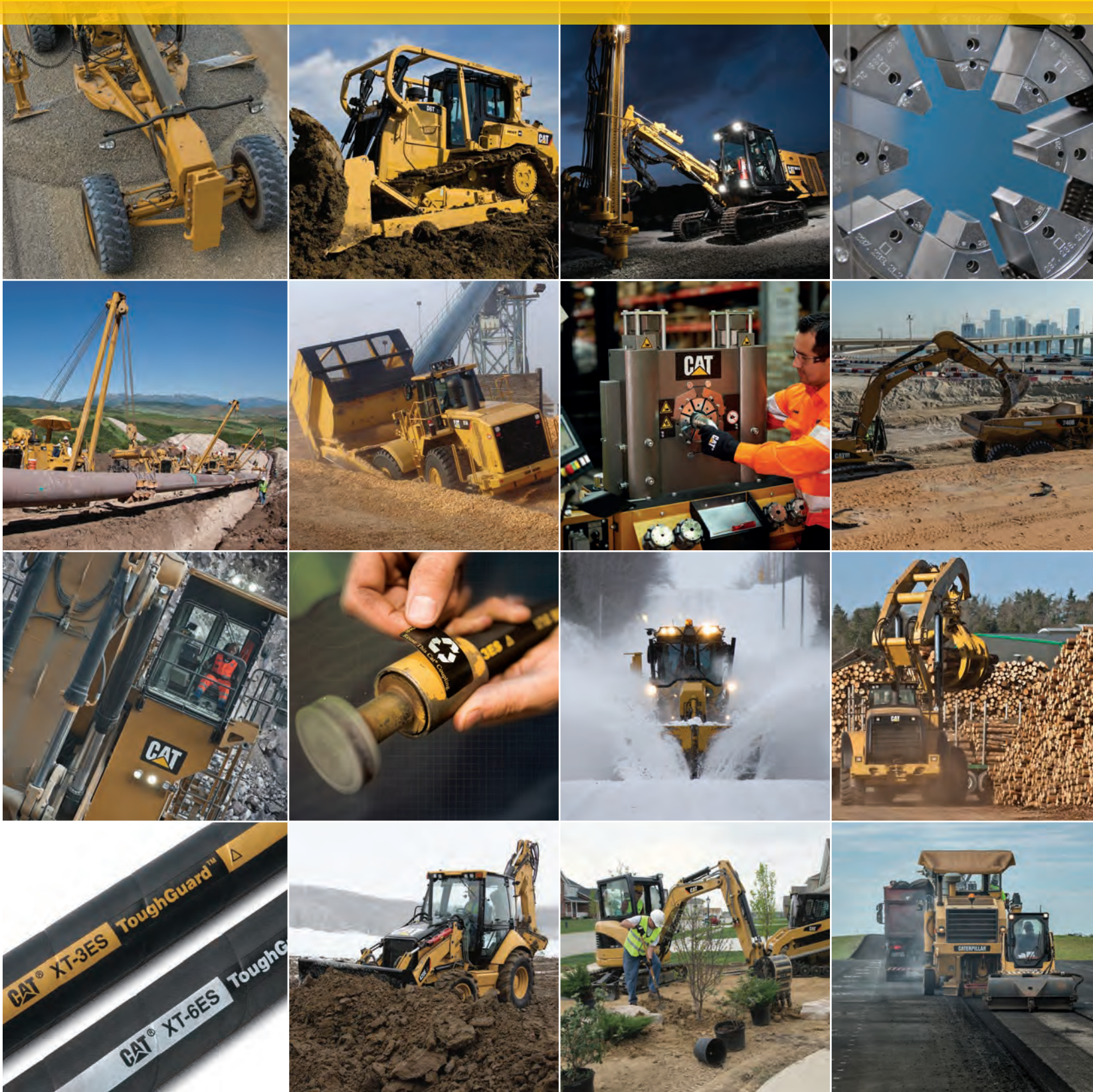


CAT® HOSE PRODUCTS & TOOLING GUIDE

10.2 EDITION



Comprehensive Industry Solutions



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5 Reasons to Choose Cat[®] Hose Assemblies

Introduction

When it comes to hydraulics, you want the safest and most reliable components on your machine.

THAT'S WHY CATERPILLAR OFFERS SUPERIOR HOSE SOLUTIONS

5 Reasons to Choose Cat® Hose Assemblies

UNRIVALED EXPERTISE

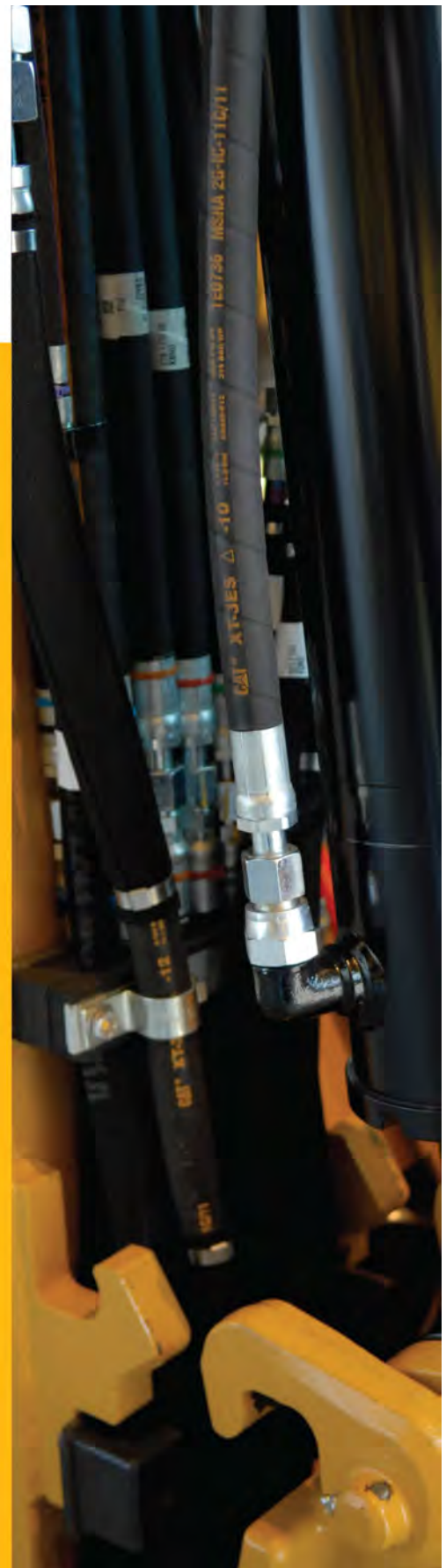
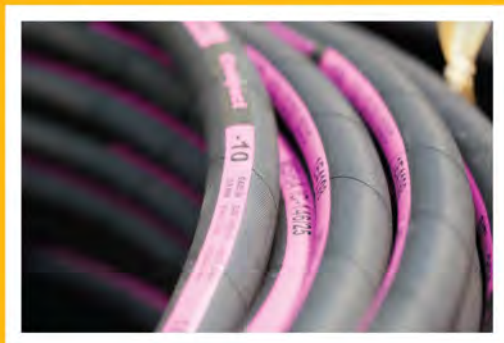
RUGGED DESIGN

METICULOUS MANUFACTURING

RIGOROUS TESTING

UNMATCHED SUPPORT

Learn how each advantage delivers genuine value to help you get the most out of your hydraulic systems—driving greater efficiency and more value to your bottom line.



UNRIVALED EXPERTISE that instills confidence

A COMPANY YOU CAN COUNT ON

When it comes to operating your Cat equipment, dependability is a must. That is why we manufacture our own line of hydraulic hose and couplings for your replacement hydraulic hose assemblies. In fact, no other equipment manufacturer is more invested in this business.

A Longer History of Know-How to Help You

When you rely on Cat hydraulic components, you have half a century of expertise behind you. Caterpillar began designing and manufacturing hose products in the 1960s to meet the high-pressure hydraulic needs of a growing construction market. Since that time—over several decades—our hydraulic hose and couplings have earned and maintained a global reputation for superior performance and reliability.



Caterpillar entered the hose business in the 1960s primarily out of necessity. The company needed a high-pressure hose that would meet increased productivity demands in the earth-moving industry. However, no such hose was available. That's why, in 1968, Caterpillar designed, tested and began manufacturing its own high-pressure spiral hose. Since that time, over 1 billion feet (300 million meters) of Cat high-pressure spiral hose has been placed in the field.

By the 1970s, Caterpillar was a leading manufacturer of high-pressure hose and coupling products, and the company's innovative Cat Spiral Hose had become the industry standard for high-pressure applications.



Higher Standards to Reassure You

To achieve peak performance from your Cat equipment, you need hydraulic replacement parts that are equivalent to your factory-installed components. That's why we engineer our replacement hose products to the same standards as the hose products originally installed on Cat machines. Close attention to routing and pressure requirements are two key elements that differentiate our ability to provide the highest levels of safety and reliability with our hydraulic systems.

RUGGED DESIGN for endurance in tough applications

A UNIQUE SYSTEM APPROACH

Cat hose assembly products and tooling are designed to work together as a coordinated system. This is the only way to achieve a reliable connection that helps optimize hydraulic system safety and dependability.

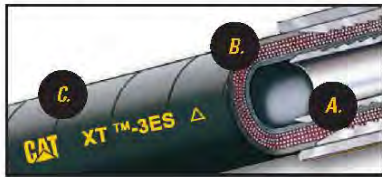


Cat Hydraulic Hose is Durable and Flexible

The complete offering includes low, medium and high pressure, as well as speciality hoses that meet a wide range of application requirements. Every hose is engineered to surpass industry standards.

Engineered for Punishing Conditions

Robust, Multiple-Ply Construction Exceeds Industry Standards



- A. The inner liner and cushion stock of the hose are made from a high-quality rubber formula proprietary to Caterpillar.
- B. Spiral or braided wire reinforcement is added for strength to surpass pressure requirements.
- C. Then a tough outer cover is applied to resist oil, weather and abrasion.



When extreme abrasion resistance is needed, Caterpillar offers another option. Cat® XT ToughGuard™ Hose has an exclusive, Caterpillar designed polyethylene cover that has surpassed two million abrasion test cycles without failure. Not only is this hose superior against abrasion, it is also highly resistant to chemicals and weathering. In addition, it eliminates the need for nylon, plastic and other forms of hose protection in most applications, which can significantly reduce material and labor costs.



Formulated for Unmatched Flexibility

Cat hydraulic hoses are designed to work at half of the SAE bend radius without sacrificing extreme cold-temperature flex capability or durability. This enables easier routing in the tightest spaces.



Proprietary Tooling and Software Ensure Exacting Assembly

Your Cat dealer uses Caterpillar designed tooling and industry-unique software to construct every hose assembly to exact OEM specifications. This exclusive tooling and software combination ensures precise crimps every time for enhanced safety and reliability.



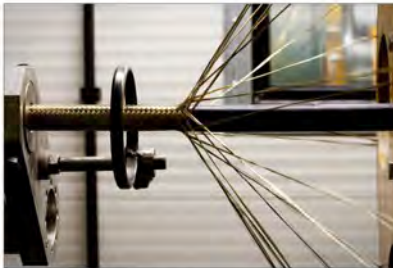
Cat Couplings Ensure a Solid Connection

Our one-piece couplings are designed for superior coupling retention with Cat hose to withstand pressure requirements and allow flexing without fatigue. This results in the most reliable connection and eliminates potential for leaks. For select machine sizes, Caterpillar also offers reusable couplings for large-diameter, high-pressure hose.

METICULOUS MANUFACTURING for reliable performance

HOSE ASSEMBLIES BUILT TO EXACT OEM SPECIFICATIONS

Our hydraulic hose assembly solutions are built to same-as-new specifications for Cat equipment. This means every new hose assembly perfectly matches the factory-installed version it is replacing.



Focused on Quality

Caterpillar uses cutting-edge machinery to produce their own hose products. Stringent quality and contamination control processes ensure consistently manufactured, high-quality components.



We apply statistical process control to verify that every batch of rubber has been mixed to our exact specifications.



Our couplings are forged and machined from high tensile strength steel. Then they are heat treated and plated to ensure maximum durability and corrosion resistance.



Before application, the hose is routed through a cooling chamber until it reaches a suitable temperature. This prevents perforation of the hose as the high tensile strength reinforcement wire is applied.



Cat hose is carefully monitored to ensure precise inner and outer diameter measurements are maintained. This provides precise coupling retention capability.

Introduction

RIGOROUS TESTING for optimum safety

THE BEST IN THE INDUSTRY

Cat hydraulic hose and couplings are subjected to the most rigorous testing processes in the hose and coupling manufacturing industry.

An All-in-One Approach Produces Most Reliable Results

Every Cat hose and coupling combination is tested as a system—not as separate components—to ensure a perfect fit that yields maximum safety and dependability.

Comprehensive Analysis Verifies Critical Standards Are Met

We use an array of measures to evaluate both raw materials and finished components. These include rubber compression and elongation testing; wire tensile-strength testing; hose impulse testing, burst pressure testing, temperature adaptability testing, abrasion testing, flexibility and diameter testing; and coupling salt-spray and metallurgical testing—all of which help ensure unparalleled hydraulics safety and dependability for your machines.



The number one cause of hose failure is abrasion. Cat ToughGuard hose, designed for severe abrasion applications, features a polyethylene cover that has surpassed two million cycles of abrasion testing without failure. The SAE standard is 39,000 cycles.



To simulate punishing conditions, Caterpillar impulse-tests hose assemblies at 130% of operating pressure for one million cycles—double the SAE standard of 500,000 cycles.



Cat hose is burst tested by applying pressure at a constant rate until it reaches a burst pressure of four times the normal operating pressure.

UNMATCHED SUPPORT for maximum uptime

THE KEY TO MAINTAINING MACHINE PRODUCTIVITY

When you need a hose assembly, you need it now. That is why your Cat dealer is uniquely skilled to perform the assembly and installation. Trained dealer technicians use the latest tooling, assembly information, routing standards, inspection techniques and contamination control processes to get your machines up and running-quickly and reliably.

Solutions That Are Optimal for Your Entire Fleet

Mining, earthmoving, excavation, forestry and compact machines can all benefit from Cat hose and couplings. Our product line meets wide-ranging applications, from the channeling of high-pressure fluids to low-pressure applications, such as fuel or brake lines in any brand machine.

Unmatched Convenience

The only thing your dealer needs to build an exact replacement Cat hydraulic hose assembly is the Cat part number-and it's right on the hose label. Order by phone and your dealer will have a replacement hose waiting for you when you arrive. If the hose being replaced was built after 2013, your dealer's phone number is printed right on the label, as well as a QR (quick response) code you can scan with a mobile device to be linked to Parts.cat.com. From there you can place your order online.



In-stock Components

Your dealer uses ongoing inventory analysis and management to ensure adequate components for customers' machines are always available. In addition, Caterpillar backs up dealers with a network of strategically placed distribution centers in every part of the world to ensure continued parts availability.



Cat Dealer Expertise

Your Cat dealer is equipped with proprietary tools and reference materials that are unmatched in the industry. From hose routing guides that eliminate potential for abrasion, to the ability to identify hydraulic-related concerns before failure through inspection of your machine, they are there to ensure your safety and machine dependability are always maintained.

Jobsite Service

When a hose failure occurs at a remote location, you expect a quick, reliable repair. A Hose Assembly Container Workshop-engineered and stocked to support your machine population-provides the immediate support you need, exactly where you need it. This minimizes your downtime by ensuring that any hose failure can be addressed immediately so your machine is quickly back in operation.



Every Hose Assembly Container Workshop is sealed from outdoor contaminants and features durable, high-density cabinets and other storage solutions designed for clean, efficient storage of parts and tooling.

Introduction

Cat Hose Assembly System Safety

SAFETY MINDSET

"SAFETY FIRST" APPROACH

Caterpillar is constantly developing and refining advanced technologies in order to assure the highest levels of safety.

CAT H&C SYSTEM DESIGN



CAT® HOSE



CAT® COUPLINGS



CAT® TOOLING &
CRIMP SPECIFICATIONS



TRAINING

SAFER, LONGER LASTING, HIGH PERFORMANCE HOSE ASSEMBLIES



It is essential that the overall Hose and Couplings Assembly Process is managed with due care and attention

Assembling of the components is just as important as the robust design and quality manufacturing.

Hose failures can have an immediate negative economic and environmental impact.

Most importantly, health & safety risks such as minor or even fatal injuries can occur.

When **Hose Safety** practices are not followed, and lead to **Hose Failures** and beyond, the overall impact can damage the **Cat brand** and the standard of quality that is recognized and expected with **Cat Hose & Coupling Products**.

DISCLAIMER

Cat® hose assembly products are designed and tested as a system to achieve a reliable connection, thus maximizing hydraulic system safety and dependability. Improper selections of hose and coupling combinations will void warranties and may result in serious personal injury or death, property damage, or component and machine system failure. Use of Caterpillar hose with other manufacturer's couplings or the use of Caterpillar couplings with other manufacturer's hose may result in the production of unreliable, unsafe or under-performing hose assemblies. It is not recommended or authorized by Caterpillar. It is also recommended that appropriate and properly maintained Caterpillar tooling is used to ensure hoses are crimped to specifications.

For additional information see SAE J1273 section 6.3 and ISO 17165-2 section 6.3

Quick Reference

Cat Hose

Hose Family	Reference	Hose Type	Reinforcement	Impulse	Temp	Industry Associated Specifications		
						SAE	EN	ISO
Low and Medium Pressure Hose	One-Wire Braid Hose	716	1 WB	250,000	-40 °C to +135 °C -40 °F to +275 °F	SAE 100R1AT	EN 853-1SN	ISO 1436-1SN
	One-Wire Braid ToughGuard Hose	716TG	1 WB	250,000	-40 °C to +135 °C -40 °F to +275 °F	SAE 100R1AT	EN 853-1SN	ISO 1436-1SN
	One-Wire Braid Compact Hose	716CP	1 WB	150,000	-40 °C to +100 °C -40 °F to +212 °F		EN 857-1SC	ISO 11237-1SC
	One-Wire Braid High Temperature Coolant Hose	2786	1 WB		-40 °C to +120 °C -40 °F to +250 °F	SAE 100R4		
	One-Wire Braid High Temperature General Purpose Hose	4901HT	2 WB	150,000	-40 °C to +150 °C -40 °F to +302 °F			
	One-Wire Braid High Temperature Engine Oil Hose	5385	1 WB	400,000	-40 °C to +135 °C -40 °F to +275 °F			
	One-Wire Braid Fire Suppression Hose	5014	1 WB	50,000	-40 °C to +100 °C -40 °F to +212 °F			
	Two-Wire Braid Hose	294	2 WB	200,000	-40 °C to +100 °C -40 °F to +212 °F	SAE 100R2AT	EN 853-2SN	ISO 1436-2SN
	Two-Wire Braid ToughGuard Hose	294TG	2 WB	200,000	-40 °C to +100 °C -40 °F to +212 °F	SAE 100R2AT	EN 853-2SN	ISO 1436-2SN
	Two-Wire Braid Compact Hose	294CP	2 WB	200,000	-40 °C to +100 °C -40 °F to +212 °F	SAE 100R16	EN 857-2SC	ISO 11237-2SC
	Two-Wire Braid High Temperature Hose	294HT	2 WB	500,000	-40 °C to +150 °C -40 °F to +302 °F	SAE J517 100R2		
	Two-Wire Braid Compact ToughGuard Hose	294CPT-G	2 WB	200,000	-40 °C to +100 °C -40 °F to +212 °F	SAE 100R16	EN 857-2SC	ISO 11237-2SC
	Two-Wire Braid 28 MPa Hose	4636	2 WB	1,000,000 @ 100°C/212°F 200,000 @ 120°C/250°F	-40 °C to +120 °C -40 °F to +250 °F	SAE 100R19		ISO 11237-R19
	Two-Wire Braid ToughGuard Hose 28 Mpa	4636TG	2 WB	1,000,000 @ 100°C/212°F 200,000 @ 120°C/250°F	-40 °C to +120 °C -40 °F to +250 °F	SAE 100R19		ISO 11237-R19
	Hydraulic Suction Hose	844	1 HSW + 1 FB	200,000	-40 °C to +135 °C -40 °F to +275 °F	SAE 100R4		
	Hydraulic Suction Hose	844HP	1 HSW + 1 FB	200,000	-40 °C to +135 °C -40 °F to +275 °F	SAE 100R4		
High Pressure Hose	XT-3ES Hose	XT-3ES	4 WS	1,000,000	-40 °C to +120 °C -40 °F to +250 °F	SAE 100R12	EN 856 R12	ISO 3852 R12
	XT-3ES ToughGuard	XT-3ESTG	4 WS	1,000,000	-40 °C to +120 °C -40 °F to +250 °F	SAE 100R12	EN 856 R12	ISO 3852 R12
	XT-5ES Hose	XT-5ES	4 WS & 6 WS	1,000,000	-40 °C to +120 °C -40 °F to +250 °F	SAE 100R13	EN 856 R13	ISO 3862 R13
	XT-5ES ToughGuard	XT-5ESTG	4 WS & 6 WS	1,000,000	-40 °C to +120 °C -40 °F to +250 °F	SAE 100R13	EN 856 R13	ISO 3862 R13

Quick Reference

	Reference	Hose Type	Reinforcement	Impulse	Temp	Industry Associated Specifications		
						SAE	EN	ISO
	XT-6ES Hose	XT-6ES	4 WS & 6 WS	1,000,000	-40 °C to +120 °C -40 °F to +250 °F	SAE 100R15		ISO 3862 R15
	XT-6ES ToughGuard	XT-6ESTG	4 WS & 6 WS	1,000,000	-40 °C to +120 °C -40 °F to +250 °F	SAE 100R15		ISO 3862 R15
Special Application Hose	Air Brake Only Hose	662	1 SF		-40 °C to +100 °C -40 °F to +212 °F	SAE J1402		
	Air Conditioning Hose	1543J (CAT_AC_FC)	1 TB		30 °C to +125 °C -22 °F to +257 °F	SAE J30R2 thru J30R9		
	Auto Lube Systems Pre-Filled Grease Hose	1543B	1 FB			SAE J30R2 thru J30R9		
	Engine And Air Brake Hose	1130	2 WB		-40 °C to +150 °C -40 °F to +302 °F	SAE J1402 Type AII		
	Heater Hose	515A	WF		-40 °C to +125 °C -40 °F to +257 °F	SAE J20R3		
	Heater Hose - High Temperature	515B	WF		-40 °C to +125 °C -40 °F to +257 °F	SAE J20 / SAE J1684		
	Heater Hose - High Temperature	515E	WF		-55 °C to +175 °C -67 °F to +347 °F	SAE 20R3		
	Fuel Hose - High Temperature	743	2 FB		-40 °C to +135 °C -40 °F to +275 °F	SAE 100R6		ISO 4079-R6
	Hydraulic Return Line Hose	661	TB		-40 °C to +120 °C -40 °F to +250 °F			
	Fabric Covered Hose	556	1 WB	150,000 up to 22mm 100,000 28mm upwards	-40 °C to +120 °C -40 °F to +250 °F	SAE 100R5		
	Pilot Hose	2929	1 WB	300,000	-40 °C to +120 °C -40 °F to +250 °F			
	Pilot ToughGuard Hose	2929TG	1 WB	300,000	-40 °C to +120 °C -40 °F to +250 °F			
	Radiator Hose	642C	WF		-40 °C to +100 °C -40 °F to +212 °F	SAE J20R1		
	Radiator Hose	642E	WF		-40 °C to +125 °C -40 °F to +257 °F	SAE J20		
	Teflon Lined High Temperature Hose	2771A	N/A	150,000	-73 °C to +260 °C -40 °F to +500 °F	SAE 100R14		
	Thermoplastic Hose	945	1 FB	150,000	-40 °C to +100 °C -40 °F to +212 °F	SAE 100R7		
	Thermoplastic Hose	1028	2 FB	150,000	-40 °C to +100 °C -40 °F to +212 °F	SAE 100R7		
	Thermoplastic Reduced Outside Diameter Hose	2760	SF	300,000	-40 °C to +100 °C -40 °F to +212 °F			
	Thermoplastic Conductive/Medium Pressure Hose	5356	1 FB	150,000	-40 °C to +100 °C -40 °F to +212 °F	SAE 100R7		
	Thermoplastic Non-conductive/Medium Pressure Hose	5356NC	1 FB	150,000	-40 °C to +100 °C -40 °F to +212 °F	SAE 100R7		

Quick Reference

	Thermoplastic Conductive/High Pressure Hose	5357	1 FB	200,000	-40 °C to +100 °C -40 °F to +212 °F	SAE 100R8		
	Thermoplastic Non-conductive/High Pressure Hose	5357NC	1 FB	200,000	-40 °C to +100 °C -40 °F to +212 °F	SAE 100R8		

Code	Description
1 WB	1 Wire Braid
2 WB	2 Wire Braid
1 HSW + 1 FB	1 Helical Steel Wire with 1 Fiber Braid
4 WS	4 Wire Spiral
6 WS	6 Wire Spiral
1 SF	1 Synthetic Fiber Braid
1 TB	1 Textile Braid
1 FB	1 Fiber Braid
WF	Woven Fabric
2 FB	2 Fiber Braid
TB	Textile Braid
SF	Synthetic Fiber

Cat Couplings

Permanent Type Couplings

Hose Family	Hose Type	Coupling Type	Dash Size																
			-2	-3	-4	-5	-6	-8	-10	-14	-12	-16	-20	-24	-32	-40	-48	-56	-64
Low & Medium Pressure Hose	716	MN	-	-	X	-	X	X	X	-	X	X	X	X	X	-	-	-	-
	716TG	MN	-	-	X	-	X	X	X	-	X	X	-	-	-	-	-	-	-
	716CP	MN	-	-	X	-	X	X	X	-	X	X	-	-	-	-	-	-	-
	2786	MN	-	-	X	-	X	X	X	-	X	X	-	-	-	-	-	-	-
	4901HT	MN	-	-	X	-	X	X	X	-	X	X	X	X	X	X	X	X	-
	5014	MN	-	-	X	-	X	X	-	-	X	-	-	-	-	-	-	-	-
	294	MN	-	-	X	X	X	X	X	-	X	X	X	X	X	X	X	X	-
	294	MGB	-	-	-	-	X	-	-	-	-	-	X	-	X	-	-	-	-
	294TG	MN	-	-	X	-	X	X	X	-	X	X	X	X	X	X	-	-	-
	294TG	MGB	-	-	-	-	X	-	-	-	-	-	X	-	X	-	-	-	-
	294CP	MN	-	-	X	-	X	X	X	-	X	X	-	-	-	-	-	-	-
	294CP	BN	-	-	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-
	294CP	MGB	-	-	-	-	X	X	-	-	-	-	-	-	-	-	-	-	-
	294HT	MN	-	-	-	-	-	-	-	-	-	-	-	-	-	X	X	-	-
	294CPTG	MN	-	-	X	-	X	-	-	-	-	-	-	-	-	-	-	-	-
	294CPTG	MGB	-	-	-	-	X	X	-	-	-	-	-	-	-	-	-	-	-
	4636	MN	-	-	-	-	-	X	-	-	X	-	-	-	-	-	-	-	-
	4636	BN	-	-	-	-	-	-	X	-	-	X	-	-	-	-	-	-	-
	4639	MN	-	-	-	-	-	X	-	-	X	-	-	-	-	-	-	-	-
	4639	BN	-	-	-	-	-	-	X	-	-	X	-	-	-	-	-	-	-
	844	MN	-	-	-	-	-	-	-	-	X	X	X	X	X	X	X	-	X
	844	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
	844HP	MN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	X
	844HP	SW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-
High Pressure Hose	Hose Type	Coupling Type	-2	-3	-4	-5	-6	-8	-10	-14	-12	-16	-20	-24	-32	-40	-48	-56	-64
	XT-3ES	ESA	-	-	-	-	X	X	X	-	X	X	-	-	-	-	-	-	-
	XT-3ES	S4G	-	-	-	-	X	X	X	-	X	X	X	X	X	-	-	-	-
	XT-3ES	XN	-	-	-	-	X	X	X	-	X	X	-	-	-	-	-	-	-
	XT-3ES	XN4	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-
	XT-3ES	MGX	-	-	-	-	-	-	-	-	-	X	X	-	X	-	-	-	-
	XT-3ESTG	ESA	-	-	-	-	X	X	X	-	X	X	-	-	-	-	-	-	-
	XT-3ESTG	S4G	-	-	-	-	X	X	X	-	X	X	X	X	X	-	-	-	-
	XT-3ESTG	XN	-	-	-	-	X	X	X	-	X	X	-	-	-	-	-	-	-
	XT-3ESTG	XN4	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-
	XT-3ESTG	MGX	-	-	-	-	-	-	-	-	-	X	X	-	X	-	-	-	-
	XT-5ES	XN	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-	-	-

Quick Reference

Permanent Type Couplings (Continued)

	Hose Type	Coupling Type	-2	-3	-4	-5	-6	-8	-10	-14	-12	-16	-20	-24	-32	-40	-48	-56	-64
	XT-5ES	XN6	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-
	XT-5ES	XS6	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
	XT-5ES	MCSH	-	-	-	-	-	-	-	-	X	X	X	X	X	-	-	-	-
	XT-5ES	MCSX	-	-	-	-	-	-	-	-	X	X	X	X	-	-	-	-	-
	XT-5ESTG	XN	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-	-	-
	XT-5ESTG	XN6	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-
	XT-5ESTG	MCSH	-	-	-	-	-	-	-	-	X	X	X	X	-	-	-	-	-
	XT-5ESTG	MCSX	-	-	-	-	-	-	-	-	X	X	X	X	-	-	-	-	-
	XT-6ES	XN	-	-	-	-	X	X	X	-	X	X	-	-	-	-	-	-	-
	XT-6ES	XN6	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-
	XT-6ES	XS6	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-
	XT-6ES	MCSM	-	-	-	-	X	-	-	-	X	X	X	X	-	-	-	-	-
	XT-6ES	MGX	-	-	-	-	-	X	-	-	X	X	-	-	-	-	-	-	-
	XT-6ESTG	XN	-	-	-	-	X	X	X	-	X	X	-	-	-	-	-	-	-
	XT-6ESTG	XN6	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-	-
	XT-6ESTG	MCSM	-	-	-	-	X	-	-	-	X	X	X	X	-	-	-	-	-
	XT-6ESTG	MGX	-	-	-	-	-	X	-	-	X	X	-	-	-	-	-	-	-
Special Application Hose																			
	662	MN	-	-	-	-	X	X	-	-	-	-	-	-	-	-	-	-	-
	1543J (CAT_AC_FC)	A/C	-	-	-	-	X	X	X	X	X	-	-	-	-	-	-	-	-
	743	JN	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	743	MHT	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	743	MH	-	-	X	X	X	X	X	-	X	X	-	-	-	-	-	-	-
	2929	MHT	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2929	MH	-	-	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-
	2929TG	MHT	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2929TG	MH	-	-	X	-	X	-	-	-	-	-	-	-	-	-	-	-	-
	2771A	JN	-	-	X	X	X	X	X	-	-	-	-	-	-	-	-	-	-
	945	JN	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	945	MHT	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	945	MH	-	-	X	-	X	X	-	-	X	-	-	-	-	-	-	-	-
	1028	55	-	X	X	X	X	X	-	-	X	-	-	-	-	-	-	-	-
	5357 / 5357NC	TP	X	X	X	-	X	X	X	-	X	X	-	-	-	-	-	-	-
	5356 / 5356NC	TP	X	X	X	X	X	X	X	-	X	X	-	-	-	-	-	-	-
	2760	JN	-	-	X	X	X	X	-	-	-	-	-	-	-	-	-	-	-

X| Available
- | Not Available

Reusable Type Couplings

Hose Family	Hose Type	Coupling Type	Dash Size							
			-6	-8	-10	-12	-16	-20	-24	-32
High Pressure Hose	XT-3ES	TR	X	X	X	X	X	-	-	-
	XT-3ESTG	TR	X	X	X	X	X	-	-	-
	XT-5ES	PL	-	-	-	-	X	X	X	X
	XT-5ESTG	PL	-	-	-	-	X	X	X	-
	XT-5ES	MCSH					X	X	X	
	XT-5ESTG	MCSH					X	X	X	
	XT-6ES	IN	-	-	-	-	X	X	X	-
	XT-6ESTG	IN	-	-	-	-	X	X	X	

X | Available
 - | Not Available

Screw Type Reusable Couplings

Hose Family	Hose Type	Coupling Type	Dash Size								
			-4	-5	-6	-8	-10	-12	-16	-20	-24
Special Application Hose	556	BRK-R	X	X	X	X	X	X	X	X	X
	1130	BRK-R	X	X	X	X	X	X	X	X	X

X | Available

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BSPP 60° - Cone - British Standard Pipe Parallel - Male	35
BSPT - British Standard Pipe Tapered - Female	36
BSPT - British Standard Pipe Tapered - Male	36
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JIC 37° - Flare - Joint Industry Council - Male	37
JIS Imperial 30° - Flare - Parallel Threads - Japanese Industrial Standards - Female	38
JIS Imperial 30° - Flare - Parallel Threads - Japanese Industrial Standards - Male	38
JIS Imperial - Tapered Threads - Japanese Industrial Standards - Female	40
JIS Imperial - Tapered Threads - Japanese Industrial Standards - Male.....	40
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JIS Metric 30° - Flare - Komatsu Style - Japanese Industrial Standards - Male	42
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Metric French Millimetric 24° - Cone - Male.....	44
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Hose and Coupling Technical Information

Preparation for Hose Assembly Process

Remembering the word — **STAMPED** — can help you consider all the necessary hose replacement criteria.

Size – Inside diameter of the hose must be adequate to keep pressure loss to a minimum and avoid damage to the hose.

Temperature – Know the normal operating temperature of the hydraulic system.

Application – Have an idea of the working conditions and implement cycle times.

Media – Know the type of fluid being used.

Pressure – Know the maximum operating pressure of the system.

Ends of Coupling – Identify correct end connections, threads, and configurations.

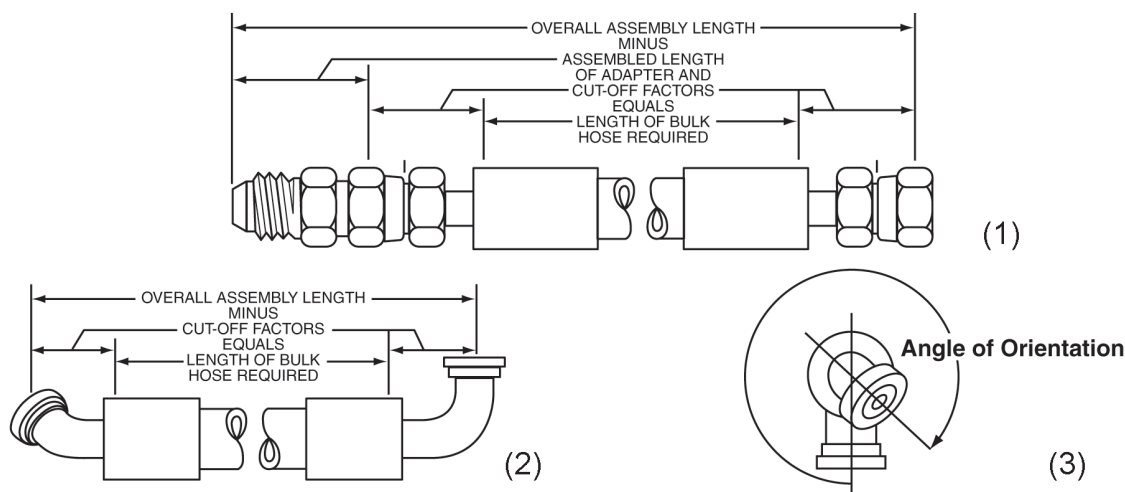
Delivery – On suction applications know the amount of vacuum/velocity a hose can withstand.

Hose, Coupling & Hose Assembly Procedure Checklist

Step 1 - Hose Assembly Assessment

1. Measure total hose assembly length (sealing surface to sealing surface) and record.

Straight Hose Assembly

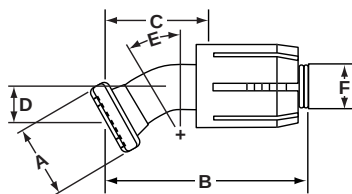


Angle of Orientation and/or Bent Stem Hose Assembly

Angle of Orientation

2. If applicable, measure angle of orientation and record. Angle of orientation = the angle between the center lines of two bent couplings measured in a clockwise direction from the back coupling to the front coupling.

Step 2 - Coupling Identification



Coupling Dimensions

- A - Head Diameter & Thickness or Thread Diameter & Pitch
- B - Stem Assembly Length
- C - Cut-Off Factor
- D - Drop Length
- E - Degree of Angle
- F - Hose Inside Diameter

Hose and Coupling Technical Information

Hose, Coupling & Hose Assembly Procedure Checklist (Continued)

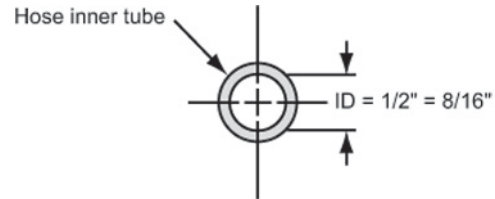
Refer to Coupling Identification Tables

1. Look for markings/part numbers to cross reference.
2. Compare the physical characteristics of the coupling head to the illustration in the Coupling Identification Tables and determine coupling possibilities.
3. Measure the coupling's dimensions in the Coupling Identification Tables to determine coupling head type.
4. Use the part number charts in the product sections to select the Cat coupling that closely matches the measured coupling dimensions.

Step 3 - Hose Identification

Refer to Hose Selection, Industry Comparison, Working Pressure and Fluid Compatibility

1. Look at the layline, if legible, for hose type information and/or part number.
2. Investigate hose application requirements:
 - Size: Hose Inside Diameter
 - Temperature Range
 - Application: Machine Type, Machine Origin and Field Work
 - Material being conveyed: Fluid Type and Flow
 - Pressure: Machine Max Working Pressure
3. Cut old hose to determine construction layers and type.
4. Measure hose inside diameter.
5. Compare construction layers to Cat Hose Construction Data Sections, and select Cat hose.



Inside Diameter Measurement

Step 4 - Permanent Coupling Type Assembly Procedure

Refer to Hose Assembly & Coupling Recovery: Training Video - PEVN3808

1. Determine the coupling cut-off factor.
2. Determine the length of bulk hose required by subtracting the combined cut-off factor from the overall assembly length.

Total Assembly Length:

- Coupling 1 Cut Off Factor

- Coupling 2 Cut-Off Factor

= Hose Cut Length

3. Cut the hose to the appropriate length.
4. Skive the cover of the hose, if required.
5. Using the Cat Hose Cleaner Group, select appropriate projectile and clean hose once at each end.
6. If permanent couplings, select the correct dies from the Die Selection Chart.
7. Make sure the die group is lubricated.
8. Crimp the couplings. If reusable coupling, reassemble after proper reclamation process.
 - **Measure Permanent Couplings Crimp Diameter with Caliper Measurement Tool**
(Consult the crimp diameter chart NEEG2746)
 - **Check the Length of the Assembly**
 - **Check the Angle of Orientation**
9. Clean the hose assembly with the proper projectile from the Hose Cleaner Group.
10. Tag the hose assembly with an identification tag using the appropriate part number.
11. Cap and/or plug the couplings.

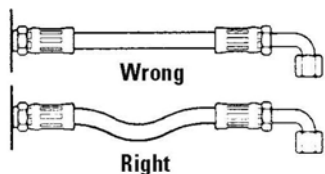
Hose and Coupling Technical Information

Hose Assembly Installation

Hose Installation

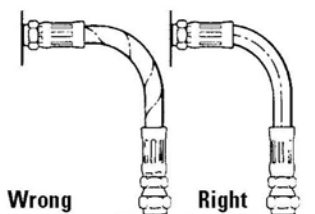
1. Provide for length change.

In straight hose installations, allow enough slack in the hose line to provide for changes in length that will occur when pressure is applied. This change in length can be from +2% to -4%.



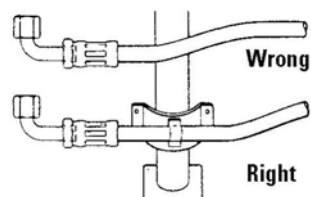
2. Avoid twisting and orient properly.

Do not twist hose during installation. This can be determined by the printed layline on the hose. Pressure applied to a twisted hose can cause hose failure or loosening of connections.



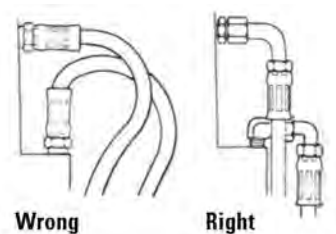
3. Protect from hazardous environment.

Keep hose away from hot parts. High ambient temperature will shorten hose life. If you can not route it away from the heat source, insulate it.



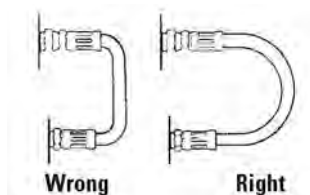
4. Avoid mechanical strain.

Use elbows and adapters in the installation to relieve strain on the assembly and to provide easier and neater installations that are accessible for inspection and maintenance.



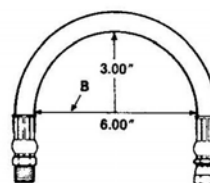
5. Use proper bend radius.

Keep the bend radius of the hose as large as possible to avoid collapsing of the hose and restriction of flow. Follow catalog specs on minimum bend radius.



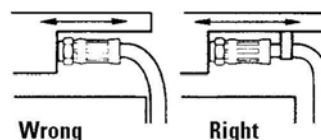
6. Use proper bend radius (cont'd).

Minimum bend radius is measured on the inside bend of the hose. To determine minimum bend, divide the total distance between ends (B length) by 2. For example, B=6, minimum bend radius = 3.



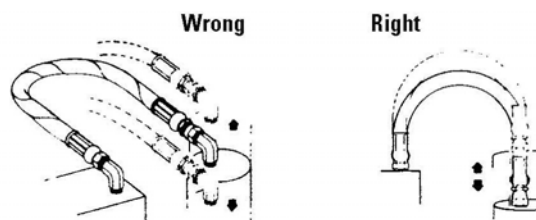
7. Secure for protection.

Install hose runs to avoid rubbing or abrasion. Use hose clamps to support long runs of hose or to keep hose away from moving parts. It is important that the clamps not allow the hose to move. This movement will cause abrasion and premature hose failure.



8. Avoid improper hose movement.

Make sure relative motion of the machine components produces bending rather than twisting of the hose. Hose should be routed so that the flex is in the same plane as the equipment movement.

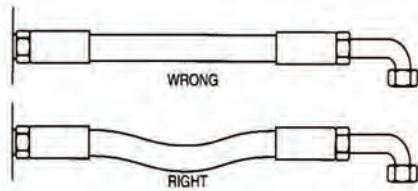


Hose and Coupling Technical Information

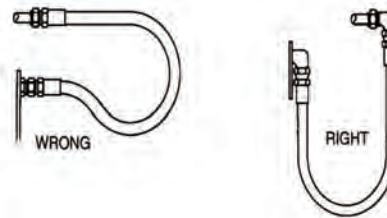
Hose Assembly Routing Tips

Proper hose installation is essential for satisfactory performance. If hose length is excessive, the appearance of the installation will be unsatisfactory and unnecessary cost of equipment will be involved. If hose assemblies are too short to permit adequate flexing and changes in length due to expansion or contraction, hose service life will be reduced.

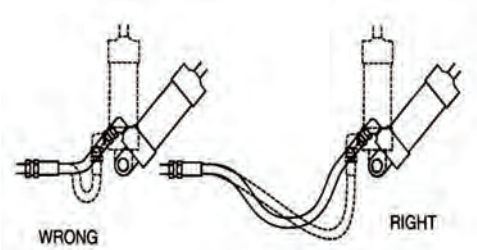
The following diagrams show proper hose installations which provide maximum performance and cost savings. Consider these examples in determining length of a specific assembly.



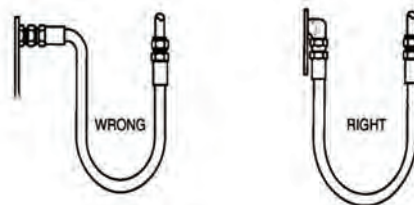
When hose installation is straight, allow enough slack in hose line to provide for length changes which will occur when pressure is applied.



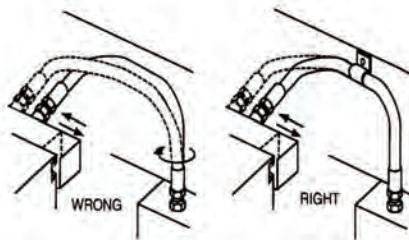
When radius is below the required minimum, use an angle adapter to avoid sharp bends.



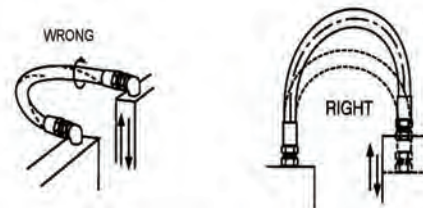
Adequate hose length is necessary to distribute movement on flexing applications and to avoid abrasion.



Use proper angle adapters to avoid tight bend in hose.



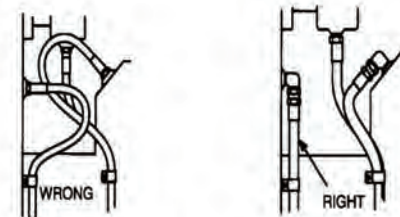
Avoid twisting of hose lines bent in two planes by clamping hose at change of plane.



Prevent twisting and distortion by bending hose in same plane as the motion of the port to which hose is connected.

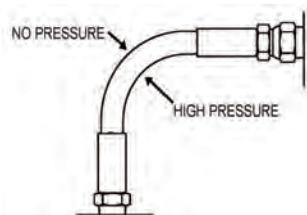


Reduce number of pipe thread joints by using hydraulic adapters instead of pipe fittings.

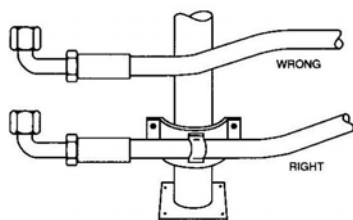


Route hose directly by using 45° and/or 90° adapter and fittings. Avoid excessive hose length to improve appearance.

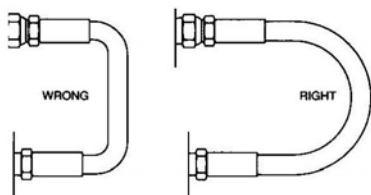
Hose and Coupling Technical Information



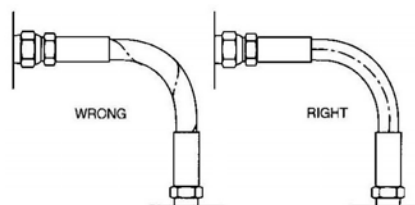
To allow for length changes when hose is pressurized, do not clamp at bends so that curves will absorb changes. Do not clamp high and low pressure lines together.



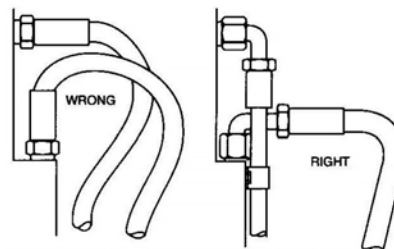
High ambient temperatures shorten hose life, so make sure hose is kept away from hot parts. If this is not possible, insulate hose.



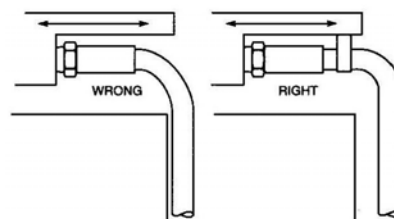
To avoid hose collapse and flow restriction, keep hose bend radii as large as possible. Refer to hose specification tables for minimum bend radii.



When installing hose, make sure it is not twisted. Pressure applied to a twisted hose can result in hose failure or loosening of connections.



Elbows and adapters should be used to relieve strain on the assembly, and to provide neater installations which will be more accessible for inspection and maintenance.



Run hose in the installation so that it avoids rubbing and abrasion. Often, clamps are required to support long hose runs or to keep hose away from moving parts. Use clamps of the correct size. A clamp too large allows hose to move inside the clamp and causes abrasion.

Hose Assembly Failure Analysis



Improper Application

Symptom: A hose has burst and random broken wires are present

Possible Cause: A high-frequency pressure impulse caused by installing hose that doesn't meet specs.

Solution: Replace hose as specified for that equipment.



Age

Symptom: Hard, cracked hose.

Possible Cause: Heat leached out the plasticizers that give a hose flexibility.

Solution: Replace the hose assembly correctly.

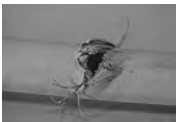


Improper Installation

Symptom: Hose is flattened out and kinked or twisted.

Possible cause: Improper installation caused hose to torque in one direction.

Solution: Replace the hose assembly correctly and check any other parts that have been affected.



Improper Application

Symptom: A hose has burst, but there are no broken wires.

Possible Cause: Hydraulic system operating pressure has exceeded the maximum operating pressure.

Solution: Replace hose assembly, check operating pressure and identify cause for the excess pressure.



External Damage

Symptom: A hose has burst, the cover is cut, and wire reinforcement is rusted.

Possible Cause: External elements have cut and degraded the cover.

Solution: Replace hose assembly and determine what external elements can be controlled to prevent future hose damage.



Improper Installation

Symptom: The hose has burst at the outside bend and is elliptical at the bent section.

Possible Cause: The minimum bend radius has been exceeded and points to faulty installation.

Solution: Replace hose assembly correctly.



Improper Application

Symptom: The hose ID broke away from the reinforcement and collapsed the ID material.

Possible Cause: The hose is pulling a vacuum.

Solution: If this is a suction line, an inner support or hose using helical wire reinforcement is required.



Improper Assembly

Symptom: The hose has burst 6"–8" away from the end of the fitting. The wire reinforcement is rusted.

Possible Cause: Improper assembly of the hose and fitting.

Solution: Proper replacement that prevents moisture around the fitting.



Improper Application

Symptom: Hose is deteriorated, and there is extreme swelling in the liner.

Possible Cause: Installation of the wrong hose material for fluid being used.

Solution: Install correct hose to match fluid.



Faulty Material

Symptom: A thermoplastic hose assembly blew off the fitting.

Possible Cause: Constant heat that causes hose to soften.

Solution: Identify the cause, evaluate the impact and replace the hose assembly.

Hose and Coupling Technical Information

Hose Assembly Replacement

Replace Hoses Immediately, If They Are:

- Twisted, kinked, crushed, or flattened
- Cracked, corroded or abraded
- Leaking
- Blistered
- Hard, stiff, heat cracked, or charred

7 Reasons Hose Assemblies Fail:

1. Fatigue
2. Abrasion/External Damage
3. Improper Application
4. Improper Assembly
5. Improper Installation
6. Faulty Tooling
7. Faulty Material

Hose Shelf Life

Maintain a system of age control to determine that hose is used before its shelf life has expired. Shelf life is the period of time when it is reasonable to expect the hose to retain full capabilities for rendering the intended service. Store hose in a manner that facilitates age control and first-in, first-out usage based on manufacturing date on hose or hose assembly. For long-term storage, the following maximum storage periods are recommended, unless otherwise specified in the respective product standard or as specified by the hose supplier:

- a. For bulk hoses (without fittings attached), maximum of 4 years from the date of manufacture, if stored in accordance with ISO 8331.
- b. For hose assemblies, maximum of 2 years. These two periods can be interpreted as consecutive for a maximum storage duration of 6 years (4 years as bulk hose plus 2 years as hose assembly).

For additional information reference SAE J1273

Hose and Coupling Technical Information

Hose Fluid Compatibility

1. CAUTION: This chart is meant to offer general guidelines for the use of Cat Hose and Couplings with the substances listed in the chart. Many factors, such as temperature, concentration and length of exposure, are relevant to individual situations. The chart is based on the compatibility of these substances with the couplings and the inner liner of the hose. There may be instances where the outer cover could be adversely affected by substances which would not chemically affect the inner liner. Conversely, some substances which adversely affect the inner liner of Cat Hose may not have a deteriorating effect on the outer cover.

2. A: Acceptable

C: Conditional - Under some conditions of temperature and pressure, hose life will be adversely affected. For guidance, consult your Caterpillar dealer hose specialist.

X: Unacceptable

— Testing Recommended

3. Liner Material:

CPE (Chlorinated Polyethylene)

EPDM (Ethylene Propylene Diene Monomer)

PTFE (Polytetrafluoroethylene)

A/C (Thermoplastic, Textile Braid, Elastomeric Cover)

AGENT TO BE CARRIED	Hose Type						
	XT-6ES, XT-6TG, XT-5ES, XT-5TG, XT-3ES, XT-3TG	294, 556, 661, 662, 716, 743, 844, 844C, 2929, 4024, 4198, 4218, 4219, 4252, 4488, 4636, 4636TG, 5014	945, 1028, 2760, 5356, 5356NC, 5357, 5357NC	1130, 4901	2786	2771A	1543J
	Liner Material						
	Chloroprene	Nitrile	Thermoplastic	CPE	EPDM	PTFE	A/C
Acetate Acid, Dilute (10%)	X	X	C	A			X
Acetone	C	X	A	A			X
Air	—	A	A	A			X
Aluminum Chloride	C	A	A	A			X
Aluminum Fluoride 20%	C	A	—	—			X
Aluminum Sulfate	C	A	—	A			X
Ammonia , Aqueous	A	—	—	—			X
Ammonium Nitrate	C	A	—	C			X
Ammonium Phosphate	X	A	X	X			X
Ammonium Sulfate	C	A	—	C			X
Barium Chloride	C	A	—	C			X
Barium Hydroxide	C	A	—	C			X
Benzene, Benzol	X	X	C	A			X
Benzine (Petroleum Ether)	—	X	—	A			X
Benzine (Petroleum Naphtha)	—	X	—	A			X
Boric Acid	X	A	X	X			X
Brake Fluid	C	X	—	X			X
Butyl Alcohol, Butanol	C	A	C	C			X
Calcium Chloride	C	A	C	C			X
Calcium Hydroxide	A	A	—	A			X
Carbon Dioxide	A	A	A	A			X
Carbon Disulfide	X	X	C	C			X
Carbon Monoxide (Hot)	C	A	C	C			X
Castor Oil	—	A	A	A			X
China Wood Oil (Tung)	A	—	—	—			X
Copper Chloride	X	A	X	X			X
Copper Sulfate	X	A	X	X			X
Crude Oil	X	X	X	X			X
Diesel Oil Light	C	A	A	A			X
Ethers	X	C	C	A			X
Ethyl Alcohol	C	A	C	C			X
Ethylene Glycol 2150	A	A	A	A			X
Ferric Chloride	X	A	X	X			X
Ferric Sulfate	X	A	X	X			X
Freon (see Refrigerant)							
Fuel Oil	C	A	A	C			X

Hose and Coupling Technical Information

1. CAUTION: This chart is meant to offer general guidelines for the use of Cat Hose and Couplings with the substances listed in the chart. Many factors, such as temperature, concentration and length of exposure, are relevant to individual situations. The chart is based on the compatibility of these substances with the couplings and the inner liner of the hose. There may be instances where the outer cover could be adversely affected by substances which would not chemically affect the inner liner. Conversely, some substances which adversely affect the inner liner of Cat Hose may not have a deteriorating effect on the outer cover.

2. A: Acceptable

C: Conditional - Under some conditions of temperature and pressure, hose life will be adversely affected. For guidance, consult your Caterpillar dealer hose specialist.

X: Unacceptable

— Testing Recommended

3. Liner Material:

CPE (Chlorinated Polyethylene)

EPDM (Ethylene Propylene Diene Monomer)

PTFE (Polytetrafluoroethylene)

A/C (Thermoplastic, Textile Braid, Elastomeric Cover)

AGENT TO BE CARRIED	Hose Type						
	XT-6ES, XT-6TG, XT-5ES, XT-5TG, XT-3ES, XT-3TG	294, 556, 661, 662, 716, 743, 844, 844C, 2929, 4024, 4198, 4218, 4219, 4252, 4488, 4636, 4636TG, 5014	945, 1028, 2760, 5356, 5356NC, 5357, 5357NC	1130, 4901	2786	2771A	1543J
	Liner Material						
	Chloroprene	Nitrile	Thermoplastic	CPE	EPDM	PTFE	A/C
Gasoline	X	C	C	C			X
Glycerine, Glycerol	A	A	A	A			X
Grease, Petroleum	C	A	A	A			X
Heptane	A	—	—	A			X
Hexane	A	—	A	A			X
Hydraulic Fluids and Lubricating Oils							
Straight Petroleum Base	A	A	A	A			X
Water and Petroleum Emulsion (FR)	C	A	A	A			X
Water and Glycol Solution to 85° C	A	A	A	A			X
Straight Phosphate— Ester (FR)	X	X	—	A			X
Phosphate — Ester and Petroleum Oil							
Blend (FR)	—	X	C	A			X
Ester Blend (MIL-L-7808)	X	X	—	A			X
Hydrogen	C	C	A	X			X
Hydrogen Peroxide (Dilute)	X	X	—	A			X
Isooctane	—	—	A	C			X
Isopropyl Alcohol	—	C	A	A			X
Kerosene	C	—	A	A			X
LPG	—	C	C	X			X
Lubricating Oils (see Hydraulic Fluids)							
Magnesium Chloride	X	A	X	X			X
Magnesium Hydroxide	C	C	—	C			X
Magnesium Sulfate	A	A	—	A			X
Mercury	A	A	A	A			X
Methane	—	C	C	A		A	X
Methyl Alcohol, Methanol	C	A	C	C			X
Methyl Isopropyl-Ketone	—	X	A	X			X
Mineral Oil	—	A	A	A			X
Naphtha	C	—	A	A			X
Naphthalene	X	X	A	A			X
Natural Gas	A	A	C	—		A	X
Petroleum Oils (see Hydraulic Fluids)	A	A	A	A			X
Potassium Chloride	X	A	X	X			X
Potassium Cyanide	A	A	—	A			X
Potassium Hydroxide	X	C	—	C			X
Potassium Sulfate	A	A	—	A			X
Refrigerant R134A	—	—	—	—			A

Hose and Coupling Technical Information

1. CAUTION: This chart is meant to offer general guidelines for the use of Cat Hose and Couplings with the substances listed in the chart. Many factors, such as temperature, concentration and length of exposure, are relevant to individual situations. The chart is based on the compatibility of these substances with the couplings and the inner liner of the hose. There may be instances where the outer cover could be adversely affected by substances which would not chemically affect the inner liner. Conversely, some substances which adversely affect the inner liner of Cat Hose may not have a deteriorating effect on the outer cover.

2. A: Acceptable

C: Conditional - Under some conditions of temperature and pressure, hose life will be adversely affected. For guidance, consult your Caterpillar dealer hose specialist.

X: Unacceptable

— Testing Recommended

3. Liner Material:

CPE (Chlorinated Polyethylene)

EPDM (Ethylene Propylene Diene Monomer)

PTFE (Polytetrafluoroethylene)

A/C (Thermoplastic, Textile Braid, Elastomeric Cover)

AGENT TO BE CARRIED	Hose Type						
	XT-6ES, XT-6TG, XT-5ES, XT-5TG, XT-3ES, XT-3TG	294, 556, 661, 662, 716, 743, 844, 844C, 2929, 4024, 4198, 4218, 4219, 4252, 4488, 4636, 4636TG, 5014	945, 1028, 2760, 5356, 5356NC, 5357, 5357NC	1130, 4901	2786	2771A	1543J
	Liner Material						
	Chloroprene	Nitrile	Thermoplastic	CPE	EPDM	PTFE	A/C
Sea Water	—	C	X	X			X
Soap Solution	—	A	A	A			X
Soda Ash, Sodium Carbonate	—	A	C	A			X
Sodium Bisulfate	X	A	X	X			X
Sodium Cyanide	—	—	—	A			X
Sodium Hydroxide 50%	X	X	—	A			X
Sodium Nitrate	—	C	—	A			X
Sodium Silicate	—	A	—	A			X
Sodium Sulfate	—	A	—	A			X
Sulfur	A	—	A	—			X
Water (over +150° F)	A	C	X	—			X

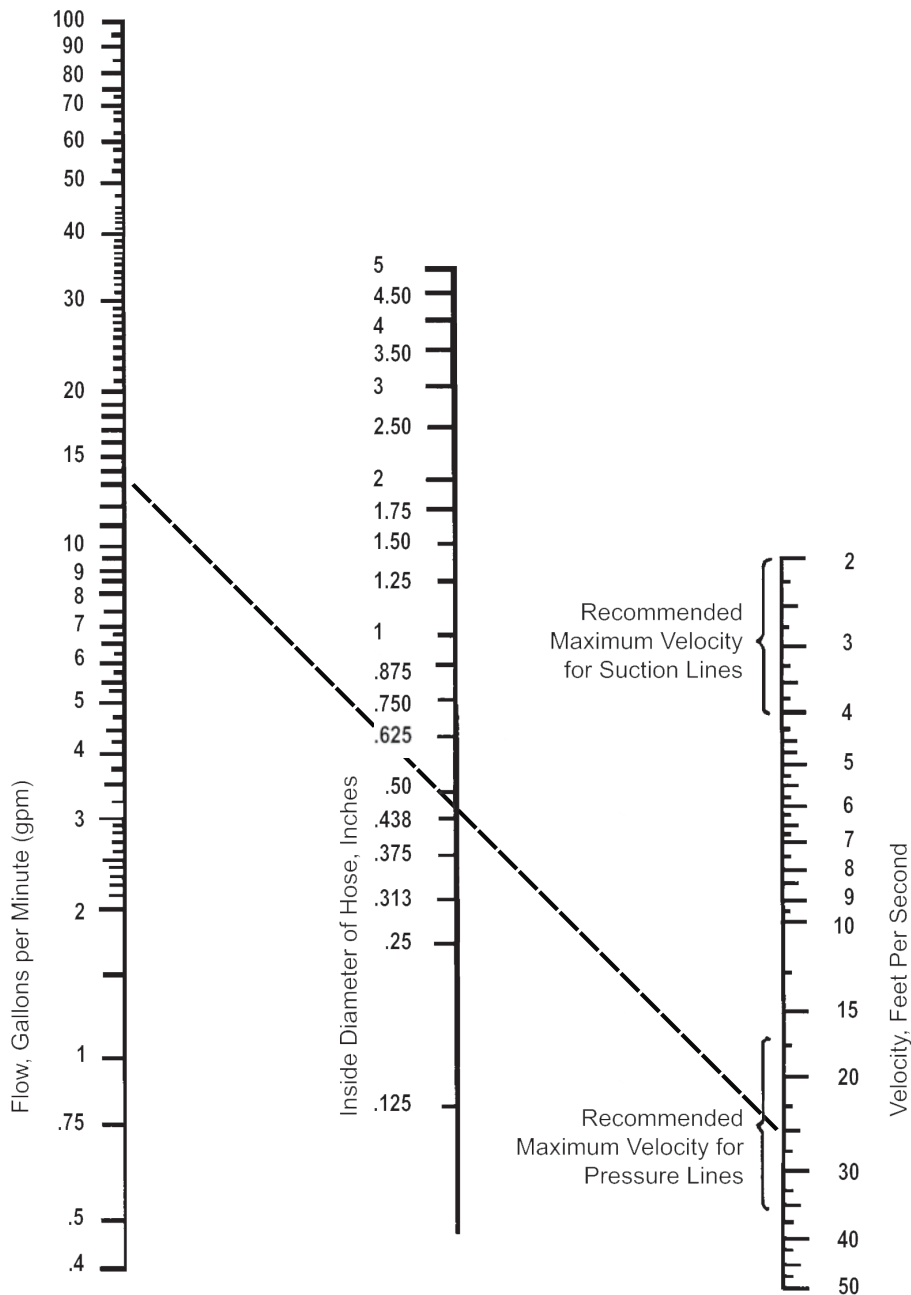
Hose Flow Capacity Nomograph

Flow Capacities of Cat Hose at Recommended Flow Velocities

The chart below is designed and provided as an aid in the determination of the correct hose size.

1. Determine flow and velocity of system.
2. Find them on indexes below.
3. Connect line with straight edge to determine correct hose size.

$$\frac{\text{AREA (IN}^2\text{)} = \text{FLOW (GPM)} \times .3208}{\text{VELOCITY (FT/SEC)}}$$

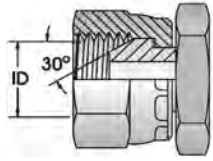


Hose and Coupling Technical Information

Connector Thread Guide

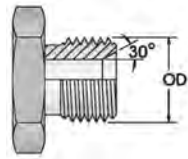
Hose and Coupling Technical Information

BSPP 60° - Cone - British Standard Pipe Parallel - Female



Size			Thread I.D.		Max Working Pressure With O-Ring		Max Working Pressure Without O-Ring		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	BAR	PSI	N.m	ft-lbf
-02	1/8"	1/8"-28	9.6	0.38	400	5800	350	5075	12	9
-04	1/4"	1/4"-19	13	0.51	400	5800	350	5075	26	19
-06	3/8"	3/8"-19	16.5	0.65	400	5800	350	5075	44	32
-08	1/2"	1/2"-14	20.8	0.82	350	5075	315	4565	78	58
-10	5/8"	5/8"-14	22.8	0.9	350	5075	315	4565	104	77
-12	3/4"	3/4"-14	26.3	1.04	315	4565	250	3625	130	96
-16	1"	1"-11	33.1	1.3	250	3625	200	2900	158	117
-20	1.1/4"	1.1/4"-11	41.8	1.65	200	2900	160	2320	200	148
-24	1.1/2"	1.1/2"-11	47.7	1.88	160	2320	125	1810	268	198
-32	2"	2"-11	59.5	2.34	125	1810	80	1160	350	258

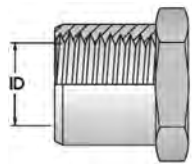
BSPP 60° - Cone - British Standard Pipe Parallel - Male



Size			Thread O.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	1/8"-28	8.6	0.34	400	5800	12	9
-04	1/4"	1/4"-19	11.9	0.47	400	5800	26	19
-06	3/8"	3/8"-19	15.2	0.6	400	5800	44	32
-08	1/2"	1/2"-14	19.1	0.75	350	5075	78	58
-10	5/8"	5/8"-14	20.8	0.82	350	5075	104	77
-12	3/4"	3/4"-14	24.6	0.97	315	4565	130	96
-16	1"	1"-11	30.7	1.21	250	3625	158	117
-20	1.1/4"	1.1/4"-11	39.4	1.55	200	2900	200	148
-24	1.1/2"	1.1/2"-11	45.5	1.79	160	2320	268	198
-32	2"	2"-11	57.4	2.26	125	1810	350	258

Hose and Coupling Technical Information

BSPT - British Standard Pipe Tapered - Female

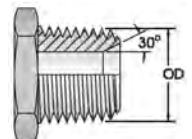


Size			Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	1/8"-28	9.6	0.38	690	10000	12	9
-04	1/4"	1/4"-19	13	0.51	690	10000	26	19
-06	3/8"	3/8"-19	16.5	0.65	620	9000	44	32
-08	1/2"	1/2"-14	20.8	0.82	480	7000	78	58
-10	5/8"	5/8"-14	22.8	0.9	480	7000	104	77
-12	3/4"	3/4"-14	26.3	1.04	450	6500	130	96
-16	1"	1"-11	33.1	1.3	350	5100	158	117
-20	1.1/4"	1.1/4"-11	41.8	1.65	215	3100	200	148
-24	1.1/2"	1.1/2"-11	47.7	1.88	100	1500	268	198
-32	2"	2"-11	59.5	2.34	100	1500	350	258

General Note:

- BSPT are Identical to and Interchangeable with the JIS Tapered Connectors.
- BSPT Tapered Connectors Seal on the Threads.
- Use of a Thread Sealant is Recommended.

BSPT - British Standard Pipe Tapered - Male



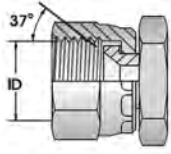
Size			Thread O.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	1/8"-28	8.6	0.34	690	10000	12	9
-04	1/4"	1/4"-19	11.9	0.47	690	10000	26	19
-06	3/8"	3/8"-19	15.2	0.6	620	9000	44	32
-08	1/2"	1/2"-14	19.1	0.75	480	7000	78	58
-10	5/8"	5/8"-14	20.8	0.82	480	7000	104	77
-12	3/4"	3/4"-14	24.6	0.97	450	6500	130	96
-16	1"	1"-11	30.7	1.21	350	5100	158	117
-20	1.1/4"	1.1/4"-11	39.4	1.55	215	3100	200	148
-24	1.1/2"	1.1/2"-11	45.5	1.79	100	1500	268	198
-32	2"	2"-11	57.4	2.26	100	1500	350	258

General Note:

- BSPT are Identical to and Interchangeable with the JIS Tapered Connectors.
- BSPT Tapered Connectors Seal on the Threads.
- Use of a Thread Sealant is Recommended.

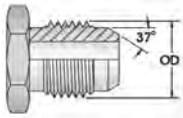
Hose and Coupling Technical Information

JIC 37° - Flare - Joint Industry Council - Female



Size			Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	5/16"-24 UNF	6.9	0.27	345	5000	10	7
-03	3/16"	3/8"-24 UNF	8.5	0.33	345	5000	13	10
-04	1/4"	7/16"-20 UNF	9.9	0.39	345	5000	20	15
-05	5/16"	1/2"-20 UNF	11.4	0.45	345	5000	25	18
-06	3/8"	9/16"-18 UNF	13	0.51	345	5000	30	22
-08	1/2"	3/4"-16 UNF	17.5	0.69	310	4500	60	44
-10	5/8"	7/8"-14 UNF	20.3	0.8	241	3500	90	66
-12	3/4"	1.1/16"-12 UN	24.9	0.98	241	3500	120	89
-14	7/8"	1.3/16"-12 UN	28.2	1.11	207	3000	130	96
-16	1"	1.5/16"-12 UN	31.2	1.23	207	3000	160	118
-20	1.1/4"	1.5/8"-12 UN	39.1	1.54	241	3500	260	192
-24	1.1/2"	1.7/8"-12 UN	45.5	1.79	138	2000	260	192
-32	2"	2.1/2"-12 UN	61.5	2.42	103	1500	350	258

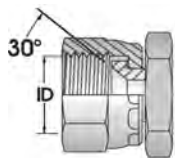
JIC 37° - Flare - Joint Industry Council - Male



Size			Thread O.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	5/16"-24 UNF	7.9	0.31	345	5000	10	7
-03	3/16"	3/8"-24 UNF	9.5	0.37	345	5000	13	10
-04	1/4"	7/16"-20 UNF	11.1	0.44	345	5000	20	15
-05	5/16"	1/2"-20 UNF	12.7	0.50	345	5000	25	18
-06	3/8"	9/16"-18 UNF	14.3	0.56	345	5000	30	22
-08	1/2"	3/4"-16 UNF	19.1	0.75	310	4500	60	44
-10	5/8"	7/8"-14 UNF	22.2	0.87	241	3500	90	66
-12	3/4"	1.1/16"-12 UN	27	1.06	241	3500	120	89
-14	7/8"	1.3/16"-12 UN	30.2	1.19	207	3000	130	96
-16	1"	1.5/16"-12 UN	33.3	1.31	207	3000	160	118
-20	1.1/4"	1.5/8"-12 UN	41.3	1.63	241	3500	260	192
-24	1.1/2"	1.7/8"-12 UN	47.6	1.87	138	2000	260	192
-32	2"	2.1/2"-12 UN	63.5	2.50	103	1500	350	258

Hose and Coupling Technical Information

JIS Imperial 30° - Flare - Parallel Threads - Japanese Industrial Standards - Female

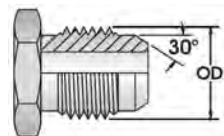


Size			Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	1/8"-28	8.7	0.34	400	5800	12	9
-04	1/4"	1/4"-19	11.9	0.47	400	5800	26	19
-06	3/8"	3/8"-19	15.1	0.59	400	5800	44	32
-08	1/2"	1/2"-14	19.1	0.75	350	5075	78	58
-10	5/8"	5/8"-14	20.6	0.81	350	5075	104	77
-12	3/4"	3/4"-14	23.8	0.94	315	4565	130	96
-16	1"	1"-11	30.2	1.19	250	3625	158	117
-20	1.1/4"	1.1/4"-11	38.9	1.53	200	2900	200	148
-24	1.1/2"	1.1/2"-11	45.2	1.78	160	2320	268	198
-32	2"	2"-11	56.4	2.22	125	1810	350	258

General Note:

- JIS Tapered connectors are Identical to and Interchangeable with the BSPT (British Standard Pipe Tapered) Connector.
- The JIS Tapered Thread does not have a 30° Flare, and will not Seal on the the BSPP (British Standard Pipe Parallel) Female Swivel with Conical Seat.
- JIS Tapered Connectors Seal on the Threads.
- Use of a Thread Sealant is Recommended.

JIS Imperial 30° - Flare - Parallel Threads - Japanese Industrial Standards - Male



Size			Thread O.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	1/8"-28	9.5	0.37	400	5800	12	9
-04	1/4"	1/4"-19	13.5	0.53	400	5800	26	19
-06	3/8"	3/8"-19	16.7	0.66	400	5800	44	32
-08	1/2"	1/2"-14	20.6	0.81	350	5075	78	58
-10	5/8"	5/8"-14	23.1	0.91	350	5075	104	77
-12	3/4"	3/4"-14	26.2	1.03	315	4565	130	96
-16	1"	1"-11	33.3	1.31	250	3625	158	117
-20	1.1/4"	1.1/4"-11	42.1	1.66	200	2900	200	148
-24	1.1/2"	1.1/2"-11	47.6	1.87	160	2320	268	198

Hose and Coupling Technical Information

JIS Imperial 30° - Flare - Parallel Threads - Japanese Industrial Standards - Male (Continued)

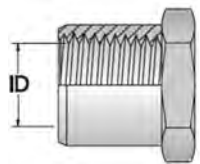
Size			Thread O.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
-32	2"	2"-11	59.5	2.34	125	1810	350	258

General Note:

- JIS Tapered connectors are Identical to and Interchangeable with the BSPT (British Standard Pipe Tapered) Connector.
- The JIS Tapered Thread does not have a 30° Flare, and will not Seal on the the BSPP (British Standard Pipe Parallel) Female Swivel with Conical Seat.
- JIS Tapered Connectors Seal on the Threads.
- Use of a Thread Sealant is Recommended.

Hose and Coupling Technical Information

JIS Imperial - Tapered Threads - Japanese Industrial Standards - Female

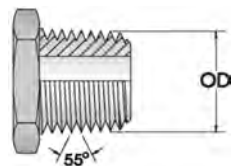


Size			Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	1/8"-28	8.7	0.34	690	10000	12	9
-04	1/4"	1/4"-19	11.9	0.47	690	10000	26	19
-06	3/8"	3/8"-19	15.1	0.59	620	9000	44	32
-08	1/2"	1/2"-14	19.1	0.75	480	7000	78	58
-10	5/8"	5/8"-14	20.6	0.81	480	7000	104	77
-12	3/4"	3/4"-14	23.8	0.94	450	6500	130	96
-16	1"	1"-11	30.2	1.19	350	5100	158	117
-20	1.1/4"	1.1/4"-11	38.9	1.53	215	3100	200	148
-24	1.1/2"	1.1/2"-11	45.2	1.78	100	1500	268	198
-32	2"	2"-11	56.4	2.22	100	1500	350	258

General Note:

- JIS Tapered connectors are Identical to and Interchangeable with the BSPT (British Standard Pipe Tapered) Connector.
- The JIS Tapered Thread does not have a 30° Flare, and will not Seal on the the BSPP (British Standard Pipe Parallel) Female Swivel with Conical Seat.
- JIS Tapered Connectors Seal on the Threads.
- Use of a Thread Sealant is Recommended.

JIS Imperial - Tapered Threads - Japanese Industrial Standards - Male



Size			Thread O.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	1/8"-28	9.5	0.37	690	10000	12	9
-04	1/4"	1/4"-19	13.5	0.53	690	10000	26	19
-06	3/8"	3/8"-19	16.7	0.66	620	9000	44	32
-08	1/2"	1/2"-14	20.6	0.81	480	7000	78	58
-10	5/8"	5/8"-14	23.1	0.91	480	7000	104	77
-12	3/4"	3/4"-14	26.2	1.03	450	6500	130	96
-16	1"	1"-11	33.3	1.31	350	5100	158	117
-20	1.1/4"	1.1/4"-11	42.1	1.66	215	3100	200	148
-24	1.1/2"	1.1/2"-11	47.6	1.87	100	1500	268	198

Hose and Coupling Technical Information

JIS Imperial - Tapered Threads - Japanese Industrial Standards - Male (Continued)

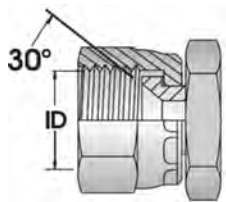
Size			Thread O.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
-32	2"	2"-11	59.5	2.34	100	1500	350	258

General Note:

- JIS Tapered connectors are Identical to and Interchangeable with the BSPT (British Standard Pipe Tapered) Connector.
- The JIS Tapered Thread does not have a 30° Flare, and will not Seal on the the BSPP (British Standard Pipe Parallel) Female Swivel with Conical Seat.
- JIS Tapered Connectors Seal on the Threads.
- Use of a Thread Sealant is Recommended.

Hose and Coupling Technical Information

JIS Metric 30° - Flare - Komatsu Style - Japanese Industrial Standards - Female

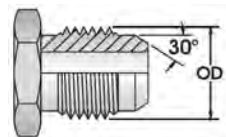


Thread Size	Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dia X Pitch	mm	inch	BAR	PSI	N.m	ft-lbf
M18 x 1.5	16.5	0.65	315	4565	130	96
M22 x 1.5	20.5	0.81	315	4565	130	96
M24 x 1.5	22.5	0.89	250	3625	158	117
M30 x 1.5	28.5	1.12	250	3625	158	117
M33 x 1.5	31.5	1.24	200	2900	200	148
M36 x 1.5	34.5	1.36	200	2900	200	148
M42 x 1.5	40.5	1.59	160	2320	268	198

General Note:

- Couplings commonly used on Komatsu Equipment.

JIS Metric 30° - Flare - Komatsu Style - Japanese Industrial Standards - Male



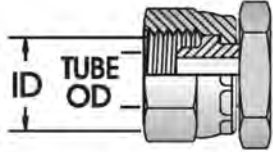
Thread Size	Thread O.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dia X Pitch	mm	inch	BAR	PSI	N.m	ft-lbf
M18 x 1.5	18.0	0.71	315	4565	130	96
M22 x 1.5	22.0	0.87	315	4565	130	96
M24 x 1.5	24.0	0.94	250	3625	158	117
M30 x 1.5	30.0	1.18	250	3625	158	117
M33 x 1.5	33.0	1.30	200	2900	200	148
M36 x 1.5	36.0	1.42	200	2900	200	148
M42 x 1.5	42.0	1.65	160	2320	268	198

General Note:

- Couplings commonly used on Komatsu Equipment.

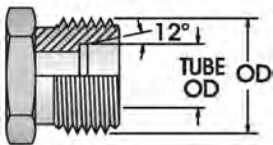
Hose and Coupling Technical Information

Metric French Gaz 24° - Cone - Female



Thread Size		Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Size & Pitch	Tube O.D.	mm	inch	BAR	PSI	N.m	ft-lbf
M20 x 1.5	13.25	18.5	0.73	420	6092	130	96
M24 x 1.5	16.75	22.5	0.88	350	5076	158	117
M30 x 1.5	21.25	28.5	1.12	280	4061	158	117
M36 x 1.5	26.75	34.5	1.36	215	3118	200	148
M45 x 1.5	33.5	43.5	1.71	215	3118	215	159
M52 x 1.5	42.25	50.5	1.99	215	3118	250	184

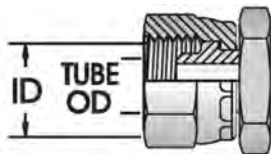
Metric French Gaz 24° - Cone - Male



Thread Size		Thread O.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Size & Pitch	Tube O.D.	mm	inch	BAR	PSI	N.m	ft-lbf
M20 x 1.5	13.25	20	0.79	420	6092	130	96
M24 x 1.5	16.75	24	0.94	350	5076	158	117
M30 x 1.5	21.25	30	1.18	280	4061	158	117
M36 x 1.5	26.75	36	1.42	215	3118	200	148
M45 x 1.5	33.5	45	1.77	215	3118	215	159
M52 x 1.5	42.25	52	2.05	215	3118	250	184

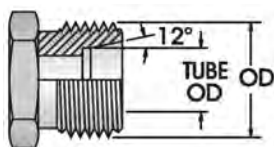
Hose and Coupling Technical Information

Metric French Millimetric 24° - Cone - Female



Thread Size		Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Size & Pitch	Tube O.D.	mm	inch	BAR	PSI	N.m	ft-lbf
M27 x 1.5	20.0	25.5	1.00	280	4061	158	117
M30 x 1.5	22.0	28.5	1.12	215	3118	158	117
M33 x 1.5	25.0	31.5	1.24	215	3118	200	148
M36 x 1.5	28.0	34.5	1.36	215	3118	200	148
M39 x 1.5	30.0	37.5	1.48	215	3118	215	159
M45 x 1.5	35.0	43.5	1.71	180	2611	215	159

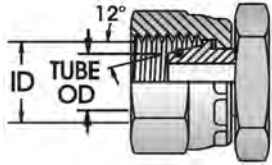
Metric French Millimetric 24° - Cone - Male



Thread Size		Thread O.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Size & Pitch	Tube O.D.	mm	inch	BAR	PSI	N.m	ft-lbf
M27 x 1.5	20.0	27.0	1.06	280	4061	158	117
M30 x 1.5	22.0	30.0	1.18	215	3118	158	117
M33 x 1.5	25.0	33.0	1.30	215	3118	200	148
M36 x 1.5	28.0	36.0	1.42	215	3118	200	148
M39 x 1.5	30.0	39.0	1.54	215	3118	215	159
M45 x 1.5	35.0	45.0	1.77	180	2611	215	159

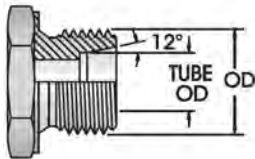
Hose and Coupling Technical Information

Metric DIN Light (L) 24° - Cone - Deutsche Industrie Normen - Female



Thread Size			Thread I. D.	Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Size & Pitch	Reference	Tube OD mm	mm	BAR	PSI	N.m	ft-lbf
M12 x 1.5	6L	6.3	10.5	250	3625	15	11
M14 x 1.5	8L	8.2	12.5	250	3625	28	21
M16 x 1.5	10L	10.2	14.5	250	3625	32	24
M18 x 1.5	12L	12.2	16.5	250	3625	38	28
M22 x 1.5	15L	15.2	20.5	250	3625	55	41
M26 x 1.5	18L	18.2	24.5	160	2320	80	59
M30 x 2.0	22L	22.2	28.0	160	2320	100	74
M36 x 2.0	28L	28.2	34.0	100	1450	125	92
M45 x 2.0	35L	35.4	43.0	100	1450	215	159
M52 x 2.0	42L	42.4	50.0	100	1450	250	184

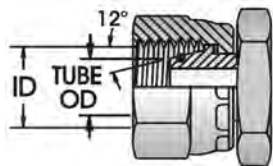
Metric DIN Light (L) 24° - Cone - Deutsche Industrie Normen - Male



Thread Size			Thread O. D.	Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Size & Pitch	Reference	Tube OD mm	mm	BAR	PSI	N.m	ft-lbf
M12 x 1.5	6L	6.0	12.0	250	3625	15	11
M14 x 1.5	8L	8.0	14.0	250	3625	28	21
M16 x 1.5	10L	10.0	16.0	250	3625	32	24
M18 x 1.5	12L	12.0	18.0	250	3625	38	28
M22 x 1.5	15L	15.0	22.0	250	3625	55	41
M26 x 1.5	18L	18.0	26.0	160	2320	80	59
M30 x 2.0	22L	22.0	30.0	160	2320	100	74
M36 x 2.0	28L	28.0	36.0	100	1450	125	92
M45 x 2.0	35L	35.0	45.0	100	1450	215	159
M52 x 2.0	42L	42.0	52.0	100	1450	250	184

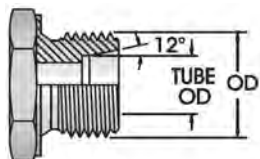
Hose and Coupling Technical Information

Metric DIN Heavy (S) 24° - Cone - Deutsche Industrie Normen - Female



Thread Size			Thread I. D.	Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Size & Pitch	Reference	Tube OD mm	mm	BAR	PSI	N.m	ft-lbf
M14 x 1.5	6S	6.3	12.5	630	9135	28	21
M16 x 1.5	8S	7.9	14.5	630	9135	32	24
M18 x 1.5	10S	10	16.5	630	9135	38	28
M20 x 1.5	12S	12	18.5	630	9135	42	31
M22 x 1.5	14S	14	20.5			55	41
M24 x 1.5	16S	15.8	22.5	400	5800	55	41
M36 x 20	25S	24.5	34.0	400	5800	125	92
M42 x 20	30S	30	40.0	250	3625	215	159
M52 x 20	38S	36.8	50.0	250	3625	250	184

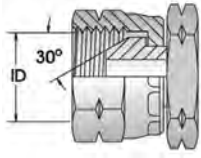
Metric DIN Heavy (S) 24° - Cone - Deutsche Industrie Normen - Male



Thread Size			Thread O. D.	Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Size & Pitch	Reference	Tube OD mm	mm	BAR	PSI	N.m	ft-lbf
M14 x 1.5	6S	6.0	14.0	630	9135	28	21
M16 x 1.5	8S	8.0	16.0	630	9135	32	24
M18 x 1.5	10S	10.0	18.0	630	9135	38	28
M20 x 1.5	12S	12.0	20.0	630	9135	42	31
M22 x 1.5	14S	14.0	22.0	400	5800	55	41
M24 x 1.5	16S	16.0	24.0	400	5800	55	41
M36 x 20	25S	25.0	36.0	400	5800	125	92
M42 x 20	30S	30.0	42.0	250	3625	215	159
M52 x 20	38S	38.0	52.0	250	3625	250	184

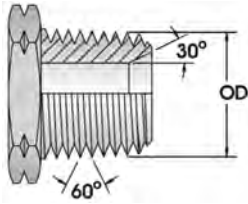
Hose and Coupling Technical Information

NPSM - National Pipe Straight Mechanical - Female



Size			Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	1/8"-27	8.7	0.34	345	5004	14	10
-04	1/4"	1/4"-18	11.9	0.47	345	5004	29	21
-06	3/8"	3/8"-18	15.9	0.63	276	4003	46	34
-08	1/2"	1/2"-14	19.1	0.75	207	3002	62	46
-12	3/4"	3/4"-14	24.6	0.97	172	2495	90	66
-16	1"	1"-11 1/2	31	1.22	140	2031	129	95
-20	1.1/4"	1.1/4"-11 1/2	39.7	1.56	79	1146	178	131
-24	1.1/2"	1.1/2"-11 1/2	45.2	1.78	69	1001	243	179
-32	2"	2"- 11 1/2	57.2	2.25	69	1001	346	255

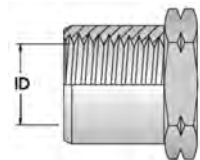
NPSM - National Pipe Straight Mechanical - Male



Size			Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	1/8"-27	10.3	0.41	345	5004	14	10
-04	1/4"	1/4"-18	14.3	0.56	276	4003	46	34
-06	3/8"	3/8"-18	17.5	0.69	207	3002	62	46
-08	1/2"	1/2"-14	21.4	0.84	207	3002	62	46
-12	3/4"	3/4"-14	27	1.06	172	2495	90	66
-16	1"	1"-11 1/2	33.3	1.31	140	2031	129	95
-20	1.1/4"	1.1/4"-11 1/2	42	1.65	79	1146	178	131
-24	1.1/2"	1.1/2"-11 1/2	48.4	1.91	69	1001	243	179
-32	2"	2"- 11 1/2	60.3	2.37	69	1001	346	255

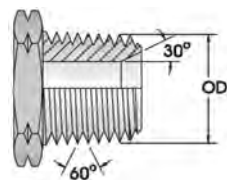
Hose and Coupling Technical Information

NPTF - National Pipe Tapered Fuels - Fixed Female



Size			Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	1/8"-27	8.7	0.34	345	5004	14	10
-04	1/4"	1/4"-18	11.9	0.47	345	5004	29	21
-06	3/8"	3/8"-18	15.9	0.63	276	4003	46	34
-08	1/2"	1/2"-14	19.1	0.75	207	3002	62	46
-12	3/4"	3/4"-14	24.6	0.97	172	2495	90	66
-16	1"	1"-11 1/2	31	1.22	140	2031	129	95
-20	1.1/4"	1.1/4"-11 1/2	39.7	1.56	79	1146	178	131
-24	1.1/2"	1.1/2"-11 1/2	45.2	1.78	69	1001	243	179
-32	2"	2"- 11 1/2	57.2	2.25	69	1001	346	255

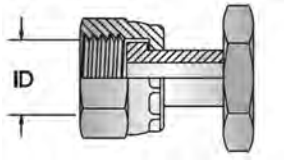
NPTF - National Pipe Tapered Fuels - Male



Size			Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	1/8"-27	10.3	0.41	345	5004	14	10
-04	1/4"	1/4"-18	14.3	0.56	345	5004	29	21
-06	3/8"	3/8"-18	17.5	0.69	276	4003	46	34
-08	1/2"	1/2"-14	21.4	0.84	207	3002	62	46
-12	3/4"	3/4"-14	27	1.06	172	2495	90	66
-16	1"	1"-11 1/2	33.3	1.31	140	2031	129	95
-20	1.1/4"	1.1/4"-11 1/2	42	1.65	79	1146	178	131
-24	1.1/2"	1.1/2"-11 1/2	48.4	1.91	69	1001	243	179
-32	2"	2"- 11 1/2	60.3	2.37	69	1001	346	255

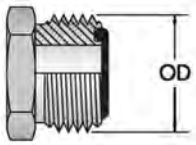
Hose and Coupling Technical Information

ORFS - O-Ring Face Seal - Female



Thread Size		Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
in - TPI	Dash (-)	mm	inch	BAR	PSI	N.m	ft-lbf
9/16 - 18 UNF	-09	12.9	0.51	630	9135	27	20
11/16 - 16 UN	-11	16	0.63	630	9135	45	33
13/16 - 16 UN	-13	19.1	0.75	630	9135	65	48
1 - 14 UNS	-16	23.6	0.93	400	5800	110	81
1.3/16 - 12 UN	-19	28.2	1.11	400	5800	140	103
1.7/16 - 12 UN	-23	34.4	1.35	400	5800	220	162
1.11/16 - 12 UN	-27	40.6	1.60	250	3625	300	221
2 - 12 UN	-32	48.8	1.92	250	3625	350	258

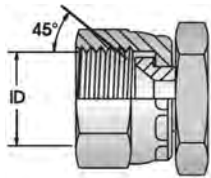
ORFS - O-Ring Face Seal - Male



Thread Size		Thread O.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
in - TPI	Dash (-)	mm	inch	BAR	PSI	N.m	ft-lbf
9/16 - 18 UNF	-09	14.3	0.56	630	9135	27	20
11/16 - 16 UN	-11	17.3	0.68	630	9135	45	33
13/16 - 16 UN	-13	20.6	0.81	630	9135	65	48
1 - 14 UNS	-16	25.4	1.00	400	5800	110	81
1.3/16 - 12 UN	-19	30	1.18	400	5800	140	103
1.7/16 - 12 UN	-23	36.3	1.43	400	5800	220	162
1.11/16 - 12 UN	-27	42.7	1.68	250	3625	300	221
2 - 12 UN	-32	51.8	2.04	250	3625	350	258

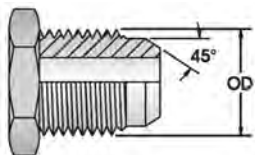
Hose and Coupling Technical Information

SAE 45° - Flare - Female



Size			Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	5/16" -24	6.9	0.27	34	500	10	7
-03	3/16"	3/8" -24	8.6	0.34	34	500	13	10
-04	1/4"	7/16 -20	9.9	0.39	34	500	20	15
-05	5/6"	1/2" -20	11.4	0.45	34	500	25	18
-06	3/8"	5/8" -18	14.2	0.56	34	500	30	22
-07	7/16"	11/16" -16	15.7	0.62	34	500	45	33
-08	1/2"	3/4" -16	17	0.67	34	500	60	44
-10	5/8"	7/8" -14	20.3	0.80	34	500	90	66
-12	3/4"	1 1/16" -14	25.1	0.99	34	500	120	89
-14	7/8"	1 1/4" - 12	29.5	1.16	34	500	130	96
-16	1"	1 3/8" - 12	32.5	1.28	34	500	160	118

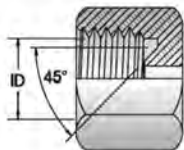
SAE 45° - Flare - Male



Size			Thread O.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	5/16" -24	7.9	0.31	34	500	10	7
-03	3/16"	3/8" -24	9.6	0.38	34	500	13	10
-04	1/4"	7/16 -20	11.2	0.44	34	500	20	15
-05	5/6"	1/2" -20	12.7	0.50	34	500	25	18
-06	3/8"	5/8" -18	15.7	0.62	34	500	30	22
-07	7/16"	11/16" -16	17.3	0.68	34	500	45	33
-08	1/2"	3/4" -16	19.0	0.75	34	500	60	44
-10	5/8"	7/8" -14	22.3	0.88	34	500	90	66
-12	3/4"	1 1/16" -14	26.9	1.06	34	500	120	89
-14	7/8"	1 1/4" - 12	31.7	1.25	34	500	130	96
-16	1"	1 3/8" - 12	35.0	1.38	34	500	160	118

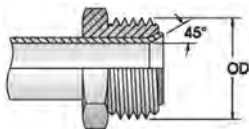
Hose and Coupling Technical Information

SAE 45° - Inverted Flare - Female



Size			Thread I.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	5/16" -24	6.9	0.27	34	500	10	7
-03	3/16"	3/8" -24	8.6	0.34	34	500	13	10
-04	1/4"	7/16 -20	9.9	0.39	34	500	20	15
-05	5/6"	1/2" -20	11.4	0.45	34	500	25	18
-06	3/8"	5/8" -18	14.2	0.56	34	500	30	22
-07	7/16"	11/16" -16	15.7	0.62	34	500	45	33
-08	1/2"	3/4" -16	17	0.67	34	500	60	44
-10	5/8"	7/8" -14	20.3	0.80	34	500	90	66
-12	3/4"	1 1/16" -14	25.1	0.99	34	500	120	89

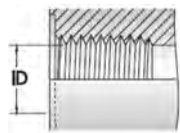
SAE 45° - Inverted Flare - Male



Size			Thread O.D.		Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	mm	inch	BAR	PSI	N.m	ft-lbf
-02	1/8"	5/16" -24	6.9	0.27	34	500	10	7
-03	3/16"	3/8" -24	8.6	0.34	34	500	13	10
-04	1/4"	7/16 -20	9.9	0.39	34	500	20	15
-05	5/6"	1/2" -20	11.4	0.45	34	500	25	18
-06	3/8"	5/8" -18	14.2	0.56	34	500	30	22
-07	7/16"	11/16" -16	15.7	0.62	34	500	45	33
-08	1/2"	3/4" -16	17	0.67	34	500	60	44
-10	5/8"	7/8" -14	20.3	0.80	34	500	90	66
-12	3/4"	1 1/16" -14	25.1	0.99	34	500	120	89

Hose and Coupling Technical Information

STOR - Straight Thread O-Ring - Female with Light Duty Adapter



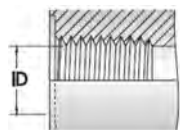
Size			Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	BAR	PSI	N.m	ft-lbf
-02	1/8"	5/16"-24 UNF	630	9135	10	7
-03	3/16"	3/8"-24 UNF	630	9135	13	10
-04	1/4"	7/16"-20 UNF	630	9135	30	22
-05	5/16"	1/2"-20 UNF	630	9135	30	22
-06	3/8"	9/16"-18 UNF	630	9135	40	30
-08	1/2"	3/4"-16 UNF	630	9135	80	59
-10	5/8"	7/8"-14 UNF	630	9135	110	81
-12	3/4"	1.1/16"-12 UN	420	6090	130	96
-14	7/8"	1.3/16"-12 UN	420	6090	200	148
-16	1"	1.5/16"-12 UN	420	6090	180	133
-20	1 1/4"	1.5/8"-12 UN	280	4060	300	221
-24	1 1/2"	1.7/8"-12 UN	280	4060	350	258
-32	2"	2.1/2"-12 UN	210	3045	420	310

General Note:



STOR Adapters with non-ORFS connection are Light Duty

STOR - Straight Thread O-Ring - Female with Heavy Duty Adapter



Size			Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	BAR	PSI	N.m	ft-lbf
-03	3/16"	3/8"-24 UNF	630	9135	20	15
-04	1/4"	7/16"-20 UNF	630	9135	30	22
-05	5/16"	1/2"-20 UNF	630	9135	45	33
-06	3/8"	9/16"-18 UNF	630	9135	55	41
-08	1/2"	3/4"-16 UNF	630	9135	100	74
-10	5/8"	7/8"-14 UNF	630	9135	140	103
-12	3/4"	1.1/16"-12 UN	420	6090	220	162
-14	7/8"	1.3/16"-12 UN	420	6090	260	192
-16	1"	1.5/16"-12 UN	420	6090	350	258
-20	1 1/4"	1.5/8"-12 UN	280	4060	400	295
-24	1 1/2"	1.7/8"-12 UN	280	4060	420	310
-32	2"	2.1/2"-12 UN	210	3045	500	369

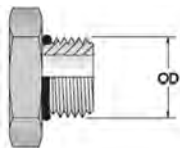
General Note:



STOR Adapters with ORFS connection are Heavy Duty

Hose and Coupling Technical Information

STOR - Straight Thread O-Ring - Male with External HEX



Size			Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	BAR	PSI	N.m	ft-lbf
-02	1/8"	5/16"-24 UNF	630	9135	13	10
-03	3/16"	3/8"-24 UNF	630	9135	20	15
-04	1/4"	7/16"-20 UNF	630	9135	40	30
-05	5/16"	1/2"-20 UNF	630	9135	45	33
-06	3/8"	9/16"-18 UNF	630	9135	60	44
-08	1/2"	3/4"-16 UNF	630	9135	100	74
-10	5/8"	7/8"-14 UNF	630	9135	130	96
-12	3/4"	1.1/16"-12 UN	420	6090	220	162
-14	7/8"	1.3/16"-12 UN	420	6090	260	192
-16	1"	1.5/16"-12 UN	420	6090	350	258
-20	1 1/4"	1.5/8"-12 UN	280	4060	400	295
-24	1 1/2"	1.7/8"-12 UN	280	4060	420	310
-32	2"	2.1/2"-12 UN	210	3045	500	369

STOR - Straight Thread O-Ring - Male with Internal HEX

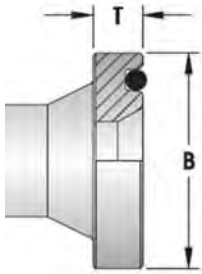


Size			Max Working Pressure		Hose Coupling Dynamic Assembly Torque	
Dash (-)	Inch Size (in)	Thread Size (in - TPI)	BAR	PSI	N.m	ft-lbf
-02	1/8"	5/16"-24 UNF	630	9135	7	5
-03	3/16"	3/8"-24 UNF	630	9135	13	10
-04	1/4"	7/16"-20 UNF	630	9135	20	15
-05	5/16"	1/2"-20 UNF	630	9135	25	18
-06	3/8"	9/16"-18 UNF	630	9135	45	33
-08	1/2"	3/4"-16 UNF	630	9135	80	59
-10	5/8"	7/8"-14 UNF	630	9135	110	81
-12	3/4"	1.1/16"-12 UN	420	6090	180	133
-14	7/8"	1.3/16"-12 UN	420	6090	220	162
-16	1"	1.5/16"-12 UN	420	6090	300	221
-20	1 1/4"	1.5/8"-12 UN	280	4060	350	258
-24	1 1/2"	1.7/8"-12 UN	280	4060	420	310
-32	2"	2.1/2"-12 UN	210	3045	500	369

Hose and Coupling Technical Information

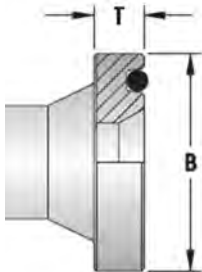
Flange Head Guide (Code 61, Code 62, Cat)

Code 61



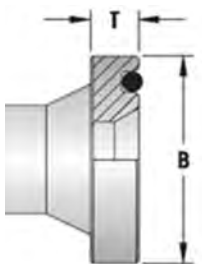
Size				Max Working Pressure	
Dash (-)	Inch Size (in)	T (mm-in)	B (mm-in)	BAR	PSI
-08	1/2"	6.7-0.265	30.20-1.19	350	5076
-10*	5/8"	6.7-0.265	34.00-1.34	350	5076
-12	3/4"	6.7-0.265	38.10-1.50	350	5076
-16	1"	8.0-0.315	44.50-1.75	320	4641
-20	1 1/4"	8.0-0.315	50.80-2.00	280	4061
-24	1 1/2"	8.0-0.315	60.30-2.37	210	3046
-32	2"	9.5-0.375	71.40-2.81	210	3046
-40	2 1/2"	9.5-0.375	84.10-3.31	175	2538
-48	3"	9.5-0.375	101.60-4.00	16	232
-56	3 1/2"	11.3-0.445	114.30-4.50	35	508
-64	4"	11.3-0.445	127.0-5.00	16	232
-80	5"	11.3-0.445	152.40-6.00	35	508

Code 62



Size				Max Working Pressure	
Dash (-)	Inch Size (in)	T (mm-in)	B (mm-in)	BAR	PSI
-08	1/2"	7.8-0.305	31.80-1.25	420	6092
-12	3/4"	8.8-0.345	41.30-1.63	420	6092
-16	1"	9.5-0.375	47.60-1.88	420	6092
-20	1 1/4"	10.3-0.405	54.00-2.13	420	6092
-24	1 1/2"	12.6-0.495	63.50-2.50	420	6092
-32	2"	12.6-0.495	79.40-3.13	420	6092

Cat



Size				Max Working Pressure	
Dash (-)	Inch Size (in)	T (mm-in)	B (mm-in)	BAR	PSI
-12	3/4"	14.2-0.560	41.30-1.63	420	6092
-16	1"	14.2-0.560	47.60-1.88	420	6092
-20	1 1/4"	14.2-0.560	54.00-2.13	420	6092

Hose and Coupling Technical Information

Flange Head Guide (Code 61, Code 62, Cat) (Continued)

Size				Max Working Pressure	
-24	1 1/2"	14.2-0.560	63.50-2.50	420	6092
-32	2"	14.2-0.560	79.40-3.13	420	6092

General Note:

- Reference charts for Split Flange part numbers.
- SAE Code 61, ISO Form R, and JIS Type I couplings are interchangeable except for Bolt Sizes.
- SAE Code 62, ISO Form R, and JIS Type I couplings are interchangeable except for Bolt Sizes.
- All Code 61 Flange Head Hose Couplings and Adapter Fittings meet or exceed SAE J518 Code 61 requirements for Hydraulic Split Flange Connections. The Code 61 Flange Head design can withstand a maximum operating pressure of 3000 to 5000 psi depending on size.
- All couplings having Cat Flange Heads meet or exceed the performance requirements of SAE J518 Code 62 specifications for Hydraulic Split Flange Connections. The thickness of Cat Flange Heads is greater than Code 62 so that special Split Flanges are required for proper installation. The Code 62 Flange Head Design can withstand a maximum operating pressure of 6000 psi regardless of size.
- *Not SAE Standard - Komatsu Style.

Conversion Formulas

Pressure Conversion:

1 Bar = 14.5 PSI

1 MPa = 10 BAR

Converting Celsius to Fahrenheit:

$$T (^{\circ}\text{F}) = T (^{\circ}\text{C}) \times 9/5 + 32$$

$$\text{Fahrenheit} = 1.8\text{C} + 32$$

Converting Fahrenheit to Celsius:

$$T (^{\circ}\text{C}) = (T (^{\circ}\text{F}) - 32) \times 5/9$$

$$\text{Celsius} = (\text{F}-32)/1.8$$

Cat Low and Medium Pressure Hose & Coupling Products

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Cat Low and Medium Pressure Hose

Cat Low and Medium Pressure Permanent Couplings Features and Benefits

Cat Low & Medium Pressure (LMP) couplings are offered in 3 different series (MN, BN & SW), each coupling series is uniquely matched & tested with a compatible hose type and/or size. The proprietary stem and shell designs are engineered to work together to ensure optimum performance throughout the Lifecycle of the hose assembly. All LMP coupling series are 'No Skive' couplings, providing a simpler, cleaner, safer & more cost-effective hose assembly process.



Our one-piece couplings are designed for superior coupling retention with Cat hose to withstand pressure requirements and allow flexing without fatigue. This results in the most reliable connection and eliminates potential for leaks.

"BN series couplings tested up to 1M impulse cycles in combination with 4636 / 4636TG hose"

Cat couplings are forged and machined from high tensile strength steel. Then they are heat treated and plated to ensure maximum durability and corrosion resistance.

"Cat couplings are not just for Cat machines, our couplings offer durability and unrivalled performance for ALL MAKES. ALL MODELS."



Salt spray testing provides a controlled accelerated corrosive environment to evaluate the relative corrosion resistance of a coating, substrate, or part itself.

Components are placed inside a chamber and exposed continually for a specified period, then evaluated for resistance to corrosion.

This test ensures that our range of couplings are class leading when it comes to environmental factors that will have a detrimental effect on product and making sure our couplings will stand up to most severe conditions.

"Cat coupling salt-spray and metallurgical testing - exceeds many key industry standards to guarantee unparalleled hydraulics safety and dependability"



Cat Low and Medium Pressure Hose

One-Wire Braid Hose - 716



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8409	6.4 - .25	14.1 - .56	-4	MN	90.0 - 13053	22.5 - 3263	100 - 3.94
456-8410	9.5 - .37	18.1 - .71	-6	MN	72.0 - 10443	18.0 - 2611	125 - 4.92
456-8416	12.7 - .50	21.5 - .85	-8	MN	64.0 - 9282	16.0 - 2321	180 - 7.09
456-8420	15.9 - .63	24.7 - .97	-10	MN	52.0 - 7542	13.0 - 1885	200 - 7.87
456-8421	19.1 - .75	28.6 - 1.13	-12	MN	42.0 - 6092	10.5 - 1523	240 - 9.45
456-8422	25.4 - 1.00	36.6 - 1.44	-16	MN	35.2 - 5105	8.8 - 1276	300 - 11.81
456-8423	31.8 - 1.25	44.8 - 1.76	-20	MN	25.2 - 3655	6.3 - 914	420 - 16.54
456-8424	38.1 - 1.50	52.0 - 2.05	-24	MN	20.0 - 2901	5.0 - 725	500 - 19.69
456-8425	50.8 - 2.00	65.9 - 2.59	-32	MN	16.0 - 2321	4.0 - 580	630 - 24.80

Exceeds the requirement of **SAE 100R1AT**

Construction: Special high temperature synthetic rubber tube; single high tensile steel wire braid reinforcement. Oil, weather, and abrasion resistant synthetic rubber outer cover

Application: Medium pressure service with high temperature petroleum base hydraulic fluids, hot oil, grease, lubricants, and crude oils. MSHA approved cover. U.S. Coast Guard 46CFR56.60-25C approved.

Temperature Range: -40° F to +275° F (-40° C to +135° C) for petroleum based hydraulic fluids. -40° F to +275° F (-40° C to +135° C) for petroleum based ISO hydraulic fluids. +185° F Max (+85° C Max) for air, water, or water-glycol. -40° to +158° F (-40° C to +70° C) for all other applications.

Couplings: Crimp-on permanent, non-skive type, MN Series coupling. See Permanent Couplings (716, 294, 844) section.

Note: Hose cover does not need to be removed before attaching couplings.

Note: Max Work Pressures listed are for use to +135 °C max temperature. Use is permitted up to full EN853-1SN working pressures to a max temperature of +100 °C.

One-Wire Braid Compact Hose - 716CP



Part number	Hose ID (mm - in)	Hose O.D. (mm - in)	Hose Dash Size	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	Min Bnd Radius (mm - in)
456-8538	6.4 - 0.25	12.2 - 0.48	-4	MN	90.0 - 13053	22.5 - 3263	50 - 1.97
456-8539	9.5 - 0.37	15.5 - 0.61	-6	MN	72.0 - 10443	18.0 - 2611	65 - 2.56
456-8540	12.7 - 0.50	19.0 - 0.75	-8	MN	64.0 - 9282	16.0 - 2321	90 - 3.54
456-8541	15.9 - 0.63	22.2 - 0.87	-10	MN	52.0 - 7542	13.0 - 1885	100 - 3.94
456-8542	19.1 - 0.75	25.8 - 1.02	-12	MN	42.0 - 6092	10.5 - 1523	120 - 4.72
456-8543	25.4 - 1.00	33.3 - 1.31	-16	MN	35.2 - 5105	8.8 - 1276	150 - 5.91

Exceeds the requirement of

Construction: Synthetic rubber tube; single high tensile steel wire braid reinforcement. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: Medium pressure service with petroleum based hydraulic fluids, lubricating oils, grease, water and water-glycol based fluids, and air. MSHA approved cover.

Temperature Range: -40° F to +212° F (-40° C to +100° C) for petroleum based fluids. +150° F Max (+66° C Max) for water based fluids and air.

Couplings: Crimp-on permanent, non-skive type, MN Series coupling. See Permanent Couplings (716, 294, 844) section.

Note: Hose cover does not need to be removed before attaching couplings.

Cat Low and Medium Pressure Hose

One-Wire Braid ToughGuard Hose - 716TG



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8426	6.4 - .25	15.7 - .62	-4	MN	90.0 - 13053	22.5 - 3263	100 - 3.94
456-8427	9.5 - .37	19.7 - .78	-6	MN	72.0 - 10443	18.0 - 2611	125 - 4.92
456-8428	12.7 - .50	23.1 - .91	-8	MN	64.0 - 9282	16.0 - 2321	180 - 7.09
456-8429	15.9 - .63	26.3 - 1.04	-10	MN	52.0 - 7542	13.0 - 1885	200 - 7.87
456-8430	19.1 - .75	30.2 - 1.19	-12	MN	42.0 - 6092	10.5 - 1523	240 - 9.45
456-8431	25.4 - 1.00	38.9 - 1.53	-16	MN	35.2 - 5105	8.8 - 1276	300 - 11.81

Exceeds the requirement of **SAE 100R1AT**

Construction: Special high temperature synthetic rubber tube; single high tensile steel wire braid reinforcement. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: Medium pressure service with high temperature petroleum base hydraulic fluids, hot oil, grease, lubricants, and crude oils. MSHA approved cover. U.S. Coast Guard 46CFR56.60-25C approved.

Temperature Range: -40° F to +275° F (-40° C to +135° C) for petroleum based hydraulic fluids. -40° F to +275° F (-40° C to +135° C) for petroleum based ISO hydraulic fluids. +185° F Max (+85° C Max) for air, water, or water-glycol. -40° to +158° F (-40° C to +70° C) for all other applications.

Couplings: Crimp-on permanent, non-skive type, MN Series coupling. See Permanent Couplings (716, 294, 844) section.

Note: Hose cover does not need to be removed before attaching couplings.

Note: Max Work Pressures listed are for use to +135 °C max temperature. Use is permitted up to full EN853-1SN working pressures to a max temperature of +100 °C.

Cat Low and Medium Pressure Hose

One-Wire Braid High Temperature Coolant Hose - 2786



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8518	6.4 - .25	14.1 - .56	-4	MN	38.0 - 5511	9.5 - 1378	100 - 3.94
456-8519	9.5 - .37	18.1 - .71	-6	MN	31.2 - 4525	7.8 - 1131	125 - 4.92
456-8520	12.7 - .50	24.7 - .97	-8	MN	27.6 - 1003	6.9 - 1001	180 - 7.09
456-8521	15.9 - .63	28.6 - 1.13	-10	MN	20.8 - 3017	5.2 - 754	200 - 7.87
456-8522	19.1 - .75	28.6 - 1.13	-12	MN	17.2 - 2495	4.3 - 624	240 - 9.45
456-8523	25.4 - 1.00	36.6 - 1.44	-16	MN	13.6 - 1973	3.4 - 493	300 - 11.81

Exceeds the requirement of **SAE 100R4**

Construction: Special high temperature synthetic rubber tube; single high tensile steel wire braid reinforcement. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: High temperature applications for use with water, water glycol, and water emulsion fluids, and long life coolant.

Temperature Range: -40° F to +250° F (-40° C to +121° C) for fluids, or up to +158° F (+70° C) when used with air.

Couplings: Crimp-on permanent, non-skive type, MN Series coupling. See Permanent Couplings (716, 294, 844) section.

Note: Hose cover does not need to be removed before attaching couplings.

Cat Low and Medium Pressure Hose

One-Wire Braid High Temperature General Purpose Hose - 4901HT



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8555	6.4 - .25	15.5 - .61	-4	MN	82.8 - 12009	20.7 - 3002	50 - 1.97
456-8556	9.5 - .37	19.4 - .76	-6	MN	82.8 - 12009	20.7 - 3002	65 - 2.56
456-8557	12.7 - .50	22.4 - .88	-8	MN	82.8 - 12009	20.7 - 3002	90 - 3.54
456-8558	15.9 - .63	24.7 - .97	-10	MN	55.2 - 8006	13.8 - 2002	100 - 3.94
456-8559	19.1 - .75	28.7 - 1.13	-12	MN	55.2 - 8006	13.8 - 2002	120 - 4.72
456-8560	25.4 - 1.00	35.6 - 1.40	-16	MN	27.6 - 4003	6.9 - 1001	150 - 5.91
456-8561	31.8 - 1.25	43.2 - 1.70	-20	MN	27.6 - 4003	6.9 - 1001	210 - 8.27
456-8562	38.1 - 1.50	50.5 - 1.99	-24	MN	13.6 - 1973	3.4 - 493	250 - 9.84
456-8563	50.8 - 2.00	65.5 - 2.58	-32	MN	13.6 - 1973	3.4 - 493	315 - 12.40
492-4108	63.5 - 2.50	75.4 - 2.97	-40	MN	13.6 - 1973	3.4 - 493	560 - 22.05
492-4109	76.2 - 3.00	88.9 - 3.50	-48	MN	13.6 - 1973	3.4 - 493	610 - 24.02

Exceeds the requirement of

Construction: Synthetic rubber tube; two braids of special high tensile steel wire reinforcement separated by synthetic rubber layer. Textile braid outer cover

Application: Hose is intended for continuous use with 1E4320 and similar petroleum-based hydraulic oils, diesel fuels, and oil misted air.

Temperature Range: -40°C to +150°C and with dry air within a temperature range of -40 °C to +120 °C . Use is also permitted with soy and rapeseed based bio-diesel blends to 20% biodiesel (B20) within a temperature range of -22 °C (-40 °C in non-operating conditions) to +107 °C continuously and up to +120 °C intermittently (maximum 10% of duty cycle) . Use is also permitted with water-based fluids and 1E1867 or similar diesel engine oils up to +100 °C.

Couplings: Crimp-on permanent, non-skive type, MN Series coupling. See Permanent Couplings (716, 294, 844) section. For related assembly equipment and tooling, see Tooling section.

Note: Hose cover does not need to be removed before attaching couplings.

Cat Low and Medium Pressure Hose

One-Wire Brad High Temperature Engine Oil Hose - 5385

Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
601-7063	25.4 - 1.00	33.3 - 1.31	-16	MN	28.0 - 4061	3.45 - 500	180 - 7.09

Exceeds the requirement of

Construction: Special high temperature synthetic rubber tube; single one braid reinforcement. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: High temperature applications for use with petroleum based lubricating and engine oils.

Temperature Range: -40° F to +275° F (-40° C to +135° C) for fluids.

Couplings: Crimp-on permanent, non-skive type, MN Series coupling. See Permanent Couplings (716, 294, 844) section.

Note: Hose cover does not need to be removed before attaching couplings.

Cat Low and Medium Pressure Hose

One-Wire Braid Fire Suppression Hose - 5014



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
492-4110	6.4 - 0.25	13.1 - 0.52	-4	MN	76.8 - 11139	19.2 - 2785	100 - 3.94
492-4111	9.5 - 0.37	17.1 - 0.67	-6	MN	62.8 - 9108	15.7 - 2277	125 - 4.92
492-4112	12.7 - 0.50	21.3 - 0.84	-8	MN	56.0 - 8122	14.0 - 2031	180 - 7.09
492-4113	19.1 - 0.75	27.3 - 1.07	-12	MN	34.8 - 5047	8.7 - 1262	240 - 9.45

Exceeds the requirement of

Construction: Synthetic rubber tube; single high tensile steel wire braid reinforcement. Oil, weather, and abrasion resistant synthetic rubber outer cover. Color: Red.

Application: Designed to be used in first fit and field installed Fire Suppression systems. This product is designed to convey water based fire retardant. It has a red cover to highlight its use in Fire Suppression Systems.

Temperature Range: 5014 hose is intended specifically for fire suppression systems operating within a temperature range of -40°C to 100°C. Exposure to temperatures above rated maximum and/or pressure impulses that exceed maximum working pressure will materially reduce hose life. The outer cover is oil and weather resistant and meets MSHA requirements.

Couplings: Crimp-on permanent, non-skive type, MN Series coupling. See Permanent Couplings (716, 294, 844) section.

Note: Hose cover does not need to be removed before attaching couplings.

Cat Low and Medium Pressure Hose

Two-Wire Braid Hose - 294



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8432	6.4 - .25	15.7 - .62	-4	MN	160.0 - 23206	40.0 - 5802	100 - 3.94
456-8433	7.9 - .31	17.3 - .68	-5	MN	140.0 - 20305	35.0 - 5076	115 - 4.53
456-8434	9.5 - .37	19.7 - .78	-6	MN	132.0 - 19145	33.0 - 4786	125 - 4.92
456-8435	12.7 - .50	23.1 - .91	-8	MN	110.0 - 15954	27.5 - 3989	180 - 7.09
456-8436	15.9 - .63	26.3 - 1.04	-10	MN	100.0 - 14504	25.0 - 3626	200 - 7.87
456-8437	19.1 - .75	30.2 - 1.19	-12	MN	86.0 - 12473	21.5 - 3118	240 - 9.45
456-8438	25.4 - 1.00	38.9 - 1.53	-16	MN	66.0 - 9572	16.5 - 2393	300 - 11.81
456-8439	31.8 - 1.25	49.6 - 1.95	-20	MN	50.0 - 7252	12.5 - 1813	420 - 16.54
456-8440	38.1 - 1.50	56.0 - 2.20	-24	MN	36.0 - 5221	9.0 - 1305	500 - 19.69
456-8441	50.8 - 2.00	68.6 - 2.70	-32	MN	32.0 - 4641	8.0 - 1160	630 - 24.80
456-8442	63.5 - 2.50	81.0 - 3.19	-40	MN	28.0 - 4061	7.0 - 1015	760 - 29.92
541-7099	76.2 - 3.00	94.3 - 3.71	-48	MN	23.6 - 3423	5.9 - 856	915 - 36.02

Exceeds the requirement of **SAE 100R2AT**

Construction: Synthetic rubber tube; two braids of special high tensile steel wire reinforcement separated by synthetic rubber layer. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: High pressure service with petroleum base hydraulic fluids, water-glycol and water-oil fire resistant hydraulic fluids, hot oil, grease, lubricants, crude and fuel oils, air and water. MSHA approved cover. U.S. Coast Guard 46CFR56.60-25C approved.

Temperature Range: -40° F to +190° F (-40° C to +88° C) for water-glycol and water-oil fire resistant hydraulic fluids, hot oil, grease, lubricants, crude and fuel oils. +150° F Max (+66° C Max) for air and water. -40° F to +212° F (-40° C to +100° C) for all other applications.

Couplings: Crimp-on permanent, non-skive type, MN Series coupling. See Permanent Couplings (716, 294, 844) section. For related assembly equipment and tooling, see Tooling section.

Note: Hose cover does not need to be removed before attaching couplings.

Cat Low and Medium Pressure Hose

Two-Wire Braid Compact Hose - 294CP



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8451	6.4 - .25	14.2 - .56	-4	MN	160.0 - 23206	40.0 - 5802	50 - 1.97
541-7160	7.9 - 0.31	15.7 - 0.62	-5	MN	140.0 - 20305	35.0 - 5076	55 - 2.17
456-8452	9.5 - .37	18.0 - .71	-6	MN	140.0 - 20305	35.0 - 5076	65 - 2.56
456-8453	12.7 - .50	21.2 - .83	-8	MN	110.0 - 15954	27.5 - 3989	90 - 3.54
456-8454	15.9 - .63	24.4 - .96	-10	MN / BN	100.0 - 14504	25.0 - 3626	100 - 3.94
456-8455	19.1 - .75	29.0 - 1.14	-12	MN	86.0 - 12473	21.5 - 3118	120 - 4.72
456-8456	25.4 - 1.00	36.6 - 1.44	-16	MN	66.0 - 9572	16.5 - 2393	150 - 5.91

Exceeds the requirement of **SAE 100R16**

Construction: Synthetic rubber tube; two braids of special high tensile steel wire reinforcement separated by synthetic rubber layer. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: High pressure service with petroleum base hydraulic fluids, water-glycol and water-oil fire resistant hydraulic fluids, hot oil, grease, lubricants, crude and fuel oils, air and water. MSHA approved cover. U.S. Coast Guard 46CFR56.60-25C approved.

Temperature Range: -40° F to +190° F (-40° C to +88° C) for water-glycol and water-oil fire resistant hydraulic fluids, hot oil, grease, lubricants, crude and fuel oils. +150° F Max (+66° C Max) for air and water. -40° F to +212° F (-40° C to +100° C) for all other applications.

Couplings: Crimp-on permanent, non-skive type, MN or BN Series coupling. See Permanent Couplings (716, 294, 844) section. For related assembly equipment and tooling, see Tooling section.

Note: Hose cover does not need to be removed before attaching couplings.

Cat Low and Medium Pressure Hose

Two-Wire Braid ToughGuard Hose - 294TG



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8443	6.4 - .25	15.7 - .62	-4	MN	160.0 - 23206	40.0 - 5802	100 - 3.94
456-8444	9.5 - .37	19.7 - .78	-6	MN	132.0 - 19145	33.0 - 4786	125 - 4.92
456-8445	12.7 - .50	23.1 - .91	-8	MN	110.0 - 15954	27.5 - 3989	180 - 7.09
456-8446	15.9 - .63	26.3 - 1.04	-10	MN	100.0 - 14504	25.0 - 3626	200 - 7.87
456-8447	19.1 - .75	30.2 - 1.19	-12	MN	86.0 - 12473	21.5 - 3118	240 - 9.45
456-8448	25.4 - 1.00	38.9 - 1.53	-16	MN	66.0 - 9572	16.5 - 2393	300 - 11.81
543-4873	50.8 - 2.00	68.6 - 2.70	-32	MN	32.0 - 4641	8.0 - 1160	630 - 24.80

Exceeds the requirement of **SAE 100R2AT**

Construction: Synthetic rubber tube; two braids of special high tensile steel wire reinforcement separated by synthetic rubber layer. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: High pressure service with petroleum base hydraulic fluids, water-glycol and water-oil fire resistant hydraulic fluids, hot oil, grease, lubricants, crude and fuel oils, air and water. MSHA approved cover. U.S. Coast Guard 46CFR56.60-25C approved.

Temperature Range: -40° F to +190° F (-40° C to +88° C) for water-glycol and water-oil fire resistant hydraulic fluids, hot oil, grease, lubricants, crude and fuel oils. +150° F Max (+66° C Max) for air and water. -40° F to +212° F (-40° C to +100° C) for all other applications.

Couplings: Crimp-on permanent, non-skive type, MN Series coupling. See Permanent Couplings (716, 294, 844) section.

Note: Hose cover does not need to be removed before attaching couplings

Cat Low and Medium Pressure Hose

Two-Wire Braid Compact ToughGuard Hose - 294CPTG



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
541-7085	6.4 - 0.25	13.5 - 0.53	-4	MN	160.0 - 23206	40.0 - 5802	50 - 1.97
541-7086	9.5 - 0.37	17.2 - 0.68	-6	MN	140.0 - 20305	35.0 - 5076	65 - 2.56

Exceeds the requirement of **SAE 100R16**

Construction: Synthetic rubber tube; two braids of special high tensile steel wire reinforcement separated by synthetic rubber layer. Oil and weather resistant synthetic rubber cover with special outer high abrasion resistant ToughGuard film.

Application: High pressure service with petroleum based hydraulic fluids, lubricating oils, grease, water and water-glycol based fluids, and air. MSHA approved cover.

Temperature Range: -40° F to +212°F (-40° C to +100° C) for petroleum based fluids. +150° F Max (+66° C Max) for water based fluids and air.

Couplings: Crimp-on permanent, non-skive type, MN Series coupling. See Permanent Couplings (716, 294, 844) section.

Note: Hose cover does not need to be removed before attaching couplings.

Cat Low and Medium Pressure Hose

Two-Wire Braid High Temperature Hose - 294HT



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
541-7183	31.8 - 1.25	48.2 - 1.90	-20	MN	18.0 - 2611	4.5 - 653	420 - 16.54
541-7184	38.1 - 1.50	54.4 - 2.14	-24	MN	13.6 - 1973	3.4 - 493	500 - 19.69
456-8449	50.8 - 2.00	68.6 - 2.70	-32	MN	12.4 - 1798	3.1 - 450	630 - 24.80
456-8450	63.5 - 2.50	81.0 - 3.19	-40	MN	11.2 - 1624	2.8 - 406	760 - 29.92

Exceeds the requirement of **SAE J517 100R2**

Construction: Synthetic rubber tube; two braids of special high tensile steel wire reinforcement separated by synthetic rubber layer. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: High pressure service with petroleum base hydraulic fluids, water-glycol and water-oil fire resistant hydraulic fluids, hot oil, grease, lubricants, crude and fuel oils, air and water. MSHA approved cover.

Temperature Range: -40° F to +300° F (-40° C to +149° C) for water-glycol and water-oil fire resistant hydraulic fluids.

Couplings: Crimp-on permanent, non-skive type, MN Series coupling. See Permanent Couplings (716, 294, 844) section.

Note: Hose cover does not need to be removed before attaching couplings.

Cat Low and Medium Pressure Hose

Two-Wire Braid Isobaric 28 MPa / 4000 PSI Hose - 4636



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8647	12.7 - 0.50	19.9 - 0.78	-8	MN	112.0 - 16244	28.0 - 4061	90 - 3.54
456-8648	15.9 - 0.63	24.6 - 0.97	-10	BN	112.0 - 16244	28.0 - 4061	100 - 3.94
456-8649	19.1 - 0.75	27.7 - 1.09	-12	MN	112.0 - 16244	28.0 - 4061	120 - 4.72
456-8650	25.4 - 1.00	35.7 - 1.41	-16	BN	112.0 - 16244	28.0 - 4061	150 - 5.91

Exceeds the requirement of **SAE 100R19**

Construction: Synthetic rubber tube; two braids of special high tensile steel wire reinforcement separated by synthetic rubber layer. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: High pressure service with petroleum based hydraulic fluids, lubricating oils, grease, water and water-glycol based fluids, and air. MSHA approved cover.

Temperature Range: -40° F to +250°F (-40° C to +121° C) for petroleum based fluids. +158° F Max (+70° C Max) for water based fluids and air.

Couplings: Crimp-on permanent, non-skive type, MN or BN Series couplings depending on hose size. See Permanent Couplings (716, 294, 844) section.

Note: Hose cover does not need to be removed before attaching couplings.

Cat Low and Medium Pressure Hose

Two-Wire Braid Isobaric ToughGuard Hose 28 MPa / 4000 PSI - 4636TG



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8536	12.7 - 0.50	19.9 - 0.78	-8	MN	112.0 - 16244	28.0 - 4061	90 - 3.54
456-8537	15.9 - 0.63	24.6 - 0.97	-10	BN	112.0 - 16244	28.0 - 4061	100 - 3.94
456-8651	19.1 - 0.75	27.7 - 1.09	-12	MN	112.0 - 16244	28.0 - 4061	120 - 4.72
456-8652	25.4 - 1.00	35.7 - 1.41	-16	BN	112.0 - 16244	28.0 - 4061	150 - 5.91

Exceeds the requirement of **SAE 100R19**

Construction: Synthetic rubber tube; two braids of special high tensile steel wire reinforcement separated by synthetic rubber layer. Oil and weather resistant synthetic rubber cover with special outer high abrasion resistant ToughGuard film.

Application: High pressure service with petroleum based hydraulic fluids, lubricating oils, grease, water and water-glycol based fluids, and air. MSHA approved cover.

Temperature Range: -40° F to +250° F (-40° C to +121° C) for petroleum based fluids. +158° F Max (+70° C Max) for water based fluids and air.

Couplings: Crimp-on permanent, non-skive type, MN or BN Series couplings depending on hose size. See Permanent Couplings (716, 294, 844) section.

Note: Hose cover does not need to be removed before attaching couplings.

Cat Low and Medium Pressure Hose

Hydraulic Suction Hose - 844



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8457	19.1 - .75	34.9 - 1.37	-12	MN	8.4 - 1218	2.1 - 305	65 - 2.56
456-8458	25.4 - 1.00	41.3 - 1.63	-16	MN	6.8 - 986	1.7 - 247	75 - 2.95
456-8459	31.8 - 1.25	50.8 - 2.00	-20	MN	5.6 - 812	1.4 - 203	100 - 3.94
456-8460	38.1 - 1.50	57.2 - 2.25	-24	MN	4.4 - 638	1.1 - 160	130 - 5.12
456-8461	50.8 - 2.00	69.9 - 2.75	-32	MN	2.8 - 406	0.7 - 102	150 - 5.91
456-8462	63.5 - 2.50	79.5 - 3.13	-40	MN	1.6 - 232	0.4 - 58	355 - 13.98
456-8463	76.2 - 3.00	92.2 - 3.63	-48	SW	1.6 - 232	0.4 - 58	460 - 18.11
456-8464	88.9 - 3.50	105.9 - 4.17	-56	MN	1.2 - 174	0.3 - 44	530 - 20.87
465-6101	127.0 - 5.00	143.0 - 5.63	-80	-	1.2 - 174	0.3 - 44	460 - 18.11
465-6102	152.4 - 6.00	170.0 - 6.69	-96	-	1.2 - 174	0.3 - 44	580 - 22.83
465-6103	203.2 - 8.00	223.0 - 8.78	-128	-	1.2 - 174	0.3 - 44	860 - 33.86

Exceeds the requirement of **SAE 100R4**

Construction: Special high temperature synthetic rubber tube; two textile fiber braids combined with wire spiraled throughout the textile reinforcement to prevent collapse under vacuum. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: Hydraulic system suction or return lines with petroleum base hydraulic fluids. MSHA approved cover. U.S. Coast Guard 46CFR56.60-25C approved.

Temperature Range: -40°F to +275°F (-40°C to +135°C).

Couplings: Crimp-on permanent, non-skive type, MN or SW Series coupling. See Permanent Couplings (716, 294, 844) section. For related assembly equipment and tooling, see Tooling section.

Note: Hose cover does not need to be removed before attaching couplings.

Cat Low and Medium Pressure Hose

Hydraulic Suction Hose - 844C



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8465	63.5 - 2.50	79.4 - 3.13	-40	MN	5.6 - 812	1.4 - 203	355 - 13.98
541-7180	76.2 - 3.00	92.1 - 3.63	-48	SW	5.6 - 812	1.4 - 203	460 - 18.11
541-7181	88.9 - 3.50	105.8 - 4.17	-56	MN	5.6 - 812	1.4 - 203	530 - 20.87
541-7182	101.6 - 4.00	117.2 - 4.61	-64	SW	5.6 - 812	1.4 - 203	610 - 24.02

Exceeds the requirement of **SAE 100R4**

Construction: Special high temperature synthetic rubber tube; two textile fiber braids combined with wire spiraled throughout the textile reinforcement to prevent collapse under vacuum. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: Hydraulic system suction or return lines with petroleum base hydraulic fluids. MSHA approved cover. U.S. Coast Guard 46CFR56.60-25C approved.

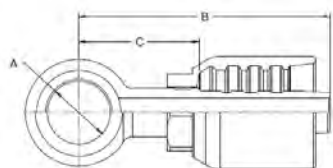
Temperature Range: -40°F to +275°F (-40°C to +135°C).

Couplings: Crimp-on permanent, non-skive type, MN or SW Series coupling. See Permanent Couplings (716, 294, 844) section. For related assembly equipment and tooling, see Tooling section.

Note: Hose cover does not need to be removed before attaching couplings.

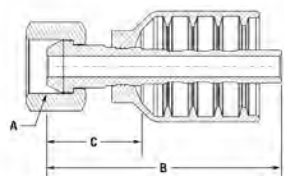
Cat Low and Medium Pressure Permanent Couplings

Banjo - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
627-9145	6.4-.25	-4	MN	M16	52.0-2.05	28.0-.1.10

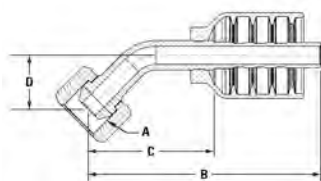
BSPP 60° Female Swivel - Straight (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
556-2931	6.4-.25	-4	MN	1/4-19	-4	46.5-1.83	22.4-0.88
605-9988	6.4-.25	-4	MN	3/8-19	-6	46.0-1.81	22.0-.87
514-2631	9.5-.37	-6	MN	3/8-19	-6	54.0-2.13	25.0-0.98
556-6627	9.5-.37	-6	MN	1/2-14	-8	52.6-2.07	23.3-0.92
518-0814	12.7-.50	-8	MN	1/2-14	-8	55.0-2.17	25.4-1.00
503-1517	12.7-.50	-8	MN	5/8-14	-10	55.0-2.17	25.4-1.00
556-6630	15.9-.63	-10	MN	5/8-14	-10	63.6-2.50	33.1-1.30
518-3005	19.1-.75	-12	MN	3/4-14	-12	65.0-2.56	29.9-1.18
605-9993	19.1-.75	-12	MN	1-11	-16	64.0-2.52	33.0-1.30
518-7796	25.4-1.00	-16	MN	1-11	-16	73.0-2.87	35.0-1.38
581-3125	25.4-1.00	-16	MN	1-11	-16	83.5-3.29	40.6-1.60
513-8170	31.8-1.25	-20	MN	1 1/4-11	-20	96.0-3.78	51.3-2.02
281-9332	38.1-1.50	-24	MN	1 1/2-11	-24	101.0-3.98	49.0-1.93
281-9333	50.8-2.00	-32	MN	2-11	-32	90.5-3.56	40.0-1.57

Note: Grayscale parts are MAO (Made As Order).

BSPP 60° Female Swivel - 45° Elbow (ISO 8434-6)

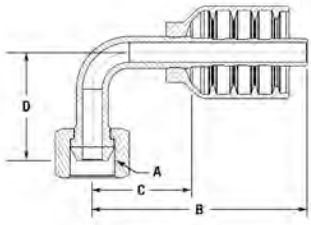


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
556-2934	6.4-.25	-4	MN	1/4-19	-4	61.25-2.41	37.2-1.46	17.5-0.69
514-2632	9.5-.37	-6	MN	3/8-19	-6	72.3-2.85	43.3-1.70	18.0-0.71
518-0815	12.7-.50	-8	MN	1/2-14	-8	78.8-3.10	49.2-1.94	20.0-0.79
503-1518	12.7-.50	-8	MN	5/8-14	-10	78.0-3.07	52.2-2.06	23.0-0.91
501-9530	15.9-.63	-10	MN	5/8-14	-10	90.4-3.56	60.3-2.37	25.0-0.98
518-3006	19.1-.75	-12	MN	3/4-14	-12	101.7-4.00	66.6-2.62	29.0-1.14
518-7797	25.4-1.00	-16	MN	1-11	-16	126.5-4.98	83.4-3.28	35.0-1.38
513-8171	31.8-1.25	-20	MN	1 1/4-11	-20	152.3-6.00	107.6-4.24	40.0-1.57

Note: Grayscale parts are MAO (Made As Order).

Cat Low and Medium Pressure Permanent Couplings

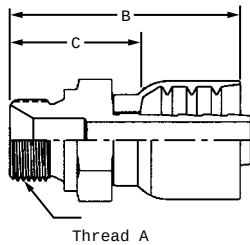
BSPP 60° Female Swivel - 90° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
556-2937	6.4-.25	-4	MN	1/4-19	-4	49.3-1.94	25.3-1.00	30.2-1.19
556-2952	6.4-.25	-4	MN	3/8-19	-6	52.3-2.06	28.24-1.11	37.1-1.46
514-2633	9.5-.37	-6	MN	3/8-19	-6	61.7-2.43	32.7-1.29	34.0-1.34
518-0816	12.7-.50	-8	MN	1/2-14	-8	68.2-2.69	38.6-1.52	41.0-1.61
503-1519	12.7-.50	-8	MN	5/8-14	-10	68.0-2.68	38.4-1.51	54.7-2.15
255-4881	19.1-.75	-12	MN	3/4-14	-12	88.0-3.46	57.0-2.24	161.0-6.34
518-3007	19.1-.75	-12	MN	3/4-14	-12	87.6-3.45	52.5-2.06	58.0-2.28
518-7798	25.4-1.00	-16	MN	1-11	-16	113.8-4.48	70.7-2.78	70.0-2.76
556-6633	31.8-1.25	-20	MN	1 1/4-11	-20	132.8-5.23	92.2-3.63	80.8-3.18
513-8172	31.8-1.25	-20	MN	1 1/4-11	-20	132.0-5.20	92.0-3.62	85.0-3.35

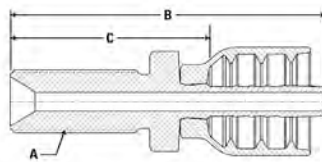
Note: Grayscale parts are MAO (Made As Order).

BSPP 60° Male - Straight (Dowty Seal)



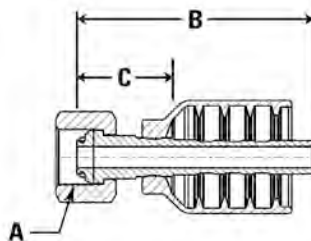
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
124-2172	6.4-.25	-4	MN	1/4-19	-4	48.0-1.89	26.7-1.05	6V-0405
124-2173	9.5-.37	-6	MN	3/8-19	-6	55.0-2.17	30.1-1.19	6V-0406
154-0111	9.5-.37	-6	MN	1/2-14	-8	59.0-2.32	33.7-1.33	6V-0407
124-2174	12.7-.50	-8	MN	1/2-14	-8	61.0-2.40	35.4-1.39	6V-0407
124-2330	12.7-.50	-8	MN	3/4-14	-12	66.0-2.60	41.0-1.61	6V-0408
154-0112	15.9-.63	-10	MN	5/8-14	-10	64.0-2.52	38.9-1.53	8C-6504
124-2175	19.1-.75	-12	MN	3/4-14	-12	71.0-2.80	40.1-1.58	6V-0408
124-2321	25.4-1.00	-16	MN	1-11	-16	84.0-3.31	45.7-1.80	6V-0409

BSPP 60° Male Bulkhead - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
620-1835	6.4-.25	-4	MN	1/4-19	-4	65.5-2.58	41.0-1.61	600-9411
620-1253	9.5-.37	-6	MN	3/8-19	-6	74.0-2.91	48.0-1.89	600-9412
620-1882	12.7-.50	-8	MN	1/2-14	-8	79.0-3.11	53.0-2.09	600-9413
620-2948	15.9-.63	-10	MN	5/8-14	-10	84.0-3.31	59.0-2.32	600-9415
620-3450	19.1-.75	-12	MN	3/4-14	-12	90.0-3.54	59.0-2.32	600-9416

BSPP 60° O-Ring Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
601-4108	6.4-.25	-4	MN	1/4-19	-4	46.5-1.83	22.0-.87	600-9411
607-9774	6.4-.25	-4	MN	3/8-19	-6	46.5-1.83	25.0-.98	600-9412
607-9777	9.5-.37	-6	MN	1/4-19	-4	56.0-2.20	27.0-1.06	600-9411
601-4109	9.5-.37	-6	MN	3/8-19	-6	54.0-2.13	25.0-.98	600-9412
605-9989	9.5-.37	-6	MN	1/2-14	-8	54.0-2.13	25.0-.98	600-9413

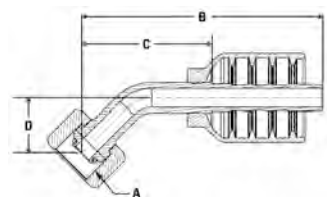
Cat Low and Medium Pressure Permanent Couplings

BSPP 60° O-Ring Female Swivel - Straight (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
601-4110	12.7-.50	-8	MN	1/2-14	-8	55.0-2.17	25.0-.98	600-9413
605-9990	12.7-.50	-8	MN	3/4-14	-12	65.0-2.56	35.0-1.38	600-9416
601-4111	15.9-.63	-10	MN	5/8-14	-10	64.0-2.52	33.0-1.30	600-9415
605-9992	15.9-.63	-10	MN	3/4-14	-12	64.0-2.52	33.0-1.30	600-9416
601-9236	19.1-.75	-12	MN	3/4-14	-12	65.0-2.56	30.0-1.18	600-9416
607-9775	19.1-.75	-12	MN	1-11	-16	76.0-2.99	40.5-1.59	600-9418
601-9237	25.4-1.00	-16	MN	1-11	-16	83.5-3.29	41.0-1.61	600-9418
605-9994	25.4-1.00	-16	MN	1 1/4-11	-20	83.5-3.29	41.0-1.61	600-9419
601-9238	31.8-1.25	-20	MN	1 1/4-11	-20	96.0-3.78	51.0-2.01	600-9419
601-9239	38.1-1.50	-24	MN	1 1/2-11	-24	113.0-4.45	56.0-2.20	600-9421
601-9240	50.8-2.00	-32	MN	2 1/2-11	-32	91.0-3.58	40.5-1.59	5K-0216

Note: Grayscale parts are MAO (Made As Order).

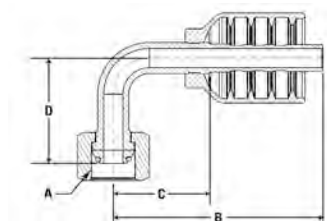
BSPP 60° O-Ring Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
601-9248	6.4-.25	-4	MN	1/4-19	-4	61.0-2.40	37.0-1.46	17.5-.69	600-9411
605-9997	6.4-.25	-4	MN	3/8-19	-6	61.0-2.40	37.0-1.46	17.5-.69	600-9412
601-9249	9.5-.37	-6	MN	3/8-19	-6	72.0-2.83	43.0-1.69	18.0-.71	600-9412
605-9998	9.5-.37	-6	MN	1/2-14	-8	72.0-2.83	43.0-1.69	18.0-.71	600-9413
601-9250	12.7-.50	-8	MN	1/2-14	-8	79.0-3.11	49.0-1.93	20.0-.79	600-9413
601-9257	12.7-.50	-8	MN	5/8-14	-10	82.0-3.23	52.0-2.05	23.0-.91	600-9415
606-0000	12.7-.50	-8	MN	3/4-14	-12	85.5-3.37	56.0-2.20	26.0-1.02	600-9416
601-9258	15.9-.63	-10	MN	5/8-14	-10	90.-3.54	60.0-2.36	25.0-.98	600-9415
606-0002	15.9-.63	-10	MN	3/4-14	-12	93.0-3.66	63.0-2.48	28.0-1.10	600-9416
601-9259	19.1-.75	-12	MN	3/4-14	-12	102.0-4.02	67.0-2.64	29.0-1.14	600-9416
606-0004	19.1-.75	-12	MN	1-11	-16	105.0-4.13	70.0-2.76	32.0-1.26	600-9418
601-9260	25.4-1.00	-16	MN	1-11	-16	126.5-4.98	83.0-3.27	35.0-1.38	600-9418
606-0018	25.4-1.00	-16	MN	1 1/4-11	-20	130.5-5.14	88.0-3.46	39.0-1.54	600-9419
606-0019	31.8-1.25	-20	MN	1 1/4-11	-20	152.0-5.98	107.0-4.21	40.0-1.57	600-9419
606-2100	31.8-1.25	-20	MN	1 1/2-11	-24	166.0-6.54	121.0-4.76	54.0-2.13	600-9421
606-1561	38.1-1.50	-24	MN	1 1/2-11	-24	168.0-6.61	111.0-4.37	50.0-1.97	600-9421
606-1563	38.1-1.50	-24	MN	2-11	-32	177.0-6.97	120.0-4.72	59.0-2.32	5K-0216
606-1566	50.8-2.00	-32	MN	2-11	-32	216.0-8.50	163.0-6.42	70.0-2.76	5K-0216

Note: Grayscale parts are MAO (Made As Order).

BSPP 60° O-Ring Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
601-9269	6.4-.25	-4	MN	1/4-19	-4	49.0-1.93	25.0-.98	30.0-1.18	600-9411
601-9270	6.4-.25	-4	MN	3/8-19	-6	52.0-2.05	28.0-1.10	37.0-1.46	600-9412
601-9271	9.5-.37	-6	MN	3/8-19	-6	62.0-2.44	33.0-1.30	34.0-1.34	600-9412
606-1579	9.5-.37	-6	MN	1/2-14	-8	62.0-2.44	33.0-1.30	35.0-1.38	600-9413
601-9273	12.7-.50	-8	MN	1/2-14	-8	68.0-2.68	39.0-1.54	41.0-1.61	600-9413

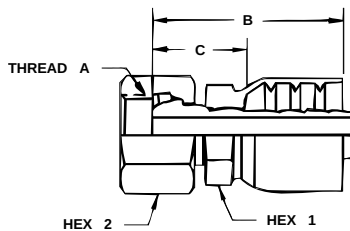
Cat Low and Medium Pressure Permanent Couplings

BSPP 60° O-Ring Female Swivel - 90° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
606-1580	12.7-.50	-8	MN	5/8-14	-10	68.0-2.68	38.0-1.50	45.0-1.77	600-9415
605-1581	12.7-.50	-8	MN	3/4-14	-12	68.0-2.68	39.0-1.54	47.0-1.85	600-9416
606-1582	15.9-.63	-10	MN	5/8-14	-10	77.0-3.03	47.0-1.85	51.0-2.01	600-9415
606-1583	15.9-.63	-10	MN	3/4-14	-12	77.0-3.03	46.0-1.81	56.0-2.20	600-9416
601-9274	19.1-.75	-12	MN	3/4-14	-12	88.0-3.46	52.5-2.07	58.0-2.28	600-9416
606-1585	19.1-.75	-12	MN	1-11	-16	88.0-3.46	52.5-2.07	62.0-2.44	600-9418
601-9275	25.4-1.00	-16	MN	1-11	-16	114.0-4.49	71.0-2.80	70.0-2.76	600-9418
606-1586	25.4-1.00	-16	MN	1 1/4-11	-20	114.0-4.49	71.52.81	76.0-2.99	600-9419
601-9276	31.8-1.25	-20	MN	1 1/4-11	-20	134.0-5.28	92.0-3.62	81.0-3.19	600-9419
606-1587	31.8-1.25	-20	MN	1 1/2-11	-24	134.0-5.28	92.0-3.62	92.0-3.62	600-9421
606-1590	38.1-1.50	-24	MN	1 1/2-11	-24	163.0-6.42	106.0-4.17	100.0-3.94	600-9421
606-1591	38.1-1.50	-24	MN	2-11	-32	163.0-6.42	106.0-4.17	110.0-4.33	5K-0216
606-1592	50.8-2.00	-32	MN	2-11	-32	193.0-7.60	143.0-5.63	140.0-5.51	5K-0216

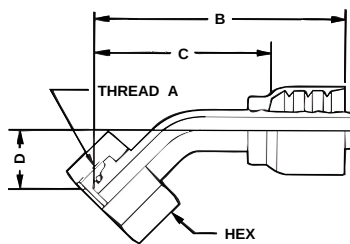
Note: Grayscale parts are MAO (Made As Order).

BSPP Spherical Seat Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
124-2291	6.4-.25	-4	MN	1/4-19	-4	43.2-1.70	22.3-0.88
124-2292	9.5-.37	-6	MN	3/8-19	-6	48.8-1.92	23.6-0.93
154-0113	9.5-.37	-6	MN	1/2-14	-8	48.87-1.92	23.5-0.93
124-2293	12.7-.50	-8	MN	1/2-14	-8	55.5-2.19	30.1-1.19
154-0114	15.9-.63	-10	MN	5/8-14	-10	52.8-2.08	27.7-1.09
124-2294	19.1-.75	-12	MN	3/4-14	-12	70.4-2.77	35.3-1.39
124-2295	25.4-1.00	-16	MN	1-11	-16	66.8-2.63	28.6-1.13
124-2337	31.8-1.25	-20	MN	1 1/4-11	-20	79.0-3.11	38.6-1.52

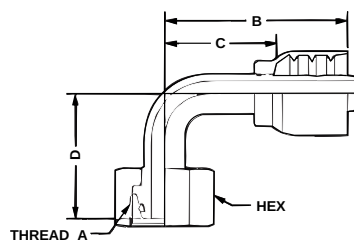
BSPP Spherical Seat Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
124-2296	6.4-.25	-4	MN	1/4-19	-4	58.0-2.28	37.1-1.46	17.5-.69
124-2297	9.5-.37	-6	MN	3/8-19	-6	71.0-2.80	45.3-1.78	20.1-.79
124-2298	12.7-.50	-8	MN	1/2-14	-8	75.0-2.95	49.5-1.95	20.1-.79
124-2299	19.1-.75	-12	MN	3/4-14	-12	96.0-3.78	65.0-2.56	27.0-1.06
124-2300	25.4-1.00	-16	MN	1-11	-16	121.0-4.76	83.0-3.27	30.0-1.18

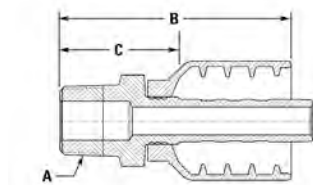
Cat Low and Medium Pressure Permanent Couplings

BSPP Spherical Seat Female Swivel - 90° Elbow



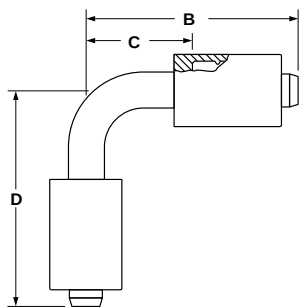
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
124-2301	6.4-.25	-4	MN	1/4-19	-4	46.2-1.82	25.3-1.00	30.2-1.19
124-2302	9.5-.37	-6	MN	3/8-19	-6	57.9-2.28	32.6-1.28	37.1-1.46
124-2303	12.7-.50	-8	MN	1/2-14	-8	64.3-2.53	39.2-1.54	37.6-1.48
124-2304	19.1-.75	-12	MN	3/4-14	-12	83.6-3.29	52.5-2.07	58.9-2.32
124-2305	25.4-1.00	-16	MN	1-11	-16	109.2-4.30	70.9-2.79	64.5-2.54
124-2306	31.8-1.25	-20	MN	1 1/4-11	-20	127.0-5.00	86.6-3.41	80.8-3.18

BSPT Male Tapered Pipe - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
281-9338	6.4-.25	-4	MN	1/4-19	-4	50-1.97	26-1.02
281-9339	9.5-.37	-6	MN	3/8-19	-6	57-2.24	32-1.26
281-9340	12.7-.50	-8	MN	1/2-14	-8	60-2.36	35-1.38
281-9341	19.1-.75	-12	MN	3/4-14	-12	72-2.83	41-1.61
281-9342	25.4-1.00	-16	MN	1-11	-16	83-3.27	44-1.73

Double Collet - 90° Elbow

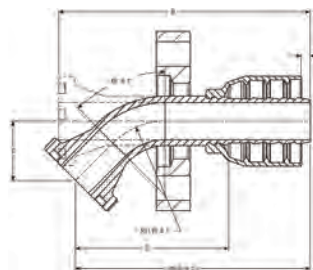


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
176-2483	6.4-.25	-4	MN	46.0-1.81	22.1-.87	46.2-1.82

Flange - Code 61 Captive (2 Bolt) - Straight

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
255-4886	25.4-1.00	-16	MN	44.5-1.75	85.0-3.35	47.0-1.85

Flange - Code 61 Captive (2 Bolt) - 45° Elbow



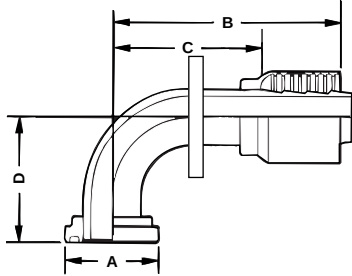
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD DASH SIZE	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
253-1350	19.1-.75	-12	MN	-12	38.1-1.50	97.0-3.82	65.0-2.56	25.0-.98	4J-5267
255-4877	25.4-1.00	-16	MN	-16	44.5-1.75	114.0-4.49	76.0-2.99	27.0-1.06	4J-0520

Cat Low and Medium Pressure Permanent Couplings

Flange - Code 61 Captive (2 Bolt) - 60° Elbow

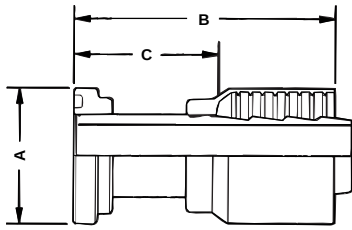
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD DASH SIZE	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
255-4887	12.7-.50	-8	MN	-12	38.1-1.50	78.0-3.07	53.0-2.09	29.0-1.14	4J-5267

Flange - Code 61 Captive (2 Bolt) - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
183-5180	6.4-.25	-4	MN	23.8-.94	49.0-1.93	29.3-1.15	31.8-1.25
322-0113	25.4-1.00	-16	MN	44.5-1.75	109-4.29	72-2.83	61-2.40

Flange - Code 61 - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
124-2050	12.7-.50	-8	MN	30.2-1.19	-8	69.0-2.72	43.3-1.70	4J-5140
124-2051	12.7-.50	-8	MN	38.1-1.50	-12	72.0-2.83	46.4-1.83	4J-5267
154-0092	15.9-.63	-10	MN	38.1-1.50	-12	76.0-2.99	51.0-2.01	4J-5267
124-2052	19.1-.75	-12	MN	38.1-1.50	-12	91.0-3.58	56.0-2.20	4J-5267
124-2053	19.1-.75	-12	MN	44.5-1.75	-16	91.0-3.58	56.0-2.20	4J-0520
591-5084	25.4-1.00	-16	BN	44.5-1.75	-16	91.0-3.58	48.0-1.89	4J-0520
124-2054	25.4-1.00	-16	MN	44.5-1.75	-16	91.0-3.58	49.0-1.93	4J-0520
124-2055	25.4-1.00	-16	MN	50.8-2.00	-20	93.0-3.66	50.0-1.97	4J-0522
302-5217	25.4-1.00	-16	MN	60.3-2.37	-24	88.0-3.46	49.0-1.93	4J-0524
302-5218	31.8-1.25	-20	MN	44.5-1.75	-16	105.0-4.13	65.0-2.56	4J-0520
124-2056	31.8-1.25	-20	MN	50.8-2.00	-20	109.0-4.29	65.0-2.56	4J-0522
124-2057	31.8-1.25	-20	MN	60.3-2.37	-24	109.0-4.29	65.0-2.56	4J-0524
302-5219	38.1-1.50	-24	MN	50.8-2.00	-20	122.0-4.80	65.0-2.56	4J-0522
124-2058	38.1-1.50	-24	MN	60.3-2.37	-24	122.0-4.80	65.0-2.56	4J-0524
124-2059	38.1-1.50	-24	MN	71.4-2.81	-32	121.0-4.76	65.0-2.56	4J-0527
302-5220	50.8-2.00	-32	MN	60.3-2.37	-24	136.0-5.35	88.0-3.46	4J-0524
124-2060	50.8-2.00	-32	MN	71.4-2.81	-32	125.0-4.92	76.0-2.99	4J-0527
124-2061	50.8-2.00	-32	MN	84.1-3.31	-40	126.0-4.96	76.0-2.99	6J-2680
302-5221	63.5-2.50	-40	MN	71.4-2.81	-32	138.0-5.43	74.0-2.91	4J-0527
253-1348	63.5-2.50	-40	MN	84.1-3.31	-40	147.0-5.79	88.0-3.46	6J-2680
253-1356	63.5-2.50	-40	MN	101.6-4.00	-48	148.0-5.83	82.0-3.23	117-1266
253-1363	63.5-2.50	-40	MN	114.3-4.50	-56	149.0-5.87	83.0-3.27	9X-4611
253-1364	63.5-2.50	-40	MN	127.0-5.00	-64	155.0-6.10	89.0-3.50	3E-6703
454-6181	76.2-3.00	-48	MN	84.1-3.31	-40	156.0-6.14	92.0-3.62	6J-2680
454-6180	76.2-3.00	-48	MN	101.6-4.00	-48	122.0-4.80	57.0-2.24	117-1266
129-7472	76.2-3.00	-48	SW	101.6-4.00	-48	132.0-5.20	69.0-2.72	117-1266
253-1368	76.2-3.00	-48	SW	114.3-4.50	-56	133.0-5.24	82.0-3.23	9X-4611
129-7420	88.9-3.50	-56	MN	114.3-4.50	-56	149.0-5.87	69.0-2.72	9X-4611
253-1388	88.9-3.50	-56	MN	127.0-5.00	-64	153.0-6.02	72.0-2.83	3E-6703
539-1406*	101.6-4.00	-64	SW	127.0-5.00	-64	183.5-7.22	88.0-3.46	3E-6703

Cat Low and Medium Pressure Permanent Couplings

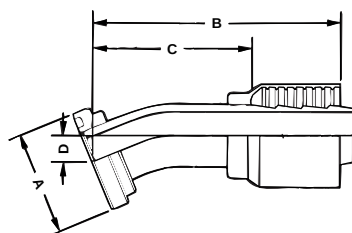
Flange - Code 61 - Straight (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL

*Coupling is made of two pieces. Shell 367-8981 is required for assembly (image below).

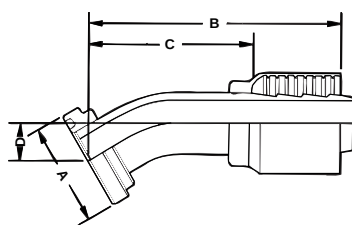


Flange - Code 61 - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
147-1714	12.7-.50	-8	MN	30.2-1.19	-8	75.0-2.95	49.3-1.94	8.9-.35	4J-5140
619-9331	12.7-.50	-8	MN	38.1-1.50	-12	84.0-3.31	59.0-2.32	11.0-.43	4J-5267
124-2062	19.1-.75	-12	MN	38.1-1.50	-12	95.0-3.74	60.0-2.36	11.0-.43	4J-5267
124-2063	19.1-.75	-12	MN	44.5-1.75	-16	95.0-3.74	60.0-2.36	11.0-.43	4J-0520
124-2064	25.4-1.00	-16	MN	44.5-1.75	-16	111.0-4.37	68.0-2.68	11.0-.43	4J-0520
124-2065	25.4-1.00	-16	MN	50.8-2.00	-20	112.0-4.41	69.0-2.72	12.0-.47	4J-0522
124-2066	31.8-1.25	-20	MN	50.8-2.00	-20	129.0-5.08	85.0-3.35	12.0-.47	4J-0522
147-1717	31.8-1.25	-20	MN	60.3-2.37	-24	130.0-5.12	85.0-3.35	13.0-.51	4J-0524
124-2067	38.1-1.50	-24	MN	60.3-2.37	-24	158.0-6.22	101.0-3.98	15.0-.59	4J-0524
302-5225	38.1-1.50	-24	MN	71.4-2.81	-32	158.0-6.22	101.0-3.98	15.0-.59	4J-0527
231-4485	50.8-2.00	-32	MN	60.3-2.37	-24	152.0-5.98	102.0-4.02	15.0-.59	4J-0524
124-2068	50.8-2.00	-32	MN	71.4-2.81	-32	185.0-7.28	135.0-5.31	22.0-.87	4J-0527
253-1349	63.5-2.50	-40	MN	84.1-3.31	-40	179.0-7.05	112.0-4.41	18.0-.71	6J-2680
253-1357	63.5-2.50	-40	MN	101.6-4.00	-48	180.0-7.09	114.0-4.49	18.0-.71	117-1266
622-2380	76.2-3.00	-48	MN	101.6-4.00	-48	247.0-9.72	173.0-6.81	27.0-1.06	117-1266

Flange - Code 61 - 30° Elbow



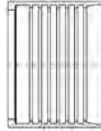
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
619-9345	12.7-.50	-8	MN	38.1-1.50	-12	83.0-3.27	57.0-2.24	16.0-.63	4J-5267
124-2069	19.1-.75	-12	MN	38.1-1.50	-12	98.0-3.86	63.0-2.48	16.0-.63	4J-5267
124-2070	25.4-1.00	-16	MN	44.5-1.75	-16	114.0-4.49	72.0-2.83	16.0-.63	4J-0520
302-5227	25.4-1.00	-16	MN	50.8-2.00	-20	115.0-4.53	73.0-2.87	17.0-.67	4J-0522
124-2071	31.8-1.25	-20	MN	50.8-2.00	-20	133.0-5.24	88.0-3.46	18.0-.71	4J-0522
124-2072	38.1-1.50	-24	MN	60.3-2.37	-24	164.0-6.46	105.0-4.13	21.0-.83	4J-0524
124-2073	38.1-1.50	-24	MN	71.4-2.81	-32	164.0-6.46	105.0-4.13	21.0-.83	4J-0527
124-2074	50.8-2.00	-32	MN	71.4-2.81	-32	191.0-7.52	140.0-5.51	32.0-1.26	4J-0527
189-0700	50.8-2.00	-32	MN	84.1-3.31	-40	191.0-7.52	140.0-5.51	32.0-1.26	6J-2680
440-2678	63.5-2.50	-40	MN	71.4-2.81	-32	260.3-10.25	196.6-7.74	66.5-2.62	4J-0527
236-7638	63.5-2.50	-40	MN	84.1-3.31	-40	187.0-7.36	122.0-4.80	27.0-1.06	6J-2680
253-1358	63.5-2.50	-40	MN	101.6-4.00	-48	189.0-7.44	123.0-4.84	27.0-1.06	117-1266
454-6183	76.2-3.00	-48	MN	84.1-3.31	-40	215.0-8.46	150.0-5.91	27.0-1.06	6J-2680
517-4080	76.2-3.00	-48	SW	84.1-3.31	-40	224.0-8.82	157.0-6.18	27.0-1.06	6J-2680
196-1811	76.2-3.00	-48	SW	101.6-4.00	-48	233.0-9.17	170.0-6.69	39.0-1.54	117-1266
454-6182	76.2-3.00	-48	MN	101.6-4.00	-48	233.0-9.17	169.0-6.65	39.0-1.54	117-1266
540-6359*	101.6-4.00	-64	SW	127.0-5.00	-64	260.0-10.24	164.0-6.46	40.0-1.57	3E-6703

Cat Low and Medium Pressure Permanent Couplings

Flange - Code 61 - 30° Elbow (Cont'd.)

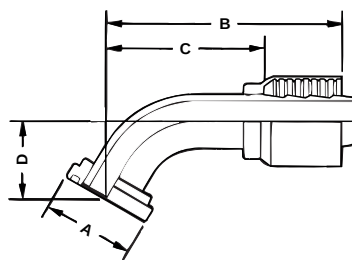
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL

*Coupling is made of two pieces. Shell 367-8981 is required for assembly (image below).



Cat Low and Medium Pressure Permanent Couplings

Flange - Code 61 - 45° Elbow

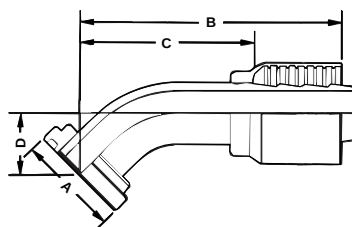


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
124-2075	12.7-.50	-8	MN	30.2-1.19	-8	78.0-3.07	52.2-2.06	20.1-.79	4J-5140
124-2076	12.7-.50	-8	MN	38.1-1.50	-12	79.0-3.11	53.4-2.10	21.3-.84	4J-5267
147-1715	15.9-.63	-10	MN	38.1-1.50	-12	91.0-3.58	60.0-2.36	29.0-1.14	4J-5267
321-6388	15.9-.63	-10	MN	44.5-1.75	-16	95.0-3.74	66.0-2.60	28.6-1.13	4J-0520
124-2077	19.1-.75	-12	MN	38.1-1.50	-12	100.0-3.94	66.0-2.60	25.0-.98	4J-5267
124-2078	19.1-.75	-12	MN	44.5-1.75	-16	100.0-3.94	66.0-2.60	25.0-.98	4J-0520
124-2079	25.4-1.00	-16	MN	44.5-1.75	-16	118.0-4.65	76.0-2.99	27.0-1.06	4J-0520
563-8845	25.4-1.00	-16	BN	44.5-1.75	-16	118.0-4.65	76.0-2.99	27.0-1.06	4J-0520
124-2080	25.4-1.00	-16	MN	50.8-2.00	-20	115.0-4.53	76.7-3.02	28.2-1.11	4J-0522
257-2723	31.8-1.25	-20	MN	44.5-1.75	-16	128.0-5.04	87.0-3.43	27.0-1.06	4J-0520
124-2081	31.8-1.25	-20	MN	50.8-2.00	-20	137.0-5.39	93.0-3.66	30.0-1.18	4J-0522
124-2082	31.8-1.25	-20	MN	60.3-2.37	-24	134.0-5.28	90.0-3.54	31.0-1.22	4J-0524
476-5496	38.1-1.50	-24	MN	50.8-2.00	-20	150.0-5.91	100.0-3.94	30.0-1.18	4J-0522
124-2083	38.1-1.50	-24	MN	60.3-2.37	-24	168.0-6.61	112.0-4.41	35.0-1.38	4J-0524
193-1551	38.1-1.50	-24	MN	60.3-2.37	-24	137.0-5.39	86.1-3.39	35.1-1.38	4J-0524
124-2084	38.1-1.50	-24	MN	71.4-2.81	-32	168.0-6.61	112.0-4.41	35.0-1.38	4J-0527
124-2085	50.8-2.00	-32	MN	71.4-2.81	-32	197.0-7.76	147.0-5.79	52.0-2.05	4J-0527
197-1332	50.8-2.00	-32	MN	84.1-3.31	-40	198.0-7.80	147.0-5.79	52.0-2.05	6J-2680
253-1351	63.5-2.50	-40	MN	84.1-3.31	-40	201.0-7.91	135.0-5.31	47.0-1.85	6J-2680
253-1359	63.5-2.50	-40	MN	101.6-4.00	-48	202.0-7.95	136.0-5.35	48.0-1.89	117-1266
454-6184	76.2-3.00	-48	MN	84.1-3.31	-40	218.0-8.58	154.0-6.06	48.0-1.89	6J-2680
622-2869	76.2-3.00	-48	MN	101.6-4.00	-48	230.0-9.06	156.0-6.14	47.0-1.85	117-1266
129-7474	76.2-3.00	-48	SW	101.6-4.00	-48	247.0-9.72	182.0-7.17	65.0-2.56	117-1266
253-1378	76.2-3.00	-48	SW	114.3-4.50	-56	249.0-9.80	188.0-7.40	67.0-2.64	9X-4611
129-7475	88.9-3.50	-56	MN	114.3-4.50	-56	301.0-11.85	220.0-8.66	73.0-2.87	9X-4611
301-1638	88.9-3.50	-56	MN	127.0-5.00	-64	238.0-9.37	157.7-6.21	54.0-2.13	3E-6703
253-1391	88.9-3.50	-56	MN	127.0-5.00	-64	300.0-11.81	208.0-8.19	73.0-2.87	3E-6703
540-6357	101.6-4.00	-64	SW	127.0-5.00	-64	280.0-11.02	185.0-7.28	70.0-2.76	3E-6703

*Coupling is made of two pieces. Shell 367-8981 is required for assembly (image below).



Flange - Code 61 - 60° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
124-2086	19.1-.75	-12	MN	38.1-1.50	-12	101.0-3.98	66.0-2.60	35.0-1.38	4J-5267
219-0953	19.1-.75	-12	MN	44.5-1.75	-16	97.0-3.82	65.7-2.59	35.3-1.39	4J-0520
124-2087	25.4-1.00	-16	MN	44.5-1.75	-16	115.0-4.53	77.0-3.03	38.4-1.51	4J-0520
201-0967	25.4-1.00	-16	MN	50.8-2.00	-20	121.0-4.76	83.0-3.27	40.0-1.57	4J-0522
124-2088	31.8-1.25	-20	MN	50.8-2.00	-20	139.0-5.47	94.0-3.70	43.0-1.69	4J-0522
302-5233	31.8-1.25	-20	MN	60.3-2.37	-24	139.0-5.47	94.0-3.70	43.0-1.69	4J-0524
124-2089	38.1-1.50	-24	MN	60.3-2.37	-24	171.0-6.73	114.0-4.49	50.0-1.97	4J-0524
196-5597	38.1-1.50	-24	MN	71.4-2.81	-32	165.0-6.50	113.8-4.48	50.0-1.97	4J-0527
124-2090	50.8-2.00	-32	MN	71.4-2.81	-32	203.0-7.99	152.0-5.98	73.0-2.87	4J-0527
302-5234	50.8-2.00	-32	MN	84.1-3.31	-40	203.0-7.99	153.0-6.02	73.0-2.87	6J-2680

Cat Low and Medium Pressure Permanent Couplings

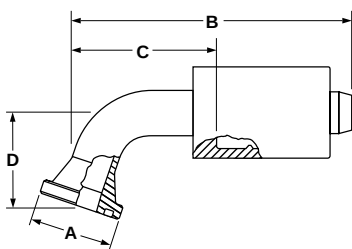
Flange - Code 61 - 60° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
253-1352	63.5-2.50	-40	MN	84.1-3.31	-40	232.0-9.13	166.0-6.54	71.0-2.80	6J-2680
253-1360	63.5-2.50	-40	MN	101.6-4.00	-48	233.0-9.17	167.0-6.57	73.0-2.87	117-1266
454-6185	76.2-3.00	-48	MN	84.1-3.31	-40	235.0-9.25	170.0-6.69	71.0-2.80	6J-2680
622-2868	76.2-3.00	-48	MN	101.6-4.00	-48	248.5-9.78	174.0-6.85	88.0-3.46	117-1266
253-1367	76.2-3.00	-48	SW	101.6-4.00	-48	224.0-8.82	162.0-6.38	79.0-3.11	117-1266
253-1373	76.2-3.00	-48	SW	101.6-4.00	-48	256.0-10.08	195.0-7.68	96.0-3.78	117-1266
540-6360*	101.6-4.00	-64	SW	127.0-5.00	-64	292.0-11.50	197.0-7.76	104.0-4.09	3E-6703

*Coupling is made of two pieces. Shell 367-8981 is required for assembly (image below).

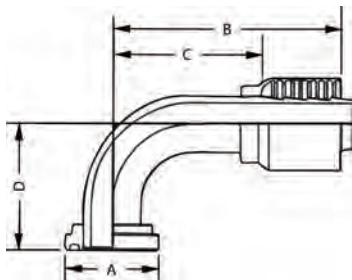


Flange - Code 61 - 67.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
619-9836	12.7-.50	-8	MN	38.1-1.50	-12	80.0-3.15	55.0-2.17	38.0-1.50	4J-5267
124-2091	19.1-.75	-12	MN	38.1-1.50	-12	96.0-3.78	65.0-2.56	40.1-1.58	4J-5267
292-4393	19.1-.75	-12	MN	44.5-1.75	-16	100.0-3.94	65.0-2.56	40.0-1.57	4J-0520
124-2092	25.4-1.00	-16	MN	44.5-1.75	-16	115.0-4.53	76.7-3.02	44.2-1.74	4J-0520
197-8505	25.4-1.00	-16	MN	50.8-2.00	-20	115.0-4.53	77.1-3.04	45.7-1.80	4J-0522
124-2093	31.8-1.25	-20	MN	50.8-2.00	-20	139.0-5.47	94.0-3.70	49.0-1.93	4J-0522
124-2094	31.8-1.25	-20	MN	60.3-2.37	-24	138.0-5.43	93.0-3.66	49.0-1.93	4J-0524
124-2095	38.1-1.50	-24	MN	60.3-2.37	-24	170.0-6.69	113.0-4.45	58.0-2.28	4J-0524
124-2096	38.1-1.50	-24	MN	71.4-2.81	-32	170.0-6.69	113.0-4.45	58.0-2.28	4J-0527
124-2097	50.8-2.00	-32	MN	71.4-2.81	-32	202.0-7.95	151.0-5.94	84.0-3.31	4J-0527
253-1380	50.8-2.00	-32	MN	84.1-3.31	-40	202.0-7.95	151.0-5.94	84.0-3.31	6J-2680
253-1353	63.5-2.50	-40	MN	84.1-3.31	-40	210.0-8.27	144.0-5.67	83.0-3.27	6J-2680
253-1361	63.5-2.50	-40	MN	101.6-4.00	-48	212.0-8.35	146.0-5.75	83.0-3.27	117-1266
622-2382	76.2-3.00	-48	MN	101.6-4.00	-48	248.0-9.76	173.0-6.81	102.0-4.02	117-1266

Flange - Code 61 - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
124-2098	12.7-.50	-8	MN	30.2-1.19	-8	71.0-2.80	45.4-1.79	41.4-1.63	4J-5140
124-2099	12.7-.50	-8	MN	38.1-1.50	-12	71.0-2.80	45.4-1.79	42.9-1.69	4J-5267
619-9851	12.7-.50	-8	MN	38.1-1.50	-12	71.0-2.80	45.5-1.79	58.0-2.28	4J-5267
124-2100	15.9-.63	-10	MN	38.1-1.50	-12	75.0-2.95	50.3-1.98	53.8-2.12	4J-5267
124-2101	19.1-.75	-12	MN	38.1-1.50	-12	90.0-3.54	58.9-2.32	54.1-2.13	4J-5267
255-4878	19.1-.75	-12	MN	38.1-1.50	-12	90.0-3.54	59.0-2.32	69.0-2.72	4J-5267
124-2102	19.1-.75	-12	MN	44.5-1.75	-16	90.0-3.54	59.0-2.32	54.0-2.13	4J-0520
180-4712	19.1-.75	-12	MN	44.5-1.75	-16	90.0-3.54	58.9-2.32	85.0-3.35	4J-0520
176-8199	19.1-.75	-12	MN	50.8-2.00	-20	90.0-3.54	58.7-2.31	55.6-2.19	4J-0522
124-2103	25.4-1.00	-16	MN	44.5-1.75	-16	109.0-4.29	71.1-2.80	60.5-2.38	4J-0520
221-6951	25.4-1.00	-16	MN	44.5-1.75	-16	109.0-4.29	71.0-2.80	121.0-4.76	4J-0520

Cat Low and Medium Pressure Permanent Couplings

Flange - Code 61 - 90° Elbow (Cont'd.)

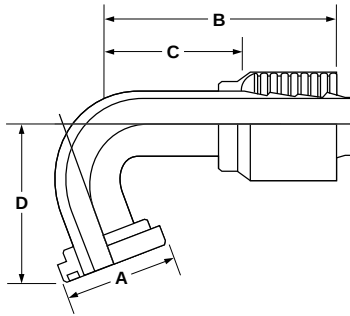
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
570-2486	25.4-1.00	-16	BN	44.5-1.75	-16	114.0-4.49	71.0-2.80	60.5-2.38	4J-0520
602-3261	25.4-1.00	-16	BN	44.5-1.75	-16	114.2-4.50	71.3-2.81	90.0-3.54	4J-0520
124-2104	25.4-1.00	-16	MN	50.8-2.00	-20	109.0-4.29	71.1-2.80	62.0-2.44	4J-0522
602-3262	25.4-1.00	-16	BN	50.8-2.00	-20	114.2-4.50	71.3-2.81	66.0-2.60	4J-0522
256-3735	25.4-1.00	-16	MN	60.3-2.37	-24	109.0-4.29	71.0-2.80	62.0-2.44	4J-0524
262-6747	31.8-1.25	-20	MN	44.5-1.75	-16	120.0-4.72	79.0-3.11	40.0-1.57	4J-0520
257-0374	31.8-1.25	-20	MN	50.8-2.00	-20	129.0-5.08	88.0-3.46	116.0-4.57	4J-0522
124-2105	31.8-1.25	-20	MN	50.8-2.00	-20	131.0-5.16	87.0-3.43	67.0-2.64	4J-0522
546-9820	31.8-1.25	-20	MN	50.8-2.00	-20	131.3-5.17	86.0-3.39	235.0-9.25	4J-0522
463-9170	31.8-1.25	-20	BN	50.8-2.00	-20	132.0-5.20	87.0-3.43	130.0-5.12	4J-0522
124-2106	31.8-1.25	-20	MN	60.3-2.37	-24	131.0-5.16	87.0-3.43	67.0-2.64	4J-0524
302-5237	31.8-1.25	-20	MN	71.4-2.81	-32	127.0-5.00	87.0-3.43	67.0-2.64	4J-0527
256-4553	38.1-1.50	-24	MN	50.8-2.00	-20	148.0-5.83	96.0-3.78	67.0-2.64	4J-0522
124-2107	38.1-1.50	-24	MN	60.3-2.37	-24	163.0-6.42	106.0-4.17	79.0-3.11	4J-0524
334-1455	38.1-1.50	-24	MN	60.3-2.37	-24	248.0-9.76	106.0-4.17	114.3-4.50	4J-0524
325-5733	38.1-1.50	-24	MN	60.3-2.37	-24	162.0-6.38	106.0-4.17	150.0-5.91	4J-0524
124-2108	38.1-1.50	-24	MN	71.4-2.81	-32	163.0-6.42	106.0-4.17	79.0-3.11	4J-0527
267-8909	38.1-1.50	-24	MN	71.4-2.81	-32	163.0-6.42	106.2-4.18	115.0-4.53	4J-0527
302-5238	38.1-1.50	-24	MN	84.1-3.31	-40	157.0-6.18	106.0-4.17	79.0-3.11	6J-2680
270-6767	50.8-2.00	-32	MN	71.4-2.81	-32	184.0-7.24	136.4-5.37	83.0-3.27	4J-0527
124-2109	50.8-2.00	-32	MN	71.4-2.81	-32	193.0-7.60	143.0-5.63	114.0-4.49	4J-0527
334-3786	50.8-2.00	-32	MN	71.4-2.81	-32	312.0-12.28	137.0-5.39	165.1-6.50	4J-0527
348-3715	50.8-2.00	-32	MN	84.1-3.31	-40	187.0-7.36	137.0-5.39	87.0-3.43	6J-2680
124-2110	50.8-2.00	-32	MN	84.1-3.31	-40	193.0-7.60	143.0-5.63	114.0-4.49	6J-2680
302-5239	63.5-2.50	-40	MN	71.4-2.81	-32	200.0-7.87	141.0-5.55	114.0-4.49	4J-0527
253-1354	63.5-2.50	-40	MN	84.1-3.31	-40	206.0-8.11	140.0-5.51	119.0-4.69	6J-2680
440-2679	63.5-2.50	-40	MN	84.1-3.31	-40	205.0-8.07	144.0-5.67	254.0-10.00	6J-2680
253-1362	63.5-2.50	-40	MN	101.6-4.00	-48	207.0-8.15	141.0-5.55	119.0-4.69	117-1266
454-6188	76.2-3.00	-48	MN	84.1-3.31	-40	225.0-8.86	161.0-6.34	119.0-4.69	6J-2680
454-6186	76.2-3.00	-48	MN	101.6-4.00	-48	225.0-8.86	161.0-6.34	119.0-4.69	117-1266
115-8215	76.2-3.00	-48	SV	101.6-4.00	-48	225.0-8.86	151.0-5.94	140.0-5.51	117-1266
454-6187	76.2-3.00	-48	MN	101.6-4.00	-48	225.0-8.86	161.0-6.34	140.0-5.51	117-1266
253-1375	76.2-3.00	-48	SV	101.6-4.00	-48	262.0-10.31	201.0-7.91	162.0-6.38	117-1266
253-1381	76.2-3.00	-48	SV	101.6-4.00	-48	249.0-9.80	188.0-7.40	203.0-7.99	117-1266
582-7599	76.2-3.00	-48	MN	101.6-4.00	-48	293.7-11.56	219.3-8.63	203.2-8.00	117-1266
176-1550	76.2-3.00	-48	SV	114.3-4.50	-56	262.0-10.31	199.0-7.83	162.0-6.38	9X-4611
480-7224	76.2-3.00	-48	MN	114.3-4.50	-56	270.0-10.63	195.0-7.68	162.0-6.38	9X-4611
129-7487	88.9-3.50	-56	MN	114.3-4.50	-56	251.0-9.88	171.0-6.73	143.0-5.63	9X-4611
253-1385	88.9-3.50	-56	MN	114.3-4.50	-56	302.0-11.89	222.0-8.74	155.0-6.10	9X-4611
253-1387	88.9-3.50	-56	MN	127.0-5.00	-64	302.0-11.89	222.0-8.74	175.0-6.89	3E-6703
540-6358*	101.6-4.00	-64	SV	127.0-5.00	-64	288.5-11.36	193.0-7.60	187.5-7.38	3E-6703

*Coupling is made of two pieces. Shell 367-8981 is required for assembly (image below).



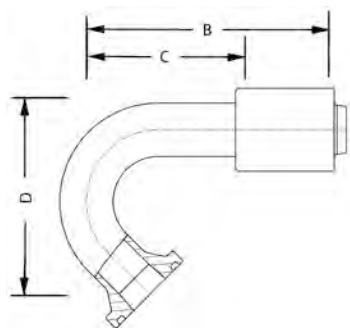
Cat Low and Medium Pressure Permanent Couplings

Flange - Code 61 - 110° Elbow



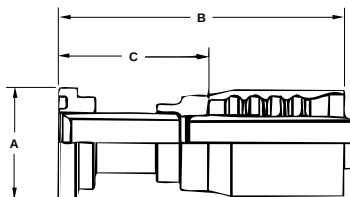
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
184-4910	25.4-1.00	-16	MN	44.5-1.75	-16	99.0-3.90	60.7-2.39	72.1-2.84	4J-0520
591-5080	25.4-1.00	-16	BN	44.5-1.75	-16	90.0-3.54	47.0-1.85	89.0-3.50	4J-0520
209-3231	25.4-1.00	-16	MN	50.8-2.00	-20	99.0-3.90	60.5-2.38	73.7-2.90	4J-0522
302-5222	31.8-1.25	-20	MN	50.8-2.00	-20	120.0-4.72	75.0-2.95	80.0-3.15	4J-0522
124-2170	31.8-1.25	-20	MN	60.3-2.37	-24	120.0-4.72	75.0-2.95	80.0-3.15	4J-0524
302-5224	31.8-1.25	-20	MN	60.3-2.37	-24	145.0-5.71	94.0-3.70	94.0-3.70	4J-0524
201-0968	50.8-2.00	-32	MN	71.4-2.81	-32	164.0-6.46	113.0-4.45	136.0-5.35	4J-0527

Flange - Code 61 - 135° Elbow



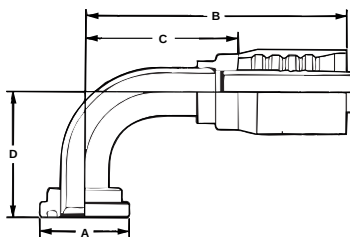
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
423-5097	38.1-1.50	-24	MN	60.3-2.37	-24	144.0-5.67	93.0-3.66	104.0-4.09	4J-0524
447-4882	50.8-2.00	-32	MN	71.4-2.81	-32	135.0-5.31	88.0-3.46	151.0-5.94	4J-0527

Flange - Code 62 - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
471-4222	19.1-.75	-12	MN	41.3-1.63	-12	90.0-3.54	55.0-2.17	4J-5267
256-3737	31.8-1.25	-20	MN	54.0-2.13	-16	109.5-4.31	65.0-2.56	4J-0520

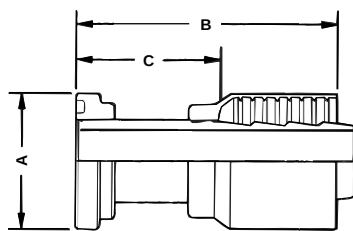
Flange - Code 62 - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
256-3736	31.8-1.25	-20	MN	54.0-2.13	-20	127.0-5.00	86.0-3.39	77.0-3.03	4J-0522

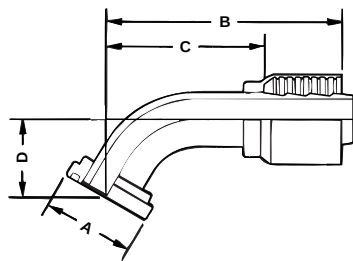
Cat Low and Medium Pressure Permanent Couplings

Flange - Komatsu Style - Straight



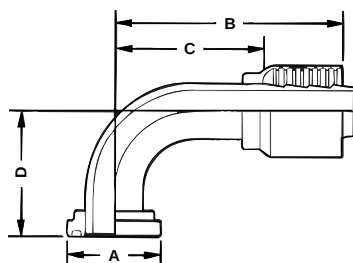
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	A HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
154-0091	15.9-.63	-10	MN	-10	34.1-1.34	82.0-3.23	57.0-2.24	4J-8996

Flange - Komatsu Style - 45° Elbow



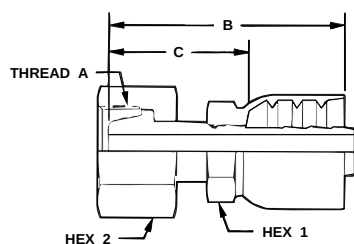
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	A HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
154-0093	15.9-.63	-10	MN	-10	34.1-1.34	88.0-3.46	63.0-2.48	26.0-1.02	4J-8996

Flange - Komatsu Style - 90° Elbow



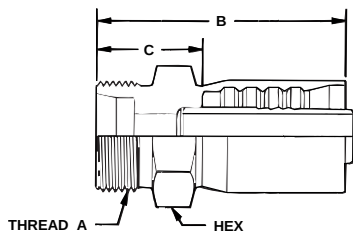
Part Number	HOSE I.D. (mm - in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	A HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
154-0094	15.9-.63	-10	MN	-10	34.1-1.34	75.0-2.95	50.0-1.97	55.0-2.17	4J-8996

French Metric Gaz Female Swivel - Straight



Part Number	HOSE I.D. (mm - in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm - in)	B LENGTH (mm - in)	C CUT-OFF FACTOR (mm - in)
124-2314	9.5 - 0.37	-6	MN	M20 x 1.5	13.0 - 0.51	55.0 - 2.17	29.8 - 1.17
124-2315	12.7 - 0.50	-8	MN	M24 x 1.5	17.0 - 0.67	62.0 - 2.44	36.6 - 1.44

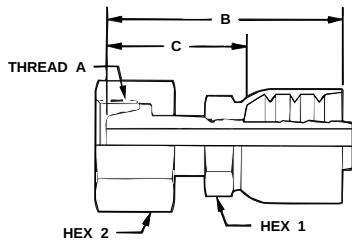
French Metric Gaz Male - Straight



Part Number	HOSE I.D. (mm - in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm - in)	B LENGTH (mm - in)	C CUT-OFF FACTOR (mm - in)
124-2308	9.5 - 0.37	-6	MN	M20 x 1.5	13.0 - 0.51	57.0 - 2.24	31.4 - 1.24
124-2309	12.7 - 0.50	-8	MN	M24 x 1.5	17.0 - 0.67	56.0 - 2.20	30.6 - 1.20

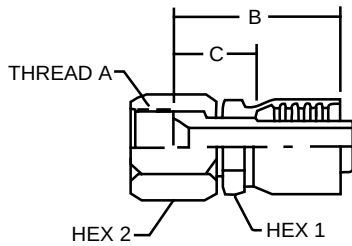
Cat Low and Medium Pressure Permanent Couplings

French Millimetric Female Swivel - Straight



Part Number	HOSE I.D. (mm - in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm - in)	B LENGTH (mm - in)	C CUT-OFF FACTOR (mm - in)
124-2319	6.4 - 0.25	-4	MN	M12 x 1.0	6.0 - 0.24	45.0 - 1.77	24.1 - 0.95
124-2324	9.5 - 0.37	-6	MN	M20 x 1.5	14.0 - 0.55	54.0 - 2.13	28.0 - 1.10

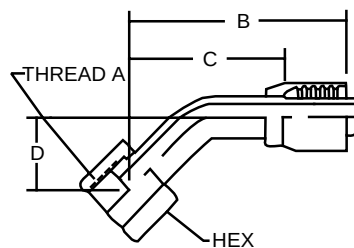
JIC 37° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
124-1950	6.4-.25	-4	MN	7/16-20	-4	37.0-1.46	16.0-.63
124-1951	6.4-.25	-4	MN	1/2-20	-5	41.0-1.61	19.8-.78
124-1952	6.4-.25	-4	MN	9/16-18	-6	42.0-1.65	20.8-.82
124-1953	7.9-.31	-5	MN	9/16-18	-6	47.0-1.85	20.8-.82
124-1954	9.5-.37	-6	MN	7/16-20	-4	48.0-1.89	22.6-.89
124-1955	9.5-.37	-6	MN	1/2-20	-5	44.0-1.73	18.0-.71
124-1956	9.5-.37	-6	MN	9/16-18	-6	49.0-1.93	23.7-.93
124-1957	9.5-.37	-6	MN	3/4-16	-8	50.0-1.97	24.3-.96
124-1960	9.5-.37	-6	MN	7/8-14	-10	51.0-2.01	25.6-1.01
124-1959	12.7-.50	-8	MN	9/16-18	-6	53.0-2.09	27.5-1.08
124-1961	12.7-.50	-8	MN	3/4-16	-8	54.0-2.13	28.4-1.12
124-1962	12.7-.50	-8	MN	7/8-14	-10	55.0-2.17	29.7-1.17
124-1963	12.7-.50	-8	MN	1 1/16-12	-12	55.0-2.17	29.4-1.16
124-1964	15.9-.63	-10	MN	3/4-16	-8	56.0-2.20	31.0-1.22
124-1965	15.9-.63	-10	MN	7/8-14	-10	57.0-2.24	32.0-1.26
124-1966	15.9-.63	-10	MN	1 1/16-12	-12	57.0-2.24	32.0-1.26
124-1967	19.1-.75	-12	MN	3/4-16	-8	59.0-2.32	27.9-1.10
124-1968	19.1-.75	-12	MN	7/8-14	-10	58.0-2.28	27.4-1.08
124-1969	19.1-.75	-12	MN	1 1/16-12	-12	58.0-2.28	27.4-1.08
124-1970	19.1-.75	-12	MN	1 3/16-12	-14	60.0-2.36	28.7-1.13
124-1971	19.1-.75	-12	MN	1 5/16-12	-16	60.0-2.36	29.5-1.16
124-1972	25.4-1.00	-16	MN	1 1/16-12	-12	68.0-2.68	30.2-1.19
124-1973	25.4-1.00	-16	MN	1 5/16-12	-16	68.0-2.68	29.5-1.16
124-1974	25.4-1.00	-16	MN	1 5/8-12	-20	69.0-2.72	30.7-1.21
124-1975	31.8-1.25	-20	MN	1 5/8-12	-20	74.0-2.91	33.8-1.33
302-5260	31.8-1.25	-20	MN	1 7/8-12	-24	95.0-3.74	54.0-2.13
124-1976	38.1-1.50	-24	MN	1 7/8-12	-24	118.0-4.65	67.0-2.64
124-1977	50.8-2.00	-32	MN	2 1/2-12	-32	115.0-4.53	65.0-2.56
569-5188	63.5-2.50	-40	MN	3 12-2B	-40	110.0-4.33	43.0-1.69

Cat Low and Medium Pressure Permanent Couplings

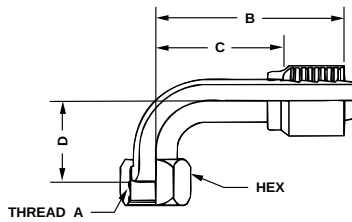
JIC 37° Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
124-1978	6.4-.25	-4	MN	7/16-20	-4	49.0-1.93	27.9-1.10	8.4-.33
124-1989	6.4-.25	-4	MN	7/16-20	-4	53.0-2.09	31.5-1.24	11.9-.47
147-1705	6.4-.25	-4	MN	1/2-20	-5	56.0-2.20	34.5-1.36	11.7-.46
124-1979	6.4-.25	-4	MN	9/16-18	-6	51.0-2.01	29.5-1.16	9.9-.39
124-1990	6.4-.25	-4	MN	9/16-18	-6	55.0-2.17	33.8-1.33	14.2-.56
124-1980	9.5-.37	-6	MN	9/16-18	-6	60.0-2.36	35.1-1.38	9.9-.39
124-1991	9.5-.37	-6	MN	9/16-18	-6	66.0-2.60	40.1-1.58	15.0-.59
124-1981	9.5-.37	-6	MN	3/4-16	-8	65.0-2.56	39.1-1.54	14.0-.55
124-1992	9.5-.37	-6	MN	3/4-16	-8	68.0-2.68	42.7-1.68	17.5-.69
124-1982	12.7-.50	-8	MN	3/4-16	-8	69.0-2.72	43.7-1.72	14.0-.55
124-1993	12.7-.50	-8	MN	3/4-16	-8	73.0-2.87	47.2-1.86	17.5-.69
124-1983	12.7-.50	-8	MN	7/8-14	-10	71.0-2.80	45.9-1.81	16.3-.64
124-1994	12.7-.50	-8	MN	7/8-14	-10	77.0-3.03	52.0-2.05	22.4-.88
124-1984	15.9-.63	-10	MN	7/8-14	-10	77.0-3.03	52.3-2.06	16.3-.64
124-1995	15.9-.63	-10	MN	7/8-14	-10	88.0-3.46	58.0-2.28	23.0-.91
124-1985	15.9-.63	-10	MN	1 1/16-12	-12	81.0-3.19	55.6-2.19	19.6-.77
124-1996	15.9-.63	-10	MN	1 1/16-12	-12	88.0-3.46	63.0-2.48	26.9-1.06
124-1986	19.1-.75	-12	MN	1 1/16-12	-12	88.0-3.46	57.2-2.25	19.6-.77
124-1997	19.1-.75	-12	MN	1 1/16-12	-12	100.0-3.94	65.0-2.56	27.0-1.06
253-1384	25.4-1.00	-16	MN	1 1/16-12	-12	121.0-4.76	83.0-3.27	27.0-1.06
124-1987	25.4-1.00	-16	MN	1 5/16-12	-16	122.0-4.80	96.3-3.79	22.6-.89
124-1998	25.4-1.00	-16	MN	1 5/16-12	-16	121.0-4.76	83.3-3.28	29.5-1.16
124-1999	31.8-1.25	-20	MN	1 5/8-12	-20	137.0-5.39	97.0-3.82	29.0-1.14
124-1988	31.8-1.25	-20	MN	1 5/8-12	-20	145.0-5.71	104.0-4.09	37.0-1.46
302-5250	38.1-1.50	-24	MN	1-7/8-12	-24	179.0-7.05	128.0-5.04	51.0-2.01
309-6969	50.8-2.00	-32	MN	2-1/2-12	-32	202.0-7.95	152.0-5.98	56.0-2.20

Cat Low and Medium Pressure Permanent Couplings

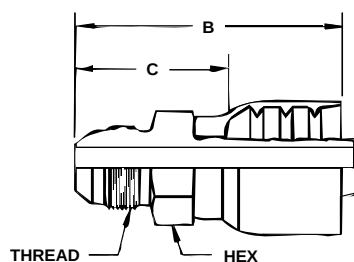
JIC 37° Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
124-2000	6.4-.25	-4	MN	7/16-20	-4	46.0-1.81	25.1-.99	17.5-.69
124-2015	6.4-.25	-4	MN	7/16-20	-4	46.0-1.81	25.1-.99	22.4-.88
124-2025	6.4-.25	-4	MN	7/16-20	-4	46.0-1.81	25.1-.99	44.5-1.75
124-2001	6.4-.25	-4	MN	1/2-20	-5	49.0-1.93	28.0-1.10	20.0-.79
228-2986	6.4-.25	-4	MN	1/2-20	-5	49.0-1.93	28.3-1.11	22.4-.88
124-2026	6.4-.25	-4	MN	1/2-20	-5	49.0-1.93	28.2-1.11	46.0-1.81
124-2002	6.4-.25	-4	MN	9/16-18	-6	46.0-1.81	25.1-.99	22.4-.88
124-2016	6.4-.25	-4	MN	9/16-18	-6	46.0-1.81	25.1-.99	28.4-1.12
124-2027	6.4-.25	-4	MN	9/16-18	-6	46.0-1.81	25.1-.99	55.6-2.19
124-2003	7.9-.31	-5	MN	9/16-18	-6	56.0-2.20	29.7-1.17	22.4-.88
124-2004	9.5-.37	-6	MN	7/16-20	-4	55.0-2.17	29.7-1.17	17.5-.69
124-2005	9.5-.37	-6	MN	9/16-18	-6	58.0-2.28	32.5-1.28	22.4-.88
124-2017	9.5-.37	-6	MN	9/16-18	-6	58.0-2.28	32.5-1.28	28.4-1.12
124-2028	9.5-.37	-6	MN	9/16-18	-6	58.0-2.28	32.5-1.28	55.6-2.19
124-2006	9.5-.37	-6	MN	3/4-16	-8	58.0-2.28	32.5-1.28	27.7-1.09
124-2018	9.5-.37	-6	MN	3/4-16	-8	58.0-2.28	32.5-1.28	35.1-1.38
124-2029	9.5-.37	-6	MN	3/4-16	-8	58.0-2.28	32.5-1.28	63.5-2.50
124-2171	12.7-.50	-8	MN	9/16-18	-6	60.0-2.36	34.3-1.35	21.8-.86
124-2007	12.7-.50	-8	MN	3/4-16	-8	64.0-2.52	38.8-1.53	27.7-1.09
124-2019	12.7-.50	-8	MN	3/4-16	-8	64.0-2.52	38.8-1.53	35.1-1.38
124-2030	12.7-.50	-8	MN	3/4-16	-8	64.0-2.52	38.8-1.53	63.5-2.50
124-2008	12.7-.50	-8	MN	7/8-14	-10	64.0-2.52	38.8-1.53	31.2-1.23
124-2020	12.7-.50	-8	MN	7/8-14	-10	64.0-2.52	38.8-1.53	44.5-1.75
124-2031	12.7-.50	-8	MN	7/8-14	-10	64.0-2.52	38.8-1.53	77.7-3.06
124-2009	12.7-.50	-8	MN	1 1/16-12	-12	64.0-2.52	38.8-1.53	46.2-1.82
124-2010	15.9-.63	-10	MN	7/8-14	-10	77.0-3.03	47.0-1.85	32.0-1.26
124-2021	15.9-.63	-10	MN	7/8-14	-10	77.0-3.03	47.0-1.85	44.0-1.73
124-2032	15.9-.63	-10	MN	7/8-14	-10	77.0-3.03	47.0-1.85	78.0-3.07
124-2011	15.9-.63	-10	MN	1 1/16-12	-12	77.0-3.03	47.0-1.85	46.0-1.81
124-2022	15.9-.63	-10	MN	1 1/16-12	-12	72.0-2.83	47.0-1.85	52.3-2.06
124-2033	15.9-.63	-10	MN	1 1/16-12	-12	72.0-2.83	47.0-1.85	91.9-3.62
302-5255	19.1-.75	-12	MN	7/8-14	-10	80.0-3.15	49.0-1.93	31.0-1.22
124-2012	19.1-.75	-12	MN	1 1/16-12	-12	84.0-3.31	52.6-2.07	46.2-1.82
124-2023	19.1-.75	-12	MN	1 1/16-12	-12	84.0-3.31	52.6-2.07	52.3-2.06
124-2034	19.1-.75	-12	MN	1 1/16-12	-12	84.0-3.31	52.6-2.07	94.7-3.73
269-3994	19.1-.75	-12	MN	1 1/16-12	-12	88.0-3.46	53.0-2.09	62.5-2.46
124-2035	19.1-.75	-12	MN	1 3/16-12	-14	97.0-3.82	66.0-2.60	100.1-3.94
147-1706	19.1-.75	-12	MN	1 5/16-12	-16	84.0-3.31	52.6-2.07	54.4-2.14
124-2013	25.4-1.00	-16	MN	1 5/16-12	-16	118.0-4.65	79.5-3.13	54.4-2.14
124-2024	25.4-1.00	-16	MN	1 5/16-12	-16	114.0-4.49	76.2-3.00	64.0-2.52
124-2036	25.4-1.00	-16	MN	1 5/16-12	-16	114.0-4.49	76.2-3.00	111.3-4.38
124-2014	31.8-1.25	-20	MN	1 5/8-12	-20	132.0-5.20	91.7-3.61	65.5-2.58
147-1707	31.8-1.25	-20	MN	1 5/8-12	-20	129.0-5.08	88.4-3.48	76.2-3.00
147-1708	31.8-1.25	-20	MN	1 5/8-12	-20	129.0-5.08	88.4-3.48	138.2-5.44
295-0020	38.1-1.50	-24	MN	1 7/8-12	-24	163.0-6.42	106.0-4.17	100.0-3.94
309-6970	50.8-2.00	-32	MN	2 1/2-12	-32	187.0-7.36	137.0-5.39	118.0-4.65

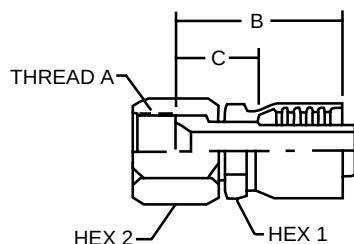
Cat Low and Medium Pressure Permanent Couplings

JIC 37° Male - Straight



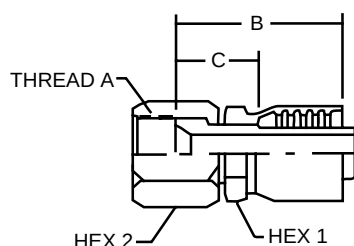
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
124-1936	6.4-.25	-4	MN	7/16-20	-4	47.0-1.85	25.7-1.01
124-1937	6.4-.25	-4	MN	1/2-20	-5	46.0-1.81	25.4-1.00
124-1938	6.4-.25	-4	MN	9/16-18	-6	49.0-1.93	28.2-1.11
124-1939	7.9-.31	-5	MN	9/16-18	-6	55.0-2.17	29.5-1.16
154-0069	9.5-.37	-6	MN	1/2-20	-5	52.0-2.05	26.5-1.04
124-1940	9.5-.37	-6	MN	9/16-18	-6	55.0-2.17	29.3-1.15
124-1941	9.5-.37	-6	MN	3/4-16	-8	59.0-2.32	33.5-1.32
124-1942	9.5-.37	-6	MN	7/8-14	-10	58.0-2.28	32.7-1.29
124-1943	12.7-.50	-8	MN	3/4-16	-8	61.0-2.40	35.3-1.39
124-1944	12.7-.50	-8	MN	7/8-14	-10	60.0-2.36	34.4-1.35
124-1945	12.7-.50	-8	MN	1 1/16-12	-12	64.0-2.52	38.9-1.53
124-1946	15.9-.63	-10	MN	7/8-14	-10	61.0-2.40	36.1-1.42
124-1947	15.9-.63	-10	MN	1 1/16-12	-12	66.0-2.60	38.9-1.53
124-1948	19.1-.75	-12	MN	1 1/16-12	-12	69.0-2.72	38.0-1.50
154-0070	19.1-.75	-12	MN	1 3/16-12	-14	72.0-2.83	40.6-1.60
154-0071	19.1-.75	-12	MN	1 5/16-12	-16	75.0-2.95	43.7-1.72
124-1949	25.4-1.00	-16	MN	1 5/16-12	-16	84.0-3.31	46.0-1.81
124-2336	31.8-1.25	-20	MN	1 5/8-12	-20	93.0-3.66	52.0-2.05
302-5246	31.8-1.25	-20	MN	1 7/8-12	-24	93.0-3.66	52.0-2.05

JIS (Komatsu Style), Metric Swivel, 30° Female Seat - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
154-0106	6.4-.25	-4	MN	M14 x 1.5	41.0-1.61	19.8-.78
154-0108	6.4-.25	-4	MN	M18 x 1.5	43.0-1.69	22.1-.87
154-0107	9.5-.37	-6	MN	M14 x 1.5	45.0-1.77	20.0-.79
154-0109	9.5-.37	-6	MN	M18 x 1.5	48.0-1.89	22.0-.87
154-0110	12.7-.50	-8	MN	M22 x 1.5	54.0-2.13	28.2-1.11
605-8697	12.7-.50	-8	MN	M24 x 1.5	54.8-2.16	25.3-1.00
221-0457	15.9-.63	-10	MN	M24 x 1.5	52.0-2.05	27.0-1.06
221-0458	19.1-.75	-12	MN	M30 x 1.5	64.0-2.52	32.0-1.26
221-0459	25.4-1.00	-16	MN	M33 x 1.5	64.0-2.52	25.0-.98

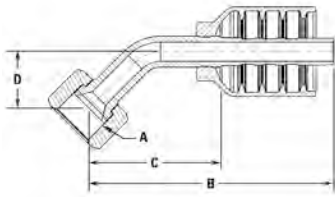
JIS Female Swivel Parallel Pipe w/ 30° Female Seat - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
154-0102	6.4-.25	-4	MN	1/4-19	-4	44.0-1.73	22.6-.89
154-0103	9.5-.37	-6	MN	3/8-19	-6	46.0-1.81	20.0-.79
154-0104	12.7-.50	-8	MN	1/2-14	-8	53.0-2.09	28.0-1.10
519-4006	19.1-.75	-12	MN	3/4-14	-12	56.0-2.20	25.0-0.98
154-0105	19.1-.75	-12	MN	3/4-14	-12	60.0-2.36	29.5-1.16
581-3126	25.4-1.00	-16	MN	1-11	-16	79.0-3.11	36.0-1.42

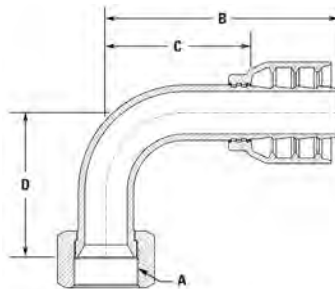
Cat Low and Medium Pressure Permanent Couplings

JIS Female Swivel Parallel Pipe w/ 30° Female Seat - 45° Elbow



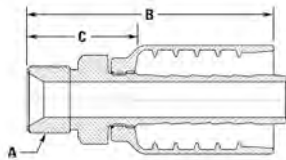
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
514-2645	9.5-.37	-6	MN	3/8-19	-6	68-2.68	43-1.69	18-0.71
519-3995	12.7-.50	-8	MN	1/2-14	-8	74-2.91	49-1.93	20-0.79
519-4007	19.1-.75	-12	MN	3/4-14	-12	98-3.86	67-2.64	29-1.14
518-7800	25.4-1.00	-16	MN	1-11	-16	122-4.80	85-3.35	35-1.38

JIS Female Swivel Parallel Pipe w/ 30° Female Seat - 90° Elbow



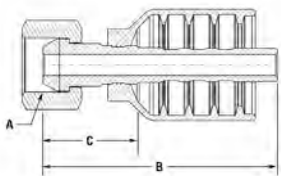
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
514-2646	9.5-.37	-6	MN	3/8-19	-6	57-2.24	33-1.30	34-1.34
519-3996	12.7-.50	-8	MN	1/2-14	-8	64-2.52	39-1.54	41-1.61
519-4008	19.1-.75	-12	MN	3/4-14	-12	84-3.31	53-2.09	58-2.28
518-7801	25.4-1.00	-16	MN	1-11	-16	109-4.29	71-2.80	70-2.76

JIS Male Parallel Pipe w/ 30° Female Seat - Straight



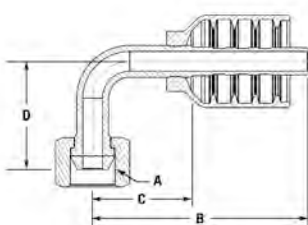
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
124-2286	6.4-.25	-4	MN	1/4-19	-4	45.0-1.77	24.0-.94
124-2287	9.5-.37	-6	XN	3/8-19	-6	55.0-2.17	30.0-1.18
124-2288	12.7-.50	-8	XN	1/2-14	-8	62.0-2.44	37.0-1.46
124-2289	19.1-.75	-12	XN	3/4-14	-12	74.0-2.91	43.0-1.69
124-2290	25.4-1.00	-16	XN	1-11	-16	85.0-3.35	46.0-1.81

JIS Female Swivel Parallel Pipe w/ 30° Male Seat - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
255-4883	19.1-.75	-12	MN	3/4-14	-12	63.5-2.5	32.51-1.28

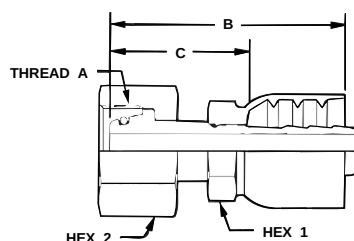
JIS Female Swivel Parallel Pipe w/ 30° Male Seat - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
255-4884	19.1-.75	-12	MN	3/4-16	-8	83.57-3.29	52.58-2.07	50.04-1.97

Cat Low and Medium Pressure Permanent Couplings

Metric DIN Light (L) 24° O-Ring Female Swivel - Straight

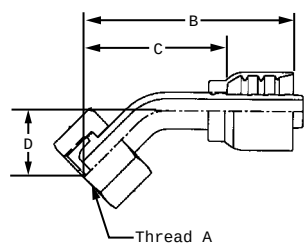


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
501-1381	6.4-.25	-4	MN	M16 x 1.5	47.0-1.85	26.0-1.02	192-7513
124-2230	6.4-.25	-4	MN	M12 x 1.5	49.0-1.93	27.7-1.09	3E-4288
124-2232	6.4-.25	-4	MN	M14 x 1.5	49.0-1.93	27.7-1.09	3E-4289
124-2233	7.9-.31	-5	MN	M16 x 1.5	56.0-2.20	30.0-1.18	3E-4296
256-3733	7.9-.31	-5	MN	M18 x 1.5	56.0-2.20	29.9-1.18	3E-4297
124-2234	9.5-.37	-6	MN	M16 x 1.5	52.0-2.05	27.0-1.06	3E-4296
124-2235	9.5-.37	-6	MN	M18 x 1.5	52.0-2.05	27.0-1.06	3E-4297
431-9025	9.5-.37	-6	MN	M22 x 1.5	69.0-2.72	40.0-1.57	3E-4298
124-2236	12.7-.50	-8	MN	M22 x 1.5	64.0-2.52	38.2-1.50	8U-6457
302-5243	12.7-.50	-8	MN	M26 x 1.5	66.0-2.60	40.0-1.57	122-9250
594-0512	12.7-.50	-8	MN	M30 x 2.0	69.0-2.72	40.0-1.57	3E-6761
124-2237	15.9-.63	-10	MN	M26 x 1.5	67.0-2.64	42.0-1.65	122-9250
124-2238	19.1-.75	-12	MN	M26 x 1.5	69.0-2.72	37.8-1.49	122-9250
124-2239	19.1-.75	-12	MN	M30 x 2.0	70.0-2.76	39.4-1.55	3E-6761
431-9027	19.1-.75	-12	MN	M36 x 2.0	83.0-3.27	47.5-1.87	092-2304
124-2240	25.4-1.00	-16	MN	M36 x 2.0	79.0-3.11	48.0-1.89	092-2304
591-1745	25.4-1.00	-16	BN	M36 x 2.0	91.0-3.58	48.0-1.89	092-2304
124-2241	31.8-1.25	-20	MN	M45 x 2.0	85.0-3.35	44.0-1.73	9X-7447
256-3734	19.1-.75	-24	MN	M52 x 2.0	106.0-4.17	55.0-2.17	190-8676

Metric DIN Light (L) 24° O-Ring Female Swivel - 30° Elbow

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
593-8796	12.7-.50	-8	MN	M22 x 1.5	87.0-3.43	53.0-2.09	15.0-.59	3E-4298
591-7376	15.9-.63	-10	MN	M26 x 1.5	98.5-3.88	68.0-2.68	21.0-.83	122-9250
595-3448	19.1-.75	-12	MN	M26 x 1.5	111.0-4.37	76.0-2.99	24.0-.94	122-9250

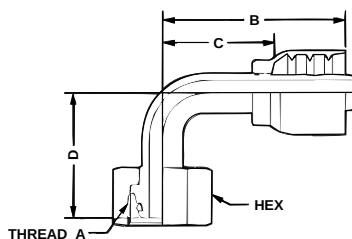
Metric DIN Light (L) 24° O-Ring Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
256-3709	6.4-.25	-4	MN	M12 x 1.5	6.0-0.24	56.0-2.20	34.9-1.37	15.2-.60	3E-4288
501-1382	6.4-.25	-4	MN	M16 x 1.5	10.0-0.39	57.0-2.24	37.0-1.46	17.0-.67	192-7513
256-3710	6.4-.25	-4	MN	M14 x 1.5	8.0-0.31	58.0-2.28	37.2-1.46	17.5-.69	3E-4289
256-3711	7.9-.31	-5	MN	M16 x 1.5	10.0-0.39	68.0-2.68	41.6-1.64	18.5-.73	3E-4296
256-3713	9.5-.37	-6	MN	M16 x 1.5	10.0-0.39	70.0-2.76	44.2-1.74	19.1-.75	3E-4296
256-3714	9.5-.37	-6	MN	M18 x 1.5	12.0-0.47	71.0-2.80	50.1-1.97	18.3-.72	3E-4297
503-4442	9.5-.37	-6	MN	M22 x 1.5	15.0-0.59	70.0-2.76	45.0-1.77	20.0-.79	8U-6457
256-3715	12.7-.50	-8	MN	M22 x 1.5	15.0-0.59	78.0-3.07	57.2-2.25	23.1-.91	8U-6457
503-7781	12.7-.50	-8	MN	M26 x 1.5	18.0-0.71	79.0-3.11	53.0-2.09	24.0-.94	122-9250
256-3716	15.9-.63	-10	MN	M26 x 1.5	18.0-0.71	89.0-3.50	64.1-2.52	27.9-1.10	122-9250
256-3717	19.1-.75	-12	MN	M26 x 1.5	18.0-0.71	93.0-3.66	61.9-2.44	24.4-.96	122-9250
256-3718	19.1-.75	-12	MN	M30 x 2.0	22.0-0.87	94.0-3.70	63.5-2.50	25.9-1.02	3E-6761
256-3719	25.4-1.00	-16	MN	M36 x 2.0	120.0-4.72	120.0-4.72	82.2-3.24	33.5-1.32	092-2304
256-3721	38.1-1.50	-24	MN	M52 x 2.0	178.0-7.01	178.0-7.01	126.8-4.99	54.9-2.16	177-2936

Cat Low and Medium Pressure Permanent Couplings

Metric DIN Light (L) 24° O-Ring Female Swivel - 90° Elbow

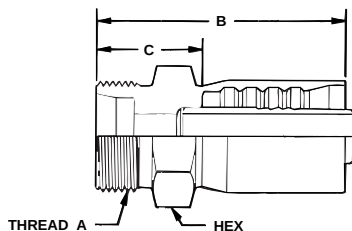


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
256-3722	6.4-.25	-4	MN	M12 x 1.5	46.0-1.81	25.2-.99	26.4-1.04	3E-4288
256-3723	6.4-.25	-4	MN	M14 x 1.5	42.0-1.65	21.2-.83	28.5-1.12	3E-4289
501-1383	6.4-.25	-4	MN	M16 x 1.5	46.0-1.81	25.0-.98	33.0-1.30	192-7513
501-9528	6.4-.25	-4	MN	M18 x 1.5	46.0-1.81	25.0-.98	36.0-1.42	8U-0598
256-3724	7.9-.31	-5	MN	M16 x 1.5	56.0-2.20	29.6-1.17	35.6-1.40	3E-4296
256-3725	7.9-.31	-5	MN	M18 x 1.5	59.0-2.32	29.5-1.16	38.0-1.50	3E-4297
503-7992	9.5-.37	-6	MN	M18 x 1.5	58.0-2.28	33.0-1.30	36.0-1.42	8U-0598
221-0452	9.5-.37	-6	MN	M16 x 1.5	58.0-2.28	32.0-1.26	37.0-1.46	3E-4296
256-3726	9.5-.37	-6	MN	M18 x 1.5	59.0-2.32	34.0-1.34	36.6-1.44	3E-4297
431-9026	9.5-.37	-6	MN	M22 x 1.5	58.0-2.28	33.0-1.30	44.0-1.73	8U-6457
602-3259	9.5-.37	-6	MN	M16 x 1.5	61.7-2.43	32.7-1.29	45.0-1.77	3E-4296
228-2991	12.7-.50	-8	MN	M22 x 1.5	64.0-2.52	38.8-1.53	42.0-1.65	8U-6457
302-5244	12.7-.50	-8	MN	M26 x 1.5	64.0-2.52	39.0-1.54	43.0-1.69	7J-9108
256-3727	15.9-.63	-10	MN	M26 x 1.5	72.0-2.83	47.1-1.85	50.8-2.00	122-925025
256-3728	19.1-.75	-12	MN	M26 x 1.5	84.0-3.31	52.5-2.07	57.2-2.25	122-9250
602-3260	19.1-.75	-12	MN	M30 x 2.0	87.65-3.45	52.7-2.07	62.0-2.44	3E-6761
256-3729	19.1-.75	-12	MN	M30 x 2.0	84.0-3.31	52.5-2.07	53.1-2.09	3E-6761
431-9028	19.1-.75	-12	MN	M36 x 2.0	84.0-3.31	53.0-2.09	66.0-2.60	092-2304
256-3730	25.4-1.00	-16	MN	M36 x 2.0	109.0-4.29	71.1-2.80	71.1-2.80	092-2304
602-3263	25.4-1.00	-16	BN	M36 x 2.0	114.2-4.50	71.3-2.81	71.0-2.80	092-2304
256-3731	31.8-1.25	-20	MN	M45 x 2.0	132.0-5.20	91.7-3.61	79.0-3.11	9X-7447

Metric DIN Light (L) 24° O-Ring Female Swivel - 120° Elbow

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
594-1943	19.1-.75	-12	MN	M30 x 2.0	88.0-3.46	53.0-2.09	92.0-3.62	3E-6761

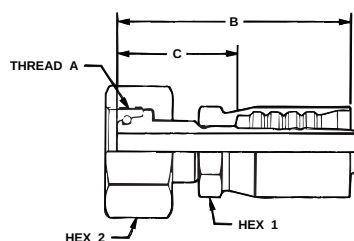
Metric DIN Light (L) 24° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
124-2176	6.4-.25	-4	MN	M12 x 1.5	6.0-0.24	43.0-1.69	22.1-.87
124-2177	6.4-.25	-4	MN	M14 x 1.5	8.0-0.31	43.0-1.69	22.1-.87
492-5097	6.4-.25	-4	MN	M16 x 1.5	10.0-0.39	43-1.69	22-0.87
124-2178	7.9-.31	-5	MN	M16 x 1.5	10.0-0.39	51.0-2.01	25.1-.99
124-2180	9.5-.37	-6	MN	M16 x 1.5	10.0-0.39	51.0-2.01	25.6-1.01
124-2181	9.5-.37	-6	MN	M18 x 1.5	12.0-0.47	51.0-2.01	25.6-1.01
124-2182	12.7-.50	-8	MN	M22 x 1.5	15.0-0.59	55.0-2.17	29.3-1.15
124-2183	15.9-.63	-10	MN	M26 x 1.5	18.0-0.71	55.0-2.17	30.2-1.19
124-2184	19.1-.75	-12	MN	M26 x 1.5	18.0-0.71	61.0-2.40	30.0-1.18
124-2185	19.1-.75	-12	MN	M30 x 2.0	22.0-0.87	65.0-2.56	34.0-1.34
124-2186	25.4-1.00	-16	MN	M36 x 2.0	28.0-1.10	75.0-2.95	37.3-1.47
124-2187	31.8-1.25	-20	MN	M45 x 2.0	35.0-1.38	85.0-3.35	44.2-1.74

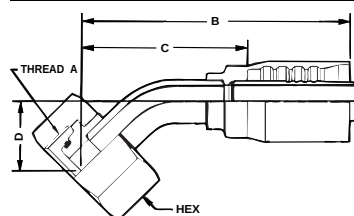
Cat Low and Medium Pressure Permanent Couplings

Metric DIN Heavy (S) 24° O-Ring Female Swivel - Straight



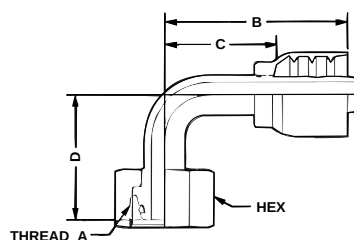
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
124-2253	6.4-.25	-4	MN	M16 x 1.5	8.0-0.31	51.0-2.01	29.7-1.17	3E-4289
124-2254	6.4-.25	-4	MN	M18 x 1.5	10.0-0.39	52.0-2.05	30.7-1.21	3E-4296
124-2255	7.9-.31	-5	MN	M20 x 1.5	12.0-.047	58.0-2.28	32.0-1.26	3E-4297
124-2256	9.5-.37	-6	MN	M20 x 1.5	12.0-.047	59.0-2.32	33.9-1.33	3E-4297
124-2257	9.5-.37	-6	MN	M22 x 1.5	14.0-0.55	57.0-2.24	32.0-1.26	3E-4298
124-2258	12.7-.50	-8	MN	M24 x 1.5	16.0-0.63	68.0-2.68	42.2-1.66	8U-6457
124-2259	15.9-.63	-10	MN	M30 x 2.0	20.0-0.79	67.0-2.64	41.9-1.65	3E-4299
124-2260	19.1-.75	-12	MN	M30 x 2.0	20.0-0.79	75.0-2.95	44.5-1.75	3E-4299
124-2261	19.1-.75	-12	MN	M36 x 2.0	25.0-.098	78.0-3.07	47.5-1.87	3E-6762
124-2262	25.4-1.00	-16	MN	M42 x 2.0	30.0-1.18	88.0-3.46	50.0-1.97	3E-6763
124-2263	31.8-1.25	-20	MN	M52 x 2.0	38.0-1.50	95.0-3.74	54.0-2.13	3E-6764

Metric DIN Heavy (S) 24° O-Ring Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
124-2264	6.4-.25	-4	MN	M16 x 1.5	8.0-0.31	58.0-2.28	36.8-1.45	17.0-.67	3E-4289
124-2265	6.4-.25	-4	MN	M18 x 1.5	10.0-0.39	59.0-2.32	37.6-1.48	18.0-.71	3E-4296
124-2266	7.9-.31	-5	MN	M20 x 1.5	12.0-0.47	69.0-2.72	43.2-1.70	20.1-.79	3E-4297
124-2267	9.5-.37	-6	MN	M20 x 1.5	12.0-0.47	72.0-2.83	47.0-1.85	22.1-.87	3E-4297
124-2268	9.5-.37	-6	MN	M22 x 1.5	14.0-0.55	73.0-2.87	47.2-1.86	22.1-.87	3E-4298
124-2269	12.7-.50	-8	MN	M24 x 1.5	16.0-0.63	80.0-3.15	54.6-2.15	24.9-.98	6T-6408
124-2270	15.9-.63	-10	MN	M30 x 2.0	20.0-0.79	89.0-3.50	64.3-2.53	28.4-1.12	3E-4299
124-2271	19.1-.75	-12	MN	M30 x 2.0	20.0-0.79	97.0-3.82	65.8-2.59	28.2-1.11	3E-4299
124-2272	19.1-.75	-12	MN	M36 x 2.0	25.0-0.98	99.0-3.90	68.1-2.68	30.2-1.19	3E-6762
124-2273	25.4-1.00	-16	MN	M42 x 2.0	30.0-1.18	125.0-4.92	86.9-3.42	38.1-1.50	3E-6763
124-2274	31.8-1.25	-20	MN	M52 x 2.0	38.0-1.50	149.0-5.87	108.0-4.25	40.0-1.57	9X-7414

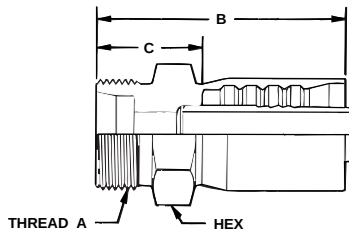
Metric DIN Heavy (S) 24° O-Ring Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
124-2275	6.4-.25	-4	MN	M16 x 1.5	46.0-1.81	25.1-.99	30.0-1.18	3E-4289
124-2276	6.4-.25	-4	MN	M18 x 1.5	46.0-1.81	25.1-.99	30.0-1.18	3E-4296
124-2277	7.9-.31	-5	MN	M20 x 1.5	56.0-2.20	29.7-1.17	37.6-1.48	3E-4297
256-3725	7.9-.31	-5	MN	M18 x 1.5	56.0-2.20	29.6-1.17	37.6-1.48	3E-4297
124-2278	9.5-.37	-6	MN	M20 x 1.5	58.0-2.28	32.5-1.28	37.6-1.48	3E-4297
605-8706	9.5-.37	-6	MN	M18 x 1.5	62.0-2.44	33.0-1.30	32.0-1.26	3E-4296
124-2279	9.5-.37	-6	MN	M22 x 1.5	58.0-2.28	32.5-1.28	37.6-1.48	3E-4298
124-2280	12.7-.50	-8	MN	M24 x 1.5	64.0-2.52	38.8-1.53	44.5-1.75	6T-6408
124-2281	15.9-.63	-10	MN	M30 x 2.0	72.0-2.83	47.0-1.85	55.1-2.17	3E-4299
124-2282	19.1-.75	-12	MN	M30 x 2.0	84.0-3.31	52.6-2.07	54.6-2.15	3E-4299
124-2283	19.1-.75	-12	MN	M36 x 2.0	84.0-3.31	52.6-2.07	57.7-2.27	3E-6762
124-2284	25.4-1.00	-16	MN	M42 x 2.0	109.0-4.29	71.1-2.80	76.2-3.00	3E-6764

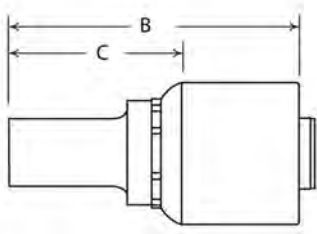
Cat Low and Medium Pressure Permanent Couplings

Metric DIN Heavy (S) 24° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
124-2242	6.4-.25	-4	MN	M16 x 1.5	8.0-0.31	46.0-1.81	25.4-1.00
124-2243	6.4-.25	-4	MN	M18 x 1.5	10.0-0.39	46.0-1.81	25.4-1.00
124-2244	7.9-.31	-5	MN	M20 x 1.5	12.0-0.47	55.0-2.17	29.0-1.14
124-2245	9.5-.37	-6	MN	M20 x 1.5	12.0-0.47	54.0-2.13	28.7-1.13
124-2246	9.5-.37	-6	MN	M22 x 1.5	14.0-0.55	56.0-2.20	30.4-1.20
124-2247	12.7-.50	-8	MN	M24 x 1.5	16.0-0.63	58.0-2.28	32.6-1.28
124-2248	15.9-.63	-10	MN	M30 x 2.0	20.0-0.79	62.0-2.44	37.1-1.46
124-2249	19.1-.75	-12	MN	M30 x 2.0	20.0-0.79	67.0-2.64	36.1-1.42
124-2250	19.1-.75	-12	MN	M36 x 2.0	25.0-0.98	70.0-2.76	38.9-1.53
124-2251	25.4-1.00	-16	MN	M42 x 2.0	30.0-1.18	82.0-3.23	43.9-1.73
501-1378	25.4-1.00	-16	MN	M36 x 2.0	28.0-1.10	87.0-3.43	45.0-1.77
124-2252	31.8-1.25	-20	MN	M52 x 2.0	38.0-1.50	93.0-3.66	52.6-2.07

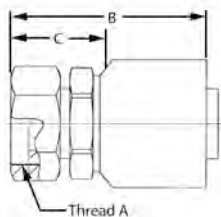
Metric DIN Standpipe - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	TUBE O.D. (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	SLEEVE	NUT	NUT SERIES
124-2189	6.4-.25	-4	MN	8-0.31	49.0-1.93	28.2-1.11	5W-1681	5W-1680	M14x1.5 (8L)
124-2188	6.4-.25	-4	MN	6-0.24	51.0-2.01	30.2-1.19	5W-1648	5W-1636	M12x1.5 (6L)
124-2190	7.9-.31	-5	MN	10-0.39	56.0-2.20	30.5-1.20	5W-1650	147-8739	M16x1.5 (10L)
124-2193	9.5-.37	-6	MN	12-0.47	56.0-2.20	30.4-1.20	5W-1651	5W-1641	M24x1.5 (16S)
190-3754	9.5-.37	-6	MN	n/a	56.0-2.20	30.4-1.20	5W-1651	5W-1641	M24x1.5 (16S)
124-2192	9.5-.37	-6	MN	10-0.39	58.0-2.28	32.4-1.28	5W-1650	147-8739	M16x1.5 (10L)
124-2194	12.7-.50	-8	MN	15-0.59	59.0-2.32	33.9-1.33	5W-1653	5W-1640	M22x1.5 (15L)
124-2195	15.9-.63	-10	MN	18-0.71	61.0-2.40	35.0-1.38	5W-1655	5W-1642	M26x1.5 (18L)
124-2196	19.1-.75	-12	MN	18-0.71	67.0-2.64	36.1-1.42	5W-1655	5W-1642	M26x1.5 (18L)
124-2197	19.1-.75	-12	MN	22-0.87	67.0-2.64	36.1-1.42	5W-1657	5W-1644	M30x2 (22L)
124-2199	31.8-1.25	-20	MN	n/a	84.0-3.31	43.7-1.72	5W-1660	5W-4778	

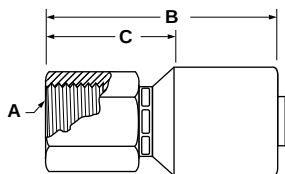
Cat Low and Medium Pressure Permanent Couplings

NPSM Female Swivel - Straight



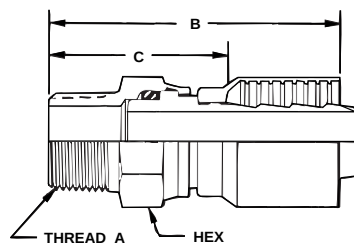
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
154-0060	6.4-.25	-4	MN	1/8-27	-2	41.0-1.61	20.1-.79
154-0061	6.4-.25	-4	MN	1/4-18	-4	43.0-1.69	21.8-.86
154-0062	9.5-.37	-6	MN	3/8-18	-6	54.0-2.13	29.0-1.14
154-0063	12.7-.50	-8	MN	1/2-14	-8	56.0-2.20	30.9-1.22
154-0064	19.1-.75	-12	MN	3/4-14	-12	61.0-2.40	30.5-1.20
124-1958	25.4-1.00	-16	MN	1-11 1/2	-16	69.0-2.72	30.2-1.19
154-0066	31.8-1.25	-20	MN	1 1/4-11 1/2	-20	74.0-2.91	33.8-1.33

NPTF Female Fixed - Straight



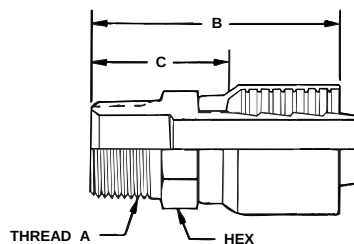
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
124-1924	6.4-.25	-4	MN	1/8-27	-2	41.0-1.61	19.6-.77
124-1925	6.4-.25	-4	MN	1/4-18	-4	49.0-1.93	27.7-1.09
154-0057	9.5-.37	-6	MN	1/4-18	-4	54.0-2.13	28.9-1.14
124-1926	9.5-.37	-6	MN	3/8-18	-6	55.0-2.17	29.3-1.15
154-0058	12.7-.50	-8	MN	3/8-18	-6	56.0-2.20	31.0-1.22
124-1927	12.7-.50	-8	MN	1/2-14	-8	63.0-2.48	37.5-1.48
154-0059	19.1-.75	-12	MN	3/4-14	-12	66.0-2.60	34.8-1.37

NPTF Male Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
124-1913	6.4-.25	-4	MN	1/8-27	-2	56.0-2.20	35.3-1.39
124-1914	6.4-.25	-4	MN	1/4-18	-4	60.0-2.36	39.1-1.54
124-1915	6.4-.25	-4	MN	3/8-18	-6	60.0-2.36	39.4-1.55
124-1916	9.5-.37	-6	MN	1/4-18	-4	67.0-2.64	41.5-1.63
124-1917	9.5-.37	-6	MN	3/8-18	-6	67.0-2.64	41.3-1.63
124-1918	9.5-.37	-6	MN	1/2-14	-8	74.0-2.91	48.8-1.92
124-1919	12.7-.50	-8	MN	3/8-18	-6	69.0-2.72	43.2-1.70
124-1920	12.7-.50	-8	MN	1/2-14	-8	76.0-2.99	50.5-1.99
124-1921	19.1-.75	-12	MN	3/4-14	-12	89.0-3.50	54.0-2.13
124-1922	25.4-1.00	-16	MN	1-11 1/2	-16	98.0-3.86	60.5-2.38

NPTF Male Fixed - Straight



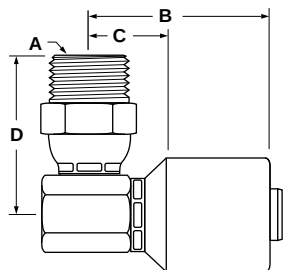
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
124-1890	6.4-.25	-4	MN	1/8-27	-2	41.0-1.61	20.1-.79
124-1891	6.4-.25	-4	MN	1/4-18	-4	48.0-1.89	27.2-1.07
124-1892	6.4-.25	-4	MN	3/8-18	-6	48.0-1.89	27.2-1.07
124-1894	6.4-.25	-4	MN	1/2-14	-8	54.0-2.13	33.0-1.30
124-1895	7.9-.31	-5	MN	1/4-18	-4	55.0-2.17	28.7-1.13

Cat Low and Medium Pressure Permanent Couplings

NPTF Male Fixed - Straight (Cont'd.)

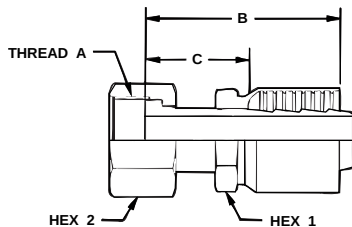
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
124-1896	9.5-.37	-6	MN	1/4-18	-4	54.0-2.13	28.5-1.12
124-1897	9.5-.37	-6	MN	3/8-18	-6	55.0-2.17	29.4-1.16
124-1898	9.5-.37	-6	MN	1/2-14	-8	59.0-2.32	34.1-1.34
124-1899	12.7-.50	-8	MN	3/8-18	-6	57.0-2.24	31.2-1.23
124-1900	12.7-.50	-8	MN	1/2-14	-8	61.0-2.40	35.9-1.41
124-1901	12.7-.50	-8	MN	3/4-14	-12	63.0-2.48	37.8-1.49
124-1902	15.9-.63	-10	MN	3/8-18	-6	64.0-2.52	34.0-1.34
124-1903	15.9-.63	-10	MN	1/2-14	-8	64.0-2.52	39.0-1.54
124-1904	15.9-.63	-10	MN	3/4-14	-12	66.0-2.60	41.0-1.61
124-1905	19.1-.75	-12	MN	1/2-14	-8	66.0-2.60	35.3-1.39
124-1906	19.1-.75	-12	MN	3/4-14	-12	68.0-2.68	36.6-1.44
124-1907	19.1-.75	-12	MN	1-11 1/2	-16	76.0-2.99	44.7-1.76
124-1908	25.4-1.00	-16	MN	3/4-14	-12	77.0-3.03	38.9-1.53
124-1909	25.4-1.00	-16	MN	1-11 1/2	-16	85.0-3.35	47.0-1.85
124-1910	31.8-1.25	-20	MN	1 1/4-11 1/2	-20	94.0-3.70	53.1-2.09
124-1911	38.1-1.50	-24	MN	1 1/2-11 1/2	-24	107.0-4.21	56.1-2.21
124-1912	50.8-2.00	-32	MN	2-11 1/2	-32	107.0-4.21	59.0-2.32
302-5240	63.5-2.50	-40	MN	2-11 1/2	-32	132.0-5.20	69.0-2.72

NPTF Male Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
124-1923	6.4-.25	-4	MN	1/4-18	-4	40.0-1.57	19.1-.75	42.2-1.66
154-0052	9.5-.37	-6	MN	3/8-18	-6	47.0-1.85	21.6-.85	44.5-1.75
154-0054	12.7-.50	-8	MN	1/2-14	-8	51.0-2.01	25.9-1.02	54.1-2.13
154-0055	19.1-.75	-12	MN	3/4-14	-12	58.0-2.28	32.8-1.29	65.8-2.59

ORFS Female Swivel - Straight



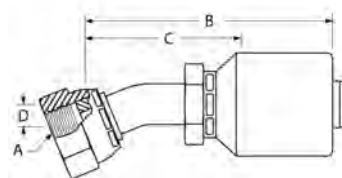
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
124-2111	6.4-.25	-4	MN	9/16-18	-4	47.0-1.85	25.4-1.00	4J-5477
124-2113	6.4-.25	-4	MN	11/16-16	-6	49.0-1.93	27.7-1.09	6V-8397
154-0095	6.4-.25	-4	MN	13/16-16	-8	53.0-2.09	31.8-1.25	6V-8398
302-5286	7.9-.31	-5	MN	11/16-16	-6	55.0-2.17	29.0-1.14	6V-8397
154-0096	9.5-.37	-6	MN	9/16-18	-4	50.0-1.97	25.0-.98	4J-5477
124-2114	9.5-.37	-6	MN	11/16-16	-6	56.0-2.20	30.9-1.22	6V-8397
124-2116	9.5-.37	-6	MN	13/16-16	-8	55.0-2.17	30.0-1.18	6V-8398
277-2093	9.5-.37	-6	MN	1-14	-10	57.0-2.24	31.5-1.24	7J-9108
154-0097	12.7-.50	-8	MN	11/16-16	-6	61.0-2.40	35.5-1.40	6V-8397
124-2117	12.7-.50	-8	MN	13/16-16	-8	55.0-2.17	30.0-1.18	6V-8398
124-2118	12.7-.50	-8	MN	1-14	-10	67.0-2.64	41.5-1.63	7J-9108
147-1716	12.7-.50	-8	MN	1 3/16-12	-12	69.0-2.72	44.0-1.73	6V-9746

Cat Low and Medium Pressure Permanent Couplings

ORFS Female Swivel - Straight (Cont'd.)

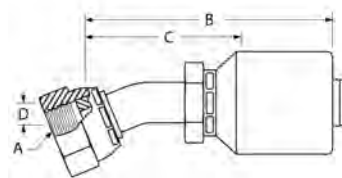
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
252-0038	15.9-.63	-10	MN	13/16-16	-8	61.0-2.40	41.0-1.61	6V-8397
587-2636	15.9-.63	-10	BN	13/16-16	-8	73.0-2.87	36.0-1.42	6V-8398
124-2119	15.9-.63	-10	MN	1-14	-10	69.0-2.72	44.0-1.73	7J-9108
238-1766	15.9-.63	-10	MN	1-14	-10	73.0-2.87	62.0-2.44	7J-9108
583-9944	15.9-.63	-10	BN	1-14	-10	79.0-3.11	43.0-1.69	7J-9108
124-2120	15.9-.63	-10	MN	1 3/16-12	-12	71.0-2.80	46.0-1.81	6V-9746
587-2634	15.9-.63	-10	BN	1 3/16-12	-12	79.0-3.11	43.0-1.69	6V-9746
154-0098	19.1-.75	-12	MN	1-14	-10	80.0-3.15	45.0-1.77	7J-9108
124-2121	19.1-.75	-12	MN	1 3/16-12	-12	81.0-3.19	46.0-1.81	6V-9746
124-2122	19.1-.75	-12	MN	1 7/16-12	-16	75.0-2.95	43.9-1.73	5K-9090
344-2353	25.4-1.00	-16	MN	1 3/16-12	-12	93.0-3.66	51.0-2.01	6V-9746
124-2123	25.4-1.00	-16	MN	1 7/16-12	-16	93.0-3.66	51.0-2.01	5K-9090
526-7915	25.4-1.00	-16	BN	1 7/16-12	-16	93.2-3.67	50.70-1.99	5K-9090
124-2124	25.4-1.00	-16	MN	1 11/16-12	-20	89.0-3.50	51.0-2.01	6V-8400
575-2963	31.8-1.25	-20	MN	1-7/16-12	-16	96.5-3.80	51.3-2.02	5K-9090
124-2125	31.8-1.25	-20	MN	1 11/16-12	-20	96.0-3.78	48.0-1.89	6V-8400
302-5287	31.8-1.25	-20	MN	2-12	-24	87.0-3.43	46.0-1.81	8T-0315
124-2320	38.1-1.50	-24	MN	2-12	-24	107.0-4.21	63.0-2.48	8T-0315

ORFS Female Swivel - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
124-2127	12.7-.50	-8	MN	13/16-16	-8	78.0-3.07	52.6-2.07	10.9-.43	6V-8398

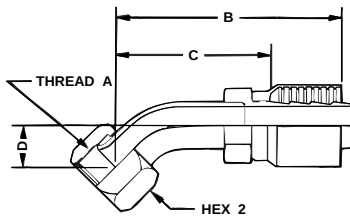
ORFS Female Swivel - 30° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
353-5488	12.7-.50	-8	MN	13/16-16	-8	77.0-3.03	52.0-2.05	13.7-.54	6V-8398
201-7376	25.4-1.00	-16	MN	1 7/16-12	-16	106.0-4.17	67.5-2.66	14.2-.56	5K-9090
526-7918	25.4-1.00	-16	BN	1 7/16-12	-16	110.0-4.33	68.0-2.68	14.0-.55	5K-9090

Cat Low and Medium Pressure Permanent Couplings

ORFS Female Swivel - 45° Elbow

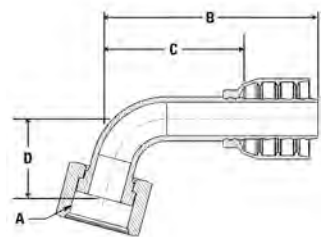


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
124-2128	6.4-.25	-4	MN	9/16-18	-4	51.0-2.01	30.0-1.18	10.4-.41	4J-5477
124-2129	6.4-.25	-4	MN	11/16-16	-6	52.0-2.05	30.5-1.20	10.9-.43	6V-8397
416-2520	7.9-.31	-5	MN	11/16-16	-6	63.0-2.48	34.0-1.34	11.0-.43	6V-8397
154-0099	9.5-.37	-6	MN	9/16-18	-4	60.0-2.36	34.5-1.36	10.4-.41	4J-5477
124-2130	9.5-.37	-6	MN	11/16-16	-6	61.0-2.40	36.1-1.42	10.7-.42	6V-8397
124-2131	9.5-.37	-6	MN	13/16-16	-8	66.0-2.60	40.1-1.58	15.0-.59	6V-8398
154-0100	12.7-.50	-8	MN	11/16-16	-6	63.0-2.48	37.8-1.49	10.9-.43	6V-8397
124-2132	12.7-.50	-8	MN	13/16-16	-8	70.0-2.76	44.7-1.76	15.0-.59	6V-8398
124-2133	12.7-.50	-8	MN	1-14	-10	72.0-2.83	46.2-1.82	16.5-.65	7J-9108
124-2134	12.7-.50	-8	MN	1 3/16-12	-12	76.0-2.99	50.8-2.00	21.1-.83	6V-9746
124-2135	15.9-.63	-10	MN	1-14	-10	78.0-3.07	52.6-2.07	16.5-.65	7J-9108
587-3252	15.9-.63	-10	BN	1-14	-10	88.0-3.46	52.0-2.05	17.0-.67	7J-9108
124-2136	15.9-.63	-10	MN	1 3/16-12	-12	82.0-3.23	57.2-2.25	21.1-.83	6V-9746
302-5288	19.1-.75	-12	MN	1-14	-10	89.0-3.50	54.0-2.13	16.5-1.65	7J-9108
124-2137	19.1-.75	-12	MN	1 3/16-12	-12	90.0-3.54	59.0-2.32	21.0-.83	6V-9746
302-5289	19.1-.75	-12	MN	1 7/16-12	-16	92.0-3.62	61.0-2.40	24.0-.94	5K-9090
466-8516	25.4-1.00	-16	MN	1 3/16-12	-12	105.0-4.13	62.0-2.44	20.0-.79	6V-9746
124-2138	25.4-1.00	-16	MN	1 7/16-12	-16	111.0-4.37	72.6-2.86	23.9-.94	5K-9090
526-7916	25.4-1.00	-16	BN	1 7/16-12	-16	115.3-4.54	72.77-2.86	23.9	5K-9090
302-5290	25.4-1.00	-16	MN	1 11/16-12	-20	112.0-4.41	74.0-2.91	25.0-.98	6V-8400
124-2139	31.8-1.25	-20	MN	1 11/16-12	-20	134.0-5.28	92.7-3.65	25.4-1.00	6V-8400
147-1696	38.1-1.50	-24	MN	2-12	-24	149.0-5.87	98.0-3.86	27.2-1.07	8T-0315

ORFS Female Swivel - 67.5° Elbow

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
302-5298	12.7-.50	-8	MN	13/16-16	-8	73-2.87	48-1.89	23-0.91	6V-8398
302-5299	25.4-1.00	-16	MN	1 7/16-12	-16	113.0-4.45	75.0-2.95	40.0-1.57	5K-9090

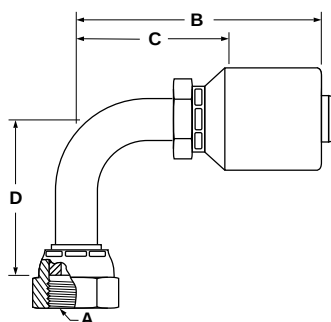
ORFS Female Swivel - 75° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
589-6594	19.1-.75	-12	MN	1 3/16-12	-12	100.9-3.97	65.9-2.59	37.5-1.48	6V-9746

Cat Low and Medium Pressure Permanent Couplings

ORFS Female Swivel - 90° Elbow



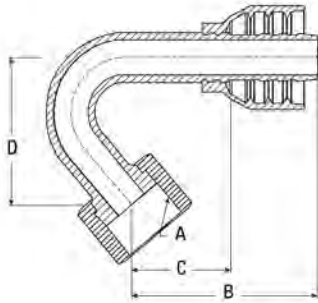
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
124-2140	6.4-.25	-4	MN	9/16-18	-4	46.0-1.81	25.1-.99	19.8-.78	4J-5477
124-2322	6.4-.25	-4	MN	9/16-18	-4	46.0-1.81	25.1-.99	32.0-1.26	4J-5477
124-2158	6.4-.25	-4	MN	9/16-18	-4	46.0-1.81	25.1-.99	45.7-1.80	4J-5477
124-2141	6.4-.25	-4	MN	11/16-16	-6	46.0-1.81	25.1-.99	22.9-.90	6V-8397
124-2159	6.4-.25	-4	MN	11/16-16	-6	46.0-1.81	25.1-.99	54.1-2.13	6V-8397
228-2987	6.4-.25	-4	MN	11/16-16	-6	49.0-1.93	28.0-1.10	38.0-1.50	6V-8397
124-2142	6.4-.25	-4	MN	13/16-16	-8	46.0-1.81	25.1-.99	29.2-1.15	6V-8398
416-2521	7.9-.31	-5	MN	11/16-16	-6	59.0-2.32	30.0-1.18	23.0-.91	6V-8397
124-2143	9.5-.37	-6	MN	9/16-18	-4	55.0-2.17	29.7-1.17	19.8-.78	4J-5477
124-2144	9.5-.37	-6	MN	11/16-16	-6	58.0-2.28	32.5-1.28	22.9-.90	6V-8397
124-2323	9.5-.37	-6	MN	11/16-16	-6	58.0-2.28	32.5-1.28	38.4-1.51	6V-8397
124-2160	9.5-.37	-6	MN	11/16-16	-6	58.0-2.28	32.5-1.28	54.1-2.13	6V-8397
124-2145	9.5-.37	-6	MN	13/16-16	-8	58.0-2.28	32.5-1.28	29.2-1.15	6V-8398
228-2989	9.5-.37	-6	MN	13/16-16	-8	58.0-2.28	32.0-1.26	41.0-1.61	6V-8398
124-2161	9.5-.37	-6	MN	13/16-16	-8	58.0-2.28	32.5-1.28	63.8-2.51	6V-8398
124-2146	12.7-.50	-8	MN	11/16-16	-6	60.0-2.36	34.3-1.35	22.9-.90	6V-8397
124-2147	12.7-.50	-8	MN	13/16-16	-8	64.0-2.52	38.8-1.53	29.2-1.15	6V-8398
124-2325	12.7-.50	-8	MN	13/16-16	-8	64.0-2.52	38.8-1.53	41.1-1.62	6V-8398
124-2162	12.7-.50	-8	MN	13/16-16	-8	64.0-2.52	38.8-1.53	63.8-2.51	6V-8398
124-2148	12.7-.50	-8	MN	1-14	-10	64.0-2.52	38.8-1.53	32.3-1.27	7J-9108
228-2990	12.7-.50	-8	MN	1-14	-10	64.0-2.52	38.8-1.53	47.0-1.85	7J-9108
124-2163	12.7-.50	-8	MN	1-14	-10	64.0-2.52	38.8-1.53	70.1-2.76	7J-9108
124-2149	12.7-.50	-8	MN	1 3/16-12	-12	64.0-2.52	38.8-1.53	47.8-1.88	6V-9746
124-2150	15.9-.63	-10	MN	1-14	-10	72.0-2.83	47.5-1.87	32.3-1.27	7J-9108
124-2168	15.9-.63	-10	MN	1-14	-10	72.0-2.83	47.0-1.85	47.0-1.85	7J-9108
124-2164	15.9-.63	-10	MN	1-14	-10	72.0-2.83	47.5-1.87	70.1-2.76	7J-9108
587-3254	15.9-.63	-10	BN	1-14	-10	83.0-3.27	47.0-1.85	32.0-1.26	7J-9108
587-3253	15.9-.63	-10	BN	1-14	-10	83.0-3.27	47.0-1.85	70.0-2.76	7J-9108
587-3255	15.9-.63	-10	BN	1-14	-10	83.0-3.27	47.0-1.85	47.0-1.85	7J-9108
124-2151	15.9-.63	-10	MN	1 3/16-12	-12	72.0-2.83	47.5-1.87	47.8-1.88	6V-9746
302-5294	15.9-.63	-10	MN	1 3/16-12	-12	72.0-2.83	47.0-1.85	96.0-3.78	6V-9746
587-3256	15.9-.63	-10	BN	1 3/16-12	-12	83.0-3.27	47.0-1.85	48.0-1.89	6V-9746
124-2152	19.1-.75	-12	MN	1-14	-10	80.0-3.15	48.8-1.92	32.3-1.27	7J-9108
124-2153	19.1-.75	-12	MN	1 3/16-12	-12	84.0-3.31	52.6-2.07	47.8-1.88	6V-9746
147-1694	19.1-.75	-12	MN	1 3/16-12	-12	84.0-3.31	52.6-2.07	57.9-2.28	6V-9746
124-2165	19.1-.75	-12	MN	1 3/16-12	-12	84.0-3.31	52.6-2.07	96.0-3.78	6V-9746
124-2154	19.1-.75	-12	MN	1 7/16-12	-16	84.0-3.31	52.6-2.07	56.1-2.21	5K-9090
584-7743	25.4-1.00	-16	MN	1 3/16-12	-12	109.2-4.30	66.7-2.63	48.0-1.89	6V-9746
124-2155	25.4-1.00	-16	MN	1 7/16-12	-16	109.0-4.29	71.1-2.80	56.1-2.21	5K-9090
147-1695	25.4-1.00	-16	MN	1 7/16-12	-16	109.0-4.29	71.1-2.80	70.6-2.78	5K-9090
289-1473	25.4-1.00	-16	MN	1 7/16-12	-16	115.0-4.53	73.0-2.87	85.0-3.34	5K-9090
124-2166	25.4-1.00	-16	MN	1 7/16-12	-16	110.0-4.33	72.0-2.83	116.0-4.57	5K-9090
124-2156	25.4-1.00	-16	MN	1 11/16-12	-20	109.0-4.29	71.1-2.80	63.8-2.51	6V-8400
526-7917	25.4-1.00	-16	BN	1 7/16-12	-16	113.8-4.48	71.27-2.80	56.15	5K-9090
526-7914	25.4-1.00	-16	BN	1 7/16-12	-16	114.3-4.50	71.77-2.82	114.3	5K-9090
302-5292	31.8-1.25	-20	MN	1 7/16-12	-16	126.0-4.96	85.0-3.35	56.0-2.20	5K-9090
124-2157	31.8-1.25	-20	MN	1 11/16-12	-20	132.0-5.20	91.4-3.60	63.8-2.51	6V-8400
306-2741	31.8-1.25	-20	MN	1 11/16-12	-20	132.0-5.20	92.0-3.62	110.0-4.33	6V-8400
124-2167	31.8-1.25	-20	MN	1 11/16-12	-20	132.0-5.20	91.4-3.60	129.3-5.09	6V-8400

Cat Low and Medium Pressure Permanent Couplings

ORFS Female Swivel - 90° Elbow (Cont'd.)

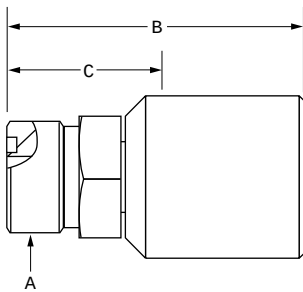
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
302-5293	31.8-1.25	-20	MN	2-12	-24	126.0-4.96	86.0-3.39	69.0-2.72	8T-0315
154-0115	38.1-1.50	-24	MN	2-12	-24	147.0-5.79	96.0-3.78	68.6-2.70	8T-0315

ORFS Female Swivel - 130° Elbow



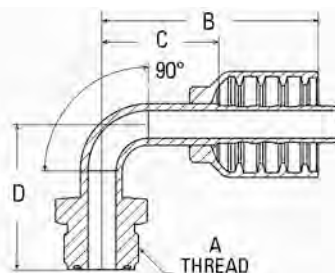
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
228-5326	15.9-.63	-10	MN	1-14	-10	65.0-2.56	34.3-1.35	51.0-2.01	7J-9108

ORFS Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
224-6265	6.4-.25	-4	MN	9/16-18	-4	42.0-1.65	21.1-.83	4J-5477
242-9532	6.4-.25	-4	MN	11/16-16	-6	49.0-1.93	25.0-.98	6V-8397
224-6266	9.5-.37	-6	MN	11/16-16	-6	52.0-2.05	26.4-1.04	6V-8397
333-2764	9.5-.37	-6	MN	13/16-16	-8	58.0-2.28	29.0-1.14	6V-8398
186-4133	12.7-.50	-8	MN	13/16-16	-8	56.0-2.20	30.7-1.21	6V-8398
302-5295	12.7-.50	-8	MN	1-14	-10	59.0-2.32	33.0-1.30	7J-9108
583-9945	15.9-.63	-10	BN	1-14	-10	71.0-2.80	34.0-1.34	7J-9108
302-5296	15.9-.63	-10	MN	1 3/16-12	-12	63.0-2.48	38.0-1.50	8T-0315
587-2635	15.9-.63	-10	BN	1 3/16-12	-12	72.0-2.83	36.0-1.42	6V-9746
186-4134	19.1-.75	-12	MN	1 3/16-12	-12	65.0-2.56	33.9-1.33	6V-9746
302-5297	19.1-.75	-12	MN	1 7/16-12	-16	74.0-2.91	39.0-1.54	5K-9090
186-4135	25.4-1.00	-16	MN	1 7/16-12	-16	77.0-3.03	39.0-1.54	5K-9090
533-5332	25.4-1.00	-16	BN	1 7/16-12	-16	83.13-3.27	40.20-1.58	5K-9090
184-3489	31.8-1.25	-20	MN	1 11/16-12	-20	89.0-3.50	47.0-1.85	6V-8400
186-4136	38.1-1.50	-24	MN	2-12	-24	111.0-4.37	60.0-2.36	8T-0315

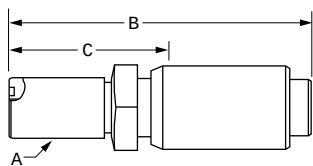
ORFS Male - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
270-9321	6.4-.25	-4	MN	11/16-16	-6	52.0-2.05	31.0-1.22	40.0-1.57	6V-8397
250-6829	12.7-.50	-8	MN	13/16-16	-8	64.0-2.52	39.0-1.54	41.0-1.61	6V-8398

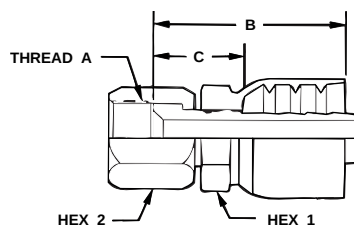
Cat Low and Medium Pressure Permanent Couplings

ORFS Male Bulkhead - Straight



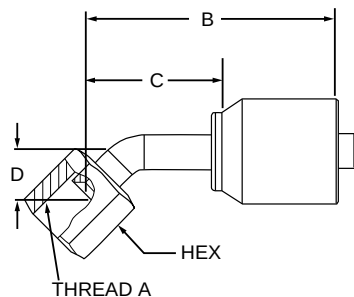
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
550-1335	6.4-.25	-4	MN	9/16-18	-4	69.0-2.72	45.0-1.77	4J-5477
596-7687	6.4-.25	-4	MN	11/16-16	-6	71.5-2.81	47.4-1.87	6V-8398
603-9461	9.5-.37	-6	MN	11/16-16	-6	79.0-3.11	49.0-1.93	6V-8398
563-3828	12.7-.50	-8	MN	13/16-16	-8	77.0-3.03	48.0-1.89	6V-8398
604-3192	31.8-1.25	-20	MN	1 11/16-12	-20	111.0-4.37	65.5-2.58	6V-8400

SAE 45° Female Swivel - Straight



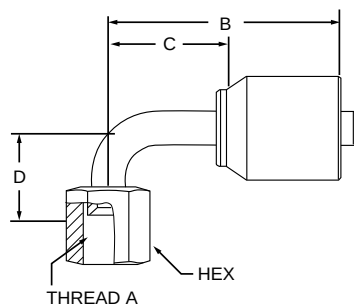
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	
124-2037	6.4-.25	-4	MN	7/16-20	-4	38.0-1.50	17.0-.67	
154-0085	6.4-.25	-4	MN	5/8-18	-6	39.0-1.54	18.0-.71	
124-2038	9.5-.37	-6	MN	5/8-18	-6	45.0-1.77	20.0-.79	
124-2039	12.7-.50	-8	MN	3/4-16	-8	54.0-2.13	28.5-1.12	
124-2040	19.1-.75	-12	MN	1 1/16-14	-12	58.0-2.28	27.4-1.08	

SAE 45° Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
154-0072	6.4-.25	-4	MN	7/16-20	-4	49.0-1.93	27.9-1.10	8.4-.33
154-0074	9.5-.37	-6	MN	5/8-18	-6	60.0-2.36	35.1-1.38	9.9-.39
154-0077	12.7-.50	-8	MN	3/4-16	-8	69.0-2.72	43.7-1.72	14.0-.55

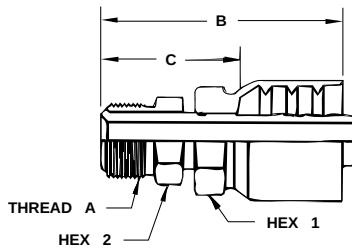
SAE 45° Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
154-0080	6.4-.25	-4	MN	7/16-20	-4	46.0-1.81	25.1-.99	17.3-.68
154-0081	6.4-.25	-4	MN	1/2-20	-5	46.0-1.81	25.1-.99	19.6-.77
154-0082	9.5-.37	-6	MN	5/8-18	-6	58.0-2.28	32.5-1.28	21.6-.85
154-0083	12.7-.50	-8	MN	3/4-16	-8	64.0-2.52	38.8-1.53	27.7-1.09
154-0084	19.1-.75	-12	MN	1 1/16-14	-12	84.0-3.31	52.6-2.07	46.2-1.82

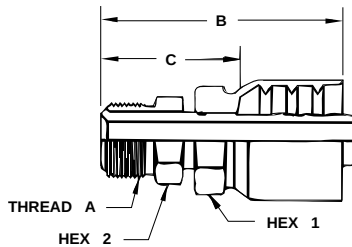
Cat Low and Medium Pressure Permanent Couplings

SAE 45° Male Swivel - Straight



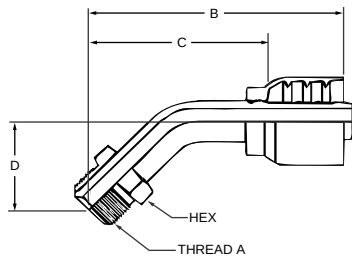
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
154-0086	9.5-.37	-6	MN	5/8-18	-6	56.0-2.20	30.9-1.22

SAE 45° Inverted Flare Male Swivel - Straight



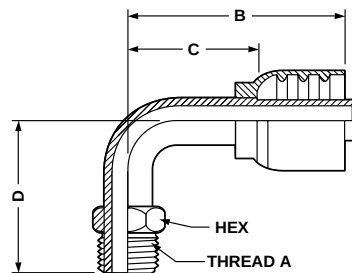
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
124-2041	6.4-.25	-4	MN	7/16-24	-4	49.0-1.93	27.4-1.08
124-2042	6.4-.25	-4	MN	1/2-20	-5	50.0-1.97	29.2-1.15
124-2043	9.5-.37	-6	MN	5/8-18	-6	56.0-2.20	31.0-1.22
154-0087	9.5-.37	-6	MN	11/16-18	-7	56.0-2.20	31.0-1.22
124-2044	12.7-.50	-8	MN	3/4-18	-8	65.0-2.56	39.4-1.55
124-2045	15.9-.63	-10	MN	7/8-18	-10	70.0-2.76	45.0-1.77

SAE 45° Inverted Flare Male Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
147-1710	6.4-.25	-4	MN	7/16-24	-4	61.0-2.40	40.4-1.59	20.8-.82
154-0088	9.5-.37	-6	MN	5/8-18	-6	74.0-2.91	49.0-1.93	23.9-.94
147-1711	12.7-.50	-8	MN	3/4-18	-8	85.0-3.35	59.6-2.35	30.0-1.18

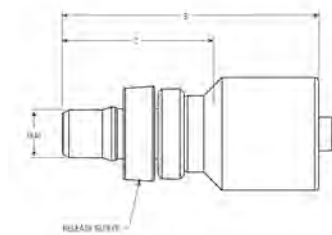
SAE 45° Inverted Flare Male Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
124-2046	6.4-.25	-4	MN	7/16-24	-4	49.0-1.93	25.0-.98	35.0-1.38
124-2047	6.4-.25	-4	MN	1/2-20	-5	49.0-1.93	25.0-.98	34.0-1.34
124-2048	9.5-.37	-6	MN	7/16-24	-4	59.0-2.32	30.0-1.18	33.0-1.30
154-0089	9.5-.37	-6	MN	1/2-20	-5	55.0-2.17	29.5-1.16	33.5-1.32
124-2049	9.5-.37	-6	MN	5/8-18	-6	62.0-2.44	33.0-1.30	38.0-1.50
154-0090	9.5-.37	-6	MN	11/16-18	-7	58.0-2.28	32.5-1.28	43.7-1.72
147-1712	12.7-.50	-8	MN	3/4-18	-8	64.0-2.52	38.8-1.53	46.0-1.81
147-1713	15.9-.63	-10	MN	7/8-18	-10	72.0-2.83	47.0-1.85	54.4-2.14

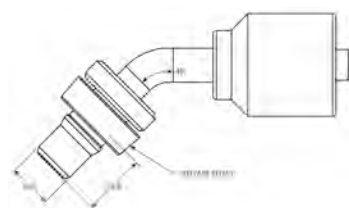
Cat Low and Medium Pressure Permanent Couplings

Snap To Connect - Straight



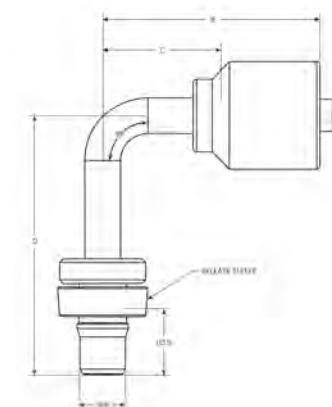
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
263-2629	6.4-.25	-4	MN	6.0-.24	51.0-2.01	30.3-1.19
263-2631	9.5-.37	-6	MN	6.0-.24	57.0-2.24	31.4-1.24
263-2632	12.7-.50	-8	MN	8.0-.31	46.0-1.81	39.0-1.54
263-2633	15.9-.63	-10	MN	10.0-.39	71.0-2.80	45.5-1.79
263-2634	19.1-.75	-12	MN	12.0-.47	80.0-3.15	48.7-1.92
277-2051	25.4-1.00	-16	MN	12.0-.47	86.0-3.39	48.1-1.89
263-2635	25.4-1.00	-16	MN	16.0-.63	92.0-3.62	54.0-2.13

Snap To Connect - 45° Elbow



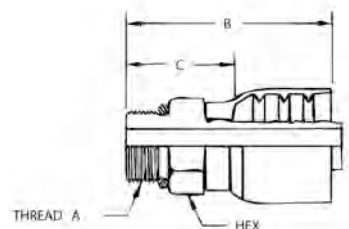
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
263-2636	6.4-.25	-4	MN	6.0-.24	63.0-2.48	41.7-1.64	22.0-.87
263-2638	9.5-.37	-6	MN	6.0-.24	73.0-2.87	47.2-1.86	22.0-.87
263-2639	12.7-.50	-8	MN	8.0-.31	85.0-3.35	59.4-2.34	30.0-1.18

Snap To Connect - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
263-2643	6.4-.25	-4	MN	4.0-.16	46.0-1.81	25.0-.98	39.6-1.56
263-2650	6.4-.25	-4	MN	6.0-.24	46.0-1.81	25.2-.99	55.0-2.17
263-2657	6.4-.25	-4	MN	4.0-.16	46.0-1.81	25.0-.98	70.6-2.78
263-2645	9.5-.37	-6	MN	6.0-.24	58.0-2.28	32.5-1.28	40.0-1.57
263-2652	9.5-.37	-6	MN	6.0-.24	57.0-2.24	33.0-1.30	54.9-2.16
263-2663	25.4-1.00	-16	MN	16.0-.63	109.0-4.29	70.9-2.79	148.0-5.83

STOR Male O-Ring - Straight



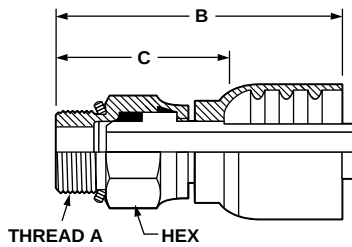
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
124-1928	6.4-.25	-4	MN	7/16-20	-4	42.0-1.65	20.6-.81	3J-7354
147-1719	6.4-.25	-4	MN	9/16-18	-6	43.0-1.69	22.4-.88	3J-1907
541-3224	6.4-.25	-4	MN	3/4-16	-8	50.6-1.99	27.9-1.10	3K-0360
124-1929	9.5-.37	-6	MN	9/16-18	-6	49.0-1.93	23.5-.93	3J-1907
124-1930	9.5-.37	-6	MN	3/4-16	-8	53.0-2.09	27.9-1.10	3K-0360
124-1931	12.7-.50	-8	MN	3/4-16	-8	55.0-2.17	29.7-1.17	3K-0360
124-1932	12.7-.50	-8	MN	7/8-14	-10	55.0-2.17	29.7-1.17	2M-9780
147-1698	12.7-.50	-8	MN	1 1/16-12	-12	59.0-2.32	33.8-1.33	3D-2824

Cat Low and Medium Pressure Permanent Couplings

STOR Male O-Ring - Straight (Cont'd.)

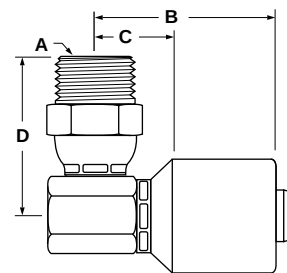
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
147-1699	15.9-.63	-10	MN	7/8-14	-10	57.0-2.24	32.0-1.26	2M-9780
147-1720	15.9-.63	-10	MN	1 1/16-12	-12	62.0-2.44	37.0-1.46	3D-2824
124-1933	19.1-.75	-12	MN	1 1/16-12	-12	64.0-2.52	32.8-1.29	3D-2824
147-1700	25.4-1.00	-16	MN	1 5/16-12	-16	75.0-2.95	36.8-1.45	7M-8485

STOR Male Swivel O-Ring - Straight



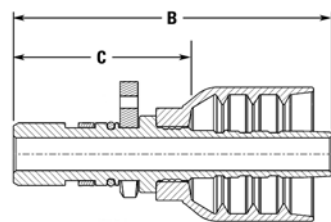
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
124-1934	9.5-.37	-6	MN	9/16-18	-6	67.0-2.64	42.0-1.65	3J-1907
147-1701	9.5-.37	-6	MN	3/4-16	-8	64.0-2.52	38.3-1.51	3K-0360
147-1702	12.7-.50	-8	MN	3/4-16	-8	65.0-2.56	40.0-1.57	3K-0360
147-1703	12.7-.50	-8	MN	7/8-14	-10	70.0-2.76	60.0-2.36	2M-9780
154-0067	19.1-.75	-12	MN	1 1/16-12	-12	82.0-3.23	50.5-1.99	3D-2824

STOR Male Swivel O-Ring - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
124-1935	9.5-.37	-6	MN	9/16-18	-6	47.0-1.85	25.0-.98	45.0-1.77	3J-1907
154-0068	12.7-.50	-8	MN	3/4-16	-8	50.0-1.97	24.1-.95	42.7-1.68	3K-0360
279-5671	12.7-.50	-8	MN	7/8-14	-10	51.0-2.01	25.9-1.02	47.8-1.88	2M-9780
215-1952	25.4-1.00	-16	MN	1 5/16-12	-16	73.0-2.87	33.8-1.33	63.5-2.50	7M-8485

WEO Plug-In Coupling



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL	BEND ANGLE	DROP (mm-in)
505-4255	9.52 - 0.37	-6	MN	-6.0 - 0.24	66 - 2.60	37 - 1.50	519-9199	—	—
506-8169	9.52 - 0.37	-6	MN	-8.0 - 0.31	66 - 2.60	37 - 1.50	5D-0834	—	—
537-8508	12.7 - 0.50	-8	MN	-6.0 - 0.24	68 - 2.68	39 - 1.54	519-9199	—	—
505-4256	12.7 - 0.50	-8	MN	-8.0 - 0.31	68 - 2.68	39 - 1.54	5D-0834	—	—
536-8817	12.7 - 0.50	-8	MN	-8.0 - 0.31	73 - 2.87	43 - 1.69	5D-0834	90	58 - 2.28
523-2366	19.1 - 0.75	-12	MN	-12.0 - 0.47	86 - 3.39	51 - 2.00	8U-5951	—	—

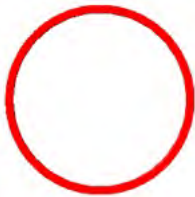
Cat Low and Medium Pressure Permanent Couplings

WEO Plug-In Clip



Part Number	Dash Size	Clip Thickness	Clip I.D.	Clip Height
502-2489	-6	0.15 in, 3.7 mm	0.43 in, 11.0 mm	0.94 in, 24.0 mm
502-2490	-8	0.14 in, 3.6 mm	0.55 in, 14.0 mm	1.10 in, 28.0 mm
502-2491	-12	0.18 in, 4.0 mm	0.83 in, 21.0 mm	1.38 in, 35.0 mm

WEO Plug-In Release Ring



Part Number	Dash Size	Seal Thickness	Seal I.D.
502-2492	-6	0.13 in, 3.2 mm	0.43 in, 11.0 mm
502-2493	-8	0.13 in, 3.2 mm	0.55 in, 14.0 mm
502-2494	-12	0.14 in, 3.6 mm	0.83 in, 21.0 mm

Cat High Pressure Hose & Coupling Products

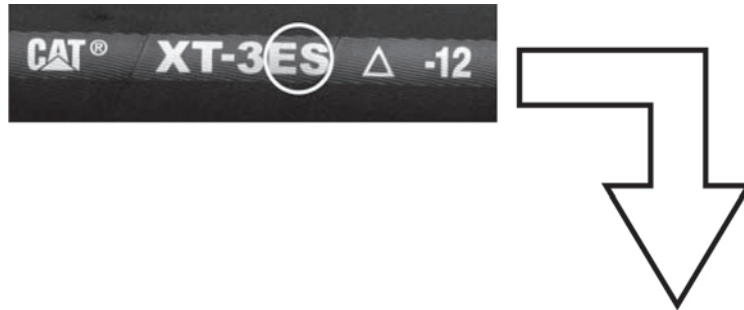
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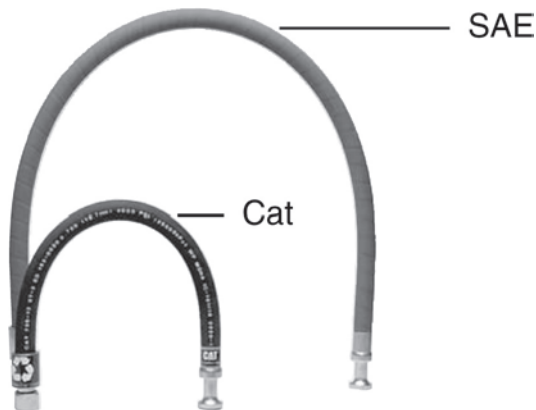
Cat XT ES Hose Features and Benefits

The Cat XT hose line-up is designed and manufactured for high pressure hydraulic applications. These range from 2500 to 6000 psi (17.5 to 42.0 MPa). ES stands for Enhanced Spiral construction and TG stands for ToughGuard hose cover; both are Caterpillar propriety designs. Not only is the XT ES hose line-up impulse tested to twice the industry requirement at one million impulse cycles, the XT ES TG hose also features a unique hose cover that surpasses two million abrasion cycles without failure.



Enhanced Spiral = Extra Toughness!

Plus, Cat XT ES hoses are designed to work at half the SAE bend radius. This means they bend better in tight places and substantially reduce hose length requirements without sacrificing force-to-bend ratio.



Cat XT ES Hose Features and Benefits

XT-ES Reusable Couplings Features and Benefits

XT-5ES Hose Couplings have the same advantages as XT-3ES Hose Couplings as well as these added features for 5000 psi (34 MPa) application.

EXCLUSIVE REUSABLE DESIGN

Reuse XT Couplings over and over again for the lowest operating cost. In addition, you know you have the right coupling at the right time.

(A) Slim, Collet-Type Style

- No bolts or protrusions for easy installation, even in cramped places.

(B) Multi-land Fingers

- Grip the wires on the skived hose solidly to prevent coupling blow-off and provide better coupling retention.

(C) Tapered Fingers & Stem

- Compressive force is slightly relieved so the hose can flex without failure at the rear of the coupling. This increases hose assembly life.

(D) Multi-land Stem

- Keeps fluid sealed in without inner liner damage and provides a positive coupling to hose seal.

(E) Hardened Steel Sleeve

- No sleeve bend or distortion so the sleeve retains its original size and shape and can be reused.
- Hose stays firmly compressed in coupling, further aiding coupling retention.

(F) Precision Machined O-Ring Head

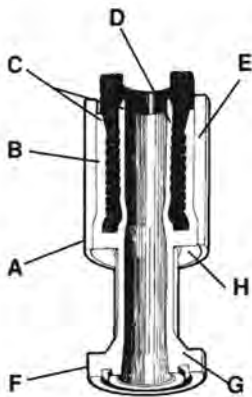
- To help eliminate hazardous fluid leaks and provide positive coupling head seal.

(G) Extruded Stem

- Orients metal grain for more uniform strength and fatigue resistance.
- Braze joint between head and stem is eliminated resulting in leak free performance and excellent coupling assembly life.

(H) Extruded Collet

- More uniform strength for excellent coupling



warning!

TO AVOID SERIOUS PERSONAL INJURY TO THE OPERATOR AND EXTENSIVE DAMAGE TO THE EQUIPMENT, THE FOLLOWING PROCEDURES MUST BE OBSERVED. FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY.

① ALWAYS match hose, stem assemblies and sleeves according to markings (Δ / + / ∞)

② NEVER interchange XT-3 ES hose, stem assemblies and sleeves marked with a Triangle (Δ) with XT-5 ES hose, stem assemblies and sleeves marked with a plus (+), XT-6 hose, stem assemblies and sleeves marked with an infinity sign (∞).



XT-ES Permanent Couplings Features and Benefits

Cat High Pressure couplings are offered in 9 different series, each coupling series is uniquely matched & tested with a compatible hose type and/or size.

XT-3ES - Coupling Series: **TR** (Reusable - Skive Type), **S4G** (Permanent - Skive Type), **XN, XN4** (Permanent - Non Skive Type)

XT-5ES - Coupling Series: **PL** (Reusable - Skive Type), **XN, XN6** (Permanent - Non Skive Type), **MCSH, XS6** (Permanent Skive Type)

XT-6ES - Coupling Series: **IN** (Reusable), **XN, XN6**, (Permanent - Non Skive Type), **XS6** (Permanent Skive Type)

The proprietary stem and shell designs are engineered to work together to ensure optimum performance throughout the Lifecycle of the hose assembly. All skive coupling series require a specified length of the hose cover to be removed. Reference chart [NEEG2956](#) for specified Skive Lengths.



Our one-piece couplings are designed for superior coupling retention with Cat hose to withstand pressure requirements and allow flexing without fatigue. This results in the most reliable connection and eliminates potential for leaks.

"XN series couplings are designed to work across the whole range of Cat® XT™ hose types, resulting in significant inventory consolidation and reduced inventory costs"

Cat couplings are forged and machined from high tensile strength steel. Then they are heat treated and plated to ensure maximum durability and corrosion resistance.

"Cat couplings are not just for Cat machines, our couplings offer durability and unrivalled performance for ALL MAKES. ALL MODELS."



Salt spray testing provides a controlled accelerated corrosive environment to evaluate the relative corrosion resistance of a coating, substrate, or part itself.

Components are placed inside a chamber and exposed continually for a specified period, then evaluated for resistance to corrosion.

This test ensures that our range of couplings are class leading when it comes to environmental factors that will have a detrimental effect on product and making sure our couplings will stand up to most severe conditions.

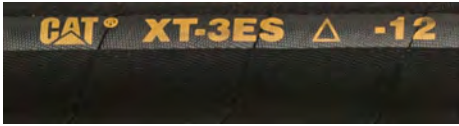
"Cat coupling salt-spray and metallurgical testing - exceeds many key industry standards to guarantee unparalleled hydraulics safety and dependability"



Cat High Pressure Hose XT-3ES

XT-3ES Hose Features and Benefits

XT-3ES - Hose Layline



XT-3ESTG ToughGuard - Hose Layline



- 1/2 SAE 100R12 Minimum Bend Radius.
- Exceeds the SAE 100R12 Industry Standard
- Superior Abrasion Resistance Cover.
- Impulse Tested to 1 Million Cycles (2 X Industry Standards).
- Working pressure between 2500 to 4000 psi
- Black hose with a Yellow mylar layline for easy identification.
- Hose is marked with a Triangle/Delta (Δ) symbol.
- Target Application(s): Small/Medium Size Wheel Loaders, Small Track-Type Tractors and Backhoe Loaders

XT-3ES Hose



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8466	9.5 - .37	20.5 - .81	-6	TR / S4G / XN	112.0 - 16244	28.0 - 4061	64 - 2.52
456-8467	12.7 - .50	23.8 - .94	-8	TR / S4G / XN	112.0 - 16244	28.0 - 4061	89 - 3.50
456-8468	15.9 - .63	27.4 - 1.08	-10	TR / XN	112.0 - 16244	28.0 - 4061	102 - 4.02
456-8469	19.1 - .75	30.9 - 1.22	-12	TR / XN	112.0 - 16244	28.0 - 4061	121 - 4.76
456-8470	25.4 - 1.00	38.2 - 1.50	-16	TR / S4G	112.0 - 16244	28.0 - 4061	153 - 6.02
456-8471	31.8 - 1.25	47.0 - 1.85	-20	S4G / XN4	96.4 - 13982	24.1 - 3495	210 - 8.27
456-8472	38.1 - 1.50	53.5 - 2.11	-24	S4G / XN4	70.0 - 10153	17.5 - 2538	254 - 10.00
456-8473	50.8 - 2.00	66.7 - 2.63	-32	S4G	70.0 - 10153	17.5 - 2538	318 - 12.52

Exceeds the requirement of **SAE 100R12**

Construction: Fabric reinforced, synthetic rubber tube; four plies of spirally-wrapped high tensile steel wire reinforcement, separated by layers of synthetic rubber. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: Extremely high-pressure service with petroleum base hydraulic fluids. MSHA approved cover.

Temperature Range: -40°F to + 250°F (-40°C to +121°C)

Couplings: Collet-type reusable, skive type, TR Series coupling. See XT-3ES Hose Reusable Couplings section. Crimp-on permanent, skive type, S4G, XN or XN4 Series coupling. See XT-3ES Hose Permanent Couplings section. For related assembly equipment and tooling, see Tooling section.

Note: Depending on coupling series, the hose cover may or may not need to be removed before attaching couplings. Please review the coupling series being used prior to hose assembly. Coupling series XN and XN4 are no-skive couplings and do not require the hose cover to be removed. All other coupling series require a specified length of the hose cover to be removed. Reference chart [NEEG2956](#) for specified Skive Lengths.

XT-3ESTG ToughGuard Hose



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8474	9.5 - .37	20.5 - .81	-6	TR / S4G / XN	112.0 - 16244	28.0 - 4061	64 - 2.52
456-8475	12.7 - .50	23.8 - .94	-8	TR / S4G / XN	112.0 - 16244	28.0 - 4061	89 - 3.50
456-8476	15.9 - .63	27.4 - 1.08	-10	TR / XN	112.0 - 16244	28.0 - 4061	102 - 4.02
456-8477	19.1 - .75	30.9 - 1.22	-12	TR / XN	112.0 - 16244	28.0 - 4061	121 - 4.76
456-8478	25.4 - 1.00	38.2 - 1.50	-16	TR / S4G	112.0 - 16244	28.0 - 4061	153 - 6.02
456-8479	31.8 - 1.25	47.0 - 1.85	-20	S4G / XN4	96.4 - 13982	24.1 - 3495	210 - 8.27
456-8480	38.1 - 1.50	53.5 - 2.11	-24	S4G / XN4	70.0 - 10153	17.5 - 2538	254 - 10.00
456-8481	50.8 - 2.00	66.7 - 2.63	-32	S4G	70.0 - 10153	17.5 - 2538	318 - 12.52

Exceeds the requirement of **SAE 100R12**

Construction: Fabric reinforced, synthetic rubber tube; four plies of spirally-wrapped high tensile steel wire reinforcement, separated by layers of synthetic rubber. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: Extremely high-pressure service with petroleum base hydraulic fluids. MSHA approved cover.

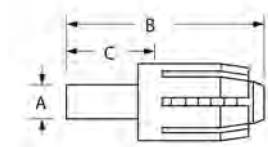
Temperature Range: -40°F to + 250°F (-40°C to +121°C)

Couplings: Collet-type reusable, skive type, TR Series coupling. See XT-3ES Hose Reusable Couplings section. Crimp-on permanent, skive type, S4G, XN or XN4 Series coupling. See XT-3ES Hose Permanent Couplings section. For related assembly equipment and tooling, see Tooling section.

Note: Depending on coupling series, the hose cover may or may not need to be removed before attaching couplings. Please review the coupling series being used prior to hose assembly. Coupling series XN and XN4 are no-skive couplings and do not require the hose cover to be removed. All other coupling series require a specified length of the hose cover to be removed. Reference chart [NEEG2956](#) for specified Skive Lengths.

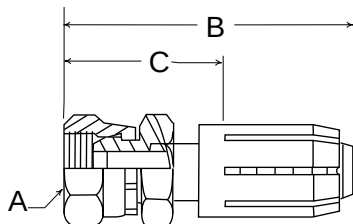
Cat High Pressure Hose XT-3ES Couplings

Braze On - Straight



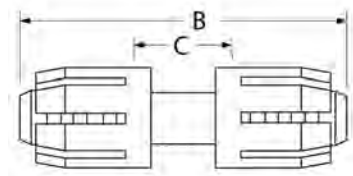
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
5P-1453	25.4-1.00	-16	TR	135.0-5.31	84.6-3.33
1P-8457	31.8-1.25	-20	TR	134.0-5.28	73.8-2.91
1P-8458	38.1-1.50	-24	TR	144.0-5.67	77.3-3.04

BSPP Spherical Seat Female Swivel - Straight



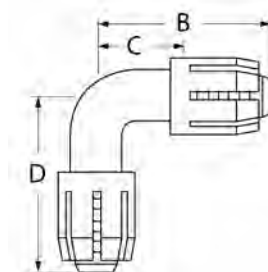
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
9X-7574	25.4-1.00	-16	TR	1-11	-16	105.15-4.14	55.22-2.17	6V-0409

Double Collet - Straight



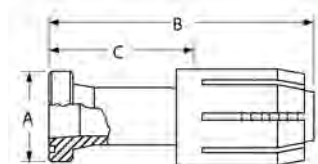
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
2P-2523	25.4-1.00	-16	TR	145.0-5.71	45.4-1.79
2P-1315	31.8-1.25	-20	TR	171.0-6.73	51.3-2.02
3P-0644	38.1-1.50	-24	TR	184.0-7.24	51.1-2.01
3P-0645	50.8-2.00	-32	TR	195.0-7.68	51.0-2.01

Double Collet - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
5P-4699	25.4-1.00	-16	TR	127.0-5.00	77.1-3.04	127.0-5.00
5P-4700	31.8-1.25	-20	TR	149.0-5.87	89.3-3.52	149.0-5.87
6V-2897	38.1-1.50	-24	TR	165.0-6.50	98.8-3.89	165.0-6.50
6V-0298	50.8-2.00	-32	TR	195.0-7.68	122.7-4.83	194.5-7.66

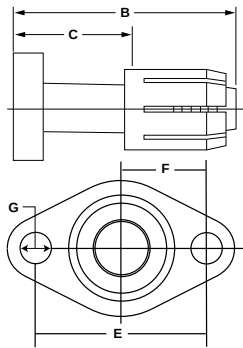
Flange - Cat - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
3E-6868	31.8-1.25	-20	TR	54.0-2.13	-20	147.0-5.79	87.0-3.43	1P-3704

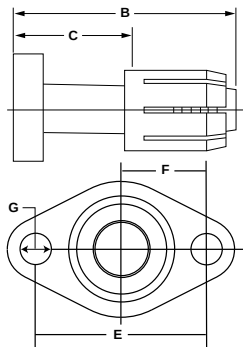
Reusable Couplings - XT-3ES

Flange - Code 61 Captive (2 Bolt) - Straight



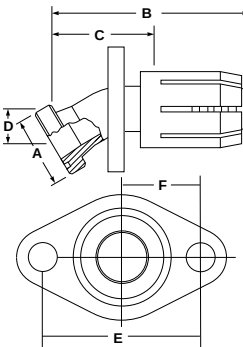
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	E FLANGE HOLE SPACING	F FLANGE HOLE SPACING	O-RING SEAL
7S-0614	25.4-1.00	-16	TR	44.5-1.75	-16	105.0-4.13	55.1-2.17	63.5-2.50	31.8-1.25	4J-0520
7S-0631	25.4-1.00	-16	TR	44.5-1.75	-16	105.0-4.13	55.1-2.17	64.3-2.53	32.1-1.26	4J-0520
7S-0592	25.4-1.00	-16	TR	44.5-1.75	-16	105.0-4.13	55.1-2.17	73.0-2.87	36.5-1.44	4J-0520
6K-8325	25.4-1.00	-16	TR	44.5-1.75	-16	136.0-5.35	85.6-3.37	64.3-2.53	32.1-1.26	1P-3703
7S-1074	31.8-1.25	-20	TR	50.8-2.00	-20	133.0-5.24	72.8-2.87	82.5-3.25	41.3-1.63	4J-0522

Flange - Code 61 Captive Fixed (2 Bolt) - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	E FLANGE HOLE SPACING	F FLANGE HOLE SPACING	O-RING SEAL
7S-1217	25.4-1.00	-16	TR	44.5-1.75	-16	125.0-4.92	75.1-2.96	82.6-3.25	41.3-1.63	1P-3703

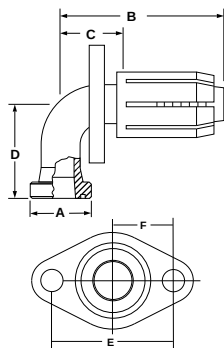
Flange - Code 61 Captive (2 Bolt) - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	E FLANGE HOLE SPACING	F FLANGE HOLE SPACING	O-RING SEAL
5P-0922	25.4-1.00	-16	TR	44.5-1.75	-16	123.0-4.84	73.1-2.88	11.0-.43	63.5-2.50	31.8-1.25	1P-3703
7S-1809	25.4-1.00	-16	TR	44.5-1.75	-16	123.0-4.84	73.1-2.88	11.0-.43	73.0-2.87	36.5-1.44	4J-0520

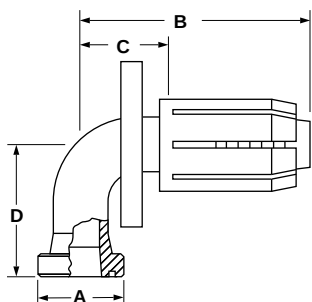
Reusable Couplings - XT-3ES

Flange - Code 61 Captive (2 Bolt) - 90° Elbow



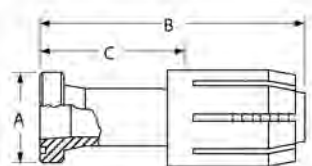
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	E FLANGE HOLE SPACING	F FLANGE HOLE SPACING	O-RING SEAL
6V-4683	19.1-.75	-12	TR	38.1-1.50	-12	100.0-3.94	54.9-2.16	54.0-2.13	64.3-2.53	32.1-1.26	4J-5267
5S-2108	25.4-1.00	-16	TR	44.5-1.75	-16	123.0-4.84	72.6-2.86	57.5-2.26	64.3-2.53	32.1-1.26	4J-0520

Flange - Code 61 Captive (4 Bolt) - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	E FLANGE HOLE SPACING	F FLANGE HOLE SPACING	O-RING SEAL
2P-9921	31.8-1.25	-20	TR	50.8-2.00	-20	152.0-5.98	92.3-3.63	91.0-3.58	58.7-2.31	47.5-1.87	1P-3704

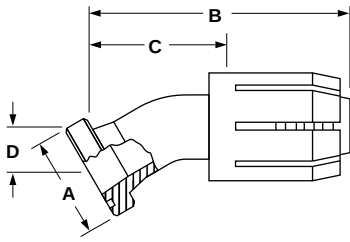
Flange - Code 61 - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
3S-8496	25.4-1.00	-16	TR	44.5-1.75	-16	105.0-4.13	55.1-2.17	4J-0520
2P-1801	25.4-1.00	-16	TR	44.5-1.75	-16	115.0-4.53	65.1-2.56	4J-0520
7S-0570	25.4-1.00	-16	TR	50.8-2.00	-20	105.0-4.13	55.1-2.17	4J-0522
6V-1404	25.4-1.00	-16	TR	50.8-2.00	-20	135.0-5.31	85.1-3.35	4J-0522
2P-1313	25.4-1.00	-16	TR	60.3-2.37	-24	105.0-4.13	55.1-2.17	4J-0524
3S-8567	31.8-1.25	-20	TR	50.8-2.00	-20	123.0-4.84	62.8-2.47	4J-0522
5S-3808	31.8-1.25	-20	TR	50.8-2.00	-20	133.0-5.24	73.0-2.87	4J-0522
1P-1219	31.8-1.25	-20	TR	50.8-2.00	-20	139.0-5.47	79.0-3.11	4J-0522
5S-3779	31.8-1.25	-20	TR	60.3-2.37	-24	123.0-4.84	62.8-2.47	4J-0524
1P-7931	31.8-1.25	-20	TR	60.3-2.37	-24	225.0-8.86	165.3-6.51	4J-0524
1P-7929	31.8-1.25	-20	TR	71.4-2.81	-32	135.0-5.31	75.3-2.96	4J-0527
1P-1238	38.1-1.50	-24	TR	60.3-2.37	-24	149.0-5.87	83.2-3.28	4J-0524
7S-9370	38.1-1.50	-24	TR	71.4-2.81	-32	134.0-5.28	67.3-2.65	4J-0527
4S-7492	50.8-2.00	-32	TR	71.4-2.81	-32	140.0-5.51	67.7-2.67	4J-0527
147-2027	50.8-2.00	-32	TR	71.4-2.81	-32	188.0-7.40	115.7-4.56	4J-0527

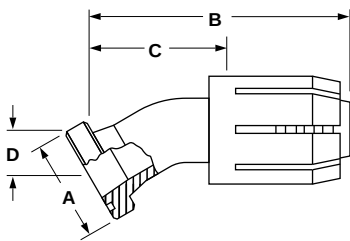
Reusable Couplings - XT-3ES

Flange - Code 61 - 22.5° Elbow



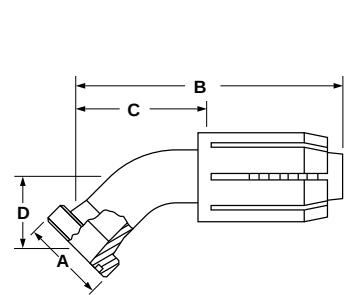
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
3S-8497	25.4-1.00	-16	TR	44.5-1.75	-16	123.0-4.84	73.1-2.88	11.0-.43	4J-0520
7S-0571	25.4-1.00	-16	TR	50.8-2.00	-20	123.0-4.84	73.1-2.88	11.0-.43	4J-0522
5P-1706	25.4-1.00	-16	TR	60.3-2.37	-24	157.0-6.18	106.6-4.20	11.0-.43	4J-0524
3S-8568	31.8-1.25	-20	TR	50.8-2.00	-20	130.0-5.12	70.3-2.77	12.5-.49	4J-0522
5S-3784	31.8-1.25	-20	TR	60.3-2.37	-24	131.0-5.16	70.8-2.79	12.5-.49	4J-0524
3S-9327	38.1-1.50	-24	TR	60.3-2.37	-24	164.0-6.46	97.3-3.83	15.5-.61	4J-0524
9S-0284	38.1-1.50	-24	TR	71.4-2.81	-32	164.0-6.46	97.3-3.83	15.5-.61	4J-0527
4S-7493	50.8-2.00	-32	TR	71.4-2.81	-32	184.0-7.24	111.7-4.40	22.0-.87	4J-0527

Flange - Code 61 - 30° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
3S-8498	25.4-1.00	-16	TR	44.5-1.75	-16	110.0-4.33	60.1-2.37	16.0-.63	4J-0520
7S-0572	25.4-1.00	-16	TR	50.8-2.00	-20	110.0-4.33	60.1-2.37	16.0-.63	4J-0522
3S-8569	31.8-1.25	-20	TR	50.8-2.00	-20	128.5-5.06	69.0-2.72	18.0-.71	4J-0522
8S-1396	31.8-1.25	-20	TR	60.3-2.37	-24	129.0-5.08	68.8-2.71	18.5-.73	4J-0524
1P-4948	31.8-1.25	-20	TR	60.3-2.37	-24	176.0-6.93	116.3-4.58	43.5-1.71	4J-0524
3S-9328	38.1-1.50	-24	TR	60.3-2.37	-24	161.0-6.34	95.0-3.74	22.5-.89	4J-0524
1P-1708	38.1-1.50	-24	TR	71.4-2.81	-32	161.0-6.34	94.8-3.73	22.5-.89	4J-0527
4S-7494	50.8-2.00	-32	TR	71.4-2.81	-32	182.0-7.17	110.2-4.34	32.0-1.26	4J-0527

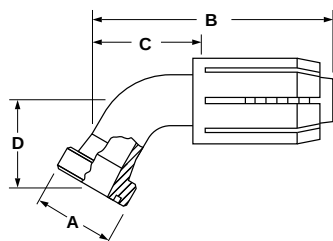
Flange - Code 61 - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
3S-8499	25.4-1.00	-16	TR	44.5-1.75	-16	117.0-4.61	67.1-2.64	27.0-1.06	4J-0520
7S-0573	25.4-1.00	-16	TR	50.8-2.00	-20	117.0-4.61	67.1-2.64	27.0-1.06	4J-0522
3S-8570	31.8-1.25	-20	TR	50.8-2.00	-20	138.0-5.43	77.8-3.06	30.5-1.20	4J-0522
5S-3778	31.8-1.25	-20	TR	60.3-2.37	-24	135.0-5.31	75.3-2.96	30.0-1.18	4J-0524
3S-9329	38.1-1.50	-24	TR	60.3-2.37	-24	161.0-6.34	94.8-3.73	36.5-1.44	4J-0524
5P-3229	38.1-1.50	-24	TR	71.4-2.81	-32	172.0-6.77	105.8-4.17	36.5-1.44	4J-0527
4S-7495	50.8-2.00	-32	TR	71.4-2.81	-32	193.0-7.60	121.2-4.77	52.0-2.05	4J-0527

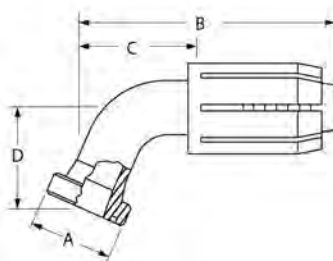
Reusable Couplings - XT-3ES

Flange - Code 61 - 60° Elbow



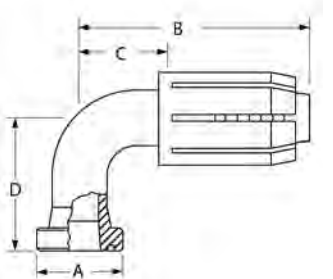
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
3S-8501	25.4-1.00	-16	TR	44.5-1.75	-16	120.0-4.72	69.6-2.74	38.5-1.52	4J-0520
7S-0574	25.4-1.00	-16	TR	50.8-2.00	-20	120.0-4.72	69.6-2.74	38.5-1.52	4J-0522
3S-8571	31.8-1.25	-20	TR	50.8-2.00	-20	139.0-5.47	79.3-3.12	43.0-1.69	4J-0522
8S-9372	31.8-1.25	-20	TR	50.8-2.00	-20	152.0-5.98	92.3-3.63	65.0-2.56	4J-0522
7S-4078	31.8-1.25	-20	TR	60.3-2.37	-24	139.0-5.47	79.0-3.11	43.0-1.69	4J-0524
3S-9330	38.1-1.50	-24	TR	60.3-2.37	-24	162.0-6.38	95.8-3.77	51.5-2.03	4J-0524
7S-8440	38.1-1.50	-24	TR	71.4-2.81	-32	162.0-6.38	95.8-3.77	51.5-2.03	4J-0527
4S-7496	50.8-2.00	-32	TR	71.4-2.81	-32	194.0-7.64	122.0-4.80	73.5-2.89	4J-0527

Flange - Code 61 - 67.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
3S-8502	25.4-1.00	-16	TR	44.5-1.75	-16	120.0-4.72	70.1-2.76	44.5-1.75	4J-0520
5S-3454	25.4-1.00	-16	TR	50.8-2.00	-20	120.0-4.72	70.1-2.76	44.5-1.75	4J-0522
3S-8572	31.8-1.25	-20	TR	50.8-2.00	-20	138.0-5.43	78.3-3.08	49.5-1.95	4J-0522
8S-8957	31.8-1.25	-20	TR	60.3-2.37	-24	138.0-5.43	78.3-3.08	49.5-1.95	4J-0524
3S-9331	38.1-1.50	-24	TR	60.3-2.37	-24	161.0-6.34	94.8-3.73	58.5-2.30	4J-0524
8S-3649	38.1-1.50	-24	TR	71.4-2.81	-32	161.0-6.34	94.8-3.73	58.5-2.30	4J-0527
5S-3788	50.8-2.00	-32	TR	71.4-2.81	-32	191.0-7.52	119.2-4.69	75.0-2.95	4J-0527
4S-7497	50.8-2.00	-32	TR	71.4-2.81	-32	193.0-7.60	121.2-4.77	85.0-3.35	4J-0527

Flange - Code 61 - 90° Elbow



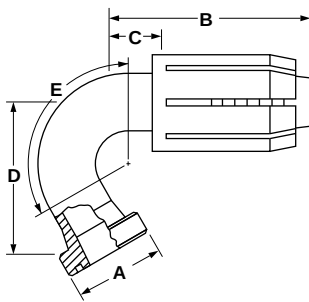
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5S-2105	25.4-1.00	-16	TR	44.5-1.75	-16	120.0-4.72	69.6-2.74	54.0-2.13	4J-0520
7S-0577	25.4-1.00	-16	TR	44.5-1.75	-16	120.0-4.72	69.6-2.74	57.0-2.24	4J-0520
3S-8503	25.4-1.00	-16	TR	44.5-1.75	-16	120.0-4.72	69.6-2.74	60.5-2.38	4J-0520
6D-9961	25.4-1.00	-16	TR	44.5-1.75	-16	120.0-4.72	69.6-2.74	117.5-4.63	4J-0520
7S-0575	25.4-1.00	-16	TR	50.8-2.00	-20	120.0-4.72	69.6-2.74	60.5-2.38	4J-0522
2P-4813	25.4-1.00	-16	TR	50.8-2.00	-20	120.0-4.72	69.6-2.74	117.5-4.63	4J-0522
7S-3122	25.4-1.00	-16	TR	60.3-2.37	-24	120.0-4.72	69.6-2.74	60.5-2.38	4J-0524
5P-1031	25.4-1.00	-16	TR	60.3-2.37	-24	115.0-4.53	64.6-2.54	108.0-4.25	4J-0524
3S-8573	31.8-1.25	-20	TR	50.8-2.00	-20	132.0-5.20	71.8-2.83	67.0-2.64	4J-0522
5S-3811	31.8-1.25	-20	TR	50.8-2.00	-20	132.0-5.20	72.3-2.85	91.0-3.58	4J-0522
5S-3826	31.8-1.25	-20	TR	50.8-2.00	-20	132.0-5.20	72.3-2.85	102.0-4.02	4J-0522
5S-3832	31.8-1.25	-20	TR	50.8-2.00	-20	132.0-5.20	72.3-2.85	111.5-4.39	4J-0522
5S-3820	31.8-1.25	-20	TR	50.8-2.00	-20	132.0-5.20	72.3-2.85	117.5-4.63	4J-0522
8S-8221	31.8-1.25	-20	TR	50.8-2.00	-20	132.0-5.20	72.3-2.85	130.0-5.12	4J-0522
5S-3842	31.8-1.25	-20	TR	50.8-2.00	-20	132.0-5.20	72.3-2.85	168.0-6.61	4J-0522
5S-3777	31.8-1.25	-20	TR	60.3-2.37	-24	132.0-5.20	72.3-2.85	68.5-2.70	4J-0524
2P-9923	31.8-1.25	-20	TR	60.3-2.37	-24	130.0-5.12	70.6-2.78	79.0-3.11	4J-0524
7S-4105	31.8-1.25	-20	TR	60.3-2.37	-24	132.0-5.20	72.3-2.85	117.5-4.63	4J-0524
5P-3230	31.8-1.25	-20	TR	60.3-2.37	-24	132.0-5.20	72.3-2.85	130.0-5.12	4J-0524
194-4769	31.8-1.25	-20	TR	71.4-2.81	-32	130.0-5.12	70.0-2.76	79.0-3.11	4J-0527
3S-9332	38.1-1.50	-24	TR	60.3-2.37	-24	152.0-5.98	85.8-3.38	79.5-3.13	4J-0524

Reusable Couplings - XT-3ES

Flange - Code 61 - 90° Elbow (Cont'd.)

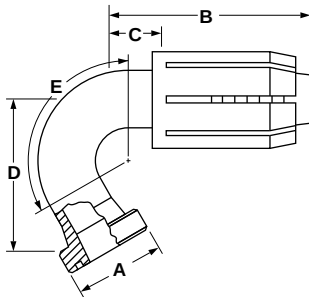
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5S-3836	38.1-1.50	-24	TR	60.3-2.37	-24	153.0-6.02	86.3-3.40	147.5-5.81	4J-0524
8S-9345	38.1-1.50	-24	TR	60.3-2.37	-24	153.0-6.02	86.3-3.40	171.5-6.75	4J-0524
7S-8439	38.1-1.50	-24	TR	71.4-2.81	-32	152.0-5.98	85.8-3.38	79.5-3.13	4J-0527
8S-8946	38.1-1.50	-24	TR	71.4-2.81	-32	153.0-6.02	86.3-3.40	114.5-4.51	4J-0527
8S-9344	38.1-1.50	-24	TR	71.4-2.81	-32	153.0-6.02	86.3-3.40	171.5-6.75	4J-0527
4S-7498	50.8-2.00	-32	TR	71.4-2.81	-32	173.0-6.81	101.2-3.98	117.5-4.63	4J-0527
3P-0421	50.8-2.00	-32	TR	71.4-2.81	-32	177.0-6.97	104.7-4.12	165.0-6.50	4J-0527
3P-0422	50.8-2.00	-32	TR	71.4-2.81	-32	177.0-6.97	104.7-4.12	203.0-7.99	4J-0527

Flange - Code 61 - 110 Elbow



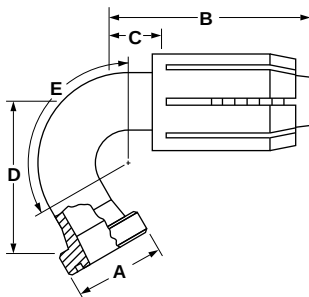
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
6V-4687	19.1-.75	-12	TR	38.1-1.50	-12	94.0-3.70	48.9-1.93	63.5-2.50	4J-5267
7S-1720	25.4-1.00	-16	TR	44.5-1.75	-16	115.0-4.53	64.6-2.54	73.0-2.87	4J-0520
5P-5121	25.4-1.00	-16	TR	50.8-2.00	-20	115.0-4.53	64.6-2.54	73.0-2.87	4J-0522
5P-9593	25.4-1.00	-16	TR	50.8-2.00	-20	93.0-3.66	42.6-1.68	133.4-5.25	4J-0522
7S-1707	31.8-1.25	-20	TR	50.8-2.00	-20	127.0-5.00	67.3-2.65	79.5-3.13	4J-0522
2P-2675	31.8-1.25	-20	TR	60.3-2.37	-24	127.0-5.00	67.3-2.65	81.0-3.19	4J-0524
2P-8355	38.1-1.50	-24	TR	60.3-2.37	-24	139.0-5.47	72.3-2.85	95.0-3.74	4J-0524
2P-6704	50.8-2.00	-32	TR	71.4-2.81	-32	164.0-6.46	92.2-3.63	140.0-5.51	4J-0527

Flange - Code 61 - 120° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5P-9956	38.1-1.50	-24	TR	60.3-2.37	-24	182.5-7.19	116.0-4.57	119.0-4.69	4J-0524

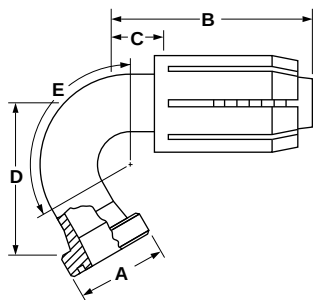
Flange - Code 61 - 125° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5P-4321	50.8-2.00	-32	TR	71.4-2.81	-32	181.0-7.13	108.7-4.28	150.5-5.93	4J-0527

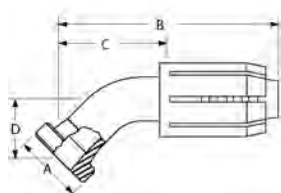
Reusable Couplings - XT-3ES

Flange - Code 61 - 135° Elbow



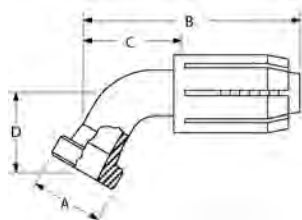
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
6V-1236	25.4-1.00	-16	TR	44.5-1.75	-16	105.0-4.13	54.6-2.15	87.5-3.44	4J-0520

Flange - Code 61 No Groove - 45° Elbow



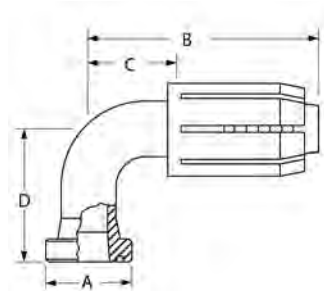
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
9S-3173	31.8-1.25	-20	TR	60.3-2.37	-24	135.0-5.31	75.3-2.96	30.0-1.18	4J-0524

Flange - Code 61 No Groove - 60° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
9S-3172	31.8-1.25	-20	TR	60.3-2.37	-24	139.0-5.47	79.3-3.12	43.0-1.69	4J-0524

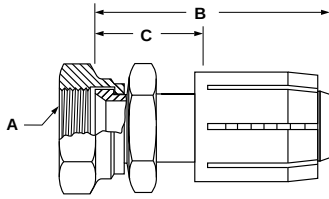
Flange - Code 62 - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
196-7776	31.8-1.25	-20	TR	54.0-2.13	-20	142.0-5.59	83.0-3.27	73.0-2.87	4J-0522

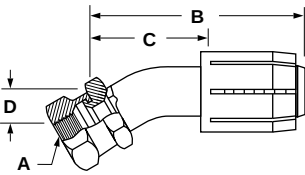
Reusable Couplings - XT-3ES

JIC 37° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
8S-3918	25.4-1.00	-16	TR	1 5/16-12	-16	117.0-4.61	53.0-2.09
2P-0988	31.8-1.25	-20	TR	1 5/8-12	-20	126.0-4.96	66.3-2.61
2P-0991	38.1-1.50	-24	TR	1 7/8-12	-24	133.0-5.24	66.8-2.63
2P-0995	50.8-2.00	-32	TR	2 1/2-12	-32	148.0-5.83	76.6-3.02

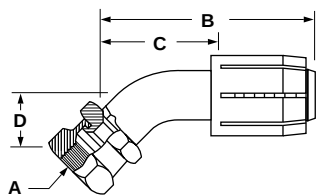
JIC 37° Female Swivel - 30° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
6V-3283	25.4-1.00	-16	TR	1 5/16-12	-16	148.0-5.83	97.6-3.84	27.0-1.06

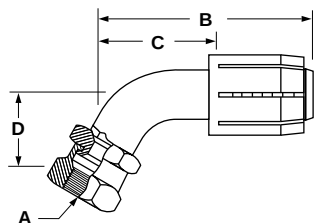
Reusable Couplings - XT-3ES

JIC 37° Female Swivel - 45° Elbow



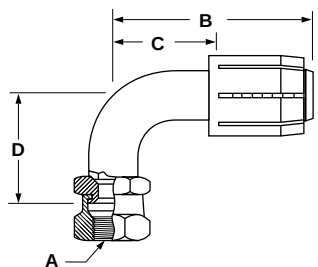
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
2P-1409	25.4-1.00	-16	TR	1 5/16-12	-16	140.0-5.51	90.1-3.55	42.0-1.65
155-2834	31.8-1.25	-20	TR	1 5/8-12	-20	178.0-7.01	117.8-4.64	43.0-1.69
155-2835	38.1-1.50	-24	TR	1 7/8-12	-24	201.0-7.91	134.8-5.31	44.0-1.73
155-2836	50.8-2.00	-32	TR	2 1/2-12	-32	223.0-8.78	151.2-5.95	56.0-2.20

JIC 37° Female Swivel - 60° Elbow



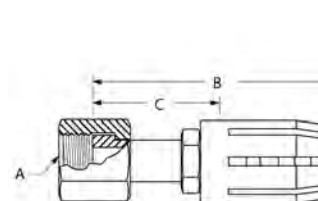
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
1P-9892	25.4-1.00	-16	TR	1 5/16-12	-16	135.0-5.31	84.6-3.33	57.0-2.24

JIC 37° Female Swivel - 90° Elbow



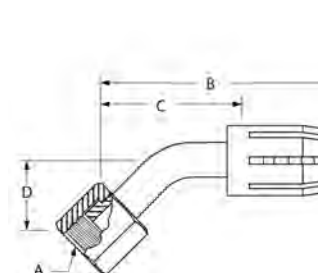
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
8K-5114	25.4-1.00	-16	TR	1 5/16-12	-16	120.0-4.72	69.6-2.74	66.5-2.62
1P-9589	25.4-1.00	-16	TR	1 5/16-12	-16	115.0-4.53	65.1-2.56	85.5-3.37
2P-1411	25.4-1.00	-16	TR	1 5/16-12	-16	115.0-4.53	65.1-2.56	142.5-5.61
155-2838	31.8-1.25	-20	TR	1 5/8-12	-20	129.0-5.08	69.3-2.73	85.0-3.35
155-2839	38.1-1.50	-24	TR	1 7/8-12	-24	151.0-5.94	84.8-3.34	90.0-3.54
155-2840	50.8-2.00	-32	TR	2 1/2-12	-32	185.0-7.28	113.0-4.45	120.0-4.72

ORFS Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
6V-9957	25.4-1.00	-16	TR	1 7/16-12	-16	95.0-3.74	45.1-1.78	5K-9090
155-2857	31.8-1.25	-20	TR	1 11/16-12	-20	110.0-4.33	50.3-1.98	6V-8400
155-2858	38.1-1.50	-24	TR	2-12	-24	120.0-4.72	53.8-2.12	8T-0315

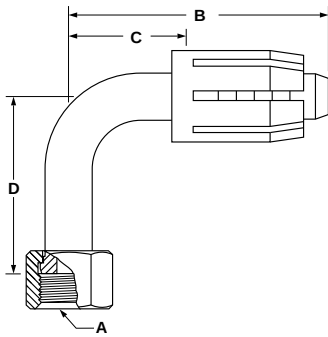
ORFS Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
6V-9958	25.4-1.00	-16	TR	1 7/16-12	-16	143.0-5.63	93.1-3.67	32.0-1.26	5K-9090
155-2860	31.8-1.25	-20	TR	1 11/16-12	-20	170.0-6.69	110.3-4.34	35.0-1.38	6V-8400
155-2861	38.1-1.50	-24	TR	2-12	-24	197.0-7.76	130.3-5.13	38.0-1.50	8T-0315

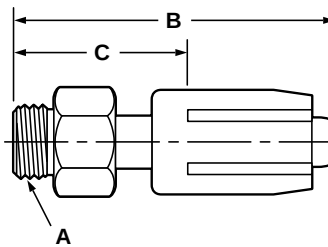
Reusable Couplings - XT-3ES

ORFS Female Swivel - 90° Elbow



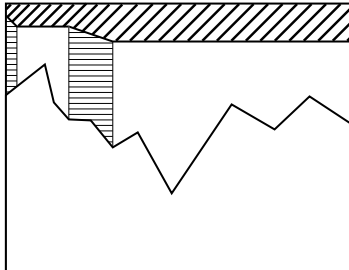
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
6V-9959	25.4-1.00	-16	TR	1 7/16-12	-16	111.0-4.37	60.6-2.39	67.5-2.66	5K-9090
6V-9960	25.4-1.00	-16	TR	1 7/16-12	-16	110.0-4.33	60.1-2.37	125.0-4.92	5K-9090
155-2863	31.8-1.25	-20	TR	1 11/16-12	-20	130.0-5.12	70.3-2.77	73.7-2.90	6V-8400
155-2864	38.1-1.50	-24	TR	2-12	-24	153.0-6.02	86.3-3.40	81.7-3.22	8T-0315

ORFS Male - Straight



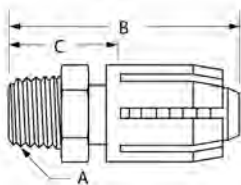
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
184-7202	31.8-1.25	-20	TR	1 11/16-12	-20	125.0-4.92	68.0-2.68	6V-8400

Reusable Sleeves - XT-3ES



Part Number	HOSE I.D. (mm - in)	DASH SIZE
3S-7166	19.1 - 0.75	-12
3S-7252	25.4 - 1.00	-16
3S-7116	31.8 - 1.25	-20
3S-8330	38.1 - 1.50	-24
4S-7507	50.8 - 2.00	-32

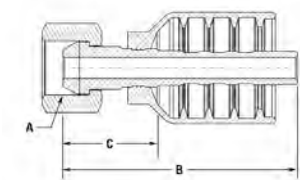
SAE 30° Male Tapered - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
7S-2371	25.4-1.00	-16	TR	1-11 1/2	-16	112.0-4.41	61.6-2.43
2P-0922	31.8-1.25	-20	TR	1 1/4-11 1/2	-20	132.0-5.20	72.3-2.85
2P-0924	50.8-2.00	-32	TR	2-11 1/2	-32	155.0-6.10	83.2-3.28

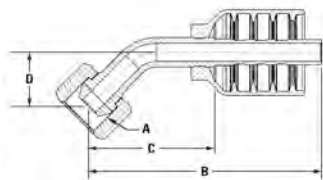
Permanent Couplings - XT-3ES

BSPP 60° Female Swivel - Straight (ISO 8434-6)



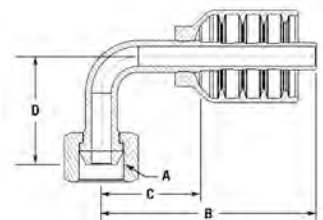
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
518-3997	9.5-.37	-6	XN	3/8-19	-6	67.0-2.64	27.2-1.07
518-0821	12.7-.50	-8	XN	1/2-14	-8	68.0-2.68	27.6-1.09
554-6965	15.9-.63	-10	XN	5/8-14	-10	87.5-3.44	36.0-1.42
554-6966	15.9-.63	-10	XN	3/4-14	-12	87.5-3.44	36.0-1.42
502-2106	19.1-.75	-12	XN	3/4-14	-12	96.5-3.80	37.9-1.49
499-1179	25.4-1.00	-16	XN	1-11	-16	113.0-4.45	42.5-1.67
499-1182	25.4-1.00	-16	XN	1 1/4-11	-20	123.5-4.86	53.0-2.09
626-8478	31.8-1.25	-20	XN4	1 1/4-11	-20	115.0-4.53	57.0-2.74

BSPP 60° Female Swivel - 45° Elbow (ISO 8434-6)



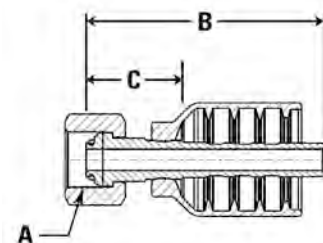
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
518-3998	9.5-.37	-6	XN	3/8-19	-6	86.6-3.41	46.8-1.84	20.0-0.79
518-0822	12.7-.50	-8	XN	1/2-14	-8	90.8-3.57	50.3-1.98	20.0-0.79
554-6967	15.9-.63	-10	XN	5/8-14	-10	103.91-4.09	57.5-2.26	21.6-0.85
502-2107	19.1-.75	-12	XN	3/4-14	-12	126.1-4.96	67.5-2.66	29.0-1.14
499-1180	25.4-1.00	-16	XN	1-11	-16	152.8-6.02	82.3-3.24	35.0-1.38
499-1183	25.4-1.00	-16	XN	1 1/4-11	-20	156.8-6.17	86.3-3.40	39.0-1.54
626-8480	31.8-1.25	-20	XN4	1 1/4-11	-20	155.0-6.10	97.0-3.82	40.0-1.57

BSPP 60° Female Swivel - 90° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
518-3999	9.5-.37	-6	XN	3/8-19	-6	73.9-2.91	34.1-1.34	37.0-1.46
518-0823	12.7-.50	-8	XN	1/2-14	-8	80.0-3.15	39.5-1.56	41.0-1.61
554-6968	15.9-.63	-10	XN	5/8-14	-10	93.47-3.68	41.7-1.64	43.8-1.72
502-2108	19.1-.75	-12	XN	3/4-14	-12	112.0-4.41	53.4-2.10	58.0-2.28
499-1181	25.4-1.00	-16	XN	1-11	-16	140.1-5.52	69.6-2.74	70.0-2.76
499-1184	25.4-1.00	-16	XN	1 1/4-11	-20	140.1-5.52	69.6-2.74	76.0-2.99
611-7346	31.8-1.25	-20	XN4	1 1/4-11	-20	140.0-5.51	82.0-3.23	81.0-3.19
626-8483	31.8-1.25	-20	XN4	1 1/4-11	-20	140.0-5.51	82.0-3.23	81.0-3.19

BSPP 60° O-Ring Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
601-9241	9.5-.37	-6	XN	3/8-19	-6	67.0-2.64	27.0-1.06	600-9412
605-9995	9.5-.37	-6	XN	1/2-14	-8	67.0-2.64	27.0-1.06	600-9413
601-9242	12.7-.50	-8	XN	1/2-14	-8	68.0-2.68	28.0-1.10	600-9413
601-9243	15.9-.63	-10	XN	5/8-14	-10	87.5-3.44	36.0-1.42	600-9415
601-4112	15.9-.63	-10	XN	3/4-14	-12	87.5-3.44	36.0-1.42	600-9416
601-9244	19.1-.75	-12	XN	3/4-14	-12	96.5-3.80	38.0-1.50	600-9416
601-9245	25.4-1.00	-16	XN	1 1/4-11	-20	113.0-4.45	42.5-1.67	600-9418

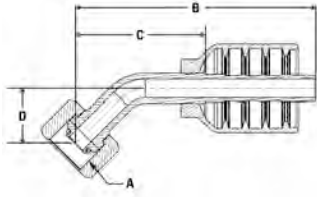
Permanent Couplings - XT-3ES

BSPP 60° O-Ring Female Swivel - Straight (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
626-5732	31.8-1.25	-20	XN4	1 1/4-11	-20	115.0-4.53	57.0-2.24	600-9419
605-9996	38.1-1.50	-24	XN4	1 1/2-11	-24	101.0-3.98	49.0-1.93	600-9421

Note: Grayscale parts are MAO (Made As Order).

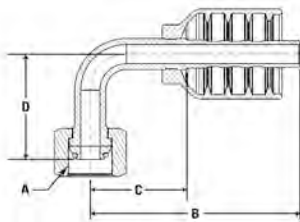
BSPP 60° O-Ring Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
601-9261	9.5-.37	-6	XN	3/8-19	-6	87.0-3.43	47.0-1.85	20.0-.79	600-9412
606-1567	9.5-.37	-6	XN	1/2-14	-8	87.0-3.43	47.0-1.85	20.0-.79	600-9413
601-9262	12.7-.50	-8	XN	1/2-14	-8	91.0-3.58	50.0-1.97	20.0-.79	600-9413
606-1568	12.7-.50	-8	XN	5/8-14	-10	94.0-3.70	53.0-2.09	23.0-.91	600-9415
606-1571	12.7-.50	-8	XN	3/4-14	-12	97.0-3.82	56.0-2.20	26.0-1.02	600-9416
601-9263	15.9-.63	-10	XN	5/8-14	-10	109.0-4.29	57.0-2.24	22.0-.87	600-9415
606-1572	15.9-.63	-10	XN	3/4-14	-12	116.0-4.57	65.0-2.56	28.0-1.10	600-9416
601-9264	19.1-.75	-12	XN	3/4-14	-12	126.0-4.96	65.0-2.56	29.0-1.14	600-9416
606-1573	19.1-.75	-12	XN	1-11	-16	129.0-5.08	68.0-2.68	32.0-1.26	600-9418
601-9265	25.4-1.00	-16	XN	1-11	-16	153.0-6.02	82.0-3.23	35.0-1.38	600-9418
601-9266	25.4-1.00	-16	XN	1 1/4-11	-20	157.0-6.18	86.0-3.39	39.0-1.54	600-9419
626-8479	31.8-1.25	-20	XN4	1 1/4-11	-20	155.0-6.10	97.0-3.82	40.0-1.57	600-9419
626-8482	31.8-1.25	-20	XN4	1 1/2-11	-24	169.0-6.65	111.0-4.37	54.0-2.13	600-6421
606-1574	38.1-1.50	-24	XN4	1 1/2-11	-24	168.0-6.61	111.0-4.37	50.0-1.97	600-6421
606-1575	38.1-1.50	-24	XN4	2-11	-32	177.0-6.97	120.0-4.72	59.0-2.32	5K-0216

Note: Grayscale parts are MAO (Made As Order).

BSPP 60° O-Ring Female Swivel - 90° Elbow

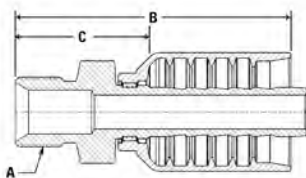


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
601-9277	9.5-.37	-6	XN	3/8-19	-6	74.0-2.91	34.0-1.34	37.0-1.46	600-9412
606-1593	9.5-.37	-6	XN	1/2-14	-8	74.0-2.91	34.0-1.34	37.0-1.46	600-9413
601-9278	12.7-.50	-8	XN	1/2-14	-8	80.03.15	39.51.56	41.01.61	600-9413
606-2077	12.7-.50	-8	XN	5/8-14	-10	80.0-3.15	39.0-1.54	45.0-1.77	600-9415
606-2080	12.7-.50	-8	XN	3/4-14	-12	80.0-3.15	39.0-1.54	47.0-1.85	600-9416
601-9279	15.9-.63	-10	XN	5/8-14	-10	93.5-3.68	41.0-1.61	44.0-1.73	600-9415
606-2087	15.9-.63	-10	XN	3/4-14	-12	93.5-3.68	42.0-1.65	56.0-2.20	600-9416
601-9280	19.1-.75	-12	XN	3/4-14	-12	112.0-4.41	51.0-2.01	58.0-2.28	600-9416
606-2093	19.1-.75	-12	XN	1-11	-16	112.0-4.41	53.0-2.09	62.0-2.44	600-9418
601-9281	25.4-1.00	-16	XN	1-11	-16	140.0-5.51	70.0-2.76	70.0-2.76	600-9418
601-9282	25.4-1.00	-16	XN	1 1/4-11	-20	140.0-5.51	70.0-2.76	76.0-2.99	600-9419
611-7346	31.8-1.25	-20	XN4	1 1/4-11	-20	140.0-5.51	82.0-3.23	81.0-3.109	600-9419
626-8484	31.8-1.25	-20	XN4	1 1/2-11	-24	140.0-5.51	82.0-3.23	92.0-3.62	600-6421
606-2094	38.1-1.50	-24	XN4	1 1/2-11	-24	163.0-6.42	106.0-4.17	100.0-3.94	600-6421
606-2905	38.1-1.50	-24	XN4	2-11	-32	163.0-6.42	106.0-4.17	110.0-4.33	5K-0216

Note: Grayscale parts are MAO (Made As Order).

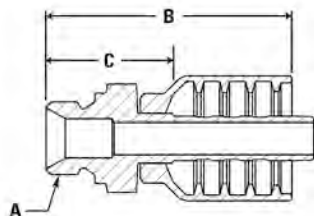
Permanent Couplings - XT-3ES

BSPP 60° Male - Straight



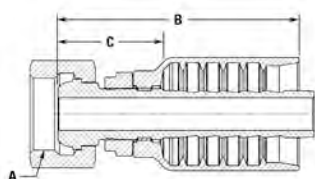
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
397-1959	15.9-.63	-10	XN	5/8-14	-10	95.5-3.76	44.0-1.73	600-9415

BSPP 60° Male - Straight (Dowty Seal)



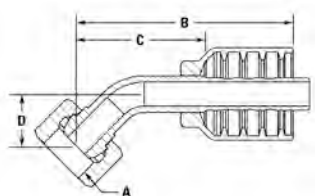
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
328-9174	12.7-.50	-8	XN	1/2-14	-8	71.0-2.80	37.0-1.46	6V-0407

BSPP Spherical Seat Female Swivel - Straight



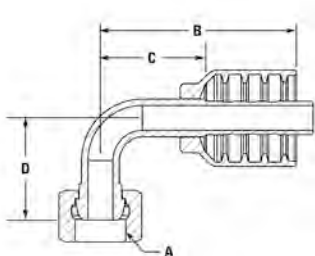
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6221	9.5-.37	-6	XN	3/8-19	-6	61.9-2.44	22.5-0.89
328-9171	12.7-.50	-8	XN	1/2-14	-8	57.3-2.26	23.2-0.91
397-1960	15.9-.63	-10	XN	5/8-14	-10	87.5-3.44	36.0-1.42
397-1961	15.9-.63	-10	XN	3/4-14	-12	87.5-3.44	36.0-1.42
432-2126	19.1-.75	-12	XN	3/4-14	-12	96.0-3.78	37.4-1.47

BSPP Spherical Seat Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6224	9.5-.37	-6	XN	3/8-19	-6	80.3-3.16	46.8-1.84	20.1-0.79
328-9172	12.7-.50	-8	XN	1/2-14	-8	84.5-3.33	50.4-1.98	20.1-0.79
416-2091	15.9-.63	-10	XN	5/8-14	-10	109.0-4.29	57.5-2.26	21.6-0.85

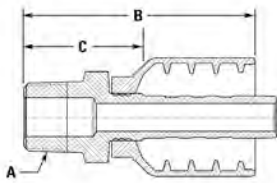
BSPP Spherical Seat Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6225	9.5-.37	-6	XN	3/8-19	-6	67.7-2.67	34.2-1.35	37.1-1.46
328-9173	12.7-.50	-8	XN	1/2-14	-8	73.6-2.90	39.6-1.56	38.1-1.50
416-2093	15.9-.63	-10	XN	5/8-14	-10	98.6-3.88	47.1-1.85	43.7-1.72
432-2127	19.1-.75	-12	XN	3/4-14	-12	107.0-4.21	53.4-2.10	58.9-2.32

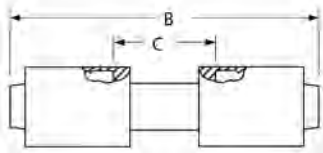
Permanent Couplings - XT-3ES

BSPT Male Tapered Pipe - Straight



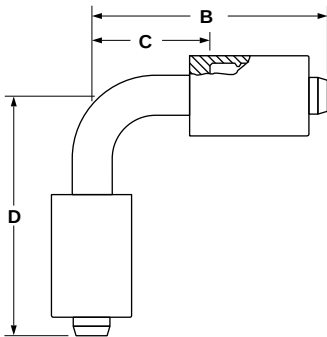
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
333-8602	9.5-.37	-6	XN	3/8-19	-6	74-2.91	34-1.34
513-4472	12.7-.50	-8	XN	1/2-14	-8	70-2.76	36-1.42
513-4473	19.1-.75	-12	XN	3/4-14	-12	95-3.74	42-1.65
513-4474	25.4-1.00	-16	XN	1-11	-16	110-4.33	45-1.77

Double Collet - Straight



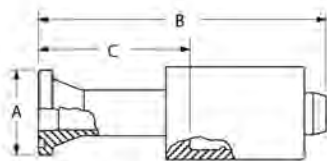
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
332-1650	9.5-.37	-6	XN	113.0-4.45	45.5-1.79
328-9183	12.7-.50	-8	XN	114.0-4.49	45.5-1.79
471-6416	19.1-.75	-12	XN	157.0-6.18	53.0-2.09
499-1175	25.4-1.00	-16	XN	192.0-7.56	52.0-2.05
589-1964	31.8-1.25	-20	XN4	167.0-6.57	51.3-2.02
588-1626	38.1-1.50	-24	XN4	183.5-7.22	69.7-2.74

Double Collet - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
328-9184	12.7-.50	-8	XN	85.0-3.35	45.0-1.77	85.0-3.35
328-9185	12.7-.50	-8	XN	123.0-4.84	83.0-3.27	85.0-3.35
432-2135	19.1-.75	-12	XN	115.0-4.53	62.0-2.44	115.0-4.53
499-1176	24.4-1.00	-16	XN	140.1-5.52	69.6-2.74	140.1-5.52
589-1965	31.8-1.25	-20	XN4	147.2-5.80	89.3-3.52	147.2-5.80
588-1633	38.1-1.50	-24	XN4	162.8-6.41	105.9-4.17	162.8-6.41

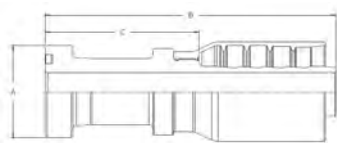
Flange - Cat - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
328-9165	12.7-.50	-8	XN	41.3-1.63	-12	86.0-3.39	52.2-2.06	1P-3702
432-2105	19.1-.75	-12	XN	41.3-1.63	-12	138.0-5.43	84.0-3.31	1P-3702
432-2116	19.1-.75	-12	XN	47.6-1.87	-16	138.0-5.43	84.0-3.31	1P-3703
496-2307	25.4-1.00	-16	XN	47.6-1.87	-16	150.0-5.91	85.0-3.35	1P-3703
496-9725	25.4-1.00	-16	XN	54.0-2.13	-20	150.0-5.91	85.0-3.35	1P-3704

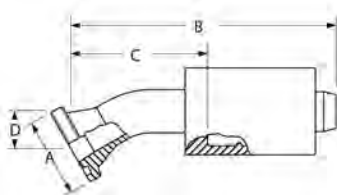
Permanent Couplings - XT-3ES

Flange - Cat High Vibration - Straight



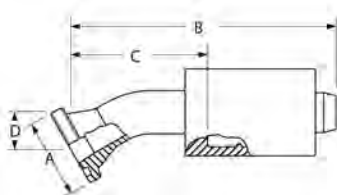
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
536-6437	25.4-1.00	-16	XN	48.0-1.89	-16	151.0-5.94	80.0-3.15	1P-3703
536-6438	25.4-1.00	-16	XN	54.0-2.13	-20	157.0-6.18	86.0-3.39	1P-3704
569-4965	31.8-1.25	-20	XN4	54.0-2.13	-20	137.0-5.39	79.0-3.11	1P-3704
455-8042	38.1-1.50	-24	XN4	63.5-2.50	-24	155.0-6.10	98.0-3.86	1P-3709

Flange - Cat - 14° Elbow



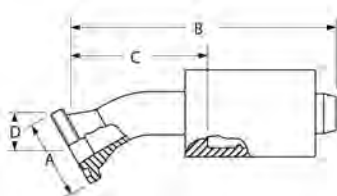
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
496-2308	25.4-1.00	-16	XN	47.6-1.87	-16	144.8-5.70	74.3-2.93	9.5-.37	1P-3703
545-7806	25.4-1.00	-16	XN	47.6-1.87	-16	206.0-8.11	135.0-5.31	9.5-.37	1P-3703

Flange - Cat - 15° Elbow



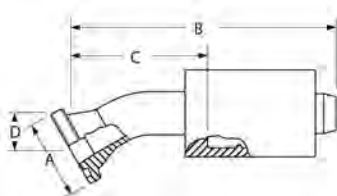
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
520-0071	25.4-1.00	-16	XN	47.6-1.87	-16	252.0-9.92	181.5-7.15	26.0-1.02	1P-3703

Flange - Cat - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2106	19.1-.75	-12	XN	41.3-1.63	-12	133.0-5.24	72.0-2.83	17.0-.67	1P-3702
432-2117	19.1-.75	-12	XN	47.6-1.87	-16	133.0-5.24	74.0-2.91	17.0-.67	1P-3703
496-2310	25.4-1.00	-16	XN	47.6-1.87	-16	153.0-6.02	82.5-3.25	18.0-.71	1P-3703
496-9726	25.4-1.00	-16	XN	54.0-2.13	-20	153.0-6.02	82.5-3.25	18.0-.71	1P-3704

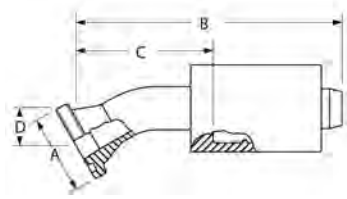
Flange - Cat - 24° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
520-0736	25.4-1.00	-16	XN	47.6-1.87	-16	250.0-9.84	179.5-7.07	50.0-1.97	1P-3703
520-0069	25.4-1.00	-16	XN	47.6-1.87	-16	284.5-11.20	214.0-8.43	48.0-1.89	1P-3703

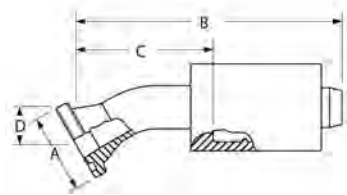
Permanent Couplings - XT-3ES

Flange - Cat - 25° Elbow



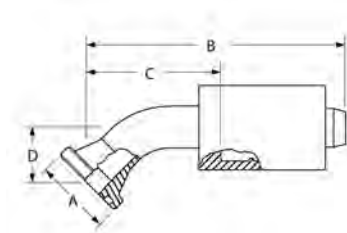
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
501-0431	19.1-.75	-12	XN	41.3-1.63	-12	256.0-10.08	197.0-7.76	42.0-1.65	1P-3702

Flange - Cat - 30° Elbow



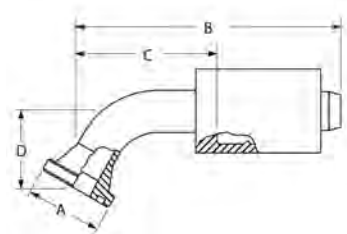
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2107	19.1-.75	-12	XN	41.3-1.63	-12	132.0-5.20	70.0-2.76	22.0-.87	1P-3702
432-2118	19.1-.75	-12	XN	47.6-1.87	-16	132.0-5.20	73.0-2.87	22.0-.87	1P-3703
496-2311	25.4-1.00	-16	XN	47.6-1.87	-16	151.0-5.94	81.0-3.19	22.5-.89	1P-3703
496-2312	25.4-1.00	-16	XN	47.6-1.87	-16	171.0-6.73	101.0-3.98	34.0-1.34	1P-3703
496-9727	25.4-1.00	-16	XN	54.0-2.13	-20	151.0-5.94	81.0-3.19	22.5-.89	1P-3704

Flange - Cat - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2108	19.1-.75	-12	XN	41.3-1.63	-12	132.0-5.20	70.5-2.78	34.5-1.36	1P-3702
432-2119	19.1-.75	-12	XN	47.6-1.87	-16	132.0-5.20	73.0-2.87	34.5-1.36	1P-3703
496-2313	25.4-1.00	-16	XN	47.6-1.87	-16	154.0-6.06	83.0-3.27	36.0-1.42	1P-3703
496-2314	25.4-1.00	-16	XN	47.6-1.87	-16	180.0-7.09	109.0-4.29	62.0-2.44	1P-3703
496-2315	25.4-1.00	-16	XN	47.6-1.87	-16	195.0-7.68	125.0-4.92	77.5-3.05	1P-3703
545-7808	25.4-1.00	-16	XN	47.6-1.87	-16	223.0-8.78	152.0-5.98	77.5-3.05	1P-3703
545-7807	25.4-1.00	-16	XN	47.6-1.87	-16	230.0-9.06	159.0-6.26	62.0-2.44	1P-3703
496-9728	25.4-1.00	-16	XN	54.0-2.13	-20	154.0-6.06	83.0-3.27	36.0-1.42	1P-3704

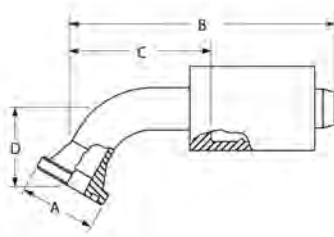
Flange - Cat - 60° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2109	19.1-.75	-12	XN	41.3-1.63	-12	128.0-5.04	67.0-2.64	46.5-1.83	1P-3702
432-2120	19.1-.75	-12	XN	47.6-1.87	-16	128.0-5.04	69.5-2.74	46.5-1.83	1P-3703
496-2316	25.4-1.00	-16	XN	47.6-1.87	-16	155.0-6.10	84.0-3.31	53.0-2.09	1P-3703
th496-9729	25.4-1.00	-16	XN	54.0-2.13	-20	155.0-6.10	84.0-3.31	53.0-2.09	1P-3704

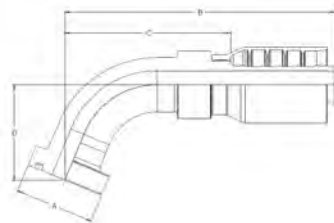
Permanent Couplings - XT-3ES

Flange - Cat - 67.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2110	19.1-.75	-12	XN	41.3-1.63	-12	125.0-4.92	64.0-2.52	52.5-2.07	1P-3702
502-0282	19.1-.75	-12	XN	47.6-1.87	-16	124.0-4.88	65.0-2.56	49.5-1.95	1P-3703
496-2317	25.4-1.00	-16	XN	47.6-1.87	-16	150.0-5.91	80.0-3.15	55.5-2.19	1P-3703
496-9730	25.4-1.00	-16	XN	54.0-2.13	-20	150.0-5.91	80.0-3.15	55.5-2.19	1P-3704
496-9731	25.4-1.00	-16	XN	54.0-2.13	-20	156.0-6.14	85.0-3.35	68.5-2.70	1P-3704

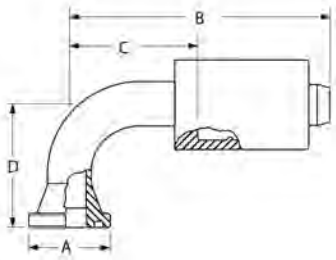
Flange - Cat High Vibration - 67.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
536-6439	25.4-1.00	-16	XN	54.0-2.13	-20	184.0-7.24	113.0-4.45	65.0-2.56	1P-3704

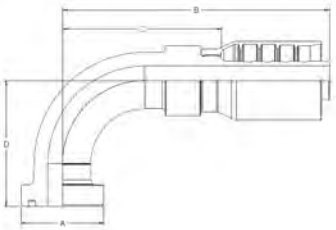
Permanent Couplings - XT-3ES

Flange - Cat - 90° Elbow



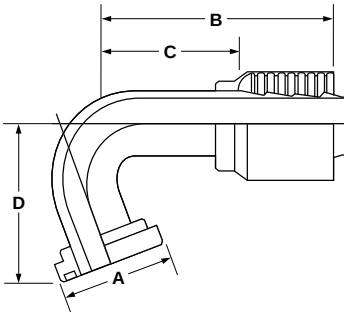
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9166	12.7-.50	-8	XN	41.3-1.63	-12	74.0-2.91	39.5-1.56	41.2-1.62	1P-3702
333-9959	12.7-.50	-8	XN	41.3-1.63	-12	74.0-2.91	39.5-1.56	55.1-2.17	1P-3702
397-1955	15.9-.63	-10	XN	41.3-1.63	-12	94.0-3.70	47.0-1.85	50.0-1.97	1P-3702
432-2111	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	68.0-2.68	1P-3702
432-2112	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	85.0-3.35	1P-3702
432-2113	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	120.0-4.72	1P-3702
432-2114	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	129.0-5.08	1P-3702
432-2121	19.1-.75	-12	XN	47.6-1.87	-16	107.0-4.21	53.0-2.09	68.0-2.68	1P-3703
432-2122	19.1-.75	-12	XN	47.6-1.87	-16	107.0-4.21	53.0-2.09	100.0-3.94	1P-3703
432-2123	19.1-.75	-12	XN	47.6-1.87	-16	107.0-4.21	53.0-2.09	128.0-5.04	1P-3703
496-2318	25.4-1.00	-16	XN	47.6-1.87	-16	135.0-5.31	70.0-2.76	73.0-2.87	1P-3703
496-2319	25.4-1.00	-16	XN	47.6-1.87	-16	135.0-5.31	70.0-2.76	82.0-3.23	1P-3703
od496-2320	25.4-1.00	-16	XN	47.6-1.87	-16	135.0-5.31	70.0-2.76	132.0-5.20	1P-3703
496-2321	25.4-1.00	-16	XN	47.6-1.87	-16	140.0-5.51	70.0-2.76	150.0-5.91	1P-3703
496-2322	25.4-1.00	-16	XN	47.6-1.87	-16	140.1-5.52	69.6-2.74	210.0-8.27	1P-3703
581-4022	25.4-1.00	-16	XN	47.6-1.87	-16	162.0-6.38	92.0-3.62	110.0-4.33	1P-3703
496-9732	25.4-1.00	-16	XN	54.0-2.13	-20	135.0-5.31	70.0-2.76	73.0-2.87	1P-3704
496-9733	25.4-1.00	-16	XN	54.0-2.13	-20	135.0-5.31	70.0-2.76	82.0-3.23	1P-3704
496-9734	25.4-1.00	-16	XN	54.0-2.13	-20	135.0-5.31	70.0-2.76	150.0-5.91	1P-3704

Flange - Cat High Vibration - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
536-6440	25.4-1.00	-16	XN	54.0-2.13	-20	175.0-6.89	104.0-4.09	82.0-3.23	1P-3704

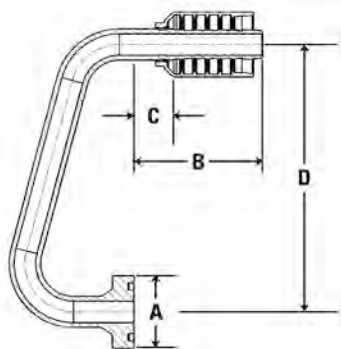
Flange - Cat - 110° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
496-2323	25.4-1.00	-16	XN	47.6-1.87	-16	125.5-4.94	55.0-2.17	85.0-3.35	1P-3703
496-9735	25.4-1.00	-16	XN	54.0-2.13	-20	125.5-4.94	55.0-2.17	85.0-3.35	1P-3704

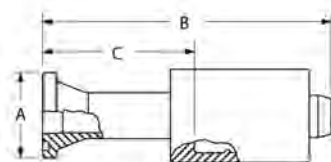
Permanent Couplings - XT-3ES

Flange - Cat - 180° Elbow



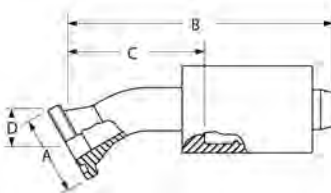
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
472-1422	19.1-.75	-12	XN	47.6-1.87	-16	84.0-3.31	26.0-1.02	175.0-6.89	1P-3703

Flange - Code 61 - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6214	9.5-.37	-6	XN	30.2-1.19	-8	79.0-3.11	45.3-1.78	4J-5140
328-9137	12.7-.50	-8	XN	30.2-1.19	-8	84.0-3.31	49.7-1.96	4J-5140
328-9138	12.7-.50	-8	XN	38.1-1.50	-12	84.0-3.31	49.7-1.96	4J-5267
490-1771	15.9-.63	-10	XN	38.1-1.50	-12	94.9-3.74	48.5-1.91	4J-5267
432-2070	19.1-.75	-12	XN	38.1-1.50	-12	124.0-4.88	70.0-2.76	4J-5267
432-2083	19.1-.75	-12	XN	44.5-1.75	-16	124.0-4.88	70.0-2.76	4J-0520
432-2093	19.1-.75	-12	XN	50.8-2.00	-20	124.0-4.88	70.0-2.76	4J-0522
497-8283	25.4-1.00	-16	XN	44.5-1.75	-16	147.0-5.79	82.0-3.23	4J-0520
498-0775	25.4-1.00	-16	XN	50.8-2.00	-20	147.0-5.79	82.0-3.23	4J-0522
498-8389	25.4-1.00	-16	XN	60.3-2.37	-24	151.0-5.94	86.0-3.39	4J-0524
567-0270	31.8-1.25	-20	XN4	50.8-2.00	-20	111.7-4.40	53.8-2.12	4J-0522
568-1462	31.8-1.25	-20	XN4	60.3-2.37	-24	114.7-4.52	56.9-2.24	4J-0524
589-1962	31.8-1.25	-20	XN4	60.3-2.37	-24	223.2-8.79	165.3-6.51	4J-0524
589-1963	31.8-1.25	-20	XN4	71.4-2.81	-32	133.2-5.24	75.4-2.97	4J-0527
423-5071	38.1-1.50	-24	XN4	60.3-2.37	-24	122.0-4.80	65.0-2.56	4J-0524
423-5073	38.1-1.50	-24	XN4	71.4-2.81	-32	122.0-4.80	65.0-2.56	4J-0527
221-0502	50.8-2.00	-32	S4G	71.4-2.81	-32	152.0-5.98	85.5-3.37	4J-0527

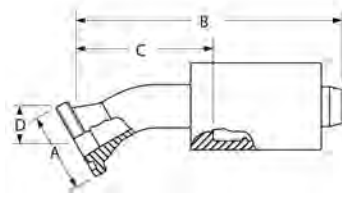
Flange - Code 61 - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9139	12.7-.50	-8	XN	30.2-1.19	-8	82.0-3.23	48.4-1.91	8.9-.35	4J-5140
328-9140	12.7-.50	-8	XN	38.1-1.50	-12	83.0-3.27	48.4-1.91	8.9-.35	4J-5267
432-2071	19.1-.75	-12	XN	38.1-1.50	-12	116.0-4.57	62.0-2.44	12.0-.47	4J-5267
432-2084	19.1-.75	-12	XN	44.5-1.75	-16	116.0-4.57	62.0-2.44	12.0-.47	4J-0520
497-8285	25.4-1.00	-16	XN	44.5-1.75	-16	136.0-5.35	66.0-2.60	11.0-.43	4J-0520
498-0776	25.4-1.00	-16	XN	50.8-2.00	-20	136.0-5.35	66.0-2.60	11.0-.43	4J-0522
498-8390	25.4-1.00	-16	XN	60.3-2.37	-24	137.3-5.41	66.8-2.63	11.0-.43	4J-0524
567-0263	31.8-1.25	-20	XN4	50.8-2.00	-20	143.5-5.65	86.0-3.39	15.0-.59	4J-0522
568-1464	31.8-1.25	-20	XN4	60.3-2.37	-24	144.0-5.67	86.0-3.39	13.0-.51	4J-0524
423-5074	38.1-1.50	-24	XN4	60.3-2.37	-24	158.0-6.22	101.0-3.98	15.0-.59	4J-0524
423-5075	38.1-1.50	-24	XN4	71.4-2.81	-32	158.0-6.22	101.0-3.98	15.0-.59	4J-0527

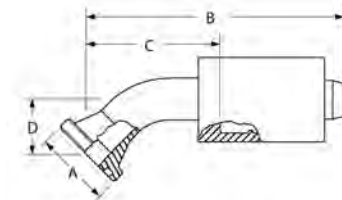
Permanent Couplings - XT-3ES

Flange - Code 61 - 30° Elbow



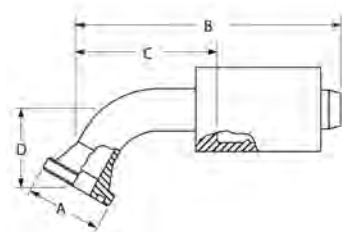
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9141	12.7-.50	-8	XN	30.2-1.19	-8	84.0-3.31	49.6-1.95	12.4-.49	4J-5140
328-9142	12.7-.50	-8	XN	38.1-1.50	-12	84.0-3.31	49.6-1.95	12.4-.49	4J-5267
432-2072	19.1-.75	-12	XN	38.1-1.50	-12	114.0-4.49	61.0-2.40	15.0-.59	4J-5267
432-2085	19.1-.75	-12	XN	44.5-1.75	-16	114.0-4.49	61.0-2.40	15.0-.59	4J-0520
497-8287	25.4-1.00	-16	XN	44.5-1.75	-16	134.0-5.28	69.0-2.72	16.0-.63	4J-0520
498-0777	25.4-1.00	-16	XN	50.8-2.00	-20	134.0-5.28	69.0-2.72	16.0-.63	4J-0522
567-0264	31.8-1.25	-20	XN4	50.8-2.00	-20	138.6-5.46	80.8-3.18	20.0-.79	4J-0522
589-0042	31.8-1.25	-20	XN4	60.3-2.37	-24	126.7-4.99	68.8-2.71	18.5-.73	4J-0524
589-0040	31.8-1.25	-20	XN4	60.3-2.37	-24	174.2-6.86	116.3-4.58	43.5-1.71	4J-0524
423-5076	38.1-1.50	-24	XN4	60.3-2.37	-24	162.0-6.38	105.0-4.13	21.0-.83	4J-0524
423-5077	38.1-1.50	-24	XN4	71.4-2.81	-32	162.0-6.38	105.1-4.14	21.3-.84	4J-0527
221-0603	50.8-2.00	-32	S4G	71.4-2.81	-32	194.0-7.64	127.0-5.00	31.0-1.22	4J-0527

Flange - Code 61 - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6215	9.5-.37	-6	XN	30.2-1.19	-8	78.0-3.07	44.2-1.74	17.5-.69	4J-5140
328-9143	12.7-.50	-8	XN	30.2-1.19	-8	84.0-3.31	50.1-1.97	19.8-.78	4J-5140
328-9144	12.7-.50	-8	XN	38.1-1.50	-12	84.0-3.31	50.1-1.97	19.8-.78	4J-5267
328-9146	12.7-.50	-8	XN	38.1-1.50	-12	88.0-3.46	54.2-2.13	23.9-.94	4J-5267
328-9145	12.7-.50	-8	XN	44.5-1.75	-16	84.0-3.31	50.1-1.97	19.8-.78	4J-0520
432-2073	19.1-.75	-12	XN	38.1-1.50	-12	117.0-4.61	63.0-2.48	25.0-.98	4J-5267
432-2086	19.1-.75	-12	XN	44.5-1.75	-16	117.0-4.61	63.0-2.48	25.0-.98	4J-0520
497-0463	25.4-1.00	-16	XN	38.1-1.50	-12	141.8-5.58	71.3-2.81	25.0-.98	4J-5267
497-8288	25.4-1.00	-16	XN	44.5-1.75	-16	139.0-5.47	74.0-2.91	27.0-1.06	4J-0520
497-8289	25.4-1.00	-16	XN	44.5-1.75	-16	169.0-6.65	98.0-3.86	51.0-2.01	4J-0520
498-0779	25.4-1.00	-16	XN	50.8-2.00	-20	139.0-5.47	74.0-2.91	27.0-1.06	4J-0522
567-0265	31.8-1.25	-20	XN4	50.8-2.00	-20	146.7-5.78	88.9-3.50	32.0-1.26	4J-0522
568-1467	31.8-1.25	-20	XN4	60.3-2.37	-24	146.7-5.78	88.9-3.50	30.0-1.18	4J-0524
423-5080	38.1-1.50	-24	XN4	60.3-2.37	-24	168.0-6.61	111.0-4.37	35.0-1.38	4J-0524
423-5083	38.1-1.50	-24	XN4	71.4-2.81	-32	168.0-6.61	111.0-4.37	35.0-1.38	4J-0527
221-0604	50.8-2.00	-32	S4G	71.4-2.81	-32	201.0-7.91	135.0-5.31	52.0-2.05	4J-0527

Flange - Code 61 - 60° Elbow



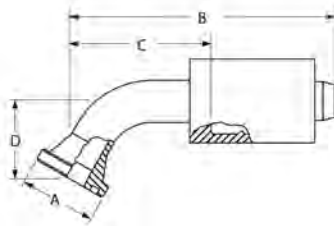
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9147	12.7-.50	-8	XN	30.2-1.19	-8	83.0-3.27	48.7-1.92	27.4-1.08	4J-5140
328-9148	12.7-.50	-8	XN	38.1-1.50	-12	83.0-3.27	48.7-1.92	27.4-1.08	4J-5267
432-2074	19.1-.75	-12	XN	38.1-1.50	-12	116.0-4.57	63.0-2.48	35.0-1.38	4J-5267
432-2087	19.1-.75	-12	XN	44.5-1.75	-16	116.0-4.57	63.0-2.48	35.0-1.38	4J-0520
497-8290	25.4-1.00	-16	XN	44.5-1.75	-16	141.0-5.55	76.0-2.99	39.0-1.54	4J-0520
498-0781	25.4-1.00	-16	XN	50.8-2.00	-20	141.0-5.55	76.0-2.99	39.0-1.54	4J-0522
567-0266	31.8-1.25	-20	XN4	50.8-2.00	-20	151.6-5.97	93.7-3.69	45.0-1.77	4J-0522
589-0044	31.8-1.25	-20	XN4	50.8-2.00	-20	150.2-5.91	92.3-3.63	65.0-2.56	4J-0522
568-1468	31.8-1.25	-20	XN4	60.3-2.37	-24	151.6-5.97	93.7-3.69	42.7-1.68	4J-0524

Permanent Couplings - XT-3ES

Flange - Code 61 - 60° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
423-5084	38.1-1.50	-24	XN4	60.3-2.37	-24	171.0-6.73	114.0-4.49	50.0-1.97	4J-0524
423-5085	38.1-1.50	-24	XN4	71.4-2.81	-32	171.0-6.73	114.0-4.49	50.0-1.97	4J-0527
221-0605	50.8-2.00	-32	S4G	71.4-2.81	-32	203.0-7.99	137.0-5.39	73.0-2.87	4J-0527

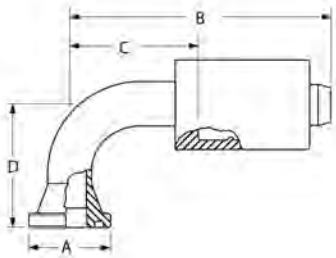
Flange - Code 61 - 67.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9149	12.7-.50	-8	XN	30.2-1.19	-8	81.0-3.19	47.3-1.86	31.5-1.24	4J-5140
328-9150	12.7-.50	-8	XN	38.1-1.50	-12	81.0-3.19	47.3-1.86	31.5-1.24	4J-5267
328-9151	12.7-.50	-8	XN	44.5-1.75	-16	81.0-3.19	47.3-1.86	31.5-1.24	4J-0520
432-2075	19.1-.75	-12	XN	38.1-1.50	-12	115.0-4.53	62.0-2.44	41.0-1.61	4J-5267
432-2088	19.1-.75	-12	XN	44.5-1.75	-16	115.0-4.53	62.0-2.44	41.0-1.61	4J-0520
432-2094	19.1-.75	-12	XN	50.8-2.00	-20	115.0-4.53	62.0-2.44	41.0-1.61	4J-0522
497-8291	25.4-1.00	-16	XN	44.5-1.75	-16	141.0-5.55	76.0-2.99	44.0-1.73	4J-0520
498-0782	25.4-1.00	-16	XN	50.8-2.00	-20	141.0-5.55	76.0-2.99	44.0-1.73	4J-0522
598-6399	31.8-1.25	-20	XN4	50.8-2.00	-20	150.6-5.93	92.3-3.63	51.0-2.01	4J-0522
568-1470	31.8-1.25	-20	XN4	60.3-2.37	-24	151.3-5.96	93.5-3.68	49.3-1.94	4J-0524
423-5086	38.1-1.50	-24	XN4	60.3-2.37	-24	170.0-6.69	113.0-4.45	58.0-2.28	4J-0524
423-5087	38.1-1.50	-24	XN4	71.4-2.81	-32	170.0-6.69	113.0-4.45	58.0-2.28	4J-0527
589-5028	50.8-2.00	-32	S4G	71.4-2.81	-32	203.0-7.99	133.2-5.24	75.0-2.95	4J-0527

Permanent Couplings - XT-3ES

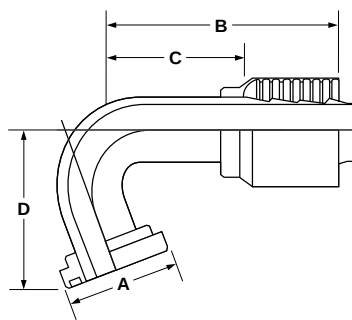
Flange - Code 61 - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6216	9.5-.37	-6	XN	30.2-1.19	-8	68.0-2.68	34.2-1.35	35.6-1.40	4J-5140
323-6217	9.5-.37	-6	XN	30.2-1.19	-8	68.0-2.68	34.2-1.35	40.9-1.61	4J-5140
328-9152	12.7-.50	-8	XN	30.2-1.19	-8	74.0-2.91	39.5-1.56	41.4-1.63	4J-5140
328-9153	12.7-.50	-8	XN	30.2-1.19	-8	74.0-2.91	39.5-1.56	82.5-3.25	4J-5140
328-9154	12.7-.50	-8	XN	38.1-1.50	-12	74.0-2.91	39.5-1.56	41.4-1.63	4J-5267
615-4001	12.7-.50	-8	XN	38.1-1.50	-12	74.0-2.91	39.5-1.56	56.0-2.20	4J-5267
328-9155	12.7-.50	-8	XN	38.1-1.50	-12	74.0-2.91	39.5-1.56	73.1-2.88	4J-5267
328-9156	12.7-.50	-8	XN	44.5-1.75	-16	74.0-2.91	39.5-1.56	41.2-1.62	4J-0520
490-1773	15.9-.63	-10	XN	38.1-1.50	-12	99.0-3.90	46.0-1.81	48.0-1.89	4J-5267
432-2076	19.1-.75	-12	XN	38.1-1.50	-12	107.0-4.21	53.0-2.09	54.0-2.13	4J-5267
432-2077	19.1-.75	-12	XN	38.1-1.50	-12	107.0-4.21	53.0-2.09	96.0-3.78	4J-5267
432-2078	19.1-.75	-12	XN	38.1-1.50	-12	107.0-4.21	53.0-2.09	127.0-5.00	4J-5267
432-2089	19.1-.75	-12	XN	44.5-1.75	-16	107.0-4.21	53.0-2.09	54.0-2.13	4J-0520
432-2090	19.1-.75	-12	XN	44.5-1.75	-16	107.0-4.21	53.0-2.09	79.0-3.11	4J-0520
551-0027	19.1-.75	-12	XN	44.5-1.75	-16	112.0-4.41	50.0-1.97	127.0-5.00	4J-0520
432-2095	19.1-.75	-12	XN	50.8-2.00	-20	107.0-4.21	53.0-2.09	54.0-2.13	4J-0522
497-0465	25.4-1.00	-16	XN	38.1-1.50	-12	126.0-4.96	61.0-2.40	54.0-2.13	4J-5267
497-8292	25.4-1.00	-16	XN	44.5-1.75	-16	135.0-5.31	70.0-2.76	54.0-2.13	4J-0520
497-8293	25.4-1.00	-16	XN	44.5-1.75	-16	135.0-5.31	70.0-2.76	61.0-2.40	4J-0520
497-8294	25.4-1.00	-16	XN	44.5-1.75	-16	140.0-5.51	69.6-2.74	110.0-4.33	4J-0520
497-8295	25.4-1.00	-16	XN	44.5-1.75	-16	135.0-5.31	70.0-2.76	118.0-4.65	4J-0520
497-8297	25.4-1.00	-16	XN	44.5-1.75	-16	135.0-5.31	70.0-2.76	140.0-5.51	4J-0520
497-8298	25.4-1.00	-16	XN	44.5-1.75	-16	140.1-5.52	69.6-2.74	165.0-6.50	4J-0520
498-0783	25.4-1.00	-16	XN	50.8-2.00	-20	135.0-5.31	70.0-2.76	61.0-2.40	4J-0522
498-0784	25.4-1.00	-16	XN	50.8-2.00	-20	135.0-5.31	70.0-2.76	118.0-4.65	4J-0522
498-8392	25.4-1.00	-16	XN	60.3-2.37	-24	135.0-5.31	69.0-2.72	61.0-2.40	4J-0524
498-8393	25.4-1.00	-16	XN	60.3-2.37	-24	140.0-5.51	69.6-2.74	108.0-4.25	4J-0524
568-1475	31.8-1.25	-20	XN4	44.5-1.75	-16	139.0-5.47	81.0-3.19	60.5-2.38	4J-0520
567-0269	31.8-1.25	-20	XN4	50.8-2.00	-20	145.0-5.71	87.1-3.43	68.0-2.68	4J-0522
588-8435	31.8-1.25	-20	XN4	50.8-2.00	-20	130.2-5.13	72.3-2.85	91.0-3.58	4J-0522
588-8437	31.8-1.25	-20	XN4	50.8-2.00	-20	130.2-5.13	72.3-2.85	102.0-4.02	4J-0522
588-8438	31.8-1.25	-20	XN4	50.8-2.00	-20	130.2-5.13	72.3-2.85	111.5-4.39	4J-0522
588-8439	31.8-1.25	-20	XN4	50.8-2.00	-20	130.2-5.13	72.3-2.85	117.5-4.63	4J-0522
588-8440	31.8-1.25	-20	XN4	50.8-2.00	-20	130.2-5.13	72.3-2.85	130.0-5.12	4J-0522
568-1476	31.8-1.25	-20	XN4	71.4-2.81	-32	139.0-5.47	87.0-3.43	67.0-2.64	4J-0527
588-8441	31.8-1.25	-20	XN4	50.8-2.00	-20	130.2-5.13	72.3-2.85	168.0-6.61	4J-0522
568-1473	31.8-1.25	-20	XN4	60.3-2.37	-24	145.2-5.72	87.4-3.44	66.8-2.63	4J-0524
589-2616	31.8-1.25	-20	XN4	60.3-2.37	-24	130.2-5.13	70.6-2.78	79.0-3.11	4J-0524
589-2617	31.8-1.25	-20	XN4	60.3-2.37	-24	130.2-5.13	70.6-2.78	117.5-4.63	4J-0524
589-2618	31.8-1.25	-20	XN4	60.3-2.37	-24	130.2-5.13	70.6-2.78	130.0-5.12	4J-0524
589-2620	31.8-1.25	-20	XN4	71.4-2.81	-32	128.5-5.06	70.6-2.78	79.0-3.11	4J-0527
588-1584	38.1-1.50	-24	XN4	60.3-2.37	-24	162.8-6.41	105.9-4.17	147.5-5.81	4J-0524
588-1585	38.1-1.50	-24	XN4	60.3-2.37	-24	162.8-6.41	105.9-4.17	171.5-6.75	4J-0524
423-5089	38.1-1.50	-24	XN4	60.3-2.37	-24	163.0-6.42	106.0-4.17	79.0-3.11	4J-0524
588-1602	38.1-1.50	-24	XN4	71.4-2.81	-32	162.8-6.41	105.9-4.17	114.5-4.51	4J-0527
588-1611	38.1-1.50	-24	XN4	71.4-2.81	-32	162.8-6.41	105.9-4.17	171.5-6.75	4J-0527
423-5092	38.1-1.50	-24	XN4	71.4-2.81	-32	163.0-6.42	106.0-4.17	79.0-3.11	4J-0527
221-0609	50.8-2.00	-32	S4G	71.4-2.81	-32	190.0-7.48	124.0-4.88	114.0-4.49	4J-0527
589-5025	50.8-2.00	-32	S4G	71.4-2.81	-32	195.1-7.68	125.3-4.93	165.0-6.50	4J-0527
589-5026	50.8-2.00	-32	S4G	71.4-2.81	-32	195.1-7.68	125.3-4.93	203.0-7.99	4J-0527

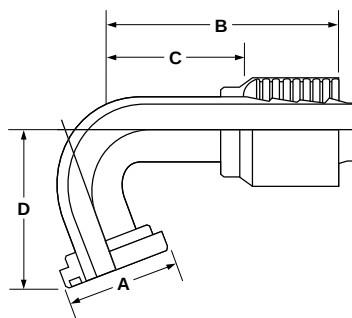
Permanent Couplings - XT-3ES

Flange - Code 61 - 100° Elbow



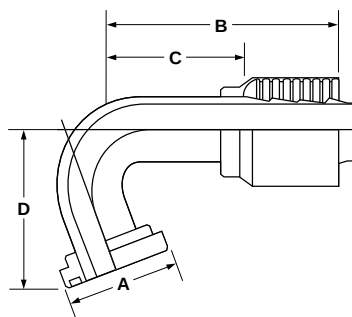
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2079	19.1-.75	-12	XN	38.1-1.50	-12	106.0-4.17	44.0-1.73	59.5-2.34	4J-5267
432-2091	19.1-.75	-12	XN	44.5-1.75	-16	106.0-4.17	44.0-1.73	59.5-2.34	4J-0520

Flange - Code 61 - 110° Elbow



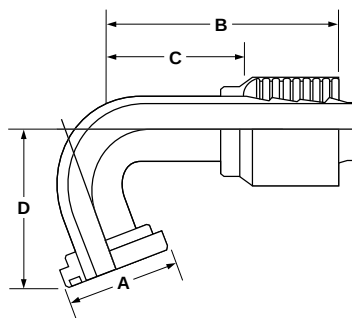
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9157	12.7-.50	-8	XN	38.1-1.50	-12	63.0-2.48	28.3-1.11	49.5-1.95	4J-5267
432-2080	19.1-.75	-12	XN	38.1-1.50	-12	95.0-3.74	41.0-1.61	64.0-2.52	4J-5267
497-8300	25.4-1.00	-16	XN	44.5-1.75	-16	125.0-4.92	59.0-2.32	73.0-2.87	4J-0520
498-0785	25.4-1.00	-16	XN	50.8-2.00	-20	125.0-4.92	59.0-2.32	73.0-2.87	4J-0522
588-8442	31.8-1.25	-20	XN4	50.8-2.00	-20	125.2-4.93	67.3-2.65	79.2-3.12	4J-0522
589-2619	31.8-1.25	-20	XN4	60.3-2.37	-24	125.2-4.93	67.3-2.65	81.0-3.19	4J-0524
589-5024	50.8-2.00	-32	S4G	71.4-2.81	-32	181.9-7.16	112.1-4.41	140.0-5.51	4J-0527

Flange - Code 61 - 120° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
588-1575	38.1-1.50	-24	XN4	60.3-2.37	-24	130.3-5.13	73.4-2.89	119.0-4.69	4J-0524

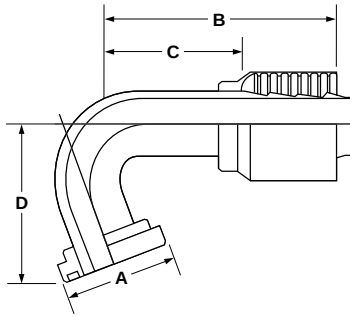
Flange - Code 61 - 125° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
589-5027	50.8-2.00	-32	S4G	71.4-2.81	-32	198.0-7.80	128.2-5.05	150.5-5.93	4J-0527

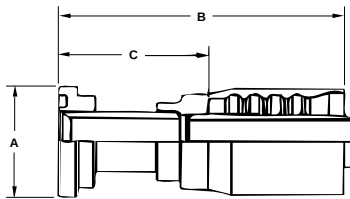
Permanent Couplings - XT-3ES

Code 61 Flange - 135° Elbow



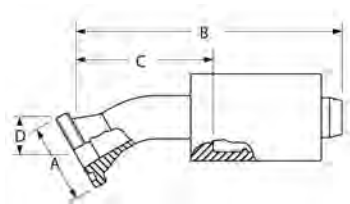
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9158	12.7-.50	-8	XN	30.2-1.19	-8	42.0-1.65	7.7-.30	54.1-2.13	4J-5140
432-2081	19.1-.75	-12	XN	38.1-1.50	-12	116.0-4.57	63.0-2.48	69.0-2.72	4J-5267
432-2092	19.1-.75	-12	XN	44.5-1.75	-16	115.0-4.53	62.0-2.44	70.0-2.76	4J-0520
497-0466	25.4-1.00	-16	XN	38.1-1.50	-12	118.0-4.65	48.0-1.89	70.0-2.76	4J-5267
497-8301	25.4-1.00	-16	XN	44.5-1.75	-16	106.5-4.19	36.0-1.42	87.5-3.44	4J-0520

Flange - Code 62 - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9161	12.7-.50	-8	XN	31.8-1.25	-8	87.0-3.43	52.8-2.08	4J-5140	
328-9162	12.7-.50	-8	XN	41.3-1.63	-12	87.0-3.43	52.8-2.08	4J-5267	
397-1949	15.9-.63	-10	XN	31.8-1.25	-8	86.0-3.39	50.0-1.97	4J-5140	
397-1952	15.9-.63	-10	XN	41.3-1.63	-12	100.0-3.94	54.0-2.13	1P-3702	
432-2099	19.1-.75	-12	XN	41.3-1.63	-12	129.0-5.08	76.0-2.99	4J-5267	
486-9601	19.1-.75	-12	XN	47.6-1.87	-16	130.0-5.12	77.0-3.03	4J-0520	
498-8394	25.4-1.00	-16	XN	41.3-1.63	-12	145.0-5.71	80.0-3.15	4J-5267	
498-8396	25.4-1.00	-16	XN	47.6-1.87	-16	154.0-6.06	89.0-3.50	4J-0520	
498-8405	25.4-1.00	-16	XN	54.0-2.13	-20	154.0-6.06	89.0-3.50	4J-0522	
568-4413	31.8-1.25	-20	XN4	54.0-2.13	-20	111.0-4.37	59.0-2.32	4J0-522	
423-5115	38.1-1.50	-24	XN4	63.5-2.50	-24	122.0-4.80	65.0-2.56	4J-0524	
221-0610	50.8-2.00	-32	S4G	79.4-3.13	-32	157.0-6.18	90.0-3.54	4J-0527	

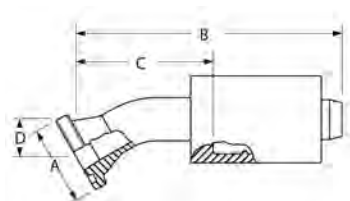
Flange - Code 62 - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
604-0155	12.7-.50	-8	XN	31.8-1.25	-8	98.5-3.88	57.9-2.28	12.9-.51	4J-5140
603-2711	12.7-.50	-8	XN	41.3-1.63	-12	99.9-3.93	59.3-2.33	13.5-.53	4J-5267
603-2206	19.1-.75	-12	XN	47.6-1.87	-16	132.7-5.22	74.1-2.92	17.0-.67	4J-0520
603-2707	19.1-.75	-12	XN	41.3-1.63	-12	127.1-5.00	68.5-2.70	14.7-.58	4J-5267
498-8397	25.4-1.00	-16	XN	47.6-1.87	-16	143.4-5.65	72.9-2.87	14.0-.55	4J-0520
498-8406	25.4-1.00	-16	XN	54.0-2.13	-20	143.4-5.65	72.9-2.87	14.0-.55	4J-0522

Note: Grayscale parts are MAO (Made As Order).

Flange - Code 62 - 30° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
604-0157	12.7-.50	-8	XN	31.8-1.25	-8	97.0-3.82	56.4-2.22	16.5-.65	4J-5140
603-8613	12.7-.50	-8	XN	41.3-1.63	-12	98.1-3.86	57.5-2.26	17.1-.67	4J-5267
603-2708	19.1-.75	-12	XN	41.3-1.63	-12	125.5-4.94	66.9-2.63	18.5-.73	4J-5267
603-2208	19.1-.75	-12	XN	47.6-1.87	-16	130.7-5.15	72.1-2.84	21.5-.85	4J-0520
498-8398	25.4-1.00	-16	XN	47.6-1.87	-16	142.5-5.61	72.0-2.83	17.5-.69	4J-0520

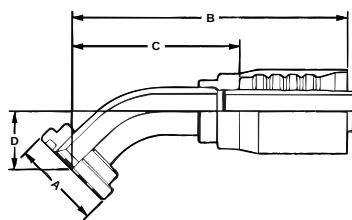
Permanent Couplings - XT-3ES

Flange - Code 62 - 30° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
498-8407	25.4-1.00	-16	XN	54.0-2.13	-20	142.5-5.61	72.0-2.83	17.5-.69	4J-0522

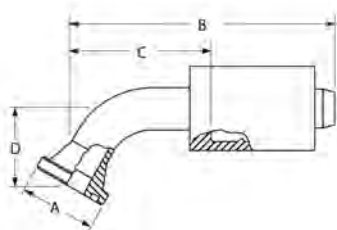
Note: Grayscale parts are MAO (Made As Order).

Flange - Code 62 - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9163	12.7-.50	-8	XN	31.8-1.25	-8	87.0-3.43	52.4-2.06	22.1-.87	4J-5140
603-8614	12.7-.50	-8	XN	41.3-1.63	-12	93.9-3.70	53.3-2.10	23.2-.91	4J-5267
397-1953	15.9-.63	-10	XN	41.3-1.63	-12	107.0-4.21	60.0-2.36	24.0-.94	1P-3702
432-2100	19.1-.75	-12	XN	41.3-1.63	-12	121.0-4.76	67.0-2.64	29.0-1.14	4J-5267
432-2102	19.1-.75	-12	XN	47.6-1.87	-16	121.0-4.76	68.0-2.68	29.0-1.14	4J-0520
559-9498	25.4-1.00	-16	XN	41.3-1.63	-12	136.0-5.35	71.0-2.80	26.0-1.02	4J-5267
498-8399	25.4-1.00	-16	XN	47.6-1.87	-16	145.0-5.71	79.0-3.11	32.0-1.26	4J-0520
498-8400	25.4-1.00	-16	XN	47.6-1.87	-16	170.8-6.72	100.3-3.95	53.0-2.09	4J-0520
498-8408	25.4-1.00	-16	XN	54.0-2.13	-20	145.0-5.71	79.0-3.11	32.0-1.26	4J-0522
568-4415	31.8-1.25	-20	XN4	54.0-2.13	-20	147.0-5.79	94.0-3.70	38.0-1.50	4J-0522

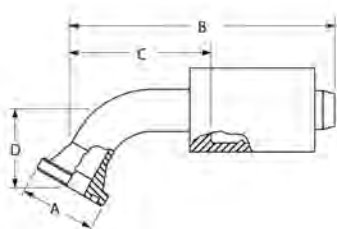
Flange - Code 62 - 60° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
604-0158	12.7-.50	-8	XN	31.8-1.25	-8	88.3-3.48	47.7-1.88	26.0-1.02	4J-5140
603-8615	12.7-.50	-8	XN	41.3-1.63	-12	95.6-3.76	55.0-2.17	38.6-1.52	4J-5267
603-2709	19.1-.75	-12	XN	41.3-1.63	-12	123.3-4.85	64.7-2.55	38.2-1.50	4J-5267
603-2210	19.1-.75	-12	XN	47.6-1.87	-16	127.9-5.04	69.3-2.73	46.2-1.82	4J-0520
498-8409	25.4-1.00	-16	XN	54.0-2.13	-20	149.4-5.88	78.9-3.11	44.0-1.73	4J-0522

Note: Grayscale parts are MAO (Made As Order).

Flange - Code 62 - 67.5° Elbow

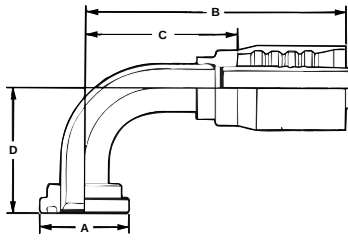


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
604-0161	12.7-.50	-8	XN	31.8-1.25	-8	86.1-3.39	45.5-1.79	27.5-1.08	4J-5140
603-8617	12.7-.50	-8	XN	41.3-1.63	-12	91.4-3.60	50.8-2.00	40.2-1.58	4J-5267
603-2212	19.1-.75	-12	XN	47.6-1.87	-16	123.7-4.87	65.1-2.56	48.5-1.91	4J-0520
603-2710	19.1-.75	-12	XN	41.3-1.63	-12	120.2-4.73	61.6-2.43	40.0-1.57	4J-5267
498-8402	25.4-1.00	-16	XN	47.6-1.87	-16	146.7-5.78	76.2-3.00	46.5-1.83	4J-0520
498-8410	25.4-1.00	-16	XN	54.0-2.13	-20	146.7-5.78	76.2-3.00	46.5-1.83	4J-0522

Note: Grayscale parts are MAO (Made As Order).

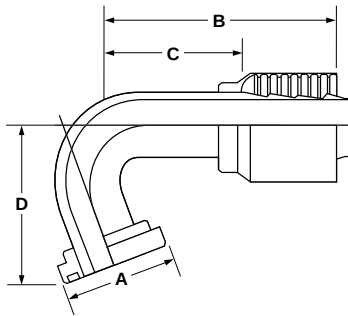
Permanent Couplings - XT-3ES

Flange - Code 62 - 90° Elbow



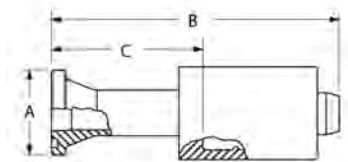
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6220	9.5-.37	-6	XN	31.8-1.25	-8	68.0-2.68	34.2-1.35	44.4-1.75	4J-5140
328-9164	12.7-.50	-8	XN	31.8-1.25	-8	74.0-2.91	39.5-1.56	44.4-1.75	4J-5140
603-8619	12.7-.50	-8	XN	41.3-1.63	-12	79.9-3.15	39.3-1.55	58.0-2.28	4J-5267
397-1951	15.9-.63	-10	XN	31.8-1.25	-8	93.0-3.66	47.0-1.85	45.0-1.77	4J-5140
397-1954	15.9-.63	-10	XN	41.3-1.63	-12	94.0-3.70	47.0-1.85	48.0-1.89	1P-3702
432-2101	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	55.0-2.17	4J-5267
432-2103	19.1-.75	-12	XN	47.6-1.87	-16	107.0-4.21	53.0-2.09	59.0-2.32	4J-0520
603-2213	19.1-.75	-12	XN	47.6-1.87	-16	112.0-4.41	53.4-2.10	70.0-2.76	4J-0520
498-8395	25.4-1.00	-16	XN	41.3-1.63	-12	126.0-4.96	61.0-2.40	59.0-2.32	4J-5267
498-8403	25.4-1.00	-16	XN	47.6-1.87	-16	135.0-5.31	70.0-2.76	70.0-2.76	4J-0520
498-8404	25.4-1.00	-16	XN	47.6-1.87	-16	140.1-5.52	69.6-2.74	101.5-4.00	4J-0520
498-8411	25.4-1.00	-16	XN	54.0-2.13	-20	135.0-5.31	70.0-2.76	70.0-2.76	4J-0522
568-4418	31.8-1.25	-20	XN4	54.0-2.13	-20	140.0-5.51	87.0-3.43	75.0-2.95	4J-0522

Flange - Code 62 - 110° Elbow



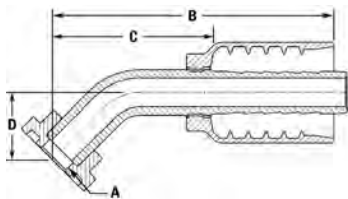
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
582-4914	25.4-1.00	-16	XN	47.6-1.87	-16	125.5-4.94	154.6-6.09	85.0-3.35	4J-0520

Flange - Komatsu Style - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	A HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
328-9167	12.7-.50	-8	XN	-10	34.0-1.34	84.0-3.31	49.7-1.96	4J-8996
397-1966	15.9-.63	-10	XN	-10	34.1-1.34	96.0-3.78	49.7-1.96	4J-8996

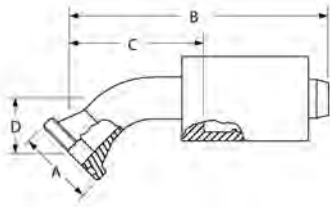
Flange - Komatsu Style - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	A HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9168	12.7-.50	-8	XN	-10	34.1-1.34	85.0-3.35	51.0-2.01	21.0-.83	4J-8996
416-2094	15.9-.63	-10	XN	-10	34.1-1.34	108.2-4.26	61.8-2.4	25.9-1.0	4J-8996

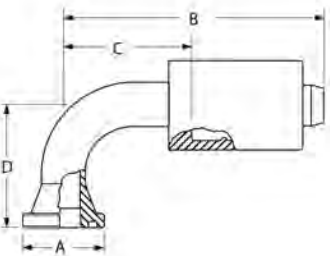
Permanent Couplings - XT-3ES

Flange - Komatsu Style - 60° Elbow



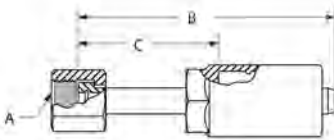
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	A HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9169	12.7-.50	-8	XN	-10	34.0-1.34	83.0-3.27	48.7-1.92	27.4-1.08	4J-8996

Flange - Komatsu Style - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	A HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9170	12.7-.50	-8	XN	-10	34.0-1.34	74.0-2.91	39.5-1.56	41.4-1.63	4J-8996
397-1967	15.9-.63	-10	XN	-10	34.1-1.34	93.5-3.68	47.1-1.85	55.1-2.17	4J-8996

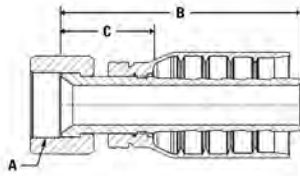
JIC 37° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6180	9.5-.37	-6	XN	7/16-20	-4	55.0-2.17	22.0-.87
550-3569	9.5-.37	-6	XN	1/2-20	-5	60.0-2.36	20.2-.80
323-6181	9.5-.37	-6	XN	9/16-18	-6	54.0-2.13	20.0-.79
323-6182	9.5-.37	-6	XN	3/4-16	-8	66.0-2.60	22.0-.87
328-9109	12.7-.50	-8	XN	3/4-16	-8	57.0-3.24	23.0-.91
328-9111	12.7-.50	-8	XN	7/8-14	-10	58.0-2.28	24.0-.94
333-9957	12.7-.50	-8	XN	7/8-14	-10	156.0-6.14	122.0-4.80
328-9112	12.7-.50	-8	XN	1 1/16-12	-12	58.0-2.28	24.0-.94
397-1940	15.9-.63	-10	XN	7/8-14	-10	94.0-3.70	47.0-1.85
397-1943	15.9-.63	-10	XN	1 1/16-12	-12	95.0-3.74	48.0-1.89
432-2039	19.1-.75	-12	XN	7/8-14	-10	89.0-3.50	35.0-1.38
432-2028	19.1-.75	-12	XN	1 1/16-12	-12	90.0-3.54	36.0-1.42
432-2035	19.1-.75	-12	XN	1 5/16-12	-16	94.0-3.70	40.0-1.57
499-1158	25.4-1.00	-16	XN	1 5/16-12	-16	102.0-4.02	37.0-1.46
499-1169	25.4-1.00	-16	XN	1 5/8-12	-20	111.0-4.37	40.0-1.57
571-9276	31.8-1.25	-20	XN4	1 5/8-12	-20	98.5-3.88	41.0-1.61
423-5103	38.1-1.50	-24	XN4	1 7/8-12	-24	112.0-4.41	55.0-2.17
221-0581	50.8-2.00	-32	S4G	2 1/2-12	-32	144.0-5.67	75.0-2.95

Permanent Couplings - XT-3ES

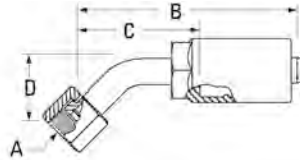
JIC 37° Female Swivel High Pressure - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
592-1114	25.4-1.00	-16	XN	1 5/16-12	-16	111.0-4.37	46.0-1.81

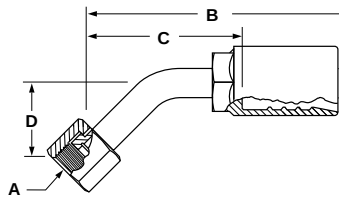
Note: Oversized Hex nut for High Pressure Rating

JIC 37° Female Swivel - 30° Elbow



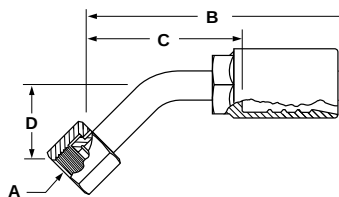
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
499-1159	25.4-1.00	-16	XN	1 5/16-12	-16	159.0-6.26	88.5-3.48	27.0-1.06

JIC 37° Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6183	9.5-.37	-6	XN	9/16-18	-6	70.0-2.76	36.6-1.44	9.9-.39
323-6184	9.5-.37	-6	XN	9/16-18	-6	75.0-2.95	41.7-1.64	15.0-.59
323-6185	9.5-.37	-6	XN	9/16-18	-6	88.0-3.46	54.7-2.15	27.9-1.10
323-6186	9.5-.37	-6	XN	3/4-16	-8	74.0-2.91	40.7-1.60	14.0-.55
323-6187	9.5-.37	-6	XN	3/4-16	-8	78.0-3.07	44.2-1.74	17.5-.69
323-6188	9.5-.37	-6	XN	3/4-16	-8	88.0-3.46	54.2-2.13	27.4-1.08
328-9113	12.7-.50	-8	XN	3/4-16	-8	78.0-3.07	44.3-1.74	14.0-.55
328-9114	12.7-.50	-8	XN	3/4-16	-8	82.0-3.23	47.8-1.88	17.5-.69
328-9115	12.7-.50	-8	XN	3/4-16	-8	93.0-3.66	59.0-2.32	28.6-1.13
328-9117	12.7-.50	-8	XN	7/8-14	-10	87.0-3.43	52.7-2.07	22.4-.88
328-9118	12.7-.50	-8	XN	7/8-14	-10	93.0-3.66	59.3-2.33	29.0-1.14
397-1941	15.9-.63	-10	XN	7/8-14	-10	105.0-4.13	58.0-2.28	22.0-.87
432-2029	19.1-.75	-12	XN	1 1/16-12	-12	124.0-4.88	71.0-2.80	32.0-1.26
432-2036	19.1-.75	-12	XN	1 5/16-12	-16	119.0-4.69	65.0-2.56	27.0-1.06
499-1160	25.4-1.00	-16	XN	1 5/16-12	-16	142.0-5.59	77.0-3.03	30.0-1.18
499-1161	25.4-1.00	-16	XN	1 5/16-12	-16	155.0-6.10	89.0-3.50	42.0-1.65
620-2949	31.8-1.25	-20	XN4	1 5/8-12	-20	148.0-5.83	90.0-3.54	27.5-1.08
568-7367	31.8-1.25	-20	XN4	1 5/8-12	-20	164.0-6.46	106.0-4.17	44.0-1.73
620-5146	38.1-1.50	-24	XN4	1 7/8-12	-24	184.0-7.24	127.0-5.00	51.0-2.01

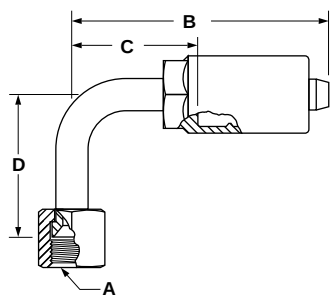
JIC 37° Female Swivel - 60° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
328-9130	12.7-.50	-8	XN	7/8-14	-10	89.0-3.50	55.2-2.17	38.6-1.52
432-2030	19.1-.75	-12	XN	1 1/16-12	-12	121.0-4.76	68.0-2.68	44.0-1.73

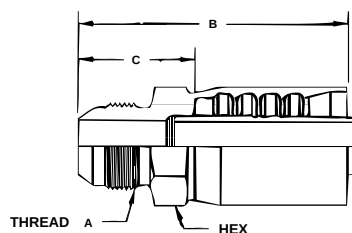
Permanent Couplings - XT-3ES

JIC 37° Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6200	9.5-.37	-6	XN	9/16-18	-6	57.5-2.26	24.0-.94	41.0-1.61
323-6189	9.5-.37	-6	XN	9/16-18	-6	68.0-2.68	34.2-1.35	21.8-.86
323-6192	9.5-.37	-6	XN	9/16-18	-6	68.0-2.68	34.2-1.35	27.9-1.10
323-6193	9.5-.37	-6	XN	9/16-18	-6	68.0-2.68	34.2-1.35	46.0-1.81
323-6191	9.5-.37	-6	XN	9/16-18	-6	68.0-2.68	34.2-1.35	55.6-2.19
323-6194	9.5-.37	-6	XN	9/16-18	-6	68.0-2.68	34.2-1.35	82.6-3.25
323-6196	9.5-.37	-6	XN	3/4-16	-8	68.0-2.68	34.2-1.35	35.1-1.38
323-6198	9.5-.37	-6	XN	3/4-16	-8	68.0-2.68	34.2-1.35	46.0-1.81
323-6197	9.5-.37	-6	XN	3/4-16	-8	68.0-2.68	34.2-1.35	63.5-2.50
323-6199	9.5-.37	-6	XN	3/4-16	-8	68.0-2.68	34.2-1.35	82.6-3.25
328-9119	12.7-.50	-8	XN	3/4-16	-8	74.0-2.91	39.5-1.56	27.7-1.09
328-9120	12.7-.50	-8	XN	3/4-16	-8	74.0-2.91	39.5-1.56	35.1-1.38
328-9122	12.7-.50	-8	XN	3/4-16	-8	74.0-2.91	39.5-1.56	53.6-2.11
328-9121	12.7-.50	-8	XN	3/4-16	-8	74.0-2.91	39.5-1.56	63.5-2.50
328-9123	12.7-.50	-8	XN	3/4-16	-8	74.0-2.91	39.5-1.56	92.0-3.62
328-9124	12.7-.50	-8	XN	3/4-16	-8	74.0-2.91	39.5-1.56	114.1-4.49
328-9125	12.7-.50	-8	XN	7/8-14	-10	74.0-2.91	39.5-1.56	31.2-1.23
328-9126	12.7-.50	-8	XN	7/8-14	-10	74.0-2.91	39.5-1.56	44.5-1.75
328-9128	12.7-.50	-8	XN	7/8-14	-10	74.0-2.91	39.5-1.56	54.1-2.13
328-9129	12.7-.50	-8	XN	7/8-14	-10	74.0-2.91	39.5-1.56	82.6-3.25
333-9958	12.7-.50	-8	XN	7/8-14	-10	74.0-2.91	39.5-1.56	114.1-4.49
397-1942	15.9-.63	-10	XN	7/8-14	-10	94.0-3.70	47.0-1.85	47.0-1.85
397-1944	15.9-.63	-10	XN	1 1/16-12	-12	94.0-3.70	47.0-1.85	52.0-2.05
483-7179	19.1-.75	-12	XN	7/8-14	-10	112.0-4.41	53.4-2.10	47.0-1.85
432-2031	19.1-.75	-12	XN	1 1/16-12	-12	107.0-4.21	54.0-2.13	46.0-1.81
432-2032	19.1-.75	-12	XN	1 1/16-12	-12	107.0-4.21	54.0-2.13	52.0-2.05
432-2033	19.1-.75	-12	XN	1 1/16-12	-12	107.0-4.21	54.0-2.13	65.0-2.56
432-2034	19.1-.75	-12	XN	1 1/16-12	-12	107.0-4.21	54.0-2.13	92.0-3.62
432-2037	19.1-.75	-12	XN	1 5/16-12	-16	107.0-4.21	54.0-2.13	64.0-2.52
432-2038	19.1-.75	-12	XN	1 5/16-12	-16	107.0-4.21	54.0-2.13	80.0-3.15
499-1164	25.4-1.00	-16	XN	1 5/16-12	-16	135.0-5.31	70.0-2.76	66.0-2.60
499-1166	25.4-1.00	-16	XN	1 5/16-12	-16	135.0-5.31	70.0-2.76	112.0-4.41
499-1168	25.4-1.00	-16	XN	1 5/16-12	-16	140.1-5.52	69.6-2.74	142.5-5.61
620-2950	31.8-1.25	-20	XN4	1 5/8-12	-20	145.0-5.71	87.0-3.43	64.0-2.52
569-4977	31.8-1.25	-20	XN4	1 5/8-12	-20	145.0-5.71	87.0-3.43	93.0-3.66
620-5147	38.1-1.50	-24	XN4	1 7/8-12	-24	163.0-6.42	106.0-4.17	100.0-3.94

JIC 37° Male - Straight



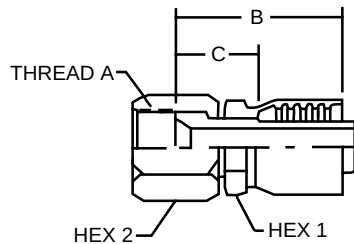
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6201	9.5-.38	-6	XN	9/16-18	-6	65.0-2.56	32.0-1.26
323-6202	9.5-.38	-6	XN	3/4-16	-8	69.0-2.72	36.0-1.42
328-9131	12.7-.50	-8	XN	3/4-16	-8	71.0-2.80	36.5-1.44
328-9132	12.7-.50	-8	XN	7/8-14	-10	70.0-2.76	36.0-1.42
598-6419	12.7-.50	-8	XN	1 1/16-12	-12	80.5-3.17	40.1-1.58
397-1945	15.9-.63	-10	XN	7/8-14	-10	89.5-3.52	38.0-1.50

Permanent Couplings - XT-3ES

JIC 37° Male - Straight (Cont'd.)

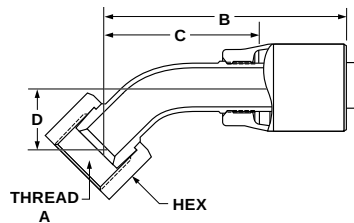
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
397-1946	15.9-.63	-10	XN	1 1/16-12	-12	92.0-3.62	41.0-1.61
432-2040	19.1-.75	-12	XN	1 1/16-12	-12	95.0-3.74	41.0-1.61
432-2041	19.1-.75	-12	XN	1 5/16-12	-16	101.0-3.98	47.0-1.85
499-1170	25.4-1.00	-16	XN	1 5/16-12	-16	119.0-4.69	48.5-1.91
570-1099	31.8-1.25	-20	XN4	1 5/8-12	-20	107.0-4.21	49.0-1.93

JIS (Komatsu Style), Metric Swivel, 30° Female Seat - Straight



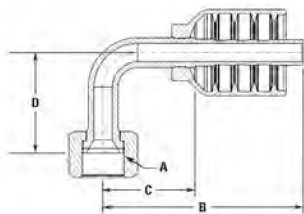
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6228	9.5-.37	-6	XN	M18 x 1.5	55.0-2.17	21.2-.83
328-9175	12.7-.50	-8	XN	M22 x 1.5	55.0-2.17	21.0-.83
397-1956	15.9-.63	-10	XN	M24 x 1.5	87.0-3.43	35.0-1.38
432-2139	19.1-.75	-12	XN	M30 x 1.5	95.0-3.74	41.0-1.61
499-1178	25.4-1.00	-16	XN	M33 x 1.5	98.0-3.86	33.0-1.30
423-5168	38.1-1.50	-24	XN4	M42 x 1.5	114.0-4.49	57.1-2.25

JIS (Komatsu Style), Metric Swivel, 30° Female Seat - 45° Elbow



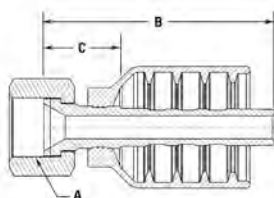
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6229	9.5-.37	-6	XN	M18 x 1.5	82.0-3.23	48.3-1.90	21.6-.85
328-9176	12.7-.50	-8	XN	M22 x 1.5	94.0-3.70	59.8-2.35	29.5-1.16
397-1957	15.9-.63	-10	XN	M24 x 1.5	104.7-4.12	58.3-2.30	22.4-.88
503-0664	19.1-.75	-12	XN	M30 x 1.5	124.2-4.89	65.5-2.58	27.0-1.06

JIS (Komatsu Style), Metric Swivel, 30° Female Seat - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6230	9.5-.37	-6	XN	M18 x 1.5	67.6-2.66	33.9-1.33	38.1-1.50
328-9177	12.7-.50	-8	XN	M22 x 1.5	73.7-2.90	39.4-1.55	50.8-2.00
397-1958	15.9-.63	-10	XN	M24 x 1.5	93.5-3.68	47.1-1.85	44.5-1.75
432-2140	19.1-.75	-12	XN	M30 x 1.5	112.1-4.41	53.4-2.10	52.3-2.06
600-4494	25.4-1.00	-16	XN	M33 x 1.5	140.1-5.52	69.6-2.74	70.0-2.76

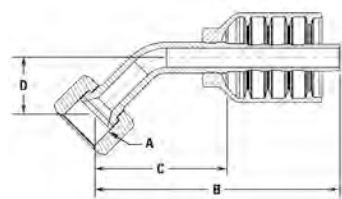
JIS Female Swivel Parallel Pipe w/ 30° Female Seat - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
519-4716	9.5-.37	-6	XN	3/8-19	-6	53-2.09	20-0.79
519-3997	12.7-.50	-8	XN	1/2-14	-8	57-2.24	24-0.94
519-4009	19.1-.75	-12	XN	3/4-14	-12	91-3.58	38-1.50
580-4113	25.4-1.00	-16	XN	1-11	-16	107-4.21	36-1.42

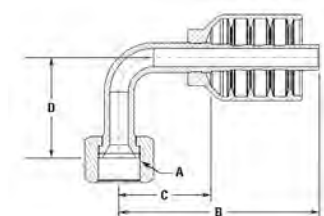
Permanent Couplings - XT-3ES

JIS Female Swivel Parallel Pipe w/ 30° Female Seat - 45° Elbow



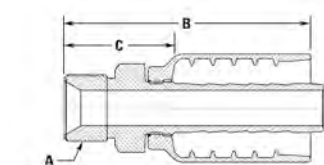
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
519-4717	9.5-.37	-6	XN	3/8-19	-6	80-3.15	47-1.85	20-0.79
519-3998	12.7-.50	-8	XN	1/2-14	-8	84-3.31	50-1.97	22-0.87
519-4010	19.1-.75	-12	XN	3/4-14	-12	120-4.72	68-2.68	29-1.14
580-4114	25.4-1.00	-16	XN	1-11	-16	160-6.30	89-3.50	35-1.38

JIS Female Swivel Parallel Pipe w/ 30° Female Seat - 90° Elbow



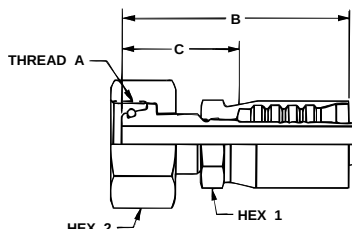
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
519-4718	9.5-.37	-6	XN	3/8-19	-6	67-2.64	34-1.34	37-1.46
519-3999	12.7-.50	-8	XN	1/2-14	-8	73-2.87	40-1.57	41-1.61
519-4011	19.1-.75	-12	XN	3/4-14	-12	106-4.17	53-2.09	58-2.28
580-4115	25.4-1.00	-16	XN	1-11	-16	140-5.51	69-2.72	70-2.76

JIS Male Parallel Pipe w/ 30° Female Seat - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6231	9.5-.37	-6	XN	3/8-19	-6	66.0-2.60	32.5-1.28
328-9178	12.7-.50	-8	XN	1/2-14	-8	72.0-2.83	38.0-1.50
518-0280	19.1-.75	-12	XN	3/4-14	-12	97-3.82	44-1.73
518-0281	25.4-1.00	-16	XN	1-11	-16	112-4.41	46-1.81

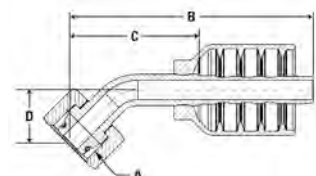
Metric DIN Light (L) 24° O-Ring Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
503-7987	9.5-.37	-6	XN	M18 x 1.5	72.0-2.83	32.0-1.26	3E-4297
503-4447	12.7-.50	-8	XN	M22 x 1.5	75.0-2.95	34.6-1.36	3E-4298
591-1725	15.9-.63	-10	XN	M26 x 1.5	95.5-3.76	44.0-1.73	122-9250
605-3265	15.9-.63	-10	XN	M30 x 2.0	86.0-3.39	34.0-1.34	3E-6761
591-1726	19.1-.75	-12	XN	M26 x 1.5	103.0-4.06	43.0-1.69	122-9250
604-1592	19.1-.75	-12	XN	M30 x 2.0	100.0-3.94	42.0-1.65	3E-6761
595-3619	25.4-1.00	-16	XN	M36 x 2.00	127.0-5.00	55.6-2.19	092-2304

Note: Grayscale parts are MAO (Made As Order).

Metric DIN Light (L) 24° O-Ring Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
503-7988	9.5-.37	-6	XN	M18 x 1.5	78.0-3.07	45.0-1.77	19.0-0.75	3E-4297
503-4448	12.7-.50	-8	XN	M22 x 1.5	83.0-3.27	50.0-1.97	20.0-0.79	3E-4298
591-1727	15.9-.63	-10	XN	M26 x 1.5	110.0-4.33	58.5-2.30	23.5-.93	122-9250

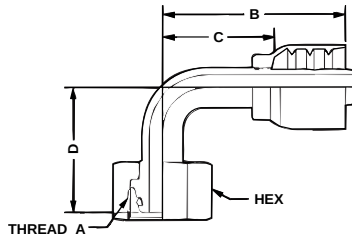
Permanent Couplings - XT-3ES

Metric DIN Light (L) 24° O-Ring Female Swivel - 45° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
591-1728	19.1-.75	-12	XN	M26 x 1.5	129.0-5.08	68.0-2.68	23.5-.93	122-9250
611-8372	19.1-.75	-12	XN	M30 x 2.0	123.0-4.84	61.5-2.42	25.5-1.00	3E-6761
569-5368	25.4-1.00	-16	XN	M36 x 2.0	150.0-5.91	79.0-3.11	32.0-1.26	092-2304

Note: Grayscale parts are MAO (Made As Order).

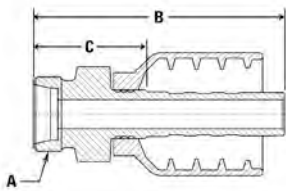
Metric DIN Light (L) 24° O-Ring Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
503-7989	9.5-.37	-6	XN	M18 x 1.5	74.0-2.91	34.0-1.34	36.0-1.42	3E-4297
503-4449	12.7-.50	-8	XN	M22 x 1.5	80.0-3.15	39.6-1.56	40.5-1.59	3E-4298
591-1729	15.9-.63	-10	XN	M26 x 1.5	99.0-3.90	46.0-1.81	51.5-2.03	122-9250
591-5077	19.1-.75	-12	XN	M26 x 1.5	106.0-4.17	45.0-1.77	51.5-2.03	122-9250
611-8374	19.1-.75	-12	XN	M30 x 2.0	112.0-4.41	51.0-2.01	56.0-2.20	3E-6761
569-6528	25.4-1.00	-16	XN	M36 x 2.0	140.0-5.51	69.0-2.72	68.5-2.70	092-2304

Note: Grayscale parts are MAO (Made As Order).

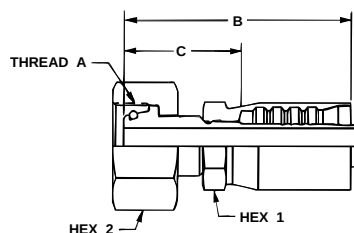
Metric DIN Light (L) 24° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
502-6079	12.7-.50	-8	XN	M22 x 1.5	73.5-2.89	33.1-1.30

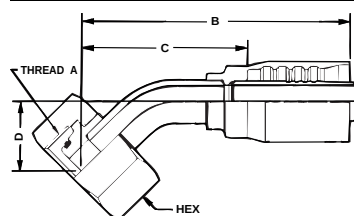
Permanent Couplings - XT-3ES

Metric DIN Heavy (S) 24° O-Ring Female Swivel - Straight



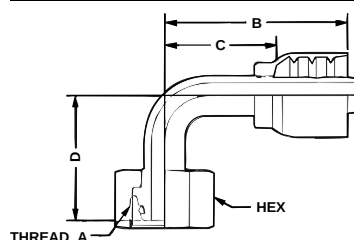
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6232	9.5-.37	-6	XN	M20 x 1.5	64.0-2.52	30.9-1.22	3E-4297
323-6233	9.5-.37	-6	XN	M22 x 1.5	68.0-2.68	34.4-1.35	3E-4298
431-9023	9.5-.37	-6	XN	M18 x 1.5	71.0-2.80	31.0-1.22	3E-4296
328-9179	12.7-.50	-8	XN	M24 x 1.5	70.0-2.76	36.2-1.43	8U-6457
397-1962	15.9-.63	-10	XN	M30 x 2.0	99.0-3.90	53.0-2.09	3E-4299
591-5078	19.1-.75	-12	XN	M30 x 2.0	109.5-4.31	50.0-1.97	3E-4299
432-2128	19.1-.75	-12	XN	M36 x 2.0	110.0-4.33	56.0-2.20	3E-6762
499-1171	25.4-1.00	-16	XN	M36 x 2.0	122.0-4.80	57.0-2.24	3E-6762
499-1172	25.4-1.00	-16	XN	M42 x 2.0	124.0-4.88	59.0-2.32	3E-6763
571-9277	31.8-1.25	-20	XN4	M52 x 2.0	113.0-4.45	55.0-2.17	460-6296

Metric DIN Heavy (S) 24° O-Ring Female Swivel - 45° Elbow



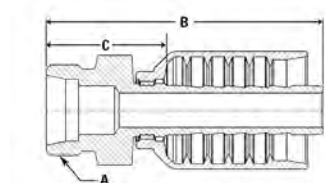
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6234	9.5-.37	-6	XN	M20 x 1.5	89.0-3.50	48.0-1.89	22.0-.87	3E-4297
323-6235	9.5-.37	-6	XN	M22 x 1.5	82.0-3.23	49.0-1.93	22.0-.87	3E-4298
328-9180	12.7-.50	-8	XN	M25 x 1.5	95.0-3.74	53.0-2.09	24.0-.94	8U-6457
397-1963	15.9-.63	-10	XN	M30 x 2.0	116.0-4.57	63.0-2.48	28.5-1.12	3E-4299
591-5079	19.1-.75	-12	XN	M30 x 2.0	122.0-4.80	61.0-2.40	25.0-.98	3E-4299
432-2129	19.1-.75	-12	XN	M36 x 2.0	122.0-4.80	69.0-2.72	30.0-1.18	3E-6762
499-1173	25.4-1.00	-16	XN	M42 x 2.0	150.0-5.91	85.0-3.35	38.0-1.50	3E-6733

Metric DIN Heavy (S) 24° O-Ring Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6237	9.5-.37	-6	XN	M22 x 1.5	68.0-2.68	34.0-1.34	38.0-1.50	3E-4298
431-9024	9.5-.37	-6	XN	M18 x 1.5	74.0-2.91	33.0-1.30	38.0-1.50	3E-4296
323-6236	9.5-.37	-6	XN	M20 x 1.5	74.0-2.91	33.5-1.32	38.0-1.50	3E-4297
328-9181	12.7-.50	-8	XN	M24 x 1.5	80.0-3.15	39.0-1.54	44.0-1.73	8U-6457
397-1964	15.9-.63	-10	XN	M30 x 2.0	98.5-3.88	46.0-1.81	55.0-2.17	3E-4299
591-1730	19.1-.75	-12	XN	M30 x 2.0	112.0-4.41	51.0-2.01	49.5-1.95	3E-4299
432-2130	19.1-.75	-12	XN	M36 x 2.0	112.0-4.41	51.0-2.01	58.0-2.28	3E-6762
499-1174	25.4-1.00	-16	XN	M42 x 2.0	140.0-5.51	70.0-2.76	76.0-2.99	3E-6763

Metric DIN Heavy (S) 24° Male - Straight



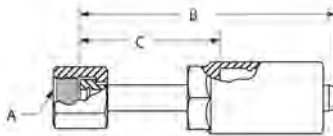
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6238	9.5-.37	-6	XN	M20 x 1.5	65.0-2.56	31.0-1.22
323-6239	9.5-.37	-6	XN	M22 x 1.5	66.0-2.60	33.0-1.33
328-9182	12.7-.5	-8	XN	M24 x 1.5	68.0-2.68	34.0-1.34
397-1965	15.9-.63	-10	XN	M30 x 2.0	91.0-3.58	40.0-1.57
552-7464	19.1-.75	-12	XN	M30 x 2.0	98.0-3.86	37.0-1.46

Permanent Couplings - XT-3ES

Metric DIN Heavy (S) 24° Male - Straight (Cont'd.)

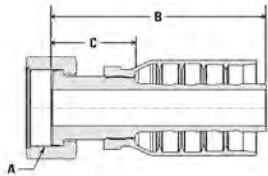
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
552-7423	19.1-.75	-12	XN	M36 x 2.0	102.0-4.02	41.0-1.61
541-4980	25.4-1.00	-16	XN	M42 x 2.0	115.0-4.53	46.0-1.81

ORFS Female Swivel - Straight



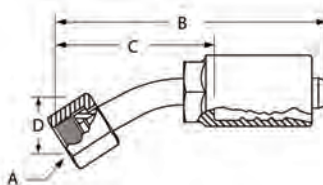
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6156	9.5-.37	-6	XN	9/16-18	-4	60.0-2.36	26.1-1.03	4J-5477
323-6157	9.5-.37	-6	XN	11/16-16	-6	62.0-2.44	28.3-1.11	6V-8397
323-6158	9.5-.37	-6	XN	13/16-16	-8	66.0-2.60	32.3-1.27	6V-8398
323-6159	9.5-.37	-6	XN	1-14	-10	68.0-2.68	34.8-1.37	7J-9108
328-9089	12.7-.50	-8	XN	11/16-16	-6	67.0-2.64	32.4-1.28	6V-8397
328-9090	12.7-.50	-8	XN	13/16-16	-8	67.0-2.64	33.1-1.30	6V-8398
328-9091	12.7-.50	-8	XN	1-14	-10	70.0-2.76	35.6-1.40	7J-9108
328-9092	12.7-.50	-8	XN	1 3/16-16	-12	72.0-2.83	38.1-1.50	6V-9746
447-3114	15.9-.63	-10	XN	13/16-16	-8	95.0-3.74	44.0-1.73	6V-8398
397-1924	15.9-.63	-10	XN	1-14	-10	92.0-3.62	46.0-1.81	7J-9108
397-1937	15.9-.63	-10	XN	1 3/16-12	-12	95.0-3.74	48.0-1.89	6V-9746
432-2022	19.1-.75	-12	XN	1-14	-10	102.0-4.02	48.0-1.89	7J-9108
432-2008	19.1-.75	-12	XN	1 3/16-12	-12	104.0-4.09	50.0-1.97	6V-9746
432-2019	19.1-.75	-12	XN	1 7/16-12	-16	104.0-4.09	51.0-2.01	5K-9090
499-1141	25.4-1.00	-16	XN	1 3/16-12	-12	112.0-4.41	47.0-1.85	6V-9746
499-1142	25.4-1.00	-16	XN	1 7/16-12	-16	118.0-4.65	53.0-2.09	5K-9090
499-1154	25.4-1.00	-16	XN	1 11/16-12	-20	118.0-4.65	53.0-2.09	6V-8400
570-4869	31.8-1.25	-20	XN4	1 11/16-12	-20	104.0-4.09	46.0-1.81	6V-8400
423-5099	38.1-1.50	-24	XN4	2-12	-24	120.0-4.72	63.0-2.48	8T-0315

ORFS Female Swivel High Vibration - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
389-1122	12.7-.50	-8	XN	1-14	-10	74.0-2.91	39.0-1.54	7J-9108
397-1939	15.9-.63	-10	XN	1 3/16-12	-12	94.0-3.70	42.0-1.65	6V-9746
432-2143	19.1-.75	-12	XN	1 7/16-12	-16	104.0-4.09	51.0-2.01	5K-9090
539-3856	25.4-1.00	-16	XN	1 11/16-12	-20	117.0-4.61	46.0-1.81	6V-8400
617-9108	31.8-1.25	-20	XN4	2-12	-24	106.0-4.17	62.0-2.44	8T-0315

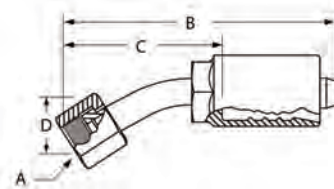
ORFS Female Swivel - 15° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2009	19.1-.75	-12	XN	1 3/16-12	-12	118.0-4.65	59.0-2.32	7.5-.30	6V-9746
558-7587	19.1-.75	-12	XN	1 3/16-12	-12	131.0-5.16	72.0-2.83	7.5-.30	6V-9746

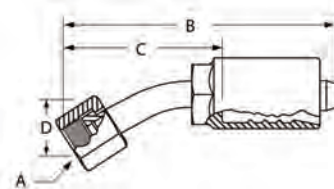
Permanent Couplings - XT-3ES

ORFS Female Swivel - 22.5° Elbow



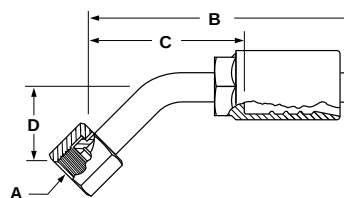
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
499-1143	25.4-1.00	-16	XN	1 7/16-12	-16	134.0-5.28	63.0-2.48	10.0-.39	5K-9090

ORFS Female Swivel - 30° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6173	9.5-.37	-6	XN	11/16-16	-6	78.0-3.07	44.2-1.74	11.2-.44	6V-8397
328-9107	12.7-.50	-8	XN	13/16-16	-8	86.0-3.39	51.8-2.04	13.7-.54	6V-8398
397-1926	15.9-.63	-10	XN	1-14	-10	107.0-4.21	61.0-2.40	16.0-.63	7J-9108
432-2010	19.1-.75	-12	XN	1 3/16-12	-12	111.0-4.37	57.0-2.24	13.0-.51	6V-9746
432-2011	19.1-.75	-12	XN	1 3/16-12	-12	119.0-4.69	65.0-2.56	18.0-.71	6V-9746
432-2012	19.1-.75	-12	XN	1 3/16-12	-12	133.0-5.24	78.0-3.07	26.0-1.02	6V-9746
568-1579	19.1-.75	-12	XN	1 3/16-12	-12	151.0-5.94	92.0-3.62	26.0-1.02	6V-9746
499-1144	25.4-1.00	-16	XN	1 7/16-12	-16	145.0-5.71	75.0-2.95	19.0-.75	5K-9090
569-4974	31.8-1.25	-20	XN4	1 11/16-12	-20	172.0-6.77	114.0-4.49	17.0-.67	6V-8400

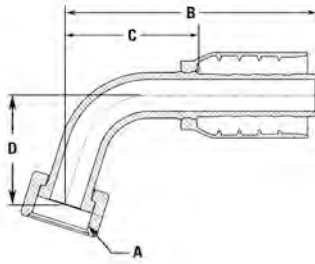
ORFS Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
384-3442	9.5-.37	-6	XN	9/16-8	-4	76.0-2.99	35.0-1.38	10.0-.39	4J-5477
323-6160	9.5-.37	-6	XN	11/16-16	-6	72.0-2.83	37.6-1.48	10.9-.43	6V-8397
323-6161	9.5-.37	-6	XN	11/16-16	-6	75.0-2.95	41.6-1.64	15.0-.59	6V-8397
323-6162	9.5-.37	-6	XN	11/16-16	-6	78.0-3.07	44.1-1.74	17.5-.69	6V-8397
323-6163	9.5-.37	-6	XN	13/16-16	-8	75.0-2.95	41.7-1.64	15.0-.59	6V-8398
328-9093	12.7-.50	-8	XN	13/16-16	-8	80.0-3.15	45.2-1.78	15.0-.59	6V-8398
328-9094	12.7-.50	-8	XN	13/16-16	-8	86.0-3.39	51.9-2.04	21.6-.85	6V-8398
328-9095	12.7-.50	-8	XN	1-14	-10	81.0-3.19	46.7-1.84	16.5-.65	7J-9108
328-9096	12.7-.50	-8	XN	1-14	-10	86.0-3.39	51.8-2.04	21.6-.85	7J-9108
397-1927	15.9-.63	-10	XN	1-14	-10	98.0-3.86	52.0-2.05	16.0-.63	7J-9108
444-6447	15.9-.63	-10	XN	1 3/16-12	-12	123.0-4.84	72.0-2.83	36.0-1.42	6V-9746
397-1928	15.9-.63	-10	XN	1-14	-10	108.0-4.25	61.0-2.40	25.0-.98	7J-9108
432-2023	19.1-.75	-12	XN	1-14	-10	113.0-4.45	60.0-2.36	21.0-.83	7J-9108
432-2013	19.1-.75	-12	XN	1 3/16-12	-12	113.0-4.45	60.0-2.36	21.0-.83	6V-9746
432-2014	19.1-.75	-12	XN	1 3/16-12	-12	120.0-4.72	67.0-2.64	28.0-1.10	6V-9746
432-2020	19.1-.75	-12	XN	1 7/16-12	-16	116.0-4.57	62.0-2.44	24.0-.94	5K-9090
499-1145	25.4-1.00	-16	XN	1 7/16-12	-16	142.0-5.59	71.8-2.83	24.5-.96	5K-9090
499-1146	25.4-1.00	-16	XN	1 7/16-12	-16	145.0-5.71	80.0-3.15	33.0-1.30	5K-9090
499-1155	25.4-1.00	-16	XN	1 11/16-12	-20	145.0-5.71	80.0-3.15	33.0-1.30	6V-8400
569-1091	31.8-1.25	-20	XN4	1 11/16-12	-20	174.0-6.85	116.0-4.57	25.0-.98	6V-8400
423-5100	38.1-1.50	-24	XN4	2-12	-24	156.0-6.14	99.0-3.90	27.0-1.06	8T-0315

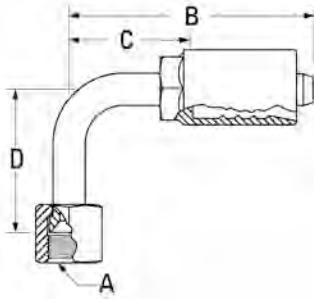
Permanent Couplings - XT-3ES

ORFS Female Swivel - 72.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
499-1147	25.4-1.00	-16	XN	1 7/16-12	-16	151.0-5.94	80.0-3.15	66.0-2.60	5K-9090

ORFS Female Swivel - 90° Elbow



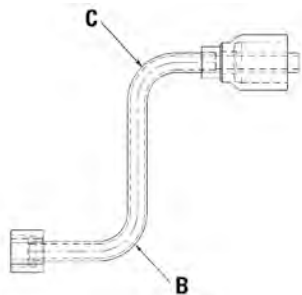
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
384-3443	9.5-.37	-6	XN	9/16-18	-4	71.0-2.80	30.0-1.18	20.0-.79	4J-5477
323-6164	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	22.9-.90	6V-8397
323-6167	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	35.1-1.38	6V-8397
323-6165	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	38.1-1.50	6V-8397
323-6166	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	54.1-2.13	6V-8397
323-6168	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	69.1-2.72	6V-8397
323-6169	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	79.0-3.11	6V-8397
323-6170	9.5-.37	-6	XN	13/16-16	-8	68.0-2.68	34.2-1.35	29.0-1.14	6V-8398
323-6171	9.5-.37	-6	XN	13/16-16	-8	68.0-2.68	34.2-1.35	40.9-1.61	6V-8398
323-6172	9.5-.37	-6	XN	13/16-16	-8	68.0-2.68	34.2-1.35	64.0-2.52	6V-8398
328-9097	12.7-.50	-8	XN	13/16-16	-8	74.0-2.91	39.5-1.56	29.2-1.15	6V-8398
328-9098	12.7-.50	-8	XN	13/16-16	-8	74.0-2.91	39.5-1.56	41.2-1.62	6V-8398
328-9100	12.7-.50	-8	XN	13/16-16	-8	74.0-2.91	39.5-1.56	43.4-1.71	6V-8398
328-9099	12.7-.50	-8	XN	13/16-16	-8	74.0-2.91	39.5-1.56	63.8-2.51	6V-8398
328-9101	12.7-.50	-8	XN	13/16-16	-8	74.0-2.91	39.5-1.56	83.1-3.27	6V-8398
328-9102	12.7-.50	-8	XN	13/16-16	-8	74.0-2.91	39.5-1.56	91.4-3.60	6V-8398
328-9103	12.7-.50	-8	XN	1-14	-10	74.0-2.91	39.5-1.56	32.3-1.27	7J-9108
328-9106	12.7-.50	-8	XN	1-14	-10	74.0-2.91	39.6-1.56	43.4-1.71	7J-9108
328-9104	12.7-.50	-8	XN	1-14	-10	74.0-2.91	39.5-1.56	47.0-1.85	7J-9108
328-9105	12.7-.50	-8	XN	1-14	-10	74.0-2.91	39.5-1.56	70.1-2.76	7J-9108
397-1929	15.9-.63	-10	XN	1-14	-10	93.0-3.66	47.0-1.85	32.0-1.26	7J-9108
397-1930	15.9-.63	-10	XN	1-14	-10	93.0-3.66	47.0-1.85	47.0-1.85	7J-9108
397-1931	15.9-.63	-10	XN	1-14	-10	93.0-3.66	47.0-1.85	53.0-2.09	7J-9108
397-1932	15.9-.63	-10	XN	1-14	-10	93.0-3.66	47.0-1.85	96.0-3.78	7J-9108
485-8400	15.9-.63	-10	XN	1-14	-10	99.0-3.90	46.0-1.81	70.0-2.76	7J-9108
397-1938	15.9-.63	-10	XN	1 3/16-12	-12	94.0-3.70	47.0-1.85	47.0-1.85	6V-9746
432-2024	19.1-.75	-12	XN	1-14	-10	107.0-4.21	53.0-2.09	48.0-1.89	7J-9108
432-2015	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	48.0-1.89	6V-9746
432-2016	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	58.0-2.28	6V-9746
432-2017	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	96.0-3.78	6V-9746
432-2018	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	107.0-4.21	6V-9746
432-2021	19.1-.75	-12	XN	1 7/16-12	-16	107.0-4.21	53.0-2.09	56.0-2.20	5K-9090
499-1148	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	56.0-2.20	5K-9090
499-1149	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	68.0-2.68	5K-9090
499-1150	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	105.0-4.13	5K-9090
499-1151	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	115.0-4.53	5K-9090
499-1152	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	125.0-4.92	5K-9090

Permanent Couplings - XT-3ES

ORFS Female Swivel - 90° Elbow (Cont'd.)

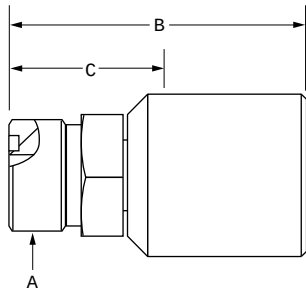
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
499-1153	25.4-1.00	-16	XN	1 7/16-12	-16	140.0-5.51	70.0-2.76	148.0-5.83	5K-9090
499-1156	25.4-1.00	-16	XN	1 11/16-20	-20	135.0-5.31	70.0-2.76	68.0-2.68	6V-8400
569-4975	31.8-1.25	-20	XN4	1 11/16-12	-20	173.0-6.81	115.0-4.53	64.0-2.52	6V-8400
569-4973	31.8-1.25	-20	XN4	1 11/16-12	-20	173.0-6.81	115.0-4.53	129.0-5.08	6V-8400
423-5101	38.1-1.50	-24	XN4	2-12	-24	156.0-6.14	99.0-3.90	69.0-2.72	8T-0315
423-5102	38.1-1.50	-24	XN4	2-12	-24	160.0-6.30	103.0-4.06	141.0-5.55	8T-0315

ORFS Female Swivel - Multi Bend (Backhoe Loaders)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	O-RING SEAL	BEND (B & C)	WORKING PRESSURE (kPa)	MIN. BURST PRESSURE (kPa)
202-0998	12.7-.50	-8	XN	13/16-16	6V-8398	90.0°	31,000	93,276
202-1002	12.7-.50	-8	XN	13/16-16	6V-8398	44.3°	31,000	93,276
202-2377	12.7-.50	-8	XN	13/16-16	6V-8398	90.0°	31,000	93,276
202-1000	15.9-.63	-10	XN	1-14	7J-9108	62.8°	24,000	72,216
202-1006	15.9-.63	-10	XN	1-14	7J-9108	64.3°	24,000	72,216
202-1004	19.1-.75	-12	XN	1 3/16-12	6V-9746	43.1°	25,750	77,628
203-4695	19.1-.75	-12	XN	1 3/16-12	6V-9746	78.1°	25,750	77,628

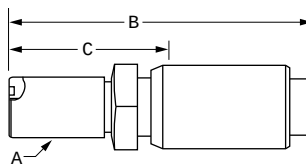
ORFS Male-Str



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6174	9.5-.37	-6	XN	11/16-16	-6	62.0-2.44	28.5-1.12	6V-8397
323-6175	9.5-.37	-6	XN	13/16-16	-8	65.0-2.56	31.1-1.22	6V-8398
323-6176	9.5-.37	-6	XN	1-14	-10	67.0-2.64	33.9-1.33	7J-9108
328-9108	12.7-.50	-8	XN	13/16-16	-8	66.0-2.60	32.0-1.26	6V-8398
331-3273	12.7-.50	-8	XN	1-14	-10	69.0-2.72	34.7-1.37	7J-9108
397-1933	15.9-.63	-10	XN	1-14	-10	82.0-3.23	35.0-1.38	7J-9108
397-1936	15.9-.63	-10	XN	1 3/16-12	-12	101.0-3.98	55.0-2.17	6V-9746
432-2025	19.1-.75	-12	XN	1 3/16-12	-12	91.0-3.58	37.0-1.46	6V-9746
611-8353	19.1-.75	-12	XN	1 7/16-12	-16	98.0-3.86	37.0-1.46	5K-9090
499-1157	25.4-1.00	-16	XN	1 7/16-12	-16	119.0-4.69	49.0-1.93	5K-9090

Note: Grayscale parts are MAO (Made As Order).

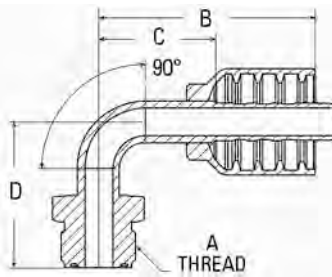
ORFS Male Bulkhead - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6177	9.5-.37	-6	XN	11/16-16	-6	81.0-3.19	47.3-1.86	6V-8397
482-7044	9.5-.37	-6	XN	13/16-16	-8	81.7-3.22	48.2-1.90	6V-8398
333-9956	12.7-.50	-8	XN	13/16-16	-8	83.0-3.27	49.2-1.94	6V-8398
397-1935	15.9-.63	-10	XN	1-14	-10	101.0-3.98	55.0-2.17	7J-9108
604-3191	19.1-.75	-12	XN	1 3/16-12	-12	120.-4.72	59.0-2.32	6V-9746

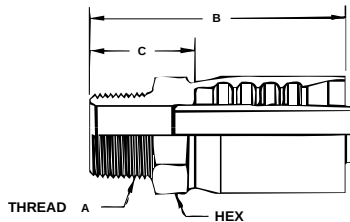
Permanent Couplings - XT-3ES

ORFS Male - 90° Elbow



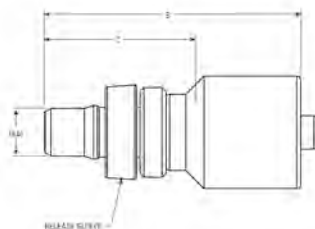
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
331-3274	12.7-.50	-8	XN	1-14	-10	73.0-2.87	39.5-1.56	49.3-1.94	7J-9108
397-1934	15.9-.63	-10	XN	1-14	-10	93.0-3.66	47.0-1.85	53.0-2.09	7J-9108
432-2026	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	57.0-2.24	6V-9746

SAE 30° Male - Straight



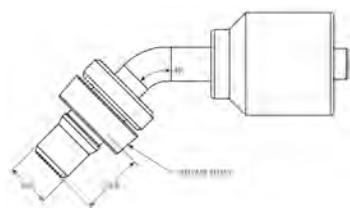
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6208	9.5-.37	-6	XN	1/4-18	-4	64.0-2.52	30.8-1.21
323-6209	9.5-.37	-6	XN	3/8-18	-6	65.0-2.56	31.8-1.25
323-6210	9.5-.37	-6	XN	1/2-14	-8	70.0-2.76	36.0-1.42
328-9133	12.7-.50	-8	XN	3/8-18	-6	66.5-2.62	32.5-1.28
328-9134	12.7-.50	-8	XN	1/2-14	-8	71.0-2.80	37.3-1.47
328-9135	12.7-.50	-8	XN	3/4-14	-12	73.0-2.87	39.1-1.54
397-1947	15.9-.63	-10	XN	1/2-14	-8	89.0-3.50	38.0-1.50
397-1948	15.9-.63	-10	XN	3/4-14	-12	91.0-3.58	40.0-1.57
432-2124	19.1-.75	-12	XN	3/4-14	-12	94.0-3.70	40.0-1.57
432-2125	19.1-.75	-12	XN	1-11 1/2	-16	102.0-4.02	48.0-1.89
499-1185	25.4-1.00	-16	XN	3/4-14	-12	112.0-4.41	41.5-1.63
499-1177	25.4-1.00	-16	XN	1-11 1/2	-16	119.0-4.69	49.0-1.93
570-1105	31.8-1.25	-20	XN4	1 1/4-11 1/2	-20	107.0-4.21	50.0-1.97
423-5109	38.1-1.50	-24	XN4	1-1/2 11-1/2	-24	113.0-4.45	56.0-2.20
221-0573	50.8-2.00	-32	S4G	2-11 1/2	-32	141.0-5.55	71.0-2.80

Snap To Connect - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
360-2602	9.5-.37	-6	XN	-6.0-.24	-6	67.0-2.64	34.0-1.34
360-2603	12.7-.50	-8	XN	-8.0-.31	-8	74.0-2.91	41.0-1.61
397-1968	15.9-.63	-10	XN	-10.0-.39	-10	91.0-3.58	45.0-1.77
432-2131	19.1-.75	-12	XN	-12.0-.47	-12	103.0-4.06	49.0-1.93
499-1186	25.4-1.00	-16	XN	20.9-.82	-12	119.0-4.69	48.0-1.89

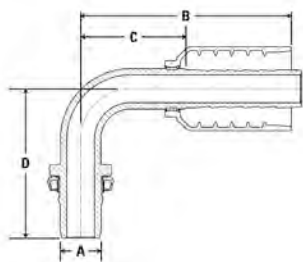
Snap To Connect - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
360-2605	9.5-.37	-6	XN	-6.0-.24	82.0-3.23	49.0-1.93	22.1-.87
360-2606	12.7-.50	-8	XN	-8.0-.31	94.0-3.70	60.0-2.36	29.7-1.17
432-2132	19.1-.75	-12	XN	-12.0-.47	133.0-5.24	79.0-3.11	41.0-1.61

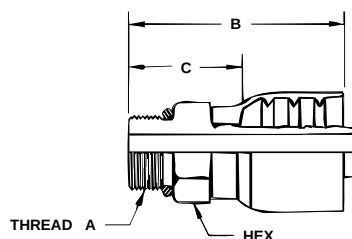
Permanent Couplings - XT-3ES

Snap To Connect - 90° Elbow



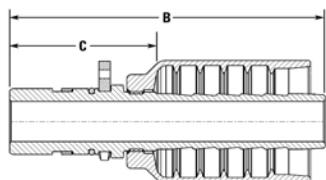
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
360-2609	9.5-.37	-6	XN	9.6-.38	-6	68.0-2.68	34.0-1.34	55.0-2.17
360-2610	12.7-.50	-8	XN	12.7-.50	-8	74.0-2.91	40.0-1.57	65.0-2.56
432-2133	19.1-.75	-12	XN	20.9-.82	-12	107.0-4.21	53.0-2.09	76.0-2.99

STOR Male Straight O-Ring - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6212	9.5-.37	-6	XN	9/16-18	-6	59.0-2.32	26.0-1.02	3J-1907
328-9136	12.7-.50	-8	XN	3/4-16	-8	65.0-2.56	31.0-1.22	3K-0360
570-9719	12.7-.50	-8	XN	7/8-14	-10	71.0-2.80	31.0-1.22	2M-9780
416-2095	15.9-.63	-10	XN	7/8-14	-10	78.0-3.07	32.0-1.26	2M-9780
432-2141	19.1-.75	-12	XN	1 1/16-12	-12	89.0-3.50	36.0-1.42	3D-2824
499-1187	25.4-1.00	-16	XN	1 5/16-12	-16	112.0-4.41	41.5-1.63	7M-8485

WEO Plug-In Coupling



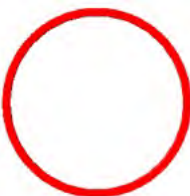
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
505-1188	19.1 - 0.75	-12	XN	-12 - 0.47	110 - 4.33	51 - 2.00	8U-5951
583-7081	19.1 - 0.75	-12	XN	-12 - 0.47	110 - 4.33	51 - 2.00	-

WEO Plug-In Clip



Part Number	Dash Size	Clip Thickness	Clip I.D.	Clip Height
502-2489	-6	0.15 in, 3.7 mm	0.43 in, 11.0 mm	0.94 in, 24.0 mm
502-2490	-8	0.14 in, 3.6 mm	0.55 in, 14.0 mm	1.10 in, 28.0 mm
502-2491	-12	0.18 in, 4.0 mm	0.83 in, 21.0 mm	1.38 in, 35.0 mm

WEO Plug-In Release Ring



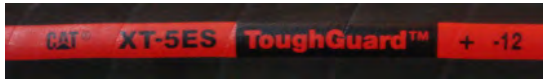
Part Number	Dash Size	Seal Thickness	Seal I.D.
502-2492	-6	0.13 in, 3.2 mm	0.43 in, 11.0 mm
502-2493	-8	0.13 in, 3.2 mm	0.55 in, 14.0 mm
502-2494	-12	0.14 in, 3.6 mm	0.83 in, 21.0 mm

XT-5ES Hose Features and Benefits

XT-5ES - Hose Layline



XT-5ESTG ToughGuard - Hose Layline



- 1/2 SAE 100R13 Minimum Bend Radius.
- Exceeds the SAE 100R13 Industry Standard
- Superior Abrasion Resistance Cover.
- Impulse Tested to 1 Million Cycles (2 X Industry Standards).
- Working pressure of 5000 psi
- Black hose with a Red mylar layline for easy identification.
- Hose is marked with a Plus (+) symbol.
- Target Application(s): Excavators

XT-5ES Hose



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8482	19.1 - .75	30.5 - 1.20	-12	XN	140.0 - 20305	35.0 - 5076	120 - 4.72
456-8483	25.4 - 1.00	38.7 - 1.52	-16	PL / MCSH / XN	140.0 - 20305	35.0 - 5076	157 - 6.18
456-8484	31.8 - 1.25	50.0 - 1.97	-20	MCSH	140.0 - 20305	35.0 - 5076	210 - 8.27
456-8485	38.1 - 1.50	58.1 - 2.29	-24	MCSH / XN6	140.0 - 20305	35.0 - 5076	255 - 10.04
456-8486	50.8 - 2.00	71.1 - 2.80	-32	XS6	140.0 - 20305	35.0 - 5076	635 - 25.00

Exceeds the requirement of **SAE 100R13**

Construction: Fabric reinforced, synthetic rubber tube; four or six plies of spirally-wrapped high tensile steel wire reinforcement, separated by layers of synthetic rubber. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: Extremely high-pressure service with petroleum base hydraulic fluids. MSHA approved cover.

Temperature Range: -40°F to + 250°F (-40°C to +121°C)

Couplings: Collet-type reusable, skive type, PL Series coupling. See XT-5ES Hose Reusable Couplings section. Crimp-on permanent, skive type, MCSH, XS6 Series coupling. Crimp-on permanent, non skive type XN, XN6. See XT-5ES Hose Permanent Couplings section. For related assembly equipment and tooling, see Tooling section.

Note: Depending on coupling series, the hose cover may or may not need to be removed before attaching couplings. Please review the coupling series being used prior to hose assembly. Coupling series XN and XN6 are no-skive couplings and do not require the hose cover to be removed. All other coupling series require a specified length of the hose cover to be removed. Reference chart [NEEG2956](#) for specified Skive Lengths.

Cat High Pressure Hose XT-5ES

XT-5ESTG ToughGuard Hose



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8487	19.1 - .75	30.5 - 1.20	-12	XN	140.0 - 20305	35.0 - 5076	120 - 4.72
456-8488	25.4 - 1.00	38.7 - 1.52	-16	PL / MCSH / XN	140.0 - 20305	35.0 - 5076	157 - 6.18
456-8489	31.8 - 1.25	50.0 - 1.97	-20	MCSH	140.0 - 20305	35.0 - 5076	210 - 8.27
456-8490	38.1 - 1.50	58.1 - 2.29	-24	MCSH / XN6	140.0 - 20305	35.0 - 5076	255 - 10.04

Exceeds the requirement of **SAE 100R13**

Construction: Fabric reinforced, synthetic rubber tube; four or six plies of spirally-wrapped high tensile steel wire reinforcement, separated by layers of synthetic rubber. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: Extremely high-pressure service with petroleum base hydraulic fluids. MSHA approved cover.

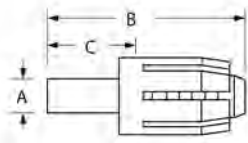
Temperature Range: -40°F to + 250°F (-40°C to +121°C)

Couplings: Collet-type reusable, skive type, PL Series coupling. See XT-5ES Hose Reusable Couplings section. Crimp-on permanent, skive type, MCSH, XS6 Series coupling. Crimp-on permanent, non skive type XN, XN6. See XT-5ES Hose Permanent Couplings section. For related assembly equipment and tooling, see Tooling section.

Note: Depending on coupling series, the hose cover may or may not need to be removed before attaching couplings. Please review the coupling series being used prior to hose assembly. Coupling series XN and XT-5ES Hose & Coupling Products | XT-5ES Hose (1036)XN6 are no-skive couplings and do not require the hose cover to be removed. All other coupling series require a specified length of the hose cover to be removed. Reference chart [NEEG2956](#) for specified Skive Lengths.

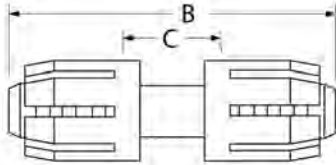
Cat High Pressure Hose XT-5ES Couplings

Braze On - Straight



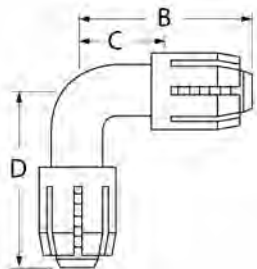
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
4Z-8154	38.1-1.50	-24	PL	113.0-4.45	30.4-1.20

Double Collet - Straight



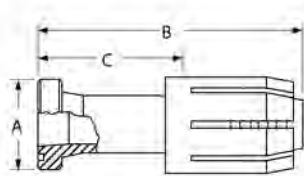
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
5P-5000	25.4-1.00	-16	PL	183.0-7.20	48.6-1.91
5P-4937	31.8-1.25	-20	PL	206.0-8.11	51.3-2.02
5P-2825	38.1-1.50	-24	PL	222.0-8.74	55.0-2.17

Double Collet - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
5P-1307	25.4-1.00	-16	PL	136.0-5.35	68.3-2.69	135.5-5.33
5P-1308	31.8-1.25	-20	PL	167.0-6.57	89.4-3.52	166.5-6.56

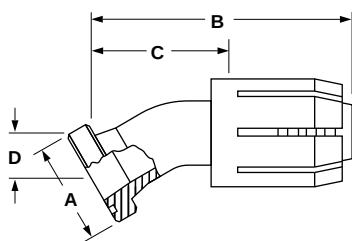
Flange - Cat - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
5P-1125	25.4-1.00	-16	PL	47.6-1.87	-16	157.0-6.18	89.8-3.54	1P-3703
5P-1131	25.4-1.00	-16	PL	54.0-2.13	-20	157.0-6.18	89.8-3.54	1P-3704
2P-6733	31.8-1.25	-20	PL	54.0-2.13	-20	164.0-6.46	86.4-3.40	1P-3704
2P-1416	31.8-1.25	-20	PL	63.5-2.50	-24	164.0-6.46	86.4-3.40	1P-3705
5P-3093	38.1-1.50	-24	PL	63.5-2.50	-24	167.0-6.57	84.0-3.31	1P-3705
8T-1009	38.1-1.50	-24	PL	63.5-2.50	-24	222.0-8.74	139.5-5.49	1P-3705
5P-3101	38.1-1.50	-24	PL	79.4-3.13	-32	167.0-6.57	84.0-3.31	1P-3709
193-1047	50.8-2.00	-32	PL	63.5-2.50	-24	246.0-9.69	149.0-5.87	1P-3705
5P-7886	50.8-2.00	-32	PL	79.4-3.13	-32	207.0-8.15	110.2-4.34	1P-3709

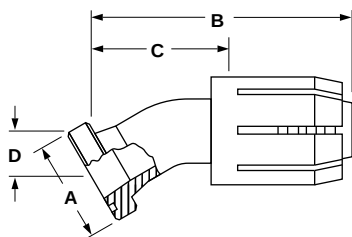
Reusable Couplings - XT-5ES

Flange - Cat - 22.5° Elbow



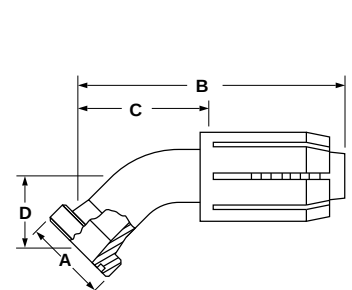
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5P-1126	25.4-1.00	-16	PL	47.6-1.87	-16	141.0-5.55	73.8-2.91	16.5-.65	1P-3703
5P-1132	25.4-1.00	-16	PL	54.0-2.13	-20	141.0-5.55	73.8-2.91	16.5-.65	1P-3704
2P-6728	31.8-1.25	-20	PL	54.0-2.13	-20	155.0-6.10	77.9-3.07	17.0-.67	1P-3704
2P-1424	31.8-1.25	-20	PL	63.5-2.50	-24	155.0-6.10	77.9-3.07	16.5-.65	1P-3705
5P-6451	38.1-1.50	-24	PL	63.5-2.50	-24	219.0-8.62	136.5-5.37	17.0-.67	1P-3705
155-5471	50.8-2.00	-32	PL	79.4-3.13	-32	291.0-11.46	194.4-7.65	26.5-1.04	1P-3709

Flange - Cat - 30° Elbow



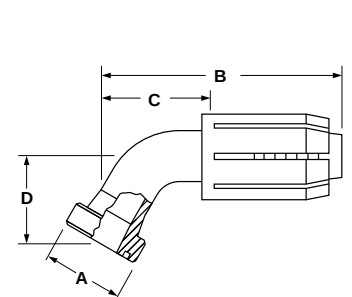
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5P-1127	25.4-1.00	-16	PL	47.6-1.87	-16	144.0-5.67	76.3-3.00	23.0-.91	1P-3703
5P-1133	25.4-1.00	-16	PL	54.0-2.13	-20	144.0-5.67	76.3-3.00	23.0-.91	1P-3704
2P-6729	31.8-1.25	-20	PL	54.0-2.13	-20	158.0-6.22	80.4-3.17	23.5-.93	1P-3704
2P-1415	31.8-1.25	-20	PL	63.5-2.50	-24	158.0-6.22	80.4-3.17	23.5-.93	1P-3705
5P-4877	38.1-1.50	-24	PL	63.5-2.50	-24	218.0-8.58	135.0-5.31	26.5-1.04	1P-3705
6V-1074	38.1-1.50	-24	PL	79.4-3.13	-32	231.0-9.09	148.5-5.85	29.3-1.15	1P-3709
5P-7968	50.8-2.00	-32	PL	79.4-3.13	-32	287.0-11.30	190.1-7.48	36.9-1.45	1P-3709

Flange - Cat - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5P-1128	25.4-1.00	-16	PL	47.6-1.87	-16	146.0-5.75	78.3-3.08	36.5-1.44	1P-3703
5P-1134	25.4-1.00	-16	PL	54.0-2.13	-20	146.0-5.75	78.3-3.08	36.5-1.44	1P-3704
2P-6730	31.8-1.25	-20	PL	54.0-2.13	-20	164.0-6.46	86.9-3.42	37.0-1.46	1P-3704
2P-1422	31.8-1.25	-20	PL	63.5-2.50	-24	161.0-6.34	83.4-3.28	37.0-1.46	1P-3705
5P-3094	38.1-1.50	-24	PL	63.5-2.50	-24	211.0-8.31	128.5-5.06	41.0-1.61	1P-3705
111-7660	38.1-1.50	-24	PL	63.5-2.50	-24	231.0-9.09	148.3-5.84	54.9-2.16	1P-3705
5P-3102	38.1-1.50	-24	PL	79.4-3.13	-32	222.0-8.74	139.0-5.47	46.0-1.81	1P-3709
5P-7959	50.8-2.00	-32	PL	79.4-3.13	-32	277.0-10.91	180.1-7.09	59.4-2.34	1P-3709

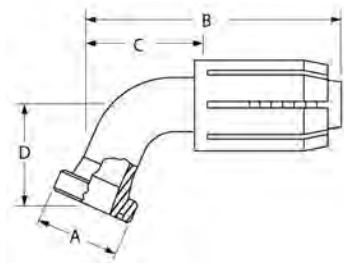
Flange - Cat - 60° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5P-1129	25.4-1.00	-16	PL	47.6-1.87	-16	145.0-5.71	77.3-3.04	50.0-1.97	1P-3703
5P-1135	25.4-1.00	-16	PL	54.0-2.13	-20	145.0-5.71	77.3-3.04	50.0-1.97	1P-3704
2P-6731	31.8-1.25	-20	PL	54.0-2.13	-20	160.0-6.30	82.4-3.24	51.5-2.03	1P-3704
2P-1418	31.8-1.25	-20	PL	63.5-2.50	-24	160.0-6.30	82.4-3.24	51.5-2.03	1P-3705
5P-3096	38.1-1.50	-24	PL	63.5-2.50	-24	200.0-7.87	117.0-4.61	54.5-2.15	1P-3705
111-7661	38.1-1.50	-24	PL	63.5-2.50	-24	215.0-8.46	132.7-5.22	73.9-2.91	1P-3705
5P-3103	38.1-1.50	-24	PL	79.4-3.13	-32	209.0-8.23	126.0-4.96	63.5-2.50	1P-3709
5P-7956	50.8-2.00	-32	PL	79.4-3.13	-32	260.0-10.24	163.0-6.42	82.6-3.25	1P-3709

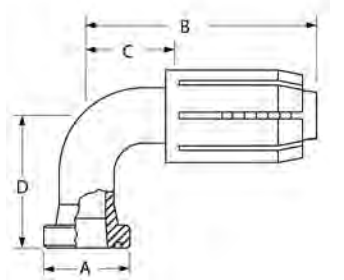
Reusable Couplings - XT-5ES

Flange - Cat - 67.5° Elbow



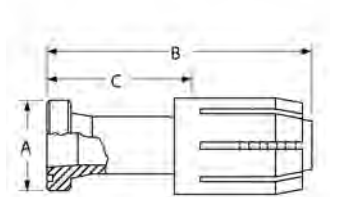
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5P-2620	25.4-1.00	-16	PL	47.6-1.87	-16	156.0-6.14	88.3-3.48	56.5-2.22	1P-3703
5P-2621	25.4-1.00	-16	PL	54.0-2.13	-20	156.0-6.14	88.3-3.48	56.5-2.22	1P-3704
5P-2599	31.8-1.25	-20	PL	54.0-2.13	-20	171.0-6.73	93.4-3.68	58.5-2.30	1P-3704
5P-2622	31.8-1.25	-20	PL	63.5-2.50	-24	171.0-6.73	93.4-3.68	58.5-2.30	1P-3705

Flange - Cat - 90° Elbow



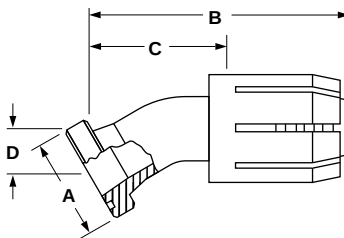
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5P-1130	25.4-1.00	-16	PL	47.6-1.87	-16	132.0-5.20	64.3-2.53	73.5-2.89	1P-3703
5P-1136	25.4-1.00	-16	PL	54.0-2.13	-20	132.0-5.20	64.3-2.53	73.5-2.89	1P-3704
2P-6732	31.8-1.25	-20	PL	54.0-2.13	-20	148.0-5.83	70.4-2.77	77.0-3.03	1P-3704
7X-1478	31.8-1.25	-20	PL	54.0-2.13	-20	148.0-5.83	70.4-2.77	150.0-5.91	1P-3704
2P-1420	31.8-1.25	-20	MCSH	63.5-2.50	-24	148.0-5.83	70.4-2.77	77.0-3.03	1P-3705
5P-3099	38.1-1.50	-24	PL	63.5-2.50	-24	170.0-6.69	87.5-3.44	86.5-3.41	1P-3705
111-7662	38.1-1.50	-24	PL	63.5-2.50	-24	170.0-6.69	87.5-3.44	105.5-4.15	1P-3705
5P-3105	38.1-1.50	-24	PL	79.4-3.13	-32	170.0-6.69	87.0-3.43	93.5-3.68	1P-3709
5P-7903	50.8-2.00	-32	PL	79.4-3.13	-32	208.0-8.19	111.4-4.39	125.0-4.92	1P-3709

Flange - Code 61 - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
155-2866	25.4-1.00	-16	PL	44.5-1.75	-16	151.0-5.94	83.8-3.30	4J-0520
155-2876	25.4-1.00	-16	PL	44.5-1.75	-16	152.0-5.98	85.1-3.35	4J-0520
155-2867	31.8-1.25	-20	PL	50.8-2.00	-20	163.0-6.42	85.9-3.38	4J-0522
8T-7978	38.1-1.50	-24	PL	60.3-2.37	-24	162.0-6.38	79.0-3.11	4J-0524
8C-5234	38.1-1.50	-24	PL	71.4-2.81	-32	162.0-6.38	79.5-3.13	4J-0527

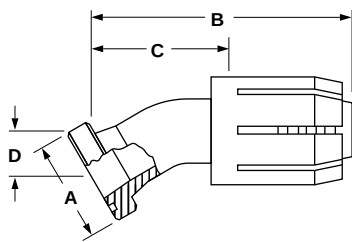
Flange - Code 61 - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
7X-1431	38.1-1.50	-24	PL	60.3-2.37	-24	213.0-8.39	130.5-5.14	17.0-.67	4J-0524

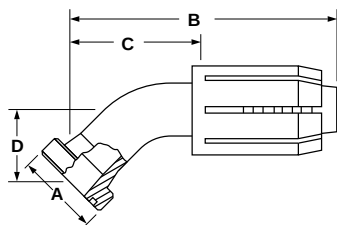
Reusable Couplings - XT-5ES

Flange - Code 61 - 30° Elbow



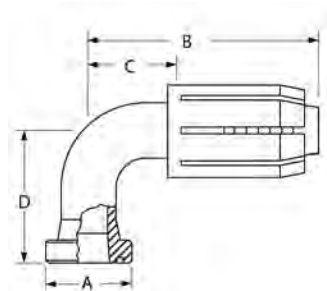
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
8T-7979	38.1-1.50	-24	PL	60.3-2.37	-24	213.0-8.39	130.5-5.14	23.5-.93	4J-0524

Flange - Code 61 - 45° Elbow



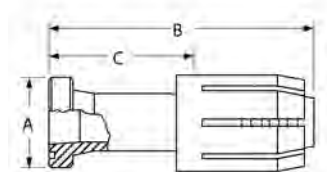
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
155-2869	25.4-1.00	-16	PL	44.5-1.75	-16	144.0-5.67	76.8-3.02	27.0-1.06	4J-0520
155-2870	31.8-1.25	-20	PL	50.8-2.00	-20	168.0-6.61	90.8-3.57	30.5-1.20	4J-0522
8T-7980	38.1-1.50	-24	PL	60.3-2.37	-24	207.0-8.15	124.7-4.91	37.5-1.48	4J-0524
155-2871	38.1-1.50	-24	PL	71.4-2.81	-32	219.0-8.62	136.5-5.37	43.0-1.69	4J-0527

Flange - Code 61 - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
155-2872	25.4-1.00	-16	PL	44.5-1.75	-16	151.0-5.94	83.8-3.30	60.5-2.38	4J-0520
155-2873	31.8-1.25	-20	PL	50.8-2.00	-20	184.0-7.24	106.9-4.21	86.3-3.40	4J-0522
3E-6822	38.1-1.50	-24	PL	60.3-2.37	-24	162.0-6.38	79.0-3.11	80.9-3.19	4J-0524
155-2874	38.1-1.50	-24	PL	71.4-2.81	-32	170.0-6.69	87.5-3.44	88.8-3.50	4J-0527

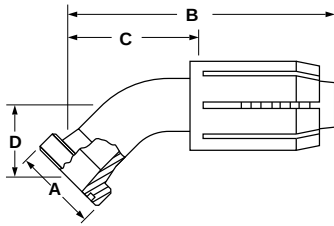
Flange - Code 62 - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
155-2877	31.8-1.25	-20	PL	54.0-2.13	-20	160.0-6.30	82.5-3.25	4J-0522
155-2878	38.1-1.50	-24	PL	63.5-2.50	-24	165.0-6.50	82.4-3.24	4J-0524
155-2879	50.8-2.00	-32	PL	79.4-3.13	-32	206.0-8.11	109.0-4.29	4J-0527

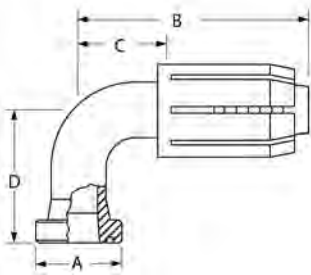
Reusable Couplings - XT-5ES

Flange - Code 62 - 45° Elbow



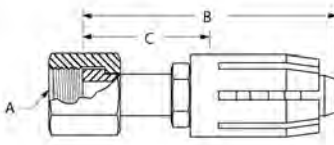
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
155-2881	25.4-1.00	-16	PL	47.6-1.87	-16	143.0-5.63	75.5-2.97	33.2-1.31	4J-0520
155-2882	31.8-1.25	-20	PL	54.0-2.13	-20	161.0-6.34	83.4-3.28	34.2-1.35	4J-0522
155-2883	38.1-1.50	-24	PL	63.5-2.50	-24	216.0-8.50	133.8-5.27	40.4-1.59	4J-0524
155-2884	50.8-2.00	-32	PL	79.4-3.13	-32	276.0-10.87	179.0-7.05	58.0-2.28	4J-0527

Flange - Code 62 - 90° Elbow



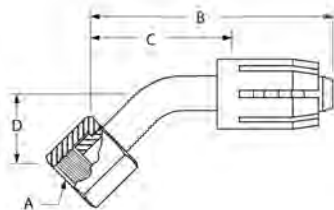
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
155-2886	25.4-1.00	-16	PL	47.6-1.87	-16	131.0-5.16	64.2-2.53	69.3-2.73	4J-0520
155-2887	31.8-1.25	-20	PL	54.0-2.13	-20	147.0-5.79	69.4-2.73	73.0-2.87	4J-0522
155-2888	38.1-1.50	-24	PL	63.5-2.50	-24	170.0-6.69	87.5-3.44	85.0-3.35	4J-0524
155-2889	50.8-2.00	-32	PL	79.4-3.13	-32	209.0-8.23	112.0-4.41	123.0-4.84	4J-0527

ORFS Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
7X-1452	25.4-1.00	-16	PL	1 7/16-12	-16	112.0-4.41	45.1-1.78	5K-9090

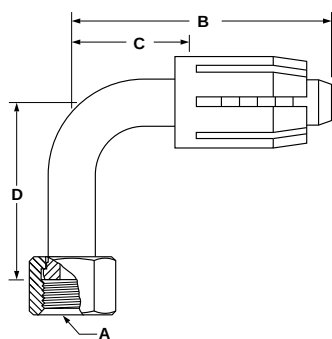
ORFS Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
7X-4814	25.4-1.00	-16	PL	1 7/16-12	-16	168.0-6.61	101.0-3.98	32.0-1.26	5K-9090

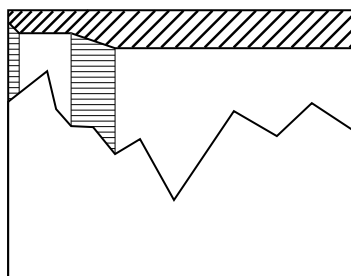
Reusable Couplings - XT-5ES

ORFS Female Swivel - 90° Elbow



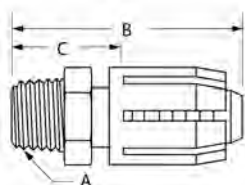
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
7X-4815	25.4-1.00	-16	PL	1 7/16-12	-16	130.0-5.12	62.8-2.47	68.0-2.68	5K-9090
7X-4816	25.4-1.00	-16	PL	1 7/16-12	-16	130.0-5.12	62.8-2.47	128.0-5.04	5K-9090

Reusable Sleeves - XT-5ES



Part Number	HOSE I.D. (mm - in)	DASH SIZE
5P-1027	19.1 - 0.75	-12
5P-1010	25.4 - 1.00	-16
5P-0477	31.8 - 1.25	-20
5P-3106	38.1 - 1.50	-24
5P-7884	50.8 - 2.00	-32

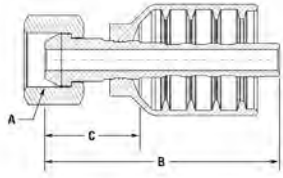
SAE 30° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
6V-2448	25.4-1.00	-16	PL	1-11 1/2	-16	131.0-5.16	63.3-2.49

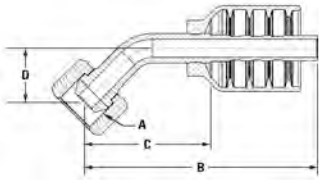
Permanent Couplings - XT-5ES

BSPP 60° Female Swivel - Straight (ISO 8434-6)



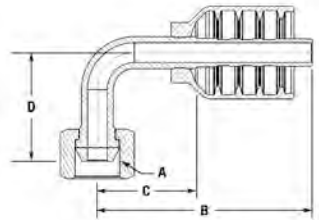
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
502-2106	19.1-.75	-12	XN	3/4-14	-12	96.5-3.80	37.9-1.49
499-1179	25.4-1.00	-16	XN	1-11	-16	113.0-4.45	42.5-1.67
499-1182	25.4-1.00	-16	XN	1 1/4-11	-20	123.5-4.86	53.0-2.09
502-5110	31.8-1.25	-20	XN6	1 1/4-11	-20	140.0-5.51	62.1-2.44

BSPP 60° Female Swivel - 45° Elbow (ISO 8434-6)



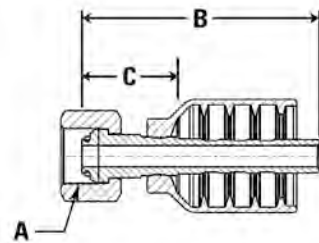
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
502-2107	19.1-.75	-12	XN	3/4-14	-12	126.1-4.96	67.5-2.66	29.0-1.14
499-1180	25.4-1.00	-16	XN	1-11	-16	152.8-6.02	82.3-3.24	35.0-1.38
499-1183	25.4-1.00	-16	XN	1 1/4-11	-20	156.8-6.17	86.3-3.40	39.0-1.54
502-5111	31.8-1.25	-20	XN6	1 1/4-11	-20	188.75-7.43	110.5-4.35	40.0-1.57

BSPP 60° Female Swivel - 90° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
502-2108	19.1-.75	-12	XN	3/4-14	-12	112.0-4.41	53.4-2.10	58.0-2.28
499-1181	25.4-1.00	-16	XN	1-11	-16	140.1-5.52	69.6-2.74	70.0-2.76
499-1184	25.4-1.00	-16	XN	1 1/4-11	-20	140.1-5.52	69.6-2.74	76.0-2.99
502-5112	31.8-1.25	-20	XN6	1 1/4-11	-20	172.75-6.80	94.5-3.72	85.0-3.35

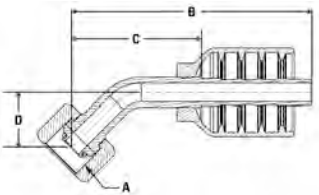
BSPP 60° O-Ring Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
601-9244	19.1-.75	-12	XN	3/4-14	-12	96.5-3.80	38.0-1.50	600-9416
601-9245	25.4-1.00	-16	XN	1 1/4-11	-20	113.0-4.45	42.5-1.67	600-9418
601-9246	31.8-1.25	-20	XN6	1 1/4-11	-20	140.0-5.51	62.0-2.44	600-9419
626-6309	38.1-1.50	-24	XN6	1 1/2-11	-24	149.5-5.89	69.0-2.72	600-6421

Note: Grayscale parts are MAO (Made As Order).

BSPP 60° O-Ring Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
601-9264	19.1-.75	-12	XN	3/4-14	-12	126.0-4.96	65.0-2.56	29.0-1.14	600-9416
606-1573	19.1-.75	-12	XN	1-11	-16	129.0-5.08	68.0-2.68	32.0-1.26	600-9418
601-9265	25.4-1.00	-16	XN	1-11	-16	153.0-6.02	82.0-3.23	35.0-1.38	600-9418
601-9266	25.4-1.00	-16	XN	1 1/4-11	-20	157.0-6.18	86.0-3.39	39.0-1.54	600-9419
601-9267	31.8-1.25	-20	XN6	1 1/4-11	-20	189.0-7.44	110.5-4.35	40.0-1.57	600-9419

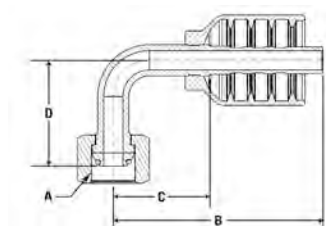
Permanent Couplings - XT-5ES

BSPP 60° O-Ring Female Swivel - 45° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
606-1577	31.8-1.25	-20	XN6	1 1/2-11	-24	203.5-8.01	121.0-4.76	54.0-2.13	600-9421
626-6768	38.1-1.50	-24	XN6	1 1/2-11	-24	200.0-7.87	120.0-4.72	50.0-1.97	600-6421
626-6817	38.1-1.5	-24	XN6	2-11	-32	209.0-8.23	129.0-5.08	59.0-2.32	5K-0216

Note: Grayscale parts are MAO (Made As Order).

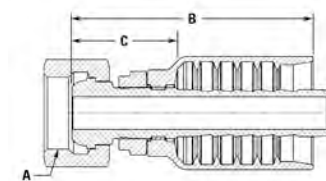
BSPP 60° O-Ring Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
601-9280	19.1-.75	-12	XN	3/4-14	-12	112.0-4.41	51.0-2.01	58.0-2.28	600-9416
606-2093	19.1-.75	-12	XN	1-11	-16	112.0-4.41	53.0-2.09	62.0-2.44	600-9418
601-9281	25.4-1.00	-16	XN	1-11	-16	140.0-5.51	70.0-2.76	70.0-2.76	600-9418
601-9282	25.4-1.00	-16	XN	1 1/4-11	-20	140.0-5.51	70.0-2.76	76.0-2.99	600-9419
601-9283	31.8-1.25	-20	XN6	1 1/4-11	-20	173.0-6.81	94.5-3.72	85.0-3.35	600-9419
606-2096	31.8-1.25	-20	XN6	1 1/2-11	-24	173.0-6.81	94.5-3.72	92.0-3.62	600-6421
626-6848	38.1-1.50	-24	XN6	1 1/2-11	-24	172.0-6.77	91.0-3.58	100.0-3.94	600-6421
626-6854	38.1-1.50	-24	XN6	2-11	-32	172.0-6.77	91.0-3.58	110.0-4.33	5K-0216

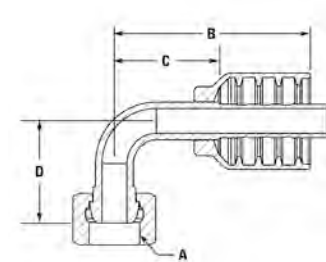
Note: Grayscale parts are MAO (Made As Order).

BSPP Spherical Seat Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
432-2126	19.1-.75	-12	XN	3/4-14	-12	96.0-3.78	37.0-1.46

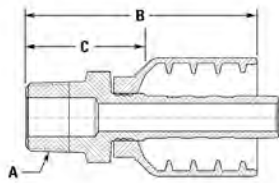
BSPP Spherical Seat Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
432-2127	19.1-.75	-12	XN	3/4-14	-12	112.0-4.41	51.0-2.01	59.0-2.32

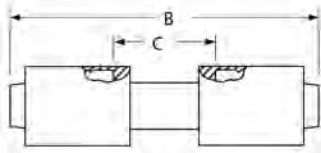
Permanent Couplings - XT-5ES

BSPT Male Tapered Pipe - Straight



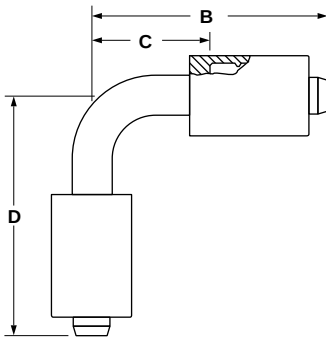
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
513-4473	19.1-.75	-12	XN	3/4-14	-12	95-3.74	42-1.65
513-4474	25.4-1.00	-16	XN	1-11	-16	110-4.33	45-1.77

Double Collet - Straight



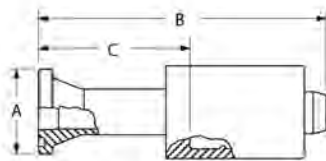
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
471-6416	19.1-.75	-12	XN	157.0-6.18	53.0-2.09
499-1175	25.4-1.00	-16	XN	192.0-7.56	52.0-2.05

Double Collet - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
432-2135	19.1-.75	-12	XN	115.0-4.53	62.0-2.44	115.0-4.53
499-1176	25.4-1.00	-16	XN	135.0-5.31	70.0-2.76	60.0-2.36
591-1736	31.8-1.25	-20	XN6	172.0-6.77	89.4-3.52	172.0-6.77
505-3890	38.1-1.50	-24	XN6	187.0-7.36	104.0-4.09	85.0-3.35

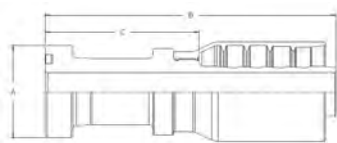
Flange - Cat - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
432-2105	19.1-.75	-12	XN	41.3-1.63	-12	138.0-5.43	84.0-3.31	1P-3702
432-2116	19.1-.75	-12	XN	47.6-1.87	-16	138.0-5.43	84.0-3.31	1P-3703
496-2307	25.4-1.00	-16	XN	47.6-1.87	-16	150.0-5.91	85.0-3.35	1P-3703
496-9725	25.4-1.00	-16	XN	54.0-2.13	-20	150.0-5.91	85.0-3.35	1P-3704
442-5579	31.8-1.25	-20	XN6	54.0-2.13	-20	158.0-6.22	85.0-3.35	1P-3704
442-5580	31.8-1.25	-20	XN6	63.5-2.50	-24	158.0-6.22	85.0-3.35	1P-3705
447-1258	38.1-1.50	-24	XN6	63.5-2.50	-24	206.0-8.11	129.0-5.08	1P-3705
620-9764	38.1-1.50	-24	XN6	79.4-3.13	-32	206.0-8.11	125.0-4.92	1P-3709
476-7236	50.8-2.00	-32	XS6	63.5-2.50	-24	241.0-9.49	136.0-5.35	1P-3705
456-3393	50.8-2.00	-32	XS6	79.4-3.13	-32	298.0-11.73	193.0-7.60	1P-3709

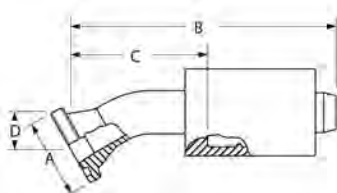
Permanent Couplings - XT-5ES

Flange - Cat High Vibration - Straight



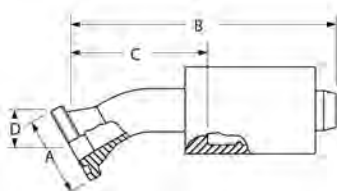
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
536-6437	25.4-1.00	-16	XN	48.0-1.89	-16	151.0-5.94	80.0-3.15	1P-3703
536-6438	25.4-1.00	-16	XN	54.0-2.13	-20	157.0-6.18	86.0-3.39	1P-3704

Flange - Cat - 10° Elbow



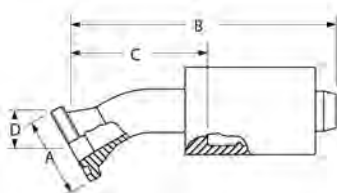
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
463-0977	50.8-2.00	-32	XS6	79.4-3.13	-32	298.0-11.73	193.0-7.60	14.0-.55	1P-3709

Flange - Cat - 14° Elbow



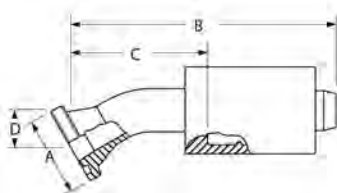
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
496-2308	25.4-1.00	-16	XN	47.6-1.87	-16	144.8-5.70	74.3-2.93	9.5-.37	1P-3703
545-7806	25.4-1.00	-16	XN	47.6-1.87	-16	206.0-8.11	135.0-5.31	9.5-.37	1P-3703

Flange - Cat - 15° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
520-0071	25.4-1.00	-16	XN	47.6-1.87	-16	252.0-9.92	181.5-7.15	26.0-1.02	1P-3703
505-3885	38.1-1.50	-24	XN6	63.5-2.50	-24	204.0-8.03	128.0-5.04	17.0-.67	1P-3705

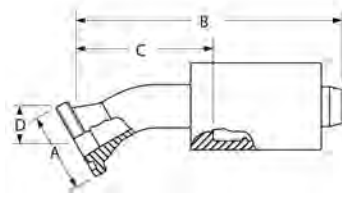
Flange - Cat - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2106	19.1-.75	-12	XN	41.3-1.63	-12	133.0-5.24	72.0-2.83	17.0-.67	1P-3702
432-2117	19.1-.75	-12	XN	47.6-1.87	-16	133.0-5.24	74.0-2.91	17.0-.67	1P-3703
496-2310	25.4-1.00	-16	XN	47.6-1.87	-16	153.0-6.02	82.5-3.25	18.0-.71	1P-3703
496-9726	25.4-1.00	-16	XN	54.0-2.13	-20	153.0-6.02	82.5-3.25	18.0-.71	1P-3704
442-5581	31.8-1.25	-20	XN6	54.0-2.13	-20	190.0-7.48	118.0-4.65	17.0-.67	1P-3704
442-5582	31.8-1.25	-20	XN6	63.5-2.50	-24	190.0-7.48	118.0-4.65	17.0-.67	1P-3705
505-3886	38.1-1.50	-24	XN6	63.5-2.50	-24	204.0-8.03	127.0-5.00	18.0-.71	1P-3705
461-2698	50.8-2.00	-32	XS6	79.4-3.13	-32	295-11.61	190-7.48	33-1.30	1P-3709

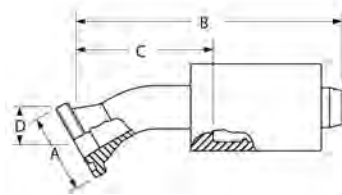
Permanent Couplings - XT-5ES

Flange - Cat - 24° Elbow



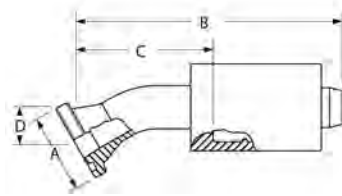
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
520-0736	25.4-1.00	-16	XN	47.6-1.87	-16	250.0-9.84	179.5-7.07	50.0-1.97	1P-3703
520-0069	25.4-1.00	-16	XN	47.6-1.87	-16	284.5-11.20	214.0-8.43	48.0-1.89	1P-3703

Flange - Cat - 25° Elbow



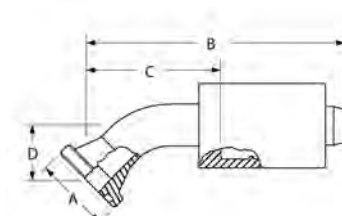
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
501-0431	19.1-.75	-12	XN	41.3-1.63	-12	256.0-10.08	197.0-7.76	42.0-1.65	1P-3702

Flange - Cat - 30° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2107	19.1-.75	-12	XN	41.3-1.63	-12	127.0-5.00	73.0-2.87	22.0-.87	1P-3702
432-2118	19.1-.75	-12	XN	47.6-1.87	-16	127.0-5.00	73.0-2.87	22.0-.87	1P-3703
496-2311	25.4-1.00	-16	XN	47.6-1.87	-16	146.0-5.75	81.0-3.19	23.0-.91	1P-3703
496-2312	25.4-1.00	-16	XN	47.6-1.87	-16	171.0-6.73	100.6-3.96	34.0-1.34	1P-3703
496-9727	25.4-1.00	-16	XN	54.0-2.13	-20	146.0-5.75	81.0-3.19	23.0-.91	1P-3704
442-5583	31.8-1.25	-20	XN6	54.0-2.13	-20	187.0-7.36	115.0-4.53	27.0-1.06	1P-3704
442-5584	31.8-1.25	-20	XN6	63.5-2.50	-24	187.0-7.36	115.0-4.53	27.0-1.06	1P-3705
447-1259	38.1-1.50	-24	XN6	63.5-2.50	-24	202.0-7.95	125.0-4.92	27.0-1.06	1P-3705
588-1530	38.1-1.50	-24	XN6	79.4-3.13	-32	202.6-7.98	118.7-4.67	29.3-1.15	1P-3709
476-7238	50.8-2.00	-32	XS6	63.5-2.50	-24	288.0-11.34	183.0-7.20	39.0-1.54	1P-3705
456-3394	50.8-2.00	-32	XS6	79.4-3.13	-32	290.0-11.42	185.0-7.28	46.0-1.81	1P-3709

Flange - Cat - 45° Elbow



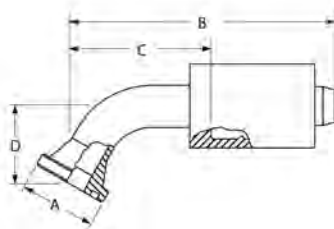
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2108	19.1-.75	-12	XN	41.3-1.63	-12	127.0-5.00	73.0-2.87	35.0-1.38	1P-3702
432-2119	19.1-.75	-12	XN	47.6-1.87	-16	127.0-5.00	73.0-2.87	35.0-1.38	1P-3703
496-2313	25.4-1.00	-16	XN	47.6-1.87	-16	149.0-5.87	83.0-3.27	36.0-1.42	1P-3703
496-2314	25.4-1.00	-16	XN	47.6-1.87	-16	175.0-6.89	109.0-4.29	62.0-2.44	1P-3703
496-2315	25.4-1.00	-16	XN	47.6-1.87	-16	195.0-7.68	125.0-4.92	77.5-3.05	1P-3703
545-7807	25.4-1.00	-16	XN	47.6-1.87	-16	230.0-9.06	158.6-6.24	62.0-2.44	1P-3703
545-7808	25.4-1.00	-16	XN	47.6-1.87	-16	223.0-8.78	152.0-5.98	77.5-3.05	1P-3703
496-9728	25.4-1.00	-16	XN	54.0-2.13	-20	148.0-5.83	83.0-3.27	36.0-1.42	1P-3704
442-5585	31.8-1.25	-20	XN6	54.0-2.13	-20	190.0-7.48	118.0-4.65	42.0-1.65	1P-3704
442-5636	31.8-1.25	-20	XN6	54.0-2.13	-20	265.0-10.43	192.0-7.56	110.0-4.33	1P-3704
442-5586	31.8-1.25	-20	XN6	63.5-2.50	-24	190.0-7.48	118.0-4.65	42.0-1.65	1P-3705
447-1260	38.1-1.50	-24	XN6	63.5-2.50	-24	194.0-7.64	118.0-4.65	41.0-1.61	1P-3705
588-1114	38.1-1.50	-24	XN6	63.5-2.50	-24	212.6-8.37	128.8-5.07	54.9-2.16	1P-3705

Permanent Couplings - XT-5ES

Flange - Cat - 45° Elbow (Cont'd.)

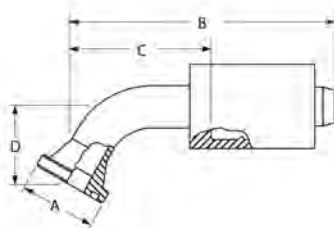
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
588-1467	38.1-1.50	-24	XN6	79.4-3.13	-32	204.8-8.06	120.9-4.76	46.0-1.81	1P-3709
476-7239	50.8-2.00	-32	XS6	63.5-2.50	-24	276.0-10.87	171.0-6.73	61.0-2.40	1P-3705
456-3395	50.8-2.00	-32	XS6	79.4-3.13	-32	337.0-13.27	222.0-8.74	73.0-2.87	1P-3709

Flange - Cat - 60° Elbow



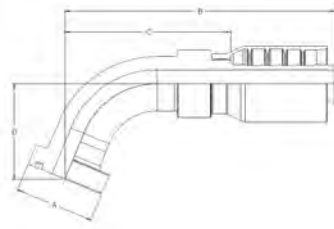
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2109	19.1-.75	-12	XN	41.3-1.63	-12	128.0-5.04	67.0-2.64	46.5-1.83	1P-3702
432-2120	19.1-.75	-12	XN	47.6-1.87	-16	128.0-5.04	69.5-2.74	46.5-1.83	1P-3703
496-2316	25.4-1.00	-16	XN	47.6-1.87	-16	155.0-6.10	84.0-3.31	53.0-2.09	1P-3703
496-9729	25.4-1.00	-16	XN	54.0-2.13	-20	155.0-6.10	84.0-3.31	53.0-2.09	1P-3704
442-5587	31.8-1.25	-20	XN6	54.0-2.13	-20	191.0-7.52	118.0-4.65	60.0-2.36	1P-3704
589-9955	31.8-1.25	-20	XN6	63.5-2.50	-24	187.1-7.37	109.2-4.30	57.5-2.26	1P-3705
442-5588	31.8-1.25	-20	XN6	63.5-2.50	-24	196.0-7.72	118.0-4.65	60.0-2.36	1P-3705
505-3887	38.1-1.50	-24	XN6	63.5-2.50	-24	205.0-8.07	122.0-4.80	56.0-2.20	1P-3705
588-1135	38.1-1.50	-24	XN6	63.5-2.50	-24	210.4-8.28	126.5-4.98	73.9-2.91	1P-3705
505-3888	38.1-1.50	-24	XN6	63.5-2.50	-24	221.0-8.70	144.0-5.67	83.0-3.27	1P-3705
588-1506	38.1-1.50	-24	XN6	79.4-3.13	-32	203.2-8.00	119.4-4.70	63.5-2.50	1P-3709
456-3396	50.8-2.00	-32	XS6	79.4-3.13	-32	306.0-12.05	201.0-7.91	100.0-3.94	1P-3709

Flange - Cat - 67.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2110	19.1-.75	-12	XN	41.3-1.63	-12	125.0-4.92	64.0-2.52	52.5-2.07	1P-3702
502-0282	19.1-.75	-12	XN	47.6-1.87	-16	124.0-4.88	65.0-2.56	49.5-1.95	1P-3703
496-2317	25.4-1.00	-16	XN	47.6-1.87	-16	150.0-5.91	80.0-3.15	55.5-2.19	1P-3703
496-9730	25.4-1.00	-16	XN	54.0-2.13	-20	150.0-5.91	80.0-3.15	55.5-2.19	1P-3704
496-9731	25.4-1.00	-16	XN	54.0-2.13	-20	156.0-6.14	85.0-3.35	68.5-2.70	1P-3704
442-5590	31.8-1.25	-20	XN6	54.0-2.13	-20	188.0-7.40	116.0-4.57	60.0-2.36	1P-3704
442-5591	31.8-1.25	-20	XN6	54.0-2.13	-20	195.0-7.68	123.0-4.84	80.0-3.15	1P-3704
505-3889	38.1-1.50	-24	XN6	63.5-2.50	-24	197.0-7.76	115.0-4.53	64.0-2.52	1P-3705
461-2699	50.8-2.00	-32	XS6	79.4-3.13	-32	294.0-11.57	189.0-7.44	113.0-4.45	1P-3709

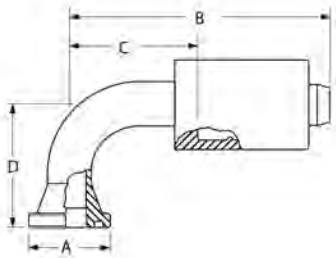
Flange - Cat High Vibration - 67.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
536-6439	25.4-1.00	-16	XN	54.0-2.13	-20	184.0-7.24	113.0-4.45	65.0-2.56	1P-3704

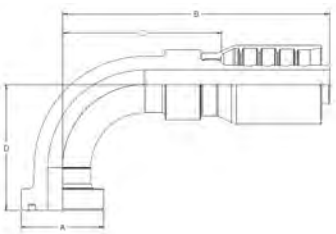
Permanent Couplings - XT-5ES

Flange - Cat - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2111	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	68.0-2.68	1P-3702
432-2112	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	85.0-3.35	1P-3702
432-2113	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	120.0-4.72	1P-3702
432-2114	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	129.0-5.08	1P-3702
432-2121	19.1-.75	-12	XN	47.6-1.87	-16	107.0-4.21	53.0-2.09	68.0-2.68	1P-3703
432-2122	19.1-.75	-12	XN	47.6-1.87	-16	107.0-4.21	53.0-2.09	100.0-3.94	1P-3703
432-2123	19.1-.75	-12	XN	47.6-1.87	-16	107.0-4.21	53.0-2.09	128.0-5.04	1P-3703
496-2318	25.4-1.00	-16	XN	47.6-1.87	-16	135.0-5.31	70.0-2.76	73.0-2.87	1P-3703
496-2319	25.4-1.00	-16	XN	47.6-1.87	-16	135.0-5.31	70.0-2.76	82.0-3.23	1P-3703
496-2320	25.4-1.00	-16	XN	47.6-1.87	-16	135.0-5.31	70.0-2.76	132.0-5.20	1P-3703
496-2321	25.4-1.00	-16	XN	47.6-1.87	-16	140.0-5.51	70.0-2.76	150.0-5.91	1P-3703
496-2322	25.4-1.00	-16	XN	47.6-1.87	-16	140.1-5.52	69.6-2.74	210.0-8.27	1P-3703
581-4022	25.4-1.00	-16	XN	47.6-1.87	-16	162.1-6.38	91.6-3.61	110.0-4.33	1P-3703
496-9732	25.4-1.00	-16	XN	54.0-2.13	-20	135.0-5.31	70.0-2.76	73.0-2.87	1P-3704
496-9733	25.4-1.00	-16	XN	54.0-2.13	-20	135.0-5.31	70.0-2.76	82.0-3.23	1P-3704
496-9734	25.4-1.00	-16	XN	54.0-2.13	-20	135.0-5.31	70.0-2.76	150.0-5.91	1P-3704
442-5593	31.8-1.25	-20	XN6	54.0-2.13	-20	181.0-7.13	109.0-4.29	82.0-3.23	1P-3704
442-5594	31.8-1.25	-20	XN6	54.0-2.13	-20	181.0-7.13	109.0-4.29	92.0-3.62	1P-3704
524-0034	31.8-1.25	-20	XN6	54.0-2.13	-20	217.0-8.54	138.9-5.47	120.0-4.72	1P-3704
442-5595	31.8-1.25	-20	XN6	54.0-2.13	-20	181.0-7.13	109.0-4.29	150.0-5.91	1P-3704
442-5596	31.8-1.25	-20	XN6	63.5-2.50	-24	181.0-7.13	109.0-4.29	82.0-3.23	1P-3705
442-5597	31.8-1.25	-20	XN6	63.5-2.50	-24	181.0-7.13	109.0-4.29	135.0-5.31	1P-3705
583-4393	38.1-1.50	-24	XN6	54.0-2.13	-20	178.6-7.03	96.2-13.79	95.5-3.76	1P-3704
447-1261	38.1-1.50	-24	XN6	63.5-2.50	-24	181.0-7.13	104.0-4.09	87.0-3.43	1P-3705
447-1262	38.1-1.50	-24	XN6	63.5-2.50	-24	181.0-7.13	104.0-4.09	106.0-4.17	1P-3705
581-4024	38.1-1.50	-24	XN6	63.5-2.50	-24	234.0-9.21	151.8-5.98	180.0-7.09	1P-3705
582-9218	38.1-1.50	-24	XN6	79.4-3.13	-32	186.7-7.35	103.7-4.09	140.0-5.51	1P-3709
583-4749	50.8-2.00	-32	XS6	63.5-2.50	-24	250.0-9.84	138.5-5.45	175.0-6.89	1P-3705
456-3397	50.8-2.00	-32	XS6	79.4-3.13	-32	242.0-9.53	137.0-5.39	147.0-5.79	1P-3709

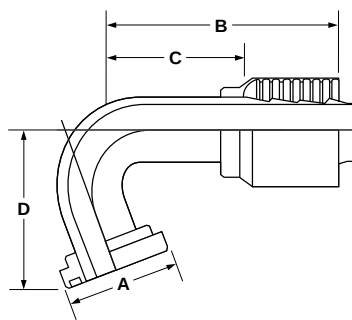
Flange - Cat Vibration - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
536-6440	25.4-1.00	-16	XN	54.0-2.13	-20	175.0-6.89	104.0-4.09	82.0-3.23	1P-3704

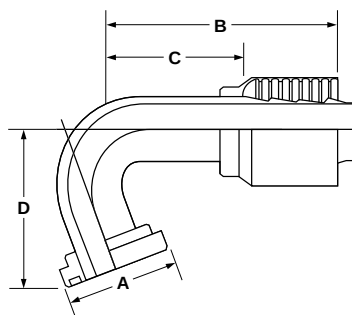
Permanent Couplings - XT-5ES

Flange - Cat - 100° Elbow



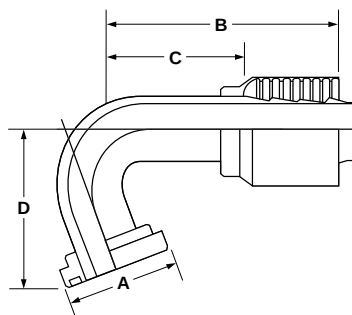
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
463-0979	50.8-2.00	-32	XS6	79.4-3.13	-32	240.0-9.45	135.0-5.31	200.0-7.87	1P-3709

Flange - Cat - 105° Elbow



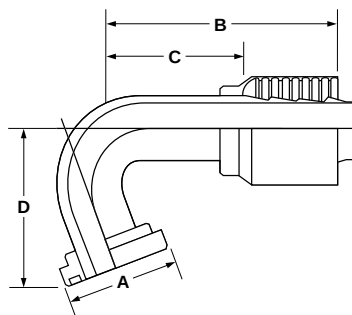
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
583-4906	38.1-1.50	-24	XN6	63.5-2.50	-24	229.3-9.03	147.2-5.80	155.0-6.10	1P-3705
463-0980	50.8-2.00	-32	XS6	79.4-3.13	-32	233.0-9.17	118.0-4.65	204.0-8.03	1P-3709

Flange - Cat - 110° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
496-2323	25.4-1.00	-16	XN	47.6-1.87	-16	120.0-4.72	55.0-2.17	85.0-3.35	1P-3703
496-9735	25.4-1.00	-16	XN	54.0-2.13	-20	120.0-4.72	55.0-2.17	85.0-3.35	1P-3704
442-5598	31.8-1.25	-20	XN6	63.5-2.50	-24	165.3-6.51	87.4-3.44	101.0-3.98	1P-3705
581-4025	38.1-1.50	-24	XN6	63.5-2.50	-24	210.8-8.30	128.6-5.06	160.0-6.30	1P-3705
583-4122	38.1-1.50	-24	XN6	79.4-3.13	-32	202.0-7.95	119.5-4.70	187.0-7.36	1P-3709

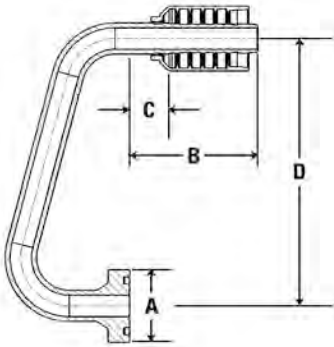
Flange - Cat - 120° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
581-4023	38.1-1.50	-24	XN6	63.5-2.50	-24	178.0-7.00	95.9-3.78	185.0-7.28	1P-3705

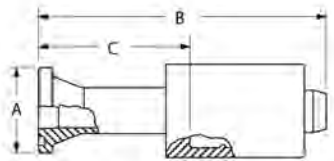
Permanent Couplings - XT-5ES

Flange - Cat - 180° Elbow



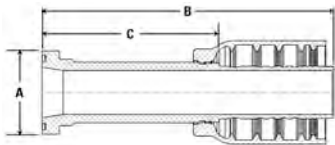
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
472-1422	19.1-.75	-12	XN	47.6-1.87	-16	84.0-3.31	26.0-1.02	175.0-6.89	1P-3703

Flange - Code 61 - Straight



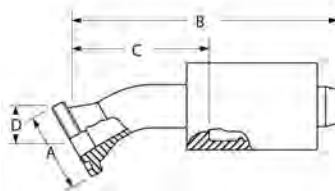
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
432-2070	19.1-.75	-12	XN	38.1-1.50	-12	124.0-4.88	70.0-2.76	4J-5267
432-2083	19.1-.75	-12	XN	44.5-1.75	-16	124.0-4.88	70.0-2.76	4J-0520
432-2093	19.1-.75	-12	XN	50.8-2.00	-20	124.0-4.88	70.0-2.76	4J-0522
497-8283	25.4-1.00	-16	XN	44.5-1.75	-16	147.0-5.79	82.0-3.23	4J-0520
498-0775	25.4-1.00	-16	XN	50.8-2.00	-20	147.0-5.79	82.0-3.23	4J-0522
498-8389	25.4-1.00	-16	XN	60.3-2.37	-24	151.0-5.94	86.0-3.39	4J-0524
442-5552	31.8-1.25	-20	XN6	44.5-1.75	-16	158.0-6.22	85.0-3.35	4J-0520
442-5553	31.8-1.25	-20	XN6	50.8-2.00	-20	158.0-6.22	85.0-3.35	4J-0522
442-5554	31.8-1.25	-20	XN6	60.3-2.37	-24	157.0-6.18	84.0-3.31	4J-0524
505-3904	38.1-1.50	-24	XN6	60.3-2.37	-24	145.0-5.71	67.0-2.64	4J-0524
505-3905	38.1-1.50	-24	XN6	71.4-2.81	-32	145.0-5.71	67.0-2.64	4J-0527
561-8112	50.8-2.00	-32	XS6	71.4-2.81	-32	227.0-8.94	115.0-4.53	4J-0527

Flange - Code 61 High Pressure - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
584-8072	38.1-1.50	-24	XN6	60.3-2.37	-24	211-8.31	127.1-5.00

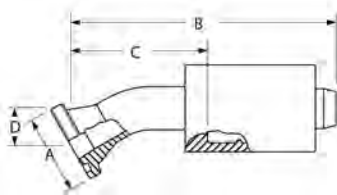
Flange - Code 61 - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2071	19.1-.75	-12	XN	38.1-1.50	-12	116.0-4.57	62.0-2.44	12.0-.47	4J-5267
432-2084	19.1-.75	-12	XN	44.5-1.75	-16	116.0-4.57	62.0-2.44	12.0-.47	4J-0520
497-8285	25.4-1.00	-16	XN	44.5-1.75	-16	136.0-5.35	66.0-2.60	11.0-.43	4J-0520
498-0776	25.4-1.00	-16	XN	50.8-2.00	-20	136.0-5.35	66.0-2.60	11.0-.43	4J-0522
498-8390	25.4-1.00	-16	XN	60.3-2.37	-24	137.3-5.41	66.8-2.63	11.0-.43	4J-0524
442-5556	31.8-1.25	-20	XN6	60.3-2.37	-24	178.0-7.01	99.8-3.93	13.0-.51	4J-0524
505-3906	38.1-1.50	-24	XN6	60.3-2.37	-24	188.3-7.41	105.4-4.15	15.0-.59	4J-0524

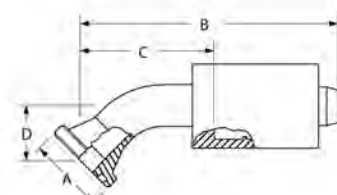
Permanent Couplings - XT-5ES

Flange - Code 61 - 30° Elbow



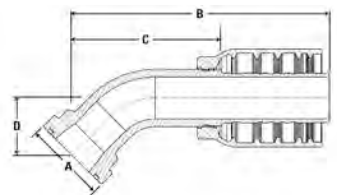
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2072	19.1-.75	-12	XN	38.1-1.50	-12	114.0-4.49	61.0-2.40	15.0-.59	4J-5267
432-2085	19.1-.75	-12	XN	44.5-1.75	-16	114.0-4.49	61.0-2.40	15.0-.59	4J-0520
497-8287	25.4-1.00	-16	XN	44.5-1.75	-16	134.0-5.28	69.0-2.72	16.0-.63	4J-0520
498-0777	25.4-1.00	-16	XN	50.8-2.00	-20	140.0-5.51	69.0-2.72	16.0-.63	4J-0520
442-5557	31.8-1.25	-20	XN6	50.8-2.00	-20	176.3-6.94	98.0-3.86	19.0-.75	4J-0522
505-3907	38.1-1.50	-24	XN6	60.3-2.37	-24	186.3-7.33	103.4-4.07	21.3-.84	4J-0524

Flange - Code 61 - 45° Elbow



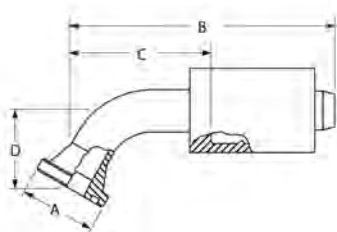
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2073	19.1-.75	-12	XN	38.1-1.50	-12	117.0-4.61	63.0-2.48	25.0-.98	4J-5267
432-2086	19.1-.75	-12	XN	44.5-1.75	-16	117.0-4.61	63.0-2.48	25.0-.98	4J-0520
497-0463	25.4-1.00	-16	XN	38.1-1.50	-12	141.8-5.58	71.3-2.81	25.0-.98	4J-5267
497-8288	25.4-1.00	-16	XN	44.5-1.75	-16	139.0-5.47	74.0-2.91	27.0-1.06	4J-0520
497-8289	25.4-1.00	-16	XN	44.5-1.75	-16	169.0-6.65	98.0-3.86	51.0-2.01	4J-0520
498-0779	25.4-1.00	-16	XN	50.8-2.00	-20	139.0-5.47	74.0-2.91	27.0-1.06	4J-0522
442-5558	31.8-1.25	-20	XN6	50.8-2.00	-20	182.0-7.17	103.5-4.07	32.0-1.26	4J-0522
442-5559	31.8-1.25	-20	XN6	60.3-2.37	-24	176.0-6.93	104.0-4.09	32.0-1.26	4J-0524
505-3908	38.1-1.50	-24	XN6	60.3-2.37	-24	200.0-7.87	123.0-4.84	44.0-1.73	4J-0524
505-3909	38.1-1.50	-24	XN6	71.4-2.81	-32	206.0-8.11	123.1-4.85	49.5-1.95	4J-0527
561-8113	50.8-2.00	-32	XS6	71.4-2.81	-32	281.0-11.06	170.0-6.69	56.0-2.20	4J-0527

Flange - Code 61 High Pressure - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
600-2276	38.1-1.50	-24	XN6	60.3-2.37	-24	197.7-7.78	113.8-4.48	44.0-1.73

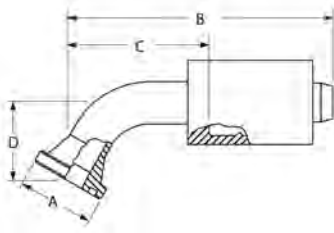
Flange - Code 61 - 60° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2074	19.1-.75	-12	XN	38.1-1.50	-12	116.0-4.57	63.0-2.48	35.0-1.38	4J-5267
432-2087	19.1-.75	-12	XN	44.5-1.75	-16	116.0-4.57	63.0-2.48	35.0-1.38	4J-0520
497-8290	25.4-1.00	-16	XN	44.5-1.75	-16	141.0-5.55	76.0-2.99	39.0-1.54	4J-0520
498-0781	25.4-1.00	-16	XN	50.8-2.00	-20	141.0-5.55	76.0-2.99	39.0-1.54	4J-0522
442-5560	31.8-1.25	-20	XN6	50.8-2.00	-20	188.0-7.40	110.0-4.33	45.0-1.77	4J-0522
442-5561	31.8-1.25	-20	XN6	60.3-2.37	-24	188.0-7.40	110.0-4.33	45.0-1.77	4J-0524
505-3910	38.1-1.50	-24	XN6	60.3-2.37	-24	199.0-7.83	116.1-4.57	50.0-1.97	4J-0524
588-1166	38.1-1.50	-24	XN6	50.8-2.00	-20	165.0-6.50	108.0-4.25	52.0-2.05	4J-0522
579-5138	50.8-2.00	-32	XS6	71.4-2.81	-32	270.0-10.63	159.0-6.26	78.0-3.07	4J-0527

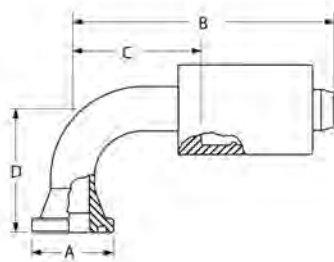
Permanent Couplings - XT-5ES

Flange - Code 61 - 67.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2075	19.1-.75	-12	XN	38.1-1.50	-12	115.0-4.53	62.0-2.44	41.0-1.61	4J-5267
432-2088	19.1-.75	-12	XN	44.5-1.75	-16	115.0-4.53	62.0-2.44	41.0-1.61	4J-0520
432-2094	19.1-.75	-12	XN	50.8-2.00	-20	115.0-4.53	62.0-2.44	41.0-1.61	4J-0522
497-8291	25.4-1.00	-16	XN	44.5-1.75	-16	141.0-5.55	76.0-2.99	44.0-1.73	4J-0520
498-0782	25.4-1.00	-16	XN	50.8-2.00	-20	141.0-5.55	76.0-2.99	44.0-1.73	4J-0522
442-5562	31.8-1.25	-20	XN6	50.8-2.00	-20	182.3-7.18	104.0-4.09	51.0-2.01	4J-0522
505-3911	38.1-1.50	-24	XN6	60.3-2.37	-24	192.3-7.57	109.4-4.31	57.5-2.26	4J-0524

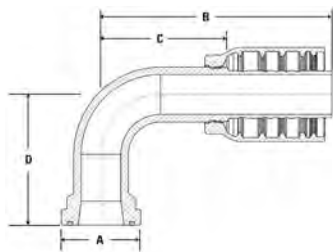
Flange - Code 61 - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2076	19.1-.75	-12	XN	38.1-1.50	-12	107.0-4.21	53.0-2.09	54.0-2.13	4J-5267
432-2077	19.1-.75	-12	XN	38.1-1.50	-12	107.0-4.21	53.0-2.09	96.0-3.78	4J-5267
432-2078	19.1-.75	-12	XN	38.1-1.50	-12	107.0-4.21	53.0-2.09	127.0-5.00	4J-5267
432-2089	19.1-.75	-12	XN	44.5-1.75	-16	107.0-4.21	53.0-2.09	54.0-2.13	4J-0520
432-2090	19.1-.75	-12	XN	44.5-1.75	-16	107.0-4.21	53.0-2.09	79.0-3.11	4J-0520
551-0027	19.1-.75	-12	XN	44.5-1.75	-16	112.0-4.41	50.0-1.97	127.0-5.00	4J-0520
432-2095	19.1-.75	-12	XN	50.8-2.00	-20	107.0-4.21	53.0-2.09	54.0-2.13	4J-0522
497-0465	25.4-1.00	-16	XN	38.1-1.50	-12	126.0-4.96	61.0-2.40	54.0-2.13	4J-5267
497-8292	25.4-1.00	-16	XN	44.5-1.75	-16	135.0-5.31	70.0-2.76	54.0-2.13	4J-0520
497-8293	25.4-1.00	-16	XN	44.5-1.75	-16	135.0-5.31	70.0-2.76	61.0-2.40	4J-0520
497-8294	25.4-1.00	-16	XN	44.5-1.75	-16	140.0-5.51	69.6-2.74	110.0-4.33	4J-0520
497-8295	25.4-1.00	-16	XN	44.5-1.75	-16	135.0-5.31	70.0-2.76	118.0-4.65	4J-0520
497-8297	25.4-1.00	-16	XN	44.5-1.75	-16	135.0-5.31	70.0-2.76	140.0-5.51	4J-0520
497-8298	25.4-1.00	-16	XN	44.5-1.75	-16	140.1-5.52	69.6-2.74	165.0-6.50	4J-0520
498-0783	25.4-1.00	-16	XN	50.8-2.00	-20	135.0-5.31	70.0-2.76	61.0-2.40	4J-0522
498-0784	25.4-1.00	-16	XN	50.8-2.00	-20	135.0-5.31	70.0-2.76	118.0-4.65	4J-0522
498-8392	25.4-1.00	-16	XN	60.3-2.37	-24	135.0-5.31	69.0-2.72	61.0-2.40	4J-0524
498-8393	25.4-1.00	-16	XN	60.3-2.37	-24	140.0-5.51	69.6-2.74	108.0-4.25	4J-0524
442-5564	31.8-1.25	-20	XN6	44.5-1.75	-16	162.0-6.38	84.4-3.32	63.0-2.48	4J-0520
481-8281	31.8-1.25	-20	XN6	44.5-1.75	-16	171.5-6.75	93.6-3.69	100.0-3.94	4J-0520
481-8282	31.8-1.25	-20	XN6	44.5-1.75	-16	171.5-6.75	93.6-3.69	195.0-7.68	4J-0520
442-5565	31.8-1.25	-20	XN6	50.8-2.00	-20	175.0-6.89	98.0-3.86	70.0-2.76	4J-0522
442-5569	31.8-1.25	-20	XN6	50.8-2.00	-20	175.8-6.92	97.5-3.84	142.0-5.59	4J-0522
442-5566	31.8-1.25	-20	XN6	60.3-2.37	-24	170.0-6.69	98.0-3.86	70.0-2.76	4J-0524
442-5567	31.8-1.25	-20	XN6	71.4-2.81	-32	175.8-6.92	97.5-3.84	70.0-2.76	4J-0527
505-3912	38.1-1.50	-24	XN6	60.3-2.37	-24	179.0-7.05	101.0-3.98	91.0-3.58	4J-0524
588-1176	38.1-1.50	-24	XN6	71.4-2.81	-32	184.3-7.26	101.4-3.99	88.8-3.50	4J-0527
505-3913	38.1-1.50	-24	XN6	71.4-2.81	-32	184.3-7.26	101.4-3.99	98.0-3.86	4J-0527
561-8114	50.8-2.00	-32	XS6	71.4-2.81	-32	278.0-10.94	166.0-6.54	121.0-4.76	4J-0527

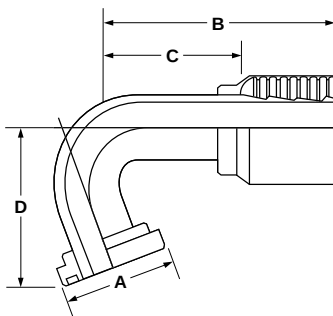
Permanent Couplings - XT-5ES

Flange - Code 61 High Pressure - 90° Elbow



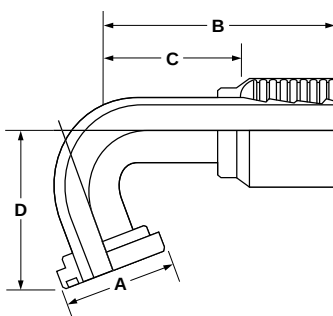
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
596-6490	38.1-1.50	-24	XN6	60.3-2.37	-24	184.7-7.27	104.2-4.10	104.0-4.09

Flange - Code 61 - 100° Elbow



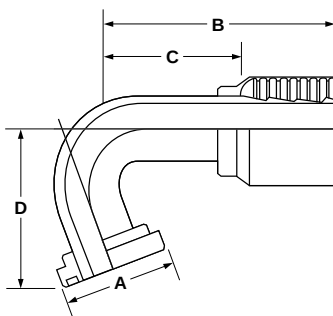
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2079	19.1-.75	-12	XN	38.1-1.50	-12	106.0-4.17	44.0-1.73	59.5-2.34	4J-5267
432-2091	19.1-.75	-12	XN	44.5-1.75	-16	106.0-4.17	44.0-1.73	59.5-2.34	4J-0520

Flange - Code 61 - 110° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2080	19.1-.75	-12	XN	38.1-1.50	-12	95.0-3.74	41.0-1.61	64.0-2.52	4J-5267
497-8300	25.4-1.00	-16	XN	44.5-1.75	-16	130.0-5.12	59.0-2.32	73.0-2.87	4J-0520
498-0785	25.4-1.00	-16	XN	50.8-2.00	-20	130.0-5.12	59.0-2.32	73.0-2.87	4J-0522
442-5570	31.8-1.25	-20	XN6	50.8-2.00	-20	165.0-6.50	86.0-3.39	84.0-3.31	4J-0522
602-7233	38.1-1.50	-24	XN6	60.3-2.37	-24	174.0-6.85	97.0-3.82	95.0-3.74	4J-0524

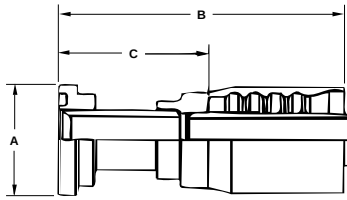
Flange - Code 61 - 135° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2081	19.1-.75	-12	XN	38.1-1.50	-12	116.0-4.57	63.0-2.48	69.0-2.72	4J-5267
432-2092	19.1-.75	-12	XN	44.5-1.75	-16	115.0-4.53	62.0-2.44	70.0-2.76	4J-0520
497-0466	25.4-1.00	-16	XN	38.1-1.50	-12	118.0-4.65	48.0-1.89	70.0-2.76	4J-5267
497-8301	25.4-1.00	-16	XN	44.5-1.75	-16	106.5-4.19	36.0-1.42	87.5-3.44	4J-0520

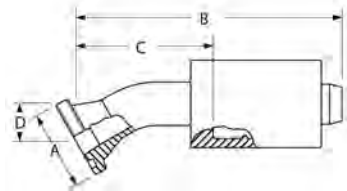
Permanent Couplings - XT-5ES

Flange - Code 62 - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
432-2099	19.1-.75	-12	XN	41.3-1.63	-12	129.0-5.08	76.0-2.99	4J-5267
486-9601	19.1-.75	-12	XN	47.6-1.87	-16	130.0-5.12	77.0-3.03	4J-0520
498-8394	25.4-1.00	-16	XN	41.3-1.63	-12	145.0-5.71	80.0-3.15	4J-5267
498-8396	25.4-1.00	-16	XN	47.6-1.87	-16	154.0-6.06	89.0-3.50	4J-0520
498-8405	25.4-1.00	-16	XN	54.0-2.13	-20	154.0-6.06	89.0-3.50	4J-0522
516-9131	31.8-1.25	-20	XN6	47.6-1.87	-16	177.0-6.97	104.0-4.09	4J-0520
442-5572	31.8-1.25	-20	XN6	54.0-2.13	-20	157.0-6.18	85.0-3.35	4J-0522
442-5573	31.8-1.25	-20	XN6	63.5-2.50	-24	157.0-6.18	85.0-3.35	4J-0524
505-3891	38.1-1.50	-24	XN6	54.0-2.13	-20	155.0-6.10	77.0-3.03	4J-0522
505-3892	38.1-1.50	-24	XN6	63.5-2.50	-24	206.0-8.11	129.0-5.08	4J-0524
505-3893	38.1-1.50	-24	XN6	79.4-3.13	-32	180.0-7.09	103.0-4.06	4J-0527
561-8115	50.8-2.00	-32	XS6	71.4-2.81	-32	221.0-8.70	116.0-4.57	4J-0527

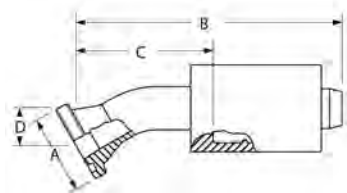
Flange - Code 62 - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
603-2206	19.1-.75	-12	XN	47.6-1.87	-16	132.7-5.22	74.1-2.92	17.0-.67	4J-0520
603-2707	19.1-.75	-12	XN	41.3-1.63	-12	127.1-5.00	68.5-2.70	14.7-.58	4J-5267
498-8397	25.4-1.00	-16	XN	47.6-1.87	-16	143.4-5.65	72.9-2.87	14.0-.55	4J-0520
498-8406	25.4-1.00	-16	XN	54.0-2.13	-20	143.4-5.65	72.9-2.87	14.0-.55	4J-0522
589-8339	31.8-1.25	-20	XN6	54.0-2.13	-20	195.9-7.71	118.0-4.65	15.0-.59	4J-0522
505-3894	38.1-1.50	-24	XN6	63.5-2.50	-24	209.5-8.25	127.1-5.00	18.0-.71	4J-0524
561-8116	50.8-2.00	-32	XS6	79.4-3.13	-32	296.0-11.65	185.0-7.28	22.0-.87	4J-0527

Note: Grayscale parts are MAO (Made As Order).

Flange - Code 62 - 30° Elbow

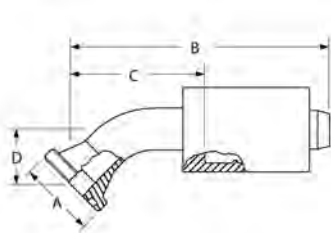


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
603-2708	19.1-.75	-12	XN	41.3-1.63	-12	125.5-4.94	66.9-2.63	18.5-.73	4J-5267
603-2208	19.1-.75	-12	XN	47.6-1.87	-16	130.7-5.15	72.1-2.84	21.5-.85	4J-0520
498-8398	25.4-1.00	-16	XN	47.6-1.87	-16	142.5-5.61	72.0-2.83	17.5-.69	4J-0520
498-8407	25.4-1.00	-16	XN	54.0-2.13	-20	142.5-5.61	72.0-2.83	17.5-.69	4J-0522
603-2164	31.8-1.25	-20	XN6	54.0-2.13	-20	192.8-7.59	114.9-4.52	26.0-1.02	4J-0522
594-3931	31.8-1.25	-20	XN6	54.0-2.13	-20	193.8-7.63	118.0-4.65	22.0-.87	4J-0522
505-3895	38.1-1.50	-24	XN6	63.5-2.50	-24	207.0-8.15	124.6-4.91	26.5-1.04	4J-0524
561-8117	50.8-2.00	-32	XS6	79.4-3.13	-32	293.0-11.54	182.0-7.17	32.0-1.26	4J-0527

Note: Grayscale parts are MAO (Made As Order).

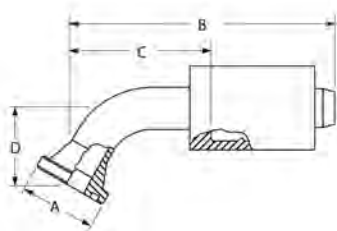
Permanent Couplings - XT-5ES

Flange - Code 62 - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2100	19.1-.75	-12	XN	41.3-1.63	-12	121.0-4.76	67.0-2.64	29.0-1.14	4J-5267
432-2102	19.1-.75	-12	XN	47.6-1.87	-16	121.0-4.76	68.0-2.68	29.0-1.14	4J-0520
559-9498	25.4-1.00	-16	XN	41.3-1.63	-12	136.0-5.35	71.0-2.80	26.0-1.02	4J-5267
498-8399	25.4-1.00	-16	XN	47.6-1.87	-16	145.0-5.71	79.0-3.11	32.0-1.26	4J-0520
498-8400	25.4-1.00	-16	XN	47.6-1.87	-16	170.8-6.72	100.3-3.95	53.0-2.09	4J-0520
498-8408	25.4-1.00	-16	XN	54.0-2.13	-20	145.0-5.71	79.0-3.11	32.0-1.26	4J-0522
442-5574	31.8-1.25	-20	XN6	54.0-2.13	-20	188.0-7.40	114.0-4.49	38.0-1.50	4J-0522
442-5575	31.8-1.25	-20	XN6	63.5-2.50	-24	188.0-7.40	114.0-4.49	38.0-1.50	4J-0524
505-3896	38.1-1.50	-24	XN6	63.5-2.50	-24	195.0-7.68	117.0-4.61	41.0-1.61	4J-0524
505-3897	38.1-1.50	-24	XN6	71.4-2.81	-32	206.7-8.14	124.3-4.89	48.0-1.89	4J-0527
561-8118	50.8-2.00	-32	XS6	79.4-3.13	-32	282.0-11.10	171.0-6.73	56.0-2.20	4J-0527

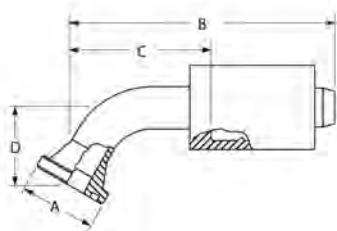
Flange - Code 62 - 60° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
603-2709	19.1-.75	-12	XN	41.3-1.63	-12	123.3-4.85	64.7-2.55	38.2-1.50	4J-5267
603-2210	19.1-.75	-12	XN	47.6-1.87	-16	127.9-5.04	69.3-2.73	46.2-1.82	4J-0520
498-8409	25.4-1.00	-16	XN	54.0-2.13	-20	149.4-5.88	78.9-3.11	44.0-1.73	4J-0522
561-2055	31.8-1.25	-20	XN6	54.0-2.13	-20	193.0-7.60	115.1-4.53	55.0-2.17	4J-0522
505-3898	38.1-1.50	-24	XN6	60.3-2.37	-24	204.7-8.06	122.3-4.81	56.0-2.20	4J-0524
561-8119	50.8-2.00	-32	XS6	79.4-3.13	-32	300.0-11.81	189.0-7.44	83.0-3.27	4J-0527

Note: Grayscale parts are MAO (Made As Order).

Flange - Code 62 - 67.5° Elbow

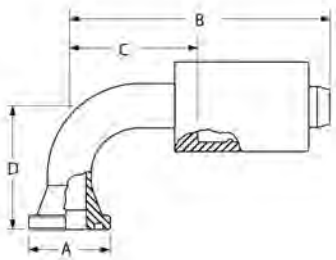


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
603-2212	19.1-.75	-12	XN	47.6-1.87	-16	123.7-4.87	65.1-2.56	48.5-1.91	4J-0520
603-2710	19.1-.75	-12	XN	41.3-1.63	-12	120.2-4.73	61.6-2.43	40.0-1.57	4J-5267
498-8402	25.4-1.00	-16	XN	47.6-1.87	-16	146.7-5.78	76.2-3.00	46.5-1.83	4J-0520
498-8410	25.4-1.00	-16	XN	54.0-2.13	-20	146.7-5.78	76.2-3.00	46.5-1.83	4J-0522
603-2166	31.8-1.25	-20	XN6	54.0-2.13	-20	189.7-7.47	118.-4.40	55.3-2.18	4J-0522
505-3899	38.1-1.50	-24	XN6	63.5-2.50	-24	197.3-7.77	114.9-4.52	64.0-2.52	4J-0524
561-8120	50.8-2.00	-32	XS6	79.4-3.13	-32	288.0-11.34	177.0-6.97	97.0-3.82	4J-0527

Note: Grayscale parts are MAO (Made As Order).

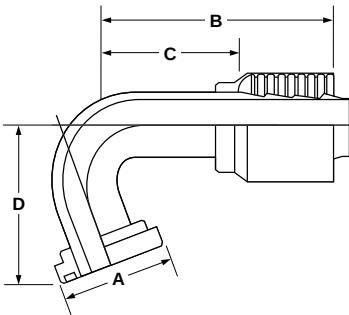
Permanent Couplings - XT-5ES

Flange - Code 62 - 90° Elbow



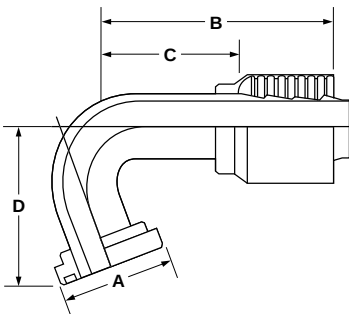
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2101	19.1-1.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	55.0-2.17	4J-5267
432-2103	19.1-1.75	-12	XN	47.6-1.87	-16	107.0-4.21	53.0-2.09	59.0-2.32	4J-0520
603-2213	19.1-1.75	-12	XN	47.6-1.87	-16	112.0-4.41	53.4-2.10	70.0-2.76	4J-0520
498-8395	25.4-1.00	-16	XN	41.3-1.63	-12	126.0-4.96	61.0-2.40	59.0-2.32	4J-5267
498-8403	25.4-1.00	-16	XN	47.6-1.87	-16	135.0-5.31	70.0-2.76	70.0-2.76	4J-0520
498-8404	25.4-1.00	-16	XN	47.6-1.87	-16	140.1-5.52	69.6-2.74	101.5-4.00	4J-0520
498-8411	25.4-1.00	-16	XN	54.0-2.13	-20	135.0-5.31	70.0-2.76	70.0-2.76	4J-0522
498-8412	25.4-1.00	-16	XN	54.0-2.13	-20	140.1-5.52	69.6-2.74	101.5-4.00	4J-0522
442-5576	31.8-1.25	-20	XN6	47.6-1.87	-16	170.3-6.70	92.4-3.64	63.5-2.50	4J-0520
481-8278	31.8-1.25	-20	XN6	47.6-1.87	-16	171.5-6.75	93.6-3.69	100.0-3.94	4J-0520
481-8279	31.8-1.25	-20	XN6	47.6-1.87	-16	171.5-6.75	93.6-3.69	180.0-7.09	4J-0520
442-5577	31.8-1.25	-20	XN6	54.0-2.13	-20	181.0-7.13	109.0-4.29	82.0-3.23	4J-0522
603-2167	31.8-1.25	-20	XN6	54.0-1.23	-20	182.6-7.19	104.7-4.12	90.0-3.54	4J-0522
481-8280	31.8-1.25	-20	XN6	54.0-2.13	-20	187.0-7.36	108.9-4.29	100.0-3.94	4J-0522
442-5634	31.8-1.25	-20	XN6	54.0-2.13	-20	187.0-7.36	108.9-4.29	140.0-5.51	4J-0522
442-5578	31.8-1.25	-20	XN6	63.5-2.50	-24	181.0-7.13	109.0-4.29	82.0-3.23	4J-0524
578-6951	31.8-1.25	-20	XN6	63.5-2.50	-24	186.7-7.35	108.9-4.29	120.0-4.72	4J-0524
505-3900	38.1-1.50	-24	XN6	54.0-2.13	-20	178.6-7.03	96.2-3.79	76.0-2.99	4J-0522
505-3901	38.1-1.50	-24	XN6	54.0-2.13	-20	179.0-7.05	96.0-3.78	140.0-5.51	4J-0522
505-3902	38.1-1.50	-24	XN6	63.5-2.50	-24	180.0-7.09	104.0-4.09	87.0-3.43	4J-0524
578-6960	38.1-1.50	-24	XN6	63.5-2.50	-24	184.7-7.27	104.2-4.10	200.0-7.87	4J-0524
505-3903	38.1-1.50	-24	XN6	79.4-3.13	-32	186.6-7.35	104.2-4.10	98.0-3.86	4J-0527
561-8121	50.8-2.00	-32	XS6	79.4-3.13	-32	278.0-10.94	167.0-6.57	120.0-4.72	4J-0527
578-6966	50.8-2.00	-32	XS6	79.4-3.13	-32	278.1-10.95	166.6-6.56	150.0-5.91	4J-0527

Flange - Code 62 - 110° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
582-4914	25.4-1.00	-16	XN	47.6-1.87	-16	125.5-4.94	154.6-6.09	85.0-3.35	4J-0520

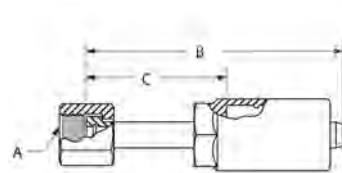
Flange - Code 62 - 130° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
594-4518	31.8-1.25	-20	XN6	47.6-1.87	-16	171.5-6.75	93.6-3.69	90.0-3.54	4J-0520

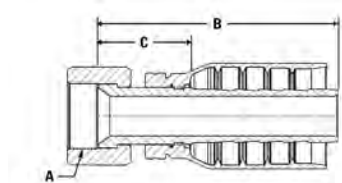
Permanent Couplings - XT-5ES

JIC 37° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
432-2039	19.1-.75	-12	XN	7/8-14	-10	89.0-3.50	35.0-1.38
432-2028	19.1-.75	-12	XN	1 1/16-12	-12	90.0-3.54	36.0-1.42
432-2035	19.1-.75	-12	XN	1 5/16-12	-16	94.0-3.70	40.0-1.57
499-1158	25.4-1.00	-16	XN	1 5/16-12	-16	102.0-4.02	37.0-1.46
499-1169	25.4-1.00	-16	XN	1 5/8-12	-20	111.0-4.37	40.0-1.57
442-5606	31.8-1.25	-20	XN6	1 5/16-12	-16	124.8-4.91	47.0-1.85
442-5607	31.8-1.25	-20	XN6	1 5/8-12	-20	122.0-4.80	49.0-1.93
442-5608	31.8-1.25	-20	XN6	1 7/8-12	-24	128.0-5.04	50.1-1.97

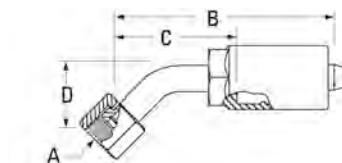
JIC 37° Female Swivel High Pressure - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
592-1114	25.4-1.00	-16	XN	1 5/16-12	-16	111.0-4.37	46.0-1.81

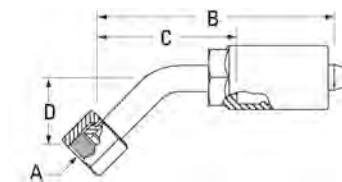
Note: Oversized Hex nut for High Pressure Rating

JIC 37° Female Swivel - 30° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
499-1159	25.4-1.00	-16	XN	1 5/16-12	-16	159.0-6.26	88.5-3.48	27.0-1.06

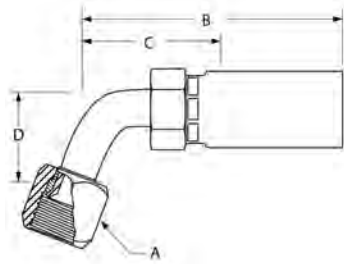
JIC 37° Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
432-2029	19.1-.75	-12	XN	1 1/16-12	-12	124.0-4.88	71.0-2.80	32.0-1.26
432-2036	19.1-.75	-12	XN	1 5/16-12	-16	119.0-4.69	65.0-2.56	27.0-1.06
499-1160	25.4-1.00	-16	XN	1 5/16-12	-16	142.0-5.59	77.0-3.03	30.0-1.18
499-1161	25.4-1.00	-16	XN	1 5/16-12	-16	155.0-6.10	89.0-3.50	42.0-1.65
442-5609	31.8-1.25	-20	XN6	1 5/8-12	-20	199.8-7.86	121.5-4.78	44.0-1.73

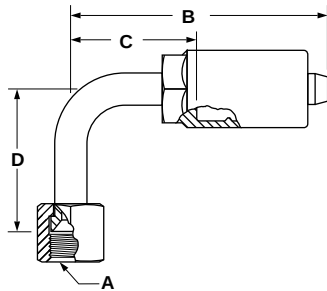
Permanent Couplings - XT-5ES

JIC 37° Female Swivel - 60° Elbow



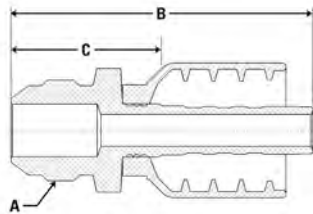
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
432-2030	19.1-.75	-12	XN	1 1/16-12	-12	121.0-4.76	68.0-2.68	44.0-1.73

JIC 37° Female Swivel - 90° Elbow



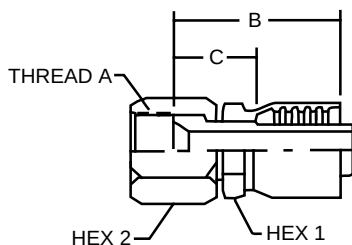
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
483-7179	19.1-.75	-12	XN	7/8-14	-10	112.0-4.41	53.4-2.10	47.0-1.85
432-2031	19.1-.75	-12	XN	1 1/16-12	-12	107.0-4.21	54.0-2.13	46.0-1.81
432-2032	19.1-.75	-12	XN	1 1/16-12	-12	107.0-4.21	54.0-2.13	52.0-2.05
432-2033	19.1-.75	-12	XN	1 1/16-12	-12	107.0-4.21	54.0-2.13	65.0-2.56
432-2034	19.1-.75	-12	XN	1 1/16-12	-12	107.0-4.21	54.0-2.13	92.0-3.62
432-2037	19.1-.75	-12	XN	1 5/16-12	-16	107.0-4.21	54.0-2.13	64.0-2.52
432-2038	19.1-.75	-12	XN	1 5/16-12	-16	107.0-4.21	54.0-2.13	80.0-3.15
499-1164	25.4-1.00	-16	XN	1 5/16-12	-16	135.0-5.31	70.0-2.76	66.0-2.60
499-1166	25.4-1.00	-16	XN	1 5/16-12	-16	135.0-5.31	70.0-2.76	112.0-4.41
499-1168	25.4-1.00	-16	XN	1 5/16-12	-16	140.1-5.52	69.6-2.74	142.5-5.61
442-5613	31.8-1.25	-20	XN6	1 5/8-12	-20	172.8-6.80	94.5-3.72	64.0-2.52
442-5610	31.8-1.25	-20	XN6	1 5/8-12	-20	173.0-6.81	94.5-3.72	87.0-3.43

JIC 37° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
432-2040	19.1-.75	-12	XN	1 1/16-12	-12	95.0-3.74	41.0-1.61
432-2041	19.1-.75	-12	XN	1 5/16-12	-16	101.0-3.98	47.0-1.85
499-1170	25.4-1.00	-16	XN	1 5/16-12	-16	119.0-4.69	48.5-1.91
442-5605	31.8-1.25	-20	XN6	1 5/8-12	-20	139.5-5.49	61.6-2.43

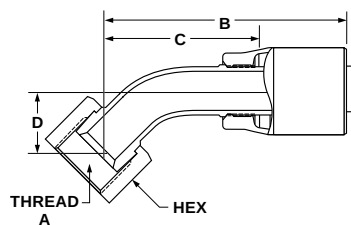
JIS (Komatsu Style), Metric Swivel, 30° Female Seat - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
432-2139	19.1-.75	-12	XN	M30 x 1.5	95.0-3.74	41.0-1.61
499-1178	25.4-1.00	-16	XN	M33 x 1.5	98.0-3.86	33.0-1.30
442-5500	31.8-1.25	-20	XN6	M36 x 1.5	128.5-5.06	50.6-1.99

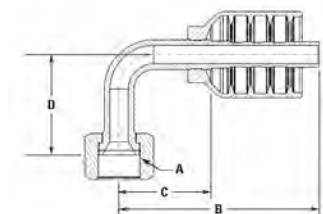
Permanent Couplings - XT-5ES

JIS (Komatsu Style), Metric Swivel, 30° Female Seat - 45° Elbow



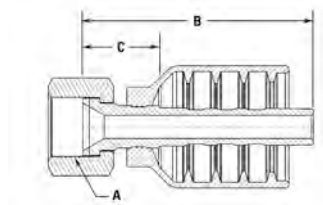
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
503-0664	19.1-.75	-12	XN	M30 x 1.5	124.2-4.89	65.5-2.58	27.0-1.06

JIS (Komatsu Style), Metric Swivel, 30° Female Seat - 90° Elbow



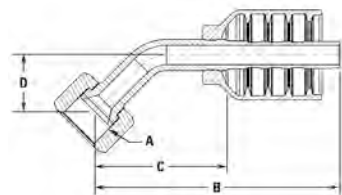
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
432-2140	19.1-.75	-12	XN	M30 x 1.5	112.1-4.41	53.4-2.10	52.3-2.06
600-4494	25.4-1.00	-16	XN	M33 x 1.5	140.1-5.52	69.6-2.74	70.0-2.76

JIS Female Swivel Parallel Pipe w/ 30° Female Seat - Straight



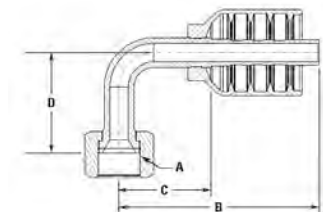
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
519-4009	19.1-.75	-12	XN	3/4-14	-12	91-3.58	38-1.50
580-4113	25.4-1.00	-16	XN	1-11	-16	107-4.21	36-1.42

JIS Female Swivel Parallel Pipe w/ 30° Female Seat - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
519-4010	19.1-.75	-12	XN	3/4-14	-12	120-4.72	68-2.68	29-1.14
580-4114	25.4-1.00	-16	XN	1-11	-16	160-6.30	89-3.50	35-1.38

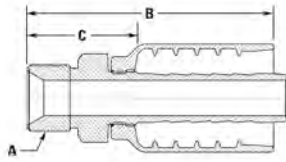
JIS Female Swivel Parallel Pipe w/ 30° Female Seat - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
519-4011	19.1-.75	-12	XN	3/4-14	-12	106-4.17	53-2.09	58-2.28
580-4115	25.4-1.00	-16	XN	1-11	-16	140-5.51	69-2.72	70-2.76

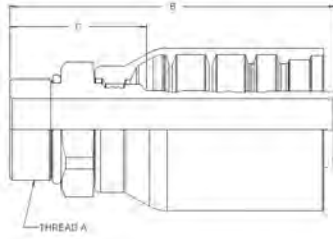
Permanent Couplings - XT-5ES

JIS Male Parallel Pipe w/ 30° Female Seat - Straight



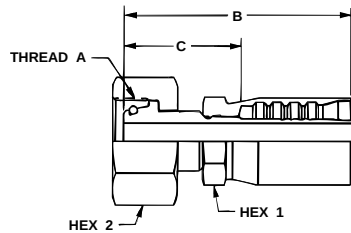
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
518-0280	19.1-.75	-12	XN	3/4-14	-12	97-3.82	44.0-1.73
518-0281	25.4-1.00	-16	XN	1-11	-16	112-4.41	46.0-1.81

JIS Male O-Ring - Straight



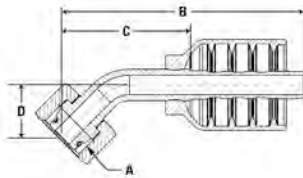
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
442-5614	31.8-1.25	-20	XN6	1 1/4-11	-20	134.0-5.28	56.1-2.21	095-1603

Metric DIN Light (L) 24° O-Ring Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
591-1726	19.1-.75	-12	XN	M26 x 1.5	103.0-4.06	43.0-1.69	122-9250
604-1592	19.1-.75	-12	XN	M30 x 2.0	100.0-3.94	42.0-1.65	3E-6761
595-3619	25.4-1.00	-16	XN	M36 x 2.00	127.0-5.00	55.6-2.19	092-2304

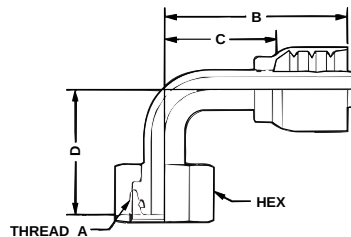
Metric DIN Light (L) 24° O-Ring Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
591-1728	19.1-.75	-12	XN	M26 x 1.5	129.0-5.08	68.0-2.68	23.5-.93	122-9250
611-8372	19.1-.75	-12	XN	M30 x 2.0	123.0-4.84	61.5-2.42	25.5-1.00	3E-6761
569-5368	25.4-1.00	-16	XN	M36 x 2.0	150.0-5.91	79.0-3.11	32.0-1.26	092-2304

Note: Grayscale parts are MAO (Made As Order).

Metric DIN Light (L) 24° O-Ring Female Swivel - 90° Elbow

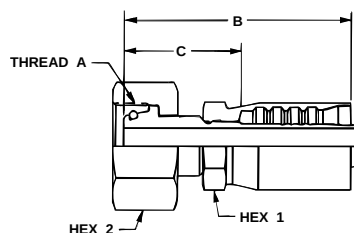


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
591-5077	19.1-.75	-12	XN	M26 x 1.5	106.0-4.17	45.0-1.77	51.5-2.03	122-9250
611-8374	19.1-.75	-12	XN	M30 x 2.0	112.0-4.41	51.0-2.01	56.0-2.20	3E-6761
569-6528	25.4-1.00	-16	XN	M36 x 2.0	140.0-5.51	69.0-2.72	68.5-2.70	092-2304

Note: Grayscale parts are MAO (Made As Order).

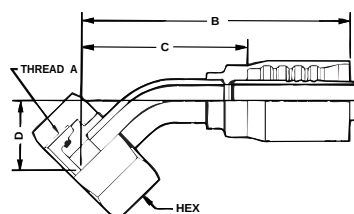
Permanent Couplings - XT-5ES

Metric DIN Heavy (S) 24° O-Ring Female Swivel - Straight



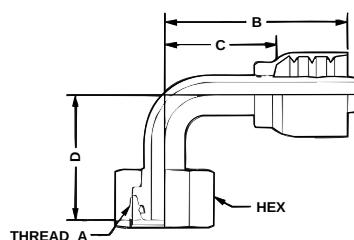
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
591-5078	19.1-.75	-12	XN	M30 x 2.0	109.5-4.31	50.0-1.97	3E-4299
432-2128	19.1-.75	-12	XN	M36 x 2.0	110.0-4.33	56.0-2.20	3E-6762
499-1171	25.4-1.00	-16	XN	M36 x 2.0	122.0-4.80	57.0-2.24	3E-6762
499-1172	25.4-1.00	-16	XN	M42 x 2.0	124.0-4.88	59.0-2.32	3E-6763
442-5611	31.8-1.25	-20	XN6	M52 x 2.0	143.0-5.63	64.8-2.55	3E-6764
591-1734	31.8-1.25	-20	XN6	M42 x 2.0	145.0-5.71	62.0-2.44	3E-6763
545-9425	38.1-1.50	-24	XN6	M52 x 2.0	145.0-5.71	62.0-2.44	460-6296

Metric DIN Heavy (S) 24° O-Ring Female Swivel - 45° Elbow



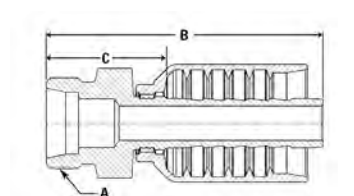
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
591-5079	19.1-.75	-12	XN	M30 x 2.0	122.0-4.80	61.0-2.40	25.0-.98	3E-4299
432-2129	19.1-.75	-12	XN	M36 x 2.0	122-4.80	69.0-2.72	30.0-1.18	3E-6762
499-1173	25.4-1.00	-16	XN	M42 x 2.0	150-5.91	85.0-3.35	38.0-1.50	3E-6733
591-1732	31.8-1.25	-20	XN6	M42 x 2.0	185.0-7.28	103.0-4.06	35.5-1.40	3E-6763
620-2855	31.8-1.25	-20	XN6	M52 x 2.0	193.0-7.60	115.0-4.53	44.5-1.75	460-6296

Metric DIN Heavy (S) 24° O-Ring Female Swivel - 90° Elbow



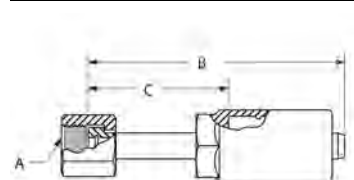
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
591-1730	19.1-.75	-12	XN	M30 x 2.0	112.0-4.41	51.0-2.01	49.5-1.95	3E-4299
432-2130	19.1-.75	-12	XN	M36 x 2.0	112.0-4.41	51.0-2.01	58.0-2.28	3E-6762
499-1174	25.4-1.00	-16	XN	M42 x 2.0	140.0-5.51	70.0-2.76	76.0-2.99	3E-6763
591-1731	31.8-1.25	-20	XN6	M42 x 2.0	172.0-6.77	89.0-3.50	70.0-2.76	3E-6763
620-2854	31.8-1.25	-20	XN6	M52 x 2.0	173.0-6.81	94.5-3.72	87.0-3.43	460-6296

Metric DIN Heavy (S) 24° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
552-7464	19.1-.75	-12	XN	M30 x 2.0	98.0-3.86	37.0-1.46
552-7423	19.1-.75	-12	XN	M36 x 2.0	102.0-4.02	41.0-1.61
541-4980	25.4-1.00	-16	XN	M42 x 2.0	115.0-4.53	46.0-1.81
501-1380	31.8-1.25	-20	XN6	M52 x 2.0	134.0-5.28	56.1-2.21

ORFS Female Swivel - Straight



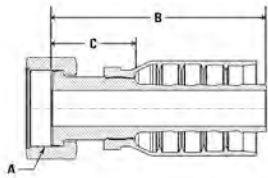
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
432-2022	19.1-.75	-12	XN	1-14	-10	102.0-4.02	48.0-1.89	7J-9108
432-2008	19.1-.75	-12	XN	1 3/16-12	-12	104.0-4.09	50.0-1.97	6V-9746
432-2019	19.1-.75	-12	XN	1 7/16-12	-16	104.0-4.09	51.0-2.01	5K-9090

Permanent Couplings - XT-5ES

ORFS Female Swivel - Straight (Cont'd.)

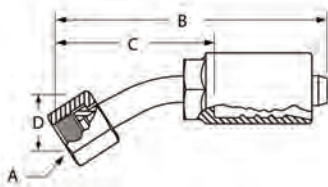
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
499-1141	25.4-1.00	-16	XN	1 3/16-12	-12	112.0-4.41	47.0-1.85	6V-9746
499-1142	25.4-1.00	-16	XN	1 7/16-12	-16	118.0-4.65	53.0-2.09	5K-9090
499-1154	25.4-1.00	-16	XN	1 11/16-12	-20	118.0-4.65	53.0-2.09	6V-8400
442-5599	31.8-1.25	-20	XN6	1 11/16-12	-20	133.0-5.24	61.0-2.40	6V-8400
505-3914	38.1-1.50	-24	XN6	2-12	-24	140.5-5.53	57.6-2.27	8T-0315

ORFS Female Swivel High Vibration - Straight



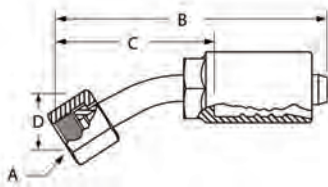
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
432-2143	19.1-.75	-12	XN	1 7/16-12	-16	104.0-4.09	51.0-2.01	5K-9090
539-3856	25.4-1.00	-16	XN	1 11/16-12	-20	117.0-4.61	46.0-1.81	6V-8400

ORFS Female Swivel - 15° Elbow



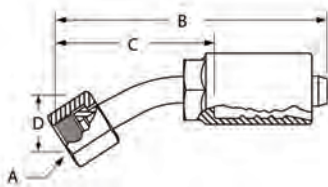
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2009	19.1-.75	-12	XN	1 3/16-12	-12	118.0-4.65	59.0-2.32	7.5-.30	6V-9746
558-7587	19.1-.75	-12	XN	1 3/16-12	-12	131.0-5.16	72.0-2.83	7.5-.30	6V-9746

ORFS Female Swivel - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
499-1143	25.4-1.00	-16	XN	1 7/16-12	-16	134.0-5.28	63.0-2.48	10.0-.39	5K-9090

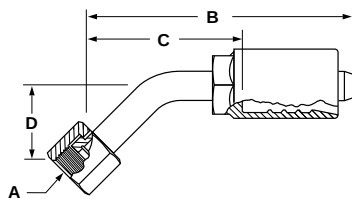
ORFS Female Swivel - 30° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2010	19.1-.75	-12	XN	1 3/16-12	-12	111.0-4.37	57.0-2.24	13.0-.51	6V-9746
432-2011	19.1-.75	-12	XN	1 3/16-12	-12	119.0-4.69	65.0-2.56	18.0-.71	6V-9746
432-2012	19.1-.75	-12	XN	1 3/16-12	-12	133.0-5.24	78.0-3.07	26.0-1.02	6V-9746
568-1579	19.1-.75	-12	XN	1 3/16-12	-12	151.0-5.94	92.0-3.62	26.0-1.02	6V-9746
499-1144	25.4-1.00	-16	XN	1 7/16-12	-16	145.0-5.71	75.0-2.95	19.0-.75	5K-9090
442-5600	31.8-1.25	-20	XN6	1 11/16-12	-20	182.0-7.17	103.0-4.06	17.0-.67	6V-8400

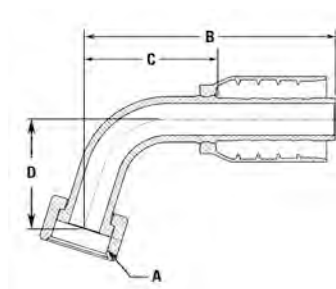
Permanent Couplings - XT-5ES

ORFS Female Swivel - 45° Elbow



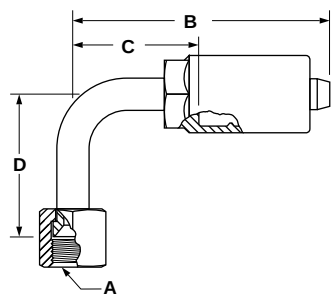
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2023	19.1-.75	-12	XN	1-14	-10	113.0-4.45	60.0-2.36	21.0-.83	7J-9108
432-2013	19.1-.75	-12	XN	1 3/16-12	-12	113.0-4.45	60.0-2.36	21.0-.83	6V-9746
432-2014	19.1-.75	-12	XN	1 3/16-12	-12	120.0-4.72	67.0-2.64	28.0-1.10	6V-9746
432-2020	19.1-.75	-12	XN	1 7/16-12	-16	116.0-4.57	62.0-2.44	24.0-.94	5K-9090
499-1145	25.4-1.00	-16	XN	1 7/16-12	-16	142.0-5.59	71.8-2.83	24.5-.96	5K-9090
499-1146	25.4-1.00	-16	XN	1 7/16-12	-16	145.0-5.71	80.0-3.15	33.0-1.30	5K-9090
499-1155	25.4-1.00	-16	XN	1 11/16-12	-20	145.0-5.71	80.0-3.15	33.0-1.30	6V-8400
442-5601	31.8-1.25	-20	XN6	1 11/16-12	-20	171.0-6.73	98.0-3.86	28.0-1.10	6V-8400
505-3915	38.1-1.50	-24	XN6	2-12	-24	180.7-7.11	97.8-3.85	27.0-1.06	8T-0315

ORFS Female Swivel - 75.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
499-1147	25.4-1.00	-16	XN	1 7/16-12	-16	151.0-5.94	80.0-3.15	66.0-2.60	5K-9090

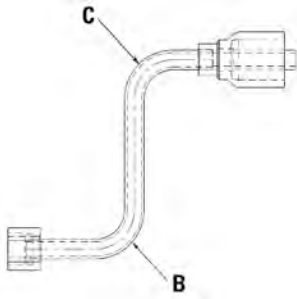
ORFS Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2024	19.1-.75	-12	XN	1-14	-10	107.0-4.21	53.0-2.09	48.0-1.89	7J-9108
432-2015	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	48.0-1.89	6V-9746
432-2016	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	58.0-2.28	6V-9746
432-2017	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	96.0-3.78	6V-9746
432-2018	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	107.0-4.21	6V-9746
432-2021	19.1-.75	-12	XN	1 7/16-12	-16	107.0-4.21	53.0-2.09	56.0-2.20	5K-9090
499-1148	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	56.0-2.20	5K-9090
499-1149	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	68.0-2.68	5K-9090
499-1150	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	105.0-4.13	5K-9090
499-1151	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	115.0-4.53	5K-9090
499-1152	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	125.0-4.92	5K-9090
499-1153	25.4-1.00	-16	XN	1 7/16-12	-16	140.0-5.51	70.0-2.76	148.0-5.83	5K-9090
499-1156	25.4-1.00	-16	XN	1 11/16-12	-20	135.0-5.31	70.0-2.76	68.0-2.68	6V-8400
442-5602	31.8-1.25	-20	XN6	1 11/16-12	-20	167.0-6.57	95.0-3.74	64.0-2.52	6V-8400
442-5603	31.8-1.25	-20	XN6	1 11/16-12	-20	173.0-6.81	94.5-3.72	129.0-5.08	6V-8400
505-3916	38.1-1.50	-24	XN6	2-12	-24	177.8-7.00	94.9-3.74	69.0-2.72	8T-0315

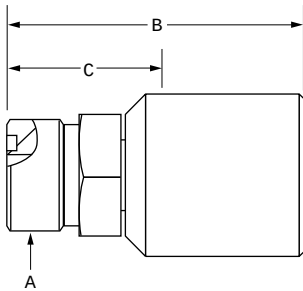
Permanent Couplings - XT-5ES

ORFS Female Swivel - Multi Bend (Backhoe Loaders)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	O-RING SEAL	BEND (B & C)	WORKING PRESSURE (kPa)	MIN. BURST PRESSURE (kPa)
202-1004	19.1-.75	-12	XN	1 3/16-12	6V-9746	43.1°	25,750	77,628
203-4695	19.1-.75	-12	XN	1 3/16-12	6V-9746	78.1°	25,750	77,628

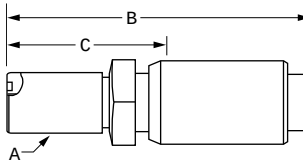
ORFS Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
432-2025	19.1-.75	-12	XN	1 3/16-12	-12	91.0-3.58	37.0-1.46	6V-9746
611-8353	19.1-.75	-12	XN	1 7/16-12	-16	98.0-3.86	37.0-1.46	5K-9090
499-1157	25.4-1.00	-16	XN	1 7/16-12	-16	119.0-4.69	49.0-1.93	5K-9090

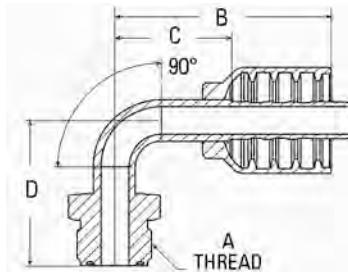
Note: Grayscale parts are MAO (Made As Order).

ORFS Male Bulkhead - Straight



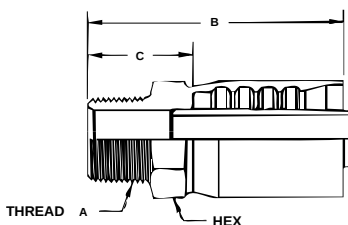
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
604-3191	19.1-.75	-12	XN	1 3/16-12	-12	120.-4.72	59.0-2.32	6V-9746

ORFS Male - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2026	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	57.0-2.24	6V-9746

SAE 30° Male - Straight



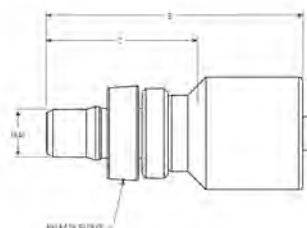
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
432-2124	19.1-.75	-12	XN	3/4-14	-12	94.0-3.70	40.0-1.57
432-2125	19.1-.75	-12	XN	1-11 1/2	-16	102.0-4.02	48.0-1.89
499-1185	25.4-1.00	-16	XN	3/4-14	-12	107.0-4.21	42.0-1.65

Permanent Couplings - XT-5ES

SAE 30° Male - Straight (Cont'd.)

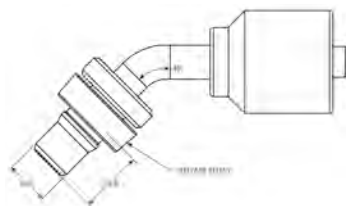
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
499-1177	25.4-1.00	-16	XN	1-11 1/2	-16	115.0-4.53	49.0-1.93
442-5604	31.8-1.25	-20	XN6	1 1/4 - 11 1/2	-20	139.5-5.49	61.6-2.43

Snap To Connect - Straight



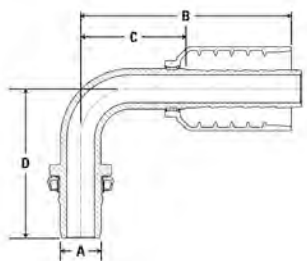
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
432-2131	19.1-.75	-12	XN	20.9-.82	-12	103.0-4.06	49.0-1.93
499-1186	25.4-1.00	-16	XN	20.9-.82	-12	119.0-4.69	48.0-1.89

Snap To Connect - 45° Elbow



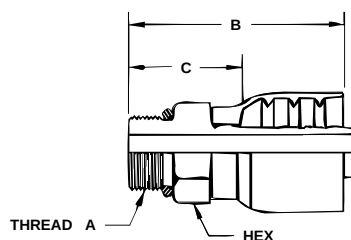
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
432-2132	19.1-.75	-12	XN	20.9-.82	-12	138.0-5.43	79.0-3.11	41.0-1.61

Snap To Connect - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
432-2133	19.1-.75	-12	XN	20.9-.82	-12	107.0-4.21	53.0-2.09	76.0-2.99

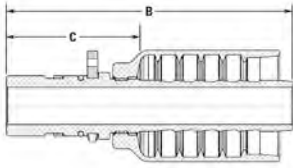
STOR Male O-Ring - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
432-2141	19.1-.75	-12	XN	1 1/16-12	-12	89.0-3.50	36.0-1.42	3D-2824
499-1187	25.4-1.00	-16	XN	1 5/16-12	-16	112.0-4.41	41.5-1.63	7M-8485
593-3758	31.8-1.25	-20	XN6	1 5/8-12	-20	140.0-5.51	62.3-2.45	2S-4078

Permanent Couplings - XT-5ES

WEO Plug-In Coupling



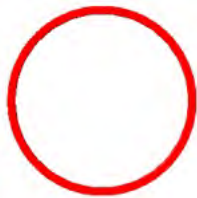
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
505-1188	19.1 - 0.75	-12	XN	-12 - 0.47	110 - 4.33	51 - 2.00	8U-5951
583-7081	19.1 - 0.75	-12	XN	-12 - 0.47	110 - 4.33	51 - 2.00	—

WEO Plug-In Clip



Part Number	Dash Size	Clip Thickness	Clip I.D.	Clip Height
502-2491	-12	0.18 in, 4.0 mm	0.83 in, 21.0 mm	1.38 in, 35.0 mm

WEO Plug-In Release Ring

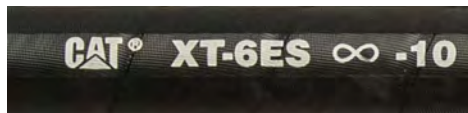


Part Number	Dash Size	Seal Thickness	Seal I.D.
502-2494	-12	0.14 in, 3.6 mm	0.83 in, 21.0 mm

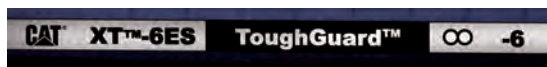
Cat High Pressure Hose XT-6ES

XT-6ES Hose Features and Benefits

XT-6ES - Hose Layline



XT-6ESTG ToughGuard - Hose Layline



- 1/2 SAE 100R15 Minimum Bend Radius.
- Exceeds the SAE 100R15 Industry Standard
- Superior Abrasion Resistance Cover.
- Impulse Tested to 1 Million Cycles (2 X Industry Standards).
- Working pressure of 6000 psi
- Black hose with a White mylar layline for easy identification.
- Hose is marked with an Infinity (∞) symbol.
- Target Application(s): Hydrostatic Loaders, Differential Steering Track-Type Tractors and Hydraulic Mining Shovels (HMS)

XT-6ES Hose



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8491	9.5 - .37	19.7 - .78	-6	XN	168.0 - 24366	42.0 - 6092	76 - 2.99
456-8492	12.7 - .50	23.3 - .92	-8	XN	168.0 - 24366	42.0 - 6092	101 - 3.98
456-8493	15.9 - .63	27.3 - 1.07	-10	XN	168.0 - 24366	42.0 - 6092	114 - 4.49
456-8494	19.1 - .75	30.5 - 1.20	-12	XN	168.0 - 24366	42.0 - 6092	133 - 5.24
456-8495	25.4 - 1.00	38.7 - 1.52	-16	IN / XN	168.0 - 24366	42.0 - 6092	165 - 6.50
456-8496	31.8 - 1.25	50.0 - 1.97	-20	IN / XN6	168.0 - 24366	42.0 - 6092	222 - 8.74
456-8497	38.1 - 1.50	58.1 - 2.29	-24	IN / XN6	168.0 - 24366	42.0 - 6092	266 - 10.47
456-8498	50.8 - 2.00	71.1 - 2.80	-32	XS6	168.0 - 24366	42.0 - 6092	660 - 25.98

Exceeds the requirement of **SAE 100R15**

Construction: Fabric reinforced, synthetic rubber tube; four or six plies of spirally-wrapped high tensile steel wire reinforcement, separated by layers of synthetic rubber. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: Extremely high-pressure service with petroleum base hydraulic fluids. MSHA approved cover.

Temperature Range: -40°F to + 250°F (-40°C to +121°C)

Couplings: Collet-type reusable, skive type, IN Series coupling. See XT-6ES Hose Reusable Couplings section. Crimp-on permanent, skive type, XS6 Series coupling. Crimp-on permanent, non skive type, XN, XN6. See XT-6ES Hose Permanent Couplings section. For related assembly equipment and tooling, see Tooling section.

Note: Depending on coupling series, the hose cover may or may not need to be removed before attaching couplings. Please review the coupling series being used prior to hose assembly. Coupling series XN and XN6 are no-skive couplings and do not require the hose cover to be removed. All other coupling series require a specified length of the hose cover to be removed. Reference chart [NEEG2956](#) for specified Skive Lengths.

XT-6ESTG ToughGuard Hose



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8499	9.5 - .37	19.7 - .78	-6	XN	168.0 - 24366	42.0 - 6092	76 - 2.99
456-8500	12.7 - .50	23.3 - .92	-8	XN	168.0 - 24366	42.0 - 6092	101 - 3.98
456-8501	15.9 - .63	27.3 - 1.07	-10	XN	168.0 - 24366	42.0 - 6092	114 - 4.49
456-8502	19.1 - .75	30.5 - 1.20	-12	XN	168.0 - 24366	42.0 - 6092	133 - 5.24
456-8503	25.4 - 1.00	38.7 - 1.52	-16	IN / XN	168.0 - 24366	42.0 - 6092	165 - 6.50
456-8504	31.8 - 1.25	50.0 - 1.97	-20	IN / XN6	168.0 - 24366	42.0 - 6092	222 - 8.74
456-8505	38.1 - 1.50	58.1 - 2.29	-24	IN / XN6	168.0 - 24366	42.0 - 6092	266 - 10.47

Exceeds the requirement of **SAE 100R15**

Construction: Fabric reinforced, synthetic rubber tube; four or six plies of spirally-wrapped high tensile steel wire reinforcement, separated by layers of synthetic rubber. Oil, weather, and abrasion resistant synthetic rubber outer cover.

Application: Extremely high-pressure service with petroleum base hydraulic fluids. MSHA approved cover.

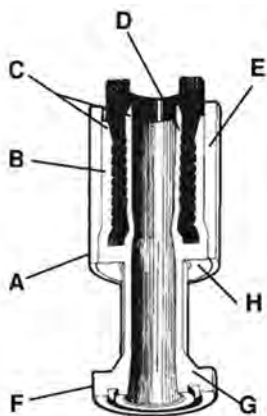
Temperature Range: -40°F to + 250°F (-40°C to +121°C)

Couplings: Collet-type reusable, skive type, IN Series coupling. See XT-6ES Hose Reusable Couplings section. Crimp-on permanent, skive type, XS6 Series coupling. Crimp-on permanent, non skive type, XN, XN6. See XT-6ES Hose Permanent Couplings section. For related assembly equipment and tooling, see Tooling section.

Note: Depending on coupling series, the hose cover may or may not need to be removed before attaching couplings. Please review the coupling series being used prior to hose assembly. Coupling series XN and XN6 are no-skive couplings and do not require the hose cover to be removed. All other coupling series require a specified length of the hose cover to be removed. Reference chart [NEEG2956](#) for specified Skive Lengths.

Cat High Pressure Hose XT-6ES Couplings

XT-6ES Reusable Couplings Features and Benefits



XT-6ES Hose Couplings have the same advantages found with the XT-5ES and XT-3ES Hose Couplings, plus a heavier stem and head construction to handle 6000 psi (41 MPa) applications.

EXCLUSIVE REUSABLE DESIGN

Reuse XT Couplings over and over again for the lowest operating cost. In addition, you know you have the right coupling at the right time.

(A) Slim, Collet-Type Style

- No bolts or protrusions for easy installation, even in cramped places.

(B) Multi-land Fingers

- Grip the wires on the skived hose solidly to prevent coupling blow-off and provide better coupling retention.

(C) Tapered Fingers & Stem

- Compressive force is slightly relieved so the hose can flex without failure at the rear of the coupling. This increases hose assembly life.

(D) Multi-land Stem

- Keeps fluid sealed in without inner liner damage and provides a positive coupling to hose seal.

(E) Hardened Steel Sleeve

- No sleeve bend or distortion so the sleeve retains its original size and shape and can be reused.
- Hose stays firmly compressed in coupling, further aiding coupling retention.

(F) Precision Machined O-Ring Head

- To help eliminate hazardous fluid leaks and provide positive coupling head seal.

(G) Extruded Stem

- Orients metal grain for more uniform strength and fatigue resistance.
- Braze joint between head and stem is eliminated resulting in leak free performance and excellent coupling assembly life.

(H) Extruded Collet

- More uniform strength for excellent coupling performance after repeated reuse.

warning!

TO AVOID SERIOUS PERSONAL INJURY TO THE OPERATOR AND EXTENSIVE DAMAGE TO THE EQUIPMENT, THE FOLLOWING PROCEDURES MUST BE OBSERVED. FAILURE TO DO SO COULD RESULT IN PERSONAL INJURY.

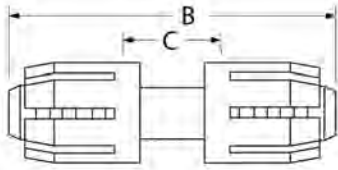
① ALWAYS match hose, stem assemblies and sleeves according to markings (Δ / + / ∞).

② NEVER interchange XT-3 ES hose, stem assemblies and sleeves marked with a Triangle (Δ) with XT-5 ES hose, stem assemblies and sleeves marked with a plus (+). XT-6 hose, stem assemblies and sleeves marked with an infinity sign (∞).



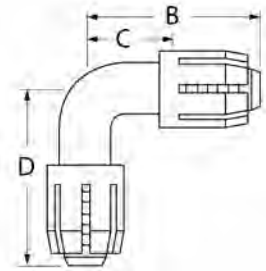
Reusable Couplings - XT-6ES

Double Collet - Straight



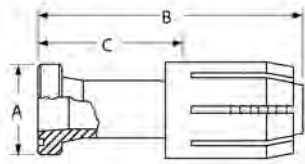
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
153-0861	25.4-1.00	-16	IN	177.0-6.97	53.0-2.09
153-0890	31.8-1.25	-20	IN	189.0-7.44	118.0-4.65

Double Collet - 90° Elbow



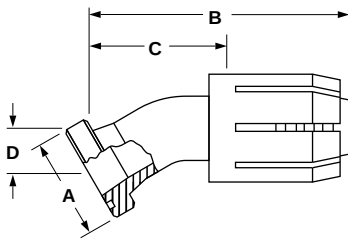
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
153-0891	31.8-1.25	-20	IN	161.0-6.34	90.3-3.56	163.0-6.42

Flange - Cat - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
153-0835	25.4-1.00	-16	IN	47.6-1.87	-16	153.0-6.02	91.0-3.58	1P-3703
153-0851	25.4-1.00	-16	IN	54.0-2.13	-20	153.0-6.02	91.0-3.58	1P-3704
153-0873	31.8-1.25	-20	IN	54.0-2.13	-20	158.0-6.22	76.0-2.99	1P-3704
153-0882	31.8-1.25	-20	IN	63.5-2.50	-24	158.0-6.22	87.5-3.44	1P-3705
211-2652	38.1-1.50	-24	IN	63.5-2.50	-24	177.0-6.97	84.0-3.31	1P-3705
211-2653	38.1-1.50	-24	IN	63.5-2.50	-24	232.0-9.13	139.0-5.47	1P-3705
460-7428	38.1-1.50	-24	IN	79.4-3.13	-32	246.5-9.70	153.5-6.04	1P-3709
268-5969	50.8-2.00	-32	IN	79.4-3.13	-32	242.0-9.53	130.0-5.12	1P-3709

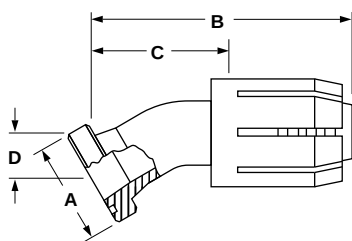
Flange - Cat - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
153-0837	25.4-1.00	-16	IN	47.6-1.87	-16	152.0-5.98	89.0-3.50	17.0-.67	1P-3703
153-0852	25.4-1.00	-16	IN	54.0-2.13	-20	151.0-5.94	89.0-3.50	16.0-.63	1P-3704
153-0874	31.8-1.25	-20	IN	54.0-2.13	-20	182.0-7.17	106.0-4.17	17.0-.67	1P-3704
153-0883	31.8-1.25	-20	IN	63.5-2.50	-24	174.0-6.85	98.0-3.86	17.0-.67	1P-3705

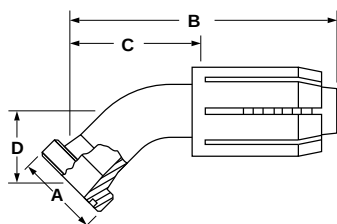
Reusable Couplings - XT-6ES

Flange - Cat - 30° Elbow



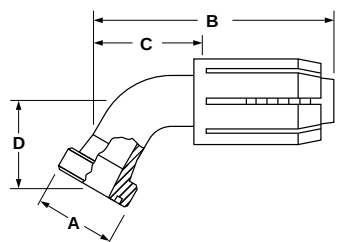
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
153-0839	25.4-1.00	-16	IN	47.6-1.87	-16	145.0-5.71	87.0-3.43	23.0-.91	1P-3703
243-1914	25.4-1.00	-16	IN	47.6-1.87	-16	160.0-6.30	98.0-3.86	32.0-1.26	1P-3703
153-0853	25.4-1.00	-16	IN	54.0-2.13	-20	149.0-5.87	87.0-3.43	23.0-.91	1P-3704
153-0875	31.8-1.25	-20	IN	54.0-2.13	-20	180.0-7.09	104.0-4.09	27.0-1.06	1P-3704
153-0884	31.8-1.25	-20	IN	63.5-2.50	-24	175.0-6.89	100.0-3.94	27.0-1.06	1P-3705
211-2654	38.1-1.50	-24	IN	63.5-2.50	-24	225.0-8.86	135.0-5.31	26.5-1.04	1P-3705
268-5970	50.8-2.00	-32	IN	79.4-3.13	-32	342.0-13.46	230.5-9.07	46.0-1.81	1P-3709

Flange - Cat - 45° Elbow



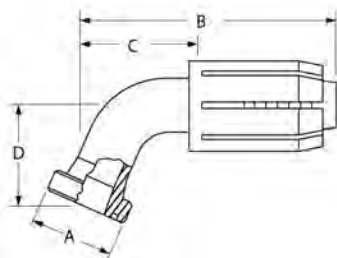
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
153-0842	25.4-1.00	-16	IN	47.6-1.87	-16	142.0-5.59	80.0-3.15	37.0-1.46	1P-3703
243-1916	25.4-1.00	-16	IN	47.6-1.87	-16	154.0-6.06	92.0-3.62	40.0-1.57	1P-3703
153-0855	25.4-1.00	-16	IN	54.0-2.13	-20	142.0-5.59	80.0-3.15	37.0-1.46	1P-3704
243-1915	25.4-1.00	-16	IN	54.0-2.13	-20	154.0-6.06	92.0-3.62	40.0-1.57	1P-3704
153-0876	31.8-1.25	-20	IN	54.0-2.13	-20	191.0-7.52	115.0-4.53	44.0-1.73	1P-3704
153-0885	31.8-1.25	-20	IN	63.5-2.50	-24	188.0-7.40	117.5-4.63	43.0-1.69	1P-3705
211-2655	38.1-1.50	-24	IN	63.5-2.50	-24	219.0-8.62	128.5-5.06	41.0-1.61	1P-3705
211-2656	38.1-1.50	-24	IN	79.4-3.13	-32	229.0-9.02	139.0-5.47	46.0-1.81	1P-3709
268-5971	50.8-2.00	-32	IN	79.4-3.13	-32	334.0-13.15	222.0-8.74	75.0-2.95	1P-3709

Flange - Cat - 60° Elbow



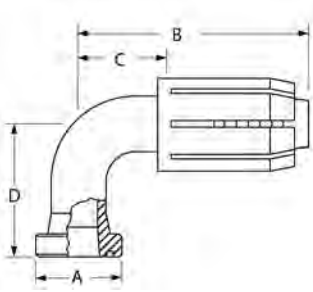
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
153-0844	25.4-1.00	-16	IN	47.6-1.87	-16	145.0-5.71	83.0-3.27	50.0-1.97	1P-3703
243-1917	25.4-1.00	-16	IN	47.6-1.87	-16	167.0-6.57	105.0-4.13	55.0-2.17	1P-3703
153-0856	25.4-1.00	-16	IN	54.0-2.13	-20	145.0-5.71	83.0-3.27	50.0-1.97	1P-3704
243-1918	25.4-1.00	-16	IN	54.0-2.13	-20	167.0-6.57	105.0-4.13	55.0-2.17	1P-3704
153-0877	31.8-1.25	-20	IN	54.0-2.13	-20	221.0-8.70	145.0-5.71	60.0-2.36	1P-3704
153-0886	31.8-1.25	-20	IN	63.5-2.50	-24	221.0-8.70	145.0-5.71	60.0-2.36	1P-3705
211-2657	38.1-1.50	-24	IN	63.5-2.50	-24	207.0-8.15	117.0-4.61	54.5-2.15	1P-3705
268-5972	50.8-2.00	-32	IN	79.4-3.13	-32	309.0-12.17	197.0-7.76	100.0-3.94	1P-3709

Flange - Cat - 67.5° Elbow



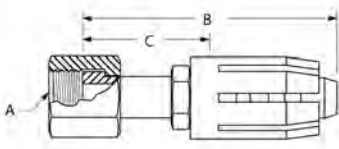
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
153-0845	25.4-1.00	-16	IN	47.6-1.87	-16	139.0-5.47	77.0-3.03	56.0-2.20	1P-3703
153-0857	25.4-1.00	-16	IN	54.0-2.13	-20	139.0-5.47	77.0-3.03	56.0-2.20	1P-3704
153-0878	31.8-1.25	-20	IN	54.0-2.13	-20	171.0-6.73	95.0-3.74	60.0-2.36	1P-3704
153-0887	31.8-1.25	-20	IN	63.5-2.50	-24	171.0-6.73	95.0-3.74	60.0-2.36	1P-3705

Flange - Cat - 90° Elbow



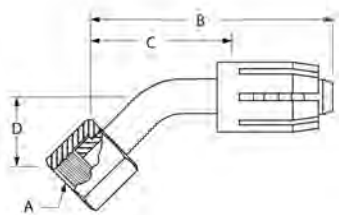
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
153-0847	25.4-1.00	-16	IN	47.6-1.87	-16	139.0-5.47	77.0-3.03	74.0-2.91	1P-3703
243-1931	25.4-1.00	-16	IN	47.6-1.87	-16	140.0-5.51	77.0-3.03	83.0-3.27	1P-3703
153-0849	25.4-1.00	-16	IN	47.6-1.87	-16	139.0-5.47	77.0-3.03	132.0-5.20	1P-3703
243-1920	25.4-1.00	-16	IN	47.6-1.87	-16	133.0-5.24	71.0-2.80	150.0-5.91	1P-3703
153-0859	25.4-1.00	-16	IN	54.0-2.13	-20	139.0-5.47	77.0-3.03	74.0-2.91	1P-3704
243-1930	25.4-1.00	-16	IN	54.0-2.13	-20	140.0-5.51	77.0-3.03	83.0-3.27	1P-3704
153-0860	25.4-1.00	-16	IN	54.0-2.13	-20	139.0-5.47	77.0-3.03	150.0-5.91	1P-3704
153-0879	31.8-1.25	-20	IN	54.0-2.13	-20	189.0-7.44	118.0-4.65	82.0-3.23	1P-3704
153-0880	31.8-1.25	-20	IN	54.0-2.13	-20	177.0-6.97	106.0-4.17	92.1-3.63	1P-3704
153-0881	31.8-1.25	-20	IN	54.0-2.13	-20	165.0-6.50	94.3-3.71	150.0-5.91	1P-3704
153-0888	31.8-1.25	-20	IN	63.5-2.50	-24	188.0-7.40	117.1-4.61	82.0-3.23	1P-3705
243-1925	31.8-1.25	-20	IN	63.5-2.50	-24	194.0-7.64	118.0-4.65	86.0-3.39	1P-3705
153-0889	31.8-1.25	-20	IN	63.5-2.50	-24	165.0-6.50	94.3-3.71	135.0-5.31	1P-3705
211-2658	38.1-1.50	-24	IN	63.5-2.50	-24	183.0-7.20	88.0-3.46	87.0-3.43	1P-3705
213-8720	38.1-1.50	-24	IN	63.5-2.50	-24	186.0-7.32	92.0-3.62	106.0-4.17	1P-3705
586-7596	38.1-1.50	-24	IN	79.4-3.13	-32	186.0-7.32	93.0-3.66	140.0-5.51	1P-3709
268-5973	50.8-2.00	-32	IN	79.4-3.13	-32	249.0-9.80	137.0-5.39	147.0-5.79	1P-3709

ORFS Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
153-0866	25.4-1.00	-16	IN	1 7/16-12	-16	107.0-4.21	45.0-1.77	5K-9090

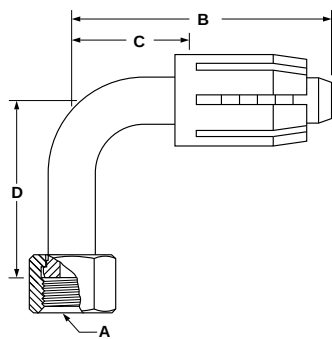
ORFS Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
153-0868	25.4-1.00	-16	IN	1 7/16-12	-16	147.0-5.79	85.0-3.35	32.0-1.26	5K-9090

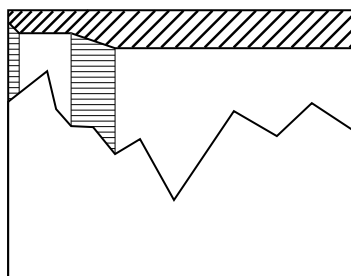
Reusable Couplings - XT-6ES

ORFS Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
153-0870	25.4-1.00	-16	IN	1 7/16-12	-16	140.0-5.51	78.0-3.07	68.0-2.68	5K-9090
153-0872	25.4-1.00	-16	IN	1 7/16-12	-16	140.0-5.51	78.0-3.07	128.0-5.04	5K-9090

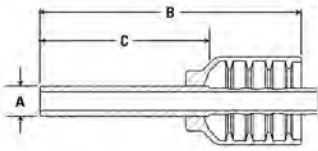
Reusable Sleeves - XT-6ES



Part Number	HOSE I.D. (mm - in)	DASH SIZE
230-9999	25.4 - 1.00	-16
153-0895	31.8 - 1.25	-20
211-2659	38.1 - 1.50	-24
222-9073	50.8 - 2.00	-32

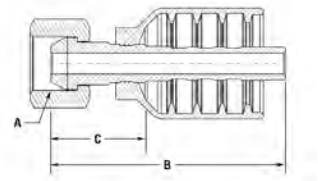
Permanent Couplings - XT-6ES

Braze On - Straight



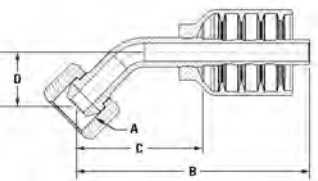
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
333-8611	9.5-.37	-6	XN	-6	95.0-3.74	62.0-2.44
333-9962	12.7-.50	-8	XN	-8	126.0-4.96	92.0-3.62
432-2136	19.1-.75	-12	XN	-12	145.0-5.71	86.0-3.39

BSPP 60° Female Swivel - Straight (ISO 8434-6)



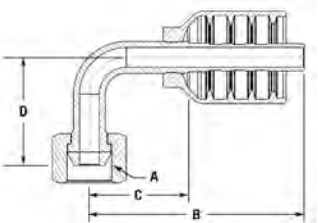
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
518-3997	9.5-.37	-6	XN	3/8-19	-6	67.0-2.64	27.2-1.07
518-0821	12.7-.50	-8	XN	1/2-14	-8	68.0-2.68	27.6-1.09
554-6965	15.9-.63	-10	XN	5/8-14	-10	87.5-3.44	36.0-1.42
554-6966	15.9-.63	-10	XN	3/4-14	-12	87.5-3.44	36.0-1.42
502-2106	19.1-.75	-12	XN	3/4-14	-12	96.5-3.80	37.9-1.49
499-1179	25.4-1.00	-16	XN	1-11	-16	113.0-4.45	42.5-1.67
499-1182	25.4-1.00	-16	XN	1 1/4-11	-20	123.5-4.86	53.0-2.09
502-5110	31.8-1.25	-20	XN6	1 1/4-11	-20	140.0-5.51	62.1-2.44

BSPP 60° Female Swivel - 45° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
518-3998	9.5-.37	-6	XN	3/8-19	-6	86.6-3.41	46.8-1.84	20.0-0.79
518-0822	12.7-.50	-8	XN	1/2-14	-8	90.8-3.57	50.3-1.98	20.0-0.79
554-6967	15.9-.63	-10	XN	5/8-14	-10	103.91-4.09	57.5-2.26	21.6-0.85
502-2107	19.1-.75	-12	XN	3/4-14	-12	126.1-4.96	67.5-2.66	29.0-1.14
499-1180	25.4-1.00	-16	XN	1-11	-16	152.8-6.02	82.3-3.24	35.0-1.38
499-1183	25.4-1.00	-16	XN	1 1/4-11	-20	156.8-6.17	86.3-3.40	39.0-1.54
502-5111	31.8-1.25	-20	XN6	1 1/4-11	-20	188.75-7.43	110.5-4.35	40.0-1.57

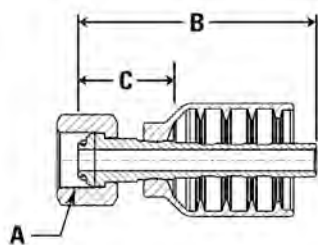
BSPP 60° Female Swivel - 90° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
518-3999	9.5-.37	-6	XN	3/8-19	-6	73.9-2.91	34.1-1.34	37.0-1.46
518-0823	12.7-.50	-8	XN	1/2-14	-8	80.0-3.15	39.5-1.56	41.0-1.61
554-6968	15.9-.63	-10	XN	5/8-14	-10	93.47-3.68	41.7-1.64	43.8-1.72
502-2108	19.1-.75	-12	XN	3/4-14	-12	112.0-4.41	53.4-2.10	58.0-2.28
499-1181	25.4-1.00	-16	XN	1-11	-16	140.1-5.52	69.6-2.74	70.0-2.76
499-1184	25.4-1.00	-16	XN	1 1/4-11	-20	140.1-5.52	69.6-2.74	76.0-2.99
502-5112	31.8-1.25	-20	XN6	1 1/4-11	-20	172.75-6.80	94.5-3.72	85.0-3.35

Permanent Couplings - XT-6ES

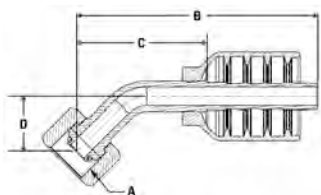
BSPP 60° O-Ring Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
601-9241	9.5-.37	-6	XN	3/8-19	-6	67.0-2.64	27.0-1.06	600-9412
605-9995	9.5-.37	-6	XN	1/2-14	-8	67.0-2.64	27.0-1.06	600-9413
601-9242	12.7-.50	-8	XN	1/2-14	-8	68.0-2.68	28.0-1.10	600-9413
601-9243	15.9-.63	-10	XN	5/8-14	-10	87.5-3.44	36.0-1.42	600-9415
601-4112	15.9-.63	-10	XN	3/4-14	-12	87.5-3.44	36.0-1.42	600-9416
601-9244	19.1-.75	-12	XN	3/4-14	-12	96.5-3.80	38.0-1.50	600-9416
601-9245	25.4-1.00	-16	XN	1 1/4-11	-20	113.0-4.45	42.5-1.67	600-9418
601-9246	31.8-1.25	-20	XN6	1 1/4-11	-20	140.0-5.51	62.0-2.44	600-9419
626-6309	38.1-1.50	-24	XN6	1 1/2-11	-24	149.5-5.89	69.0-2.72	600-6421

Note: Grayscale parts are MAO (Made As Order).

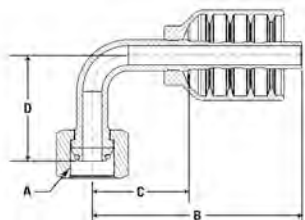
BSPP 60° O-Ring Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
601-9261	9.5-.37	-6	XN	3/8-19	-6	87.0-3.43	47.0-1.85	20.0-.79	600-9412
606-1567	9.5-.37	-6	XN	1/2-14	-8	87.0-3.43	47.0-1.85	20.0-.79	600-9413
601-9262	12.7-.50	-8	XN	1/2-14	-8	91.0-3.58	50.0-1.97	20.0-.79	600-9413
606-1568	12.7-.50	-8	XN	5/8-14	-10	94.0-3.70	53.0-2.09	23.0-.91	600-9415
606-1571	12.7-.50	-8	XN	3/4-14	-12	97.0-3.82	56.0-2.20	26.0-1.02	600-9416
601-9263	15.9-.63	-10	XN	5/8-14	-10	109.0-4.29	57.0-2.24	22.0-.87	600-9415
606-1572	15.9-.63	-10	XN	3/4-14	-12	116.0-4.57	65.0-2.56	28.0-1.10	600-9416
601-9264	19.1-.75	-12	XN	3/4-14	-12	126.0-4.96	65.0-2.56	29.0-1.14	600-9416
606-1573	19.1-.75	-12	XN	1-11	-16	129.0-5.08	68.0-2.68	32.0-1.26	600-9418
601-9265	25.4-1.00	-16	XN	1-11	-16	153.0-6.02	82.0-3.23	35.0-1.38	600-9418
601-9266	25.4-1.00	-16	XN	1 1/4-11	-20	157.0-6.18	86.0-3.39	39.0-1.54	600-9419
601-9267	31.8-1.25	-20	XN6	1 1/4-11	-20	189.0-7.44	110.5-4.35	40.0-1.57	600-9419
606-1577	31.8-1.25	-20	XN6	1 1/2-11	-24	203.5-8.01	121.0-4.76	54.0-2.13	600-9421
626-6768	38.1-1.50	-24	XN6	1 1/2-11	-24	200.0-7.87	120.0-4.72	50.0-1.97	600-6421
626-6817	38.1-1.5	-24	XN6	2-11	-32	209.0-8.23	129.0-5.08	59.0-2.32	5K-0216

Note: Grayscale parts are MAO (Made As Order).

BSPP 60° O-Ring Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
601-9277	9.5-.37	-6	XN	3/8-19	-6	74.0-2.91	34.0-1.34	37.0-1.46	600-9412
606-1593	9.5-.37	-6	XN	1/2-14	-8	74.0-2.91	34.0-1.34	37.0-1.46	600-9413
601-9278	12.7-.50	-8	XN	1/2-14	-8	80.0-3.15	39.5-1.56	41.0-1.61	600-9413
606-2077	12.7-.50	-8	XN	5/8-14	-10	80.0-3.15	39.0-1.54	45.0-1.77	600-9415
606-2080	12.7-.50	-8	XN	3/4-14	-12	80.0-3.15	39.0-1.54	47.0-1.85	600-9416
601-9279	15.9-.63	-10	XN	5/8-14	-10	93.5-3.68	41.0-1.61	44.0-1.73	600-9415
606-2087	15.9-.63	-10	XN	3/4-14	-12	93.5-3.68	42.0-1.65	56.0-2.20	600-9416
601-9280	19.1-.75	-12	XN	3/4-14	-12	112.0-4.41	51.0-2.01	58.0-2.28	600-9416
606-2093	19.1-.75	-12	XN	1-11	-16	112.0-4.41	53.0-2.09	62.0-2.44	600-9418
601-9281	25.4-1.00	-16	XN	1-11	-16	140.0-5.51	70.0-2.76	70.0-2.76	600-9418

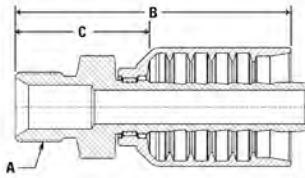
Permanent Couplings - XT-6ES

BSPP 60° O-Ring Female Swivel - 90° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
601-9282	25.4-1.00	-16	XN	1 1/4-11	-20	140.0-5.51	70.0-2.76	76.0-2.99	600-9419
601-9283	31.8-1.25	-20	XN6	1 1/4-11	-20	173.0-6.81	94.5-3.72	85.0-3.35	600-9419
606-2096	31.8-1.25	-20	XN6	1 1/2-11	-24	173.0-6.81	94.5-3.72	92.0-3.62	600-6421
626-6848	38.1-1.50	-24	XN6	1 1/2-11	-24	172.0-6.77	91.0-3.58	100.0-3.94	600-6421
626-6854	38.1-1.50	-24	XN6	2-11	-32	172.0-6.77	91.0-3.58	110.0-4.33	5K-0216

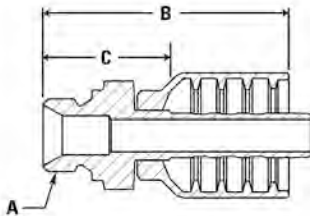
Note: Grayscale parts are MAO (Made As Order).

BSPP 60° Male - Straight



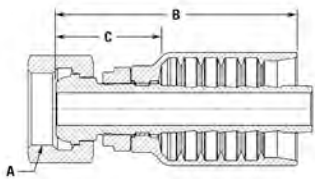
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
397-1959	15.9-.63	-10	XN	5/8-14	-10	95.5-3.76	44.0-1.73	600-9415

BSPP 60° Male - Straight (Dowty Seal)



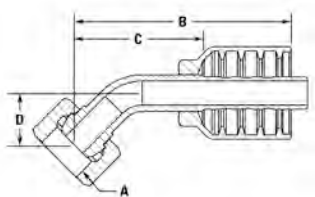
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
328-9174	12.7-.50	-8	XN	1/2-14	-8	71.0-2.80	37.0-1.46	6V-0407

BSPP Spherical Seat Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6221	9.5-.37	-6	XN	3/8-19	-6	61.9-2.44	22.5-0.89
328-9171	12.7-.50	-8	XN	1/2-14	-8	57.3-2.26	23.2-0.91
397-1960	15.9-.63	-10	XN	5/8-14	-10	87.5-3.44	36.0-1.42
397-1961	15.9-.63	-10	XN	3/4-14	-12	87.5-3.44	36.0-1.42
432-2126	19.1-.75	-12	XN	3/4-14	-12	96.0-3.78	37.0-1.46

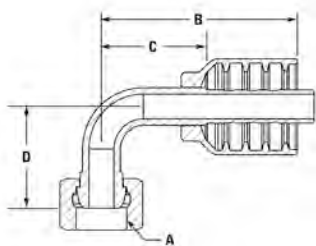
BSPP Spherical Seat Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6224	9.5-.37	-6	XN	3/8-19	-6	80.3-3.16	46.8-1.84	20.1-0.79
328-9172	12.7-.50	-8	XN	1/2-14	-8	84.5-3.33	50.4-1.98	20.1-0.79
416-2091	15.9-.63	-10	XN	5/8-14	-10	109.0-4.29	57.5-2.26	21.6-0.85

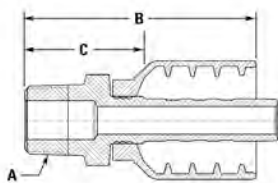
Permanent Couplings - XT-6ES

BSPP Spherical Seat Female Swivel - 90° Elbow



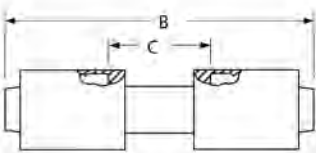
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6225	9.5-.37	-6	XN	3/8-19	-6	67.7-2.67	34.2-1.35	37.1-1.46
328-9173	12.7-.50	-8	XN	1/2-14	-8	73.6-2.90	39.6-1.56	38.1-1.50
416-2093	15.9-.63	-10	XN	5/8-14	-10	98.6-3.88	47.1-1.85	43.7-1.72
432-2127	19.1-.75	-12	XN	3/4-14	-12	112.0-4.41	51.0-2.01	59.0-2.32

BSPT Male Tapered Pipe - Straight



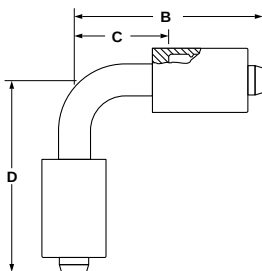
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
333-8602	9.5-.37	-6	XN	3/8-19	-6	74-2.91	34-1.34
513-4472	12.7-.50	-8	XN	1/2-14	-8	70-2.76	36-1.42
513-4473	19.1-.75	-12	XN	3/4-14	-12	95-3.74	42-1.65
513-4474	25.4-1.00	-16	XN	1-11	-16	110-4.33	45-1.77

Double Collet - Straight



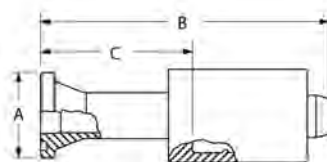
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
332-1650	9.5-.37	-6	XN	113.0-4.45	45.5-1.79
328-9183	12.7-.50	-8	XN	114.0-4.49	45.5-1.79
471-6416	19.1-.75	-12	XN	157.0-6.18	53.0-2.09
499-1175	25.4-1.00	-16	XN	203.0-7.99	62.0-2.44

Double Collet - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
328-9185	12.7-.50	-8	XN	123.0-4.84	83.0-3.27	85.0-3.35
328-9184	12.7-.50	-8	XN	85.0-3.35	45.0-1.77	85.0-3.35
432-2135	19.1-.75	-12	XN	115.0-4.53	62.0-2.44	115.0-4.53
499-1176	25.4-1.00	-16	XN	135.0-5.31	70.0-2.76	60.0-2.36
591-1736	31.8-1.25	-20	XN6	172.0-6.77	89.4-3.52	172.0-6.77
505-3890	38.1-1.50	-24	XN6	187.0-7.36	104.0-4.09	85.0-3.35

Flange - Cat - Straight



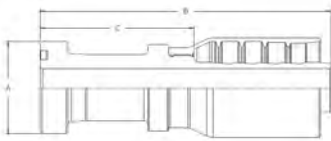
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
328-9165	12.7-.50	-8	XN	41.3-1.63	-12	86.0-3.39	52.2-2.06	1P-3702
432-2105	19.1-.75	-12	XN	41.3-1.63	-12	138.0-5.43	84.0-3.31	1P-3702
432-2116	19.1-.75	-12	XN	47.6-1.87	-16	138.0-5.43	84.0-3.31	1P-3703
496-2307	25.4-1.00	-16	XN	47.6-1.87	-16	150.0-5.91	85.0-3.35	1P-3703

Permanent Couplings - XT-6ES

Flange - Cat - Straight (Cont'd.)

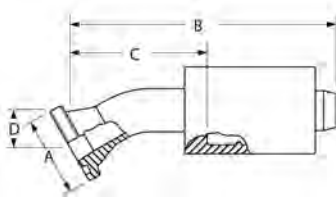
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
496-9725	25.4-1.00	-16	XN	54.0-2.13	-20	150.0-5.91	85.0-3.35	1P-3704
442-5579	31.8-1.25	-20	XN6	54.0-2.13	-20	158.0-6.22	85.0-3.35	1P-3704
442-5580	31.8-1.25	-20	XN6	63.5-2.50	-24	158.0-6.22	85.0-3.35	1P-3705
447-1258	38.1-1.50	-24	XN6	63.5-2.50	-24	206.0-8.11	129.0-5.08	1P-3705
620-9764	38.1-1.50	-24	XN6	79.4-3.13	-32	206.0-8.11	125.0-4.92	1P-3709
476-7236	50.8-2.00	-32	XS6	63.5-2.50	-24	241.0-9.49	136.0-5.35	1P-3705
456-3393	50.8-2.00	-32	XS6	79.4-3.13	-32	298.0-11.73	193.0-7.60	1P-3709

Flange - Cat High Vibration - Straight



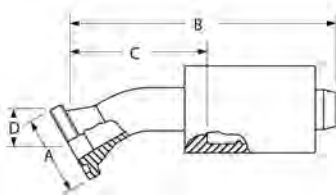
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
536-6437	25.4-1.00	-16	XN	48.0-1.89	-16	151.0-5.94	80.0-3.15	1P-3703
536-6438	25.4-1.00	-16	XN	54.0-2.13	-20	157.0-6.18	86.0-3.39	1P-3704

Flange - Cat - 10° Elbow



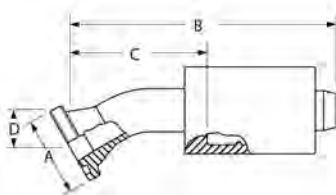
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
463-0977	50.8-2.00	-32	XS6	79.4-3.13	-32	298.0-11.73	193.0-7.60	14.0-.55	1P-3709

Flange - Cat -14° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
496-2308	25.4-1.00	-16	XN	47.6-1.87	-16	144.8-5.70	74.3-2.93	9.5-.37	1P-3703
545-7806	25.4-1.00	-16	XN	47.6-1.87	-16	206.0-8.11	135.0-5.31	9.5-.37	1P-3703

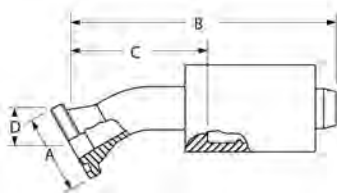
Flange - Cat - 15° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
520-0071	25.4-1.00	-16	XN	47.6-1.87	-16	252.0-9.92	181.5-7.15	26.0-1.02	1P-3703
505-3885	38.1-1.50	-24	XN6	63.5-2.50	-24	204.0-8.03	128.0-5.04	17.0-.67	1P-3705

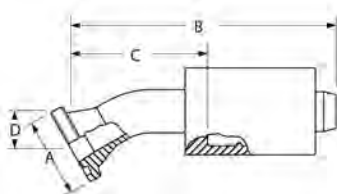
Permanent Couplings - XT-6ES

Flange - Cat - 22.5° Elbow



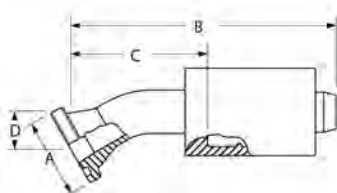
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2106	19.1-.75	-12	XN	41.3-1.63	-12	133.0-5.24	72.0-2.83	17.0-.67	1P-3702
432-2117	19.1-.75	-12	XN	47.6-1.87	-16	133.0-5.24	74.0-2.91	17.0-.67	1P-3703
496-2310	25.4-1.00	-16	XN	47.6-1.87	-16	153.0-6.02	82.5-3.25	18.0-.71	1P-3703
496-9726	25.4-1.00	-16	XN	54.0-2.13	-20	153.0-6.02	82.5-3.25	18.0-.71	1P-3704
442-5581	31.8-1.25	-20	XN6	54.0-2.13	-20	190.0-7.48	118.0-4.65	17.0-.67	1P-3704
442-5582	31.8-1.25	-20	XN6	63.5-2.50	-24	190.0-7.48	118.0-4.65	17.0-.67	1P-3705
505-3886	38.1-1.50	-24	XN6	63.5-2.50	-24	204.0-8.03	127.0-5.00	18.0-.71	1P-3705
461-2698	50.8-2.00	-32	XS6	79.4-3.13	-32	295-11.61	190-7.48	33-1.30	1P-3709

Flange - Cat - 24° Elbow



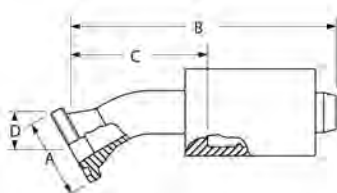
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
520-0736	25.4-1.00	-16	XN	47.6-1.87	-16	250.0-9.84	179.5-7.07	50.0-1.97	1P-3703
520-0069	25.4-1.00	-16	XN	47.6-1.87	-16	284.5-11.20	214.0-8.43	48.0-1.89	1P-3703

Flange - Cat - 25° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
501-0431	19.1-.75	-12	XN	41.3-1.63	-12	256.0-10.08	197.0-7.76	42.0-1.65	1P-3702

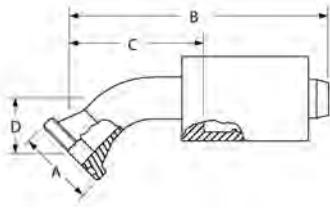
Flange - Cat - 30° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2107	19.1-.75	-12	XN	41.3-1.63	-12	132.0-5.20	70.0-2.76	22.0-.87	1P-3702
432-2118	19.1-.75	-12	XN	47.6-1.87	-16	132.0-5.20	73.0-2.87	22.0-.87	1P-3703
496-2311	25.4-1.00	-16	XN	47.6-1.87	-16	151.0-5.94	81.0-3.19	22.5-.89	1P-3703
496-2312	25.4-1.00	-16	XN	47.6-1.87	-16	171.0-6.73	101.0-3.98	34.0-1.34	1P-3703
496-9727	25.4-1.00	-16	XN	54.0-2.13	-20	151.0-5.94	81.0-3.19	22.5-.89	1P-3704
442-5583	31.8-1.25	-20	XN6	54.0-2.13	-20	187.0-7.36	115.0-4.53	27.0-1.06	1P-3704
442-5584	31.8-1.25	-20	XN6	63.5-2.50	-24	187.0-7.36	115.0-4.53	27.0-1.06	1P-3705
447-1259	38.1-1.50	-24	XN6	63.5-2.50	-24	202.0-7.95	125.0-4.92	27.0-1.06	1P-3705
588-1530	38.1-1.50	-24	XN6	79.4-3.13	-32	202.6-7.98	118.7-4.67	29.3-1.15	1P-3709
476-7238	50.8-2.00	-32	XS6	63.5-2.50	-24	288.0-11.34	183.0-7.20	39.0-1.54	1P-3705
456-3394	50.8-2.00	-32	XS6	79.4-3.13	-32	290.0-11.42	185.0-7.28	46.0-1.81	1P-3709

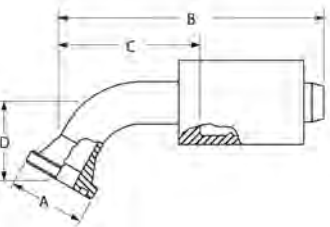
Permanent Couplings - XT-6ES

Flange - Cat - 45° Elbow



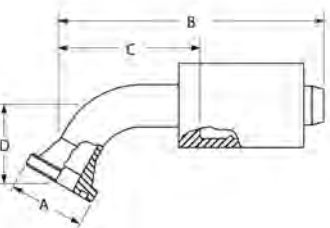
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2108	19.1-.75	-12	XN	41.3-1.63	-12	132.0-5.20	70.5-2.78	34.5-1.36	1P-3702
432-2119	19.1-.75	-12	XN	47.6-1.87	-16	132.0-5.20	73.0-2.87	34.5-1.36	1P-3703
496-2313	25.4-1.00	-16	XN	47.6-1.87	-16	154.0-6.06	83.0-3.27	36.0-1.42	1P-3703
496-2314	25.4-1.00	-16	XN	47.6-1.87	-16	180.0-7.09	109.0-4.29	62.0-2.44	1P-3703
496-2315	25.4-1.00	-16	XN	47.6-1.87	-16	195.0-7.68	125.0-4.92	77.5-3.05	1P-3703
545-7807	25.4-1.00	-16	XN	47.6-1.87	-16	230.0-9.06	159.0-6.26	62.0-2.44	1P-3703
545-7808	25.4-1.00	-16	XN	47.6-1.87	-16	223.0-8.78	152.0-5.98	77.5-3.05	1P-3703
496-9728	25.4-1.00	-16	XN	54.0-2.13	-20	154.0-6.06	83.0-3.27	36.0-1.42	1P-3704
442-5585	31.8-1.25	-20	XN6	54.0-2.13	-20	190.0-7.48	118.0-4.65	42.0-1.65	1P-3704
442-5636	31.8-1.25	-20	XN6	54.0-2.13	-20	265.0-10.43	192.0-7.56	110.0-4.33	1P-3704
442-5586	31.8-1.25	-20	XN6	63.5-2.50	-24	190.0-7.48	118.0-4.65	42.0-1.65	1P-3705
447-1260	38.1-1.50	-24	XN6	63.5-2.50	-24	194.0-7.64	118.0-4.65	41.0-1.61	1P-3705
588-1114	38.1-1.50	-24	XN6	63.5-2.50	-24	212.6-8.37	128.8-5.07	54.9-2.16	1P-3705
588-1467	38.1-1.50	-24	XN6	79.4-3.13	-32	204.8-8.06	120.9-4.76	46.0-1.81	1P-3709
476-7239	50.8-2.00	-32	XS6	63.5-2.50	-24	276.0-10.87	171.0-6.73	61.0-2.40	1P-3705
456-3395	50.8-2.00	-32	XS6	79.4-3.13	-32	337.0-13.27	222.0-8.74	73.0-2.87	1P-3709

Flange - Cat - 60° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2109	19.1-.75	-12	XN	41.3-1.63	-12	128.0-5.04	67.0-2.64	46.5-1.83	1P-3702
432-2120	19.1-.75	-12	XN	47.6-1.87	-16	128.0-5.04	69.5-2.74	46.5-1.83	1P-3703
496-2316	25.4-1.00	-16	XN	47.6-1.87	-16	155.0-6.10	84.0-3.31	53.0-2.09	1P-3703
496-9729	25.4-1.00	-16	XN	54.0-2.13	-20	155.0-6.10	84.0-3.31	53.0-2.09	1P-3704
442-5587	31.8-1.25	-20	XN6	54.0-2.13	-20	191.0-7.52	118.0-4.65	60.0-2.36	1P-3704
589-9955	31.8-1.25	-20	XN6	63.5-2.50	-24	187.1-7.37	109.2-4.30	57.5-2.26	1P-3705
442-5588	31.8-1.25	-20	XN6	63.5-2.50	-24	196.0-7.72	118.0-4.65	60.0-2.36	1P-3705
505-3887	38.1-1.50	-24	XN6	63.5-2.50	-24	205.0-8.07	122.0-4.80	56.0-2.20	1P-3705
588-1135	38.1-1.50	-24	XN6	63.5-2.50	-24	210.4-8.28	126.5-4.98	73.9-2.91	1P-3705
505-3888	38.1-1.50	-24	XN6	63.5-2.50	-24	221.0-8.70	144.0-5.67	83.0-3.27	1P-3705
588-1506	38.1-1.50	-24	XN6	79.4-3.13	-32	203.2-8.00	119.4-4.70	63.5-2.50	1P-3709
456-3396	50.8-2.00	-32	XS6	79.4-3.13	-32	306.0-12.05	201.0-7.91	100.0-3.94	1P-3709

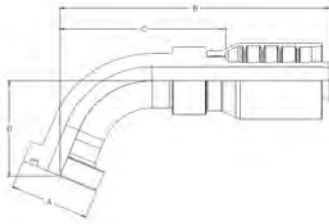
Flange - Cat - 67.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2110	19.1-.75	-12	XN	41.3-1.63	-12	125.0-4.92	64.0-2.52	52.5-2.07	1P-3702
502-0282	19.1-.75	-12	XN	47.6-1.87	-16	124.0-4.88	65.0-2.56	49.5-1.95	1P-3703
496-2317	25.4-1.00	-16	XN	47.6-1.87	-16	150.0-5.91	80.0-3.15	55.5-2.19	1P-3703
496-9730	25.4-1.00	-16	XN	54.0-2.13	-20	150.0-5.91	80.0-3.15	55.5-2.19	1P-3704
496-9731	25.4-1.00	-16	XN	54.0-2.13	-20	156.0-6.14	85.0-3.35	68.5-2.70	1P-3704
442-5590	31.8-1.25	-20	XN6	54.0-2.13	-20	188.0-7.40	116.0-4.57	60.0-2.36	1P-3704
442-5591	31.8-1.25	-20	XN6	54.0-2.13	-20	195.0-7.68	123.0-4.84	80.0-3.15	1P-3704
505-3889	38.1-1.50	-24	XN6	63.5-2.50	-24	197.0-7.76	115.0-4.53	64.0-2.52	1P-3705
461-2699	50.8-2.00	-32	XS6	79.4-3.13	-32	294.0-11.57	189.0-7.44	113.0-4.45	1P-3709

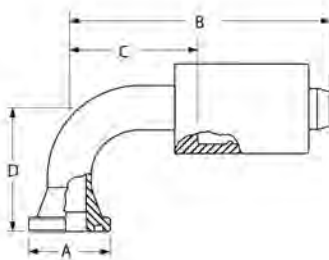
Permanent Couplings - XT-6ES

Flange - Cat High Vibration - 67.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
536-6439	25.4-1.00	-16	XN	54.0-2.13	-20	184.0-7.24	113.0-4.45	65.0-2.56	1P-3704

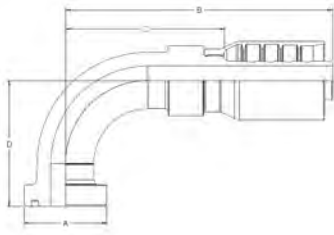
Flange - Cat - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D ko DROP (mm-in)	O-RING SEAL
328-9166	12.7-.50	-8	XN	41.3-1.63	-12	74.0-2.91	39.5-1.56	41.2-1.62	1P-3702
333-9959	12.7-.50	-8	XN	41.3-1.63	-12	74.0-2.91	39.5-1.56	55.1-2.17	1P-3702
397-1955	15.9-.63	-10	XN	41.3-1.63	-12	94.0-3.70	47.0-1.85	50.0-1.97	1P-3702
432-2111	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	68.0-2.68	1P-3702
432-2112	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	85.0-3.35	1P-3702
432-2113	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	120.0-4.72	1P-3702
432-2114	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	129.0-5.08	1P-3702
432-2121	19.1-.75	-12	XN	47.6-1.87	-16	107.0-4.21	53.0-2.09	68.0-2.68	1P-3703
432-2122	19.1-.75	-12	XN	47.6-1.87	-16	107.0-4.21	53.0-2.09	100.0-3.94	1P-3703
432-2123	19.1-.75	-12	XN	47.6-1.87	-16	107.0-4.21	53.0-2.09	128.0-5.04	1P-3703
496-2318	25.4-1.00	-16	XN	47.6-1.87	-16	135.0-5.31	70.0-2.76	73.0-2.87	1P-3703
496-2319	25.4-1.00	-16	XN	47.6-1.87	-16	135.0-5.31	70.0-2.76	82.0-3.23	1P-3703
496-2320	25.4-1.00	-16	XN	47.6-1.87	-16	135.0-5.31	70.0-2.76	132.0-5.20	1P-3703
496-2321	25.4-1.00	-16	XN	47.6-1.87	-16	140.0-5.51	70.0-2.76	150.0-5.91	1P-3703
496-2322	25.4-1.00	-16	XN	47.6-1.87	-16	140.1-5.52	69.6-2.74	210.0-8.27	1P-3703
581-4022	25.4-1.00	-16	XN	47.6-1.87	-16	162.0-6.38	92.0-3.62	110.0-4.33	1P-3703
496-9732	25.4-1.00	-16	XN	54.0-2.13	-20	135.0-5.31	70.0-2.76	73.0-2.87	1P-3704
496-9733	25.4-1.00	-16	XN	54.0-2.13	-20	135.0-5.31	70.0-2.76	82.0-3.23	1P-3704
496-9734	25.4-1.00	-16	XN	54.0-2.13	-20	135.0-5.31	70.0-2.76	150.0-5.91	1P-3704
442-5593	31.8-1.25	-20	XN6	54.0-2.13	-20	181.0-7.13	109.0-4.29	82.0-3.23	1P-3704
442-5594	31.8-1.25	-20	XN6	54.0-2.13	-20	181.0-7.13	109.0-4.29	92.0-3.62	1P-3704
524-0034	31.8-1.25	-20	XN6	54.0-2.13	-20	217.0-8.54	138.9-5.47	120.0-4.72	1P-3704
442-5595	31.8-1.25	-20	XN6	54.0-2.13	-20	181.0-7.13	109.0-4.29	150.0-5.91	1P-3704
442-5596	31.8-1.25	-20	XN6	63.5-2.50	-24	181.0-7.13	109.0-4.29	82.0-3.23	1P-3705
442-5597	31.8-1.25	-20	XN6	63.5-2.50	-24	181.0-7.13	109.0-4.29	135.0-5.31	1P-3705
583-4393	38.1-1.50	-24	XN6	54.0-2.13	-20	178.6-7.03	96.2-13.79	95.5-3.76	1P-3704
447-1261	38.1-1.50	-24	XN6	63.5-2.50	-24	181.0-7.13	104.0-4.09	87.0-3.43	1P-3705
447-1262	38.1-1.50	-24	XN6	63.5-2.50	-24	181.0-7.13	104.0-4.09	106.0-4.17	1P-3705
581-4024	38.1-1.50	-24	XN6	63.5-2.50	-24	234.0-9.21	151.8-5.98	180.0-7.09	1P-3705
582-9218	38.1-1.50	-24	XN6	79.4-3.13	-32	186.7-7.35	103.7-4.09	140.0-5.51	1P-3709
583-4749	50.8-2.00	-32	XS6	63.5-2.50	-24	250.0-9.84	138.5-5.45	175.0-6.89	1P-3705
456-3397	50.8-2.00	-32	XS6	79.4-3.13	-32	242.0-9.53	137.0-5.39	147.0-5.79	1P-3709

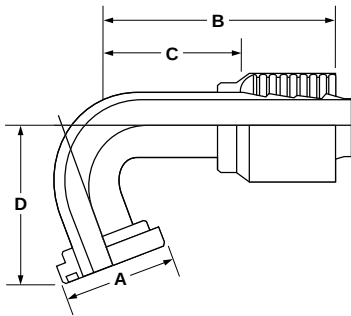
Permanent Couplings - XT-6ES

Flange - Cat High Vibration - 90° Elbow



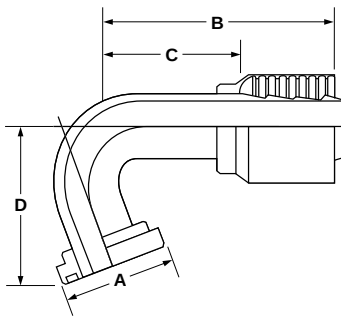
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
536-6440	25.4-1.00	-16	XN	54.0-2.13	-20	175.0-6.89	104.0-4.09	82.0-3.23	1P-3704

Flange - Cat - 100° Elbow



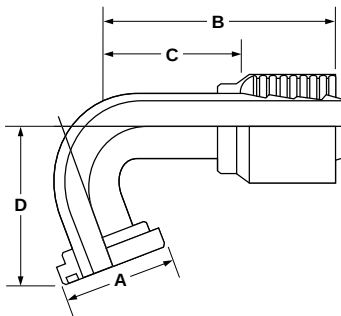
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
463-0979	50.8-2.00	-32	XS6	79.4-3.13	-32	240.0-9.45	135.0-5.31	200.0-7.87	1P-3709

Flange - Cat - 105° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
583-4906	38.1-1.50	-24	XN6	63.5-2.50	-24	229.3-9.03	147.2-5.80	155.0-6.10	1P-3705
463-0980	50.8-2.00	-32	XS6	79.4-3.13	-32	233.0-9.17	118.0-4.65	204.0-8.03	1P-3709

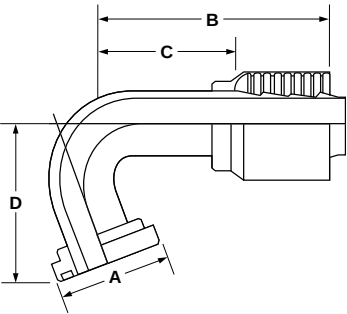
Flange - Cat - 110° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
496-2323	25.4-1.00	-16	XN	47.6-1.87	-16	125.5-4.94	55.0-2.17	85.0-3.35	1P-3703
496-9735	25.4-1.00	-16	XN	54.0-2.13	-20	125.5-4.94	55.0-2.17	85.0-3.35	1P-3704
442-5598	31.8-1.25	-20	XN6	63.5-2.50	-24	165.3-6.51	87.4-3.44	101.0-3.98	1P-3705
581-4025	38.1-1.50	-24	XN6	63.5-2.50	-24	210.8-8.30	128.6-5.06	160.0-6.30	1P-3705
583-4122	38.1-1.50	-24	XN6	79.4-3.13	-32	202.0-7.95	119.5-4.70	187.0-7.36	1P-3709

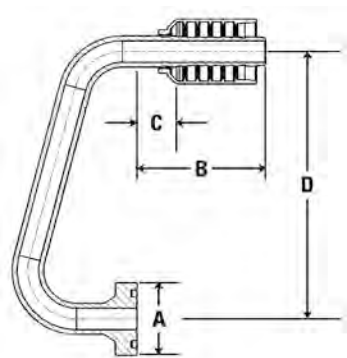
Permanent Couplings - XT-6ES

Flange - Cat - 120° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
581-4023	38.1-1.50	-24	XN6	63.5-2.50	-24	178.0-7.00	95.9-3.78	185.0-7.28	1P-3705

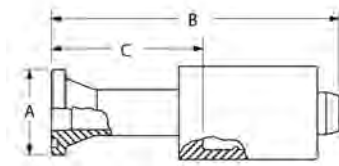
Flange - Cat - 180° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
472-1422	19.1-.75	-12	XN	47.6-1.87	-16	84.0-3.31	26.0-1.02	175.0-6.89	1P-3703

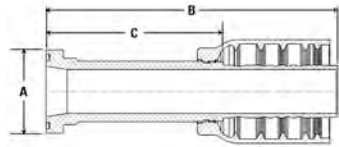
Permanent Couplings - XT-6ES

Flange - Code 61 - Straight



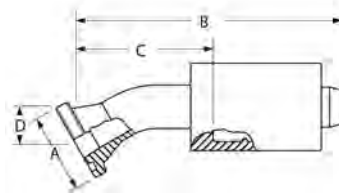
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6214	9.5-.37	-6	XN	30.2-1.19	-8	79.0-3.11	45.3-1.78	4J-5140
328-9137	12.7-.50	-8	XN	30.2-1.19	-8	84.0-3.31	49.7-1.96	4J-5140
328-9138	12.7-.50	-8	XN	38.1-1.50	-12	84.0-3.31	49.7-1.96	4J-5267
490-1771	15.9-.63	-10	XN	38.1-1.50	-12	94.9-3.74	48.5-1.91	4J-5267
432-2070	19.1-.75	-12	XN	38.1-1.50	-12	124.0-4.88	70.0-2.76	4J-5267
432-2083	19.1-.75	-12	XN	44.5-1.75	-16	124.0-4.88	70.0-2.76	4J-0520
432-2093	19.1-.75	-12	XN	50.8-2.00	-20	124.0-4.88	70.0-2.76	4J-0522
497-8283	25.4-1.00	-16	XN	44.5-1.75	-16	147.0-5.79	82.0-3.23	4J-0520
498-0775	25.4-1.00	-16	XN	50.8-2.00	-20	147.0-5.79	82.0-3.23	4J-0522
498-8389	25.4-1.00	-16	XN	60.3-2.37	-24	151.0-5.94	86.0-3.39	4J-0524
442-5552	31.8-1.25	-20	XN6	44.5-1.75	-16	158.0-6.22	85.0-3.35	4J-0520
442-5553	31.8-1.25	-20	XN6	50.8-2.00	-20	158.0-6.22	85.0-3.35	4J-0522
442-5554	31.8-1.25	-20	XN6	60.3-2.37	-24	157.0-6.18	84.0-3.31	4J-0524
505-3904	38.1-1.50	-24	XN6	60.3-2.37	-24	145.0-5.71	67.0-2.64	4J-0524
505-3905	38.1-1.50	-24	XN6	71.4-2.81	-32	145.0-5.71	67.0-2.64	4J-0527
561-8112	50.8-2.00	-32	XS6	71.4-2.81	-32	227.0-8.94	115.0-4.53	4J-0527

Flange - Code 61 High Pressure - Straight



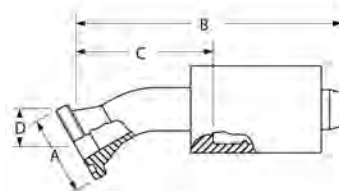
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
584-8072	38.1-1.50	-24	XN6	60.3-2.37	-24	211-8.31	127.1-5.00

Flange - Code 61 - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9139	12.7-.50	-8	XN	30.2-1.19	-8	82.0-3.23	48.4-1.91	8.9-.35	4J-5140
328-9140	12.7-.50	-8	XN	38.1-1.50	-12	83.0-3.27	48.4-1.91	8.9-.35	4J-5267
432-2071	19.1-.75	-12	XN	38.1-1.50	-12	116.0-4.57	62.0-2.44	12.0-.47	4J-5267
432-2084	19.1-.75	-12	XN	44.5-1.75	-16	116.0-4.57	62.0-2.44	12.0-.47	4J-0520
497-8285	25.4-1.00	-16	XN	44.5-1.75	-16	136.0-5.35	66.0-2.60	11.0-.43	4J-0520
498-0776	25.4-1.00	-16	XN	50.8-2.00	-20	136.0-5.35	66.0-2.60	11.0-.43	4J-0522
498-8390	25.4-1.00	-16	XN	60.3-2.37	-24	137.3-5.41	66.8-2.63	11.0-.43	4J-0524
442-5556	31.8-1.25	-20	XN6	60.3-2.37	-24	178.0-7.01	99.8-3.93	13.0-.51	4J-0524
505-3906	38.1-1.50	-24	XN6	60.3-2.37	-24	188.3-7.41	105.4-4.15	15.0-.59	4J-0524

Flange - Code 61 - 30° Elbow



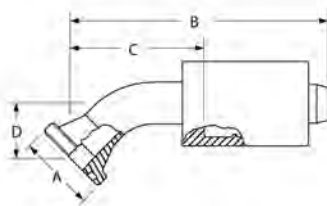
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9141	12.7-.50	-8	XN	30.2-1.19	-8	84.0-3.31	49.6-1.95	12.4-.49	4J-5140
328-9142	12.7-.50	-8	XN	38.1-1.50	-12	84.0-3.31	49.6-1.95	12.4-.49	4J-5267
432-2072	19.1-.75	-12	XN	38.1-1.50	-12	114.0-4.49	61.0-2.40	15.0-.59	4J-5267
432-2085	19.1-.75	-12	XN	44.5-1.75	-16	114.0-4.49	61.0-2.40	15.0-.59	4J-0520

Permanent Couplings - XT-6ES

Flange - Code 61 - 30° Elbow (Cont'd.)

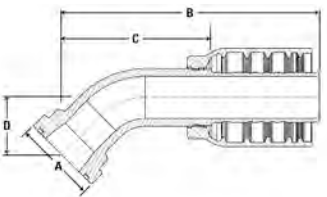
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
497-8287	25.4-1.00	-16	XN	44.5-1.75	-16	134.0-5.28	69.0-2.72	16.0-.63	4J-0520
498-0777	25.4-1.00	-16	XN	50.8-2.00	-20	140.0-5.51	69.0-2.72	16.0-.63	4J-0520
442-5557	31.8-1.25	-20	XN6	50.8-2.00	-20	176.3-6.94	98.0-3.86	19.0-.75	4J-0522
505-3907	38.1-1.50	-24	XN6	60.3-2.37	-24	186.3-7.33	103.4-4.07	21.3-.84	4J-0524

Flange - Code 61 - 45° Elbow



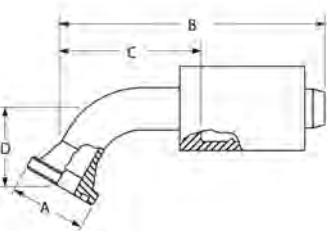
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6215	9.5-.37	-6	XN	30.2-1.19	-8	78.0-3.07	44.2-1.74	17.5-.69	4J-5140
328-9143	12.7-.50	-8	XN	30.2-1.19	-8	84.0-3.31	50.1-1.97	19.8-.78	4J-5140
328-9144	12.7-.50	-8	XN	38.1-1.50	-12	84.0-3.31	50.1-1.97	19.8-.78	4J-5267
328-9146	12.7-.50	-8	XN	38.1-1.50	-12	88.0-3.46	54.2-2.13	23.9-.94	4J-5267
328-9145	12.7-.50	-8	XN	44.5-1.75	-16	84.0-3.31	50.1-1.97	19.8-.78	4J-0520
432-2073	19.1-.75	-12	XN	38.1-1.50	-12	117.0-4.61	63.0-2.48	25.0-.98	4J-5267
432-2086	19.1-.75	-12	XN	44.5-1.75	-16	117.0-4.61	63.0-2.48	25.0-.98	4J-0520
497-0463	25.4-1.00	-16	XN	38.1-1.50	-12	141.8-5.58	71.3-2.81	25.0-.98	4J-5267
497-8288	25.4-1.00	-16	XN	44.5-1.75	-16	139.0-5.47	74.0-2.91	27.0-1.06	4J-0520
497-8289	25.4-1.00	-16	XN	44.5-1.75	-16	169.0-6.65	98.0-3.86	51.0-2.01	4J-0520
498-0779	25.4-1.00	-16	XN	50.8-2.00	-20	139.0-5.47	74.0-2.91	27.0-1.06	4J-0522
442-5558	31.8-1.25	-20	XN6	50.8-2.00	-20	182.0-7.17	103.5-4.07	32.0-1.26	4J-0522
442-5559	31.8-1.25	-20	XN6	60.3-2.37	-24	176.0-6.93	104.0-4.09	32.0-1.26	4J-0524
505-3908	38.1-1.50	-24	XN6	60.3-2.37	-24	200.0-7.87	123.0-4.84	44.0-1.73	4J-0524
505-3909	38.1-1.50	-24	XN6	71.4-2.81	-32	206.0-8.11	123.1-4.85	49.5-1.95	4J-0527
561-8113	50.8-2.00	-32	XS6	71.4-2.81	-32	281.0-11.06	170.0-6.69	56.0-2.20	4J-0527

Flange - Code 61 High Pressure - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
600-2276	38.1-1.50	-24	XN6	60.3-2.37	-24	197.7-7.78	113.8-4.48	44.0-1.73

Flange - Code 61 - 60° Elbow



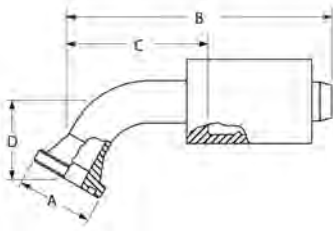
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9147	12.7-.50	-8	XN	30.2-1.19	-8	83.0-3.27	48.7-1.92	27.4-1.08	4J-5140
328-9148	12.7-.50	-8	XN	38.1-1.50	-12	83.0-3.27	48.7-1.92	27.4-1.08	4J-5267
432-2074	19.1-.75	-12	XN	38.1-1.50	-12	116.0-4.57	63.0-2.48	35.0-1.38	4J-5267
432-2087	19.1-.75	-12	XN	44.5-1.75	-16	116.0-4.57	63.0-2.48	35.0-1.38	4J-0520
497-8290	25.4-1.00	-16	XN	44.5-1.75	-16	141.0-5.55	76.0-2.99	39.0-1.54	4J-0520
498-0781	25.4-1.00	-16	XN	50.8-2.00	-20	141.0-5.55	76.0-2.99	39.0-1.54	4J-0522
442-5560	31.8-1.25	-20	XN6	50.8-2.00	-20	188.0-7.40	110.0-4.33	45.0-1.77	4J-0522

Permanent Couplings - XT-6ES

Flange - Code 61 - 60° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
442-5561	31.8-1.25	-20	XN6	60.3-2.37	-24	188.0-7.40	110.0-4.33	45.0-1.77	4J-0524
505-3910	38.1-1.50	-24	XN6	60.3-2.37	-24	199.0-7.83	116.1-4.57	50.0-1.97	4J-0524
588-1166	38.1-1.50	-24	XN6	50.8-2.00	-20	165.0-6.50	108.0-4.25	52.0-2.05	4J-0522
579-5138	50.8-2.00	-32	XS6	71.4-2.81	-32	270.0-10.63	159.0-6.26	78.0-3.07	4J-0527

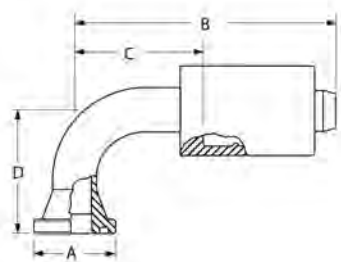
Flange - Code 61 - 67.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9149	12.7-.50	-8	XN	30.2-1.19	-8	81.0-3.19	47.3-1.86	31.5-1.24	4J-5140
328-9150	12.7-.50	-8	XN	38.1-1.50	-12	81.0-3.19	47.3-1.86	31.5-1.24	4J-5267
328-9151	12.7-.50	-8	XN	44.5-1.75	-16	81.0-3.19	47.3-1.86	31.5-1.24	4J-0520
432-2075	19.1-.75	-12	XN	38.1-1.50	-12	115.0-4.53	62.0-2.44	41.0-1.61	4J-5267
432-2088	19.1-.75	-12	XN	44.5-1.75	-16	115.0-4.53	62.0-2.44	41.0-1.61	4J-0520
432-2094	19.1-.75	-12	XN	50.8-2.00	-20	115.0-4.53	62.0-2.44	41.0-1.61	4J-0522
497-8291	25.4-1.00	-16	XN	44.5-1.75	-16	141.0-5.55	76.0-2.99	44.0-1.73	4J-0520
498-0782	25.4-1.00	-16	XN	50.8-2.00	-20	141.0-5.55	76.0-2.99	44.0-1.73	4J-0522
442-5562	31.8-1.25	-20	XN6	50.8-2.00	-20	182.3-7.18	104.0-4.09	51.0-2.01	4J-0522
505-3911	38.1-1.50	-24	XN6	60.3-2.37	-24	192.3-7.57	109.4-4.31	57.5-2.26	4J-0524

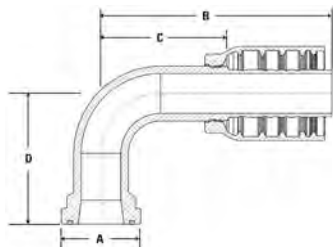
Permanent Couplings - XT-6ES

Flange - Code 61 - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6216	9.5-.37	-6	XN	30.2-1.19	-8	68.0-2.68	34.2-1.35	35.6-1.40	4J-5140
323-6217	9.5-.37	-6	XN	30.2-1.19	-8	68.0-2.68	34.2-1.35	40.9-1.61	4J-5140
328-9152	12.7-.50	-8	XN	30.2-1.19	-8	74.0-2.91	39.5-1.56	41.4-1.63	4J-5140
328-9153	12.7-.50	-8	XN	30.2-1.19	-8	74.0-2.91	39.5-1.56	82.5-3.25	4J-5140
328-9154	12.7-.50	-8	XN	38.1-1.50	-12	74.0-2.91	39.5-1.56	41.4-1.63	4J-5267
615-4001	12.7-.50	-8	XN	38.1-1.50	-12	74.0-2.91	39.5-1.56	56.0-2.20	4J-5267
328-9155	12.7-.50	-8	XN	38.1-1.50	-12	74.0-2.91	39.5-1.56	73.1-2.88	4J-5267
328-9156	12.7-.50	-8	XN	44.5-1.75	-16	74.0-2.91	39.5-1.56	41.2-1.62	4J-0520
490-1773	15.9-.63	-10	XN	38.1-1.50	-12	99.0-3.90	46.0-1.81	48.0-1.89	4J-5267
432-2076	19.1-.75	-12	XN	38.1-1.50	-12	107.0-4.21	53.0-2.09	54.0-2.13	4J-5267
432-2077	19.1-.75	-12	XN	38.1-1.50	-12	107.0-4.21	53.0-2.09	96.0-3.78	4J-5267
432-2078	19.1-.75	-12	XN	38.1-1.50	-12	107.0-4.21	53.0-2.09	127.0-5.00	4J-5267
432-2089	19.1-.75	-12	XN	44.5-1.75	-16	107.0-4.21	53.0-2.09	54.0-2.13	4J-0520
432-2090	19.1-.75	-12	XN	44.5-1.75	-16	107.0-4.21	53.0-2.09	79.0-3.11	4J-0520
551-0027	19.1-.75	-12	XN	44.5-1.75	-16	112.0-4.41	50.0-1.97	127.0-5.00	4J-0520
432-2095	19.1-.75	-12	XN	50.8-2.00	-20	107.0-4.21	53.0-2.09	54.0-2.13	4J-0522
497-0465	25.4-1.00	-16	XN	38.1-1.50	-12	126.0-4.96	61.0-2.40	54.0-2.13	4J-5267
497-8292	25.4-1.00	-16	XN	44.5-1.75	-16	135.0-5.31	70.0-2.76	54.0-2.13	4J-0520
497-8293	25.4-1.00	-16	XN	44.5-1.75	-16	135.0-5.31	70.0-2.76	61.0-2.40	4J-0520
497-8294	25.4-1.00	-16	XN	44.5-1.75	-16	140.0-5.51	69.6-2.74	110.0-4.33	4J-0520
497-8295	25.4-1.00	-16	XN	44.5-1.75	-16	135.0-5.31	70.0-2.76	118.0-4.65	4J-0520
497-8297	25.4-1.00	-16	XN	44.5-1.75	-16	135.0-5.31	70.0-2.76	140.0-5.51	4J-0520
497-8298	25.4-1.00	-16	XN	44.5-1.75	-16	140.1-5.52	69.6-2.74	165.0-6.50	4J-0520
498-0783	25.4-1.00	-16	XN	50.8-2.00	-20	135.0-5.31	70.0-2.76	61.0-2.40	4J-0522
498-0784	25.4-1.00	-16	XN	50.8-2.00	-20	135.0-5.31	70.0-2.76	118.0-4.65	4J-0522
498-8392	25.4-1.00	-16	XN	60.3-2.37	-24	135.0-5.31	69.0-2.72	61.0-2.40	4J-0524
498-8393	25.4-1.00	-16	XN	60.3-2.37	-24	140.0-5.51	69.6-2.74	108.0-4.25	4J-0524
442-5564	31.8-1.25	-20	XN6	44.5-1.75	-16	162.0-6.38	84.4-3.32	63.0-2.48	4J-0520
481-8281	31.8-1.25	-20	XN6	44.5-1.75	-16	171.5-6.75	93.6-3.69	100.0-3.94	4J-0520
481-8282	31.8-1.25	-20	XN6	44.5-1.75	-16	171.5-6.75	93.6-3.69	195.0-7.68	4J-0520
442-5565	31.8-1.25	-20	XN6	50.8-2.00	-20	175.0-6.89	98.0-3.86	70.0-2.76	4J-0522
442-5569	31.8-1.25	-20	XN6	50.8-2.00	-20	175.8-6.92	97.5-3.84	142.0-5.59	4J-0522
442-5566	31.8-1.25	-20	XN6	60.3-2.37	-24	170.0-6.69	98.0-3.86	70.0-2.76	4J-0524
442-5567	31.8-1.25	-20	XN6	71.4-2.81	-32	175.8-6.92	97.5-3.84	70.0-2.76	4J-0527
505-3912	38.1-1.50	-24	XN6	60.3-2.37	-24	179.0-7.05	101.0-3.98	91.0-3.58	4J-0524
588-1176	38.1-1.50	-24	XN6	71.4-2.81	-32	184.3-7.26	101.4-3.99	88.8-3.50	4J-0527
505-3913	38.1-1.50	-24	XN6	71.4-2.81	-32	184.3-7.26	101.4-3.99	98.0-3.86	4J-0527
561-8114	50.8-2.00	-32	XS6	71.4-2.81	-32	278.0-10.94	166.0-6.54	121.0-4.76	4J-0527

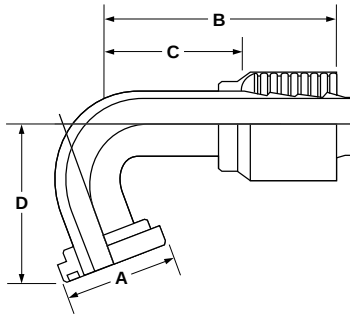
Flange - Code 61 High Pressure - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
596-6490	38.1-1.50	-24	XN6	60.3-2.37	-24	184.7-7.27	104.2-4.10	104.0-4.09

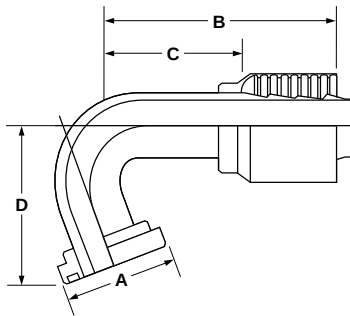
Permanent Couplings - XT-6ES

Flange - Code 61 - 100° Elbow



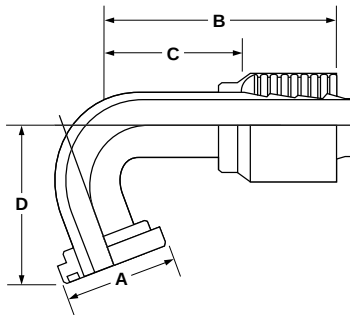
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2079	19.1-.75	-12	XN	38.1-1.50	-12	106.0-4.17	44.0-1.73	59.5-2.34	4J-5267
432-2091	19.1-.75	-12	XN	44.5-1.75	-16	106.0-4.17	44.0-1.73	59.5-2.34	4J-0520

Flange - Code 61 - 110° Elbow



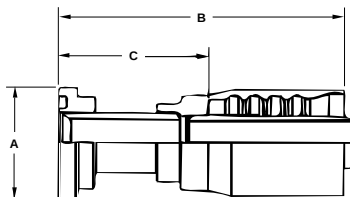
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9157	12.7-.50	-8	XN	38.1-1.50	-12	63.0-2.48	28.3-1.11	49.5-1.95	4J-5267
432-2080	19.1-.75	-12	XN	38.1-1.50	-12	95.0-3.74	41.0-1.61	64.0-2.52	4J-5267
497-8300	25.4-1.00	-16	XN	44.5-1.75	-16	130.0-5.12	59.0-2.32	73.0-2.87	4J-0520
498-0785	25.4-1.00	-16	XN	50.8-2.00	-20	130.0-5.12	59.0-2.32	73.0-2.87	4J-0522
442-5570	31.8-1.25	-20	XN6	50.8-2.00	-20	165.0-6.50	86.0-3.39	84.0-3.31	4J-0522
602-7233	38.1-1.50	-24	XN6	60.3-2.37	-24	174.0-6.85	97.0-3.82	95.0-3.74	4J-0524

Flange - Code 61 - 135° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9158	12.7-.50	-8	XN	30.2-1.19	-8	42.0-1.65	7.7-.30	54.1-2.13	4J-5140
432-2081	19.1-.75	-12	XN	38.1-1.50	-12	116.0-4.57	63.0-2.48	69.0-2.72	4J-5267
432-2092	19.1-.75	-12	XN	44.5-1.75	-16	115.0-4.53	62.0-2.44	70.0-2.76	4J-0520
497-0466	25.4-1.00	-16	XN	38.1-1.50	-12	118.0-4.65	48.0-1.89	70.0-2.76	4J-5267
497-8301	25.4-1.00	-16	XN	44.5-1.75	-16	106.5-4.19	36.0-1.42	87.5-3.44	4J-0520

Flange - Code 62 - Straight



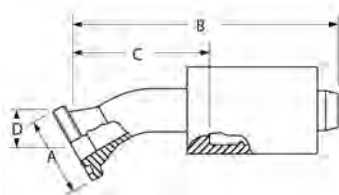
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
328-9161	12.7-.50	-8	XN	31.8-1.25	-8	87.0-3.43	52.8-2.08	4J-5140
328-9162	12.7-.50	-8	XN	41.3-1.63	-12	87.0-3.43	52.8-2.08	4J-5267
397-1949	15.9-.63	-10	XN	31.8-1.25	-8	86.0-3.39	50.0-1.97	4J-5140
397-1952	15.9-.63	-10	XN	41.3-1.63	-12	100.0-3.94	54.0-2.13	1P-3702
432-2099	19.1-.75	-12	XN	41.3-1.63	-12	129.0-5.08	76.0-2.99	4J-5267
486-9601	19.1-.75	-12	XN	47.6-1.87	-16	130.0-5.12	77.0-3.03	4J-0520
498-8394	25.4-1.00	-16	XN	41.3-1.63	-12	145.0-5.71	80.0-3.15	4J-5267
498-8396	25.4-1.00	-16	XN	47.6-1.87	-16	154.0-6.06	89.0-3.50	4J-0520
498-8405	25.4-1.00	-16	XN	54.0-2.13	-20	154.0-6.06	89.0-3.50	4J-0522
516-9131	31.8-1.25	-20	XN6	47.6-1.87	-16	177.0-6.97	104.0-4.09	4J-0520

Permanent Couplings - XT-6ES

Flange - Code 62 - Straight (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
442-5572	31.8-1.25	-20	XN6	54.0-2.13	-20	157.0-6.18	85.0-3.35	4J-0522
442-5573	31.8-1.25	-20	XN6	63.5-2.50	-24	157.0-6.18	85.0-3.35	4J-0524
505-3891	38.1-1.50	-24	XN6	54.0-2.13	-20	155.0-6.10	77.0-3.03	4J-0522
505-3892	38.1-1.50	-24	XN6	63.5-2.50	-24	206.0-8.11	129.0-5.08	4J-0524
505-3893	38.1-1.50	-24	XN6	79.4-3.13	-32	180.0-7.09	103.0-4.06	4J-0527
561-8115	50.8-2.00	-32	XS6	71.4-2.81	-32	221.0-8.70	116.0-4.57	4J-0527

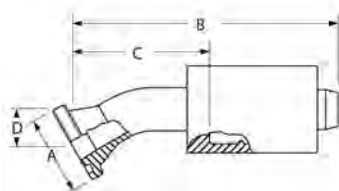
Flange - Code 62 - 22.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
604-0155	12.7-.50	-8	XN	31.8-1.25	-8	98.5-3.88	57.9-2.28	12.9-.51	4J-5140
603-2711	12.7-.50	-8	XN	41.3-1.63	-12	99.9-3.93	59.3-2.33	13.5-.53	4J-5267
603-2206	19.1-.75	-12	XN	47.6-1.87	-16	132.7-5.22	74.1-2.92	17.0-.67	4J-0520
603-2707	19.1-.75	-12	XN	41.3-1.63	-12	127.1-5.00	68.5-2.70	14.7-.58	4J-5267
498-8397	25.4-1.00	-16	XN	47.6-1.87	-16	143.4-5.65	72.9-2.87	14.0-.55	4J-0520
498-8406	25.4-1.00	-16	XN	54.0-2.13	-20	143.4-5.65	72.9-2.87	14.0-.55	4J-0522
589-8339	31.8-1.25	-20	XN6	54.0-2.13	-20	195.9-7.71	118.0-4.65	15.0-.59	4J-0522
505-3894	38.1-1.50	-24	XN6	63.5-2.50	-24	209.5-8.25	127.1-5.00	18.0-.71	4J-0524
561-8116	50.8-2.00	-32	XS6	79.4-3.13	-32	296.0-11.65	185.0-7.28	22.0-.87	4J-0527

Note: Grayscale parts are MAO (Made As Order).

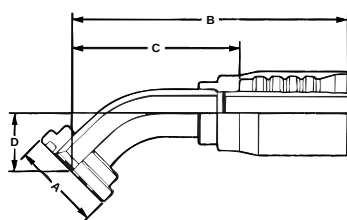
Flange - Code 62 - 30° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
604-0157	12.7-.50	-8	XN	31.8-1.25	-8	97.0-3.82	56.4-2.22	16.5-.65	4J-5140
603-8613	12.7-.50	-8	XN	41.3-1.63	-12	98.1-3.86	57.5-2.26	17.1-.67	4J-5267
603-2708	19.1-.75	-12	XN	41.3-1.63	-12	125.5-4.94	66.9-2.63	18.5-.73	4J-5267
603-2208	19.1-.75	-12	XN	47.6-1.87	-16	130.7-5.15	72.1-2.84	21.5-.85	4J-0520
498-8398	25.4-1.00	-16	XN	47.6-1.87	-16	142.5-5.61	72.0-2.83	17.5-.69	4J-0520
498-8407	25.4-1.00	-16	XN	54.0-2.13	-20	142.5-5.61	72.0-2.83	17.5-.69	4J-0522
603-2164	31.8-1.25	-20	XN6	54.0-2.13	-20	192.8-7.59	114.9-4.52	26.0-1.02	4J-0522
594-3931	31.8-1.25	-20	XN6	54.0-2.13	-20	193.8-7.63	118.0-4.65	22.0-.87	4J-0522
505-3895	38.1-1.50	-24	XN6	63.5-2.50	-24	207.0-8.15	124.6-4.91	26.5-1.04	4J-0524
561-8117	50.8-2.00	-32	XS6	79.4-3.13	-32	293.0-11.54	182.0-7.17	32.0-1.26	4J-0527

Note: Grayscale parts are MAO (Made As Order).

Flange - Code 62 - 45° Elbow



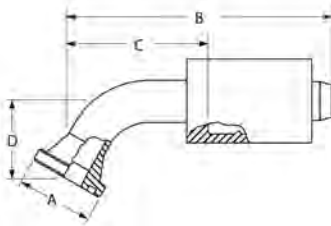
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9163	12.7-.50	-8	XN	31.8-1.25	-8	87.0-3.43	52.4-2.06	22.1-.87	4J-5140
603-8614	12.7-.50	-8	XN	41.3-1.63	-12	93.9-3.70	53.3-2.10	23.2-.91	4J-5267
397-1953	15.9-.63	-10	XN	41.3-1.63	-12	107.0-4.21	60.0-2.36	24.0-.94	4J-5267

Permanent Couplings - XT-6ES

Flange - Code 62 - 45° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2100	19.1-.75	-12	XN	41.3-1.63	-12	121.0-4.76	67.0-2.64	29.0-1.14	4J-5267
432-2102	19.1-.75	-12	XN	47.6-1.87	-16	121.0-4.76	68.0-2.68	29.0-1.14	4J-0520
559-9498	25.4-1.00	-16	XN	41.3-1.63	-12	136.0-5.35	71.0-2.80	26.0-1.02	4J-5267
498-8399	25.4-1.00	-16	XN	47.6-1.87	-16	145.0-5.71	79.0-3.11	32.0-1.26	4J-0520
498-8400	25.4-1.00	-16	XN	47.6-1.87	-16	170.8-6.72	100.3-3.95	53.0-2.09	4J-0520
498-8408	25.4-1.00	-16	XN	54.0-2.13	-20	145.0-5.71	79.0-3.11	32.0-1.26	4J-0522
442-5574	31.8-1.25	-20	XN6	54.0-2.13	-20	188.0-7.40	114.0-4.49	38.0-1.50	4J-0522
442-5575	31.8-1.25	-20	XN6	63.5-2.50	-24	188.0-7.40	114.0-4.49	38.0-1.50	4J-0524
505-3896	38.1-1.50	-24	XN6	63.5-2.50	-24	195.0-7.68	117.0-4.61	41.0-1.61	4J-0524
505-3897	38.1-1.50	-24	XN6	71.4-2.81	-32	206.7-8.14	124.3-4.89	48.0-1.89	4J-0527
561-8118	50.8-2.00	-32	XS6	79.4-3.13	-32	282.0-11.10	171.0-6.73	56.0-2.20	4J-0527

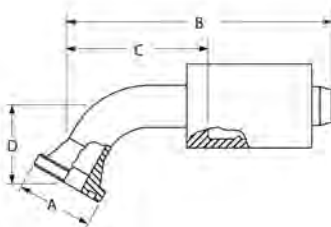
Flange - Code 62 - 60° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
604-0158	12.7-.50	-8	XN	31.8-1.25	-8	88.3-3.48	47.7-1.88	26.0-1.02	4J-5140
603-8615	12.7-.50	-8	XN	41.3-1.63	-12	95.6-3.76	55.0-2.17	38.6-1.52	4J-5267
603-2709	19.1-.75	-12	XN	41.3-1.63	-12	123.3-4.85	64.7-2.55	38.2-1.50	4J-5267
603-2210	19.1-.75	-12	XN	47.6-1.87	-16	127.9-5.04	69.3-2.73	46.2-1.82	4J-0520
498-8409	25.4-1.00	-16	XN	54.0-2.13	-20	149.4-5.88	78.9-3.11	44.0-1.73	4J-0522
561-2055	31.8-1.25	-20	XN6	54.0-2.13	-20	193.0-7.60	115.1-4.53	55.0-2.17	4J-0522
505-3898	38.1-1.50	-24	XN6	60.3-2.37	-24	204.7-8.06	122.3-4.81	56.0-2.20	4J-0524
561-8119	50.8-2.00	-32	XS6	79.4-3.13	-32	300.0-11.81	189.0-7.44	83.0-3.27	4J-0527

Note: Grayscale parts are MAO (Made As Order).

Flange - Code 62 - 67.5° Elbow

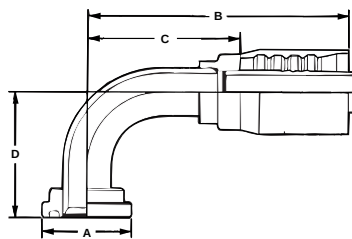


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
604-0161	12.7-.50	-8	XN	31.8-1.25	-8	86.1-3.39	45.5-1.79	27.5-1.08	4J-5140
603-8617	12.7-.50	-8	XN	41.3-1.63	-12	91.4-3.60	50.8-2.00	40.2-1.58	4J-5267
603-2212	19.1-.75	-12	XN	47.6-1.87	-16	123.7-4.87	65.1-2.56	48.5-1.91	4J-0520
603-2710	19.1-.75	-12	XN	41.3-1.63	-12	120.2-4.73	61.6-2.43	40.0-1.57	4J-5267
498-8402	25.4-1.00	-16	XN	47.6-1.87	-16	146.7-5.78	76.2-3.00	46.5-1.83	4J-0520
498-8410	25.4-1.00	-16	XN	54.0-2.13	-20	146.7-5.78	76.2-3.00	46.5-1.83	4J-0522
603-2166	31.8-1.25	-20	XN6	54.0-2.13	-20	189.7-7.47	118.-4.40	55.3-2.18	4J-0522
505-3899	38.1-1.50	-24	XN6	63.5-2.50	-24	197.3-7.77	114.9-4.52	64.0-2.52	4J-0524
561-8120	50.8-2.00	-32	XS6	79.4-3.13	-32	288.0-11.34	177.0-6.97	97.0-3.82	4J-0527

Note: Grayscale parts are MAO (Made As Order).

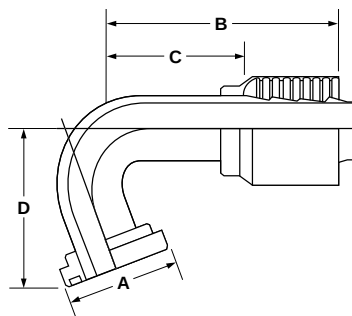
Permanent Couplings - XT-6ES

Flange - Code 62 - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6220	9.5-.37	-6	XN	31.8-1.25	-8	68.0-2.68	34.2-1.35	44.4-1.75	4J-5140
328-9164	12.7-.50	-8	XN	31.8-1.25	-8	74.0-2.91	39.5-1.56	44.4-1.75	4J-5140
603-8619	12.7-.50	-8	XN	41.3-1.63	-12	79.9-3.15	39.3-1.55	58.0-2.28	4J-5267
397-1954	15.9-.63	-10	XN	41.3-1.63	-12	94.0-3.70	47.0-1.85	48.0-1.89	1P-3702
432-2101	19.1-.75	-12	XN	41.3-1.63	-12	107.0-4.21	53.0-2.09	55.0-2.17	4J-5267
432-2103	19.1-.75	-12	XN	47.6-1.87	-16	107.0-4.21	53.0-2.09	59.0-2.32	4J-0520
603-2213	19.1-.75	-12	XN	47.6-1.87	-16	112.0-4.41	53.4-2.10	70.0-2.76	4J-0520
498-8395	25.4-1.00	-16	XN	41.3-1.63	-12	126.0-4.96	61.0-2.40	59.0-2.32	4J-5267
498-8403	25.4-1.00	-16	XN	47.6-1.87	-16	135.0-5.31	70.0-2.76	70.0-2.76	4J-0520
498-8404	25.4-1.00	-16	XN	47.6-1.87	-16	140.1-5.52	69.6-2.74	101.5-4.00	4J-0520
498-8411	25.4-1.00	-16	XN	54.0-2.13	-20	135.0-5.31	70.0-2.76	70.0-2.76	4J-0522
498-8412	25.4-1.00	-16	XN	54.0-2.13	-20	140.1-5.52	69.6-2.74	101.5-4.00	4J-0522
442-5576	31.8-1.25	-20	XN6	47.6-1.87	-16	170.3-6.70	92.4-3.64	63.5-2.50	4J-0520
481-8278	31.8-1.25	-20	XN6	47.6-1.87	-16	171.5-6.75	93.6-3.69	100.0-3.94	4J-0520
481-8279	31.8-1.25	-20	XN6	47.6-1.87	-16	171.5-6.75	93.6-3.69	180.0-7.09	4J-0520
442-5577	31.8-1.25	-20	XN6	54.0-2.13	-20	181.0-7.13	109.0-4.29	82.0-3.23	4J-0522
603-2167	31.8-1.25	-20	XN6	54.0-1.23	-20	182.6-7.19	104.7-4.12	90.0-3.54	4J-0522
481-8280	31.8-1.25	-20	XN6	54.0-2.13	-20	187.0-7.36	108.9-4.29	100.0-3.94	4J-0522
442-5634	31.8-1.25	-20	XN6	54.0-2.13	-20	187.0-7.36	108.9-4.29	140.0-5.51	4J-0522
442-5578	31.8-1.25	-20	XN6	63.5-2.50	-24	181.0-7.13	109.0-4.29	82.0-3.23	4J-0524
578-6951	31.8-1.25	-20	XN6	63.5-2.50	-24	186.7-7.35	108.9-4.29	120.0-4.72	4J-0524
505-3900	38.1-1.50	-24	XN6	54.0-2.13	-20	178.6-7.03	96.2-3.79	76.0-2.99	4J-0522
505-3901	38.1-1.50	-24	XN6	54.0-2.13	-20	179.0-7.05	96.0-3.78	140.0-5.51	4J-0522
505-3902	38.1-1.50	-24	XN6	63.5-2.50	-24	180.0-7.09	104.0-4.09	87.0-3.43	4J-0524
578-6960	38.1-1.50	-24	XN6	63.5-2.50	-24	184.7-7.27	104.2-4.10	200.0-7.87	4J-0524
505-3903	38.1-1.50	-24	XN6	79.4-3.13	-32	186.6-7.35	104.2-4.10	98.0-3.86	4J-0527
561-8121	50.8-2.00	-32	XS6	79.4-3.13	-32	278.0-10.94	167.0-6.57	120.0-4.72	4J-0527
578-6966	50.8-2.0	-32	XS6	79.4-3.13	-32	278.1-10.95	166.6-6.56	150.0-5.91	4J-0527

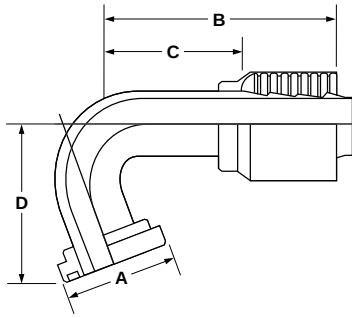
Flange - Code 62 - 110° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
582-4914	25.4-1.00	-16	XN	47.6-1.87	-16	125.5-4.94	154.6-6.09	85.0-3.35	4J-0520

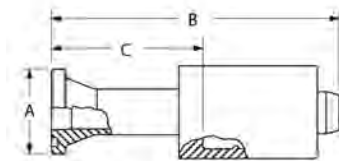
Permanent Couplings - XT-6ES

Flange - Code 62 - 130° Elbow



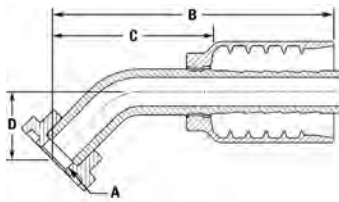
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
594-4518	31.8-1.25	-20	XN6	47.6-1.87	-16	171.5-6.75	93.6-3.69	90.0-3.54	4J-0520

Flange - Komatsu Style - Straight



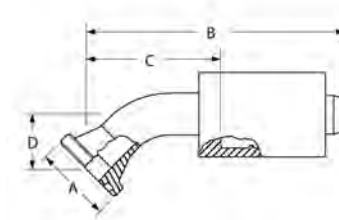
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	A HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
328-9167	12.7-.50	-8	XN	-10	34.0-1.34	84.0-3.31	49.7-1.96	4J-8996
397-1966	15.9-.63	-10	XN	-10	34.1-1.34	96.0-3.78	49.7-1.96	4J-8996

Flange - Komatsu Style - 45° Elbow



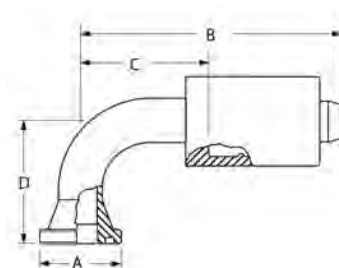
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	A HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9168	12.7-.50	-8	XN	-10	34.1-1.34	85.0-3.35	51.0-2.01	21.0-.83	4J-8996
416-2094	15.9-.63	-10	XN	-10	34.1-1.34	108.2-4.26	61.8-2.4	25.9-1.0	4J-8996

Flange - Komatsu Style - 60° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	A HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9169	12.7-.50	-8	XN	-10	34.0-1.34	83.0-3.27	48.7-1.92	27.4-1.08	4J-8996

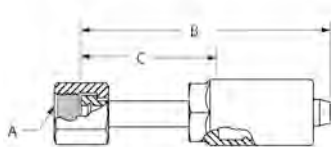
Flange - Komatsu Style - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	A HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9170	12.7-.50	-8	XN	-10	34.0-1.34	74.0-2.91	39.5-1.56	41.4-1.63	4J-8996
397-1967	15.9-.63	-10	XN	-10	34.1-1.34	93.5-3.68	47.1-1.85	55.1-2.17	4J-8996

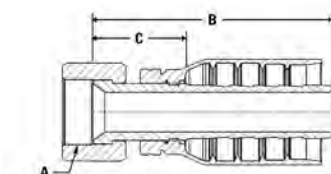
Permanent Couplings - XT-6ES

JIC 37° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6180	9.5-.37	-6	XN	7/16-20	-4	55.0-2.17	22.0-.87
550-3569	9.5-.37	-6	XN	1/2-20	-5	60.0-2.36	20.2-.80
323-6181	9.5-.37	-6	XN	9/16-18	-6	54.0-2.13	20.0-.79
323-6182	9.5-.37	-6	XN	3/4-16	-8	66.0-2.60	22.0-.87
328-9109	12.7-.50	-8	XN	3/4-16	-8	57.0-3.24	23.0-.91
333-9957	12.7-.50	-8	XN	7/8-14	-10	156.0-6.14	122.0-4.80
328-9111	12.7-.50	-8	XN	7/8-14	-10	58.0-2.28	24.0-.94
328-9112	12.7-.50	-8	XN	1 1/16-12	-12	58.0-2.28	24.0-.94
397-1940	15.9-.63	-10	XN	7/8-14	-10	94.0-3.70	47.0-1.85
432-2039	19.1-.75	-12	XN	7/8-14	-10	89.0-3.50	35.0-1.38
432-2028	19.1-.75	-12	XN	1 1/16-12	-12	90.0-3.54	36.0-1.42
432-2035	19.1-.75	-12	XN	1 5/16-12	-16	94.0-3.70	40.0-1.57
499-1158	25.4-1.00	-16	XN	1 5/16-12	-16	102.0-4.02	37.0-1.46
499-1169	25.4-1.00	-16	XN	1 5/8-12	-20	111.0-4.37	40.0-1.57
442-5606	31.8-1.25	-20	XN6	1 5/16-12	-16	124.8-4.91	47.0-1.85
442-5607	31.8-1.25	-20	XN6	1 5/8-12	-20	122.0-4.80	49.0-1.93
442-5608	31.8-1.25	-20	XN6	1 7/8-12	-24	128.0-5.04	50.1-1.97

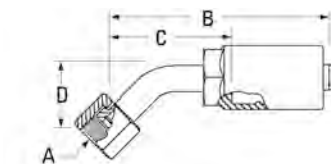
JIC 37° Female Swivel High Pressure - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
592-1114	25.4-1.00	-16	XN	1 5/16-12	-16	111.0-4.37	46.0-1.81

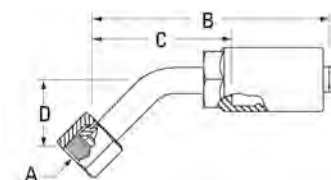
Note: Oversized Hex nut for High Pressure Rating

JIC 37° Female Swivel - 30° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
499-1159	25.4-1.00	-16	XN	1 5/16-12	-16	159.0-6.26	88.5-3.48	27.0-1.06

JIC 37° Female Swivel - 45° Elbow



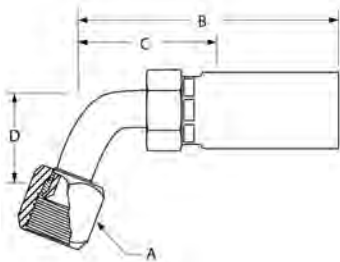
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6183	9.5-.37	-6	XN	9/16-18	-6	70.0-2.76	36.6-1.44	9.9-.39
323-6184	9.5-.37	-6	XN	9/16-18	-6	75.0-2.95	41.7-1.64	15.0-.59
323-6185	9.5-.37	-6	XN	9/16-18	-6	88.0-3.46	54.7-2.15	27.9-1.10
323-6187	9.5-.37	-6	XN	3/4-16	-8	78.0-3.07	44.0-1.73	17.5-.69
323-6188	9.5-.37	-6	XN	3/4-16	-8	88.0-3.46	54.2-2.13	27.4-1.08
328-9113	12.7-.50	-8	XN	3/4-16	-8	78.0-3.07	44.3-1.74	14.0-.55

Permanent Couplings - XT-6ES

JIC 37° Female Swivel - 45° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
328-9115	12.7-.50	-8	XN	3/4-16	-8	93.0-3.66	59.0-2.32	28.6-1.13
328-9117	12.7-.50	-8	XN	7/8-14	-10	87.0-3.43	53.0-2.09	22.0-.87
328-9118	12.7-.50	-8	XN	7/8-14	-10	93.0-3.66	59.3-2.33	29.0-1.14
397-1941	15.9-.63	-10	XN	7/8-14	-10	105.0-4.13	58.0-2.28	22.0-.87
432-2029	19.1-.75	-12	XN	1 1/16-12	-12	124.0-4.88	71.0-2.80	32.0-1.26
432-2036	19.1-.75	-12	XN	1 5/16-12	-16	119.0-4.69	65.0-2.56	27.0-1.06
499-1160	25.4-1.00	-16	XN	1 5/16-12	-16	142.0-5.59	77.0-3.03	30.0-1.18
499-1161	25.4-1.00	-16	XN	1 5/16-12	-16	155.0-6.10	89.0-3.50	42.0-1.65
442-5609	31.8-1.25	-20	XN6	1 5/8-12	-20	199.8-7.86	121.5-4.78	44.0-1.73

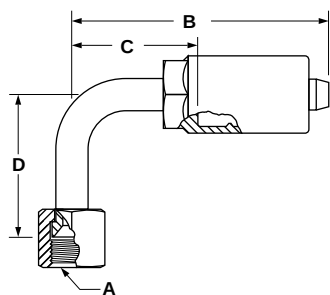
JIC 37° Female Swivel - 60° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
328-9130	12.7-.50	-8	XN	7/8-14	-10	89.0-3.50	55.2-2.17	38.6-1.52
432-2030	19.1-.75	-12	XN	1 1/16-12	-12	121.0-4.76	68.0-2.68	44.0-1.73

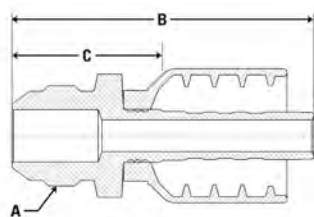
Permanent Couplings - XT-6ES

JIC 37° Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6200	9.5-.37	-6	XN	9/16-18	-6	57.5-2.26	24.0-.94	41.0-1.61
323-6189	9.5-.37	-6	XN	9/16-18	-6	68.0-2.68	34.2-1.35	21.8-.86
323-6193	9.5-.37	-6	XN	9/16-18	-6	68.0-2.68	34.2-1.35	46.0-1.81
323-6191	9.5-.37	-6	XN	9/16-18	-6	68.0-2.68	34.2-1.35	55.6-2.19
323-6192	9.5-.37	-6	XN	9/16-18	-6	68.0-2.68	34.0-1.34	28.0-1.10
323-6197	9.5-.37	-6	XN	3/4-16	-8	68.0-2.68	34.0-1.34	63.5-2.50
323-6194	9.5-.37	-6	XN	9/16-18	-6	68.0-2.68	34.2-1.35	82.6-3.25
323-6198	9.5-.37	-6	XN	3/4-16	-8	68.0-2.68	34.2-1.35	46.0-1.81
323-6199	9.5-.37	-6	XN	3/4-16	-8	68.0-2.68	34.2-1.35	82.6-3.25
328-9119	12.7-.50	-8	XN	3/4-16	-8	74.0-2.91	39.5-1.56	27.7-1.09
328-9120	12.7-.50	-8	XN	3/4-16	-8	74.0-2.91	39.5-1.56	35.1-1.38
328-9122	12.7-.50	-8	XN	3/4-16	-8	74.0-2.91	39.5-1.56	53.6-2.11
328-9121	12.7-.50	-8	XN	3/4-16	-8	74.0-2.91	39.5-1.56	63.5-2.50
328-9123	12.7-.50	-8	XN	3/4-16	-8	74.0-2.91	39.5-1.56	92.0-3.62
328-9124	12.7-.50	-8	XN	3/4-16	-8	74.0-2.91	39.5-1.56	114.1-4.49
328-9125	12.7-.50	-8	XN	7/8-14	-10	74.0-2.91	39.5-1.56	31.2-1.23
328-9126	12.7-.50	-8	XN	7/8-14	-10	74.0-2.91	39.5-1.56	44.5-1.75
328-9128	12.7-.50	-8	XN	7/8-14	-10	74.0-2.91	39.5-1.56	54.1-2.13
328-9129	12.7-.50	-8	XN	7/8-14	-10	74.0-2.91	39.5-1.56	82.6-3.25
333-9958	12.7-.50	-8	XN	7/8-14	-10	74.0-2.91	39.5-1.56	114.1-4.49
397-1942	15.9-.63	-10	XN	7/8-14	-10	94.0-3.70	47.0-1.85	47.0-1.85
397-1944	15.9-.63	-10	XN	1 1/16-12	-12	93.0-3.66	47.0-1.85	52.0-2.05
483-7179	19.1-.75	-12	XN	7/8-14	-10	112.0-4.41	53.4-2.10	47.0-1.85
432-2031	19.1-.75	-12	XN	1 1/16-12	-12	107.0-4.21	54.0-2.13	46.0-1.81
432-2032	19.1-.75	-12	XN	1 1/16-12	-12	107.0-4.21	54.0-2.13	52.0-2.05
432-2033	19.1-.75	-12	XN	1 1/16-12	-12	107.0-4.21	54.0-2.13	65.0-2.56
432-2034	19.1-.75	-12	XN	1 1/16-12	-12	107.0-4.21	54.0-2.13	92.0-3.62
432-2037	19.1-.75	-12	XN	1 5/16-12	-16	107.0-4.21	54.0-2.13	64.0-2.52
432-2038	19.1-.75	-12	XN	1 5/16-12	-16	107.0-4.21	54.0-2.13	80.0-3.15
499-1164	25.4-1.00	-16	XN	1 5/16-12	-16	135.0-5.31	70.0-2.76	66.0-2.60
499-1166	25.4-1.00	-16	XN	1 5/16-12	-16	135.0-5.31	70.0-2.76	112.0-4.41
499-1168	25.4-1.00	-16	XN	1 5/16-12	-16	140.1-5.52	69.6-2.74	142.5-5.61
442-5613	31.8-1.25	-20	XN6	1 5/8-12	-20	172.8-6.80	94.5-3.72	64.0-2.52
442-5610	31.8-1.25	-20	XN6	1 5/8-12	-20	173.0-6.81	94.5-3.72	87.0-3.43

JIC 37° Male-Str



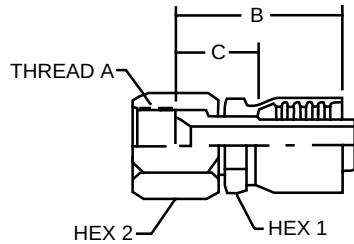
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6201	9.5-.38	-6	XN	9/16-18	-6	65.0-2.56	32.0-1.26
323-6202	9.5-.38	-6	XN	3/4-16	-8	69.0-2.72	36.0-1.42
328-9131	12.7-.50	-8	XN	3/4-16	-8	71.0-2.80	36.5-1.44
328-9132	12.7-.50	-8	XN	7/8-14	-10	70.0-2.76	36.0-1.42
598-6419	12.7-.50	-8	XN	1 1/16-12	-12	80.5-3.17	40.1-1.58
397-1945	15.9-.63	-10	XN	7/8-14	-10	89.5-3.52	38.0-1.50
397-1946	15.9-.63	-10	XN	1 1/16-12	-12	92.0-3.62	41.0-1.61
432-2040	19.1-.75	-12	XN	1 1/16-12	-12	95.0-3.74	41.0-1.61

Permanent Couplings - XT-6ES

JIC 37° Male-Str (Cont'd.)

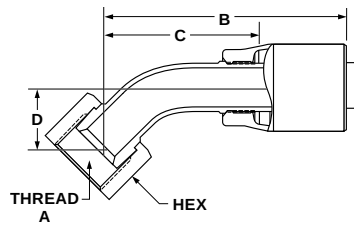
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
432-2041	19.1-.75	-12	XN	1 5/16-12	-16	101.0-3.98	47.0-1.85
499-1170	25.4-1.00	-16	XN	1 5/16-12	-16	119.0-4.69	48.5-1.91
442-5605	31.8-1.25	-20	XN6	1 5/8-12	-20	139.5-5.49	61.6-2.43

JIS (Komatsu Style), Metric Swivel, 30° Female Seat - Straight



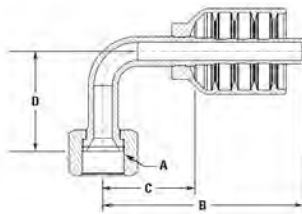
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6228	9.5-.37	-6	XN	M18 x 1.5	55.0-2.17	21.2-.83
328-9175	12.7-.50	-8	XN	M22 x 1.5	55.0-2.17	21.0-.83
397-1956	15.9-.63	-10	XN	M24 x 1.5	87.0-3.43	35.0-1.38
432-2139	19.1-.75	-12	XN	M30 x 1.5	95.0-3.74	41.0-1.61
499-1178	25.4-1.00	-16	XN	M33 x 1.5	98.0-3.86	33.0-1.30
442-5500	31.8-1.25	-20	XN6	M36 x 1.5	128.5-5.06	50.6-1.99

JIS (Komatsu Style), Metric Swivel, 30° Female Seat - 45° Elbow



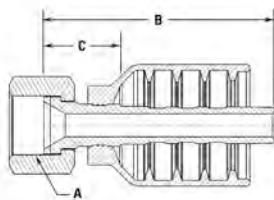
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6229	9.5-.37	-6	XN	M18 x 1.5	82.0-3.23	48.3-1.90	21.6-.85
328-9176	12.7-.50	-8	XN	M22 x 1.5	94.0-3.70	59.8-2.35	29.5-1.16
397-1957	15.9-.63	-10	XN	M24 x 1.5	104.7-4.12	58.3-2.30	22.4-.88
503-0664	19.1-.75	-12	XN	M30 x 1.5	124.2-4.89	65.5-2.58	27.0-1.06

JIS (Komatsu Style), Metric Swivel, 30° Female Seat - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6230	9.5-.37	-6	XN	M18 x 1.5	67.6-2.66	33.9-1.33	38.1-1.50
328-9177	12.7-.50	-8	XN	M22 x 1.5	73.7-2.90	39.4-1.55	50.8-2.00
397-1958	15.9-.63	-10	XN	M24 x 1.5	93.5-3.68	47.1-1.85	44.5-1.75
432-2140	19.1-.75	-12	XN	M30 x 1.5	112.1-4.41	53.4-2.10	52.3-2.06
600-4494	25.4-1.00	-16	XN	M33 x 1.5	140.1-5.52	69.6-2.74	70.0-2.76

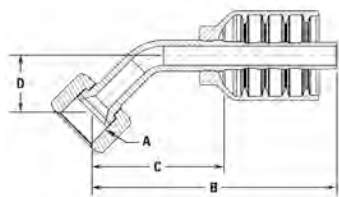
JIS Female Swivel Parallel Pipe w/ 30° Female Seat - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
519-4716	9.5-.37	-6	XN	3/8-19	-6	53-2.09	20-0.79
519-3997	12.7-.50	-8	XN	1/2-14	-8	57-2.24	24-0.94
519-4009	19.1-.75	-12	XN	3/4-14	-12	91-3.58	38-1.50
580-4113	25.4-1.00	-16	XN	1-11	-16	107-4.21	36-1.42

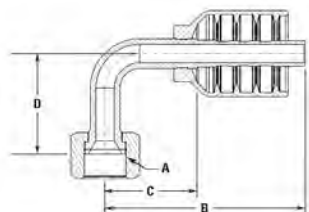
Permanent Couplings - XT-6ES

JIS Female Swivel Parallel Pipe w/ 30° Female Seat - 45° Elbow



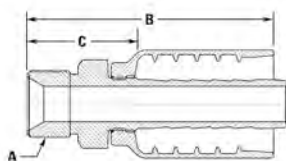
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
519-4717	9.5-.37	-6	XN	3/8-19	-6	80-3.15	47-1.85	20-0.79
519-3998	12.7-.50	-8	XN	1/2-14	-8	84-3.31	50-1.97	22-0.87
519-4010	19.1-.75	-12	XN	3/4-14	-12	120-4.72	68-2.68	29-1.14
580-4114	25.4-1.00	-16	XN	1-11	-16	160-6.30	89-3.50	35-1.38

JIS Female Swivel Parallel Pipe w/ 30° Female Seat - 90° Elbow



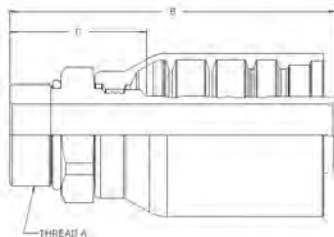
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
519-4718	9.5-.37	-6	XN	3/8-19	-6	67-2.64	34-1.34	37-1.46
519-3999	12.7-.50	-8	XN	1/2-14	-8	73-2.87	40-1.57	41-1.61
519-4011	19.1-.75	-12	XN	3/4-14	-12	106-4.17	53-2.09	58-2.28
580-4115	25.4-1.00	-16	XN	1-11	-16	140-5.51	69-2.72	70-2.76

JIS Male Parallel Pipe w/ 30° Female Seat - Straight



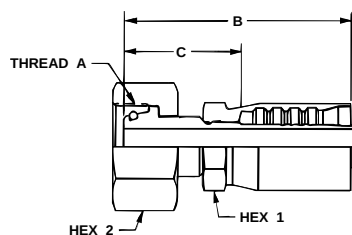
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6231	9.5-.37	-6	XN	3/8-19	-6	66.0-2.60	32.5-1.28
328-9178	12.7-.50	-8	XN	1/2-14	-8	72.0-2.83	38.0-1.50
518-0280	19.1-.75	-12	XN	3/4-14	-12	97-3.82	44.0-1.73
518-0281	25.4-1.00	-16	XN	1-11	-16	112-4.41	46.0-1.81

JIS Male O-Ring - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
442-5614	31.8-1.25	-20	XN6	1 1/4-11	-20	134.0-5.28	56.1-2.21	095-1603

Metric DIN Light (L) 24° O-Ring Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
503-7987	9.5-.37	-6	XN	M18 x 1.5	72.0-2.83	32.0-1.26	3E-4297
503-4447	12.7-.50	-8	XN	M22 x 1.5	75.0-2.95	34.6-1.36	3E-4298
591-1725	15.9-.63	-10	XN	M26 x 1.5	95.5-3.76	44.0-1.73	122-9250
605-3265	15.9-.63	-10	XN	M30 x 2.0	86.0-3.39	34.0-1.34	3E-6761
591-1726	19.1-.75	-12	XN	M26 x 1.5	103.0-4.06	43.0-1.69	122-9250
604-1592	19.1-.75	-12	XN	M30 x 2.0	100.0-3.94	42.0-1.65	3E-6761

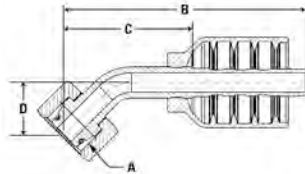
Permanent Couplings - XT-6ES

Metric DIN Light (L) 24° O-Ring Female Swivel - Straight (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
595-3619	25.4-1.00	-16	XN	M36 x 2.0	127.0-5.00	55.6-2.19	092-2304

Note: Grayscale parts are MAO (Made As Order).

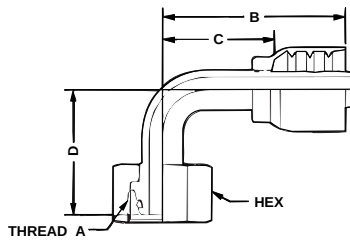
Metric DIN Light (L) 24° O-Ring Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
503-7988	9.5-.37	-6	XN	M18 x 1.5	78.0-3.07	45.0-1.77	19.0-0.75	3E-4297
503-4448	12.7-.50	-8	XN	M22 x 1.5	83.0-3.27	50.0-1.97	20.0-0.79	3E-4298
591-1727	15.9-.63	-10	XN	M26 x 1.5	110.0-4.33	58.5-2.30	23.5-.93	122-9250
591-1728	19.1-.75	-12	XN	M26 x 1.5	129.0-5.08	68.0-2.68	23.5-.93	122-9250
611-8372	19.1-.75	-12	XN	M30 x 2.0	123.0-4.84	61.5-2.42	25.5-1.00	3E-6761
569-5368	25.4-1.00	-16	XN	M36 x 2.0	150.0-5.91	79.0-3.11	32.0-1.26	092-2304

Note: Grayscale parts are MAO (Made As Order).

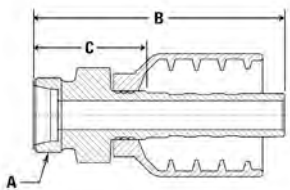
Metric DIN Light (L) 24° O-Ring Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
503-7989	9.5-.37	-6	XN	M18 x 1.5	74.0-2.91	34.0-1.34	36.0-1.42	3E-4297
503-4449	12.7-.50	-8	XN	M22 x 1.5	80.0-3.15	39.6-1.56	40.5-1.59	3E-4298
591-1729	15.9-.63	-10	XN	M26 x 1.5	99.0-3.90	46.0-1.81	51.5-2.03	122-9250
591-5077	19.1-.75	-12	XN	M26 x 1.5	106.0-4.17	45.0-1.77	51.5-2.03	122-9250
611-8374	19.1-.75	-12	XN	M30 x 2.0	112.0-4.41	51.0-2.01	56.0-2.20	3E-6761
569-6528	25.4-1.00	-16	XN	M36 x 2.0	140.0-5.51	69.0-2.72	68.5-2.70	092-2304

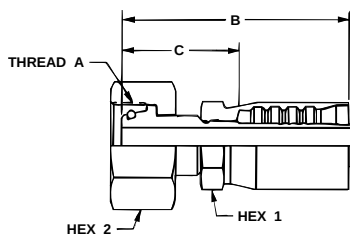
Note: Grayscale parts are MAO (Made As Order).

Metric DIN Light (L) 24° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
502-6079	12.7-.50	-8	XN	M22 x 1.5	73.5-2.89	33.1-1.30

Metric DIN Heavy (S) 24° O-Ring Female Swivel - Straight



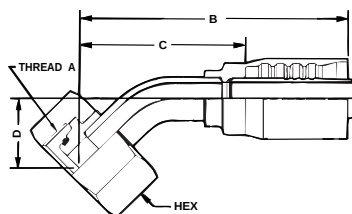
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6232	9.5-.37	-6	XN	M20 x 1.5	64.0-2.52	30.9-1.22	3E-4297
323-6233	9.5-.37	-6	XN	M22 x 1.5	68.0-2.68	34.4-1.35	3E-4298
431-9023	9.5-.37	-6	XN	M18 x 1.5	64.0-2.52	30.0-1.18	3E-4296

Permanent Couplings - XT-6ES

Metric DIN Heavy (S) 24° O-Ring Female Swivel - Straight (Cont'd.)

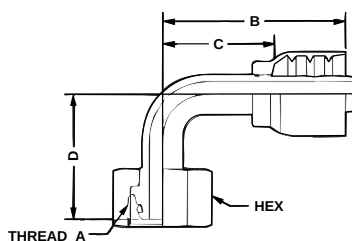
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
328-9179	12.7-.50	-8	XN	M24 x 1.5	70.0-2.76	36.2-1.43	8U-6457
397-1962	15.9-.63	-10	XN	M30 x 2.0	99.0-3.90	53.0-2.09	3E-4299
591-5078	19.1-.75	-12	XN	M30 x 2.0	109.5-4.31	50.0-1.97	3E-4299
432-2128	19.1-.75	-12	XN	M36 x 2.0	110.0-4.33	56.0-2.20	3E-6762
499-1171	25.4-1.00	-16	XN	M36 x 2.0	122.0-4.80	57.0-2.24	3E-6762
499-1172	25.4-1.00	-16	XN	M42 x 2.0	124.0-4.88	59.0-2.32	3E-6763
442-5611	31.8-1.25	-20	XN6	M52 x 2.0	143.0-5.63	64.8-2.55	3E-6764
591-1734	31.8-1.25	-20	XN6	M42 x 2.0	145.0-5.71	62.0-2.44	3E-6763
545-9425	38.1-1.50	-24	XN6	M52 x 2.0	145.0-5.71	62.0-2.44	460-6296

Metric DIN Heavy (S) 24° O-Ring Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6234	9.5-.37	-6	XN	M20 x 1.5	89.0-3.50	48.0-1.89	22.0-.87	3E-4297
323-6235	9.5-.37	-6	XN	M22 x 1.5	82.0-3.23	49.0-1.93	22.0-.87	3E-4298
328-9180	12.7-.50	-8	XN	M25 x 1.5	95.0-3.74	53.0-2.09	24.0-.94	8U-6457
397-1963	15.9-.63	-10	XN	M30 x 2.0	116.0-4.57	63.0-2.48	28.5-1.12	3E-4299
591-5079	19.1-.75	-12	XN	M30 x 2.0	122.0-4.80	61.0-2.40	25.0-.98	3E-4299
432-2129	19.1-.75	-12	XN	M36 x 2.0	122-4.80	69.0-2.72	30.0-1.18	3E-6762
499-1173	25.4-1.00	-16	XN	M42 x 2.0	150-5.91	85.0-3.35	38.0-1.50	3E-6733
591-1732	31.8-1.25	-20	XN6	M42 x 2.0	185.0-7.28	103.0-4.06	35.5-1.40	3E-6763
620-2855	31.8-1.25	-20	XN6	M52 x 2.0	193.0-7.60	115.0-4.53	44.5-1.75	460-6296

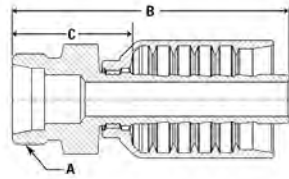
Metric DIN Heavy (S) 24° O-Ring Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6237	9.5-.37	-6	XN	M22 x 1.5	68.0-2.68	34.0-1.34	38.0-1.50	3E-4298
431-9024	9.5-.37	-6	XN	M18 x 1.5	74.0-2.91	33.0-1.30	38.0-1.50	3E-4296
323-6236	9.5-.37	-6	XN	M20 x 1.5	74.0-2.91	33.5-1.32	38.0-1.50	3E-4297
328-9181	12.7-.50	-8	XN	M24 x 1.5	80.0-3.15	39.0-1.54	44.0-1.73	8U-6457
397-1964	15.9-.63	-10	XN	M30 x 2.0	98.5-3.88	46.0-1.81	55.0-2.17	3E-4299
591-1730	19.1-.75	-12	XN	M30 x 2.0	112.0-4.41	51.0-2.01	49.5-1.95	3E-4299
432-2130	19.1-.75	-12	XN	M36 x 2.0	112.0-4.41	51.0-2.01	58.0-2.28	3E-6762
499-1174	25.4-1.00	-16	XN	M42 x 2.0	140.0-5.51	70.0-2.76	76.0-2.99	3E-6763
591-1731	31.8-1.25	-20	XN6	M42 x 2.0	172.0-6.77	89.0-3.50	70.0-2.76	3E-6763
620-2854	31.8-1.25	-20	XN6	M52 x 2.0	173.0-6.81	94.5-3.72	87.0-3.43	460-6296

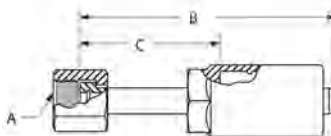
Permanent Couplings - XT-6ES

Metric DIN Heavy (S) 24° Male - Straight



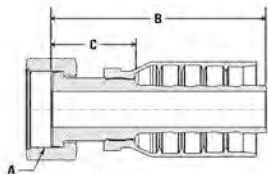
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6238	9.5-.37	-6	XN	M20 x 1.5	65.0-2.56	31.0-1.22
323-6239	9.5-.37	-6	XN	M22 x 1.5	66.0-2.60	33.0-1.33
328-9182	12.7-.5	-8	XN	M24 x 1.5	68.0-2.68	34.0-1.34
397-1965	15.9-.63	-10	XN	M30 x 2.0	91.0-3.58	40.0-1.57
552-7464	19.1-.75	-12	XN	M30 x 2.0	98.0-3.86	37.0-1.46
552-7423	19.1-.75	-12	XN	M36 x 2.0	102.0-4.02	41.0-1.61
541-4980	25.4-1.00	-16	XN	M42 x 2.0	115.0-4.53	46.0-1.81
501-1380	31.8-1.25	-20	XN6	M52 x 2.0	134.0-5.28	56.1-2.21

ORFS Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6156	9.5-.37	-6	XN	9/16-18	-4	60.0-2.36	26.1-1.03	4J-5477
323-6157	9.5-.37	-6	XN	11/16-16	-6	62.0-2.44	28.3-1.11	6V-8397
323-6158	9.5-.37	-6	XN	13/16-16	-8	66.0-2.60	32.3-1.27	6V-8398
323-6159	9.5-.37	-6	XN	1-14	-10	68.0-2.68	34.8-1.37	7J-9108
328-9089	12.7-.50	-8	XN	11/16-16	-6	67.0-2.64	32.4-1.28	6V-8397
328-9090	12.7-.50	-8	XN	13/16-16	-8	67.0-2.64	33.1-1.30	6V-8398
328-9091	12.7-.50	-8	XN	1-14	-10	70.0-2.76	35.6-1.40	7J-9108
328-9092	12.7-.50	-8	XN	1 3/16-12	-12	72.0-2.83	38.1-1.50	6V-9746
447-3114	15.9-.63	-10	XN	13/16-16	-8	95.0-3.74	44.0-1.73	6V-8398
397-1924	15.9-.63	-10	XN	1-14	-10	92.0-3.62	46.0-1.81	7J-9108
397-1937	15.9-.63	-10	XN	1 3/16-12	-12	95.0-3.74	48.0-1.89	6V-9746
432-2022	19.1-.75	-12	XN	1-14	-10	102.0-4.02	48.0-1.89	7J-9108
432-2008	19.1-.75	-12	XN	1 3/16-12	-12	104.0-4.09	50.0-1.97	6V-9746
432-2019	19.1-.75	-12	XN	1 7/16-12	-16	104.0-4.09	51.0-2.01	5K-9090
499-1141	25.4-1.00	-16	XN	1 3/16-12	-12	112.0-4.41	47.0-1.85	6V-9746
499-1142	25.4-1.00	-16	XN	1 7/16-12	-16	118.0-4.65	53.0-2.09	5K-9090
499-1154	25.4-1.00	-16	XN	1 11/16-12	-20	118.0-4.65	53.0-2.09	6V-8400
442-5599	31.8-1.25	-20	XN6	1 11/16-12	-20	133.0-5.24	61.0-2.40	6V-8400
505-3914	38.1-1.50	-24	XN6	2-12	-24	140.5-5.53	57.6-2.27	8T-0315

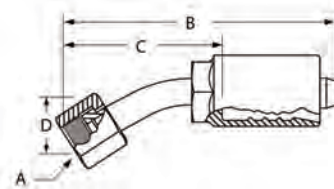
ORFS Female Swivel High Vibration - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
389-1122	12.7-.50	-8	XN	1-14	-10	74.0-2.91	39.0-1.54	7J-9108
397-1939	15.9-.63	-10	XN	1 3/16-12	-12	94.0-3.70	42.0-1.65	6V-9746
432-2143	19.1-.75	-12	XN	1 7/16-12	-16	104.0-4.09	51.0-2.01	5K-9090
539-3856	25.4-1.00	-16	XN	1 11/16-12	-20	117.0-4.61	46.0-1.81	6V-8400

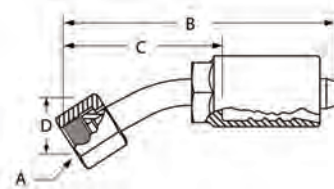
Permanent Couplings - XT-6ES

ORFS Female Swivel - 15° Elbow



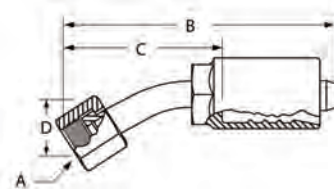
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2009	19.1-.75	-12	XN	1 3/16-12	-12	118.0-4.65	59.0-2.32	7.5-.30	6V-9746
558-7587	19.1-.75	-12	XN	1 3/16-12	-12	131.0-5.16	72.0-2.83	7.5-.30	6V-9746

ORFS Female Swivel - 22.5° Elbow



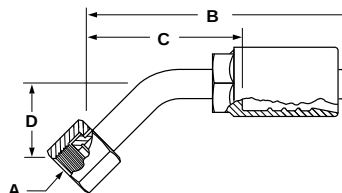
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
499-1143	25.4-1.00	-16	XN	1 7/16-12	-16	134.0-5.28	63.0-2.48	10.0-.39	5K-9090

ORFS Female Swivel - 30° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6173	9.5-.37	-6	XN	11/16-16	-6	78.0-3.07	44.2-1.74	11.2-.44	6V-8397
328-9107	12.7-.50	-8	XN	13/16-16	-8	86.0-3.39	51.8-2.04	13.7-.54	6V-8398
397-1926	15.9-.63	-10	XN	1-14	-10	107.0-4.21	61.0-2.40	16.0-.63	7J-9108
432-2010	19.1-.75	-12	XN	1 3/16-12	-12	111.0-4.37	57.0-2.24	13.0-.51	6V-9746
432-2011	19.1-.75	-12	XN	1 3/16-12	-12	119.0-4.69	65.0-2.56	18.0-.71	6V-9746
432-2012	19.1-.75	-12	XN	1 3/16-12	-12	133.0-5.24	78.0-3.07	26.0-1.02	6V-9746
568-1579	19.1-.75	-12	XN	1 3/16-12	-12	151.0-5.94	92.0-3.62	26.0-1.02	6V-9746
499-1144	25.4-1.00	-16	XN	1 7/16-12	-16	145.0-5.71	75.0-2.95	19.0-.75	5K-9090
442-5600	31.8-1.25	-20	XN6	1 11/16-12	-20	182.0-7.17	103.0-4.06	17.0-.67	6V-8400

ORFS Female Swivel - 45° Elbow



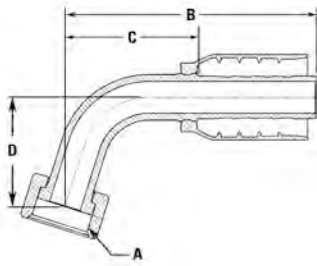
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
384-3442	9.5-.37	-6	XN	9/16-8	-4	76.0-2.99	35.0-1.38	10.0-.39	4J-5477
323-6160	9.5-.37	-6	XN	11/16-16	-6	72.0-2.83	37.6-1.48	10.9-.43	6V-8397
323-6161	9.5-.37	-6	XN	11/16-16	-6	75.0-2.95	41.6-1.64	15.0-.59	6V-8397
323-6162	9.5-.37	-6	XN	11/16-16	-6	78.0-3.07	44.1-1.74	17.5-.69	6V-8397
323-6163	9.5-.37	-6	XN	13/16-16	-8	75.0-2.95	41.7-1.64	15.0-.59	6V-8398
328-9093	12.7-.50	-8	XN	13/16-16	-8	80.0-3.15	45.2-1.78	15.0-.59	6V-8398
328-9094	12.7-.50	-8	XN	13/16-16	-8	86.0-3.39	51.9-2.04	21.6-.85	6V-8398
328-9095	12.7-.50	-8	XN	1-14	-10	81.0-3.19	46.7-1.84	16.5-.65	7J-9108
328-9096	12.7-.50	-8	XN	1-14	-10	86.0-3.39	51.8-2.04	21.6-.85	7J-9108
397-1927	15.9-.63	-10	XN	1-14	-10	98.0-3.86	52.0-2.05	16.0-.63	7J-9108
444-6447	15.9-.63	-10	XN	1 3/16-12	-12	123.0-4.84	72.0-2.83	36.0-1.42	6V-9746
397-1928	15.9-.63	-10	XN	1-14	-10	108.0-4.25	61.0-2.40	25.0-.98	7J-9108
432-2023	19.1-.75	-12	XN	1-14	-10	113.0-4.45	60.0-2.36	21.0-.83	7J-9108
432-2013	19.1-.75	-12	XN	1 3/16-12	-12	113.0-4.45	60.0-2.36	21.0-.83	6V-9746
432-2014	19.1-.75	-12	XN	1 3/16-12	-12	120.0-4.72	67.0-2.64	28.0-1.10	6V-9746

Permanent Couplings - XT-6ES

ORFS Female Swivel - 45° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2020	19.1-.75	-12	XN	1 7/16-12	-16	116.0-4.57	62.0-2.44	24.0-.94	5K-9090
499-1145	25.4-1.00	-16	XN	1 7/16-12	-16	142.0-5.59	71.8-2.83	24.5-.96	5K-9090
499-1146	25.4-1.00	-16	XN	1 7/16-12	-16	145.0-5.71	80.0-3.15	33.0-1.30	5K-9090
499-1155	25.4-1.00	-16	XN	1 11/16-12	-20	145.0-5.71	80.0-3.15	33.0-1.30	6V-8400
442-5601	31.8-1.25	-20	XN6	1 11/16-12	-20	171.0-6.73	98.0-3.86	28.0-1.10	6V-8400
505-3915	38.1-1.50	-24	XN6	2-12	-24	180.7-7.11	97.8-3.85	27.0-1.06	8T-0315

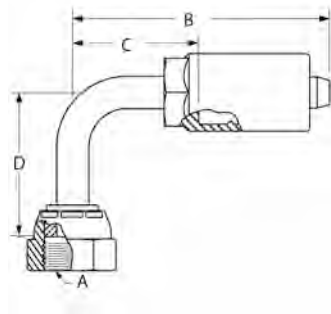
ORFS Female Swivel - 72.5° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
499-1147	25.4-1.00	-16	XN	1 7/16-12	-16	151.0-5.94	80.0-3.15	66.0-2.60	5K-9090

Permanent Couplings - XT-6ES

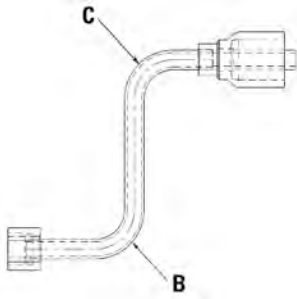
ORFS Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
384-3443	9.5-.37	-6	XN	9/16-18	-4	71.0-2.80	30.0-1.18	20.0-.79	4J-5477
323-6164	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	22.9-.90	6V-8397
323-6167	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	35.1-1.38	6V-8397
323-6165	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	38.1-1.50	6V-8397
323-6166	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	54.1-2.13	6V-8397
323-6168	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	69.1-2.72	6V-8397
323-6169	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	79.0-3.11	6V-8397
323-6170	9.5-.37	-6	XN	13/16-16	-8	68.0-2.68	34.2-1.35	29.0-1.14	6V-8398
323-6171	9.5-.37	-6	XN	13/16-16	-8	68.0-2.68	34.2-1.35	40.9-1.61	6V-8398
323-6172	9.5-.37	-6	XN	13/16-16	-8	68.0-2.68	34.2-1.35	64.0-2.52	6V-8398
328-9097	12.7-.50	-8	XN	13/16-16	-8	74.0-2.91	39.5-1.56	29.2-1.15	6V-8398
328-9098	12.7-.50	-8	XN	13/16-16	-8	74.0-2.91	39.5-1.56	41.2-1.62	6V-8398
328-9100	12.7-.50	-8	XN	13/16-16	-8	74.0-2.91	39.5-1.56	43.4-1.71	6V-8398
328-9099	12.7-.50	-8	XN	13/16-16	-8	74.0-2.91	39.5-1.56	63.8-2.51	6V-8398
328-9101	12.7-.50	-8	XN	13/16-16	-8	74.0-2.91	39.5-1.56	83.1-3.27	6V-8398
328-9102	12.7-.50	-8	XN	13/16-16	-8	74.0-2.91	39.5-1.56	91.4-3.60	6V-8398
328-9103	12.7-.50	-8	XN	1-14	-10	74.0-2.91	39.5-1.56	32.3-1.27	7J-9108
328-9106	12.7-.50	-8	XN	1-14	-10	74.0-2.91	39.6-1.56	43.4-1.71	7J-9108
328-9104	12.7-.50	-8	XN	1-14	-10	74.0-2.91	39.5-1.56	47.0-1.85	7J-9108
328-9105	12.7-.50	-8	XN	1-14	-10	74.0-2.91	39.5-1.56	70.1-2.76	7J-9108
397-1929	15.9-.63	-10	XN	1-14	-10	93.0-3.66	47.0-1.85	32.0-1.26	7J-9108
397-1930	15.9-.63	-10	XN	1-14	-10	93.0-3.66	47.0-1.85	47.0-1.85	7J-9108
397-1931	15.9-.63	-10	XN	1-14	-10	93.0-3.66	47.0-1.85	53.0-2.09	7J-9108
397-1932	15.9-.63	-10	XN	1-14	-10	93.0-3.66	47.0-1.85	96.0-3.78	7J-9108
485-8400	15.9-.63	-10	XN	1-14	-10	99.0-3.90	46.0-1.81	70.0-2.76	7J-9108
397-1938	15.9-.63	-10	XN	1 3/16-12	-12	94.0-3.70	47.0-1.85	47.0-1.85	6V-9746
432-2024	19.1-.75	-12	XN	1-14	-10	107.0-4.21	53.0-2.09	48.0-1.89	7J-9108
432-2015	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	48.0-1.89	6V-9746
432-2016	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	58.0-2.28	6V-9746
432-2017	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	96.0-3.78	6V-9746
432-2018	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	107.0-4.21	6V-9746
432-2021	19.1-.75	-12	XN	1 7/16-12	-16	107.0-4.21	53.0-2.09	56.0-2.20	5K-9090
499-1148	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	56.0-2.20	5K-9090
499-1149	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	68.0-2.68	5K-9090
499-1150	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	105.0-4.13	5K-9090
499-1151	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	115.0-4.53	5K-9090
499-1152	25.4-1.00	-16	XN	1 7/16-12	-16	135.0-5.31	70.0-2.76	125.0-4.92	5K-9090
499-1153	25.4-1.00	-16	XN	1 7/16-12	-16	140.0-5.51	70.0-2.76	148.0-5.83	5K-9090
499-1156	25.4-1.00	-16	XN	1 11/16-12	-20	135.0-5.31	70.0-2.76	68.0-2.68	6V-8400
442-5602	31.8-1.25	-20	XN6	1 11/16-12	-20	167.0-6.57	95.0-3.74	64.0-2.52	6V-8400
442-5603	31.8-1.25	-20	XN6	1 11/16-12	-20	173.0-6.81	94.5-3.72	129.0-5.08	6V-8400
505-3916	38.1-1.50	-24	XN6	2-12	-24	177.8-7.00	94.9-3.74	69.0-2.72	8T-0315

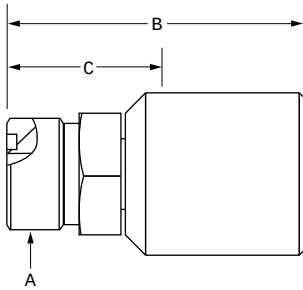
Permanent Couplings - XT-6ES

ORFS Female Swivel - Multi Bend (Backhoe Loaders)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	O-RING SEAL	BEND (B & C)	WORKING PRESSURE (kPa)	MIN. BURST PRESSURE (kPa)
202-0998	12.7-.50	-8	XN	13/16-16	6V-8398	90.0°	31,000	93,276
202-1002	12.7-.50	-8	XN	13/16-16	6V-8398	44.3°	31,000	93,276
202-2377	12.7-.50	-8	XN	13/16-16	6V-8398	90.0°	31,000	93,276
202-1000	15.9-.63	-10	XN	1-14	7J-9108	62.8°	24,000	72,216
202-1006	15.9-.63	-10	XN	1-14	7J-9108	64.3°	24,000	72,216
202-1004	19.1-.75	-12	XN	1 3/16-12	6V-9746	43.1°	25,750	77,628
203-4695	19.1-.75	-12	XN	1 3/16-12	6V-9746	78.1°	25,750	77,628

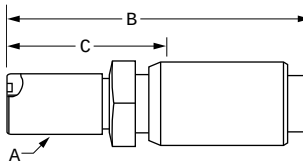
ORFS Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6174	9.5-.37	-6	XN	11/16-16	-6	62.0-2.44	28.5-1.12	6V-8397
323-6175	9.5-.37	-6	XN	13/16-16	-8	65.0-2.56	31.1-1.22	6V-8398
323-6176	9.5-.37	-6	XN	1-14	-10	67.0-2.64	33.9-1.33	7J-9108
328-9108	12.7-.50	-8	XN	13/16-16	-8	66.0-2.60	32.0-1.26	6V-8398
331-3273	12.7-.50	-8	XN	1-14	-10	69.0-2.72	34.7-1.37	7J-9108
397-1933	15.9-.63	-10	XN	1-14	-10	82.0-3.23	35.0-1.38	7J-9108
397-1936	15.9-.63	-10	XN	1 3/16-12	-12	101.0-3.98	55.0-2.17	6V-9746
432-2025	19.1-.75	-12	XN	1 3/16-12	-12	91.0-3.58	37.0-1.46	6V-9746
611-8353	19.1-.75	-12	XN	1 7/16-12	-16	98.0-3.86	37.0-1.46	5K-9090
499-1157	25.4-1.00	-16	XN	1 7/16-12	-16	119.0-4.69	49.0-1.93	5K-9090

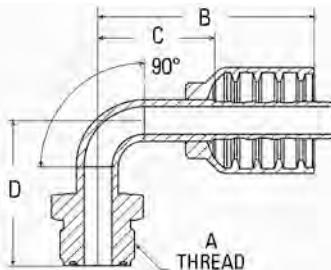
Note: Grayscale parts are MAO (Made As Order).

ORFS Male Bulkhead - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6177	9.5-.37	-6	XN	11/16-16	-6	81.0-3.19	47.3-1.86	6V-8397
482-7044	9.5-.37	-6	XN	13/16-16	-8	81.7-3.22	48.2-1.90	6V-8398
333-9956	12.7-.50	-8	XN	13/16-16	-8	83.0-3.27	49.2-1.94	6V-8398
397-1935	15.9-.63	-10	XN	1-14	-10	101.0-3.98	55.0-2.17	7J-9108
604-3191	19.1-.75	-12	XN	1 3/16-12	-12	120.-4.72	59.0-2.32	6V-9746

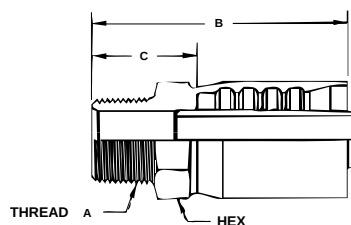
ORFS Male - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
331-3274	12.7-.50	-8	XN	1-14	-10	73.0-2.87	39.5-1.56	49.3-1.94	7J-9108
397-1934	15.9-.63	-10	XN	1-14	-10	93.0-3.66	47.0-1.85	53.0-2.09	7J-9108
432-2026	19.1-.75	-12	XN	1 3/16-12	-12	107.0-4.21	53.0-2.09	57.0-2.24	6V-9746

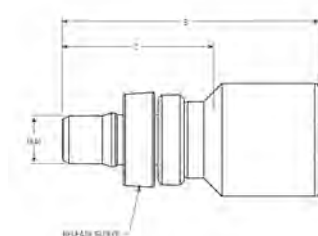
Permanent Couplings - XT-6ES

SAE 30° Male - Straight



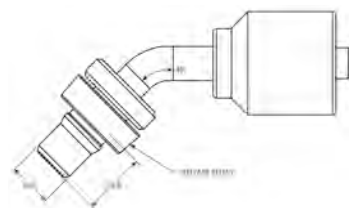
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6208	9.5-.37	-6	XN	1/4-18	-4	64.0-2.52	30.8-1.21
323-6209	9.5-.37	-6	XN	3/8-18	-6	65.0-2.56	31.8-1.25
323-6210	9.5-.37	-6	XN	1/2-14	-8	70.0-2.76	36.0-1.42
328-9133	12.7-.50	-8	XN	3/8-18	-6	66.5-2.62	32.5-1.28
328-9134	12.7-.50	-8	XN	1/2-14	-8	71.0-2.80	37.3-1.47
328-9135	12.7-.50	-8	XN	3/4-14	-12	73.0-2.87	39.1-1.54
397-1947	15.9-.63	-10	XN	1/2-14	-8	89.0-3.50	38.0-1.50
397-1948	15.9-.63	-10	XN	3/4-14	-12	91.0-3.58	40.0-1.57
432-2124	19.1-.75	-12	XN	3/4-14	-12	94.0-3.70	40.0-1.57
432-2125	19.1-.75	-12	XN	1-11 1/2	-16	102.0-4.02	48.0-1.89
499-1185	25.4-1.00	-16	XN	3/4-14	-12	112.0-4.41	41.5-1.63
499-1177	25.4-1.00	-16	XN	1-11 1/2	-16	119.0-4.69	49.0-1.93
442-5604	31.8-1.25	-20	XN6	1 1/4 - 11 1/2	-20	139.5-5.49	61.6-2.43

Snap To Connect - Straight



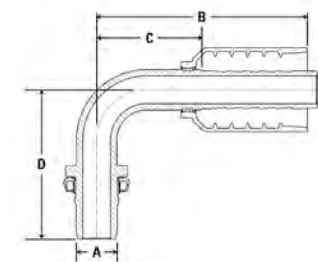
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
360-2602	9.5-.37	-6	XN	9.6-.38	-6	67.0-2.64	34.0-1.34
360-2603	12.7-.50	-8	XN	12.7-.50	-8	74.0-2.91	41.0-1.61
397-1968	15.9-.63	-10	XN	16.1-.63	-10	91.0-3.58	45.0-1.77
432-2131	19.1-.75	-12	XN	20.9-.82	-12	103.0-4.06	49.0-1.93
499-1186	25.4-1.00	-16	XN	20.9-.82	-12	119.0-4.69	48.0-1.89

Snap To Connect - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
360-2605	9.5-.37	-6	XN	9.6-.38	-6	82.0-3.23	49.0-1.93	22.0-.87
360-2606	12.7-.50	-8	XN	12.7-.50	-8	94.0-3.70	60.0-2.36	30.0-1.18
432-2132	19.1-.75	-12	XN	20.9-.82	-12	138.0-5.43	79.0-3.11	41.0-1.61

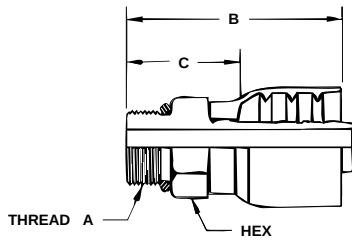
Snap To Connect - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
360-2609	9.5-.37	-6	XN	9.6-.38	-6	68.0-2.68	34.0-1.34	55.0-2.17
360-2610	12.7-.50	-8	XN	12.7-.50	-8	74.0-2.91	40.0-1.57	65.0-2.56
432-2133	19.1-.75	-12	XN	20.9-.82	-12	107.0-4.21	53.0-2.09	76.0-2.99

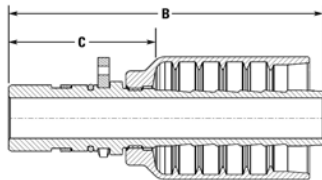
Permanent Couplings - XT-6ES

STOR Male O-Ring - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6212	9.5-.37	-6	XN	9/16-18	-6	59.0-2.32	26.0-1.02	3J-1907
328-9136	12.7-.50	-8	XN	3/4-16	-8	65.0-2.56	31.0-1.22	3K-0360
570-9719	12.7-.50	-8	XN	7/8-14	-10	71.0-2.80	31.0-1.22	2M-9780
416-2095	15.9-.63	-10	XN	7/8-14	-10	78.0-3.07	32.0-1.26	2M-9780
432-2141	19.1-.75	-12	XN	1 1/16-12	-12	89.0-3.50	36.0-1.42	3D-2824
499-1187	25.4-1.00	-16	XN	1 5/16-12	-16	112.0-4.41	41.5-1.63	7M-8485
593-3758	31.8-1.25	-20	XN6	1 5/8-12	-20	140.0-5.51	62.0-2.44	2S-4078

WEO Plug-In Coupling



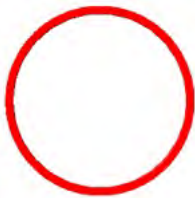
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
505-1188	19.1 - 0.75	-12	XN	-12 - 0.47	110 - 4.33	51 - 2.00	8U-5951
583-7081	19.1 - 0.75	-12	XN	-12 - 0.47	110 - 4.33	51 - 2.00	-

WEO Plug-In Clip



Part Number	Dash Size	Clip Thickness	Clip I.D.	Clip Height
502-2489	-6	0.15 in, 3.7 mm	0.43 in, 11.0 mm	0.94 in, 24.0 mm
502-2490	-8	0.14 in, 3.6 mm	0.55 in, 14.0 mm	1.10 in, 28.0 mm
502-2491	-12	0.18 in, 4.0 mm	0.83 in, 21.0 mm	1.38 in, 35.0 mm

WEO Plug-In Release Ring



Part Number	Dash Size	Seal Thickness	Seal I.D.
502-2492	-6	0.13 in, 3.2 mm	0.43 in, 11.0 mm
502-2493	-8	0.13 in, 3.2 mm	0.55 in, 14.0 mm
502-2494	-12	0.14 in, 3.6 mm	0.83 in, 21.0 mm

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Air Brake Only Hose - 662

Air Brake Only Hose - 662



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	MIN. BURST PRESS (kPa - psi)	MAX. WORK PRESS (kPa - psi)
5P-0720	6.4 - .25	15.9 - .63	-4	6300 - 914	1400 - 203
371-1253	9.5 - .37	19.1 - .75	-6	6200 - 899	1400 - 203
5P-1300	11.1 - .44	20.6 - .81	-7	6300 - 914	1400 - 203
371-1254	12.7 - .50	22.2 - .87	-8	6200 - 899	1400 - 203

APPLICATION: Air only. Approved for use on vehicles by meeting D.O.T. FMVSS 106.

Meets the requirements of SAE J1402. Note: Sold by the centimeter.

All "Automotive Air Brake Hose" for use in truck "air brake systems including flexible connections from frame to axle, tractor to trailer, trailer to trailer, and other unshielded air lines that are exposed to potential pull or impact" .

[Please refer to the -6 and -8 couplings starting on, page 103 and ending on, page 106](#)

Operating Temperature Range: -40°C to 100°C (-40°F to 212°F)

Air Conditioning Hose - 1543J

Air Conditioning Hose - 1543J



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
541-7161	7.9 - .31	15.7 - .62	-6	A/C	13.7 - 1987	2.4 - 350	25 - 0.98
541-7162	10.3 - .41	18.8 - .74	-8	A/C	13.7 - 1987	2.4 - 350	38 - 1.50
541-7163	12.7 - .50	21.1 - .83	-10	A/C	13.7 - 1987	2.4 - 350	63 - 2.48
541-7164	15.9 - .63	24.4 - .96	-12	A/C	13.7 - 1987	2.4 - 350	104 - 4.09
541-7165	19.1 - .75	28.4 - 1.12	-14	A/C	13.7 - 1987	2.4 - 350	104 - 4.09

Construction: Thermoplastic tube, textile braid, elastomeric cover.

Application: Construction, truck and agricultural air conditioning systems.

Moisture Ingression: Less than 16 gm/100 in² per year.

R134 Permeation: 2.0 lbs/ft² per year at 176° F.

Temperature Range: -22° F to +257° F (-30° C to +125° C).

Couplings: Crimp-on permanent, non-skive type, A/C Series coupling. See Permanent Couplings (1543) section. For related assembly equipment and tooling, see Tooling section.

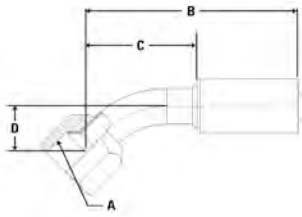
Required Cutting Tool: Cutting Tool (177-4271) and Blade (177-4272) is required for cutting hose. Do not use Hose Cutting Machine. Cut-off saw can cause heating distortion. See Miscellaneous Tools and Accessories section.

Reference: IRM HOS02-01

¹ Centerline of Hose

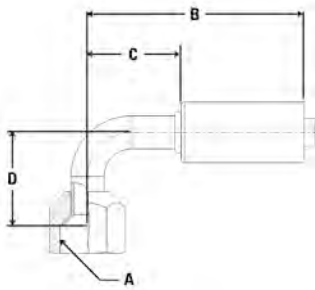
Air Conditioning Hose Couplings - 1543J

A/C 45° Flare - 45° Elbow



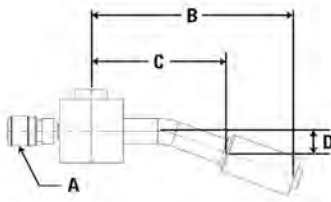
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
320-1809	10.3-.41	-8	A/C	3/4-16	-8	76.0-2.99	40.0-1.57	16.0-.63
320-1807	10.3-.41	-8	A/C	7/8-14	-10	90.0-3.54	54.0-2.13	22.0-.87

A/C 45° Flare - 90° Elbow



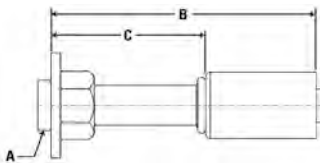
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
320-1811	7.9-.31	-6	A/C	5/8-18	-6	62.5-2.46	27.0-1.06	27.0-1.06
320-1808	7.9-.31	-6	A/C	5/8-18	-8	70.0-2.76	34.0-1.34	52.0-2.05
320-1805	10.3-.41	-8	A/C	3/4-16	-8	68.0-2.68	32.0-1.26	32.0-1.26
320-1810	12.7-.50	-10	A/C	7/8-14	-10	74.0-2.91	38.0-1.50	38.0-1.50
320-1806	15.9-.63	-12	A/C	1 1/16-14	-12	80.0-3.15	44.0-1.73	44.0-1.73

A/C Compressor Block Male Sensor Port - 20° Elbow



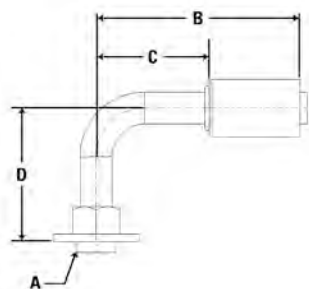
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1865	10.3-.41	-8	A/C	-8	101.0-3.98	67.5-2.66	11.0-.43	9X-7385

A/C Compressor Ring Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1839	10.3-.41	-8	A/C	-8	89.0-3.50	50.0-1.97	9X-7385

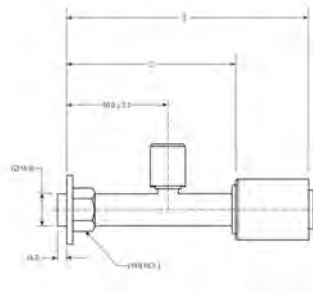
A/C Compressor Ring Male - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
425-2577	10.3-.41	-8	A/C	-8	81.0-3.19	45.0-1.77	53.0-2.09	9X-7385
425-2579	15.9-.63	-12	A/C	-12	86.0-3.39	50.0-1.97	83.0-3.27	9X-7385
477-2275	15.9-.63	-12	A/C	-12	86.0-3.39	48.0-1.89	83.0-3.27	9X-7385

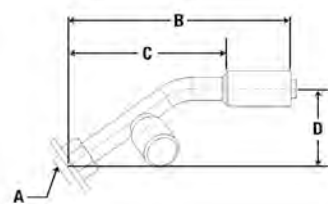
Air Conditioning Hose Couplings - 1543J

A/C Compressor Ring Male Charge Port - Straight



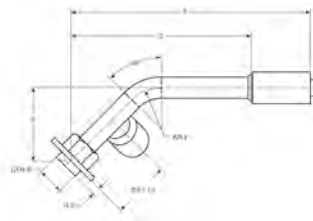
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1879	10.3-.41	-8	A/C	-8	119.0-4.69	83.5-3.29	9X-7385
320-1835	19.1-.75	-14	A/C	-14	119.0-4.69	83.5-3.29	9X-7385

A/C Compressor Ring Male Charge Port - 35° Elbow



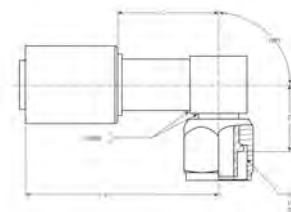
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1895	10.3-.41	-8	A/C	-8	123.5-4.86	88.0-3.46	43.0-1.69	9X-7385

A/C Compressor Ring Male Charge Port - 45° Elbow



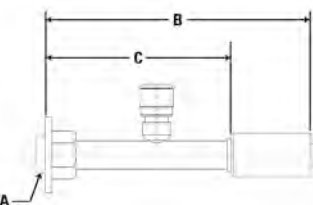
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1842	10.3-.41	-8	A/C	-8	148.5-5.85	109.5-4.31	44.5-1.75	9X-7385
320-1856	15.9-.63	-12	A/C	-12	130.0-5.12	94.5-3.72	44.5-1.75	9X-7385
320-1922	15.9-.63	-12	A/C	-12	130.0-5.12	94.5-3.72	44.5-1.75	9X-7385

A/C Compressor Ring Male Charge Port - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1827	10.3-.41	-8	A/C	-8	81.0-3.19	45.0-1.77	53.0-2.09	9X-7385
320-1910	10.3-.41	-8	A/C	-8	81.0-3.19	45.0-1.77	53.0-2.09	9X-7385
320-1836	10.3-.41	-8	A/C	-8	121.0-4.76	80.0-3.15	70.0-2.76	9X-7385
320-1828	15.9-.63	-12	A/C	-12	86.0-3.39	50.0-1.97	83.0-3.27	9X-7385

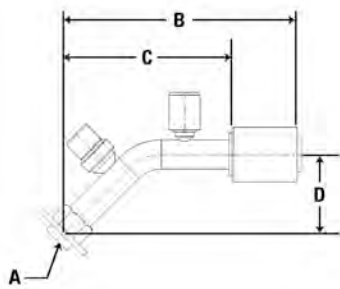
A/C Compressor Ring Male Sensor Port - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
460-1446	10.3-.41	-8	A/C	-8	119.0-4.69	83.5-3.29	9X-7385

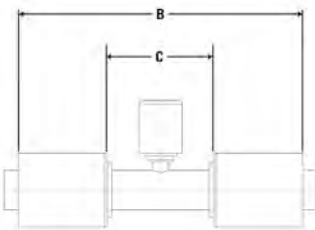
Air Conditioning Hose Couplings - 1543J

A/C Compressor Ring Male Sensor & Charge Port - 45° Elbow



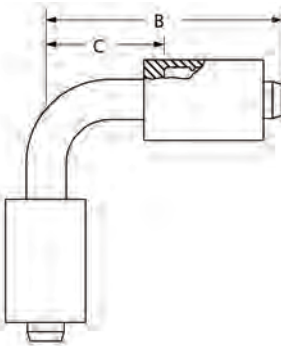
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1893	15.9-.63	-12	A/C	-12	130.0-5.12	94.5-3.72	44.5-1.75	9X-7385

A/C Double Collet Charge Port - Straight



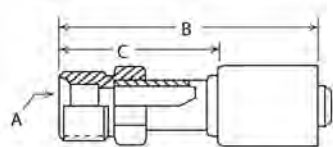
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
320-1921	15.9-.63	-12	A/C	-12	115.0-4.53	43.0-1.69

A/C Double Collet - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	DROP (mm-in)
450-2530	7.9-.31	-6	A/C	-6	76.0-2.99	40.0-1.57	76.0-2.99
340-4857	10.3-.41	-8	A/C	-8	118.0-4.65	82.0-3.23	118.0-4.65
320-1852	15.9-.63	-12	A/C	-12	118.0-4.65	82.0-3.23	118.0-4.65

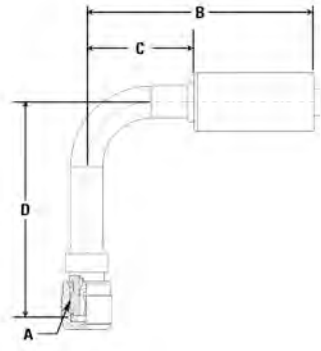
A/C Metric Tube0 Bulkhead Male (Long Pilot) - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1814	7.9-.31	-6	A/C	5/8-18	-6	84.5-3.33	49.0-1.93	9X-7380
376-5361	7.9-.31	-6	A/C	5/8-18	-6	94.0-3.70	58.0-2.28	9X-7380
320-1813	10.3-.41	-8	A/C	3/4-16	-8	84.0-3.31	48.5-1.91	9X-7381
352-2000	12.7-.50	-10	A/C	7/8-14	-10	111.0-4.37	75.0-2.95	9X-7382
320-1867	15.9-.63	-12	A/C	7/8-14	-10	111.0-4.37	75.0-2.95	9X-7382
433-7836	15.9-.63	-12	A/C	1 1/16-14	-12	111.0-4.37	75.0-2.95	9X-7383

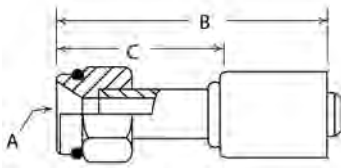
Air Conditioning Hose Couplings - 1543J

A/C Schrader (HS Switch) - 90° Elbow



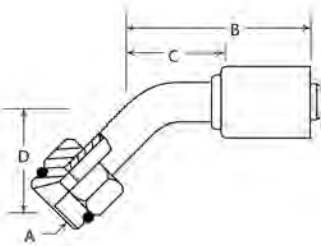
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
320-1849	7.9-.31	-6	A/C	7/16-20	-6	67.0-2.64	32.0-1.26	63.0-2.48

A/C Self Seal Female - Straight



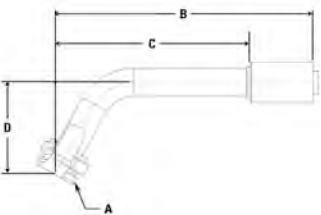
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1743	7.9-.31	-6	A/C	7/8-20	-8	63.5-2.50	28.0-1.10	9X-7383
320-1744	10.3-.41	-8	A/C	7/8-20	-8	80.5-3.17	45.0-1.77	9X-7383
455-7148	10.3-.41	-8	A/C	7/8-20	-8	104.0-4.09	68.0-2.68	9X-7383
320-1804	12.7-.50	-10	A/C	7/8-20	-8	64.0-2.52	28.0-1.10	9X-7383
320-1799	12.7-.50	-10	A/C	1 1/4-18	-12	64.0-2.52	28.0-1.10	9X-7384
320-1745	15.9-.63	-12	A/C	1 1/4-18	-12	97.5-3.84	62.0-2.44	9X-7384
455-7149	15.9-.63	-12	A/C	1 1/4-18	-12	113.0-4.45	77.0-3.03	9X-7384
320-1796	19.1-.75	-14	A/C	1 1/4-18	-12	64.0-2.52	28.0-1.10	9X-7384

A/C Self Seal Female - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1795	10.3-.41	-8	A/C	7/8-20	-8	106.5-4.19	71.0-2.80	32.0-1.26	9X-7383
320-1793	15.9-.63	-12	A/C	1 1/4-18	-12	98.0-3.86	62.0-2.44	36.0-1.42	9X-7384
320-1897	19.1-.75	-14	A/C	1 1/4-18	-12	133.0-5.24	97.0-3.82	57.0-2.24	9X-7384
478-5465	19.1-.75	-14	A/C	1 1/4-18	-12	133.0-5.24	97.0-3.82	57.0-2.24	9X-7384

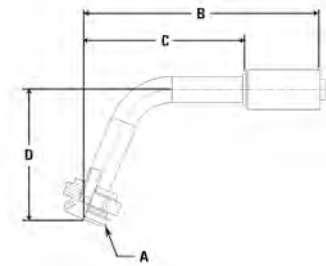
A/C Self Seal Female - 60° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1802	15.9-.63	-12	A/C	1 1/4-18	-12	146.0-5.75	110.0-4.33	52.0-2.05	9X-7384

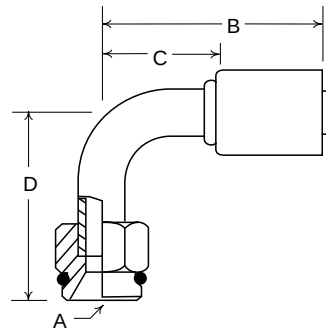
Air Conditioning Hose Couplings - 1543J

A/C Self Seal Female - 68° Elbow



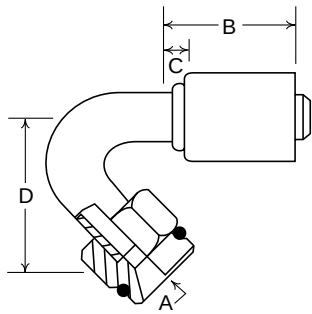
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
478-5464	10.3-.41	-8	A/C	7/8-20	-8	115.0-4.53	79.0-3.11	63.0-2.48	9X-7383

A/C Self Seal Female - 90° Elbow



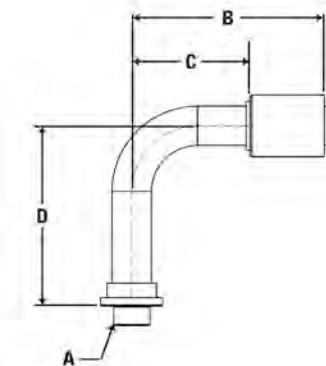
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1816	7.9-.31	-6	A/C	7/8-20	-8	70.0-2.76	34.0-1.34	35.0-1.38	9X-7383
320-1746	7.9-.31	-6	A/C	7/8-20	-8	62.0-2.44	27.0-1.06	38.0-1.50	9X-7383
320-1790	7.9-.31	-6	A/C	7/8-20	-8	62.0-2.44	27.0-1.06	65.0-2.56	9X-7383
320-1747	10.3-.41	-8	A/C	7/8-20	-8	75.0-2.95	39.0-1.54	45.0-1.77	9X-7383
478-5457	12.7-.50	-10	A/C	7/8-20	-8	94.0-3.70	58.0-2.28	62.0-2.44	9X-7383
320-1800	12.7-.50	-10	A/C	1 1/4-18	-12	96.0-3.78	60.0-2.36	62.0-2.44	9X-7384
320-1791	15.9-.63	-12	A/C	1 1/4-18	-12	78.0-3.07	42.0-1.65	76.0-2.99	9X-7384
320-1794	15.9-.63	-12	A/C	1 1/4-18	-12	78.0-3.07	42.0-1.65	100.0-3.94	9X-7384
320-1797	19.1-.75	-14	A/C	1 1/4-18	-12	99.0-3.90	63.5-2.50	76.0-2.99	9X-7384

A/C Self Seal Female - 135° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1792	15.9-.63	-12	A/C	1 1/4-18	-12	55.0-2.17	19.0-.75	70.0-2.76	9X-7384

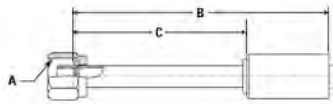
A/C Teardrop Female (No Nut) - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
501-1191	19.1-.75	-14	A/C	-14	93.0-3.66	57.0-2.24	87.0-3.43	327-0283

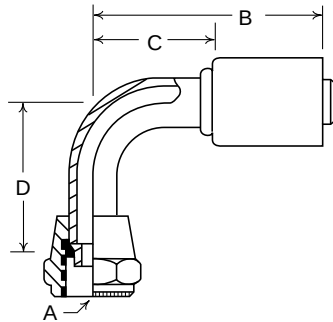
Air Conditioning Hose Couplings - 1543J

A/C Tube O-Ring Female Swivel (Long Pilot) - Straight



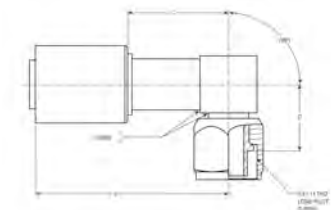
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1761	7.9-.31	-6	A/C	5/8-18	-6	77.0-3.03	35.0-1.38	9X-7380
320-1720	7.9-.31	-6	A/C	3/4-16	-8	73.5-2.89	38.0-1.50	9X-7381
478-5447	10.3-.41	-8	A/C	5/8-18	-6	112.0-4.41	76.0-2.99	9X-7380
320-1760	10.3-.41	-8	A/C	3/4-16	-8	74.0-2.91	38.0-1.50	9X-7381
579-7513	10.3-.41	-8	A/C	7/8-14	-10	84.0-3.31	53.0-2.09	9X-7382
320-1762	12.7-.50	-10	A/C	7/8-14	-10	89.0-3.50	53.0-2.09	9X-7382
320-1721	15.9-.63	-12	A/C	7/8-14	-10	82.0-3.23	46.0-1.81	9X-7382
320-1768	15.9-.63	-12	A/C	1 1/16-14	-12	96.0-3.78	60.0-2.36	9X-7383
320-1754	19.1-.75	-14	A/C	7/8-14	-10	79.0-3.11	43.0-1.69	9X-7382
320-1755	19.1-.75	-14	A/C	1 1/16-14	-12	96.0-3.78	60.0-2.36	9X-7383

A/C Tube O-Ring Female Swivel (Long Pilot) - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1723	7.9-.31	-6	A/C	5/8-18	-6	62.5-2.46	27.0-1.06	30.0-1.18	9X-7380
320-1776	7.9-.31	-6	A/C	5/8-18	-6	62.0-2.44	27.0-1.06	44.0-1.73	9X-7380
320-1724	7.9-.31	-6	A/C	3/4-16	-8	74.0-2.91	38.0-1.50	41.0-1.61	9X-7381
364-1219	7.9-.31	-6	A/C	3/4-16	-8	74.0-2.91	38.0-1.50	93.0-3.66	9X-7381
416-5426	10.3-.41	-8	A/C	5/8-18	-6	71.0-2.80	35.0-1.38	35.0-1.38	9X-7380
478-5448	10.3-.41	-8	A/C	5/8-18	-6	106.0-4.17	70.0-2.76	38.0-1.50	9X-7380
320-1775	10.3-.41	-8	A/C	3/4-16	-8	67.0-2.64	31.0-1.22	38.0-1.50	9X-7381
320-1773	10.3-.41	-8	A/C	3/4-16	-8	68.0-2.68	32.0-1.26	51.0-2.01	9X-7381
320-1845	10.3-.41	-8	A/C	3/4-16	-8	68.0-2.68	32.0-1.26	63.5-2.50	9X-7381
320-1772	10.3-.41	-8	A/C	3/4-16	-8	67.0-2.64	31.0-1.22	85.0-3.35	9X-7381
320-1765	12.7-.50	-10	A/C	7/8-14	-10	74.0-2.91	38.0-1.50	38.0-1.50	9X-7382
320-1904	15.9-.63	-12	A/C	7/8-14	-10	82.0-3.23	39.0-1.54	26.0-1.02	9X-7382
320-1725	15.9-.63	-12	A/C	7/8-14	-10	81.0-3.19	45.0-1.77	45.0-1.77	9X-7382
320-1834	15.9-.63	-12	A/C	7/8-14	-10	81.0-3.19	45.0-1.77	55.0-2.17	9X-7382
320-1876	15.9-.63	-12	A/C	7/8-14	-10	76.5-3.01	41.0-1.61	80.0-3.15	9X-7382
320-1771	15.9-.63	-12	A/C	7/8-14	-10	76.5-3.01	41.0-1.61	112.0-4.41	9X-7382
320-1774	15.9-.63	-12	A/C	7/8-14	-10	78.0-3.07	42.0-1.65	150.0-5.91	9X-7382
320-1777	15.9-.63	-12	A/C	1 1/16-14	-12	74.0-2.91	38.0-1.50	51.0-2.01	9X-7383
320-1769	19.1-.75	-14	A/C	7/8-14	-10	80.0-3.15	44.0-1.73	76.0-2.99	9X-7382
364-1216	19.1-.75	-14	A/C	7/8-14	-10	80.0-3.15	44.0-1.73	150.0-5.91	9X-7382
320-1812	19.1-.75	-14	A/C	1 1/16-14	-12	99.0-3.90	63.5-2.50	63.5-2.50	9X-7383

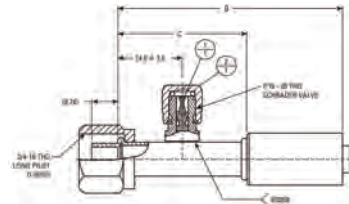
A/C Tube O-Ring Female Swivel (Long Pilot) Block - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1890	10.3-.41	-8	A/C	3/4-16	-8	60.0-2.36	24.0-.94	23.0-.91	9X-7381
320-1905	19.1-.75	-14	A/C	7/8-14	-10	75.0-2.95	39.0-1.54	26.0-1.02	9X-7382

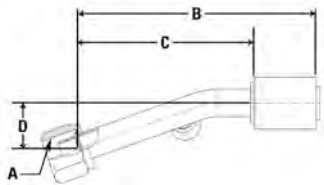
Air Conditioning Hose Couplings - 1543J

A/C Tube O-Ring Female Swivel (Long Pilot) Charge Port - Straight



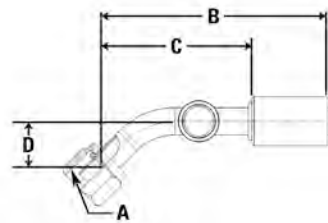
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1832	7.9-.31	-6	A/C	5/8-18	-6	83.5-3.29	48.0-1.89	9X-7380
320-1901	7.9-.31	-6	A/C	3/4-16	-8	85.5-3.37	50.0-1.97	9X-7381
358-9008	10.3-.41	-8	A/C	3/4-16	-8	86.0-3.39	50.0-1.97	9X-7381
345-4554	15.9-.63	-12	A/C	7/8-14	-10	94.0-3.70	58.0-2.28	9X-7382

A/C Tube O-Ring Female Swivel (Long Pilot) Charge Port - 20° Elbow



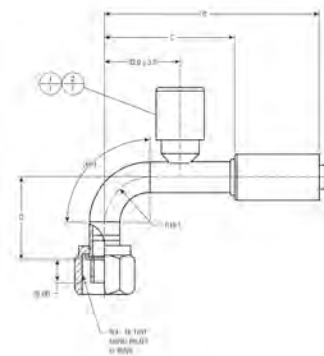
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1900	15.9-.63	-12	A/C	7/8-14	-10	138.0-5.43	102.0-4.02	26.5-1.04	9X-7382

A/C Tube O-Ring Female Swivel (Long Pilot) Charge Port - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
438-5420	12.7-.50	-10	A/C	7/8-14	-10	108.0-4.25	72.0-2.83	22.0-.87	9X-7382
368-8109	15.9-.63	-12	A/C	7/8-14	-10	123.0-4.84	87.0-3.43	49.5-1.95	9X-7382

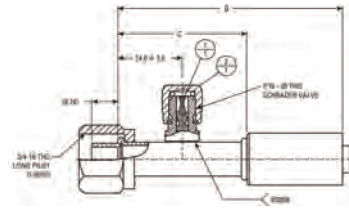
A/C Tube O-Ring Female Swivel (Long Pilot) Charge Port - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1886	7.9-.31	-6	A/C	3/4-16	-8	112.5-4.43	77.0-3.03	41.0-1.61	9X-7381
320-1903	7.9-.31	-6	A/C	3/4-16	-8	105.0-4.13	70.0-2.76	85.0-3.35	9X-7381
320-1898	10.3-.41	-8	A/C	3/4-16	-8	91.0-3.58	55.0-2.17	35.0-1.38	9X-7381
320-1899	15.9-.63	-12	A/C	7/8-14	-10	101.0-3.98	65.0-2.56	45.0-1.77	9X-7382
320-1847	15.9-.63	-12	A/C	7/8-14	-10	116.0-4.57	80.0-3.15	49.5-1.95	9X-7382

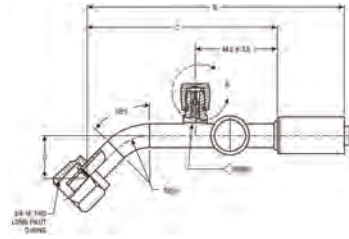
Air Conditioning Hose Couplings - 1543J

A/C Tube O-Ring Female Swivel (Long Pilot) Sensor Port - Straight



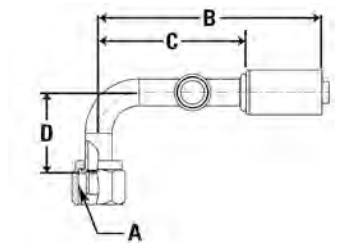
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1833	7.9-.31	-6	A/C	3/4-16	-8	201.0-7.91	165.0-6.50	9X-7381
320-1837	10.3-.41	-8	A/C	3/4-16	-8	86.0-3.39	48.0-1.89	9X-7381
320-1989	19.1-.75	-14	A/C	7/8-14	-10	94.0-3.70	58.0-2.28	9X-7382

A/C Tube O-Ring Female Swivel (Long Pilot) Sensor Port - 45° Elbow



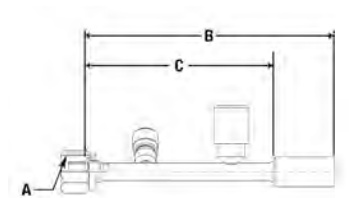
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1757	10.3-.41	-8	A/C	3/4-16	-8	106.0-4.17	70.0-2.76	27.0-1.06	9X-7381
385-5269	10.3-.41	-8	A/C	3/4-16	-8	106.0-4.17	70.0-2.76	27.0-1.06	9X-7381
345-4555	15.9-.63	-12	A/C	7/8-14	-10	106.0-4.17	70.0-2.76	22.0-.87	9X-7382
320-1866	15.9-.63	-12	A/C	7/8-14	-10	89.0-3.50	53.0-2.09	27.5-1.08	9X-7382
385-5270	15.9-.63	-12	A/C	7/8-14	-10	132.5-5.22	97.0-3.82	54.0-2.13	9X-7382

A/C Tube O-Ring Female Swivel (Long Pilot) Sensor Port - 90° Elbow



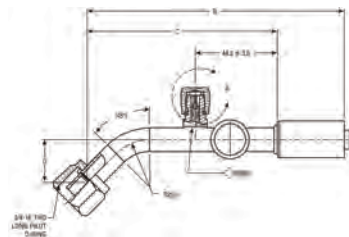
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1766	10.3-.41	-8	A/C	3/4-16	-8	106.0-4.17	70.0-2.76	38.0-1.50	9X-7381
320-1841	10.3-.41	-8	A/C	3/4-16	-8	81.0-3.19	45.0-1.77	67.0-2.64	9X-7381
320-1990	19.1-.75	-14	A/C	7/8-14	-10	84.0-3.31	48.0-1.89	76.0-2.99	9X-7382

A/C Tube O-Ring Female Swivel (Long Pilot) Sensor & Charge Port - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1831	7.9-.31	-6	A/C	3/4-16	-8	146.0-5.75	110.0-4.33	9X-7381

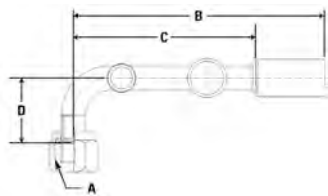
A/C Tube O-Ring Female Swivel (Long Pilot) Sensor & Charge Port - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1844	10.3-.41	-8	A/C	3/4-16	-8	138.0-5.43	102.0-4.02	23.0-.91	9X-7381
368-8108	10.3-.41	-8	A/C	3/4-16	-8	125.0-4.92	89.0-3.50	60.0-2.36	9X-7381

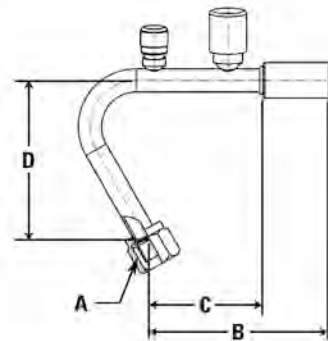
Air Conditioning Hose Couplings - 1543J

A/C Tube O-Ring Female Swivel (Long Pilot) Sensor & Charge Port - 90° Elbow



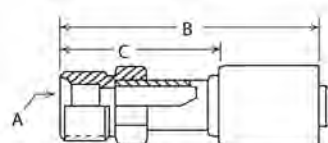
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1767	10.3-.41	-8	A/C	3/4-16	-8	131.0-5.16	95.0-3.74	34.0-1.34	9X-7381
320-1846	10.3-.41	-8	A/C	3/4-16	-8	121.0-4.76	85.0-3.35	34.0-1.34	9X-7381

A/C Tube O-Ring Female Swivel (Long Pilot) Sensor & Charge Port - 120° Elbow



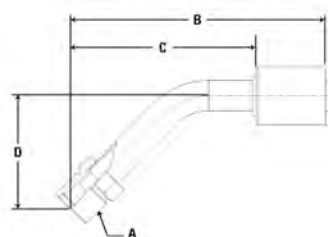
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
372-7053	10.3-.41	-8	A/C	3/4-16	-8	99.0-3.90	63.0-2.48	87.0-3.43	9X-7381

A/C Tube O-Ring Male (Long Pilot) - Straight



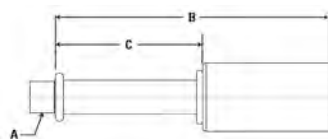
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1741	7.9-.31	-6	A/C	5/8-18	-6	72.5-2.85	37.0-1.46	9X-7380
320-1778	7.9-.31	-6	A/C	3/4-16	-8	72.5-2.85	37.0-1.46	9X-7381
320-1779	10.3-.41	-8	A/C	3/4-16	-8	77.0-3.03	41.0-1.61	9X-7381
320-1742	15.9-.63	-12	A/C	7/8-14	-10	86.0-3.39	50.0-1.97	9X-7382

A/C Tube O-Ring Male (Long Pilot) - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1780	15.9-.63	-12	A/C	7/8-14	-10	132.0-5.20	96.0-3.78	59.0-2.32	9X-7382

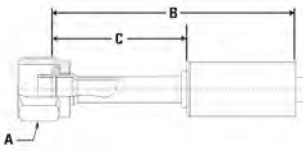
A/C Tube O-Ring Male Flare (Long Pilot) - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
381-8083	10.3-.41	-8	A/C		-6	78.0-3.07	42.0-1.65	9X-7380

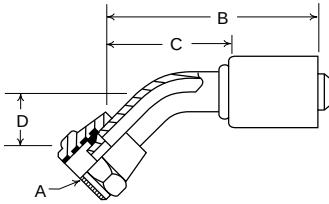
Air Conditioning Hose Couplings - 1543J

A/C Tube O-Ring Female Swivel (Short Pilot) - Straight



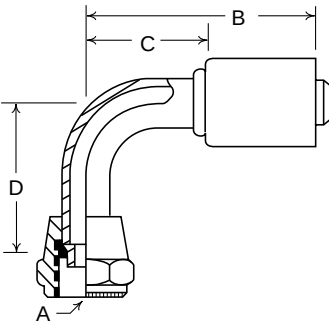
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1985	7.9-.31	-6	A/C	3/4-16	-8	79.5-3.13	44.0-1.73	9X-7381

A/C Tube O-Ring Female Swivel (Short Pilot) - 45° Elbow



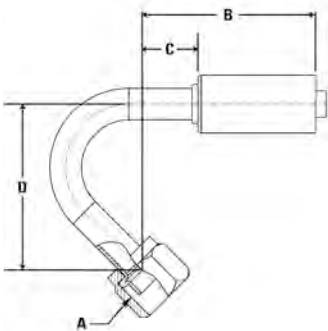
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1750	7.9-.31	-6	A/C	5/8-18	-6	89.0-3.50	53.5-2.11	15.0-.59	9X-7380
320-1759	7.9-.31	-6	A/C	5/8-18	-6	89.0-3.50	53.5-2.11	18.0-.71	9X-7380
320-1749	7.9-.31	-6	A/C	3/4-16	-8	67.5-2.66	32.0-1.26	15.0-.59	9X-7381
320-1752	7.9-.31	-6	A/C	3/4-16	-8	94.0-3.70	58.0-2.28	29.0-1.14	9X-7381
320-1758	10.3-.41	-8	A/C	3/4-16	-8	84.0-3.31	48.0-1.89	22.0-.87	9X-7381
320-1722	15.9-.63	-12	A/C	7/8-14	-10	98.0-3.86	62.0-2.44	22.0-.87	9X-7382
320-1756	15.9-.63	-12	A/C	1 1/16-14	-12	98.0-3.86	62.5-2.46	36.0-1.42	9X-7383
320-1751	19.1-.75	-14	A/C	7/8-14	-10	102.0-4.02	66.0-2.60	40.0-1.57	9X-7382
320-1753	19.1-.75	-14	A/C	1 1/16-14	-12	102.0-4.02	66.0-2.60	40.0-1.57	9X-7383

A/C Tube O-Ring Female Swivel (Short Pilot) - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
478-5446	7.9-.31	-6	A/C	5/8-18	-6	66.0-2.60	30.0-1.18	30.0-1.18	9X-7380
478-7507	19.1-.75	-14	A/C	1 1/16-14	-12	102.0-4.02	63.5-2.50	63.5-2.50	9X-7383

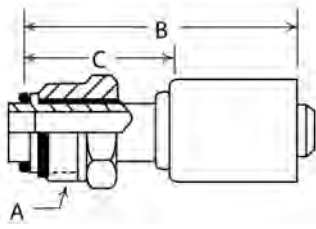
A/C Tube O-Ring Female Swivel (Short Pilot) - 135° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1902	7.9-.31	-6	A/C	5/8-18	-6	52.0-2.05	17.0-.67	50.0-1.97	9X-7380

Air Conditioning Hose Couplings - 1543J

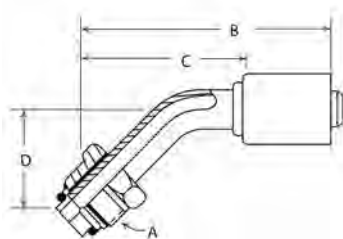
A/C Tube O-Ring Male Swivel (Short Pilot) - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1781	7.9-.31	-6	A/C	5/8-18	-6	78.5-3.09	43.0-1.69	9X-7380
320-1782	10.3-.41	-8	A/C	3/4-18	-8	81.0-3.19	45.0-1.77	9X-7381
320-1783	15.9-.63	-12	A/C	7/8-18	-10	96.0-3.78	60.0-2.36	9X-7382
320-1786	15.9-.63	-12	A/C	1 1/16-16	-12	96.0-3.78	60.0-2.36	9X-7383
320-1788	19.1-.75	-14	A/C	1 1/16-16	-12	96.0-3.78	60.0-2.36	9X-7383

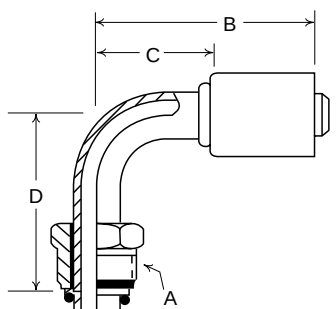
Air Conditioning Hose Couplings - 1543J

A/C Tube O-Ring Male Swivel (Short Pilot) - 45° Elbow



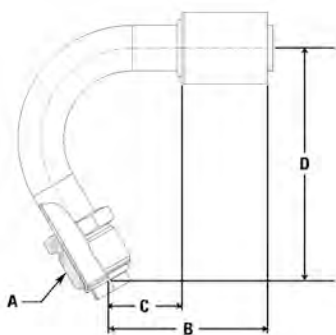
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1726	7.9-.31	-6	A/C	5/8-18	-6	78.5-3.09	43.0-1.69	22.0-.87	9X-7380
352-1998	10.3-.41	-8	A/C	5/8-18	-6	79.5-3.13	44.0-1.73	22.0-.87	9X-7380
320-1785	10.3-.41	-8	A/C	3/4-18	-8	89.0-3.50	53.0-2.09	32.0-1.26	9X-7381
320-1727	15.9-.63	-12	A/C	7/8-14	-10	95.0-3.74	59.0-2.32	33.0-1.30	9X-7382
320-1787	15.9-.63	-12	A/C	1 1/16-16	-12	142.0-5.59	106.0-4.17	70.0-2.76	9X-7383
320-1826	19.1-.75	-14	A/C	1 1/16-16	-12	142.0-5.59	106.0-4.17	70.0-2.76	9X-7383

A/C Tube O-Ring Male Swivel (Short Pilot) - 90° Elbow



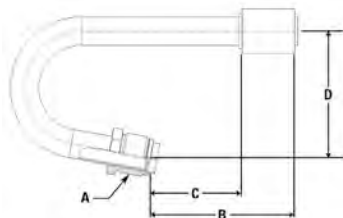
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1728	7.9-.31	-6	A/C	5/8-18	-6	62.5-2.46	27.0-1.06	41.0-1.61	9X-7380
320-1784	10.3-.41	-8	A/C	3/4-18	-8	67.0-2.64	31.5-1.24	57.0-2.24	9X-7381
352-1999	12.7-.50	-10	A/C	7/8-18	-10	76.0-2.99	40.0-1.57	54.0-2.13	9X-7382
320-1729	15.9-.63	-12	A/C	7/8-18	-10	81.0-3.19	45.0-1.77	63.5-2.50	9X-7382
320-1730	15.9-.63	-12	A/C	1 1/16-16	-12	92.5-3.64	57.0-2.24	63.5-2.50	9X-7383
320-1789	19.1-.75	-14	A/C	1 1/16-16	-12	99.0-3.90	63.5-2.50	63.5-2.50	9X-7383

A/C Tube O-Ring Male Swivel (Short Pilot) - 120° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1875	19.1-.75	-14	A/C	1 1/16-16	-12	67.0-2.64	31.0-1.22	97.0-3.82	9X-7383

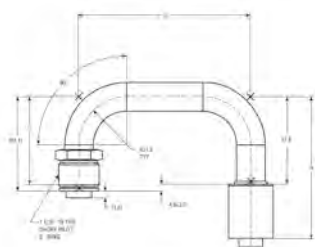
A/C Tube O-Ring Male Swivel (Short Pilot) - 170° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
355-4143	15.9-.63	-12	A/C	1 1/16-16	-12	97.0-3.82	61.0-2.4	85.0-3.35	9X-7383

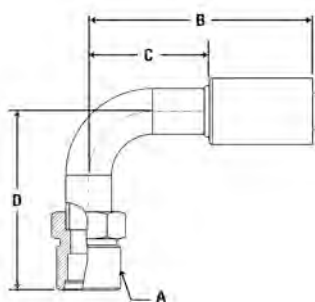
Air Conditioning Hose Couplings - 1543J

A/C Tube O-Ring Male Swivel (Short Pilot) - 180° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1824	15.9-.63	-12	A/C	1 1/16-16	-12	94.0-3.70	62.0-2.44	114.0-4.49	9X-7383
320-1880	19.1-.75	-14	A/C	1 1/16-16	-12	92.0-3.62	62.0-2.44	114.0-4.49	9X-7383

A/C Tube O Bulkhead Male - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
520-7374	10.3-.41	-8	A/C	3/4-16	-8	79.0-3.11	43.0-1.69	77.5-3.05	9X-7381
488-2336	12.7-.50	-10	A/C	7/8-14	-10	78.0-3.07	42.0-1.65	62.0-2.44	9X-7382
320-1815	15.9-.63	-12	A/C	1 1/16-14	-12	93.0-3.66	57.0-2.24	75.0-2.95	9X-7383
385-5271	15.9-.63	-12	A/C	1 1/16-14	-12	286.0-11.26	250.0-9.84	75.0-2.95	9X-7383

Auto Lube Systems Pre-Filled Grease Hose - 1543B

Pre-Filled Grease Hose for Auto Lube Systems (1543B)

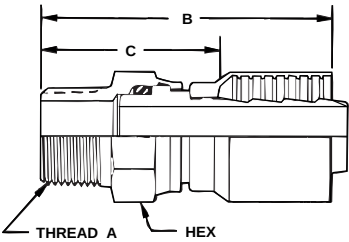


Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)
171-9629	3.1 - .12	8.1 - .32	-2	82.7 - 12000	20.7 - 3000

Construction: Fiber reinforced thermoplastic, medium pressure hose pre-filled with grease. Application: For use in Auto Lube systems.

Auto Lube Systems Pre-Filled Grease Hose Couplings - 1543B

NPTF Male Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
418-6463	3.1-.12	-2	1/8-27	-2	53.0-2.09	38.0-1.50

Engine Oil and Air Brake Dual Purpose Hose - 556

Engine Oil and Air Brake Dual Purpose Hose - 556



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
541-7130	4.8 - .19	13.2 - .52	-4	82.8 - 12009	20.7 - 3002	75 - 2.95
541-7131	6.4 - .25	14.7 - .58	-5	82.8 - 12009	20.7 - 3002	85 - 3.35
541-7132	7.9 - .31	17.3 - .68	-6	62.0 - 8992	15.5 - 2248	100 - 3.94
541-7133	10.3 - .41	19.6 - .77	-8	55.2 - 8006	13.8 - 2002	115 - 4.53
541-7134	12.7 - .50	23.4 - .92	-10	48.4 - 7020	12.1 - 1755	140 - 5.51
541-7135	15.9 - .63	27.4 - 1.08	-12	41.2 - 5976	10.3 - 1494	165 - 6.50
541-7136	22.2 - .87	31.2 - 1.23	-16	22.0 - 3191	5.5 - 798	185 - 7.28
541-7137	28.6 - 1.13	38.1 - 1.50	-20	17.2 - 2495	4.3 - 624	225 - 8.86
541-7138	34.9 - 1.37	44.5 - 1.75	-24	13.6 - 1973	3.4 - 493	265 - 10.43

Construction: Synthetic rubber tube, textile inner braid, high tensile steel wire braid reinforcement, textile braid cover.

Application: Medium pressure service with petroleum base hydraulic fluids, water-glycol and water-oil fire resistant hydraulic fluids, water, crude and fuel oils, not oil, diesel fuels, anti-freeze solutions, air. D.O.T. FMVSS 106 All Air Brake Approved.

Temperature Range: -40° F to +158° F (-40° C to +70° C) for air and anti-freeze solutions. -40° F to +185° F (-40° C to +85° C) for water glycol and water-oil fire resistant hydraulic fluids, water, crude and fuel oils, hot oil, and diesel fuels. -20° F to +250° F (-29° C to +120° C) for all other applications. Usage at temperatures exceeding +200° F (+120° C) is based on reduced working pressure.

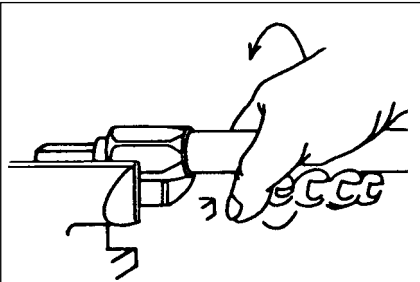
Couplings: Screw-type reusable, non-skive type, see Reusable Couplings (556, 1130) section. For related assembly equipment and tooling, see Tooling section.

Note: Hose cover does not need to be removed before attaching couplings.

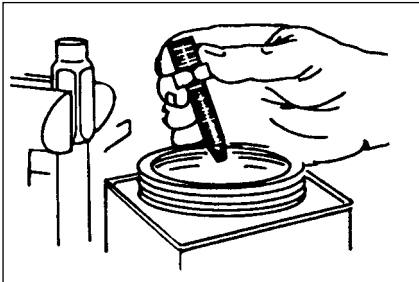
Note: 4901 hose type is a valid replacement for 556 hose type where DOT approval is not required.

¹ Centerline of Hose

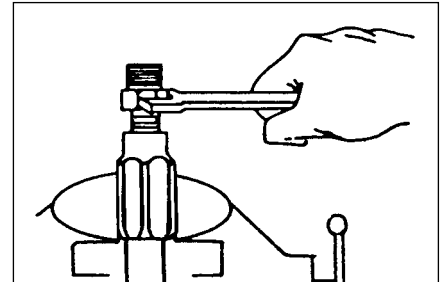
Assembly Instructions



Place socket in vise. Thread hose counterclockwise into socket until hose bottoms. Back off 1/2 turn.



Oil nipple threads and inside of hose with heavy oil. Caution: Do not oil hose cover.



Thread nipple clockwise into socket until nipple hex shoulders against socket.

Engine Oil and Air Brake Dual Purpose Hose - 1130

Engine Oil and Air Brake Dual Purpose Hose - 1130



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
541-7139	4.8 - .19	13.2 - .52	-4	55.2 - 8006	13.8 - 2002	20 - 0.79
541-7140	6.4 - .25	14.7 - .58	-5	41.2 - 5976	10.3 - 1494	25 - 0.98
541-7141	7.9 - .31	17.3 - .68	-6	41.2 - 5976	10.3 - 1494	32 - 1.26
541-7142	10.3 - .41	19.6 - .77	-8	34.4 - 4989	8.6 - 1247	45 - 1.77
541-7143	12.7 - .50	23.4 - .92	-10	34.4 - 4989	8.6 - 1247	58 - 2.28
541-7144	15.9 - .63	27.4 - 1.08	-12	20.8 - 3017	5.2 - 754	70 - 2.76
541-7145	22.2 - .87	31.2 - 1.23	-16	11.2 - 1624	2.8 - 406	90 - 3.54
541-7146	28.6 - 1.13	38.1 - 1.50	-20	8.4 - 1218	2.1 - 305	115 - 4.53
541-7147	34.9 - 1.37	44.5 - 1.75	-24	6.8 - 986	1.7 - 247	140 - 5.51

Construction: Synthetic rubber tube, textile inner braid, high tensile steel wire braid reinforcement, textile braid cover.

Application: Air, engine oil, water, lubricating oils, diesel fuel, petroleum base hydraulic oils D.O.T. FMVSS 106 All Air Brake approved. U.S. Coast Guard 46CFR56.60-25C approved.

Temperature Range: -40° F to +248° F (-40° C to +120° C) for air. -40° F to +302° F (-40° C to +150° C) for water based fluids, gasoline and diesel fuel.

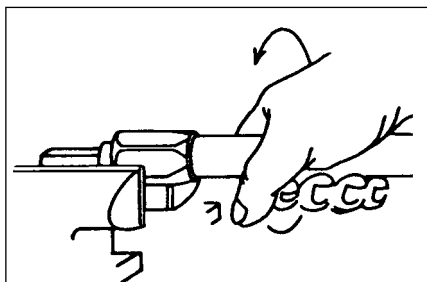
Couplings: Screw-type reusable, non-skive type, see Reusable Couplings (556, 1130) section. For related assembly equipment and tooling, see Tooling section.

Note: Hose cover does not need to be removed before attaching couplings.

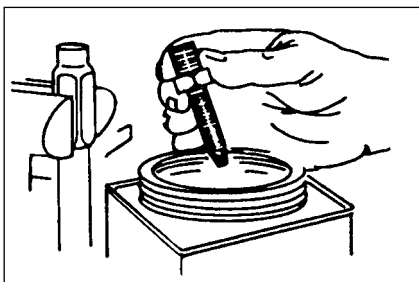
Note: 4901 hose type is a valid replacement for 1130 hose type where DOT approval is not required.

¹ Centerline of Hose

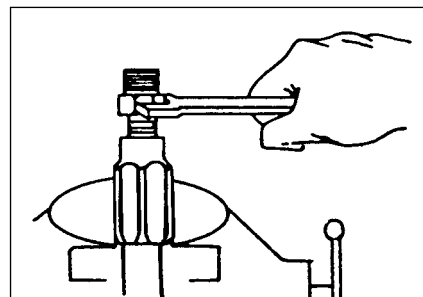
Assembly Instructions



Place socket in vise. Thread hose counterclockwise into socket until hose bottoms. Back off 1/2 turn.



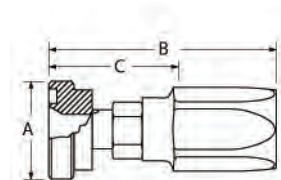
Oil nipple threads and inside of hose with heavy oil. Caution: Do not oil hose cover.



Thread nipple clockwise into socket until nipple hex shoulders against socket.

Engine and Air Brake Dual Purpose Hose Reusable Screw Type Couplings - 556 / 1130

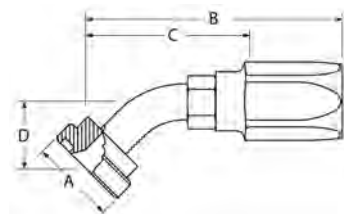
Flange - Code 61 - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
9X-3842	28.6-1.13	-20	BRK-R	50.8-2.00	-20	91.0-3.58	56.0-2.20	4J-0522

NOTE: Refer to the Seal Section of the Guide for a complete list of seals and applications.

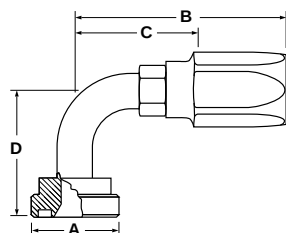
Flange - Code 61 - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
9X-3846	28.6-1.13	-20	BRK-R	50.8-2.00	-20	104.5-4.11	72.0-2.83	28.5-1.12	4J-0522

NOTE: Refer to the Seal Section of the Guide for a complete list of seals and applications.

Flange - Code 61 - 90° Elbow

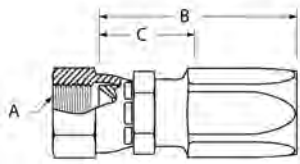


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
9X-3849	22.2-.87	-16	BRK-R	44.5-1.75	-16	90.0-3.54	58.0-2.28	60.5-2.38	4J-0520
9X-3850	28.6-1.13	-20	BRK-R	50.8-2.00	-20	102.0-4.02	67.5-2.66	63.5-2.50	4J-0522

NOTE: Refer to the Seal Section of the Guide for a complete list of seals and applications.

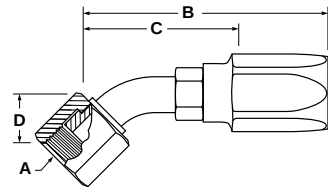
Engine and Air Brake Dual Purpose Hose Reusable Screw Type Couplings - 556 / 1130

JIC 37° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
001-6285	4.8-.19	-4	BRK-R	7/16-20	-4	41.0-1.61	21.0-0.83
9X-3821	6.4-.25	-5	BRK-R	7/16-20	-4	46.0-1.81	24.0-0.94
053-2295	6.4-.25	-5	BRK-R	1/2-20	-5	47.0-1.85	24.5-0.96
9X-3823	6.4-.25	-5	BRK-R	9/16-18	-6	49.5-1.95	27.0-1.06
001-6286	7.9-.31	-6	BRK-R	9/16-18	-6	49.0-1.93	26.5-1.04
030-7186	7.9-.31	-6	BRK-R	9/16-18	-6	45.5-1.79	26.0-1.02
001-6287	10.3-.41	-8	BRK-R	3/4-16	-8	61.0-2.40	30.0-1.18
030-7190	10.3-.41	-8	BRK-R	3/4-16	-8	56.0-2.20	27.0-1.06
9X-3826	12.7-.50	-10	BRK-R	3/4-16	-8	70.0-2.76	32.0-1.26
061-6746	12.7-.50	-10	BRK-R	7/8-14	-10	71.0-2.80	33.0-1.30
9X-3957	12.7-.50	-10	BRK-R	1 1/16-12	-12	72.5-2.85	34.5-1.36
001-6289	15.9-.63	-12	BRK-R	1 1/16-12	-12	67.5-2.66	35.0-1.38
9X-3830	22.2-.87	-16	BRK-R	1 5/16-12	-16	85.0-3.35	33.0-1.30
3L-9762	28.6-1.13	-20	BRK-R	1 5/8-12	-20	75.0-2.95	39.5-1.56
9X-3832	34.9-1.37	-24	BRK-R	1 7/8-12	-24	83.0-3.27	46.0-1.81

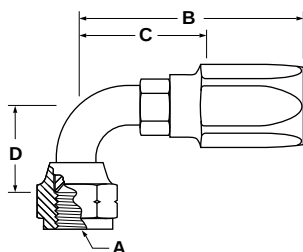
JIC 37° Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
9X-3854	4.8-.19	-4	BRK-R	7/16-20	-4	47.0-1.85	28.0-1.10	8.0-.31
9X-3855	6.4-.25	-5	BRK-R	1/2-20	-5	52.5-2.07	33.0-1.30	9.0-.35
068-0599	7.9-.31	-6	BRK-R	9/16-18	-6	56.5-2.22	35.0-1.38	10.0-.39
9X-3857	7.9-.31	-6	BRK-R	3/4-16	-8	68.5-2.70	44.0-1.73	14.0-.55
068-2859	10.3-.41	-8	BRK-R	3/4-16	-8	76.0-2.99	48.5-1.91	14.0-.55
9X-3859	12.7-.50	-10	BRK-R	7/8-14	-10	85.0-3.35	54.0-2.13	16.0-.63
9X-3860	15.9-.63	-12	BRK-R	1 1/16-12	-12	95.5-3.76	62.5-2.46	20.0-.79
9X-3861	22.2-.87	-16	BRK-R	1 5/16-12	-16	94.5-3.72	64.5-2.54	23.0-.91

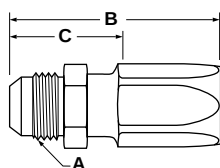
Engine and Air Brake Dual Purpose Hose Reusable Screw Type Couplings - 556 / 1130

JIC 37° Female Swivel - 90° Elbow



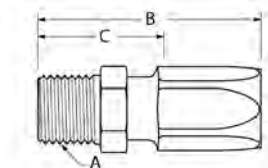
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
068-0589	4.8-.19	-4	BRK-R	7/16-20	-4	51.0-2.01	31.0-1.22	17.0-.67
9X-3870	4.8-.19	-4	BRK-R	7/16-20	-4	44.0-1.73	25.0-.98	46.0-1.81
9X-3863	6.4-.25	-5	BRK-R	1/2-20	-5	50.0-1.97	30.0-1.18	20.0-.79
068-0009	7.9-.31	-6	BRK-R	9/16-18	-6	56.5-2.22	35.5-1.40	22.0-.87
032-4872	7.9-.31	-6	BRK-R	9/16-18	-6	54.0-2.13	31.0-1.22	55.0-2.17
068-0556	10.3-.41	-8	BRK-R	3/4-16	-8	73.5-2.89	44.5-1.75	28.0-1.10
111-7666	10.3-.41	-8	BRK-R	3/4-16	-8	73.0-2.87	44.5-1.75	62.0-2.44
053-2141	12.7-.50	-10	BRK-R	7/8-14	-10	81.5-3.21	50.5-1.99	31.0-1.22
9X-3874	12.7-.50	-10	BRK-R	7/8-14	-10	83.0-3.27	52.0-2.05	65.0-2.56
9X-3867	15.9-.63	-12	BRK-R	1 1/16-12	-12	99.0-3.90	60.5-2.38	46.0-1.81
9X-3875	15.9-.63	-12	BRK-R	1 1/16-12	-12	96.0-3.78	58.0-2.28	94.5-3.72
9X-3868	22.2-.87	-16	BRK-R	1 5/16-12	-16	94.0-3.70	64.0-2.52	54.0-2.13
9X-3876	22.2-.87	-16	BRK-R	1 5/16-12	-16	90.0-3.54	60.0-2.36	110.0-4.33
9X-3869	28.6-1.13	-20	BRK-R	1 5/8-12	-20	102.0-4.02	67.5-2.66	65.5-2.58

JIC 37° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
068-0601	7.9-.31	-6	BRK-R	9/16-18	-6	54.0-2.13	31.0-1.22
068-0554	10.3-.41	-8	BRK-R	3/4-16	-8	65.5-2.58	36.0-1.42
9X-3947	22.2-.87	-16	BRK-R	1 5/16-12	-16	75.0-2.95	45.0-1.77

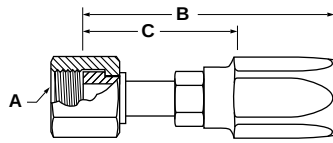
NPTF Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
1L-3664	4.8-.19	-4	BRK-R	1/8-27	-2	42.5-1.67	23.5-.93
1L-2287	4.8-.19	-4	BRK-R	1/4-18	-4	47.5-1.87	28.5-1.12
9X-3807	6.4-.25	-5	BRK-R	1/8-27	-2	45.0-1.77	25.5-1.00
9X-3808	6.4-.25	-5	BRK-R	1/4-18	-4	50.0-1.97	30.0-1.18
9X-3809	7.9-.31	-6	BRK-R	1/4-18	-4	54.0-2.13	31.0-1.22
9X-3810	7.9-.31	-6	BRK-R	3/8-18	-6	54.0-2.13	31.0-1.22
1L-1699	10.3-.41	-8	BRK-R	3/8-18	-6	63.0-2.48	34.0-1.34
9X-3812	10.3-.41	-8	BRK-R	1/2-14	-8	69.5-2.74	40.0-1.57
3N-7291	12.7-.50	-10	BRK-R	3/8-18	-6	65.0-2.56	34.0-1.34
9X-3813	12.7-.50	-10	BRK-R	1/2-14	-8	73.0-2.87	40.5-1.59
9X-3814	12.7-.50	-10	BRK-R	3/4-14	-12	74.5-2.93	42.0-1.65
9X-3815	15.9-.63	-12	BRK-R	3/4-14	-12	82.5-3.25	42.5-1.67
9X-3816	22.2-.87	-16	BRK-R	3/4-14	-12	71.0-2.80	39.0-1.54
1L-1480	22.2-.87	-16	BRK-R	1-11 1/2	-16	76.0-2.99	43.5-1.71
3L-3870	28.6-1.13	-20	BRK-R	1 1/4-11 1/2	-20	82.5-3.25	48.0-1.89
1L-0767	34.9-1.37	-24	BRK-R	1 1/2-11 1/2	-24	88.5-3.48	51.5-2.03

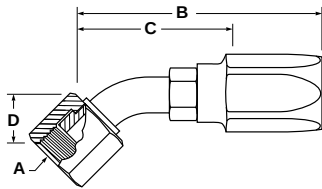
Engine and Air Brake Dual Purpose Hose Reusable Screw Type Couplings - 556 / 1130

ORFS Female Swivel - Straight



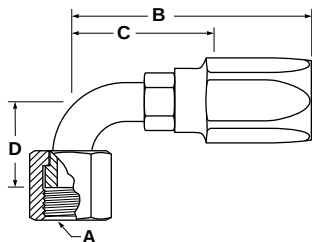
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
9X-3881	4.8-.19	-4	BRK-R	9/16-18	-4	53.0-2.09	33.0-1.30	4J-5477
7X-1463	7.9-.31	-6	BRK-R	11/16-16	-6	60.0-2.36	37.0-1.46	6V-8397
9X-3882	10.3-.41	-8	BRK-R	13/16-16	-8	74.0-2.91	47.0-1.85	6V-8398
9X-3883	12.7-.50	-10	BRK-R	1-14	-10	84.5-3.33	53.5-2.11	7J-9108
9X-3884	15.9-.63	-12	BRK-R	1 3/16-12	-12	93.0-3.66	55.0-2.17	6V-9746
9X-3885	22.2-.87	-16	BRK-R	1 7/16-12	-16	86.0-3.39	56.0-2.20	5K-9090
435-0432	31.8-1.25	-20	BRK-R	1 11/16-12	-20	90.0-3.54	55.0-2.17	6V-8400

ORFS Female Swivel - 45° Elbow



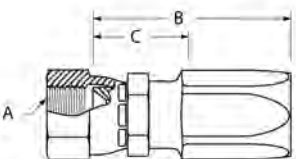
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
9X-3886	4.8-.19	-4	BRK-R	9/16-18	-4	54.0-2.13	39.0-1.54	10.0-.39	4J-5477
9X-3887	7.9-.31	-6	BRK-R	1 1/16-16	-6	64.0-2.52	42.5-1.67	11.0-.43	6V-8397
9X-3888	10.3-.41	-8	BRK-R	13/16-16	-8	81.0-3.19	53.5-2.11	15.0-.59	6V-8398
9X-3889	12.7-.50	-10	BRK-R	1-14	-10	87.5-3.44	56.5-2.22	16.0-.63	7J-9108
9X-3890	15.9-.63	-12	BRK-R	1 3/16-12	-12	97.5-3.84	59.5-2.34	21.0-.83	6V-9746
9X-3891	22.2-.87	-16	BRK-R	1 7/16-12	-16	102.0-4.02	72.0-2.83	24.0-.94	5K-9090

ORFS Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
9X-3892	4.8-.19	-4	BRK-R	9/16-18	-4	50.0-1.97	38.5-1.52	21.0-.83	4J-5477
9X-3898	4.8-.19	-4	BRK-R	9/16-18	-4	50.0-1.97	43.5-1.71	46.0-1.81	4J-5477
9X-3893	7.9-.31	-6	BRK-R	11/16-16	-6	60.5-2.38	39.5-1.56	23.0-.91	6V-8397
9X-3899	7.9-.31	-6	BRK-R	11/16-16	-6	63.0-2.48	41.5-1.63	54.0-2.13	6V-8397
9X-3894	10.3-.41	-8	BRK-R	13/16-16	-8	74.0-2.91	46.0-1.81	29.0-1.14	6V-8398
9X-3900	10.3-.41	-8	BRK-R	13/16-16	-8	75.5-2.97	48.0-1.89	64.0-2.52	6V-8398
9X-3895	12.7-.50	-10	BRK-R	1-14	-10	80.5-3.17	49.5-1.95	32.0-1.26	7J-9108
9X-3901	12.7-.50	-10	BRK-R	1-14	-10	83.0-3.27	52.0-2.05	70.0-2.76	7J-9108
9X-3896	15.9-.63	-12	BRK-R	1 3/16-12	-12	95.0-3.74	57.0-2.24	48.0-1.89	6V-9746
9X-3902	15.9-.63	-12	BRK-R	1 3/16-12	-12	96.0-3.78	58.0-2.28	96.0-3.78	6V-9746
9X-3897	22.2-.87	-16	BRK-R	1 7/16-12	-16	100.5-3.96	70.5-2.78	56.0-2.20	5K-9090
9X-3903	22.2-.87	-16	BRK-R	1 7/16-12	-16	90.0-3.54	60.0-2.36	114.0-4.49	5K-9090

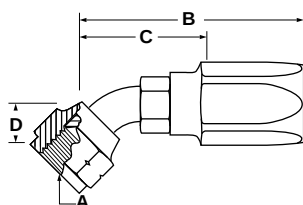
SAE 45° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
061-8863	7.9-.31	-6	BRK-R	5/8-18	-6	60.0-2.36	37.0-1.46
053-1788	15.9-.63	-12	BRK-R	1 1/16-14	-12	88.5-3.48	49.0-1.93

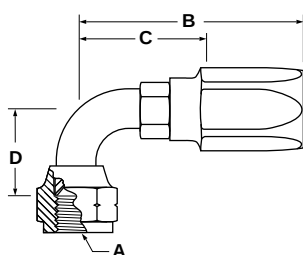
Engine and Air Brake Dual Purpose Hose Reusable Screw Type Couplings - 556 / 1130

SAE 45° Female Swivel - 45° Elbow



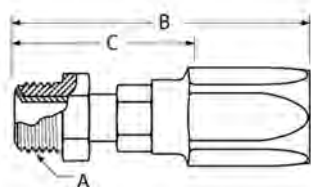
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
9X-3879	7.9-.31	-6	BRK-R	5/8-18	-6	56.5-2.22	35.0-1.38	10.0-.39

SAE 45° Female Swivel - 90° Elbow



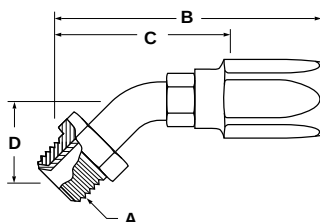
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
9X-3880	7.9-.31	-6	BRK-R	5/8-18	-6	56.5-2.22	35.5-1.40	21.5-.85

SAE 45° Inverted Flare Male Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
9X-3852	4.8-.19	-4	BRK-R	7/16-24	-4	62.5-2.46	43.5-1.71
9X-3853	7.9-.31	-6	BRK-R	5/8-18	-6	69.0-2.72	46.0-1.81
9X-3956	10.3-.41	-8	BRK-R	3/4-18	-8	79.5-3.13	50.5-1.99

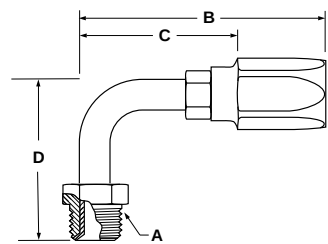
SAE 45° Inverted Flare Male Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
9X-3877	7.9-.31	-6	BRK-R	5/8-18	-6	76.0-2.99	53.0-2.09	24.0-.94

Engine and Air Brake Dual Purpose Hose Reusable Screw Type Couplings - 556 / 1130

SAE 45° Inverted Flare Male Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
9X-3878	7.9-.31	-6	BRK-R	5/8-18	-6	67.0-2.64	44.0-1.73	43.0-1.69

Heater Hose - 515A



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	MIN. BURST PRESS (kPa - psi)	MAX. WORK PRESS (kPa - psi)	MIN. BEND RADIUS (mm - in)
5P-0767	15.9 - .63	23.9 - .94	-10	1750 - 254	437 - 63	130 - 5.12
5P-0765	19.1 - .75	26.9 - 1.06	-12	1400 - 203	350 - 51	145 - 5.71
8I-1362	25.4 - 1.00	33.8 - 1.33	-16	1200 - 174	300 - 44	180 - 7.09

Meets the requirements of SAE J20R3. Note: Sold by the centimeter.
Operating Temperature Range: -40°C to 125°C (-40°F to 257°F)

Heater Hose - High Temperature - 515B

Heater Hose - High Temperature - 515B



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8660	15.9 - .63	23.9 - 0.94	-10	1.7 - 249	0.4 - 62	130 - 5.12

Meets the requirements of SAE J20 and SAE J1684. Note: Sold by the centimeter.
Operating Temperature Range: -40°C to 125°C (-40°F to 257°F)

Heater Hose - High Temperature - 515E

Heater Hose - High Temperature - 515E



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
541-7117	9.5 - .37	17.6 - 0.69	-6	1.7 - 249	0.4 - 62	95 - 3.74
6V-8843	15.9 - .63	22.8 - .90	-10	1.8 - 254	0.4 - 64	130 - 5.12
541-7121	19.1 - .75	27.0 - 1.06	-12	1.4 - 203	0.4 - 51	145 - 5.71

Meets the requirements of SAE 20R3 Silicone. Note: Sold by the centimeter.
Operating Temperature Range: -55°C to 175°C (-67°F to 347°F)

Fuel Hose - High Temperature - 743

Fuel Hose - High Temperature - 743



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8506	4.8 - .19	11.1 - .44	-3	JN	14.0 - 2031	3.5 - 508	50 - 1.97
456-8507	6.4 - .25	12.7 - .50	-4	MH	11.2 - 1624	2.8 - 406	65 - 2.56
456-8508	7.9 - .31	14.3 - .56	-5	MH	11.2 - 1624	2.8 - 406	75 - 2.95
456-8509	9.5 - .37	15.9 - .63	-6	MH	11.2 - 1624	2.8 - 406	75 - 2.95
456-8510	12.7 - .50	19.8 - .78	-8	MH	11.2 - 1624	2.8 - 406	100 - 3.94
456-8511	15.9 - .63	23.0 - .91	-10	MH	9.6 - 1247	2.4 - 348	125 - 4.92
456-8512	19.1 - .75	26.8 - 1.06	-12	MH	8.4 - 1218	2.1 - 305	150 - 5.91
456-8513	25.4 - 1.00	33.8 - 1.33	-16	MH	8.0 - 1160	2.0 - 290	200 - 7.87

Construction: Synthetic rubber tube; two braids of fabric reinforcement. Oil, and weather resistant outer cover.

Application: Hose is intended for use with petroleum based hydraulic fluids and lubricating oils.

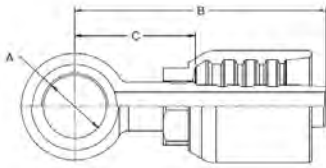
Temperature Range: of -40° F to +275° F (-40° C to +135° C), water based fluids to +185° F (+85° C), and air to +158° F (+70° C).

Couplings: Crimp-on permanent, non-skive type, MH or JN Series coupling. See Permanent Couplings (743) section.

Note: Hose cover does not need to be removed before attaching couplings.

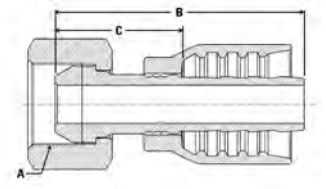
Fuel Hose - High Temperature Couplings - 743

Banjo - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
627-9146	6.4-.25	-4	MH	M16	52.0-2.05	28.0-1.10

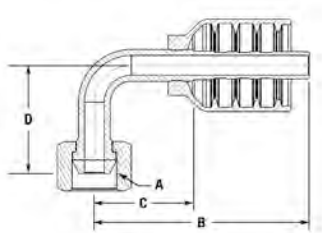
BSPP 60° Female Swivel - Straight (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
555-5302	12.7-.50	-8	MH	1/2-14	-8	59.0-2.32	30.0-1.18

Note: Grayscale parts are MAO (Made As Order).

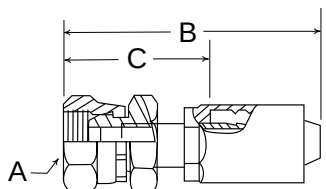
BSPP 60° Female Swivel - 90° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
555-5303	12.7-.50	-8	MH	1/2-14	-8	68.0-2.68	39.0-1.54	38.0-1.50

Note: Grayscale parts are MAO (Made As Order).

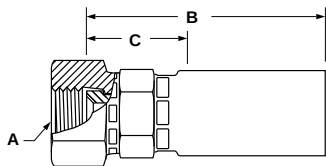
BSPP Spherical Seat Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
149-8580	9.5-.37	-6	MH	3/8-19	-6	49.5-1.95	24.0-.94
149-8581	12.7-.50	-8	MH	1/2-14	-8	56.0-2.20	30.0-1.18

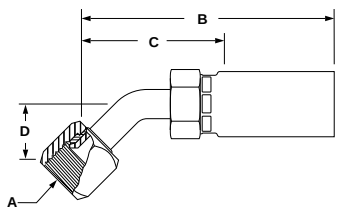
Fuel Hose - High Temperature Couplings - 743

JIC 37° Female Swivel - Straight



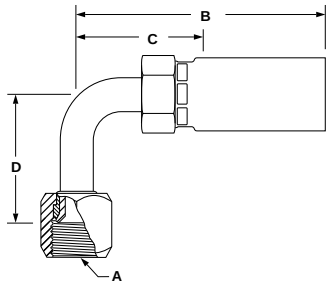
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
149-8515	6.4-.25	-4	MH	7/16-20	-4	40.0-1.57	17.0-.67
149-8520	9.5-.37	-6	MH	9/16-18	-6	50.0-1.97	24.0-.94
149-8521	9.5-.37	-6	MH	3/4-16	-8	50.0-1.97	24.0-.94
149-8522	12.7-.50	-8	MH	3/4-16	-8	55.0-2.17	29.0-1.14
149-8523	12.7-.50	-8	MH	7/8-14	-10	56.0-2.20	30.0-1.18
149-8524	12.7-.50	-8	MH	1 1/16-12	-12	56.0-2.20	30.0-1.18
220-5130	15.9-.63	-10	MH	3/4-16	-8	54.0-2.13	24.0-.94

JIC 37° Female Swivel - 45° Elbow



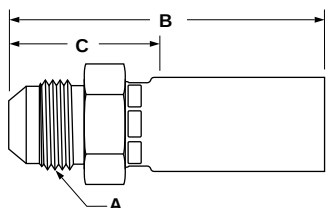
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
149-8528	6.4-.25	-4	MH	7/16-20	-4	52.0-2.05	28.0-1.10	8.0-.31
149-8533	12.7-.50	-8	MH	3/4-16	-8	70.0-2.76	44.0-1.73	14.0-.55
149-8538	12.7-.50	-8	MH	3/4-16	-8	73.0-2.87	47.0-1.85	17.5-.69

JIC 37° Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
149-8541	6.4-.25	-4	MH	7/16-20	-4	46.0-1.81	26.0-1.02	18.0-.71
149-8543	7.9-.31	-5	MH	9/16-18	-6	56.0-2.20	27.0-1.06	28.0-1.10
149-8591	9.5-.37	-6	MH	9/16-18	-6	59.0-2.32	32.0-1.26	22.0-.87
149-8544	9.5-.37	-6	MH	9/16-18	-6	62.0-2.44	33.0-1.30	28.0-1.10
149-8592	12.7-.50	-8	MH	3/4-16	-8	65.0-2.56	39.0-1.54	28.0-1.10
149-8546	12.7-.50	-8	MH	3/4-16	-8	65.0-2.56	39.0-1.54	35.0-1.38
149-8554	12.7-.50	-8	MH	3/4-16	-8	65.0-2.56	39.0-1.54	64.0-2.52

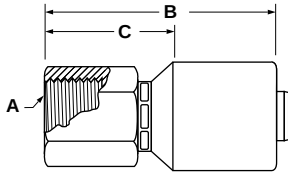
JIC 37° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
220-5087	6.4-.25	-4	MH	1/2-20	-5	49.5-1.95	25.5-1.00
149-8556	9.5-.37	-6	MH	9/16-18	-6	56.0-2.20	29.0-1.14
149-8557	12.7-.50	-8	MH	3/4-16	-8	61.0-2.40	36.0-1.42
220-5094	15.9-.63	-10	MH	7/8-14	-10	65.0-2.56	39.0-1.54
149-8558	19.1-.75	-12	MH	1 1/16-12	-12	73.0-2.87	41.0-1.61
220-5099	25.4-1.00	-16	MH	1 5/16-12	-16	89.0-3.50	47.0-1.88

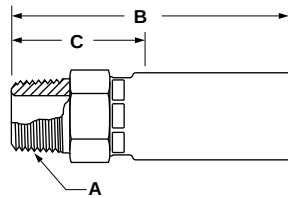
Fuel Hose - High Temperature Couplings - 743

NPTF Female Rigid - Straight



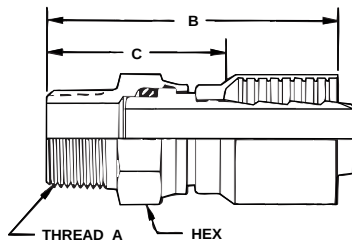
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
588-6374	9.5-.37	-6	MH	1/4-18	-4	55.0-2.17	29.0-1.14

NPTF Male - Straight



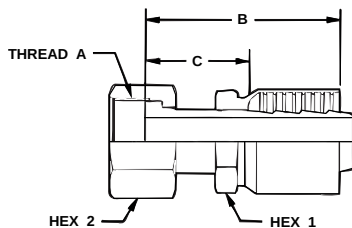
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
267-3846	4.8-.19	-3	JN	1/8-27	-2	38.0-1.50	21.0-.83
267-4660	4.8-.19	-3	JN	3/8-18	-6	45.0-1.77	28.0-1.10
149-8562	6.4-.25	-4	MH	1/8-27	-2	44.0-1.73	20.0-.79
149-8567	9.5-.37	-6	MH	1/4-18	-4	55.0-2.17	29.0-1.14
149-8568	9.5-.37	-6	MH	3/8-18	-6	55.0-2.17	29.0-1.14
149-8569	9.5-.37	-6	MH	1/2-14	-8	60.0-2.36	34.0-1.34
149-8571	12.7-.50	-8	MH	1/2-14	-8	62.0-2.44	31.0-1.22

NPTF Male Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
267-4658	4.8-.19	-3	JN	1/8-27	-2	53.0-2.09	36.0-1.42
220-5070	6.4-.25	-4	MH	1/8-27	-2	59.0-2.32	35.0-1.38
149-8574	6.4-.25	-4	MH	1/4-18	-4	60.0-2.36	39.0-1.54
220-5076	12.7-.50	-8	MH	1/2-14	-8	77.0-3.03	51.0-2.01

ORFS Female Swivel - Straight



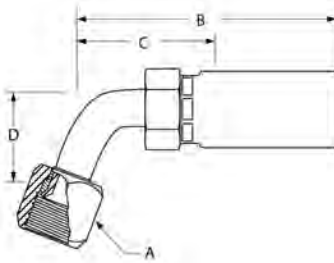
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
273-1716	4.8-.19	-3	JN	9/16-18	-4	43.0-1.69	25.0-.98	4J-5477
307-8256	4.8-.19	-3	JN	11/16-16	-6	45.0-1.77	28.0-1.10	6V-8397
149-8471	6.4-.25	-4	MH	9/16-18	-4	50.0-1.97	25.0-.98	4J-5477
149-8472	6.4-.25	-4	MH	11/16-16	-6	49.0-1.93	28.0-1.10	6V-8397
306-8016	6.4-.25	-4	MH	13/16-16	-8	53.0-2.09	32.0-1.26	6V-8398
197-5817	9.5-.37	-6	MH	9/16-18	-4	51.0-2.01	26.0-1.02	4J-5477
149-8474	9.5-.37	-6	MH	11/16-16	-6	57.0-2.24	30.5-1.20	6V-8397
149-8475	9.5-.37	-6	MH	13/16-16	-8	56.0-2.20	29.0-1.14	6V-8398
149-8476	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	29.5-1.16	6V-8398
149-8477	12.7-.50	-8	MH	1-14	-10	68.0-2.68	42.0-1.65	7J-9108
524-7070	15.9-.63	-10	MH	13/16-16	-8	72.0-2.83	42.0-1.65	6V-8398

Fuel Hose - High Temperature Couplings - 743

ORFS Female Swivel - Straight (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
220-5333	15.9-.63	-10	MH	1-14	-10	70.0-2.76	43.5-1.71	7J-9108
149-8478	19.1-.75	-12	MH	1 3/16-12	-12	75.0-2.95	40.0-1.57	6V-9746
220-5336	19.1-.75	-12	MH	1 7/16-12	-16	80.0-3.15	49.0-1.93	5K-9090
220-5337	25.4-1.00	-16	MH	1 7/16-12	-16	89.0-3.50	50.0-1.97	5K-9090

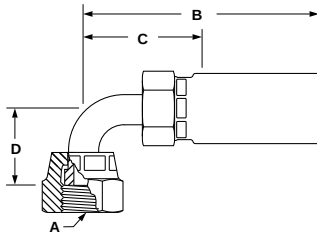
ORFS Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
307-8263	4.8-.19	-3	JN	9/16-18	-4	48.0-1.89	31.0-1.22	10.0-.39	4J-5477
149-8480	6.4-.25	-4	MH	9/16-18	-4	51.0-2.01	30.0-1.18	10.0-.39	4J-5477
149-8481	6.4-.25	-4	MH	11/16-16	-6	55.0-2.17	31.0-1.22	11.0-.43	6V-8397
220-5350	9.5-.37	-6	MH	9/16-18	-4	63.5-2.50	34.0-1.34	10.0-.39	4J-5477
149-8483	9.5-.37	-6	MH	11/16-16	-6	62.0-2.44	36.0-1.42	11.0-.43	6V-8397
256-2464	9.5-.37	-6	MH	11/16-16	-6	69.0-2.72	43.0-1.69	18.0-.71	6V-8397
253-1382	9.5-.37	-6	MH	11/16-16	-6	86.0-3.39	60.0-2.36	35.0-1.38	6V-8397
256-2465	9.5-.37	-6	MH	11/16-16	-6	101.0-3.98	75.0-2.95	50.0-1.97	6V-8397
149-8484	9.5-.37	-6	MH	13/16-16	-8	69.0-2.72	40.0-1.57	15.0-.59	6V-8398
149-8485	12.7-.50	-8	MH	13/16-16	-8	71.0-2.80	44.5-1.75	15.0-.59	6V-8398
149-8486	12.7-.50	-8	MH	1-14	-10	72.0-2.83	46.0-1.81	17.0-.67	7J-9108
220-5352	15.9-.63	-10	MH	1-14	-10	82.0-3.23	52.0-2.05	17.0-.67	7J-9108
149-8487	19.1-.75	-12	MH	1 3/16-12	-12	90.0-3.54	59.0-2.32	21.0-.83	6V-9746
220-5354	25.4-1.00	-16	MH	1 7/16-12	-16	111.0-4.37	72.0-2.83	24.0-.94	5K-9090

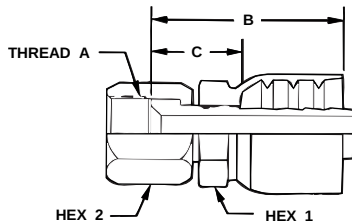
Fuel Hose - High Temperature Couplings - 743

ORFS Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
149-8489	6.4-.25	-4	MH	9/16-18	-4	49.0-1.93	28.0-1.10	20.0-.79	4J-5477
149-8498	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.0-.98	32.0-1.26	4J-5477
149-8505	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.0-.98	46.0-1.81	4J-5477
149-8490	6.4-.25	-4	MH	11/16-16	-6	46.0-1.81	25.0-.98	23.0-.91	6V-8397
248-8868	7.9-.31	-5	MH	11/16-16	-6	59.0-2.32	30.0-1.18	29.5-1.16	6V-8397
149-8492	9.5-.37	-6	MH	9/16-18	-4	59.0-2.32	30.0-1.18	20.0-.79	4J-5477
149-8493	9.5-.37	-6	MH	11/16-16	-6	59.0-2.32	33.0-1.30	23.0-.91	6V-8397
149-8501	9.5-.37	-6	MH	11/16-16	-6	59.0-2.32	33.0-1.30	38.0-1.50	6V-8397
149-8507	9.5-.37	-6	MH	11/16-16	-6	59.0-2.32	33.0-1.30	54.0-2.13	6V-8397
149-8509	9.5-.37	-6	MH	13/16-16	-8	59.0-2.32	33.0-1.30	64.0-2.52	6V-8398
149-8494	9.5-.37	-6	MH	13/16-16	-8	61.0-2.40	33.0-1.30	29.0-1.14	6V-8398
220-5363	9.5-.37	-6	MH	13/16-16	-8	59.0-2.32	32.0-1.26	41.0-1.61	6V-8398
220-5356	12.7-.50	-8	MH	11/16-16	-6	60.0-2.36	35.0-1.38	23.0-.91	6V-8397
149-8495	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.0-1.54	29.0-1.14	6V-8398
149-8502	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.0-1.54	41.0-1.61	6V-8398
149-8503	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.0-1.54	45.0-1.77	6V-8398
149-8510	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.0-1.54	64.0-2.52	6V-8398
149-8496	12.7-.50	-8	MH	1-14	-10	65.0-2.56	39.0-1.54	32.0-1.26	7J-9108
149-8511	12.7-.50	-8	MH	1-14	-10	65.0-2.56	39.0-1.54	70.0-2.76	7J-9108
220-5364	12.7-.50	-8	MH	1-14	-10	68.0-2.68	39.0-1.54	47.0-1.85	7J-9108
220-5357	12.7-.50	-8	MH	1 3/16-12	-12	68.0-2.68	39.0-1.54	48.0-1.89	6V-9746
220-5358	15.9-.63	-10	MH	1-14	-10	77.0-3.03	47.0-1.85	32.0-1.26	7J-9108
435-9922	19.1-.75	-12	MH	1-14	-10	80.0-3.15	49.0-1.93	32.0-1.26	7J-9108
149-8497	19.1-.75	-12	MH	1 3/16-12	-12	84.0-3.31	52.0-2.05	48.0-1.89	6V-9746
149-8504	19.1-.75	-12	MH	1 3/16-12	-12	84.0-3.31	52.0-2.05	58.0-2.28	6V-9746
149-8512	19.1-.75	-12	MH	1 3/16-12	-12	84.0-3.31	52.0-2.05	96.0-3.78	6V-9746
220-5360	19.1-.75	-12	MH	1 7/16-12	-16	88.0-3.46	53.0-2.09	56.0-2.20	5K-9090
220-5366	25.4-1.00	-16	MH	1 7/16-12	-16	109.0-4.29	70.0-2.76	71.0-2.80	5K-9090

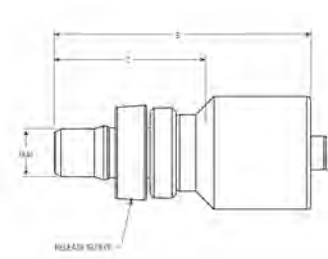
SAE 45° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
307-8246	4.8-.19	-3	JN	3/8-24	-3	34.0-1.34	17.0-.67
149-8576	9.5-.37	-6	MH	5/8-18	-6	46.0-1.81	19.0-.75

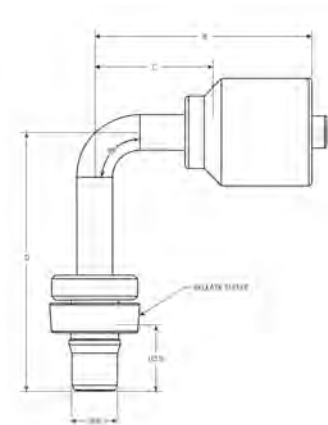
Fuel Hose - High Temperature Couplings - 743

Snap To Connect - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
263-2664	6.4-.25	-4	MH	9.6-.38	-6	51.0-2.01	30.0-1.18

Snap To Connect - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
263-2678	6.4-.25	-4	MH	9.6-.38	-6	46.0-1.81	25.0-.98	40.0-1.57
263-2685	6.4-.25	-4	MH	9.6-.38	-6	46.0-1.81	25.0-.98	55.0-2.17

Hydraulic Return Line Hose - 661

Hydraulic Return Line Hose - 661



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
541-7167	38.1 - 1.50	53.8 - 2.12	-24	5.6 - 812	1.4 - 203	538 - 21.18
541-7168	44.5 - 1.75	60.4 - 2.38	-28	5.6 - 812	1.4 - 203	604 - 23.78
541-7169	50.8 - 2.00	65.0 - 2.56	-32	5.6 - 812	1.4 - 203	650 - 25.59
541-7170	57.2 - 2.25	72.9 - 2.87	-36	4.2 - 609	1.1 - 152	729 - 28.70
541-7171	63.5 - 2.50	79.2 - 3.12	-40	4.2 - 609	1.1 - 152	792 - 31.18
541-7172	88.9 - 3.50	104.6 - 4.12	-56	4.2 - 609	1.1 - 152	1046 - 41.18
103-2544	127.0 - 5.00	144.2 - 5.68	-80	2.8 - 406	0.7 - 102	1442 - 56.77

Meets the requirements of ASTM D380.

APPLICATION: Low temperature, straight connections where band clamps are required.

Note: Sold by the centimeter.

Operating Temperature Range: -40°C to 120°C (-40°F to 248°F)

Pilot Hose - 2929 / 2929TG

Pilot Hose - 2929



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
456-8514	4.8 - .19	11.0 - .43	-3	MH	41.6 - 6034	10.4 - 1508	30 - 1.18
456-8515	6.4 - .25	12.0 - .47	-4	MH	41.6 - 6034	10.4 - 1508	30 - 1.18
456-8516	9.5 - .37	15.3 - .60	-6	MH	41.6 - 6034	10.4 - 1508	50 - 1.97
456-8517	12.7 - .50	18.5 - .73	-8	MH	41.6 - 6034	10.4 - 1508	60 - 2.36

Construction: Synthetic rubber inner tube resistant to hydraulic fluids with single high tensile steel wire braid reinforcement. An oil, weather, and abrasion resistant outer cover meeting MSHA requirements.

Application: Medium pressure use with petroleum -40° F to +250° F (-40° C to +121° C) or up to +158° F (+70° C) with water based fluids.

Couplings: Crimp-on permanent, non-skive type, MH Series coupling. See Permanent Couplings (2929) section.

Note: Hose cover does not need to be removed before attaching couplings. Required Cutting

Pilot ToughGuard Hose - 2929TG



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
541-7076	6.4 - 0.25	11.5 - 0.45	-4	MH	41.6 - 6034	10.4 - 1508	30 - 1.18
541-7077	9.5 - 0.37	14.8 - 0.58	-6	MH	41.6 - 6034	10.4 - 1508	50 - 1.97
541-7078	12.7 - 0.50	18.0 - 0.71	-8	MH	41.6 - 6034	10.4 - 1508	60 - 2.36

Construction: Synthetic rubber tube; single high tensile steel wire braid reinforcement. Oil and weather resistant synthetic rubber cover with special outer high abrasion resistant ToughGuard film.

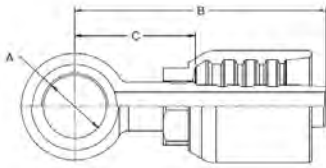
Application: Medium pressure service with petroleum based hydraulic fluids, lubricating oils, grease, water and water-glycol based fluids, and air. MSHA approved cover.

Temperature Range: -40° F to +250°F (-40° C to +121° C) for petroleum based fluids. +158° F Max (+70° C Max) for water based fluids and air.

Couplings: Crimp-on permanent, non-skive type, MH Series coupling. See Permanent Couplings (2929) section.

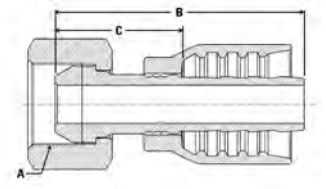
Pilot Hose Couplings - 2929 / 2929TG

Banjo - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
627-9146	6.4-.25	-4	MH	M16	52.0-2.05	28.0-1.10

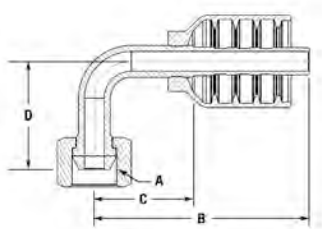
BSPP 60° Female Swivel - Straight (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
555-5302	12.7-.50	-8	MH	1/2-14	-8	59.0-2.32	30.0-1.18

Note: Grayscale parts are MAO (Made As Order).

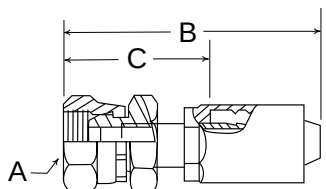
BSPP 60° Female Swivel - 90° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
555-5303	12.7-.50	-8	MH	1/2-14	-8	68.0-2.68	39.0-1.54	38.0-1.50

Note: Grayscale parts are MAO (Made As Order).

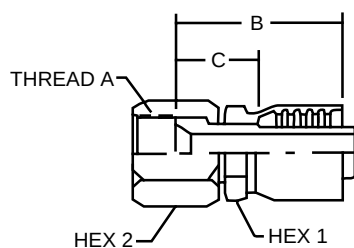
BSPP Spherical Seat Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
149-8580	9.5-.37	-6	MH	3/8-19	-6	49.5-1.95	24.0-.94
149-8581	12.7-.50	-8	MH	1/2-14	-8	56.0-2.20	30.0-1.18

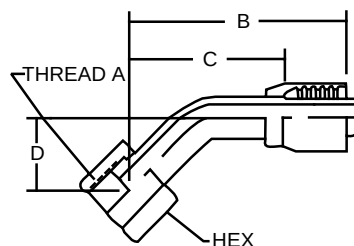
Pilot Hose Couplings - 2929 / 2929TG

JIC 37° Female Swivel - Straight



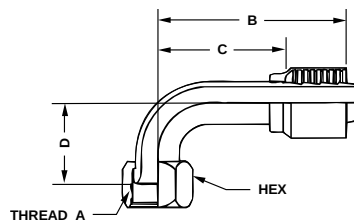
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
149-8515	6.4-.25	-4	MH	7/16-20	-4	40.0-1.57	16.0-.63
149-8520	9.5-.37	-6	MH	9/16-18	-6	50.0-1.97	23.0-.91
149-8521	9.5-.37	-6	MH	3/4-16	-8	50.0-1.97	24.0-.94
149-8522	12.7-.50	-8	MH	3/4-16	-8	55.0-2.17	29.0-1.14
149-8523	12.7-.50	-8	MH	7/8-14	-10	56.0-2.20	30.0-1.18
149-8524	12.7-.50	-8	MH	1 1/16-12	-12	56.0-2.20	30.0-1.18

JIC 37° Female Swivel - 45° Elbow



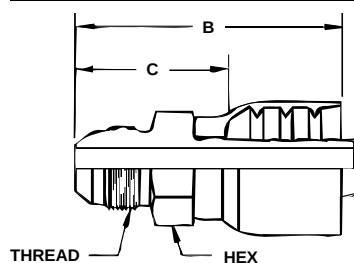
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
149-8528	6.4-.25	-4	MH	7/16-20	-4	52.0-2.05	28.0-1.10	8.0-.31
149-8533	12.7-.50	-8	MH	3/4-16	-8	70.0-2.76	44.0-1.73	14.0-.55
149-8538	12.7-.50	-8	MH	3/4-16	-8	73.0-2.87	48.0-1.89	17.5-.69

JIC 37° Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
149-8541	6.4-.25	-4	MH	7/16-20	-4	46.0-1.81	26.0-1.02	17.5-.69
149-8543	7.9-.31	-5	MH	9/16-18	-6	56.0-2.20	27.0-1.06	28.0-1.10
149-8591	9.5-.37	-6	MH	9/16-18	-6	58.0-2.28	32.0-1.26	22.0-.87
149-8544	9.5-.37	-6	MH	9/16-18	-6	62.0-2.44	33.0-1.30	28.0-1.10
149-8592	12.7-.50	-8	MH	3/4-16	-8	65.0-2.56	39.0-1.54	28.0-1.10
149-8546	12.7-.50	-8	MH	3/4-16	-8	65.0-2.56	39.0-1.54	35.0-1.38
149-8554	12.7-.50	-8	MH	3/4-16	-8	65.0-2.56	39.0-1.54	62.0-2.44

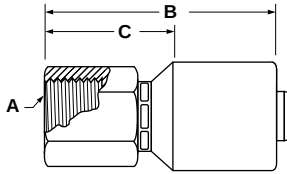
JIC 37° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
220-5087	6.4-.25	-4	MH	1/2-20	-5	49.5-1.95	25.5-1.00
149-8556	9.5-.37	-6	MH	9/16-18	-6	56.0-2.20	29.0-1.14
149-8557	12.7-.50	-8	MH	3/4-16	-8	61.0-2.40	36.0-1.42

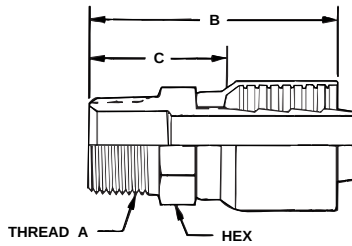
Pilot Hose Couplings - 2929 / 2929TG

NPTF Female Rigid - Straight



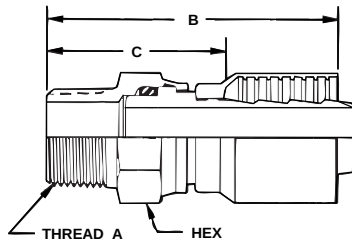
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
588-6374	9.5-.37	-6	MH	1/4-18	-4	58.5-2.30	29.0-1.14

NPTF Male - Straight



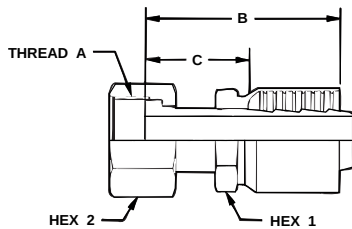
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
267-4660	4.8-.19	-3	MH	3/8-18	-6	45.0-1.77	28.0-1.10
149-8562	6.4-.25	-4	MH	1/8-27	-2	44.0-1.73	20.0-.79
149-8567	9.5-.37	-6	MH	1/4-18	-4	55.0-2.17	29.0-1.14
149-8568	9.5-.37	-6	MH	3/8-18	-6	55.0-2.17	29.0-1.14
149-8569	9.5-.37	-6	MH	1/2-14	-8	60.0-2.36	34.0-1.34
149-8571	12.7-.50	-8	MH	1/2-14	-8	62.0-2.44	36.0-1.42

NPTF Male Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
220-5070	6.4-.25	-4	MH	1/8-27	-2	59.0-2.32	35.0-1.38
149-8574	6.4-.25	-4	MH	1/4-18	-4	60.0-2.36	39.0-1.54
220-5076	12.7-.50	-8	MH	1/2-14	-8	78.0-3.07	49.0-1.93

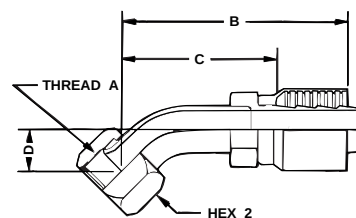
ORFS Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
307-8256	4.8-.19	-3	MH	11/16-16	-6	46.0-1.81	28.0-1.10	6V-8397
149-8471	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.0-.98	4J-5477
149-8472	6.4-.25	-4	MH	11/16-16	-6	49.0-1.93	28.0-1.10	6V-8397
306-8016	6.4-.25	-4	MH	13/16-16	-8	53.0-2.09	32.0-1.26	6V-8398
197-5817	9.5-.37	-6	MH	9/16-18	-4	51.0-2.01	25.0-.98	4J-5477
149-8474	9.5-.37	-6	MH	11/16-16	-6	57.0-2.24	30.5-1.20	6V-8397
149-8475	9.5-.37	-6	MH	13/16-16	-8	56.0-2.20	30.0-1.18	6V-8398
149-8476	12.7-.50	-8	MH	13/16-16	-8	56.0-2.20	29.5-1.16	6V-8398
149-8477	12.7-.50	-8	MH	1-14	-10	68.0-2.68	42.0-1.65	7J-9108

Pilot Hose Couplings - 2929 / 2929TG

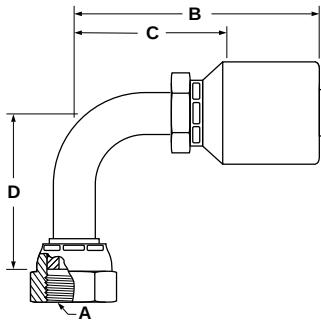
ORFS Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
149-8480	6.4-.25	-4	MH	9/16-18	-4	51.0-2.01	30.0-1.18	10.0-.39	4J-5477
149-8481	6.4-.25	-4	MH	11/16-16	-6	55.0-2.17	31.0-1.22	11.0-.43	6V-8397
220-5350	9.5-.37	-6	MH	9/16-18	-4	63.5-2.50	34.0-1.34	10.0-.39	4J-5477
256-2464	9.5-.37	-6	MH	11/16-16	-6	69.0-2.72	43.0-1.69	18.0-.71	6V-8397
253-1382	9.5-.37	-6	MH	11/16-16	-6	86.0-3.39	60.0-2.36	35.0-1.38	6V-8397
256-2465	9.5-.37	-6	MH	11/16-16	-6	101.0-3.98	75.0-2.95	50.0-1.97	6V-8397
149-8483	9.5-.37	-6	MH	11/16-16	-6	62.0-2.44	36.0-1.42	11.0-.43	6V-8397
149-8484	9.5-.37	-6	MH	13/16-16	-8	66.0-2.60	40.0-1.57	15.0-.59	6V-8398
149-8485	12.7-.50	-8	MH	13/16-16	-8	71.0-2.80	45.0-1.77	15.0-.59	6V-8398
149-8486	12.7-.50	-8	MH	1-14	-10	72.0-2.83	46.0-1.81	17.0-.67	7J-9108

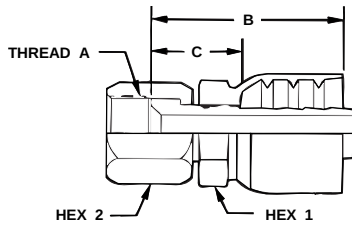
Pilot Hose Couplings - 2929 / 2929TG

ORFS Female Swivel - 90° Elbow



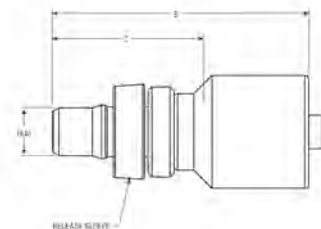
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
149-8489	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.0-.98	20.0-.79	4J-5477
149-8498	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.0-.98	32.0-1.26	4J-5477
149-8505	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.0-.98	46.0-1.81	4J-5477
149-8490	6.4-.25	-4	MH	11/16-16	-6	46.0-1.81	25.0-.98	23.0-.91	6V-8397
248-8868	7.9-.31	-5	MH	11/16-16	-6	59.0-2.32	30.0-1.18	29.5-1.16	6V-8397
149-8492	9.5-.37	-6	MH	9/16-18	-4	59.0-2.32	30.0-1.18	20.0-.79	4J-5477
149-8493	9.5-.37	-6	MH	11/16-16	-6	59.0-2.32	33.0-1.30	23.0-.91	6V-8397
149-8501	9.5-.37	-6	MH	11/16-16	-6	59.0-2.32	33.0-1.30	38.0-1.50	6V-8397
149-8507	9.5-.37	-6	MH	11/16-16	-6	59.0-2.32	33.0-1.30	54.0-2.13	6V-8397
149-8509	9.5-.37	-6	MH	13/16-16	-8	59.0-2.32	33.0-1.30	64.0-2.52	6V-8398
149-8494	9.5-.37	-6	MH	13/16-16	-8	61.0-2.40	33.0-1.30	29.0-1.14	6V-8398
220-5363	9.5-.37	-6	MH	13/16-16	-8	59.0-2.32	32.0-1.26	41.0-1.61	6V-8398
220-5356	12.7-.50	-8	MH	11/16-16	-6	60.0-2.36	34.5-1.36	23.0-.91	6V-8397
149-8495	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.0-1.54	29.0-1.14	6V-8398
149-8502	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.0-1.54	41.0-1.61	6V-8398
149-8503	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.0-1.54	45.0-1.77	6V-8398
149-8510	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.0-1.54	64.0-2.52	6V-8398
149-8496	12.7-.50	-8	MH	1-14	-10	65.0-2.56	39.0-1.54	32.0-1.26	7J-9108
149-8511	12.7-.50	-8	MH	1-14	-10	65.0-2.56	39.0-1.54	70.0-2.76	7J-9108
220-5364	12.7-.50	-8	MH	1-14	-10	68.0-2.68	39.0-1.54	47.0-1.85	7J-9108
220-5357	12.7-.50	-8	MH	1 3/16-12	-12	68.0-2.68	39.0-1.54	48.0-1.89	6V-9746

SAE 45° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
149-8576	9.5-.37	-6	MH	5/8-18	-6	46.0-1.81	20.0-.79

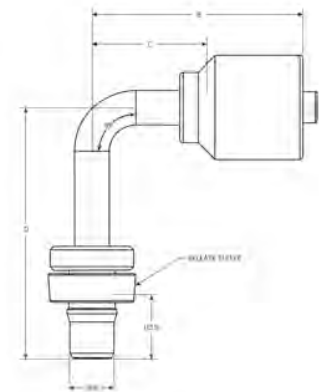
Snap To Connect - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
263-2664	6.4-.25	-4	MH	6.0-.24	51.0-2.01	30.0-1.18

Pilot Hose Couplings - 2929 / 2929TG

Snap To Connect - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
263-2678	6.4-.25	-4	MH	6.0-.24	46.0-1.81	25.0-.98	40.0-1.57
263-2685	6.4-.25	-4	MH	6.0-.24	46.0-1.81	25.0-.98	55.0-2.17

Radiator Hose - 642C



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	MIN. BURST PRESS (kPa - psi)	MAX. WORK PRESS (kPa - psi)	MIN. BEND RADIUS (mm - in)
371-8094	25.4 - 1.00	39.6 - 1.56	-16	3910 - 567	980 - 142	305 - 12.01
371-8096	28.6 - 1.13	42.8 - 1.69	-18	3780 - 548	945 - 137	330 - 12.99
371-8113	31.8 - 1.25	46.0 - 1.81	-20	3500 - 508	875 - 127	355 - 13.98
371-8115	34.9 - 1.37	49.1 - 1.93	-22	3360 - 487	840 - 122	380 - 14.96
371-8119	38.1 - 1.50	52.3 - 2.06	-24	3150 - 457	784 - 114	405 - 15.94
371-8121	44.5 - 1.75	58.7 - 2.31	-28	2800 - 406	700 - 102	455 - 17.91
371-8122	50.8 - 2.00	65.0 - 2.56	-32	2450 - 355	616 - 89	510 - 20.08
371-8124	57.2 - 2.25	71.4 - 2.81	-36	2450 - 355	616 - 89	710 - 27.95
371-8125	60.3 - 2.37	74.5 - 2.93	-38	2240 - 325	560 - 81	740 - 29.13
371-8946	63.5 - 2.50	77.7 - 3.06	-40	2100 - 305	525 - 76	770 - 30.31
371-8947	69.9 - 2.75	84.1 - 3.31	-44	1680 - 244	420 - 61	830 - 32.68
371-8948	73.0 - 2.87	87.2 - 3.43	-46	1680 - 244	420 - 61	860 - 33.86
371-8949	76.2 - 3.00	90.4 - 3.56	-48	1680 - 244	420 - 61	900 - 35.43
371-8950	88.9 - 3.50	103.1 - 4.06	-56	1400 - 203	350 - 51	1020 - 40.16
371-8951	95.3 - 3.75	109.5 - 4.31	-60	1120 - 162	280 - 41	1090 - 42.91
371-8952	101.6 - 4.00	115.8 - 4.56	-64	1050 - 152	266 - 39	1150 - 45.28
7X-7895	108.0 - 4.25	122.2 - 4.81	-68	840 - 122	210 - 30	0 - .00
371-8953	114.3 - 4.50	140.0 - 5.51	-72	840 - 122	210 - 30	1210 - 47.64
371-8954	127.0 - 5.00	140.0 - 5.51	-80	840 - 122	210 - 30	1280 - 50.39
371-8955	152.4 - 6.00	141.2 - 5.56	-96	700 - 102	175 - 25	1400 - 55.12

Meets the requirements of SAE J20R1. Note: Sold by the centimeter.
Operating Temperature Range: -40°C to 100°C (-40°F to 212°F)

Radiator Hose - 642E

Radiator Hose - 642E

Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
541-7109	50.8 - 2.00	64.2 - 2.53	-32	2.4 - 348	0.6 - 87	510 - 20.08
541-7110	63.5 - 2.50	76.4 - 3.01	-40	2.1 - 302	0.5 - 75	770 - 30.31
541-7111	76.2 - 3.00	88.1 - 3.47	-48	1.7 - 249	0.4 - 62	900 - 35.43
541-7112	88.9 - 3.50	101.8 - 4.01	-56	1.4 - 203	0.4 - 51	1020 - 40.16
541-7113	101.6 - 4.00	114.5 - 4.51	-64	1.0 - 151	0.3 - 38	1150 - 45.28
541-7114	114.3 - 4.50	126.2 - 4.97	-72	0.8 - 122	0.2 - 30	1280 - 50.39
541-7115	127.0 - 5.00	139.9 - 5.51	-80	0.7 - 104	0.2 - 26	1400 - 55.12
541-7116	139.7 - 5.50	152.6 - 6.01	-88	0.6 - 81	0.1 - 20	1530 - 60.24

Meets the requirements of SAE J20. Note: Sold by the centimeter.

Operating Temperature Range: -55°C to 175°C (-67°F to 347°F)

Teflon Lined High Temperature Hose - 2771A

Teflon Lined High Temperature Hose - 2771A



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
541-7079	6.4 - .25	9.5 - .37	-4	JN	42.0 - 6092	10.5 - 1523	75 - 2.95
541-7080	7.9 - .31	11.0 - .43	-5	JN	42.0 - 6092	10.5 - 1523	100 - 3.94
541-7081	9.5 - .37	12.8 - .50	-6	JN	42.0 - 6092	10.5 - 1523	125 - 4.92
541-7082	12.7 - .50	16.0 - .63	-8	JN	28.0 - 4061	7.0 - 1015	165 - 6.50
541-7083	15.9 - .63	19.3 - .76	-10	JN	22.4 - 3249	5.6 - 812	200 - 7.87
541-7084	19.1 - .75	22.3 - .88	-12	JN	22.4 - 3249	5.6 - 812	230 - 9.06
297-2799	22.2 - .87	25.8 - 1.02	-14	JN	24.1 - 3495	5.6 - 812	230 - 9.06

Construction: A general purpose, high temperature medium pressure hose with a PTFE inner tube and one braid of stainless steel wire reinforcement outer cover.

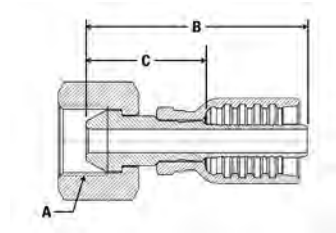
Temperature Range: -65 to +450° F (-54 to 232°C) continuously, and intermittently from -100 to 500° F (-73 to 260°C).

Couplings: Crimp-on permanent, non-skive type, JN Series coupling. See Permanent Couplings (2771A) section.

Note: Hose cover does not need to be removed before attaching couplings

Teflon Lined High Temperature Hose Couplings - 2771A

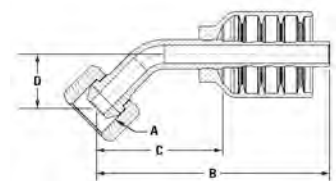
BSPP 60° Female Swivel - Straight (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
557-5997	6.4-.25	-4	JN	1/4-19	-4	40.0-1.57	22.0-.87
557-5332	7.9-.31	-5	JN	3/8-19	-6	41.0-1.61	21.0-.87
557-5334	9.5-.37	-6	JN	3/8-19	-6	50.5-1.99	23.0-.91
557-9040	12.7-.50	-8	JN	1/2-14	-8	49.0-1.93	28.0-1.10

Note: Grayscale parts are MAO (Made As Order).

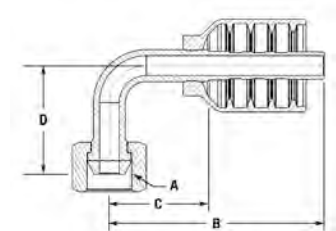
BSPP 60° Female Swivel - 45° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
557-5999	6.4-.25	-4	JN	1/4-19	-4	55.0-2.17	38.0-1.50	17.5-.69
557-9041	12.7-.50	-8	JN	1/2-14	-8	67.0-2.64	46.0-1.81	20.0-.79

Note: Grayscale parts are MAO (Made As Order).

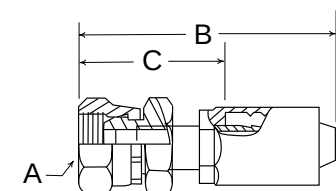
BSPP 60° Female Swivel - 90° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
557-6001	6.4-.25	-4	JN	1/4-19	-4	43.0-1.69	26.0-1.02	30.0-1.18
557-5336	9.5-.37	-6	JN	3/8-19	-6	59.0-2.32	32.0-1.26	37.0-1.46
557-9042	12.7-.50	-8	JN	1/2-14	-8	59.0-2.32	38.0-1.50	38.0-1.50

Note: Grayscale parts are MAO (Made As Order).

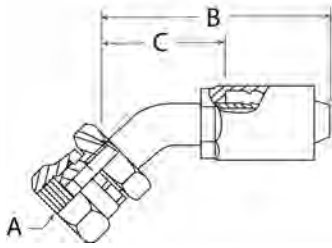
BSPP Spherical Seat Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3436	6.4-.25	-4	JN	1/4-19	-4	40.0-1.57	23.0-.91
146-3438	9.5-.37	-6	JN	3/8-19	-6	50.5-1.99	23.0-.91
146-3439	12.7-.50	-8	JN	1/2-14	-8	49.0-1.93	28.0-1.10

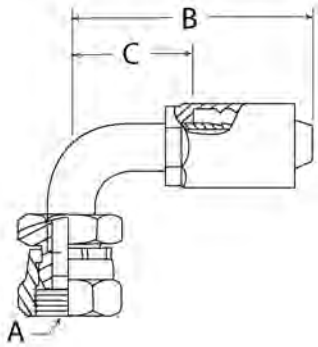
Teflon Lined High Temperature Hose Couplings - 2771A

BSPP Spherical Seat Female Swivel - 45° Elbow



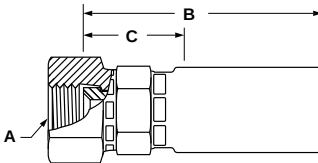
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3440	6.4-.25	-4	JN	1/4-19	-4	55.0-2.17	38.0-1.50	17.5-.69

BSPP Spherical Seat Female Swivel - 90° Elbow



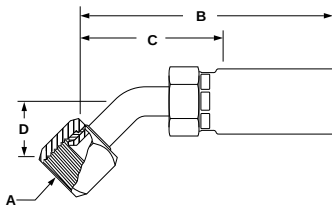
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3442	6.4-.25	-4	JN	1/4-19	-4	43.0-1.69	26.0-1.02	30.0-1.18
146-3443	12.7-.50	-8	JN	1/2-14	-8	59.0-2.32	38.0-1.50	38.0-1.50

JIC 37° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3367	6.4-.25	-4	JN	7/16-20	-4	34.5-1.36	17.0-.67
253-1371	6.4-.25	-4	JN	9/16-18	-6	37.0-1.46	20.0-.79
146-3447	7.9-.31	-5	JN	9/16-18	-6	38.0-1.50	18.0-.71
146-3368	9.5-.37	-6	JN	9/16-18	-6	51.0-2.01	24.0-.94
329-7308	9.5-.37	-6	JN	3/4-16	-8	51.0-2.01	24.0-.94
146-3369	12.7-.50	-8	JN	3/4-16	-8	47.0-1.85	26.0-1.02
146-3449	12.7-.50	-8	JN	7/8-14	-10	48.5-1.91	28.0-1.10
622-2305	19.1-.75	-12	JN	1 1/16-12	-12	51.0-2.01	23.0-.91
308-4529	22.2-.88	-14	JN	1 5/16-12	-16	53.0-2.09	26.0-1.02

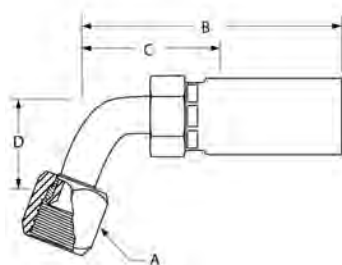
JIC 37° Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3370	6.4-.25	-4	JN	7/16-20	-4	46.0-1.81	29.5-1.16	8.0-.31
146-3372	9.5-.37	-6	JN	9/16-18	-6	62.0-2.44	35.0-1.38	10.0-.39
146-3374	9.5-.37	-6	JN	9/16-18	-6	70.0-2.76	43.0-1.69	18.0-.71
146-3373	12.7-.50	-8	JN	3/4-16	-8	64.0-2.52	43.0-1.69	14.0-.55
146-3376	12.7-.50	-8	JN	3/4-16	-8	73.0-2.87	52.0-2.05	23.0-.91
146-3450	12.7-.50	-8	JN	7/8-14	-10	66.0-2.60	45.0-1.77	17.0-.67
622-0934	15.9-.63	-10	JN	7/8-14	-10	93.0-3.66	70.0-2.76	23.5-.93
622-2306	19.1-.75	-12	JN	1 1/16-12	-12	80.0-3.23	54.5-2.15	20.0-.79

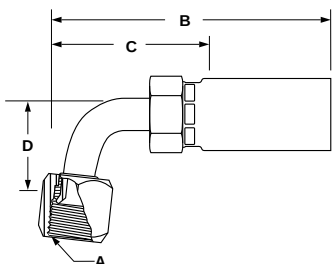
Teflon Lined High Temperature Hose Couplings - 2771A

JIC 37° Female Swivel - 65° Elbow



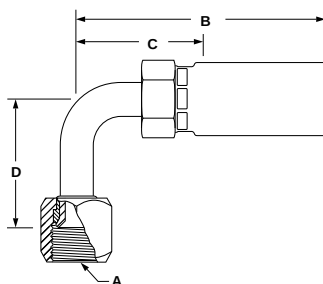
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3377	9.5-.37	-6	JN	9/16-18	-6	82.0-3.23	54.0-2.13	57.0-2.24
146-3378	9.5-.37	-6	JN	9/16-18	-6	85.0-3.35	58.0-2.28	65.0-2.56

JIC 37° Female Swivel - 80° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3380	9.5-.37	-6	JN	9/16-18	-6	64.0-2.52	37.0-1.46	35.0-1.38
146-3381	9.5-.37	-6	JN	9/16-18	-6	68.0-2.68	41.0-1.61	59.0-2.32

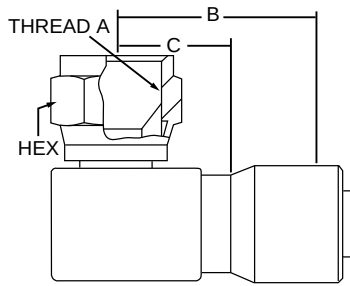
JIC 37° Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3382	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	26.0-1.02	17.5-.69
146-3379	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	26.0-1.02	26.5-1.04
146-3418	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	26.0-1.02	50.0-1.97
146-3392	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	26.0-1.02	63.0-2.48
146-3383	7.9-.31	-5	JN	9/16-18	-6	49.0-1.93	28.5-1.12	22.0-.87
146-3384	9.5-.37	-6	JN	9/16-18	-6	60.0-2.36	33.0-1.30	22.0-.87
146-3387	9.5-.37	-6	JN	9/16-18	-6	60.0-2.36	33.0-1.30	28.0-1.10
146-3393	9.5-.37	-6	JN	9/16-18	-6	60.0-2.36	33.0-1.30	56.0-2.20
146-3388	9.5-.37	-6	JN	3/4-16	-8	60.0-2.36	33.0-1.30	35.0-1.38
146-3394	9.5-.37	-6	JN	3/4-16	-8	60.0-2.36	33.0-1.30	64.0-2.52
146-3385	12.7-.50	-8	JN	3/4-16	-8	59.0-2.32	38.0-1.50	28.0-1.10
146-3389	12.7-.50	-8	JN	3/4-16	-8	59.0-2.32	38.0-1.50	35.0-1.38
146-3398	12.7-.50	-8	JN	3/4-16	-8	59.0-2.32	38.0-1.50	45.5-1.79
146-3395	12.7-.50	-8	JN	3/4-16	-8	59.0-2.32	38.0-1.50	63.5-2.50
307-8240	12.7-.50	-8	JN	7/8-14	-10	59.0-2.32	38.0-1.50	31.0-1.22
146-3390	12.7-.50	-8	JN	7/8-14	-10	59.0-2.32	38.0-1.50	44.5-1.75
146-3396	12.7-.50	-8	JN	7/8-14	-10	59.0-2.32	38.0-1.50	78.0-3.07
622-2307	19.1-.75	-12	JN	1 1/16-12	-12	77.0-3.03	50.0-1.97	46.0-1.81

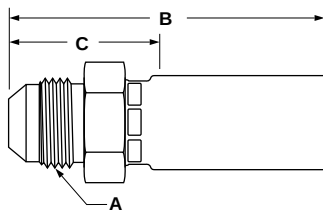
Teflon Lined High Temperature Hose Couplings - 2771A

JIC 37° Female Swivel Block - 90° Elbow



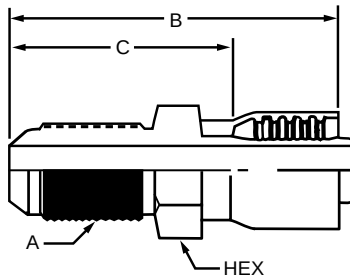
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3399	12.7-.50	-8	JN	3/4-16	-8	44.0-1.73	23.0-.91	22.0-.87

JIC 37° Male - Straight



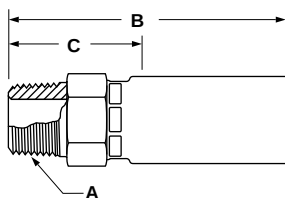
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3400	6.4-.25	-4	JN	7/16-20	-4	44.0-1.73	26.0-1.02
146-3402	9.5-.37	-6	JN	9/16-18	-6	56.0-2.20	29.0-1.14

JIC 37° Male Bulkhead - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3445	6.4-.25	-4	JN	7/16-20	-4	60.0-2.36	43.0-1.69
146-3444	9.5-.37	-6	JN	9/16-18	-6	77.0-3.03	50.0-1.97

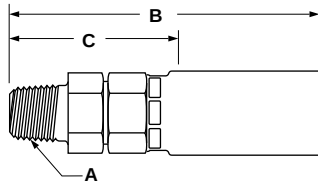
NPTF Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
267-3846	4.8-.19	-3	JN	1/8-27	-2	38.0-1.50	21.0-.83
267-4660	4.8-.19	-3	JN	3/8-18	-6	45.0-1.77	28.0-1.10
146-3404	6.4-.25	-4	JN	1/8-27	-2	38.0-1.50	21.0-.83
146-3405	6.4-.25	-4	JN	1/4-18	-4	45.0-1.77	28.0-1.10
146-3406	6.4-.25	-4	JN	3/8-18	-6	45.0-1.77	28.0-1.10
146-3409	9.5-.37	-6	JN	3/8-18	-6	56.0-2.20	29.0-1.14
146-3410	9.5-.37	-6	JN	1/2-14	-8	61.0-2.40	34.0-1.34
146-3411	12.7-.50	-8	JN	1/2-14	-8	56.0-2.20	35.0-1.38
352-2786	22.2-.88	-14	JN	1-11 1/2	-16	73.0-2.87	46.0-1.81

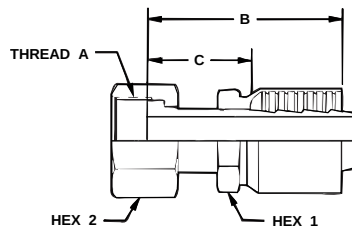
Teflon Lined High Temperature Hose Couplings - 2771A

NPTF Male Swivel - Straight



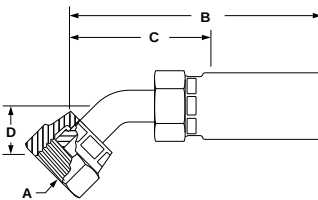
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
267-4658	4.8-.19	-3	JN	1/8-27	-2	53.0-2.09	36.0-1.42
178-9166	6.4-.25	-4	JN	1/8-27	-2	53.0-2.09	36.0-1.42
146-3412	6.4-.25	-4	JN	1/4-18	-4	58.0-2.28	41.0-1.61
146-3413	9.5-.37	-6	JN	1/4-18	-4	69.0-2.72	41.0-1.61
146-3414	9.5-.37	-6	JN	3/8-18	-6	69.0-2.72	42.0-1.65
146-3415	9.5-.37	-6	JN	1/2-14	-8	76.0-2.99	49.0-1.93
146-3416	12.7-.50	-8	JN	3/8-18	-6	63.0-2.48	42.0-1.65
146-3417	12.7-.50	-8	JN	1/2-14	-8	71.0-2.80	50.0-1.97

ORFS Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
273-1716	4.8-.19	-3	JN	9/16-18	-4	43.0-1.69	25.0-.98	4J-5477
307-8256	4.8-.19	-3	JN	11/16-16	-6	45.0-1.77	28.0-1.10	6V-8397
146-3338	6.4-.25	-4	JN	9/16-18	-4	44.0-1.73	25.0-.98	4J-5477
146-3350	6.4-.25	-4	JN	11/16-16	-6	45.0-1.77	28.0-1.10	6V-8397
146-3339	7.9-.31	-5	JN	11/16-16	-6	46.0-1.81	26.0-1.02	6V-8397
146-3340	9.5-.37	-6	JN	11/16-16	-6	58.0-2.28	31.0-1.22	6V-8397
146-3341	12.7-.50	-8	JN	11/16-16	-6	56.0-2.20	35.0-1.38	6V-8397
146-3342	12.7-.50	-8	JN	13/16-16	-8	58.0-2.28	37.0-1.46	6V-8398
307-8260	15.9-.63	-10	JN	1-14	-10	56.0-2.20	34.5-1.36	7J-9108
307-8261	15.9-.63	-10	JN	1 3/16-12	-12	58.0-2.28	37.0-1.46	6V-9746
307-8262	19.1-.75	-12	JN	1 3/16-12	-12	61.0-2.40	37.0-1.46	6V-9746
277-2091	19.1-.75	-12	JN	1 7/16-12	-16	62.0-2.44	38.0-1.50	5K-9090
318-8685	22.2-.88	-14	JN	1 7/16-12	-16	65.5-2.58	39.0-1.54	5K-9090

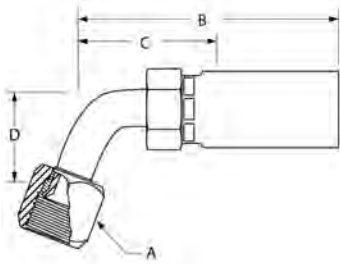
ORFS Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
307-8263	4.8-.19	-3	JN	9/16-18	-4	48.0-1.89	31.0-1.22	10.0-.39	4J-5477
146-3343	6.4-.25	-4	JN	9/16-18	-4	49.5-1.95	31.0-1.22	10.0-.39	4J-5477
146-3446	6.4-.25	-4	JN	11/16-16	-6	48.0-1.89	30.0-1.18	10.0-.39	6V-8397
146-3344	7.9-.31	-5	JN	11/16-16	-6	53.0-2.09	33.0-1.30	11.0-.43	6V-8397
146-3345	9.5-.37	-6	JN	11/16-16	-6	63.0-2.48	36.0-1.42	11.0-.43	6V-8397
146-3397	9.5-.37	-6	JN	11/16-16	-6	70.0-2.76	43.0-1.69	18.0-.71	6V-8397
307-8264	12.7-.50	-8	JN	11/16-16	-6	58.0-2.28	37.0-1.46	11.0-.43	6V-8397
146-3346	12.7-.50	-8	JN	13/16-16	-8	65.0-2.56	44.0-1.73	15.0-.59	6V-8398
146-3347	12.7-.50	-8	JN	13/16-16	-8	73.0-2.87	52.0-2.05	23.0-.91	6V-8398
307-8266	15.9-.63	-10	JN	1-14	-10	72.0-2.83	51.0-2.01	16.5-.65	7J-9108
307-8267	15.9-.63	-10	JN	1 3/16-12	-12	77.0-3.03	56.0-2.20	21.0-.83	6V-9746
307-8268	19.1-.75	-12	JN	1 3/16-12	-12	80.0-3.15	56.0-2.20	21.0-.83	6V-9746
318-8686	22.2-.88	-14	JN	1 7/16-12	-16	92.5-3.64	66.0-2.60	24.0-.94	5K-9090

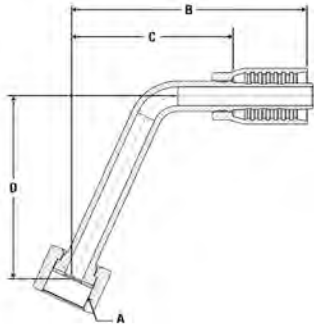
Teflon Lined High Temperature Hose Couplings - 2771A

ORFS Female Swivel - 65° Elbow



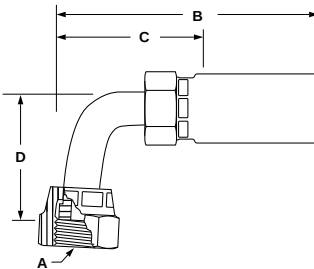
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
146-3348	9.5-.37	-6	JN	11/16-16	-6	83.0-3.27	56.0-2.20	61.0-2.40	6V-8397

ORFS Female Swivel - 65.5° Elbow



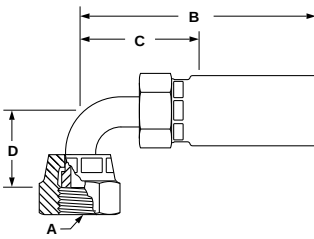
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
146-3349	9.5-.37	-6	JN	11/16-16	-6	85.0-3.35	58.0-2.28	66.0-2.60	6V-8397

ORFS Female Swivel - 80° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
146-3351	9.5-.37	-6	JN	11/16-16	-6	64.0-2.52	37.0-1.46	35.0-1.38	6V-8397
146-3352	9.5-.37	-6	JN	11/16-16	-6	68.0-2.68	41.0-1.61	59.0-2.32	6V-8397

ORFS Female Swivel - 90° Elbow



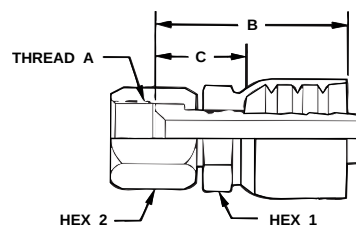
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
146-3353	6.4-.25	-4	JN	9/16-18	-4	43.0-1.69	26.0-1.02	20.0-.79	4J-5477
146-3360	6.4-.25	-4	JN	9/16-18	-4	43.0-1.69	26.0-1.02	32.0-1.26	4J-5477
146-3364	6.4-.25	-4	JN	9/16-18	-4	43.0-1.69	26.0-1.02	46.0-1.81	4J-5477
146-3354	6.4-.25	-4	JN	11/16-16	-6	43.0-1.69	26.0-1.02	23.0-.91	6V-8397
146-3355	7.9-.31	-5	JN	11/16-16	-6	49.0-1.93	29.0-1.14	23.0-.91	6V-8397
146-3356	7.9-.31	-5	JN	11/16-16	-6	49.0-1.93	29.0-1.14	29.0-1.14	6V-8397
146-3357	9.5-.37	-6	JN	11/16-16	-6	60.0-2.36	33.0-1.30	23.0-.91	6V-8397
146-3358	9.5-.37	-6	JN	11/16-16	-6	60.0-2.36	33.0-1.30	31.0-1.22	6V-8397
146-3361	9.5-.37	-6	JN	11/16-16	-6	60.0-2.36	33.0-1.30	38.0-1.50	6V-8397

Teflon Lined High Temperature Hose Couplings - 2771A

ORFS Female Swivel - 90° Elbow (Cont'd.)

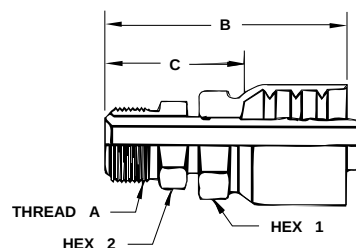
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
146-3365	9.5-.37	-6	JN	11/16-16	-6	60.0-2.36	33.0-1.30	54.0-2.13	6V-8397
146-3359	12.7-.50	-8	JN	13/16-16	-8	59.0-2.32	38.0-1.50	29.0-1.14	6V-8398
146-3363	12.7-.50	-8	JN	13/16-16	-8	59.0-2.32	38.0-1.50	35.0-1.38	6V-8398
146-3362	12.7-.50	-8	JN	13/16-16	-8	59.0-2.32	38.0-1.50	41.0-1.61	6V-8398
146-3366	12.7-.50	-8	JN	13/16-16	-8	59.0-2.32	38.0-1.50	64.0-2.52	6V-8398
307-8271	15.9-.63	-10	JN	1-14	-10	67.0-2.64	46.0-1.81	32.0-1.26	7J-9108
307-8272	15.9-.63	-10	JN	1 3/16-12	-12	67.0-2.64	46.0-1.81	33.0-1.30	6V-9746
307-8273	19.1-.75	-12	JN	1 3/16-12	-12	74.0-2.91	49.5-1.95	48.0-1.89	6V-9746
307-8274	19.1-.75	-12	JN	1 3/16-12	-12	74.0-2.91	49.5-1.95	96.0-3.78	6V-9746
293-2193	19.1-.75	-12	JN	1 7/16-12	-16	74.0-2.91	50.0-1.97	56.0-2.20	5K-9090
318-8687	22.2-.88	-14	JN	1 7/16-12	-16	87.0-3.43	60.5-2.38	71.0-2.80	5K-9090

SAE 45° Female Swivel - Straight



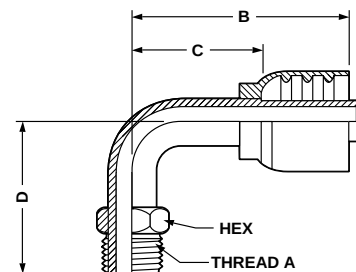
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
307-8246	4.8-.19	-3	JN	3/8-24	-3	35.0-1.38	17.0-.67

SAE 45° Inverted Male Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3430	9.5-.37	-6	JN	5/8-18	-6	57.0-2.24	30.0-1.18
146-3431	12.7-.50	-8	JN	3/4-18	-8	58.0-2.28	37.0-1.46

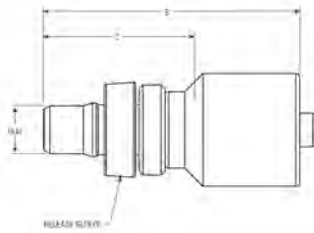
SAE 45° Inverted Swivel Male - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3435	12.7-.50	-8	JN	3/4-18	-8	59.0-2.32	38.0-1.5	46.0-1.81

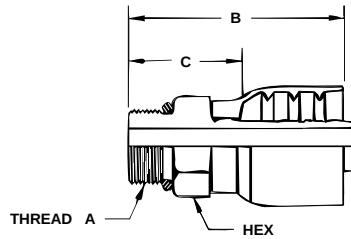
Teflon Lined High Temperature Hose Couplings - 2771A

Snap To Connect - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
263-2605	6.4-.25	-4	JN	6.0-.24	48.0-1.89	30.9-1.22

STOR Male O-Ring - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
146-3419	6.4-.25	-4	JN	7/16-20	-4	39.0-1.54	21.0-.83	3J-7354

Thermoplastic Hose - 945

Thermoplastic Hose - 945



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
541-7173	4.8 - .19	10.9 - .43	-3	JN	84.0 - 12183	21.0 - 3046	45.0 - 1.77
541-7174	6.4 - .25	13.0 - .51	-4	MH	76.8 - 11139	19.2 - 2785	50.0 - 1.97
541-7175	7.9 - .31	14.5 - .57	-5	MH	70.0 - 10153	17.5 - 2538	58.0 - 2.28
541-7177 ¹	7.9 - .31	14.5 - .57	-5	MH	70.0 - 10153	17.5 - 2538	58.0 - 2.28
541-7176	9.5 - .37	16.5 - .65	-6	MH	62.8 - 9108	15.7 - 2277	63.0 - 2.48
541-7179 ¹	9.5 - .37	16.5 - .65	-6	MH	62.8 - 9108	15.7 - 2277	63.0 - 2.48
541-7178	12.7 - .50	20.6 - .81	-8	MH	56.0 - 8122	14.0 - 2031	90.0 - 3.54
541-7185	19.1 - .75	26.9 - 1.06	-12	MH	34.8 - 5047	8.7 - 1262	180.0 - 7.09

Construction: Thermoplastic inner tube resistant to hydraulic fluids with suitable synthetic fiber reinforcement and a hydraulic fluid, abrasion, and weather resistant thermoplastic cover. All layers bonded.

Application: Medium pressure service with petroleum base hydraulic fluids, air, water, and water glycol. Exposure to temperatures above the rated maximum and/or pressure impulses that exceed maximum working pressure will materially reduce hose life.

Temperature Range: -40° F to +200° F (-40° C to 93° C) for petroleum and synthetic based hydraulic oils. Up to 151° F (+66° C) for air, water, and water/glycol applications.

Couplings: Crimp-on, swage-on permanent, non-skive type, JN, MH Series coupling. See Permanent Couplings (945) section. For related assembly equipment and tooling, see Tooling section.

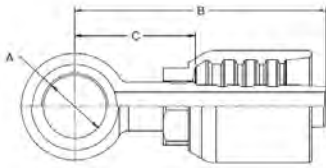
Note: Hose cover does not need to be removed before attaching couplings.

Required Cutting Tool: Cutting Tool (177-4271) and Blade (177-4272) is required for cutting hose. Do not use Hose Cutting Machine. Cut-off saw can cause heating distortion. See Miscellaneous Tools and Accessories section.

¹Twin-line Hose

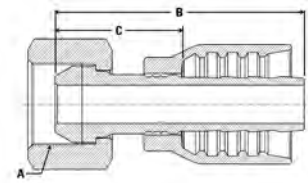
Thermoplastic Hose Couplings - 945

Banjo - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
627-9146	6.4-.25	-4	MH	M16	52.0-2.05	28.0-1.10

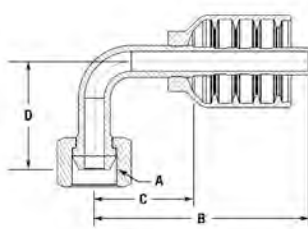
BSPP Conical Female Swivel - Straight (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
555-5302	12.7-.50	-8	MH	1/2-14	-8	59.0-2.32	30.0-1.18
555-5304	19.1-.75	-12	MH	3/4-14	-12	70.0-2.76	35.0-1.38

Note: Grayscale parts are MAO (Made As Order).

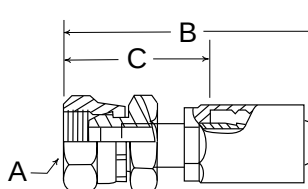
BSPP Conical Female Swivel- 90° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
555-5303	12.7-.50	-8	MH	1/2-14	-8	68.0-2.68	39.0-1.54	38.0-1.50
555-5305	19.1-.75	-12	MH	3/4-14	-12	88.0-3.46	52.0-2.05	58.0-2.28

Note: Grayscale parts are MAO (Made As Order).

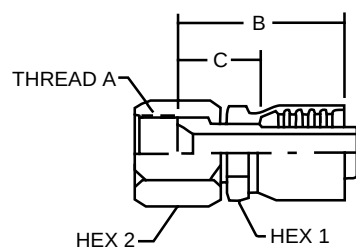
BSPP Spherical Seat Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
149-8580	9.5-.37	-6	MH	3/8-19	-6	49.5-1.95	24.0-.94
149-8581	12.7-.50	-8	MH	1/2-14	-8	56.0-2.20	30.0-1.18

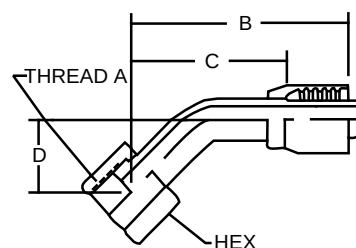
Thermoplastic Hose Couplings - 945

JIC 37° Female Swivel - Straight



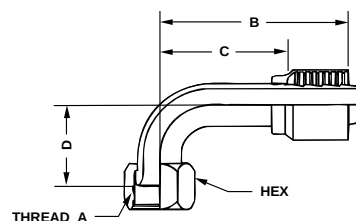
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
149-8515	6.4-.25	-4	MH	7/16-20	-4	40.0-1.57	16.0-.63
149-8520	9.5-.37	-6	MH	9/16-18	-6	50.0-1.97	23.0-.91
149-8521	9.5-.37	-6	MH	3/4-16	-8	50.0-1.97	24.0-.94
149-8522	12.7-.50	-8	MH	3/4-16	-8	55.0-2.17	29.0-1.14
149-8523	12.7-.50	-8	MH	7/8-14	-10	56.0-2.20	30.0-1.18
149-8524	12.7-.50	-8	MH	1 1/16-12	-12	56.0-2.20	30.0-1.18
220-5130	15.9-.63	-10	MH	3/4-16	-8	60.0-2.36	30.0-1.18

JIC 37° Female Swivel - 45° Elbow



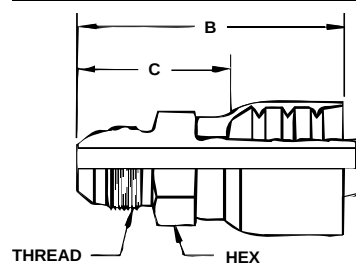
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
149-8528	6.4-.25	-4	MH	7/16-20	-4	52.0-2.05	28.0-1.10	8.0-.31
149-8533	12.7-.50	-8	MH	3/4-16	-8	70.0-2.76	44.0-1.73	14.0-.55
149-8538	12.7-.50	-8	MH	3/4-16	-8	73.0-2.87	48.0-1.89	17.5-.69

JIC 37° Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
149-8541	6.4-.25	-4	MH	7/16-20	-4	46.0-1.81	26.0-1.02	17.5-.69
149-8543	7.9-.31	-5	MH	9/16-18	-6	56.0-2.20	27.0-1.06	28.0-1.10
149-8591	9.5-.37	-6	MH	9/16-18	-6	58.0-2.28	32.0-1.26	22.0-.87
149-8544	9.5-.37	-6	MH	9/16-18	-6	62.0-2.44	33.0-1.30	28.0-1.10
149-8592	12.7-.50	-8	MH	3/4-16	-8	65.0-2.56	39.0-1.54	28.0-1.10
149-8546	12.7-.50	-8	MH	3/4-16	-8	65.0-2.56	39.0-1.54	35.0-1.38
149-8554	12.7-.50	-8	MH	3/4-16	-8	65.0-2.56	39.0-1.54	62.0-2.44

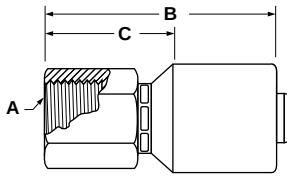
JIC 37° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
220-5087	6.4-.25	-4	MH	1/2-20	-5	49.5-1.95	25.5-1.00
149-8556	9.5-.37	-6	MH	9/16-18	-6	55.0-2.16	29.0-1.14
149-8557	12.7-.50	-8	MH	3/4-16	-8	61.0-2.40	36.0-1.42
220-5094	15.9-.63	-10	MH	7/8-14	-10	65.0-2.56	39.0-1.54
149-8558	19.1-.75	-12	MH	1 1/16-12	-12	75.5-2.97	41.0-1.61

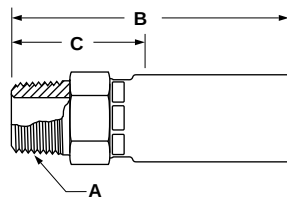
Thermoplastic Hose Couplings - 945

NPTF Female Fixed - Straight



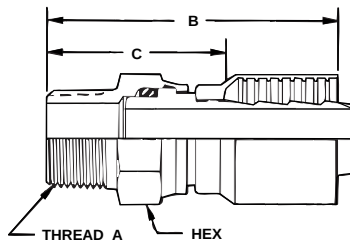
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
588-6374	9.5-.37	-6	MH	1/4-18	-4	55.0-2.17	29.0-1.14

NPTF Male - Straight



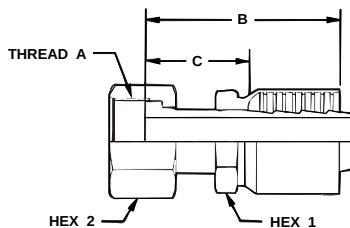
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
267-3846	4.8-.19	-3	JN	1/8-27	-2	38.0-1.50	21.0-.83
267-4660	4.8-.19	-3	JN	3/8-18	-6	45.0-1.77	28.0-1.10
149-8562	6.4-.25	-4	MH	1/8-27	-2	44.0-1.73	20.0-.79
149-8567	9.5-.37	-6	MH	1/4-18	-4	55.0-2.17	29.0-1.14
149-8568	9.5-.37	-6	MH	3/8-18	-6	55.0-2.17	29.0-1.14
149-8569	9.5-.37	-6	MH	1/2-14	-8	60.0-2.36	34.0-1.34
149-8571	12.7-.50	-8	MH	1/2-14	-8	62.0-2.44	31.0-1.22

NPTF Male Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
267-4658	4.8-.19	-3	JN	1/8-27	-2	53.0-2.09	36.0-1.42
220-5070	6.4-.25	-4	MH	1/8-27	-2	59.0-2.32	35.0-1.38
149-8574	6.4-.25	-4	MH	1/4-18	-4	60.0-2.36	39.0-1.54
220-5076	12.7-.50	-8	MH	1/2-14	-8	77.0-3.03	51.0-2.01

ORFS Female Swivel - Straight



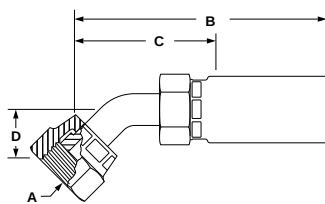
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
273-1716	4.8-.19	-3	JN	9/16-18	-4	43.0-1.69	25.0-.98	4J-5477
307-8256	4.8-.19	-3	JN	11/16-16	-6	45.0-1.77	28.0-1.10	6V-8397
149-8471	6.4-.25	-4	MH	9/16-18	-4	49.5-1.95	25.0-.98	4J-5477
1499-8472	6.4-.25	-4	MH	11/16-16	-6	52.0-2.05	28.0-1.10	6V-8397
306-8016	6.4-.25	-4	MH	13/16-16	-8	53.0-2.09	32.0-1.26	6V-8398
197-5817	9.5-.37	-6	MH	9/16-18	-4	54.0-2.13	26.0-1.02	4J-5477
149-8474	9.5-.37	-6	MH	11/16-16	-6	60.0-2.36	30.5-1.20	6V-8397
149-8475	9.5-.37	-6	MH	13/16-16	-8	59.0-2.32	29.0-1.14	6V-8398
149-8476	12.7-.50	-8	MH	13/16-16	-8	59.0-2.32	29.5-1.16	6V-8398
149-8477	12.7-.50	-8	MH	1-14	-10	68.0-2.68	42.0-1.65	7J-9108
524-7070	15.9-.63	-10	MH	13/16-16	-8	72.0-2.83	42.0-1.65	6V-8398

Thermoplastic Hose Couplings - 945

ORFS Female Swivel - Straight (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
220-5333	15.9-.63	-10	MH	1-14	-10	73.0-2.87	43.0-1.69	7J-9108
149-8478	19.1-.75	-12	MH	1 3/16-12	-12	81.0-3.19	40.0-1.57	6V-9746
220-5336	19.1-.75	-12	MH	1 7/16-12	-16	84.0-3.31	49.0-1.93	5K-9090

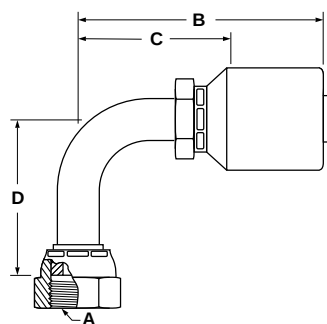
ORFS Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
307-8263	4.8-.19	-3	JN	9/16-18	-4	48.0-1.89	31.0-1.22	10.0-.39	4J-5477
149-8480	6.4-.25	-4	MH	9/16-18	-4	54.0-2.13	30.0-1.18	10.0-.39	4J-5477
149-8481	6.4-.25	-4	MH	11/16-16	-6	55.0-2.17	31.0-1.22	11.0-.43	6V-8397
220-5350	9.5-.37	-6	MH	9/16-18	-4	63.5-2.50	34.0-1.34	10.0-.39	4J-5477
149-8483	9.5-.37	-6	MH	11/16-16	-6	65.0-2.56	36.0-1.42	11.0-.43	6V-8397
256-2464	9.5-.37	-6	MH	11/16-16	-6	69.0-2.72	43.0-1.69	18.0-.71	6V-8397
253-1382	9.5-.37	-6	MH	11/16-16	-6	86.0-3.39	60.0-2.36	35.0-1.38	6V-8397
256-2465	9.5-.37	-6	MH	11/16-16	-6	101.0-3.98	75.0-2.95	50.0-1.97	6V-8397
149-8484	9.5-.37	-6	MH	13/16-16	-8	69.0-2.72	40.0-1.57	15.0-.59	6V-8398
149-8485	12.7-.50	-8	MH	13/16-16	-8	74.0-2.91	45.0-1.77	15.0-.59	6V-8398
149-8486	12.7-.50	-8	MH	1-14	-10	72.0-2.83	47.0-1.85	16.5-.65	7J-9108
220-5352	15.9-.63	-10	MH	1-14	-10	82.0-3.23	52.0-2.05	16.5-.65	7J-9108
149-8487	19.1-.75	-12	MH	1 3/16-12	-12	94.0-3.70	58.5-2.30	21.0-.83	6V-9746

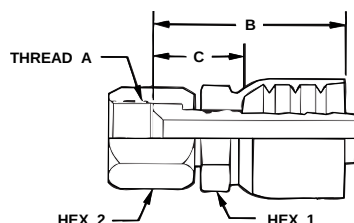
Thermoplastic Hose Couplings - 945

ORFS Female Swivel - 90° Elbow



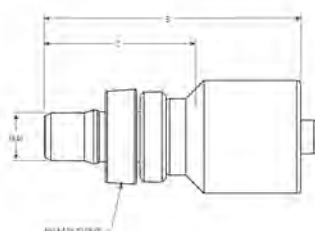
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
149-8498	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.0-.98	32.0-1.26	4J-5477
149-8505	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.0-.98	46.0-1.81	4J-5477
149-8489	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	28.0-1.10	20.0-.79	4J-5477
149-8490	6.4-.25	-4	MH	11/16-16	-6	46.0-1.81	25.0-.98	23.0-.91	6V-8397
248-8868	7.9-.31	-5	MH	11/16-16	-6	59.0-2.32	30.0-1.18	29.0-1.14	6V-8397
149-8492	9.5-.37	-6	MH	9/16-18	-4	56.0-2.20	30.0-1.18	20.0-.79	4J-5477
149-8493	9.5-.37	-6	MH	11/16-16	-6	54.0-2.13	32.0-1.26	23.0-.91	6V-8397
149-8507	9.5-.37	-6	MH	11/16-16	-6	58.0-2.28	32.0-1.26	54.0-2.13	6V-8397
149-8501	9.5-.37	-6	MH	11/16-16	-6	59.0-2.32	32.0-1.26	38.0-1.50	6V-8397
149-8494	9.5-.37	-6	MH	13/16-16	-8	58.0-2.28	32.0-1.26	29.0-1.14	6V-8398
220-5363	9.5-.37	-6	MH	13/16-16	-8	58.0-2.28	32.0-1.26	41.0-1.61	6V-8398
149-8509	9.5-.37	-6	MH	13/16-16	-8	58.0-2.28	32.0-1.26	64.0-2.52	6V-8398
220-5356	12.7-.50	-8	MH	11/16-16	-6	60.0-2.36	35.0-1.38	23.0-.91	6V-8397
149-8495	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.0-1.54	29.0-1.14	6V-8398
149-8502	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.0-1.54	41.0-1.61	6V-8398
149-8503	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.0-1.54	45.0-1.77	6V-8398
149-8510	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.0-1.54	64.0-2.52	6V-8398
149-8496	12.7-.50	-8	MH	1-14	-10	65.0-2.56	39.0-1.54	32.0-1.26	7J-9108
220-5364	12.7-.50	-8	MH	1-14	-10	68.0-2.68	39.0-1.54	47.0-1.85	7J-9108
149-8511	12.7-.50	-8	MH	1-14	-10	65.0-2.56	39.0-1.54	70.0-2.76	7J-9108
220-5357	12.7-.50	-8	MH	1 3/16-12	-12	68.0-2.68	39.0-1.54	48.0-1.89	6V-9746
220-5358	15.9-.63	-10	MH	1-14	-10	77.0-3.03	47.0-1.85	32.0-1.26	7J-9108
435-9922	19.1-.75	-12	MH	1-14	-10	84.0-3.31	49.0-1.93	32.0-1.26	7J-9108
149-8497	19.1-.75	-12	MH	1 3/16-12	-12	88.0-3.46	52.0-2.05	48.0-1.89	6V-9746
149-8504	19.1-.75	-12	MH	1 3/16-12	-12	88.0-3.46	52.0-2.05	58.0-2.28	6V-9746
149-8512	19.1-.75	-12	MH	1 3/16-12	-12	88.0-3.46	52.0-2.05	96.0-3.78	5K-9090
220-5360	25.4-1.00	-16	MH	1 7/16-12	-16	88.0-3.46	53.0-2.09	56.0-2.20	5K-9090

SAE 45° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
307-8246	4.8-.19	-3	JN	3/8-24	-3	34.0-1.34	17.0-.67
149-8576	9.5-.37	-6	MH	5/8-18	-6	46.0-1.81	19.0-.75

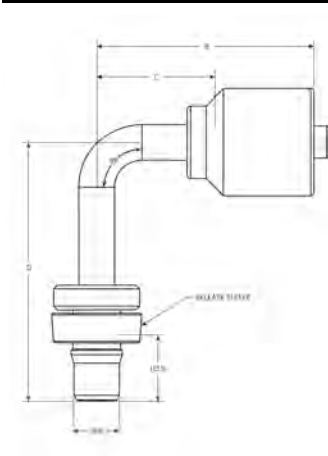
Snap To Connect - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
263-2664	6.4-.25	-4	MH	9.6-.38	-6	51.0-2.01	30.0-1.18

Thermoplastic Hose Couplings - 945

Snap To Connect - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
263-2678	6.4-.25	-4	MH	9.6-.38	-6	46.0-1.81	25.0-.98	40.0-1.57
263-2685	6.4-.25	-4	MH	9.6-.38	-6	46.0-1.81	25.0-.98	55.0-2.17

Thermoplastic Hose - 1028



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
541-7122	4.8 - .19	10.9 - .43	-3	56	82.8 - 12009	20.7 - 3002	45 - 1.77
541-7123	6.4 - .25	13.0 - .51	-4	56	76.0 - 11023	19.0 - 2756	50 - 1.97
541-7124	7.9 - .31	14.5 - .57	-5	56	68.8 - 9979	17.2 - 2495	58 - 2.28
541-7128 ²	7.9 - .31	14.5 - .57	-5	56	70.0 - 10153	17.5 - 2538	58 - 2.28
541-7125	9.5 - .37	16.5 - .65	-6	56	62.0 - 8992	15.5 - 2248	63 - 2.48
541-7129 ²	9.5 - .37	16.5 - .65	-6	56	62.0 - 8992	15.5 - 2248	63 - 2.48
541-7126	12.7 - .50	20.6 - .81	-8	56	55.2 - 8006	13.8 - 2002	90 - 3.54
541-7127	19.1 - .75	26.9 - 1.06	-12	56	34.4 - 4889	8.6 - 1247	180 - 7.09

Construction: Elastomeric core tube, two fiber braid reinforcement, special polyester cover. All layers bonded.

Application: Medium pressure service with petroleum base hydraulic fluids, water glycol, and water-oil fire resistant hydraulic fluids. Hydraulic systems exposed to very low temperatures. Ideal for use a low temperature on fork lift trucks in refrigerated warehouses, and earthmoving and agricultural machinery for cold climates.

Temperature Range: -70° F to +135° F (-56° C to +70° C) for water glycol and water-oil resistant hydraulic fluids. -70° F to +212° F (-56° C to +100° C) for all other applications.

Couplings: Crimp-on, swage-on permanent, non-skive type, 56 Series coupling. See Permanent Couplings (1028) section. For related assembly equipment and tooling, see Tooling section.

Note: Hose cover does not need to be removed before attaching couplings.

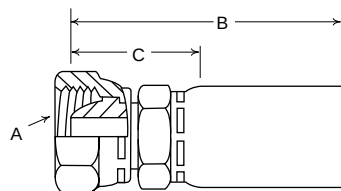
Required Cutting Tool: Cutting Tool (177-4271) and Blade (177-4272) is required for cutting hose. Do not use Hose Cutting Machine. Cut-off saw can cause heating distortion. See Miscellaneous Tools and Accessories section.

¹ Centerline of Hose

² Twin-line Hose

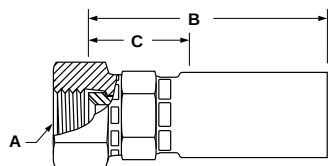
Thermoplastic Hose Couplings - 1028

BSPP Spherical Seat Female Swivel - Straight



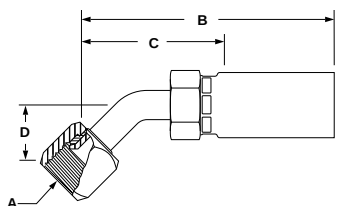
Part Number	HOSE I.D. (mm - in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm - in)	C CUT-OFF FACTOR (mm - in)
481-5745	4.8-0.19	-3	56	1/4-19	-4	35.0-1.38	15.5-0.61
481-5748	6.4-0.25	-4	56	1/4-19	-4	42.0-1.65	15.5-0.61
481-5742	7.9 - 0.31	-5	56	3/8-19	-6	46.0 - 1.81	19.0 - 0.75
481-5747	9.5 - 0.37	-6	56	3/8-19	-6	46.0 - 1.81	19.0 - 0.75
481-5738	4.8 - 0.19	-8	56	1/2-20	-8	51.0 - 2.01	21.0 - 0.83

JIC 37° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
480-9480	4.8-.19	-3	56	7/16-20	-4	45.0-1.77	27.0-1.06
480-9462	4.8-.19	-3	56	1/2-20	-5	47.0-1.85	29.0-1.14
479-4150	6.4-.25	-4	56	7/16-20	-4	52.0-2.05	28.0-1.10
479-4154	6.4-.25	-4	56	1/2-20	-5	54.0-2.13	29.0-1.14
479-4191	6.4-.25	-4	56	9/16-18	-6	54.0-2.13	30.0-1.18
480-9464	7.9-.31	-5	56	1/2-20	-5	56.0-2.20	30.0-1.18
479-4155	7.9-.31	-5	56	9/16-18	-6	57.0-2.24	31.0-1.22
480-9479	9.5-.37	-6	56	9/16-18	-6	56.0-2.20	31.0-1.22
479-4156	9.5-.37	-6	56	3/4-16	-8	60.0-2.36	35.0-1.38
479-4157	12.7-.50	-8	56	3/4-16	-8	64.0-2.52	36.0-1.42
480-9471	12.7-.50	-8	56	7/8-14	-10	67.0-2.64	39.0-1.54
480-9466	12.7-.50	-8	56	1 1/16-12	-12	69.0-2.72	41.0-1.61
480-9469	19.1-.75	-12	56	7/8-14	-10	73.0-2.87	39.0-1.54
480-9476	19.1-.75	-12	56	1 1/16-12	-12	78.0-3.07	44.0-1.73

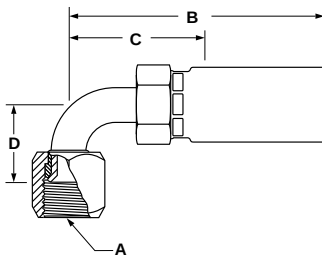
JIC 37° Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
479-4161	4.8-.19	-3	56	7/16-20	-4	49.0-1.93	32.0-1.26	10.0-.39
479-4162	6.4-.25	-4	56	7/16-20	-4	56.0-2.20	31.0-1.22	10.0-.39
480-9468	6.4-.25	-4	56	1/2-20	-5	62.0-2.44	38.0-1.50	10.0-.39
479-4163	7.9-.31	-5	56	9/16-18	-6	64.0-2.52	39.0-1.54	11.0-.43
479-4164	9.5-.37	-6	56	9/16-18	-6	65.0-2.56	40.0-1.57	11.0-.43
479-4165	9.5-.37	-6	56	3/4-16	-8	70.0-2.76	45.0-1.77	15.0-.59
479-4184	9.5-.37	-6	56	3/4-16	-8	81.0-3.19	55.0-2.17	18.0-.71
480-9475	12.7-.50	-8	56	3/4-16	-8	69.0-2.72	41.0-1.61	15.0-.59
481-5755	19.1-.75	-12	56	1 1/16-12	-12	102.0-4.02	69.0-2.72	21.0-.83

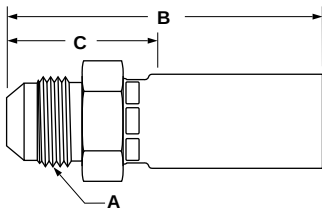
Thermoplastic Hose Couplings - 1028

JIC 37° Female Swivel - 90° Elbow



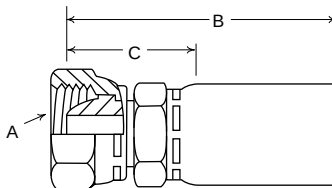
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
479-4186	4.8-.19	-3	56	7/16-20	-4	44.0-1.73	37.0-1.46	32.0-1.26
481-5750	4.8-.19	-3	56	7/16-20	-4	51.0-2.01	33.0-1.30	46.0-1.81
479-4192	6.4-.25	-4	56	7/16-20	-4	51.0-2.01	27.0-1.06	32.0-1.26
479-4187	6.4-.25	-4	56	1/2-20	-5	51.0-2.01	27.0-1.06	32.0-1.26
481-5757	6.4-.25	-4	56	1/2-20	-5	60.0-2.36	35.0-1.38	46.0-1.81
481-5752	7.9-.31	-5	56	9/16-18	-6	59.0-2.32	33.0-1.30	38.0-1.50
481-5754	7.9-.31	-5	56	9/16-18	-6	60.0-2.36	34.0-1.34	54.0-2.13
479-4188	9.5-.37	-6	56	9/16-18	-6	56.0-2.20	31.0-1.22	38.0-1.50
479-4166	9.5-.37	-6	56	9/16-18	-6	56.0-2.20	31.0-1.22	54.0-2.13
479-4189	9.5-.37	-6	56	3/4-16	-8	56.0-2.20	31.0-1.22	41.0-1.61
479-4167	9.5-.37	-6	56	3/4-16	-8	56.0-2.20	31.0-1.22	64.0-2.52
479-4190	12.7-.50	-8	56	3/4-16	-8	63.0-2.48	35.0-1.38	41.0-1.61
481-5758	12.7-.50	-8	56	3/4-16	-8	66.0-2.60	38.0-1.50	64.0-2.52
479-4185	19.1-.75	-12	56	1 1/16-12	-12	99.0-3.90	65.0-2.56	48.0-1.89

JIC 37° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
480-9470	6.4-.25	-4	56	7/16-20	-4	53.0-2.09	29.0-1.14
480-9474	9.5-.37	-6	56	9/16-18	-6	55.0-2.17	29.0-1.14
480-9465	19.1-.75	-12	56	1 1/16-12	-12	78.0-3.07	44.0-1.73

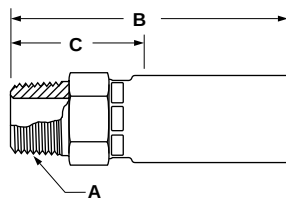
Metric DIN Light (L) 24° Female Swivel - Straight



Part Number	HOSE I.D. (mm - in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm - in)	C CUT-OFF FACTOR (mm - in)	O-RING SEAL
481-5739	4.8-0.19	-3	56	M12 x 1.5	37.0-1.46	18.0-0.71	3E-4288
481-5741	6.4 - 0.25	-4	56	M14 x 1.5	44.0-1.73	18.0-0.71	3E-4289
481-5737	9.5 - 0.37	-6	56	M16 x 1.5	46.0-1.81	18.5-0.73	3E-4296
481-5746	9.5 - 0.37	-6	56	M18 x 1.5	47.0-1.85	19.0-0.75	3E-4297

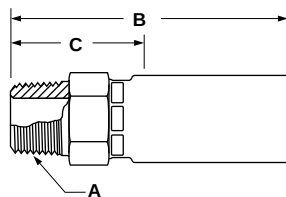
Thermoplastic Hose Couplings - 1028

NPTF Male - Straight



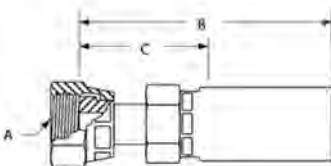
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
481-5751	4.8-.19	-3	56	3/8-18	-6	47.0-1.85	30.0-1.18
479-4143	4.8-.19	-4	56	1/8-27	-2	41.0-1.61	23.0-.91
479-4145	4.8-.19	-4	56	1/4-18	-4	46.0-1.81	29.0-1.14
479-4147	7.9-.31	-5	56	1/4-18	-4	55.0-2.17	29.0-1.14
481-5753	7.9-.31	-5	56	3/8-18	-6	56.0-2.20	30.0-1.18
479-4144	6.4-.25	-6	56	1/8-27	-2	49.0-1.93	24.0-.94
479-4146	6.4-.25	-6	56	1/4-18	-4	53.0-2.09	29.0-1.14
480-9459	9.5-.37	-6	56	1/4-18	-4	55.0-2.17	30.0-1.18
480-9467	9.5-.37	-6	56	3/8-18	-6	55.0-2.17	30.0-1.18
479-4148	9.5-.37	-6	56	1/2-14	-8	62.0-2.44	37.0-1.46
480-9460	12.7-.50	-8	56	3/8-18	-6	58.0-2.28	30.0-1.18
480-9472	12.7-.50	-8	56	1/2-14	-8	64.0-2.52	36.0-1.42
480-9461	19.1-.75	-12	56	3/4-14	-12	75.0-2.95	42.0-1.65

NPTF Male Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
479-4159	4.8-.19	-3	56	1/4-18	-4	66.0-2.60	48.0-1.89
479-4160	6.4-.25	-4	56	1/4-18	-4	75.0-2.95	50.0-1.97

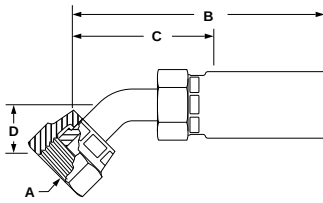
ORFS Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
479-4180	6.4-.25	-4	56	9/16-18	-4	55.0-2.17	31.0-1.22	4J-5477
479-4181	6.4-.25	-4	56	11/16-16	-6	57.0-2.24	32.0-1.26	6V-8397
479-4182	7.9-.31	-5	56	11/16-16	-6	58.0-2.28	32.0-1.26	6V-8397
480-9478	9.5-.37	-6	56	11/16-16	-6	67.0-2.64	42.0-1.65	6V-8397
479-4183	12.7-.50	-8	56	13/16-16	-8	64.0-2.52	36.0-1.42	6V-8398
479-4179	19.1-.75	-12	56	1 3/16-12	-12	81.0-3.19	47.0-1.85	6V-9746

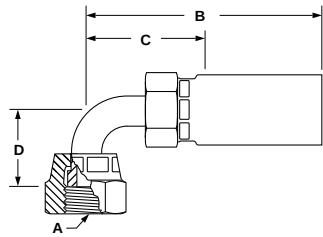
Thermoplastic Hose Couplings - 1028

ORFS Female Swivel - 45° Elbow



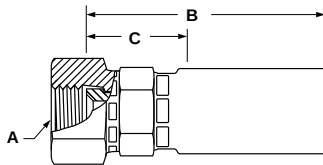
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
479-4173	6.4-.25	-4	56	9/16-18	-4	57.0-2.24	33.0-1.30	10.0-.39	4J-5477
479-4174	9.5-.37	-6	56	11/16-16	-6	60.0-2.36	35.0-1.38	11.0-.43	6V-8397
479-4175	12.7-.50	-8	56	13/16-16	-8	69.0-2.72	41.0-1.61	15.0-.59	6V-8398
481-5756	19.1-.75	-12	56	1 3/16-12	-12	102.0-4.02	69.0-2.72	21.0-.83	6V-9746

ORFS Female Swivel - 90° Elbow



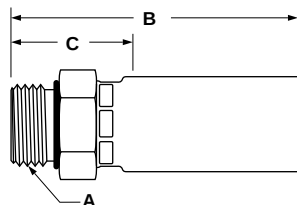
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
479-4177	6.4-.25	-4	56	9/16-18	-4	53.0-2.09	29.0-1.14	21.0-.83	4J-5477
479-4169	6.4-.25	-4	56	9/16-18	-4	53.0-2.09	29.0-1.14	46.0-1.81	4J-5477
480-9473	7.9-.31	-5	56	11/16-16	-6	58.0-2.28	32.0-1.26	23.0-.91	6V-8397
480-9477	9.5-.37	-6	56	11/16-16	-6	56.0-2.20	31.0-1.22	23.0-.91	6V-8397
479-4171	9.5-.37	-6	56	11/16-16	-6	56.0-2.20	31.0-1.22	54.0-2.13	6V-8397
479-4178	12.7-.50	-8	56	13/16-16	-8	63.0-2.48	35.0-1.38	29.0-1.14	6V-8398
479-4172	12.7-.50	-8	56	13/16-16	-8	63.0-2.48	35.0-1.38	64.0-2.52	6V-8398
479-4176	19.1-.75	-12	56	1 3/16-12	-12	99.0-3.90	65.0-2.56	48.0-1.89	6V-9746

SAE 45° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
479-4158	9.5-.37	-6	56	5/8-18	-6	60.0-2.36	35.0-1.38

STOR Male O-Ring - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
479-4149	4.8-.19	-3	56	7/16-20	-4	41.0-1.61	23.0-.91	3J-7354

Thermoplastic Hose - 5356 / 5356NC / 5357 / 5357NC

Thermoplastic Conductive / Medium Pressure Hose - 5356



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
593-7423	3.2 - .13	8.1 - .32	-2	TP	84.0 - 12183	21.0 - 3046	13.0 - .51
593-7424	4.8 - .19	10.3 - .41	-3	TP	84.0 - 12183	21.0 - 3046	45.0 - 1.77
593-7427	6.4 - .25	12.5 - .49	-4	TP	76.8 - 11139	19.2 - 2785	50.0 - 1.97
593-7428	7.9 - .31	14.2 - .56	-5	TP	70.0 - 10153	17.5 - 2538	58.0 - 2.28
593-7431	9.5 - .37	15.8 - .62	-6	TP	62.8 - 9108	15.7 - 2277	63.0 - 2.48
593-7433	12.7 - .50	19.3 - .76	-8	TP	56.0 - 8122	14.0 - 2031	90.0 - 3.54
593-7435	15.9 - .63	23.1 - .91	-10	TP	42.0 - 6092	10.5 - 1523	154.0 - 6.06
593-7438	19.1 - .75	26.4 - 1.03	-12	TP	34.8 - 5047	8.7 - 1262	180.0 - 7.09
593-7439	25.4 - 1.00	33.3 - 1.31	-16	TP	28.0 - 4061	7.0 - 1015	225.0 - 8.86

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

Construction: Thermoplastic tube, fiber braid reinforcement, Black thermoplastic cover. All layers bonded.

Application: Medium pressure service with petroleum base hydraulic fluids, water glycol, and water-oil fire resistant hydraulic fluids. Ideal for use on forklift trucks, earthmoving, and agricultural machinery.

Temperature Range: -40° F to +200° F (-40° C to +93° C) for petroleum and synthetic based hydraulic oils. -40° F to +150° F (-40° C to +66° C) for air, water, and water/glycol.

Couplings: Crimp-on permanent, non-skive type, TP Series couplings. See Permanent Couplings (5356, 5357) section.

Note: Hose cover does not need to be removed before attaching couplings.

Required Cutting Tool: Cutting Tool (177-4271) and Blade (177-4272) is required for cutting hose. Do not use Hose Cutting Machine. Cut-off saw can cause heating distortion. See Miscellaneous Tools and Accessories section.

Thermoplastic Nonconductive / Medium Pressure Hose - 5356NC



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
593-7440	3.2 - .13	8.1 - .32	-2	TP	84.0 - 12183	21.0 - 3046	13.0 - .51
593-7441	4.8 - .19	10.3 - .41	-3	TP	84.0 - 12183	21.0 - 3046	45.0 - 1.77
593-7444	6.4 - .25	12.5 - .49	-4	TP	76.8 - 11139	19.2 - 2785	50.0 - 1.97
593-7445	7.9 - .31	14.2 - .56	-5	TP	70.0 - 10153	17.5 - 2538	58.0 - 2.28
593-7447	9.5 - .37	15.8 - .62	-6	TP	62.8 - 9108	15.7 - 2277	63.0 - 2.48
593-7448	12.7 - .50	19.3 - .76	-8	TP	56.0 - 8122	14.0 - 2031	90.0 - 3.54
593-7449	15.9 - .63	23.1 - .91	-10	TP	42.0 - 6092	10.5 - 1523	154.0 - 6.06
593-7450	19.1 - .75	26.4 - 1.03	-12	TP	34.8 - 5047	8.7 - 1262	180.0 - 7.09
593-7453	25.4 - 1.00	33.3 - 1.31	-16	TP	28 - 4061	7.0 - 1015	225.0 - 8.86

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

Construction: Thermoplastic tube, fiber braid reinforcement, Orange thermoplastic cover. All layers bonded.

Application: Medium pressure service with petroleum base hydraulic fluids, water glycol, and water-oil fire resistant hydraulic fluids. Ideal for use on forklift trucks, earthmoving, and agricultural machinery. This nonconductive product meets the electrical insulating properties defined in SAE J517 and is used only in special applications when there is high risk of electric shock from hose contact with high voltage power systems (e.g. aerial bucket lifts for maintenance of utility distribution lines).

Temperature Range: -40° F to +200° F (-40° C to +93° C) for petroleum and synthetic based hydraulic oils. -40° F to +150° F (-40° C to +66° C) for air, water, and water/glycol.

Thermoplastic Hose - 5356 / 5356NC / 5357 / 5357NC

Thermoplastic Nonconductive / Medium Pressure Hose - 5356NC (Cont'd.)

Couplings: Crimp-on permanent, non-skive type, TP Series couplings. See Permanent Couplings (5356, 5357) section.

Note: Hose cover does not need to be removed before attaching couplings.

Required Cutting Tool: Cutting Tool (177-4271) and Blade (177-4272) is required for cutting hose. Do not use Hose Cutting Machine. Cut-off saw can cause heating distortion. See Miscellaneous Tools and Accessories section.

Thermoplastic Conductive / High Pressure Hose - 5357



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
593-7455	4.8 - .19	10.3 - .41	-3	TP	140.0 - 20305	35.0 - 5076	90.0 - 3.54
593-7456	6.4 - .25	12.5 - .49	-4	TP	140.0 - 20305	35.0 - 5076	100.0 - 3.94
593-7457	9.5 - .37	14.2 - .56	-6	TP	112.0 - 16244	28.0 - 4061	125.0 - 4.92
593-7458	12.7 - .50	15.8 - .62	-8	TP	98.0 - 14214	24.5 - 3553	180.0 - 7.09
593-7459	15.9 - .63	19.3 - .76	-10	TP	76.8 - 11139	19.2 - 2785	205.0 - 8.07
593-7461	19.1 - .75	23.1 - .91	-12	TP	62.8 - 9108	15.7 - 2277	240.0 - 9.45
593-7462	25.4 - 1.00	26.4 - 1.04	-16	TP	46.0 - 6672	14.0 - 2031	300.0 - 11.81

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

Construction: Thermoplastic tube, fiber braid reinforcement, Black thermoplastic cover. All layers bonded.

Application: High pressure service with petroleum base hydraulic fluids, water glycol, and water-oil fire resistant hydraulic fluids. Ideal for use on forklift trucks, earthmoving, and agricultural machinery.

Temperature Range: -40° F to +200° F (-40° C to +93° C) for petroleum and synthetic based hydraulic oils. -40° F to +150° F (-40° C to +66° C) for air, water, and water/glycol.

Couplings: Crimp-on permanent, non-skive type, TP Series couplings. See Permanent Couplings (5356, 5357) section.

Note: Hose cover does not need to be removed before attaching couplings.

Required Cutting Tool: Cutting Tool (177-4271) and Blade (177-4272) is required for cutting hose. Do not use Hose Cutting Machine. Cut-off saw can cause heating distortion. See Miscellaneous Tools and Accessories section.

Thermoplastic Nonconductive / High Pressure Hose - 5357NC



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
593-7464	4.8 - .19	10.3 - .41	-3	TP	140.0 - 20305	35.0 - 5076	90.0 - 3.54
593-7466	6.4 - .25	12.5 - .49	-4	TP	140.0 - 20305	35.0 - 5076	100.0 - 3.94
593-7467	9.5 - .37	14.2 - .56	-6	TP	112.0 - 16244	28.0 - 4061	125.0 - 4.92
593-7469	12.7 - .50	15.8 - .62	-8	TP	98.0 - 14214	24.5 - 3553	180.0 - 7.09
593-7470	15.9 - .63	19.3 - .76	-10	TP	76.8 - 11139	19.2 - 2785	205.0 - 8.07
593-7471	19.1 - .75	23.1 - .91	-12	TP	62.8 - 9108	15.7 - 2277	240.0 - 9.45
593-7473	25.4 - 1.00	26.4 - 1.04	-16	TP	46.0 - 6672	14 - 2031	300.0 - 11.81

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

Construction: Thermoplastic tube, fiber braid reinforcement, Orange thermoplastic cover. All layers bonded.

Application: High pressure service with petroleum base hydraulic fluids, water glycol, and water-oil fire resistant hydraulic fluids. Ideal for use on forklift trucks, earthmoving, and agricultural machinery. This nonconductive product meets the electrical insulating properties defined in SAE J517 and is used only in special applications when there is high risk of electric shock from hose contact with high voltage power systems (e.g. aerial bucket lifts for maintenance of utility distribution lines).

Thermoplastic Hose - 5356 / 5356NC / 5357 / 5357NC

Thermoplastic Nonconductive / High Pressure Hose - 5357NC (Cont'd.)

Temperature Range: -40° F to +200° F (-40° C to +93° C) for petroleum and synthetic based hydraulic oils. -40° F to +150° F (-40° C to +66° C) for air, water, and water/glycol.

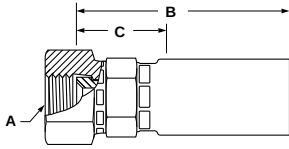
Couplings: Crimp-on permanent, non-skive type, TP Series couplings. See Permanent Couplings (5356, 5357) section.

Note: Hose cover does not need to be removed before attaching couplings.

Required Cutting Tool: Cutting Tool (177-4271) and Blade (177-4272) is required for cutting hose. Do not use Hose Cutting Machine. Cut-off saw can cause heating distortion. See Miscellaneous Tools and Accessories section.

Thermoplastic Hose Couplings (5356, 5356NC, 5357, 5357NC)

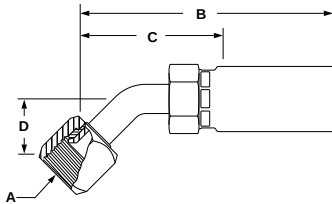
JIC 37° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
590-5736	3.2 - .13	-2	TP	7/16-20	-4	37.0 - 1.46	15.0 - 0.59
590-5738	4.8 - .19	-3	TP	7/16-20	-4	41.0 - 1.61	14.5 - 0.57
620-3298	4.8 - .19	-3	TP	1/2-20	-5	41.5 - 1.63	15.0 - 0.59
590-5739	6.4 - .25	-4	TP	7/16-20	-4	43.5 - 1.71	15.0 - 0.59
590-5740	6.4 - .25	-4	TP	1/2-20	-5	44.0 - 1.73	15.5 - 0.61
590-5741	6.4 - .25	-4	TP	9/16-18	-6	45.0 - 1.77	16.5 - 0.65
590-5742	6.4 - .25	-4	TP	3/4-16	-8	46.5 - 1.83	18.0 - 0.71
590-5743	7.9 - .31	-5	TP	1/2-20	-5	44.0 - 1.73	15.5 - 0.61
590-5745	7.9 - .31	-5	TP	9/16-18	-6	45.0 - 1.77	16.5 - 0.65
590-5744	9.5 - .37	-6	TP	1/2-20	-5	49.5 - 1.95	19.0 - 0.75
590-5746	9.5 - .37	-6	TP	9/16-18	-6	47.0 - 1.85	16.5 - 0.65
590-5748	9.5 - .37	-6	TP	3/4-16	-8	48.0 - 1.89	17.5 - 0.69
590-5749	9.5 - .37	-6	TP	7/8-14	-10	48.0 - 1.89	17.5 - 0.69
590-5747	12.7 - .50	-8	TP	9/16-18	-6	49.0 - 1.93	17.0 - 0.67
590-5750	12.7 - .50	-8	TP	3/4-16	-8	50.0 - 1.97	18.0 - 0.71
590-5751	12.7 - .50	-8	TP	7/8-14	-10	51.0 - 2.01	19.0 - 0.75
590-5752	12.7 - .50	-8	TP	1-1/16-12	-12	52.0 - 2.05	20.0 - 0.79
590-5753	15.9 - .63	-10	TP	7/8-14	-10	56.0 - 2.20	20.0 - 0.79
590-5754	15.9 - .63	-10	TP	1-1/16-12	-12	57.5 - 2.26	21.5 - 0.85
590-5755	19.1 - .75	-12	TP	7/8-14	-10	60.0 - 2.36	20.0 - 0.79
590-5756	19.1 - .75	-12	TP	1-1/16-12	-12	61.5 - 2.42	21.5 - 0.85
590-5757	19.1 - .75	-12	TP	1-3/16-12	-14	61.5 - 2.42	21.5 - 0.85
590-5759	19.1 - .75	-12	TP	1-5/16-12	-16	62.0 - 2.44	22.0 - 0.87
590-5762	25.4 - 1.00	-16	TP	1-1/16-12	-12	70.0 - 2.76	23.0 - 0.91
590-5763	25.4 - 1.00	-16	TP	1-5/16-12	-16	70.0 - 2.76	23.0 - 0.91

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

JIC 37° Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
590-7810	3.2 - .13	-2	TP	7/16-20	-4	54.3 - 2.14	32.3 - 1.27	10.0 - .39
590-7811	4.8 - .19	-3	TP	7/16-20	-4	58.3 - 2.30	31.8 - 1.25	10.0 - .39
590-7812	6.4 - .25	-4	TP	7/16-20	-4	62.3 - 2.45	33.8 - 1.33	10.0 - .39
590-7813	6.4 - .25	-4	TP	1/2-20	-5	62.5 - 2.46	34.0 - 1.34	10.0 - .39
590-7814	6.4 - .25	-4	TP	9/16-18	-6	63.3 - 2.49	34.8 - 1.37	11.0 - .43

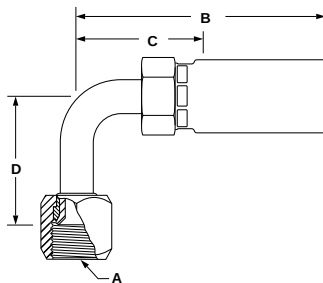
Thermoplastic Hose Couplings (5356, 5356NC, 5357, 5357NC)

JIC 37° Female Swivel - 45° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
590-7815	7.9 - .31	-5	TP	1/2-20	-5	62.2 - 2.45	33.7 - 1.33	10.0 - .39
590-7816	7.9 - .31	-5	TP	9/16-18	-6	63.2 - 2.49	34.7 - 1.37	11.0 - .43
590-7817	9.5 - .37	-6	TP	9/16-18	-6	67.5 - 2.66	37.0 - 1.46	11.0 - .43
590-7819	9.5 - .37	-6	TP	3/4-16	-8	71.5 - 2.81	41.0 - 1.61	15.0 - .59
590-7820	9.5 - .37	-6	TP	7/8-14	-10	72.5 - 2.85	42.0 - 1.65	16.0 - .63
590-7818	12.7 - .50	-8	TP	9/16-18	-6	76.5 - 3.01	44.5 - 1.75	15.0 - .59
590-7821	12.7 - .50	-8	TP	3/4-16	-8	78.3 - 3.08	46.3 - 1.82	15.0 - .59
590-7822	12.7 - .50	-8	TP	7/8-14	-10	79.4 - 3.13	55.2 - 2.17	16.0 - .63
590-7823	15.9 - .63	-10	TP	7/8-14	-10	91.1 - 3.59	55.1 - 2.17	16.0 - .63
590-7824	15.9 - .63	-10	TP	1-1/16-12	-12	96.2 - 3.79	60.2 - 2.37	21.0 - .83
590-7825	19.1 - .75	-12	TP	1-1/16-12	-12	103.7 - 4.08	63.7 - 2.51	21.0 - .83
590-7826	19.1 - .75	-12	TP	1-5/16-12	-16	106.7 - 4.20	66.7 - 2.63	24.0 - .94
590-7827	25.4 - 1.00	-16	TP	1-5/16-12	-16	120.4 - 4.74	73.4 - 2.89	24.0 - .94

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

JIC 37° Female Swivel - 90° Elbow

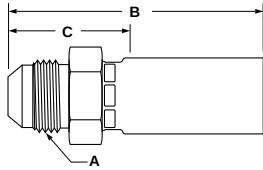


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
590-7405	3.2 - .13	-2	TP	7/16-20	-4	50.0 - 1.97	28.0 - 1.10	32.0 - 1.26
590-7406	4.8 - .19	-3	TP	7/16-20	-4	54.0 - 2.13	27.5 - 1.08	32.0 - 1.26
590-7407	6.4 - .25	-4	TP	7/16-20	-4	60.5 - 2.38	32.0 - 1.26	32.0 - 1.26
590-7408	6.4 - .25	-4	TP	9/16-18	-6	60.5 - 2.38	32.0 - 1.26	38.0 - 1.50
590-7409	6.4 - .25	-4	TP	1/2-20	-5	60.5 - 2.38	32.0 - 1.26	32.0 - 1.26
590-7410	7.9 - .31	-5	TP	1/2-20	-5	61.0 - 2.40	32.5 - 1.28	32.0 - 1.26
620-3319	7.9 - .31	-5	TP	9/16-18	-6	61.0 - 2.40	32.5 - 1.28	23.0 - .91
590-7411	9.5 - .37	-6	TP	9/16-18	-6	67.0 - 2.64	36.5 - 1.44	38.0 - 1.50
590-7412	9.5 - .37	-6	TP	3/4-16	-8	67.0 - 2.64	36.5 - 1.44	41.0 - 1.61
590-7413	12.7 - .50	-8	TP	3/4-16	-8	76.0 - 2.99	44.0 - 1.73	41.0 - 1.61
590-7414	12.7 - .50	-8	TP	7/8-14	-10	76.5 - 3.01	44.5 - 1.75	46.5 - 1.83
590-7415	12.7 - .50	-8	TP	1-1/16-12	-12	76.5 - 3.01	44.5 - 1.75	45.0 - 1.77
590-7416	15.9 - .63	-10	TP	7/8-14	-10	91.0 - 3.58	55.0 - 2.17	47.0 - 1.85
590-7417	15.9 - .63	-10	TP	1-1/16-12	-12	91.0 - 3.58	55.0 - 2.17	53.0 - 2.09
590-7418	19.1 - .75	-12	TP	1-1/16-12	-12	102.0 - 4.02	62.0 - 2.44	58.0 - 2.28
590-7419	19.1 - .75	-12	TP	1-5/16-12	-16	102.0 - 4.02	62.0 - 2.44	62.0 - 2.44
590-7420	25.4 - 1.00	-16	TP	1-5/16-12	-16	121.0 - 4.76	74.0 - 2.91	71.0 - 2.80

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

Thermoplastic Hose Couplings (5356, 5356NC, 5357, 5357NC)

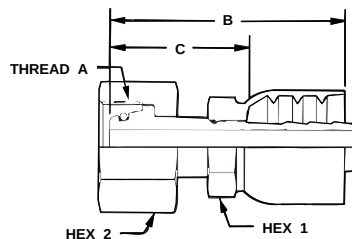
JIC 37° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
590-5629	3.2 - .13	-2	TP	7/16-20	-4	48.5 - 1.91	26.5 - 1.04
590-5631	4.8 - .19	-3	TP	7/16-20	-4	52.5 - 2.06	26.0 - 1.02
590-5632	6.4 - .25	-4	TP	7/16-20	-4	55.0 - 2.17	26.5 - 1.04
590-5633	6.4 - .25	-4	TP	1/2-20	-5	55.0 - 2.17	26.5 - 1.04
590-5634	6.4 - .25	-4	TP	9/16-18	-6	55.6 - 2.19	27.1 - 1.07
590-5635	7.9 - .31	-5	TP	1/2-20	-5	55.0 - 2.17	26.5 - 1.04
590-5637	7.9 - .31	-5	TP	9/16-18	-6	55.6 - 2.19	27.1 - 1.07
590-5636	9.5 - .37	-6	TP	1/2-20	-5	57.0 - 2.24	26.5 - 1.04
590-5638	9.5 - .37	-6	TP	9/16-18	-6	57.6 - 2.27	27.1 - 1.07
590-5640	9.5 - .37	-6	TP	3/4-16	-8	61.5 - 2.42	31.0 - 1.22
590-5641	9.5 - .37	-6	TP	7/8-14	-10	65.8 - 2.59	35.3 - 1.39
590-5639	12.7 - .50	-8	TP	9/16-18	-6	60.1 - 2.37	28.1 - 1.11
590-5642	12.7 - .50	-8	TP	3/4-16	-8	63.5 - 2.50	31.5 - 1.24
590-5643	12.7 - .50	-8	TP	7/8-14	-10	66.5 - 2.62	34.5 - 1.36
590-5644	12.7 - .50	-8	TP	1-1/16-12	-12	71.0 - 2.80	39.0 - 1.54
590-5645	15.9 - .63	-10	TP	7/8-14	-10	71.5 - 2.81	35.5 - 1.40
590-5646	15.9 - .63	-10	TP	1-1/16-12	-12	76.0 - 2.99	40.0 - 1.57
590-5647	19.1 - .75	-12	TP	1-1/16-12	-12	80.0 - 3.15	40.0 - 1.57
590-5651	19.1 - .75	-12	TP	1-3/16-12	-14	80.5 - 3.17	40.5 - 1.59
590-5652	19.1 - .75	-12	TP	1-5/16-12	-16	82.5 - 3.25	42.5 - 1.67
590-5653	25.4 - 1.00	-16	TP	1-5/16-12	-16	90.6 - 3.57	43.6 - 1.72

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

Metric DIN Light (L) 24° O-Ring Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
590-7208	4.8 - .19	-3	TP	M12 X 1.5	48.0 - 1.89	21.5 - 0.85	3E-4288
590-7209	6.4 - .25	-4	TP	M12 X 1.5	50.5 - 1.99	22.0 - 0.87	3E-4288
590-7210	6.4 - .25	-4	TP	M14 X 1.5	52.0 - 2.04	23.5 - 0.93	3E-4289
590-7211	6.4 - .25	-4	TP	M16 X 1.5	49.0 - 1.93	20.5 - 0.81	3E-4296
590-7212	7.9 - .31	-5	TP	M16 X 1.5	54.0 - 2.13	25.5 - 1.00	3E-4296
590-7213	7.9 - .31	-5	TP	M18 X 1.5	52.0 - 2.04	23.5 - 0.93	3E-4297
590-7214	9.5 - .37	-6	TP	M16 X 1.5	54.0 - 2.13	23.5 - 1.00	3E-4296
590-7215	9.5 - .37	-6	TP	M18 X 1.5	56.0 - 2.20	25.5 - 1.00	3E-4297
590-7216	9.5 - .37	-6	TP	M22 X 1.5	57.5 - 2.26	27.0 - 1.06	3E-4298
590-7217	12.7 - .50	-8	TP	M18 X 1.5	57.0 - 2.24	25.0 - 0.98	3E-4297

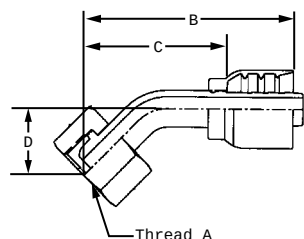
Thermoplastic Hose Couplings (5356, 5356NC, 5357, 5357NC)

Metric DIN Light (L) 24° O-Ring Female Swivel - Straight (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
590-7218	12.7 - .50	-8	TP	M22 X 1.5	60.5 - 2.38	28.5 - 1.12	3E-4298
590-7219	12.7 - .50	-8	TP	M26 X 1.5	62.0 - 2.44	30.0 - 1.18	122-9250
590-7220	15.9 - .63	-10	TP	M26 X 1.5	68.0 - 2.68	32.0 - 1.26	122-9250
590-7221	19.1 - .75	-12	TP	M30 X 2	73.5 - 2.89	33.5 - 1.32	3E-6761
590-7222	19.1 - .75	-12	TP	M36 X 2	75.0 - 2.95	35.0 - 1.38	092-2304
590-7223	25.4 - 1.00	-16	TP	M36 X 2	83.0 - 3.27	36.0 - 1.42	092-2304

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

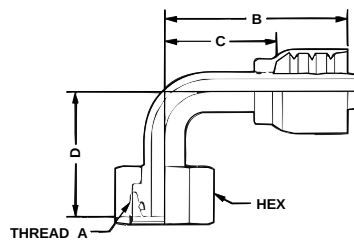
Metric DIN Light (L) 24° O-Ring Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
590-7856	3.2 - .13	-2	TP	M12 X 1.5	57.0 - 2.24	35.0 - 1.38	15.0 - 0.59	3E-4288
590-7858	6.4 - .25	-4	TP	M12 X 1.5	67.3 - 2.65	38.8 - 1.53	15.0 - 0.59	3E-4288
590-7859	6.4 - .25	-4	TP	M14 X 1.5	68.3 - 2.69	39.8 - 1.57	16.0 - 0.63	3E-4289
590-7861	7.9 - .31	-5	TP	M16 X 1.5	69.2 - 2.72	40.7 - 1.60	17.0 - 0.67	3E-4296
590-7862	7.9 - .31	-5	TP	M18 X 1.5	70.7 - 2.78	42.2 - 1.66	18.5 - 0.73	3E-4297
590-7863	9.5 - .37	-6	TP	M16 X 1.5	73.5 - 2.89	43.0 - 1.69	17.0 - 0.67	3E-4296
590-7864	9.5 - .37	-6	TP	M18 X 1.5	75.0 - 2.95	44.5 - 1.75	18.5 - 0.73	3E-4297
590-7865	9.5 - .37	-6	TP	M22 X 1.5	76.0 - 2.99	45.5 - 1.79	19.5 - 0.77	3E-4298
590-7866	12.7 - .50	-8	TP	M22 X 1.5	82.8 - 3.26	50.8 - 2.00	19.5 - 0.77	3E-4298
590-7867	12.7 - .50	-8	TP	M26 X 1.5	92.5 - 3.64	60.5 - 2.38	28.0 - 1.10	122-9250
590-7868	15.9 - .63	-10	TP	M26 X 1.5	98.7 - 3.89	62.7 - 2.47	23.5 - 0.93	122-9250
590-7869	19.1 - .75	-12	TP	M30 X 2	108.2 - 4.26	68.2 - 2.69	25.5 - 0.93	3E-6761
590-7870	19.1 - .75	-12	TP	M36 X 2	114.3 - 4.50	74.3 - 2.93	31.6 - 1.24	092-2304
590-7871	25.4 - 1.00	-16	TP	M36 X 2	130.6 - 5.14	83.6 - 3.29	34.2 - 1.35	092-2304

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

Metric DIN Light (L) 24° O-Ring Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
590-7230	3.2 - .13	-2	TP	M12 X 1.5	49.0 - 1.93	27.0 - 1.06	30.0 - 1.18	3E-4288
590-7231	4.8 - .19	-3	TP	M12 X 1.5	53.0 - 2.09	26.5 - 1.04	34.0 - 1.34	3E-4288
590-7232	6.4 - .25	-4	TP	M12 X 1.5	60.5 - 2.38	32.0 - 1.26	30.0 - 1.18	3E-4288
590-7233	6.4 - .25	-4	TP	M14 X 1.5	60.5 - 2.38	32.0 - 1.26	30.5 - 1.20	3E-4289
590-7234	6.4 - .25	-4	TP	M16 X 1.5	58.5 - 2.30	30.0 - 1.18	29.0 - 1.14	3E-4296

Thermoplastic Hose Couplings (5356, 5356NC, 5357, 5357NC)

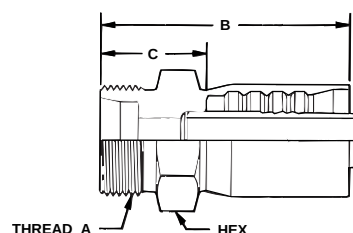
Metric DIN Light (L) 24° O-Ring Female Swivel - 90° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
590-7235	7.9 - .31	-5	TP	M16 X 1.5	61.0 - 2.40	32.5 - 1.28	33.0 - 1.30	3E-4296
590-7236	7.9 - .31	-5	TP	M18 X 1.5	61.0 - 2.40	32.5 - 1.28	40.0 - 1.47	3E-4297
590-7237	9.5 - .37	-6	TP	M16 X 1.5	67.0 - 2.64	36.5 - 1.44	33.0 - 1.30	3E-4296
590-7238	9.5 - .37	-6	TP	M18 X 1.5	67.0 - 2.64	36.5 - 1.44	36.0 - 1.42	3E-4297
590-7239	9.5 - .37	-6	TP	M22 X 1.5	67.0 - 2.64	36.5 - 1.44	40.5 - 1.59	3E-4298
590-7240	12.7 - .50	-8	TP	M22 X 1.5	76.5 - 3.01	44.5 - 1.75	40.0 - 1.57	3E-4298
590-7241	12.7 - .50	-8	TP	M26 X 1.5	76.5 - 3.01	44.5 - 1.75	52.0 - 2.05	122-9250
590-7242	15.9 - .63	-10	TP	M26 X 1.5	91.0 - 3.58	55.0 - 2.17	56.5 - 2.22	122-9250
590-7243	19.1 - .75	-12	TP	M30 X 2	102.0 - 4.02	62.0 - 2.44	62.0 - 2.44	3E-6761
590-7244	19.1 - .75	-12	TP	M36 X 2	102.0 - 4.02	62.0 - 2.44	64.0 - 2.52	092-2304
590-7246	25.4 - 1.00	-16	TP	M36 X 2	121.0 - 4.76	74.0 - 2.91	73.0 - 2.87	092-2304

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

Thermoplastic Hose Couplings (5356, 5356NC, 5357, 5357NC)

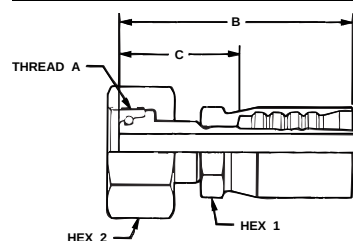
Metric DIN Light (L) 24° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
590-5124	3.2 - .13	-2	TP	M12 X 1.5	43.0 - 1.69	21.0 - 0.83	3E-4288
590-5125	4.8 - .19	-3	TP	M12 X 1.5	46.5 - 1.83	20.0 - 0.78	3E-4288
590-5126	6.4 - .25	-4	TP	M12 X 1.5	49.5 - 1.95	21.0 - 0.83	3E-4288
590-5127	6.4 - .25	-4	TP	M14 X 1.5	49.0 - 1.93	20.5 - 0.81	3E-4289
590-5128	6.4 - .25	-4	TP	M16 X 1.5	52.0 - 2.04	23.5 - 0.93	3E-4296
590-5129	7.9 - .31	-5	TP	M14 X 1.5	50.5 - 1.99	22.0 - 0.87	3E-4289
590-5130	7.9 - .31	-5	TP	M16 X 1.5	51.0 - 2.00	22.5 - 0.89	3E-4296
590-5131	7.9 - .31	-5	TP	M18 X 1.5	52.0 - 2.05	23.5 - 0.93	3E-4297
590-5132	9.5 - .37	-6	TP	M16 X 1.5	54.0 - 2.13	23.5 - 0.93	3E-4296
590-5133	9.5 - .37	-6	TP	M18 X 1.5	54.0 - 2.13	23.5 - 0.93	3E-4297
590-5134	9.5 - .37	-6	TP	M22 X 1.5	55.0 - 2.17	24.5 - 0.96	3E-4298
590-5135	12.7 - .50	-8	TP	M18 X 1.5	56.0 - 2.20	24.0 - 0.94	3E-4297
590-5136	12.7 - .50	-8	TP	M22 X 1.5	58.0 - 2.28	26.0 - 1.02	3E-4298
590-5137	12.7 - .50	-8	TP	M26 X 1.5	58.5 - 2.30	26.5 - 1.04	122-9250
590-5138	15.9 - .63	-10	TP	M26 X 1.5	63.0 - 2.48	27.0 - 1.06	122-9250
590-5139	15.9 - .63	-10	TP	M30 X 2	66.0 - 2.60	30.0 - 1.18	3E-6761
590-5140	19.1 - .75	-12	TP	M30 X 2	70.0 - 2.76	30.0 - 1.18	3E-6761
590-5141	19.1 - .75	-12	TP	M36 X 2	73.0 - 2.87	33.0 - 1.30	092-2304
590-5142	25.4 - 1.00	-16	TP	M36 X 2	80.0 - 3.15	33.0 - 1.30	092-2304

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

Metric DIN Heavy (S) 24° O-Ring Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
590-5855	3.2 - .13	-2	TP	M16 X 1.5	46.0 - 1.81	24.0 - 0.94	3E-4289
590-5856	4.8 - .19	-3	TP	M16 X 1.5	50.0 - 1.97	23.5 - 0.93	3E-4289
590-5857	6.4 - .25	-4	TP	M16 X 1.5	52.5 - 2.07	24.0 - 0.94	3E-4289
590-5858	6.4 - .25	-4	TP	M18 X 1.5	53.5 - 2.11	25.0 - 0.98	3E-4296
590-5859	7.9 - .31	-5	TP	M16 X 1.5	52.5 - 2.07	24.0 - 0.94	3E-4289
590-5860	7.9 - .31	-5	TP	M18 X 1.5	53.5 - 2.11	25.0 - 0.98	3E-4296
590-5861	7.9 - .31	-5	TP	M20 X 1.5	57.0 - 2.24	28.5 - 1.12	3E-4297
590-5862	9.5 - .37	-6	TP	M18 X 1.5	55.7 - 2.19	25.2 - 0.99	3E-4296
590-5863	9.5 - .37	-6	TP	M20 X 1.5	59.0 - 2.32	28.5 - 1.12	3E-4297
590-5864	9.5 - .37	-6	TP	M22 X 1.5	56.0 - 2.20	25.5 - 1.00	3E-4298
590-5865	12.7 - .50	-8	TP	M24 X 1.5	62.0 - 2.44	30.0 - 1.18	8U-6457
590-5866	15.9 - .63	-10	TP	M30 X 2	72.0 - 2.83	36.0 - 1.42	3E-4299
590-5867	19.1 - .75	-12	TP	M30 X 2	75.0 - 2.95	35.0 - 1.38	3E-4299

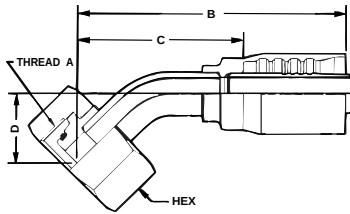
Thermoplastic Hose Couplings (5356, 5356NC, 5357, 5357NC)

Metric DIN Heavy (S) 24° O-Ring Female Swivel - Straight (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
590-5868	19.1 - .75	-12	TP	M36 X 2	72.0 - 2.83	32.0 - 1.26	3E-6762
590-5869	25.4 - 1.00	-16	TP	M36 X 2	83.0 - 3.27	36.0 - 1.42	3E-6762
590-5870	25.4 - 1.00	-16	TP	M42 X 2	83.0 - 3.27	36.0 - 1.42	3E-6763

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

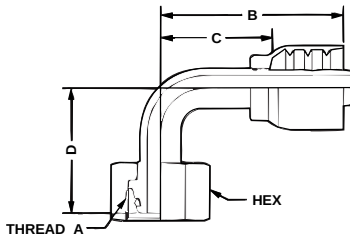
Metric DIN Heavy (S) 24° O-Ring Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
590-7361	3.2 - .13	-2	TP	M16 X 1.5	61.3 - 2.41	39.3 - 1.55	17.0 - 0.67	3E-4289
590-7371	4.8 - .19	-3	TP	M16 X 1.5	65.3 - 2.57	38.8 - 1.53	17.0 - 0.67	3E-4289
590-7372	6.4 - .25	-4	TP	M16 X 1.5	69.3 - 2.73	40.8 - 1.61	17.0 - 0.67	3E-4289
590-7373	6.4 - .25	-4	TP	M18 X 1.5	69.3 - 2.73	40.8 - 1.61	17.0 - 0.67	3E-4296
590-7374	7.9 - .31	-5	TP	M18 X 1.5	69.2 - 2.72	40.7 - 1.60	17.0 - 0.67	3E-4296
590-7375	7.9 - .31	-5	TP	M20 X 1.5	70.2 - 2.76	41.7 - 1.64	18.0 - 0.71	3E-4297
590-7376	9.5 - .37	-6	TP	M20 X 1.5	75.0 - 2.95	44.5 - 1.75	18.5 - 0.73	3E-4297
590-7377	9.5 - .37	-6	TP	M22 X 1.5	77.5 - 3.05	47.0 - 1.85	21.0 - 0.83	3E-4298
590-7378	12.7 - .50	-8	TP	M24 X 1.5	84.3 - 3.32	52.3 - 2.06	21.0 - 0.83	8U-6457
590-7379	15.9 - .63	-10	TP	M30 X 2	100.2 - 3.94	64.2 - 2.53	25.0 - 0.98	3E-4299
590-7380	19.1 - .75	-12	TP	M30 X 2	113.2 - 4.46	73.2 - 2.88	30.5 - 1.20	3E-4299
590-7381	19.1 - .75	-12	TP	M36 X 2	113.5 - 4.47	73.5 - 2.89	30.9 - 1.22	3E-6762
590-7382	25.4 - 1.00	-16	TP	M36 X 2	130.0 - 5.12	83.0 - 3.27	33.5 - 1.32	3E-6762
590-7383	25.4 - 1.00	-16	TP	M42 X 2	135.0 - 5.31	88.0 - 3.46	35.1 - 1.38	3E-6763

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

Metric DIN Heavy (S) 24° O-Ring Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
590-7347	3.2 - .13	-2	TP	M16 X 1.5	52.5 - 2.07	30.5 - 1.20	32.0 - 1.26	3E-4289
590-7348	4.8 - .19	-3	TP	M16 X 1.5	56.5 - 2.22	30.0 - 1.18	32.0 - 1.26	3E-4289
590-7349	6.4 - .25	-4	TP	M16 X 1.5	60.5 - 2.38	32.0 - 1.26	32.0 - 1.26	3E-4289
590-7350	6.4 - .25	-4	TP	M18 X 1.5	60.5 - 2.38	32.0 - 1.26	32.0 - 1.26	3E-4296
590-7351	7.9 - .31	-5	TP	M18 X 1.5	61.0 - 2.40	32.5 - 1.28	32.0 - 1.26	3E-4296
590-7352	7.9 - .31	-5	TP	M20 X 1.5	61.0 - 2.40	32.5 - 1.28	34.0 - 1.34	3E-4297
590-7353	9.5 - .37	-6	TP	M20 X 1.5	67.0 - 2.64	36.5 - 1.44	35.5 - 1.40	3E-4297
590-7354	9.5 - .37	-6	TP	M22 X 1.5	67.0 - 2.64	36.5 - 1.44	43.0 - 1.69	3E-4298

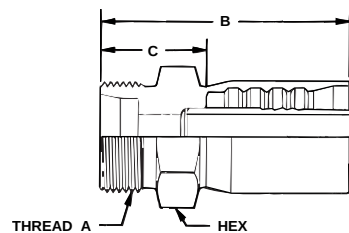
Thermoplastic Hose Couplings (5356, 5356NC, 5357, 5357NC)

Metric DIN Heavy (S) 24° O-Ring Female Swivel - 90° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
590-7355	12.7 - .50	-8	TP	M24 X 1.5	76.5 - 3.01	44.5 - 1.75	43.0 - 1.69	8U-6457
590-7356	15.9 - .63	-10	TP	M30 X 2	91.0 - 3.58	55.0 - 2.17	49.5 - 1.95	3E-4299
590-7357	19.1 - .75	-12	TP	M30 X 2	102.0 - 4.02	62.0 - 2.44	62.5 - 2.46	3E-4299
590-7358	19.1 - .75	-12	TP	M36 X 2	102.0 - 4.02	62.0 - 2.44	63.0 - 2.48	3E-6762
590-7359	25.4 - 1.00	-16	TP	M36 X 2	121.0 - 4.76	74.0 - 2.91	72.0 - 2.83	3E-6762
590-7360	25.4 - 1.00	-16	TP	M42 X 2	121.0 - 4.76	74.0 - 2.91	74.0 - 2.91	3E-6763

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

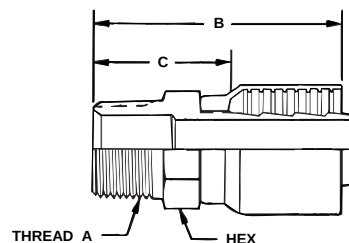
Metric DIN Heavy (S) 24° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
590-5192	3.2 - .13	-2	TP	M16 X 1.5	48.5 - 1.91	26.5 - 1.04	3E-4289
590-5193	4.8 - .19	-3	TP	M16 X 1.5	52.5 - 2.07	26.0 - 1.02	3E-4289
590-5194	6.4 - .25	-4	TP	M16 X 1.5	55.0 - 2.17	26.5 - 1.04	3E-4289
590-5195	6.4 - .25	-4	TP	M18 X 1.5	55.5 - 2.19	27.0 - 1.06	3E-4296
590-5196	7.9 - .31	-5	TP	M16 X 1.5	55.0 - 2.17	26.5 - 1.04	3E-4289
590-5197	7.9 - .31	-5	TP	M18 X 1.5	55.5 - 2.19	27.0 - 1.06	3E-4296
590-5198	7.9 - .31	-5	TP	M20 X 1.5	56.5 - 2.22	28.0 - 1.10	3E-4297
590-5201	9.5 - .37	-6	TP	M18 X 1.5	58.5 - 2.30	27.0 - 1.06	3E-4296
590-5199	9.5 - .37	-6	TP	M20 X 1.5	60.5 - 2.38	28.0 - 1.10	3E-4297
590-5200	9.5 - .37	-6	TP	M22 X 1.5	57.5 - 2.26	30.0 - 1.18	3E-4298
590-5202	12.7 - .50	-8	TP	M22 X 1.5	61.0 - 2.40	29.0 - 1.14	3E-4298
590-5203	12.7 - .50	-8	TP	M24 X 1.5	64.0 - 2.52	32.0 - 1.26	8U-6457
590-5204	15.9 - .63	-10	TP	M30 X 2	72.0 - 2.83	36.0 - 1.42	3E-4299
590-5205	19.1 - .75	-12	TP	M30 X 2	76.0 - 2.99	36.0 - 1.42	3E-4299
590-5207	25.4 - 1.00	-16	TP	M36 X 2	88.0 - 3.46	41.0 - 1.61	3E-6762
590-5209	25.4 - 1.00	-16	TP	M42 X 2	90.0 - 3.54	43.0 - 1.69	3E-6763

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

NPTF Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
590-5087	3.2 - .13	-2	TP	1/8-27	-2	44.5 - 1.75	22.5 - 0.89
590-5088	4.8 - .19	-3	TP	1/8-27	-2	48.5 - 1.91	22.0 - 0.87
590-5089	4.8 - .19	-3	TP	1/4-18	-4	54.0 - 2.13	27.5 - 1.08

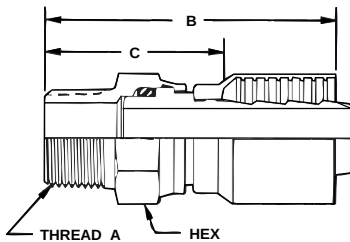
Thermoplastic Hose Couplings (5356, 5356NC, 5357, 5357NC)

NPTF Male - Straight (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
590-5090	6.4 - .25	-4	TP	1/4-18	-4	56.5 - 2.22	28.0 - 1.10
590-5091	7.9 - .31	-5	TP	1/4-18	-4	56.5 - 2.22	28.0 - .10
590-5092	9.5 - .37	-6	TP	1/4-18	-4	59.0 - 2.32	28.5 - 1.12

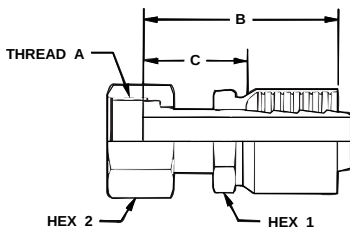
NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

NPTF Male Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
623-6955	3.2-.13	-2	TP	1/8-27	-2	57.0-2.24	35.0-1.38
623-6953	6.4-.25	-4	TP	1/4-18	-4	67.0-2.64	38.5-1.52

ORFS Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
590-4034	3.2 - .13	-2	TP	9/16-18	-4	50.0 - 1.97	28.0 - 1.10	4J-5477
590-4035	4.8 - .19	-3	TP	9/16-18	-4	54.0 - 2.13	27.5 - 1.08	4J-5477
590-4036	6.4 - .25	-4	TP	9/16-18	-4	56.5 - 2.22	28.0 - 1.10	4J-5477
590-4038	6.4 - .25	-4	TP	11/16-16	-6	60.0 - 2.36	31.5 - 1.24	6V-8397
590-4037	7.9 - .31	-5	TP	9/16-18	-4	56.0 - 2.20	27.5 - 1.08	4J-5477
590-4039	7.9 - .31	-5	TP	11/16-16	-6	59.0 - 2.32	30.5 - 1.20	6V-8397
590-4040	9.5 - .37	-6	TP	11/16-16	-6	61.0 - 2.40	30.5 - 1.20	6V-8397
590-4042	9.5 - .37	-6	TP	13/16-16	-8	63.5 - 2.50	33.0 - 1.30	6V-8398
590-4041	12.7 - .50	-8	TP	11/16-16	-6	63.5 - 2.50	31.5 - 1.24	6V-8397
590-4043	12.7 - .50	-8	TP	13/16-16	-8	65.5 - 2.58	33.5 - 1.32	6V-8398
590-4044	12.7 - .50	-8	TP	1-14	-10	72.0 - 2.83	40.0 - 1.57	7J-9108
590-4045	12.7 - .50	-8	TP	1-3/16-12	-12	74.0 - 2.91	42.0 - 1.65	6V-9746
590-4046	15.9 - .63	-10	TP	1-14	-10	77.0 - 3.03	41.0 - 1.61	7J-9108
590-4047	15.9 - .63	-10	TP	1-3/16-12	-12	79.0 - 3.11	43.0 - 1.69	6V-9746
590-4048	19.1 - .75	-12	TP	1-14	-10	81.5 - 3.21	41.5 - 1.63	7J-9108
590-4049	19.1 - .75	-12	TP	1-3/16-12	-12	85.0 - 3.35	45.0 - 1.77	6V-9746
590-4050	19.1 - .75	-12	TP	1-7/16-12	-16	85.0 - 3.35	45.0 - 1.77	5K-9090
590-4051	25.4 - 1.00	-16	TP	1-3/16-12	-12	91.0 - 3.58	44.0 - 1.73	6V-9746
590-4052	25.4 - 1.00	-16	TP	1-7/16-12	-16	93.5 - 3.68	46.5 - 1.83	5K-9090

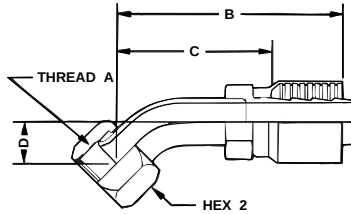
Thermoplastic Hose Couplings (5356, 5356NC, 5357, 5357NC)

ORFS Female Swivel - Straight (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
590-4053	25.4 - 1.00	-16	TP	1-11/16-12	-20	95.5 - 3.76	48.5 - 1.91	6V-8400

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

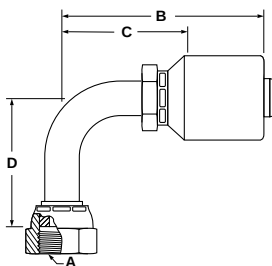
ORFS Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
590-7872	3.2 - .13	-2	TP	9/16-18	-4	52.0 - 2.05	30.0 - 1.18	10.0 - .39	4J-5477
590-7873	4.8 - .19	-3	TP	9/16-18	-4	56.0 - 2.20	29.5 - 1.16	10.0 - .39	4J-5477
590-7874	6.4 - .25	-4	TP	9/16-18	-4	62.3 - 2.45	33.8 - 1.33	10.0 - .39	4J-5477
590-7876	6.4 - .25	-4	TP	11/16-16	-6	63.3 - 2.49	34.8 - 1.37	11.0 - .43	6V-8397
590-7875	7.9 - .31	-5	TP	9/16-16	-4	67.5 - 2.66	39.0 - 1.54	10.0 - .39	4J-5477
590-7877	7.9 - .31	-5	TP	11/16-16	-6	62.4 - 2.46	33.9 - 1.33	11.0 - .43	6V-8397
590-7878	9.5 - .37	-6	TP	11/16-16	-6	65.8 - 2.59	35.3 - 1.39	11.0 - .43	6V-8397
590-7880	9.5 - .37	-6	TP	13/16-16	-8	71.5 - 2.81	41.0 - 1.61	15.0 - .59	6V-8398
590-7879	12.7 - .50	-8	TP	11/16-16	-6	79.0 - 3.11	47.0 - 1.85	15.0 - .59	6V-8397
590-7881	12.7 - .50	-8	TP	13/16-16	-8	78.4 - 3.09	46.4 - 1.83	15.0 - .59	6V-8398
590-7882	12.7 - .50	-8	TP	1-14	-10	79.3 - 3.12	47.3 - 1.86	16.0 - .63	7J-9108
590-7883	15.9 - .63	-10	TP	1-14	-10	91.2 - 3.59	55.2 - 2.17	16.0 - .63	7J-9108
590-7884	15.9 - .63	-10	TP	1-3/16-12	-12	96.2 - 3.79	60.2 - 2.37	21.0 - .83	6V-9746
590-7885	19.1 - .75	-12	TP	1-3/16-12	-12	104.0 - 1.09	64.0 - 2.52	21.0 - .83	6V-9746
590-7886	19.1 - .75	-12	TP	1-7/16-12	-16	106.7 - 4.20	66.7 - 2.63	24.0 - .94	5K-9090
590-7887	25.4 - 1.00	-16	TP	1-7/16-12	-16	120.4 - 4.74	73.4 - 2.89	24.0 - .94	5K-9090
590-7888	25.4 - 1.00	-16	TP	1-11/16-12	-20	121.4 - 4.78	74.4 - 2.93	25.0 - .98	6V-8400

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

ORFS Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
590-7897	3.2 - .13	-2	TP	9/16-18	-4	49.0 - 1.93	27.0 - 1.06	32.0 - 1.26	4J-5477
590-7898	4.8 - .19	-3	TP	9/16-18	-4	53.0 - 2.09	26.5 - 1.04	32.0 - 1.26	4J-5477
590-7899	6.4 - .25	-4	TP	9/16-18	-4	58.5 - 2.30	30.0 - 1.18	32.0 - 1.26	4J-5477
590-7901	6.4 - .25	-4	TP	11/16-16	-6	61.0 - 2.40	30.0 - 1.18	38.0 - 1.50	6V-8397
590-7900	7.9 - .31	-5	TP	9/16-16	-4	58.5 - 2.30	32.5 - 1.28	32.0 - 1.26	4J-5477
590-7902	7.9 - .31	-5	TP	11/16-16	-6	61.0 - 2.40	32.5 - 1.28	38.0 - 1.50	6V-8397
590-7903	9.5 - .37	-6	TP	11/16-16	-6	67.0 - 2.64	36.5 - 1.44	38.0 - 1.50	6V-8397

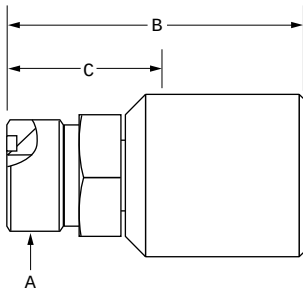
Thermoplastic Hose Couplings (5356, 5356NC, 5357, 5357NC)

ORFS Female Swivel - 90° Elbow (Cont'd.)

Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
590-7905	9.5 - .37	-6	TP	13/16-16	-8	76.5 - 3.01	36.5 - 1.44	41.0 - 1.61	6V-8398
590-7904	12.7 - .50	-8	TP	11/16-16	-6	67.0 - 2.64	44.5 - 1.75	41.0 - 1.61	6V-8397
590-7906	12.7 - .50	-8	TP	13/16-16	-8	75.5 - 2.97	43.5 - 1.71	41.0 - 1.61	6V-8398
590-7907	12.7 - .50	-8	TP	1-14	-10	75.5 - 2.97	43.5 - 1.71	47.0 - 1.85	7J-9108
590-7908	15.9 - .63	-10	TP	1-14	-10	91.0 - 3.58	55.0 - 2.17	47.0 - 1.85	7J-9108
590-7909	15.9 - .63	-10	TP	1-3/16-12	-12	91.0 - 3.58	55.0 - 2.17	58.0 - 2.28	6V-9746
590-7910	19.1 - .75	-12	TP	1-3/16-12	-12	104.0 - 4.09	64.0 - 2.52	58.0 - 2.28	6V-9746
590-7911	19.1 - .75	-12	TP	1-7/16-12	-16	104.0 - 4.09	64.0 - 2.52	71.0 - 2.80	5K-9090
590-7912	25.4 - 1.00	-16	TP	1-7/16-12	-16	120.0 - 4.72	73.0 - 2.87	71.0 - 2.80	5K-9090
590-7913	25.4 - 1.00	-16	TP	1-11/16-12	-20	121.0 - 4.76	74.0 - 2.91	78.0 - 3.07	6V-8400

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

ORFS Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
590-4054	3.2 - .13	-2	TP	9/16-18	-4	47.0 - 1.85	25.0 - .98	4J-5477
590-4055	4.8 - .19	-3	TP	9/16-18	-4	51.5 - 2.03	25.0 - .98	4J-5477
590-4056	6.4 - .25	-4	TP	9/16-18	-4	53.5 - 2.11	25.0 - .98	4J-5477
590-4058	6.4 - .25	-4	TP	11/16-16	-6	54.5 - 2.15	26.0 - 1.02	6V-8397
590-4057	7.9 - .31	-5	TP	9/16-18	-4	55.0 - 2.17	26.5 - 1.04	4J-5477
590-4059	9.5 - .37	-6	TP	11/16-16	-6	56.5 - 2.22	26.0 - 1.02	6V-8397
590-4060	9.5 - .37	-6	TP	13/16-16	-8	61.0 - 2.40	30.5 - 1.20	6V-8398
590-4959	12.7 - .50	-8	TP	13/16-16	-8	61.0 - 2.40	29.0 - 1.14	6V-8398
590-4960	15.9 - .63	-10	TP	1-14	-10	70.5 - 2.78	34.5 - 1.36	7J-9108
590-4961	19.1 - .75	-12	TP	1-3/16-12	-12	78.0 - 3.07	38.0 - 1.50	6V-9746
590-4962	25.4 - 1.00	-16	TP	1-7/16-12	-16	90.5 - 3.56	43.5 - 1.71	5K-9090

NOTE: Greyscale parts are In Stock, other part numbers are Made As Ordered (MAO).

Thermoplastic Reduced Outside Diameter Hose - 2760

Thermoplastic Reduced Outside Diameter Hose - 2760



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
541-7100	6.4 - .25	10.7 - .42	-4	JN	41.2 - 5976	10.3 - 1494	38 - 1.50
541-7101	7.9 - .31	13.5 - .53	-5	JN	41.2 - 5976	10.3 - 1494	44 - 1.73
541-7102	9.5 - .37	14.5 - .57	-6	JN	41.2 - 5976	10.3 - 1494	63 - 2.48
541-7103	12.7 - .50	17.7 - .70	-8	JN	41.2 - 5976	10.3 - 1494	76 - 2.99

Construction: Thermoplastic or synthetic rubber inner tube resistant to hydraulic fluids with suitable fibers or wire reinforcement and a hydraulic fluid and weather resistant thermoplastic or synthetic rubber cover.

Application: Medium pressure use with petroleum or water base, and synthetic hydraulic fluids.

Temperature Range: -40° F to +212° F (-40° C to +100° C).

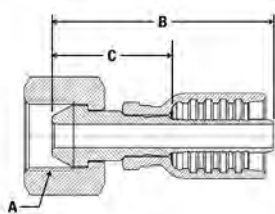
Couplings: Crimp-on permanent, non-skive type, JN Series coupling. See Permanent Couplings (2760) section. For related assembly equipment and tooling, see Tooling section. Note: Hose cover does not need to be removed before attaching couplings. Required Cutting.

Tool: Cutting Tool (177-4271) and Blade (177-4272) is required for cutting hose. Do not use Hose Cutting Machine. Cut-off saw can cause heating distortion. See Miscellaneous Tools and Accessories section.

¹ Centerline of Hose

Thermoplastic Reduced Outside Diameter Hose Couplings - 2760

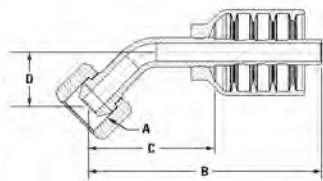
BSPP 60° Female Swivel - Straight (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
557-5997	6.4-.25	-4	JN	1/4-19	-4	40.0-1.57	22.0-.87
557-5332	7.9-.31	-5	JN	3/8-19	-6	41.0-1.61	21.0-.87
557-5334	9.5-.37	-6	JN	3/8-19	-6	50.5-1.99	23.0-.91
557-9040	12.7-.50	-8	JN	1/2-14	-8	49.0-1.93	28.0-1.10

Note: Grayscale parts are MAO (Made As Order).

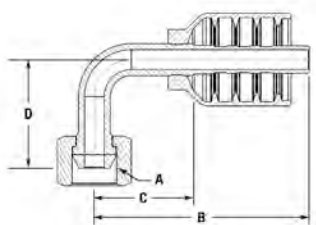
BSPP 60° Female Swivel - 45° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
557-5999	6.4-.25	-4	JN	1/4-19	-4	55.0-2.17	38.0-1.50	17.5-.69
557-9041	12.7-.50	-8	JN	1/2-14	-8	67.0-2.64	46.0-1.81	20.0-.79

Note: Grayscale parts are MAO (Made As Order).

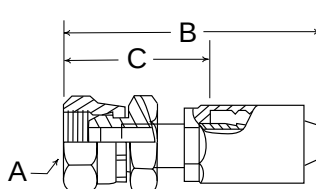
BSPP 60° Female Swivel - 90° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
557-6001	6.4-.25	-4	JN	1/4-19	-4	43.0-1.69	26.0-1.02	30.0-1.18
557-5336	9.5-.37	-6	JN	3/8-19	-6	59.0-2.32	32.0-1.26	37.0-1.46
557-9042	12.7-.50	-8	JN	1/2-14	-8	59.0-2.32	38.0-1.50	38.0-1.50

Note: Grayscale parts are MAO (Made As Order).

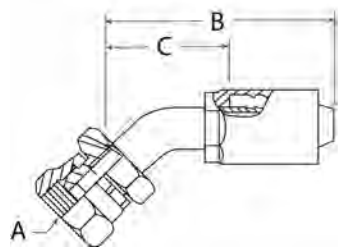
BSPP Spherical Seat Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3436	6.4-.25	-4	JN	1/4-19	-4	40.0-1.57	23.0-.91
146-3438	9.5-.37	-6	JN	3/8-19	-6	50.5-1.99	23.0-.91
146-3439	12.7-.50	-8	JN	1/2-14	-8	49.0-1.93	28.0-1.10

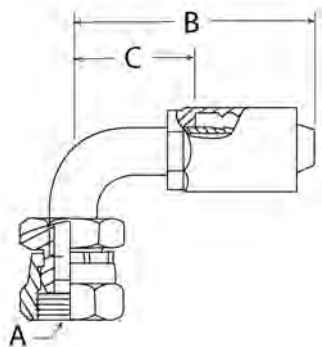
Thermoplastic Reduced Outside Diameter Hose Couplings - 2760

BSPP Spherical Seat Female Swivel - 45° Elbow



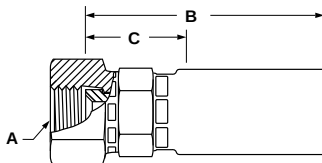
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3440	6.4-.25	-4	JN	1/4-19	-4	55.0-2.17	38.0-1.50	17.5-.69

BSPP Spherical Seat Female Swivel - 90° Elbow



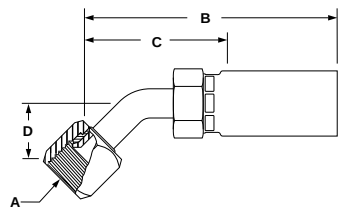
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3442	6.4-.25	-4	JN	1/4-19	-4	43.0-1.69	26.0-1.02	30.0-1.18
146-3443	12.7-.50	-8	JN	1/2-14	-8	59.0-2.32	38.0-1.50	38.0-1.50

JIC 37° Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3367	6.4-.25	-4	JN	7/16-20	-4	34.5-1.36	17.0-.67
253-1371	6.4-.25	-4	JN	9/16-18	-6	37.0-1.46	20.0-.79
146-3447	7.9-.31	-5	JN	9/16-18	-6	38.0-1.50	18.0-.71
146-3368	9.5-.37	-6	JN	9/16-18	-6	51.0-2.01	24.0-.94
329-7308	9.5-.37	-6	JN	3/4-16	-8	51.0-2.01	24.0-.94
146-3369	12.7-.50	-8	JN	3/4-16	-8	47.0-1.85	26.0-1.02
146-3449	12.7-.50	-8	JN	7/8-14	-10	48.5-1.91	28.0-1.10
622-2305	19.1-.75	-12	JN	1 1/16-12	-12	51.0-2.01	23.0-.91
308-4529	22.2-.88	-14	JN	1 5/16-12	-16	53.0-2.09	26.0-1.02

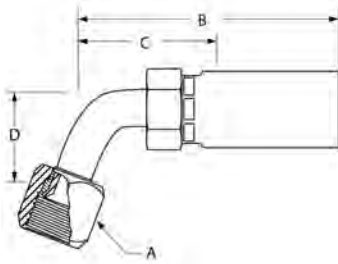
JIC 37° Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3370	6.4-.25	-4	JN	7/16-20	-4	46.0-1.81	29.5-1.16	8.0-.31
146-3372	9.5-.37	-6	JN	9/16-18	-6	62.0-2.44	35.0-1.38	10.0-.39
146-3374	9.5-.37	-6	JN	9/16-18	-6	70.0-2.76	43.0-1.69	18.0-.71
146-3373	12.7-.50	-8	JN	3/4-16	-8	64.0-2.52	43.0-1.69	14.0-.55
146-3376	12.7-.50	-8	JN	3/4-16	-8	73.0-2.87	52.0-2.05	23.0-.91
146-3450	12.7-.50	-8	JN	7/8-14	-10	66.0-2.60	45.0-1.77	17.0-.67
622-0934	15.9-.63	-10	JN	7/8-14	-10	93.0-3.66	70.0-2.76	23.5-.93
622-2306	19.1-.75	-12	JN	1 1/16-12	-12	80.0-3.23	54.5-2.15	20.0-.79

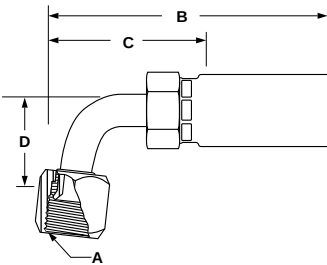
Thermoplastic Reduced Outside Diameter Hose Couplings - 2760

JIC 37° Female Swivel - 65° Elbow



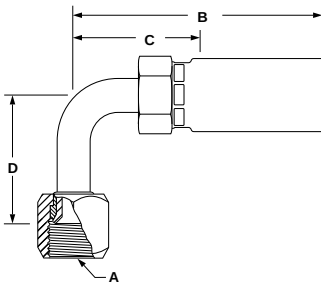
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3377	9.5-.37	-6	JN	9/16-18	-6	82.0-3.23	54.0-2.13	57.0-2.24
146-3378	9.5-.37	-6	JN	9/16-18	-6	85.0-3.35	58.0-2.28	65.0-2.56

JIC 37° Female Swivel - 80° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3380	9.5-.37	-6	JN	9/16-18	-6	64.0-2.52	37.0-1.46	35.0-1.38
146-3381	9.5-.37	-6	JN	9/16-18	-6	68.0-2.68	41.0-1.61	59.0-2.32

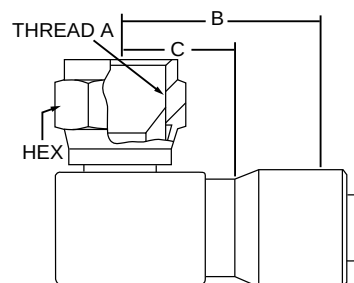
JIC 37° Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3382	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	26.0-1.02	17.5-.69
146-3379	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	26.0-1.02	26.5-1.04
146-3418	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	26.0-1.02	50.0-1.97
146-3392	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	26.0-1.02	63.0-2.48
146-3383	7.9-.31	-5	JN	9/16-18	-6	49.0-1.93	28.5-1.12	22.0-.87
146-3384	9.5-.37	-6	JN	9/16-18	-6	60.0-2.36	33.0-1.30	22.0-.87
146-3387	9.5-.37	-6	JN	9/16-18	-6	60.0-2.36	33.0-1.30	28.0-1.10
146-3393	9.5-.37	-6	JN	9/16-18	-6	60.0-2.36	33.0-1.30	56.0-2.20
146-3388	9.5-.37	-6	JN	3/4-16	-8	60.0-2.36	33.0-1.30	35.0-1.38
146-3394	9.5-.37	-6	JN	3/4-16	-8	60.0-2.36	33.0-1.30	64.0-2.52
146-3385	12.7-.50	-8	JN	3/4-16	-8	59.0-2.32	38.0-1.50	28.0-1.10
146-3389	12.7-.50	-8	JN	3/4-16	-8	59.0-2.32	38.0-1.50	35.0-1.38
146-3398	12.7-.50	-8	JN	3/4-16	-8	59.0-2.32	38.0-1.50	45.5-1.79
146-3395	12.7-.50	-8	JN	3/4-16	-8	59.0-2.32	38.0-1.50	63.5-2.50
307-8240	12.7-.50	-8	JN	7/8-14	-10	59.0-2.32	38.0-1.50	31.0-1.22
146-3390	12.7-.50	-8	JN	7/8-14	-10	59.0-2.32	38.0-1.50	44.5-1.75
146-3396	12.7-.50	-8	JN	7/8-14	-10	59.0-2.32	38.0-1.50	78.0-3.07
622-2307	19.1-.75	-12	JN	1 1/16-12	-12	77.0-3.03	50.0-1.97	46.0-1.81

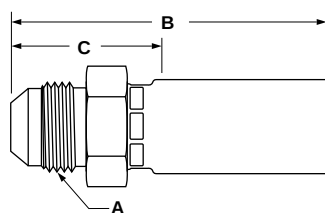
Thermoplastic Reduced Outside Diameter Hose Couplings - 2760

JIC 37° Female Swivel Block - 90° Elbow



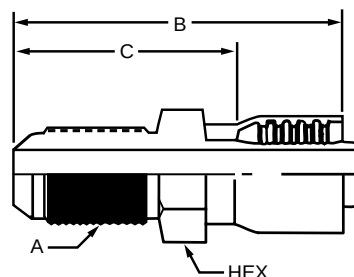
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3399	12.7-.50	-8	JN	3/4-16	-8	44.0-1.73	23.0-.91	22.0-.87

JIC 37° Male - Straight



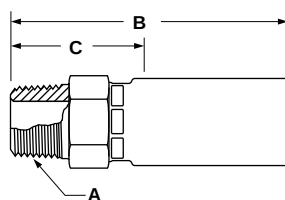
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3400	6.4-.25	-4	JN	7/16-20	-4	44.0-1.73	26.0-1.02
146-3402	9.5-.37	-6	JN	9/16-18	-6	56.0-2.20	29.0-1.14

JIC 37° Male Bulkhead - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3445	6.4-.25	-4	JN	7/16-20	-4	60.0-2.36	43.0-1.69
146-3444	9.5-.37	-6	JN	9/16-18	-6	77.0-3.03	50.0-1.97

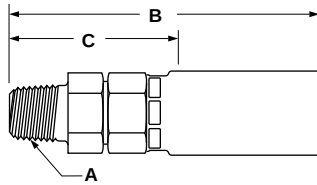
NPTF Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
267-3846	4.8-.19	-3	JN	1/8-27	-2	38.0-1.50	21.0-.83
267-4660	4.8-.19	-3	JN	3/8-18	-6	45.0-1.77	28.0-1.10
146-3404	6.4-.25	-4	JN	1/8-27	-2	38.0-1.50	21.0-.83
146-3405	6.4-.25	-4	JN	1/4-18	-4	45.0-1.77	28.0-1.10
146-3406	6.4-.25	-4	JN	3/8-18	-6	45.0-1.77	28.0-1.10
146-3409	9.5-.37	-6	JN	3/8-18	-6	56.0-2.20	29.0-1.14
146-3410	9.5-.37	-6	JN	1/2-14	-8	61.0-2.40	34.0-1.34
146-3411	12.7-.50	-8	JN	1/2-14	-8	56.0-2.20	35.0-1.38
352-2786	22.2-.88	-14	JN	1-11 1/2	-16	73.0-2.87	46.0-1.81

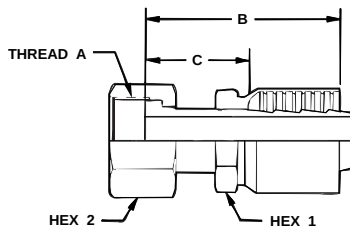
Thermoplastic Reduced Outside Diameter Hose Couplings - 2760

NPTF Male Swivel - Straight



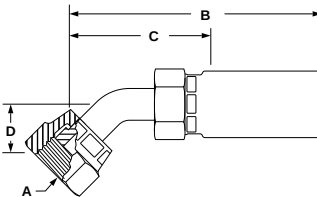
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
267-4658	4.8-.19	-3	JN	1/8-27	-2	53.0-2.09	36.0-1.42
178-9166	6.4-.25	-4	JN	1/8-27	-2	53.0-2.09	36.0-1.42
146-3412	6.4-.25	-4	JN	1/4-18	-4	58.0-2.28	41.0-1.61
146-3413	9.5-.37	-6	JN	1/4-18	-4	69.0-2.72	41.0-1.61
146-3414	9.5-.37	-6	JN	3/8-18	-6	69.0-2.72	42.0-1.65
146-3415	9.5-.37	-6	JN	1/2-14	-8	76.0-2.99	49.0-1.93
146-3416	12.7-.50	-8	JN	3/8-18	-6	63.0-2.48	42.0-1.65
146-3417	12.7-.50	-8	JN	1/2-14	-8	71.0-2.80	50.0-1.97

ORFS Female Swivel - Straight



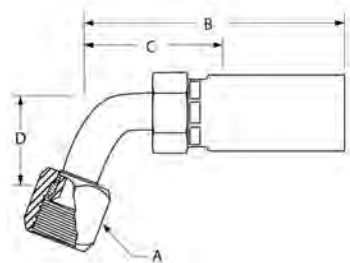
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
146-3338	6.4-.25	-4	JN	9/16-18	-4	44.0-1.73	25.0-.98	4J-5477
146-3350	6.4-.25	-4	JN	11/16-16	-6	45.0-1.77	28.0-1.10	6V-8397
146-3339	7.9-.31	-5	JN	11/16-16	-6	46.0-1.81	26.0-1.02	6V-8397
146-3340	9.5-.37	-6	JN	11/16-16	-6	58.0-2.28	31.0-1.22	6V-8397
146-3341	12.7-.50	-8	JN	11/16-16	-6	56.0-2.20	35.0-1.38	6V-8397
146-3342	12.7-.50	-8	JN	13/16-16	-8	58.0-2.28	37.0-1.46	6V-8398

ORFS Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
146-3343	6.4-.25	-4	JN	9/16-18	-4	49.5-1.95	31.0-1.22	10.0-.39	4J-5477
146-3446	6.4-.25	-4	JN	11/16-16	-6	48.0-1.89	30.0-1.18	10.0-.39	6V-8397
146-3344	7.9-.31	-5	JN	11/16-16	-6	53.0-2.09	33.0-1.30	11.0-.43	6V-8397
146-3345	9.5-.37	-6	JN	11/16-16	-6	63.0-2.48	36.0-1.42	11.0-.43	6V-8397
146-3397	9.5-.37	-6	JN	11/16-16	-6	70.0-2.76	43.0-1.69	18.0-.71	6V-8397
307-8264	12.7-.50	-8	JN	11/16-16	-6	58.0-2.28	37.6-1.48	10.9-.43	6V-8397
146-3346	12.7-.50	-8	JN	13/16-16	-8	65.0-2.56	44.0-1.73	15.0-.59	6V-8398
146-3347	12.7-.50	-8	JN	13/16-16	-8	73.0-2.87	52.0-2.05	23.0-.91	6V-8398

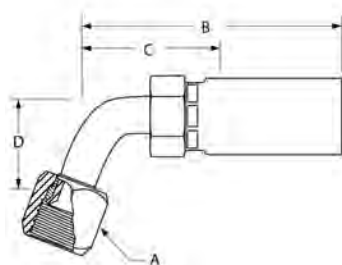
ORFS Female Swivel - 65° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
146-3348	9.5-.37	-6	JN	11/16-16	-6	83.0-3.27	56.0-2.20	61.0-2.40	6V-8397

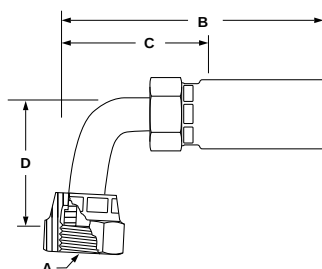
Thermoplastic Reduced Outside Diameter Hose Couplings - 2760

ORFS Female Swivel - 65° Elbow



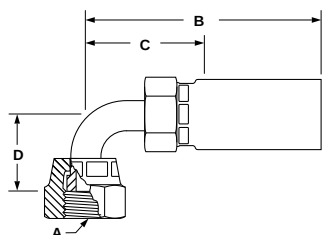
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
146-3349	9.5-.37	-6	JN	11/16-16	-6	85.0-3.35	58.0-2.28	66.0-2.60	6V-8397

ORFS Female Swivel - 80° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
146-3351	9.5-.37	-6	JN	11/16-16	-6	64.0-2.52	37.0-1.46	35.0-1.38	6V-8397
146-3352	9.5-.37	-6	JN	11/16-16	-6	68.0-2.68	41.0-1.61	59.0-2.32	6V-8397

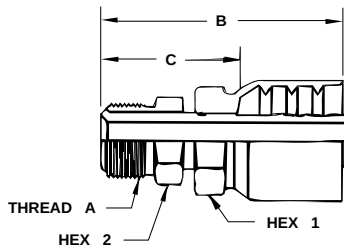
ORFS Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
146-3353	6.4-.25	-4	JN	9/16-18	-4	43.0-1.69	27.0-1.06	20.0-.79	4J-5477
146-3360	6.4-.25	-4	JN	9/16-18	-4	43.0-1.69	27.0-1.06	32.0-1.26	4J-5477
146-3364	6.4-.25	-4	JN	9/16-18	-4	43.0-1.69	27.0-1.06	46.0-1.81	4J-5477
146-3354	6.4-.25	-4	JN	11/16-16	-6	43.0-1.69	27.0-1.06	23.0-.91	6V-8397
146-3355	7.9-.31	-5	JN	11/16-16	-6	49.0-1.93	29.0-1.14	23.0-.91	6V-8397
146-3356	7.9-.31	-5	JN	11/16-16	-6	49.0-1.93	29.0-1.14	29.0-1.14	6V-8397
146-3357	9.5-.37	-6	JN	11/16-16	-6	60.0-2.36	33.0-1.30	23.0-.91	6V-8397
146-3358	9.5-.37	-6	JN	11/16-16	-6	60.0-2.36	33.0-1.30	31.0-1.22	6V-8397
146-3361	9.5-.37	-6	JN	11/16-16	-6	60.0-2.36	33.0-1.30	38.0-1.50	6V-8397
146-3365	9.5-.37	-6	JN	11/16-16	-6	60.0-2.36	33.0-1.30	54.0-2.13	6V-8397
146-3359	12.7-.50	-8	JN	13/16-16	-8	59.0-2.32	38.0-1.50	29.0-1.14	6V-8398
146-3363	12.7-.50	-8	JN	13/16-16	-8	59.0-2.32	38.0-1.50	35.0-1.38	6V-8398
146-3362	12.7-.50	-8	JN	13/16-16	-8	59.0-2.32	38.0-1.50	41.0-1.61	6V-8398
146-3366	12.7-.50	-8	JN	13/16-16	-8	59.0-2.32	38.0-1.50	64.0-2.52	6V-8398

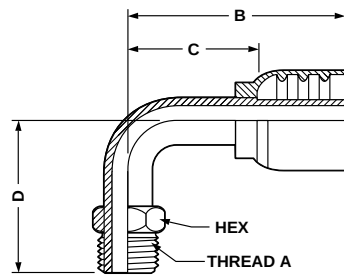
Thermoplastic Reduced Outside Diameter Hose Couplings - 2760

SAE 45° Inverted Male Swivel - Straight



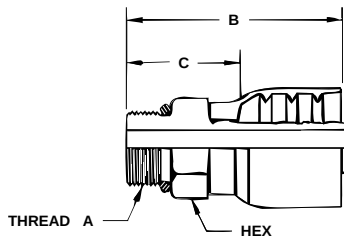
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3430	9.5-.37	-6	JN	5/8-18	-6	57.0-2.24	30.0-1.18
146-3431	12.7-.50	-8	JN	3/4-18	-8	58.0-2.28	37.0-1.46

SAE 45° Inverted Swivel Male - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3435	12.7-.50	-8	JN	3/4-18	-8	59.0-2.32	38.0-1.5	46.0-1.81

STOR Male O-Ring - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
146-3419	6.4-.25	-4	JN	7/16-20	-4	39.0-1.54	21.0-.83	3J-7354

4SP Four Spiral Hose - 5065

4SP Four Spiral Hose - 5065



Part Number	HOSE I.D. (mm - in)	HOSE O.D. (mm - in)	HOSE DASH SIZE	COUPLING SERIES	MIN. BURST PRESS (MPa - psi)	MAX. WORK PRESS (MPa - psi)	MIN. BEND RADIUS (mm - in)
529-7538	6.4 - .25	17.9 - .70	-4	DS4	180.0 - 26107	45.0 - 6527	150 - 5.91
529-7540	9.5 - .37	21.4 - .84	-6	DS4	178.0 - 25817	44.5 - 6454	180 - 7.09

Construction: Fabric reinforced, synthetic rubber tube; four piles of spirally-wrapped high tensile steel wire reinforcement, similar to ISO 3862 4SP, with an ultra-high molecular weight polyethylene (UHMW-PE) sheath for oil, weather, heat and abrasion resistant rubber outer cover.

Application: Extremely high-pressure service with petroleum and water base hydraulic fluids. MSHA approved cover.

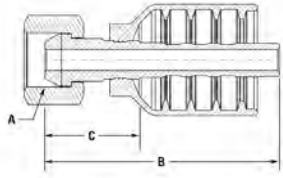
Temperature: -40°F to + 212°F (-40°C to +100°C)

Couplings: Crimp-on permanent, non-skive type, DS4 Series coupling. See Permanent Couplings (5065) section.

Note: Hose cover does not need to be removed before attaching couplings.

4SP Four Spiral Hose Couplings - 5065

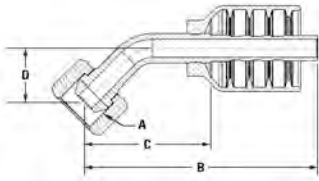
BSPP 60° Female Swivel - Straight (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
587-9001	6.4-.25	-4	DS4	1/4-19	-4	74.0-2.91	26.0-1.02

Note: Grayscale parts are MAO (Made As Order).

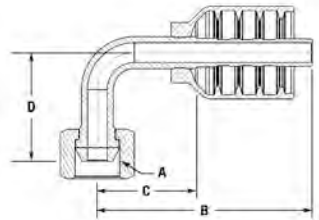
BSPP 60° Female Swivel - 45° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
587-9002	6.4-.25	-4	DS4	1/4-19	-4	94.0-3.70	46.0-1.81	17.5-.69

Note: Grayscale parts are MAO (Made As Order).

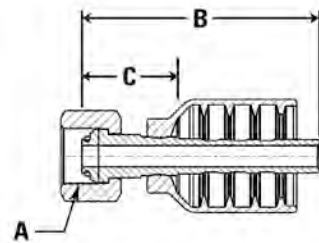
BSPP 60° Female Swivel - 90° Elbow (ISO 8434-6)



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
587-9003	6.4-.25	-4	DS4	1/4-19	-4	73.0-2.87	25.0-.98	30.0-1.18

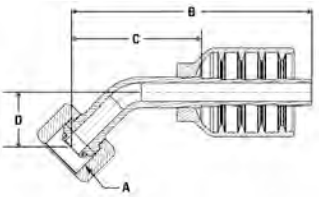
Note: Grayscale parts are MAO (Made As Order).

BSPP 60° O-Ring Female Swivel - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
601-9247	6.4-.25	-4	DS4	1/4-19	-4	74.0-2.91	26.0-1.02	600-9411

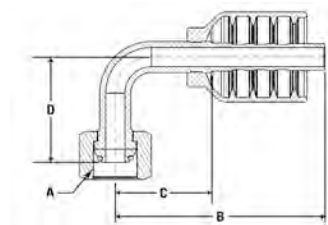
BSPP 60° O-Ring Female Swivel - 45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
601-9268	6.4-.25	-4	DS4	1/4-19	-4	84.0-3.31	37.0-1.46	17.5-.69	600-9411
606-1578	6.4-.25	-4	DS4	3/8-19	-6	84.0-3.31	37.0-1.46	17.5-.69	600-9412

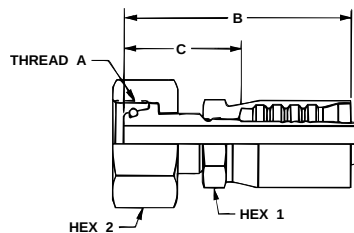
4SP Four Spiral Hose Couplings - 5065

BSPP 60° O-Ring Female Swivel - 90° Elbow



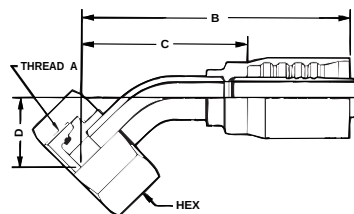
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
601-9284	6.4-.25	-4	DS4	1/4-19	-4	73.0-2.87	25.0-.98	30.0-1.18	600-9411
606-2097	6.4-.25	-4	DS4	3/8-19	-6	73.0-2.87	25.0-.98	31.0-1.22	600-9412

Metric DIN Heavy (S) 24° O-Ring Female Swivel - Straight



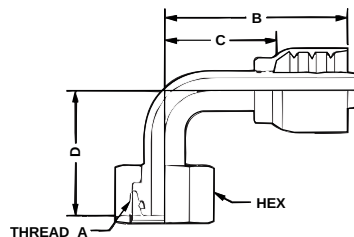
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6232	9.5-.37	-6	DS4	M20 x 1.5	64.0-2.52	27.0-1.06	3E-4297

Metric DIN Heavy (S) 24° O-Ring Female Swivel - 45° Elbow



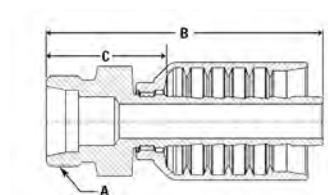
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
621-5532	9.5-.37	-6	DS4	M20 x 1.5	89.0-3.43	50.0-1.97	23.0-.91	3E-4297

Metric DIN Heavy (S) 24° O-Ring Female Swivel - 90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
621-5534	9.5-.37	-6	DS4	M20 x 1.5	75.0-2.95	38.0-1.50	43.0-1.69	3E-4297

Metric DIN Heavy (S) 24° Male - Straight



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
550-3731	6.4-.25	-4	DS4	M18 x 1.5	76.0-2.99	29.0-1.14
323-6238	6.4-.25	-4	DS4	M18 x 1.5	75.5-2.97	28.0-1.10
621-5527	9.5-.37	-6	DS4	M20 x 1.5	66.5-2.62	29.5-1.16

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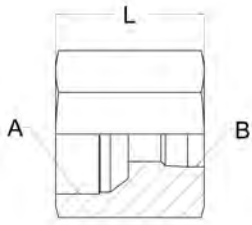
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Adapters

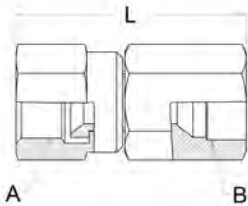
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37° JIC Port / NPTF Port



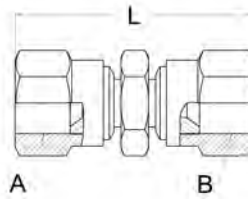
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
7U-6220	9/16-18	-6	1/8-27	-2	17.46	25	Steel
8C-3999	1 5/16-12	-16	3/4-14	-12	38.1	58	Steel
8C-7533	1 5/8-12	-20	1/2-14	-8	47.63	49	Steel

37° JIC Swivel Nut / 37° JIC Port



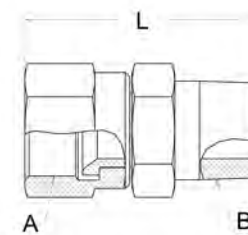
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
503-7460	9/16-18	-6	9/16-18	-6	17.46	40	Steel
8C-4065	1 5/16-12	-16	1 5/16-12	-16	38.1	80	Steel
8T-1486	1 5/8-12	-20	1 5/8-12	-20	50.8	80	Steel

37° JIC Swivel Nut / 37° JIC Swivel Nut



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
207-1871	7/16-20	-4	7/16-20	-4	14.29	20.3	Steel

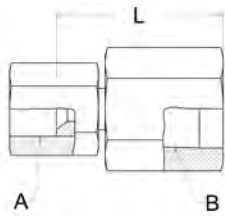
37° JIC Swivel Nut / Male NPTF



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
156-7530	7/16-20	-4	1/4-18	-4	14.29	37.1	SST
139-5872	7/16-20	-4	1/4-18	-4	14.29	37.1	Steel
140-9768	9/16-18	-6	1/8-27	-2	17.46	28	Steel
135-8279	9/16-18	-6	3/8-18	-6	19.05	40.4	Steel
6U-0464	3/4-16	-8	3/8-18	-6	22	47	Steel
340-2435	3/4-16	-8	1/2-14	-8	22.22	48.8	Steel
385-5788	7/8-14	-10	1/2-14	-8	25.4	52	Steel
148-0209	1 1/16-12	-12	3/4-14	-12	31.75	54.61	Steel
249-7676	1 5/8-12	-20	1 1/4-11.5	-20	50.8	70.1	Steel
213-3567	1 7/8-12	-24	1 1/2-11.5	-24		77	Steel

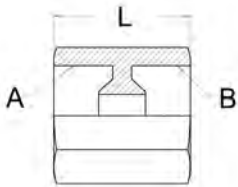
Straight Adapters

37° JIC Swivel Nut / NPTF Port



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
145-8833	7/16-20	-4	1/4-18	-4	19.05	27.4	Steel
9J-6190	9/16-18	-6	3/8-18	-6	22.22	41.15	Steel
5P-8018	3/4-16	-8	3/8-18	-6	22.22	42.2	Steel
6V-2481	3/4-16	-8	1/2-14	-8	28.58	48	Steel
8C-8552	7/8-14	-10	1/2-14	-8	25.4	37.3	Steel
5T-2119	1 1/16-12	-12	1/2-14	-8	26.99	37.85	Steel
8C-8553	1 1/16-12	-12	3/4-14	-12	34.92	52.1	Steel
5P-2244	1 5/16-12	-16	1-11.5	-16	38.1	67.3	Steel

45° Inverted Flare-SAE J512 Port / 45° Inverted Flare-SAE J512



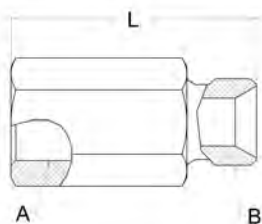
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
9S-7584	5/16-28	-2	5/16-28	-2	10.32	15	Brass
5K-9242	7/16-24	-4	7/16-24	-4	13.49	15.7	Brass
4H-6142	1/2-20	-5	1/2-20	-5	15.09	17.8	Brass
7K-1456	5/8-18	-6	5/8-18	-6	19.05	20.3	Brass
6K-8077	3/4-18	-8	3/4-18	-8	23	23.1	Brass
5K-9249	7/8-18	-10	7/8-18	-10	26.99	24.6	Brass

BSPP Flat Face-ISO 1179 Port / Male 24° Cone-ISO 8434-1



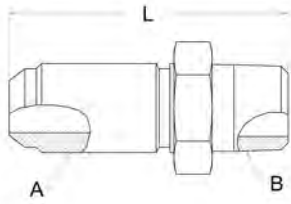
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
482-1480	1/2-14	-8	M14x1.5	27	36	Steel
397-2600	3/4-14	-12	M14x1.5	36	52.3	Steel

BSPP Flat Face-ISO 1179 Port / Male 60° Cone-BS5200



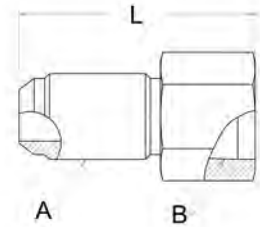
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
305-3383	1/4-19	-4	1/4-19	-4	19	47	Steel

Bulkhead Male 37° JIC / Male NPTF



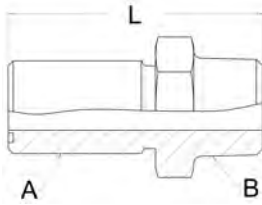
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
143-9199	7/16-20	-4	1/4-18	-4	17.46	52.6	Steel
338-1539	3/4-16	-8	1/2-14	-8	25.4	65	Steel
6V-2409	7/8-14	-10	1/2-14	-8	28.58	69.6	Steel

Bulkhead Male 37° JIC / NPTF Port



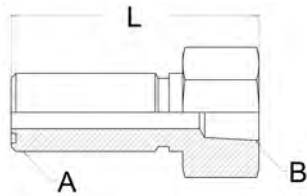
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
5P-6941	7/16-20	-4	1/8-27	-2	17.46	46.7	Steel
5P-4653	9/16-18	-6	1/4-18	-4	20.64	52.32	Steel
8T-3569	3/4-16	-8	3/8-18	-6	25.4	61.3	Steel
6V-2376	3/4-16	-8	1/2-14	-8	28.58	65.3	Steel
2U-0708	1 1/16-12	-12	3/4-14	-12	34.9	74.2	Steel
304-8014	1 5/16-12	-16	1-11.5	-16	41.28	71.9	Steel

Bulkhead Male ORFS / Male NPTF



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
132-5091	11/16-16	-6	3/8-18	-6	25.4	58	Steel
304-8001	13/16-16	-8	1/2-14	-8	28.58	64.5	Steel
323-9993	1-14	-10	3/4-14	-12	33.34	70	Steel
347-4411	1 11/16-12	-20	1/2-14	-8	50.8	71.5	Steel

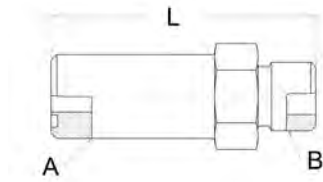
Bulkhead Male ORFS / NPTF Port



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
304-8043	9/16-18	-4	1/8-27	-2	20.64	45.5	Steel
8C-6915	11/16-16	-6	1/8-27	-2	25.4	48.2	Steel
156-6129	13/16-16	-8	1/8-27	-2	22.22	42	Steel
365-0588	13/16-16	-8	1/4-18	-4	28.58	50.5	Steel

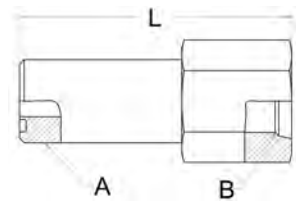
Straight Adapters

Bulkhead ORFS / Male STOR



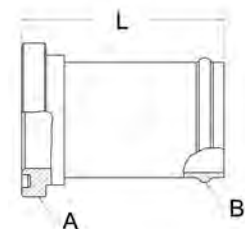
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
329-5462	9/16-18	-4	3/8-24	-3	20.64	38.4	Brass
337-8783	9/16-18	-4	3/8-24	-3	20.64	38.4	SST
442-0493	9/16-18	-4	7/16-20	-4	20.6	55	Steel
089-7702	11/16-16	-6	9/16-18	-6	19.05	55	Steel
281-5878	11/16-16	-6	3/4-16	-8	22.22	57.8	Steel
267-4159	11/16-16	-6	3/4-16	-8	28.58	53	Steel
152-6942	13/16-16	-8	3/4-16	-8	28.58	59.7	Steel
163-7050	13/16-16	-8	7/8-14	-10	26.99	55	Steel
160-5083	1-14	-10	3/4-16	-8	33.34	70.6	Steel
163-9964	1-14	-10	7/8-14	-10	32	67.1	Steel
144-7767	1-14	-10	7/8-14	-10	33.34	58	Steel
268-1642	1-14	-10	1 1/16-12	-12	33.34	76.3	Steel
332-8545	1 3/16-12	-12	7/8-14	-10	38.1	71.9	Steel
235-3583	1 3/16-12	-12	1 1/16-12	-12	38.1	73.4	Steel
108-3872	1 3/16-12	-12	1 5/16-12	-16	44.45	74.5	Steel
229-8638	1 7/16-12	-16	1 1/16-12	-12	44.45	83.5	Steel
107-6709	1 7/16-12	-16	1 5/16-12	-16	44.45	75	Steel
386-6205	1 11/16-12	-20	1 5/8-12	-20	50.8	82.8	Steel

Bulkhead ORFS / STOR Port



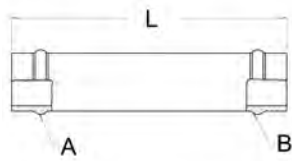
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
459-0671	11/16-16	-6	9/16-18	-6	22.22	57	SST
9X-2608	9/16-18	-4	3/8-24	-3	20.64	45	Steel
7X-7945	9/16-18	-4	9/16-18	-6	19.05	57	Steel
8T-9358	11/16-16	-6	9/16-18	-6	22.22	57	Steel
8C-8835	11/16-16	-6	3/4-16	-8	25.4	65	Steel
106-5074	1 3/16-12	-12	3/4-16	-8	38	72.5	Steel
421-6177	1 3/16-12	-12	1 1/16-12	-12	38.1	72	Steel

Code 61 Flange Head / Hose Bead



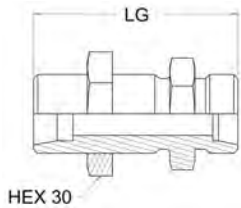
Part Number	Thread Size (A)	Hose ID (mm) (B)	Dash Size (B)	HEX Size	Length (L)	Material
193-8308	Dash 20	38.10	-24	—	66.7	Steel

Hose Bead / Hose Bead



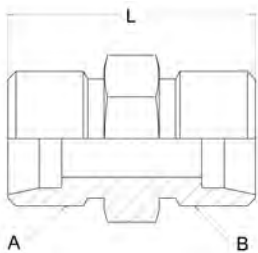
Part Number	Hose ID (mm) (A)	Dash Size (A)	Hose ID (mm)(B)	Dash Size (A)	HEX Size	Length (L)	Material
393-7327	4.76	-3	7.94	-5	—	38	Brass
397-1010	9.52	-6	11.1		12.7	62.23	Brass
421-6178	9.52	-6	12.70	-8	19.05	82.4	Brass
379-0633	9.52	-6	5.56		—	34	Brass
396-0409	12.70	-8	12.70	-8	—	60.5	Steel
145-7125	15.88	-10	15.88	-10	—	50.8	Steel
5E-6102	15.88	-10	15.88	-10	—	60	Steel
6P-8855	15.88	-10	15.88	-10	—	76.2	Steel
254-3859	15.88	-10	9.52	-6	—	78.7	Steel
232-0493	25.40	-16	15.88	-10	—	104	Steel
2Q-0392	38.10	-24	25.40	-16	—	102.5	Steel
260-9239	50.80	-32	50.80	-32	—	127	Steel
369-6865	6.35	-4	12.70	-8	17.5	86.4	Steel
421-6188	9.52	-6	9.52	-6	—	60	Steel

Male 24° Cone-ISO 8434-1 / Male 24° Cone-ISO 8434-1



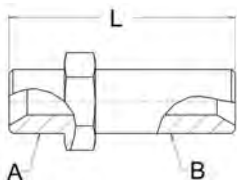
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
230-0822	M22x1.5	M22x1.5	30	57	Steel

Male 24° Flareless-SAE J514 / Male 24° Flareless-SAE J514



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
5P-6312	5/16-24	-2	5/16-24	-2	12.7	25.9	Steel

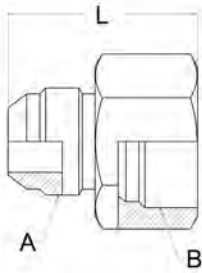
Male 30° Flare-JIS / Bulkhead Male 30° Flare-JIS



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
139-6516	3/8-19	-6	3/8-19	-6	22	59	Steel

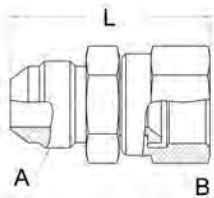
Straight Adapters

Male 37° JIC / 37° JIC Port



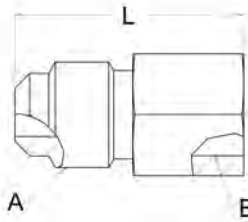
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
5P-5009	7/16-20	-4	1/2-20	-5	15.88	31	Steel
5P-5008	7/16-20	-4	9/16-18	-6	17.46	32.4	Steel
5P-5007	7/16-20	-4	3/4-16	-8	22.22	38	Steel
5P-5006	7/16-20	-4	7/8-14	-10	25.4	50.2	Steel
5P-5005	7/16-20	-4	1 1/16-12	-12	34.9	44.5	Steel
5P-5004	7/16-20	-4	1 3/16-12	-14	34.92	56.4	Steel
5P-5003	7/16-20	-4	1 5/16-12	-16	38.1	57.9	Steel
488-4813	9/16-18	-6	7/16-20	-4	15.88	29.5	Steel
469-7700	9/16-18	-6	1 5/16-12	-16	34.9	36.8	Steel
459-0732	3/4-16	-8	9/16-18	-6	20.64	101.6	Steel
090-2782	3/4-16	-8	9/16-18	-6	20.64	29.5	Steel
5P-8228	3/4-16	-8	7/8-14	-10	25.4	35.8	Steel
450-2063	3/4-16	-8	1 5/16-12	-16	38.1	49.3	Steel
6V-9012	7/8-14	-10	3/4-16	-8	28.58	46	Steel
8T-2270	7/8-14	-10	7/8-14	-10	25.4	90	Steel
8C-4434	7/8-14	-10	7/8-14	-10		33.7	Steel
5P-1945	7/8-14	-10	1 1/16-12	-12	31.75	45.7	Steel
5P-9789	1 1/16-12	-12	3/4-16	-8	28.58	40	Steel
494-1459	1 1/16-12	-12	7/8-14	-10	28.58	37.85	Steel
470-4025	1 1/16-12	-12	1 5/16-12	-16	34.9	54.6	Steel
6V-7484	1 3/16-12	-14	1 5/16-12	-16	41.28	48.5	Steel
439-1897	1 5/16-12	-16	1 1/16-12	-12	38.1	58.9	Steel
489-1532	1 5/16-12	-16	1 7/8-12	-24	57.2	53.3	Steel
8C-6713	1 5/8-12	-20	1 5/16-12	-16	42.86	43.4	Steel
5R-8782	1 5/8-12	-20	1 7/8-12	-24		64.77	Steel

Male 37° JIC / 37° JIC Swivel Nut



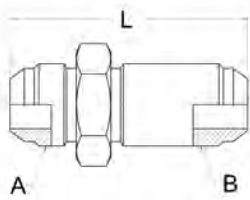
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
426-4163	9/16-18	-6	3/4-16	-8	22.23	25.4	Steel
367-6009	3/4-16	-8	3/4-16	-8		44	Steel
7X-7686	1 7/8-12	-24	1 5/16-12	-16	50.8	71.63	Steel

Male 37° JIC / BSPP STOR-JIS B2351 Port



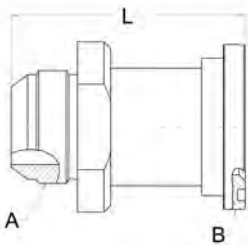
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
203-0436	7/16-20	-4	1/8-28	-2	13	24	Brass

Male 37° JIC / Bulkhead Male 37° JIC



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
2P-1276	7/16-20	-4	7/16-20	-4	17.46	52.6	Steel
7J-6419	1/2-20	-5	1/2-20	-5	19.05	52.6	Steel
2P-1278	9/16-18	-6	9/16-18	-6	20.64	55.4	Steel
137-0868	9/16-18	-6	9/16-18	-6	20.6	63	Steel
2P-1281	3/4-16	-8	3/4-16	-8	25.4	62	Steel
2P-1282	7/8-14	-10	7/8-14	-10	28.58	69.6	Steel
2P-1283	1 1/16-12	-12	1 1/16-12	-12	34.92	78.5	Steel
506-2015	1 1/16-12	-12	1 1/16-12	-12	34.92	260.4	Steel
2P-1284	1 3/16-12	-14	1 3/16-12	-14	38.1	79.2	Steel
2P-1285	1 5/16-12	-16	1 5/16-12	-16	41.28	79.8	Steel
506-2014	1 5/16-12	-16	1 5/16-12	-16	34.93	260.4	Steel
439-1964	1 5/8-12	-20	1 5/16-12	-16	47.63	82.8	Steel
238-2579	1 5/8-12	-20	1 5/8-12	-20	47.2	84.1	Steel

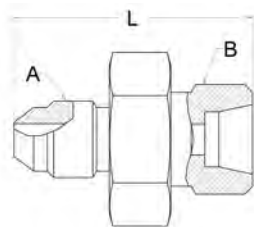
Male 37° JIC / Code 61 Head Flange



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
503-7462	1 5/8-12	-20	Dash 24	53.98	85.7	Steel
107-2660	1 7/8-12	-24	Dash 24	50.8	68.8	Steel

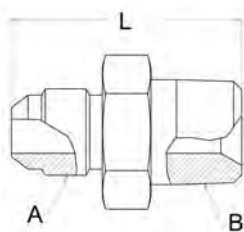
Straight Adapters

Male 37° JIC / Male 24° Cone-ISO 8434-1



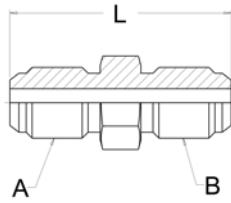
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
450-2058	7/16-20	-4	M16x1.5	22	35	Steel
6V-0472	9/16-18	-6	M14x1.5	19	31	Steel
6V-4373	3/4-16	-8	M16x1.5	—	34.54	Steel
6V-4374	3/4-16	-8	M18x1.5	—	34.54	Steel
6V-4375	7/8-14	-10	M22x1.5	—	38.61	Steel
6V-4381	7/8-14	-10	M22x1.5	—	40.64	Steel
6V-4376	1 1/16-12	-12	M26x1.5	—	42.93	Steel
6V-4377	1 5/16-12	-16	M30x2	—	46.04	Steel
6V-4383	1 5/16-12	-16	M30x2	—	48.03	Steel
6V-4378	1 5/8-12	-20	M36x2	—	47.62	Steel

Male 37° JIC / Male 30° Flare-JIS



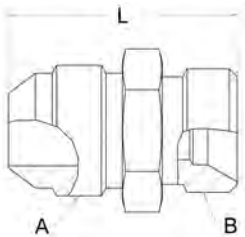
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
8T-2121	9/16-18	-6	3/8-19	-6	22	38	Steel
8T-2122	3/4-16	-8	1/2-14	-8	27	46	Steel
8T-2218	7/8-14	-10	5/8-14	-10	31.75	48.5	Steel
8T-2123	1 1/16-12	-12	3/4-14	-12	36	55	Steel
8T-2124	1 5/16-12	-16	1-11	-16	41	60	Steel

Male 37° JIC / Male 37° JIC



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
364-2513	9/16-18	-6	9/16-18	-6	20.64	55.4	SST
4R-8697	3/4-16	-8	3/4-16	-8	20.6	41.1	SST
3J-7355	7/16-20	-4	7/16-20	-4	12.7	34.8	Steel
281-5842	7/16-20	-4	7/16-20	-4	12.7	34.8	SST
030-7984	7/16-20	-4	9/16-18	-6	15.88	35.5	Steel
061-6740	7/16-20	-4	3/4-16	-8	25.4	38.3	Steel
7J-6418	1/2-20	-5	1/2-20	-5	19.05	34.8	Steel
7K-4129	9/16-18	-6	9/16-18	-6	15.88	35.8	Steel
053-3153	9/16-18	-6	7/8-14	-10	28.58	42.7	Steel
061-6737	3/4-16	-8	9/16-18	-6	25.4	38.6	Steel
090-6372	3/4-16	-8	3/4-16	-8	—	100	Steel
3R-2704	3/4-16	-8	3/4-16	-8	20.6	41.1	Steel
030-7982	3/4-16	-8	7/8-14	-10	23.82	45.3	Steel
061-8248	7/8-14	-10	7/8-14	-10	23.8	47.8	Steel
030-7983	7/8-14	-10	1 1/16-12	-12	34.92	52.2	Steel
3R-2705	1 1/16-12	-12	3/4-16	-8	28.58	49.6	Steel
9S-7739	1 1/16-12	-12	1 1/16-12	-12	28.58	54.9	Steel
2P-2206	1 3/16-12	-14	1 3/16-12	-14	—	56.1	Steel
061-9787	1 5/16-12	-16	3/4-16	-8	41.28	50.7	Steel
9S-7754	1 5/16-12	-16	1 5/16-12	-16	34.9	57.2	Steel
061-6739	1 5/16-12	-16	1 5/8-12	-20	47.63	60.4	Steel
068-4152	1 5/8-12	-20	1 5/8-12	-20	42.86	61.7	Steel
7X-7904	1 7/8-12	-24	1 7/8-12	-24	50.8	69.8	Steel

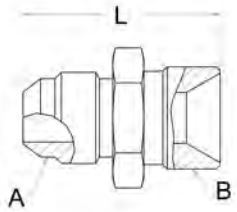
Male 37° JIC / Male 60° Cone JIS Metric Thread



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
6V-4388	3/4-16	-8	M18x1.5	—	33.53	Steel
6V-4389	7/8-14	-10	M22x1.5	—	38.61	Steel
6V-4391	1 5/16-12	-16	M30x1.5	—	44.04	Steel

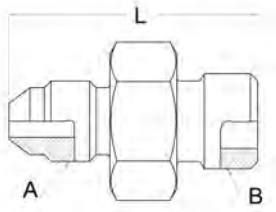
Straight Adapters

Male 37° JIC / Male 60° Cone-ISO 7631



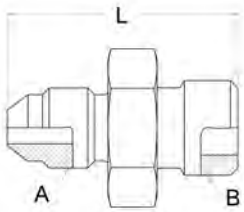
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
6V-4387	9/16-18	-6	M16x1.5	—	30.96	Steel
6V-4390	1 1/16-12	-12	M26x1.5	—	41.28	Steel

Male 37° JIC / Male BSPP Flat Face-ISO 1179



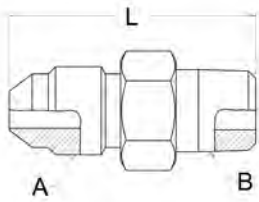
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
525-1725	7/16-20	-4	1/4-19	-4		32	Brass
468-7184	7/16-20	-4	1/8-28	-2	17	28	Steel
6V-3522	7/16-20	-4	1/4-19	-4	19.05	35	Steel
330-9736	7/16-20	-4	1/4-19	-4	19.05	31.4	Steel
451-0441	7/16-20	-4	3/8-19	-6	22	33.2	Steel
171-9653	9/16-18	-6	1/4-19	-4	19.05	35.05	Steel
6V-3523	9/16-18	-6	3/8-19	-6		36.5	Steel
426-4169	9/16-18	-6	1/2-14	-8	30	38.6	Steel
426-4171	9/16-18	-6	3/4-14	-12	36	40	Steel
6V-3524	3/4-16	-8	1/2-14	-8		41	Steel
188-1032	3/4-16	-8	3/4-14	-12	36	42.2	Steel
6V-3526	7/8-14	-10	1/2-14	-8		44	Steel
224-1376	1 1/16-12	-12	3/4-14	-12	36	47.5	Steel
385-5781	1 1/16-12	-12	1-11	-16	46	53.4	Steel
426-4173	1 5/16-12	-16	1 1/4-11	-20	50	55.1	Steel

Male 37° JIC / Male BSPP STOR-JIS B2351



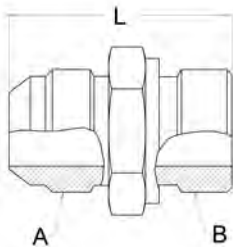
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
252-9332	1 1/16-12	-12	3/4-14	-12	31.75	51	Steel
203-5563	7/16-20	-4	1/4-19	-4	19	32	SST
6V-3521	7/16-20	-4	1/8-28	-2	-	35	Steel
281-5960	1/2-20	-5	1/4-19	-4	19	33	Steel
365-5040	9/16-18	-6	1/4-19	-4	19	32	Steel
6W-8220	9/16-18	-6	3/8-19	-6	22.2	33	Steel
6V-3525	3/4-16	-8	3/8-19	-6	-	39	Steel
174-0030	7/8-14	-10	3/8-19	-6	-	40.4	Steel
6V-3528	7/8-14	-10	3/4-14	-12	-	47.5	Steel
6V-3527	1 1/16-12	-12	3/4-14	-12	-	50.5	Steel
6V-3529	1 5/16-12	-16	1-11	-16	-	53	Steel

Male 37° JIC / Male BSPT-ISO 7-1



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
211-3352	9/16-18	-6	3/8-19	-6	19	37	Steel
241-0384	3/8-24	-3	3/4-14	-12	34.92	43.8	Steel
474-2605	7/16-20	-4	1/8-28	-2	13	31	Steel
245-7692	7/16-20	-4	1/4-19	-4	19.05	32	Steel
343-4581	9/16-18	-6	1/4-19	-4	17	36.3	Steel
3Q-1249	3/4-16	-8	1/2-14	-8	22	45.5	Steel
241-0386	3/4-16	-8	3/4-14	-12	34.92	46.4	Steel
342-9073	7/8-14	-10	3/4-14	-12	27	49.5	Steel
241-0398	1 1/16-12	-12	1-11	-16	34.92	57.2	Steel

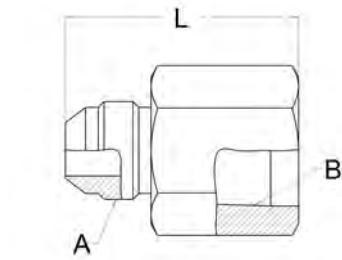
Male 37° JIC / Male Metric Flat Face-ISO 9974



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
287-7272	7/16-20	-4	M10x1	14	30	Steel
296-9364	7/16-20	-4	M14x1.5	19	34	Steel
304-8042	7/16-20	-4	M14x1.5	19	35.2	Steel
377-9635	3/4-16	-8	M18x1.5	24	39	Steel
470-9971	3/4-16	-8	M18x1.5		37.1	Steel
492-6784	7/8-14	-10	M18x1.5	27	41.7	Steel
377-9637	1 1/16-12	-12	M27x2	32	49	Steel

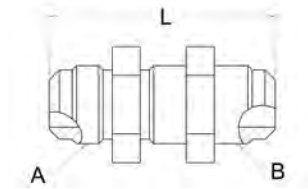
Straight Adapters

Male 37° JIC / NPTF Port



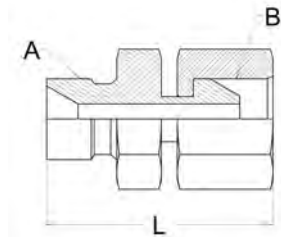
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
222-2208	7/16-20	-4	1/4-18	-4	19.05	33.3	Brass
126-7331	9/16-18	-6	1/4-18	-4	19.05	35.6	Brass
194-3987	7/16-20	-4	1/4-18	-4	17.46	53.6	SST
480-3025	3/4-16	-8	1/2-14	-8	28.58	45.5	SST
5D-9231	7/16-20	-4	1/8-27	-2	14.29	30.2	Steel
4U-1697	7/16-20	-4	1/8-27	-2	—	50.5	Steel
464-3341	7/16-20	-4	1/2-14	-8	28.58	42.9	Steel
7K-3762	1/2-20	-5	1/8-27	-2	14.29	29.7	Steel
5P-8869	9/16-18	-6	1/4-18	-4	19.05	35.6	Steel
053-0088	9/16-18	-6	3/8-18	-6	22.22	37.1	Steel
061-9413	3/4-16	-8	3/8-18	-6	22.2	39.6	Steel
5U-8370	3/4-16	-8	1/2-14	-8	28.58	45.6	Steel
6V-1846	7/8-14	-10	1/2-14	-8	28.58	48	Steel
061-8246	1 1/16-12	-12	3/4-14	-12	34.9	52.3	Steel
173-0880	1 1/16-12	-12	1-11.5	-16	41.28	58.4	Steel
432-2045	1 3/16-12	-14	1/4-18	-4	—	42.8	Steel
001-7041	1 3/16-12	-14	3/4-14	-12	34.9	52.3	Steel
061-8962	1 5/16-12	-16	1-11.5	-16	41.28	59.7	Steel
7X-7905	1 7/8-12	-24	1 1/2-11.5	-24	60.32	66.5	Steel

Male 45° Flare-SAE J512 / Male 45° Flare-SAE J512



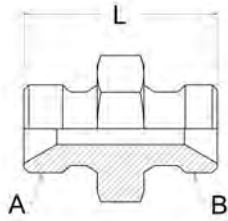
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
1U-9886	7/16-20	-4	7/16-20	-4	11.11	30	Brass
3B-9395	7/16-20	-4	7/16-20	-4	11.11	30.16	Brass
253-0412	1 1/16-12	-12	1 1/16-12	-12	34.9	78.5	Brass
7T-6083	5/8-18	-6	5/8-18	-6	22.23	51	Steel

Male 60° Cone-BS5200 / 60° Cone-BS5200 Swivel Nut



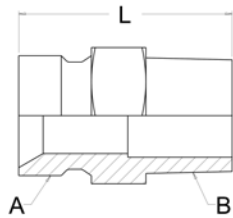
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
287-1876	1/4-19	-4	1/4-19	-4	19	35.5	Steel
463-4908	1/4-19	-4	1/4-19	-4	19	35	Steel

Male 60° Cone-BS5200 / Male 60° Cone-BS5200



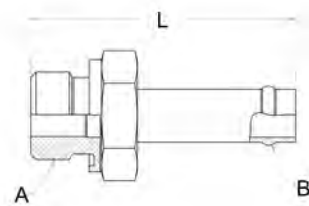
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
194-7229	3/8-19	-6	3/8-19	-6	23.81	32	Steel
465-9014	1/2-14	-8	1/4-19	-4	27	33	Steel
151-9227	1/2-14	-8	1/2-14	-8	27	36	Steel
511-5620	1/2-14	-8	1/2-14	-8	27	42	Steel
329-5463	1 1/2-11	-24	1 1/4-11	-20	55	54	Steel

Male 60° Cone-BS5200 / Male BSPT-ISO 7-1



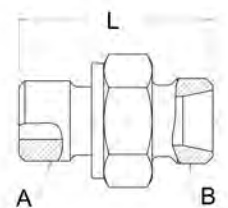
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
213-7483	1/4-19	-4	1/4-19	-4	—	34.5	Steel
262-0502	1/4-19	-4	1/4-19	-4	19	32.2	Steel
362-1436	1/2-14	-8	1/4-19	-4	25	51.8	Steel
379-2201	1/2-14	-8	3/8-19	-6	27	64	Steel
379-2202	1/2-14	-8	3/4-14	-12	27	45	Steel
143-6955	3/4-14	-12	3/4-14	-12	30	47	Steel
143-6957	3/4-14	-12	1-11	-16	36	51.9	Steel

Male BSPP Flat Face-ISO 1179 / Hose Bead



Part Number	Thread Size (A)	Dash Size (A)	Hose ID (mm) (B)	Dash Size (B)	HEX Size	Length (L)	Material
233-7888	3/8-19	-6	12.70	-8	22.2	58.7	Brass
504-5535	3/8-19	-6	10.32		22	42	Steel
426-4129	1/2-14	-8	12.70	-8	27	63.6	Steel

Male BSPP Flat Face-ISO 1179 / Male 24° Cone-ISO 8434-1



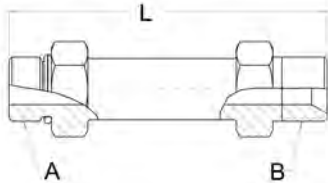
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
382-6279	1/4-19	-4	M14x1.5	19	32	Steel
373-1776	1/4-19	-4	M16x1.5		30.5	Steel
501-8720	1/4-19	-4	M16x1.5	19	34	Steel
216-2309	1/4-19	-4	M16x1.5	19	30	Steel
317-8510	1/4-19	-4	M16x1.5	19	34	Steel
382-6296	3/8-19	-6	M12x1.5	22	30.5	Steel
221-8496	3/8-19	-6	M20x1.5	22	36	Steel
373-5753	1/2-14	-8	M18x1.5	27	59	Steel
386-0623	1/2-14	-8	M18x1.5	27	34	Steel

Straight Adapters

Male BSPP Flat Face-ISO 1179 / Male 24° Cone-ISO 8434-1 (Cont'd.)

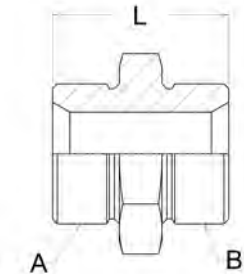
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
367-5980	3/4-14	-12	M22x1.5	36	38.5	Steel
499-8642	3/4-14	-12	M30x2	32	40	Steel

Male BSPP Flat Face-ISO 1179 / Male 60° Cone-JIS B8363



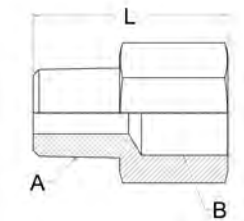
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
143-0555	1/2-14	-8	1/2-14	-8	27	105	Steel

Male BSPP Flat Face-ISO 1179 / Male BSPP Flat Face-ISO 1179



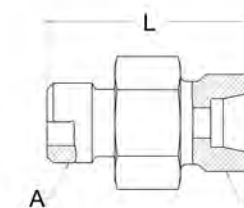
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
274-6663	1/4-19	-4	1/4-19	-4	—	30	Steel
147-8508	1 1/4-11	-20	1 1/4-11	-20	52	52.8	Steel

Male BSPP STOR-JIS B2351 / BSPP STOR-JIS B2351 Port



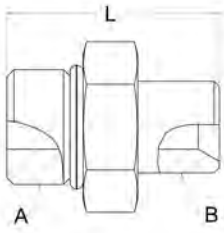
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
177-3466	1/8-28	-2	1/8-28	-2	14	80	Brass
177-3475	1/8-28	-2	1/8-28	-2	14	22.5	Brass
168-4043	1/4-19	-4	1/4-19	-4	19	77	Brass
258-5153	1/4-19	-4	1/8-28	-2	17	13	Steel
384-2368	3/8-19	-6	3/8-19	-6	—	32	Steel
159-5805	1/2-14	-8	3/8-19	-6	27	36	Steel

Male BSPP STOR-JIS B2351 / Male 24° Cone-ISO 8434-1



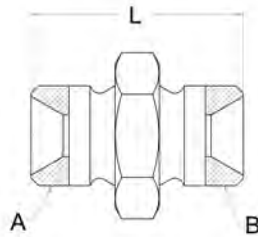
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
415-4641	3/8-19	-6	M18x1.5	22	49	Steel
144-1055	1/2-14	-8	M20x1.5	27	39	Steel

Male BSPP STOR-JIS B2351 / Male 60° Cone-BS5200



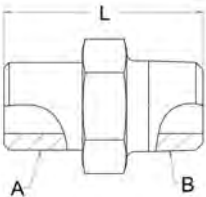
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
140-4802	1/2-14	-8	3/8-19	-6	27	39	Steel

Male BSPP STOR-JIS B2351 / Male BSPP STOR-JIS B2351



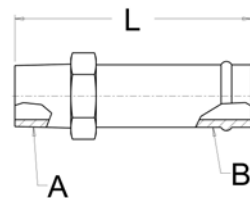
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
081-4340	3/8-19	-6	3/8-19	-6	—	28	Brass
147-2440	3/4-14	-12	1/2-14	-8	27	39	Brass
147-2443	3/4-14	-12	3/4-14	-12	27	42.5	Brass
268-6154	1/4-19	-4	1/4-19	-4	19	28	Steel
268-6156	3/8-19	-6	1/4-19	-4	22	34.5	Steel
268-6155	3/8-19	-6	3/8-19	-6	22	34	Steel
259-8856	1/2-14	-8	1/2-14	-8	22	28	Steel
287-7440	1/2-14	-8	3/4-14	-12	—	—	Steel
344-3894	3/4-14	-12	1/2-14	-8	—	—	Steel
8U-6275	3/4-14	-12	3/4-14	-12	32	40	Steel
344-3893	1-11	-16	3/4-14	-12	—	—	Steel

Male BSPP STOR-JIS B2351 / Male BSPT-ISO 7-1



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
196-0285	3/8-19	-6	3/8-19	-6	—	—	Steel

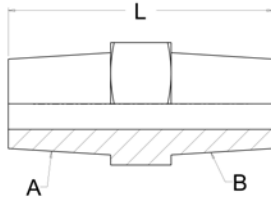
Male BSPT-ISO 7-1 / Hose Bead



Part Number	Thread Size (A)	Dash Size (A)	Hose ID (mm) (B)	Dash Size (A)	HEX Size	Length (L)	Material
230-5123	1/8-28	-2	25	—	27	41	Steel
462-4090	1/4-19	-4	15.88	-10	19.05	59.7	Steel
268-1589	3/8-19	-6	15.88	-10	19	60	Steel
462-4089	1/2-14	-8	15.88	-10	23.8	65.1	Steel
455-4746	3/4-14	-12	16	—	27	44	Steel
313-2868	3/4-14	-12	31.75	-20	34.93	71	Steel

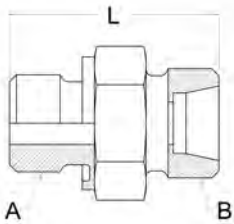
Straight Adapters

Male BSPT-ISO 7-1 / Male BSPT-ISO 7-1



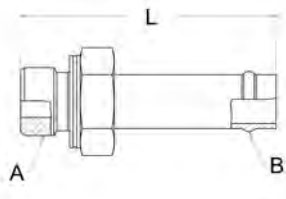
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
211-4529	3/8-19	-6	3/8-19	-6	17	30	Brass
203-0432	1/2-14	-8	3/8-19	-6	26	36	Brass
243-0116	1/2-14	-8	1/2-14	-8	22	40	Brass
262-0526	1/4-19	-4	1/4-19	-4	17	36.8	Steel
262-0524	3/8-19	-6	1/4-19	-4	19	36.8	Steel
126-4709	3/8-19	-6	3/8-19	-6	19	36	Steel
260-9249	1/2-14	-8	1/4-19	-4	24	43.2	Steel
252-7243	1/2-14	-8	1/2-14	-8	24	48	Steel
154-2925	3/4-14	-12	1-11	-16	42	53.2	Steel
219-1090	1-11	-16	3/4-14	-12	35.5	54	Steel
143-4449	1-11	-16	1-11	-16	36	59.4	Steel
166-4994	1-11	-16	1-11	-16	34.9	59.4	Steel

Male Metric Flat Face-ISO 9974 / Male 24° Cone-ISO 8434-1



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
499-8646	M16x1.5	M18x1.5	22	34.5	Steel
487-3171	M18x1.5	M20x1.5	24	36.5	Steel
202-5373	M22x1.5	M30x2	32	38	Steel
202-6305	M26x1.5	M30x2	32	40	Steel
487-4923	M48x2	M52x2	55	64	Steel

Male Metric STOR-ISO 6149 / Hose Bead

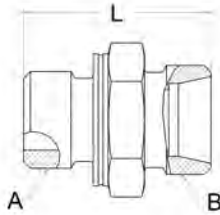


Part Number	Thread Size (A)	Hose ID (mm) (B)	Dash Size (B)	HEX Size	Length (L)	Material
185-1047	M12x1.5	12.70	-8	17.4	59.2	Brass
321-8626	M12x1.5	9.52	-6	17	38.1	Brass
287-8089	M16x1.5	12.70	-8	22	55	Brass
478-5155	M16x1.5	15.90	-10	—	38.9	Brass
321-8627	M16x1.5	9.52	-6	22	40.39	Brass
505-8510	M22x1.5	9.52	-6	17.46	41.7	Brass
185-1044	M30x2	25.40	-16	38.1	66.5	Brass
453-6510	M12x1.5	10.32	—	—	38.1	SST
453-6997	M12x1.5	10.32	—	13	44.1	SST
207-4168	M14x1.5	7.94	-5	—	64.4	Steel
426-4124	M16x1.5	12.70	-8	22	60	Steel
439-1816	M16x1.5	15.88	-10	22	60	Steel

Male Metric STOR-ISO 6149 / Hose Bead (Cont'd.)

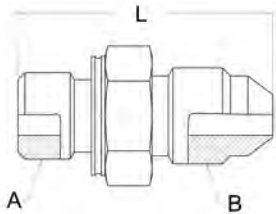
Part Number	Thread Size (A)	Hose ID (mm) (B)	Dash Size (B)	HEX Size	Length (L)	Material
135-2221	M16x1.5	15.88	-10	21	70	Steel
439-1984	M18x1.5	15.88	-10	26.99	63.6	Steel

Male Metric STOR-ISO 6149 / Male 24° Cone-ISO 8434-1



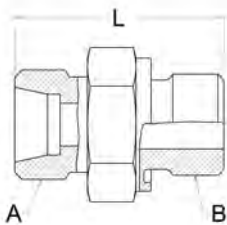
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
355-7416	M12x1.5	M14x1.5	17	28	Steel
385-5785	M16x1.5	M18x1.5	22	31	Steel

Male Metric STOR-ISO 6149 / Male 37° Flare-SAE J514



Part Number	Thread Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
210-7672	M27x2	1 1/16-12	-12	32	50	SST
439-1947	M10x1	7/16-20	-4	14	29.5	Steel
9Y-7443	M10x1	7/16-20	-4	12.7	32.3	Steel
3E-7437	M12x1.5	7/16-20	-4	14	31	Steel
516-4481	M14x1.5	7/16-20	-4	19	31.7	Steel
493-0323	M16x1.5	7/8-14	-10	27	46	Steel
493-0322	M22x1.5	7/8-14	-10	27.7	46	Steel
9Y-7441	M8x1	7/16-20	-4	12.7	56.42	Steel
9Y-7442	M8x1	7/16-20	-4	12.7	32.42	Steel

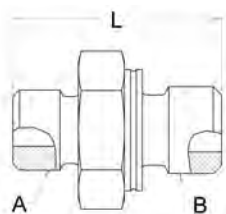
Male Metric STOR-ISO 6149 / Male BSPP STOR-JIS B2351



Part Number	Thread Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
372-1092	M16x1.5	1/4-19	-4	19	30.5	Brass
440-0640	M14x1.5	3/8-19	-6	14	24.5	Steel
440-0637	M18x1.5	3/8-19	-6	19	31.8	Steel
381-2820	M18x1.5	3/8-19	-6	22	36.8	Steel

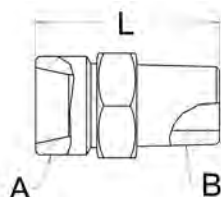
Straight Adapters

Male Metric STOR-ISO 6149 / Male Metric STOR-ISO 6149



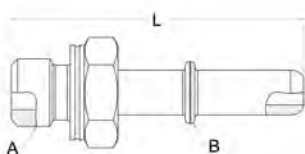
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
196-8235	M14x1.5	M22x1.5	24	50.5	SST
347-4440	M10x1	M16x1.5	22	26	Steel
438-5043	M16x1.5	M16x1.5	22	52	Steel

Male Metric STOR-ISO 6149 / Male NPTF



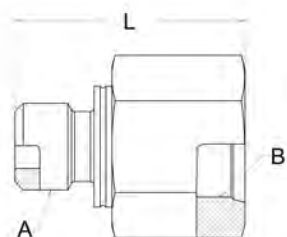
Part Number	Thread Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
221-1582	M16x1.5	1/4-18	-4	—	30	Brass

Male Metric STOR-ISO 6149 / Male-SAE J2044



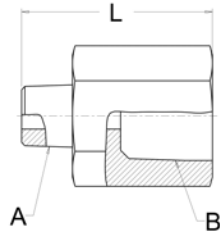
Part Number	Thread Size (A)	Hose ID (mm) (B)	Dash Size (B)	HEX Size	Length (L)	Material
474-2619	M12x1.5	7.94	-5	17	52.1	Steel
444-4991	M18x1.5	15.88	-10	24	74	Steel
423-6878	M18x1.5	9.52	-6	24	55.1	Steel

Male Metric STOR-ISO 6149 / Metric STOR-ISO 6149 Port



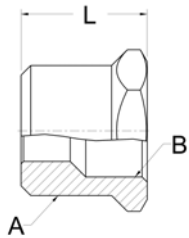
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
319-9224	M16x1.5	M16x1.5	22	30	Brass
451-0503	M12x1.5	M14x1.5	22	32	Steel
448-8999	M14x1.5	M10x1	19	32	Steel
250-1421	M14x1.5	M12x1.5	22	32	Steel
243-0206	M14x1.5	M12x1.5	19	27	Steel
433-4841	M16x1.5	M12x1.5	22	27.4	Steel
268-1549	M18x1.5	M10x1	24	35	Steel
421-1018	M18x1.5	M12x1.5	24	23	Steel
260-9229	M22x1.5	M12x1.5	27	34	Steel
253-7768	M22x1.5	M22x1.5	30	62	Steel
447-7510	M22x1.5	M22x1.5	30	62	Steel
287-7242	M27x2	M27x2	32	47.5	Steel

Male Metric STOR-ISO 6149 / NPTF Port



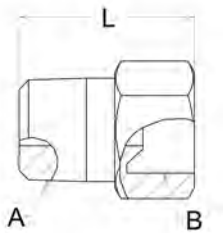
Part Number	Thread Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
247-4438	M10x1	1/4-18	-4	19.05	30	Brass
7V-2839	M22x1.5	3/8-18	-6	27	32	Brass
134-4123	M10x1	1/8-27	-2	19	25	Steel
415-2241	M12x1.5	1/8-27	-2	15.88	23.7	Steel
5C-7617	M14x1.5	1/4-18	-4	19.05	33.3	Steel
159-3966	M14x1.5	3/8-18	-6	22.22	35	Steel
291-2325	M16x1.5	3/8-18	-6	25.4	98	Steel
146-2739	M18x1.5	1/8-27	-2	—	406	Steel
268-1966	M18x1.5	1/4-18	-4	24	15	Steel
419-5988	M22x1.5	1/2-14	-8	—	42.67	Steel

Male NPTF / 45° Flare-SAE J512 Port



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
214-3613	1/2-14	-8	5/8-18	-6	21.89	19.81	Steel
214-3615	3/4-14	-12	5/8-18	-6	26.67	27.19	Steel

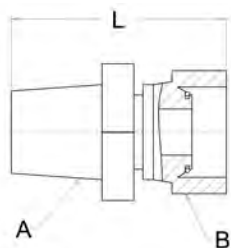
Male NPTF / 45° Inverted Flare-SAE J512 Port



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
9S-7580	1/8-27	-2	5/16-28	-2	10.32	15.7	Brass
9S-7581	1/8-27	-2	3/8-24	-3	11.91	17.5	Brass
1P-3458	1/8-27	-2	1/2-20	-5	15.09	19.8	Brass
7K-1457	1/8-27	-2	5/8-18	-6	19.05	22.4	Brass
5K-9239	1/4-18	-4	7/16-24	-4	14.29	22.4	Brass
4H-6141	1/4-18	-4	1/2-20	-5	15.09	24.6	Brass
5P-7039	1/4-18	-4	3/4-18	-8	23.02	26.9	Brass
5K-9248	3/8-18	-6	5/8-18	-6	19.05	26.2	Brass
5K-9238	3/8-18	-6	3/4-18	-8	23.02	26.9	Brass
170-1564	3/8-18	-6	7/8-18	-10	26.99	28.5	Brass
5K-9245	1/2-14	-8	3/4-18	-8	23.01	31.8	Brass
6K-8079	1/2-14	-8	7/8-18	-10	26.99	33.3	Brass

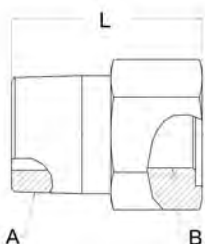
Straight Adapters

Male NPTF / 60° Cone BS5200 Port



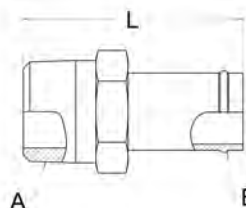
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
424-1872	1/4-18	-4	1/2-14	-8	—	35	Steel
424-1873	1/2-14	-8	1/2-14	-8	—	42	Steel
348-8539	1/2-14	-8	1/2-14	-8	—	47.4	Steel

Male NPTF / BSPP Flat Face-ISO1179 Port



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
208-3899	1/2-14	-8	3/4-14	-12	32	40	Steel

Male NPTF / Hose Bead



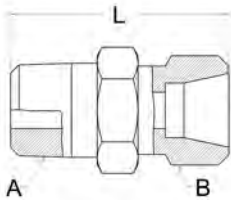
Part Number	Thread Size (A)	Dash Size (A)	Hose ID (mm) (B)	Dash Size (B)	HEX Size	Length (L)	Material
186-8138	1 1/4-11.5	-20	38.10	-24	—	89	Steel
8T-2173	1/8-27	-2	7.94	-5	11.11	39.1	Brass
006-7801	3/8-18	-6	9.52	-6	17.46	45.2	Brass
053-2313	3/4-14	-12	25.40	-16	31.75	66.9	Brass
7X-1445	1 1/4-11.5	-20	38.10	-24	42.2	76.2	Brass
8C-5185	1 1/2-11.5	-24	38.10	-24	50.8	76.2	Brass
451-0398	3/8-18	-6	9.52	-6	19.05	59.7	SST
368-5219	1-11.5	-16	31.75	-20	40	70	SST
425-2047	1/8-27	-2	9.52	-6	12	33	Steel
262-0511	1/4-18	-4	15.88	-10	19.05	59.7	Steel
352-6508	1/4-18	-4	7.94	-5	14.29	59.7	Steel
5P-7175	1/4-18	-4	9.52	-6	15.88	59.7	Steel
176-0569	3/8-18	-6	12.70	-8	19.05	59.7	Steel
337-6501	3/8-18	-6	15.88	-10	22.2	56.69	Steel
347-4416	3/8-18	-6	9.52	-6	19.05	58.7	Steel
474-1553	1/2-14	-8	15.88	-10	23.81	54.8	Steel
2V-9121	1/2-14	-8	15.88	-10	23.81	66	Steel
352-6507	1/2-14	-8	19.05	-12	25.4	66	Steel
135-9944	3/4-14	-12	19.05	-12	28.58	67.8	Steel
005-7898	3/4-14	-12	19.05	-12	28.58	53.4	Steel

Straight Adapters

Male NPTF / Hose Bead (Cont'd.)

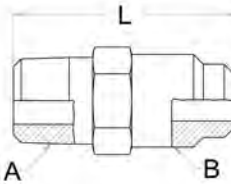
Part Number	Thread Size (A)	Dash Size (A)	Hose ID (mm) (B)	Dash Size (B)	HEX Size	Length (L)	Material
263-4798	3/4-14	-12	25		—	40	Steel
6V-2492	3/4-14	-12	25.40	-16	31.75	67.8	Steel
210-7567	3/4-14	-12	6		—	40	Steel
033-3096	1-11.5	-16	19.05	-12	34.93	72.6	Steel
347-4444	1-11.5	-16	25.40	-16	34.93	72.6	Steel
432-7499	1 1/2-11.5	-24	38.10	-24	50.8	118.11	Steel
8T-5354	2-11.5	-32	50.80	-32	66.68	82.55	Steel

Male NPTF / Male 24° Cone-ISO 8434-1



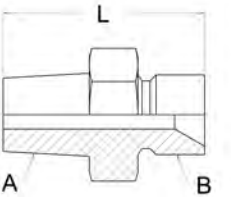
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
268-1623	1/8-27	-2	M12x1.5	12	24	Steel

Male NPTF / Male 45° Flare-SAE J512



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
012-0703	1/8-27	-2	3/8-24	-3	11.11	25.4	Brass
164-5618	1/8-27	-2	3/8-24	-3	11.11	25.5	Brass
3B-9400	1/8-27	-2	7/16-20	-4	11.11	26.9	Brass
9L-9412	1/8-27	-2	5/8-18	-6	15.88	31.75	Brass
3B-9110	1/4-18	-4	1/2-20	-5	14.29	34	Brass
3B-9403	1/4-18	-4	5/8-18	-6	15.88	36.5	Brass
1L-2283	1/4-18	-4	3/4-16	-8	19.05	38.1	Brass
061-8644	3/8-18	-6	5/8-18	-6	22.22	45.97	Brass

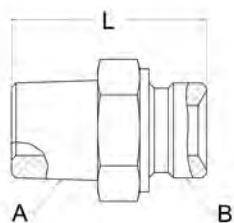
Male NPTF / Male 60° Cone BS5200



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
154-2930	1/4-18	-4	1/4-19	-4	19	33.2	Steel
262-0506	1/4-18	-4	3/8-19	-6	22	34.2	Steel
252-7242	1/2-14	-8	1/2-14	-8	27	43	Steel
289-2400	3/4-14	-12	1-11	-16	—	51	Steel

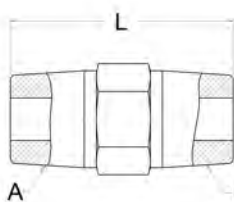
Straight Adapters

Male NPTF / Male BSPP STOR-JIS B2351



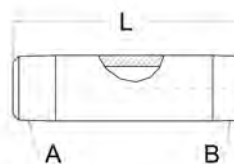
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
196-7705	1/2-14	-8	3/8-19	-6	23.5	40.6	Steel
336-7548	1/2-14	-8	1/2-14	-8	27	43	Steel
396-6328	1/2-14	-8	3/4-14	-12	32	46	Steel

Male NPTF / Male BSPT-ISO 7-1



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
260-9254	1/4-18	-4	1/4-19	-4	15.88	36.8	Steel
193-5182	3/8-18	-6	3/8-19	-6	19	36.6	Steel
204-0394	1/2-14	-8	3/8-19	-6	22	41.5	Steel
237-7212	3/4-14	-12	3/4-14	-12	28.58	49.8	Steel
143-2786	1-11.5	-16	3/4-14	-12	35	70.6	Steel
100-3221	1-11.5	-16	1-11	-16	37.7	105	Steel
241-0397	1-11.5	-16	1-11	-16	34.92	49.8	Steel

Male NPTF / Male NPTF



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
105-7204	1/8-27	-2	1/8-27	-2	—	660	Black Pipe
192-0087	1/8-27	-2	1/8-27	-2	—	80	Black Pipe
161-7443	1/8-27	-2	1/8-27	-2	—	75	Black Pipe
110-8796	1/8-27	-2	1/8-27	-2	—	87	Black Pipe
112-9271	1/8-27	-2	1/8-27	-2	—	140	Black Pipe
124-0368	1/8-27	-2	1/8-27	-2	—	310	Black Pipe
124-0369	1/8-27	-2	1/8-27	-2	—	186	Black Pipe
321-8664	1/8-27	-2	1/8-27	-2	—	51	Black Pipe
3B-7282	1/8-27	-2	1/8-27	-2	—	152.4	Black Pipe
3B-7283	1/8-27	-2	1/8-27	-2	—	69.85	Black Pipe
3B-7285	1/8-27	-2	1/8-27	-2	—	63	Black Pipe
3B-7733	1/8-27	-2	1/8-27	-2	—	38.1	Black Pipe
3B-7734	1/8-27	-2	1/8-27	-2	—	88.9	Black Pipe
3B-7736	1/8-27	-2	1/8-27	-2	—	127	Black Pipe
5H-7826	1/8-27	-2	1/8-27	-2	—	25.4	Black Pipe
451-1488	1/8-27	-2	1/8-27	-2	—	87	Black Pipe
4F-2861	1/8-27	-2	1/8-27	-2	—	92.075	Black Pipe
4J-2394	1/8-27	-2	1/8-27	-2	—	109.22	Black Pipe

Straight Adapters

Male NPTF / Male NPTF (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
9S-1812	1/8-27	-2	1/8-27	-2	—	102	Black Pipe
6V-1813	1/8-27	-2	1/8-27	-2	—	19	Black Pipe
8B-2283	1/8-27	-2	1/8-27	-2	—	32	Black Pipe
3B-7262	1/4-18	-4	1/4-18	-4	—	38.1	Black Pipe
3B-7273	1/4-18	-4	1/4-18	-4	—	101.6	Black Pipe
3B-7275	1/4-18	-4	1/4-18	-4	—	64	Black Pipe
3B-7738	1/4-18	-4	1/4-18	-4	—	22	Black Pipe
3B-7740	1/4-18	-4	1/4-18	-4	—	152.4	Black Pipe
5B-7442	1/4-18	-4	1/4-18	-4	—	120.65	Black Pipe
5H-7598	1/4-18	-4	1/4-18	-4	—	76.2	Black Pipe
5N-8396	1/4-18	-4	1/4-18	-4	—	83	Black Pipe
030-7765	3/8-18	-6	3/8-18	-6	—	51	Black Pipe
136-2954	3/8-18	-6	3/8-18	-6	—	200	Black Pipe
136-2955	3/8-18	-6	3/8-18	-6	—	90	Black Pipe
1L-1644	3/8-18	-6	3/8-18	-6	—	44	Black Pipe
393-8331	3/8-18	-6	3/8-18	-6	—	120	Black Pipe
3B-7741	3/8-18	-6	3/8-18	-6	—	25.4	Black Pipe
3B-7742	3/8-18	-6	3/8-18	-6	—	38.1	Black Pipe
3B-7743	3/8-18	-6	3/8-18	-6	—	139.7	Black Pipe
4F-0186	3/8-18	-6	3/8-18	-6	—	76.2	Black Pipe
6Z-2038	3/8-18	-6	3/8-18	-6	—	25.4	Black Pipe
105-1860	1/2-14	-8	1/2-14	-8	—	76	Black Pipe
105-1861	1/2-14	-8	1/2-14	-8	—	63.5	Black Pipe
130-7287	1/2-14	-8	1/2-14	-8	—	120	Black Pipe
1L-8432	1/2-14	-8	1/2-14	-8	—	70	Black Pipe
279-0825	1/2-14	-8	1/2-14	-8	—	482.6	Black Pipe
2B-3470	1/2-14	-8	1/2-14	-8	—	140	Black Pipe
2H-1880	1/2-14	-8	1/2-14	-8	—	152	Black Pipe
222-7370	1/2-14	-8	1/2-14	-8	—	1750	Black Pipe
222-7371	1/2-14	-8	1/2-14	-8	—	1826.7	Black Pipe
222-9984	1/2-14	-8	1/2-14	-8	—	508	Black Pipe
222-9985	1/2-14	-8	1/2-14	-8	—	2991.3	Black Pipe
242-4310	1/2-14	-8	1/2-14	-8	—	178	Black Pipe
249-4312	1/2-14	-8	1/2-14	-8	—	50.8	Black Pipe
267-6785	1/2-14	-8	1/2-14	-8	—	142	Black Pipe
314-9603	1/2-14	-8	1/2-14	-8	—	125	Black Pipe

Straight Adapters

Male NPTF / Male NPTF (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
3B-7272	1/2-14	-8	1/2-14	-8	—	76.2	Black Pipe
3B-7284	1/2-14	-8	1/2-14	-8	—	38.1	Black Pipe
3B-7866	1/2-14	-8	1/2-14	-8	—	51	Black Pipe
3F-8431	1/2-14	-8	1/2-14	-8	—	228.6	Black Pipe
5B-7319	1/2-14	-8	1/2-14	-8	—	95.25	Black Pipe
7B-4115	1/2-14	-8	1/2-14	-8	—	44.45	Black Pipe
8B-3308	1/2-14	-8	1/2-14	-8	—	28.575	Black Pipe
1F-6660	3/4-14	-12	3/4-14	-12	—	64	Black Pipe
171-9420	3/4-14	-12	3/4-14	-12	—	108	Black Pipe
180-4655	3/4-14	-12	3/4-14	-12	—	152	Black Pipe
276-3503	3/4-14	-12	3/4-14	-12	—	279.4	Black Pipe
279-0826	3/4-14	-12	3/4-14	-12	—	357.7	Black Pipe
279-0827	3/4-14	-12	3/4-14	-12	—	1700	Black Pipe
222-7368	3/4-14	-12	3/4-14	-12	—	1485	Black Pipe
222-7369	3/4-14	-12	3/4-14	-12	—	786.4	Black Pipe
3P-2021	3/4-14	-12	3/4-14	-12	—	101.6	Black Pipe
3B-7265	3/4-14	-12	3/4-14	-12	—	152.4	Black Pipe
3B-7267	3/4-14	-12	3/4-14	-12	—	76.2	Black Pipe
3B-7270	3/4-14	-12	3/4-14	-12	—	51	Black Pipe
3B-7745	3/4-14	-12	3/4-14	-12	—	35	Black Pipe
5B-9892	3/4-14	-12	3/4-14	-12	—	44	Black Pipe
4F-0440	3/4-14	-12	3/4-14	-12	—	57.15	Black Pipe
4I-7470	3/4-14	-12	3/4-14	-12	—	169.8625	Black Pipe
6L-5295	3/4-14	-12	3/4-14	-12	—	140	Black Pipe
7F-6654	3/4-14	-12	3/4-14	-12	—	50.8	Black Pipe
141-2370	1-11.5	-16	1-11.5	-16	—	1448	Black Pipe
278-1172	1-11.5	-16	1-11.5	-16	—	1568.8	Black Pipe
278-1173	1-11.5	-16	1-11.5	-16	—	2326	Black Pipe
278-1174	1-11.5	-16	1-11.5	-16	—	120	Black Pipe
278-1176	1-11.5	-16	1-11.5	-16	—	638.9	Black Pipe
279-0836	1-11.5	-16	1-11.5	-16	—	1514.4	Black Pipe
279-0837	1-11.5	-16	1-11.5	-16	—	1854.2	Black Pipe
279-0838	1-11.5	-16	1-11.5	-16	—	406.4	Black Pipe
279-1125	1-11.5	-16	1-11.5	-16	—	469.9	Black Pipe
229-5976	1-11.5	-16	1-11.5	-16	—	292	Black Pipe
3N-3894	1-11.5	-16	1-11.5	-16	—	97	Black Pipe

Male NPTF / Male NPTF (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
3B-7280	1-11.5	-16	1-11.5	-16	—	50.8	Black Pipe
3B-7749	1-11.5	-16	1-11.5	-16	—	38	Black Pipe
2N-0853	1-11.5	-16	1-11.5	-16	—	108	Black Pipe
2S-9222	1-11.5	-16	1-11.5	-16	—	206.38	Black Pipe
6B-8128	1-11.5	-16	1-11.5	-16	—	63.5	Black Pipe
6B-8129	1-11.5	-16	1-11.5	-16	—	76.2	Black Pipe
6N-2430	1-11.5	-16	1-11.5	-16	—	139.7	Black Pipe
7B-7169	1-11.5	-16	1-11.5	-16	—	44	Black Pipe
7B-7908	1-11.5	-16	1-11.5	-16	—	114.3	Black Pipe
7B-9008	1-11.5	-16	1-11.5	-16	—	152.4	Black Pipe
7F-8622	1-11.5	-16	1-11.5	-16	—	130	Black Pipe
7F-8701	1-11.5	-16	1-11.5	-16	—	234.95	Black Pipe
131-4961	1 1/4-11.5	-20	1 1/4-11.5	-20	—	125	Black Pipe
3B-7750	1 1/4-11.5	-20	1 1/4-11.5	-20	—	41.275	Black Pipe
3D-2189	1 1/4-11.5	-20	1 1/4-11.5	-20	—	101.6	Black Pipe
2R-3538	1 1/4-11.5	-20	1 1/4-11.5	-20	—	136.525	Black Pipe
2W-8721	1 1/4-11.5	-20	1 1/4-11.5	-20	—	107.95	Black Pipe
5L-3785	1 1/4-11.5	-20	1 1/4-11.5	-20	—	50.8	Black Pipe
4B-4609	1 1/4-11.5	-20	1 1/4-11.5	-20	—	64	Black Pipe
4P-7891	1 1/4-11.5	-20	1 1/4-11.5	-20	—	85.725	Black Pipe
4P-7894	1 1/4-11.5	-20	1 1/4-11.5	-20	—	168.275	Black Pipe
105-0428	1 1/2-11.5	-24	1 1/2-11.5	-24	—	203.2	Black Pipe
130-2550	1 1/2-11.5	-24	1 1/2-11.5	-24	—	343	Black Pipe
132-1430	1 1/2-11.5	-24	1 1/2-11.5	-24	—	420	Black Pipe
1L-2893	1 1/2-11.5	-24	1 1/2-11.5	-24	—	70	Black Pipe
149-3995	1 1/2-11.5	-24	1 1/2-11.5	-24	—	165	Black Pipe
149-3996	1 1/2-11.5	-24	1 1/2-11.5	-24	—	225	Black Pipe
156-8160	1 1/2-11.5	-24	1 1/2-11.5	-24	—	133	Black Pipe
123-0214	1 1/2-11.5	-24	1 1/2-11.5	-24	—	548	Black Pipe
279-0843	1 1/2-11.5	-24	1 1/2-11.5	-24	—	756.5	Black Pipe
279-0844	1 1/2-11.5	-24	1 1/2-11.5	-24	—	402.4	Black Pipe
279-0846	1 1/2-11.5	-24	1 1/2-11.5	-24	—	761.7	Black Pipe
279-0847	1 1/2-11.5	-24	1 1/2-11.5	-24	—	326.5	Black Pipe
287-6901	1 1/2-11.5	-24	1 1/2-11.5	-24	—	343	Black Pipe
204-0241	1 1/2-11.5	-24	1 1/2-11.5	-24	—	254	Black Pipe
210-8820	1 1/2-11.5	-24	1 1/2-11.5	-24	—	305	Black Pipe

Straight Adapters

Male NPTF / Male NPTF (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
229-9325	1 1/2-11.5	-24	1 1/2-11.5	-24	—	69.85	Black Pipe
263-0874	1 1/2-11.5	-24	1 1/2-11.5	-24	—	122	Black Pipe
315-8412	1 1/2-11.5	-24	1 1/2-11.5	-24	—	475	Black Pipe
3L-8992	1 1/2-11.5	-24	1 1/2-11.5	-24	—	64	Black Pipe
3L-8993	1 1/2-11.5	-24	1 1/2-11.5	-24	—	50.8	Black Pipe
3N-9383	1 1/2-11.5	-24	1 1/2-11.5	-24	—	279	Black Pipe
3R-9595	1 1/2-11.5	-24	1 1/2-11.5	-24	—	260	Black Pipe
434-3694	1 1/2-11.5	-24	1 1/2-11.5	-24	—	50.8	Black Pipe
2L-2811	1 1/2-11.5	-24	1 1/2-11.5	-24	—	180.975	Black Pipe
5B-7642	1 1/2-11.5	-24	1 1/2-11.5	-24	—	85.725	Black Pipe
5B-7643	1 1/2-11.5	-24	1 1/2-11.5	-24	—	114.3	Black Pipe
5B-7661	1 1/2-11.5	-24	1 1/2-11.5	-24	—	44.45	Black Pipe
6F-6045	1 1/2-11.5	-24	1 1/2-11.5	-24	—	57.15	Black Pipe
6F-8857	1 1/2-11.5	-24	1 1/2-11.5	-24	—	76.2	Black Pipe
6F-8858	1 1/2-11.5	-24	1 1/2-11.5	-24	—	44.45	Black Pipe
6L-4489	1 1/2-11.5	-24	1 1/2-11.5	-24	—	330.2	Black Pipe
6L-5699	1 1/2-11.5	-24	1 1/2-11.5	-24	—	127	Black Pipe
7B-0497	1 1/2-11.5	-24	1 1/2-11.5	-24	—	228.6	Black Pipe
7E-2476	1 1/2-11.5	-24	1 1/2-11.5	-24	—	571	Black Pipe
9Y-6582	1 1/2-11.5	-24	1 1/2-11.5	-24	—	314	Black Pipe
278-5664	1 1/2-11.5	-24	2-11.5	-32	—	116.9	Black Pipe
128-5051	2-11.5	-32	2-11.5	-32	—	177	Black Pipe
292-3624	2-11.5	-32	2-11.5	-32	—	490	Black Pipe
222-2024	2-11.5	-32	2-11.5	-32	—	475	Black Pipe
246-1245	2-11.5	-32	2-11.5	-32	—	51	Black Pipe
426-4120	2-11.5	-32	2-11.5	-32	—	203.2	Black Pipe
3B-7286	2-11.5	-32	2-11.5	-32	—	76.2	Black Pipe
3B-7296	2-11.5	-32	2-11.5	-32	—	50.8	Black Pipe
5N-8778	2-11.5	-32	2-11.5	-32	—	355.6	Black Pipe
4D-5222	2-11.5	-32	2-11.5	-32	—	152.4	Black Pipe
4P-2603	2-11.5	-32	2-11.5	-32	—	193.675	Black Pipe
6N-4543	2-11.5	-32	2-11.5	-32	—	104.8	Black Pipe
8Q-9643	2-11.5	-32	2-11.5	-32	—	63.5	Black Pipe
8T-3510	2-11.5	-32	2-11.5	-32	—	280	Black Pipe
8W-9062	2-11.5	-32	2-11.5	-32	—	175	Black Pipe
8X-5627	2-11.5	-32	2-11.5	-32	—	410	Black Pipe

Straight Adapters

Male NPTF / Male NPTF (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
140-5978	3-8	-48	3-8	-48	—	67	Black Pipe
149-4009	3-8	-48	3-8	-48	—	304.8	Black Pipe
162-7255	3-8	-48	3-8	-48	—	155	Black Pipe
315-8399	3-8	-48	3-8	-48	—	112	Black Pipe
3N-8672	3 1/2-8	-56	3 1/2-8	-56	—	120.65	Black Pipe
3N-8673	3 1/2-8	-56	3 1/2-8	-56	—	158.75	Black Pipe
2N-2472	3 1/2-8	-56	3 1/2-8	-56	—	69.85	Black Pipe
5N-4476	3 1/2-8	-56	3 1/2-8	-56	—	222.25	Black Pipe
6V-8408	3 1/2-8	-56	3 1/2-8	-56	—	400	Black Pipe
6V-8412	3 1/2-8	-56	3 1/2-8	-56	—	873	Black Pipe
6V-8424	3 1/2-8	-56	3 1/2-8	-56	—	83	Black Pipe
0A-2926	1/8-27	-2	1/8-27	-2	11.11	24.6	Brass
379-1119	1/8-27	-2	1/8-27	-2	17.526	49.27	Brass
6V-2610	1/8-27	-2	1/8-27	-2	—	19.05	Brass
6K-1019	1/4-18	-4	1/8-27	-2	15.88	31.75	Brass
3B-7767	1/4-18	-4	1/4-18	-4	—	22.225	Brass
3B-7771	1/4-18	-4	1/4-18	-4	—	31.75	Brass
3B-7773	1/4-18	-4	1/4-18	-4	—	50.8	Brass
3B-7894	1/4-18	-4	1/4-18	-4	—	38.1	Brass
5K-2408	1/4-18	-4	1/4-18	-4	15.88	36.8	Brass
397-1099	1/2-14	-8	3/8-18	-6	22.22	41.15	Brass
3B-7770	1/2-14	-8	1/2-14	-8	—	28.575	Brass
3B-7881	1/2-14	-8	1/2-14	-8	—	38.1	Brass
2N-2012	1 1/4-11.5	-20	1 1/4-11.5	-20	—	127	Brass
6V-9029	1 1/4-11.5	-20	1 1/4-11.5	-20	—	63.5	Brass
5N-2918	2-11.5	-32	2-11.5	-32	—	50.8	Brass
3B-7274	1/4-18	-4	1/4-18	-4	—	89	Galv Pipe
3B-7276	1/4-18	-4	1/4-18	-4	—	50.8	Galv Pipe
3B-7739	1/4-18	-4	1/4-18	-4	—	32	Galv Pipe
6V-0678	3/8-18	-6	3/8-18	-6	—	127	Galv Pipe
3B-7271	1/2-14	-8	1/2-14	-8	—	101.6	Galv Pipe
173-4409	1/4-18	-4	1/4-18	-4	15.88	36.5125	SST
4C-5898	3/8-18	-6	3/8-18	-6	19.05	76.2	SST
168-3333	1/2-14	-8	1/2-14	-8	22.22	48	SST
168-3346	1/2-14	-8	1/2-14	-8	—	152	SST
297-8066	3/4-14	-12	1/2-14	-8	25.58	49.8	SST
201-0578	3/4-14	-12	3/4-14	-12	—	127	SST

Straight Adapters

Male NPTF / Male NPTF (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
173-4410	1-11.5	-16	1-11.5	-16	34.92	59.4	SST
175-3623	1-11.5	-16	1-11.5	-16	—	102	SST
194-4171	1-11.5	-16	1 1/4-11.5	-20	—	62.2	SST
1Y-3853	1 1/4-11.5	-20	1 1/4-11.5	-20	—	203.2	SST
1Y-3854	1 1/4-11.5	-20	1 1/4-11.5	-20	—	101.6	SST
491-5273	1 1/4-11.5	-20	1 1/4-11.5	-20	44.45	63	SST
439-1941	1 1/2-11.5	-24	1 1/2-11.5	-24	—	177.8	SST
439-1943	1 1/2-11.5	-24	1 1/2-11.5	-24	—	254	SST
439-1983	1 1/2-11.5	-24	1 1/2-11.5	-24	—	127	SST
8Q-9297	1 1/2-11.5	-24	1 1/2-11.5	-24	—	203	SST
8Q-9880	1 1/2-11.5	-24	1 1/2-11.5	-24	—	50.8	SST
197-7547	2-11.5	-32	2-11.5	-32	—	50.8	SST
209-9835	2-11.5	-32	2-11.5	-32	—	203.2	SST
209-9896	2-11.5	-32	2-11.5	-32	—	101.6	SST
439-1945	2-11.5	-32	2-11.5	-32	—	152.4	SST
386-6237	2-11.5	-32	2-11.5	-32	—	245	SST
450-0847	2 1/2-8	-40	2 1/2-8	-40	—	127	SST
493-1510	2 1/2-8	-40	2 1/2-8	-40	—	63.5	SST
100-7868	1/8-27	-2	1/8-27	-2	—	381	Steel
5K-5068	1/8-27	-2	1/8-27	-2	11.11	26.9	Steel
8C-7575	1/8-27	-2	1/8-27	-2	11.11	38.1	Steel
8C-7576	1/8-27	-2	1/8-27	-2	11.11	76.2	Steel
5P-3238	1/4-18	-4	1/8-27	-2	15.88	32	Steel
105-6431	1/4-18	-4	1/4-18	-4	19	35	Steel
5P-8998	1/4-18	-4	1/4-18	-4	15.88	36.8	Steel
134-0712	1/4-18	-4	1/4-18	-4	—	28	Steel
141-9504	1/4-18	-4	1/4-18	-4	—	285	Steel
141-9505	1/4-18	-4	1/4-18	-4	—	603	Steel
279-4495	1/4-18	-4	1/4-18	-4	—	51	Steel
8C-7574	1/4-18	-4	1/4-18	-4	15.88	152.4	Steel
114-3399	1/4-18	-4	1/2-14	-8	22.22	43.18	Steel
8X-3316	1/4-18	-4	3/4-14	-12	—	52.3875	Steel
5S-2403	3/8-18	-6	1/4-18	-4	19.05	37	Steel
4C-7153	3/8-18	-6	1/4-18	-4	19.05	45	Steel
004-6683	3/8-18	-6	3/8-18	-6	19.05	36.8	Steel
7X-0495	3/8-18	-6	1/2-14	-8	22.22	43.2	Steel
087-0882	1/2-14	-8	1/4-18	-4	22.35	41.15	Steel
4C-7151	1/2-14	-8	1/4-18	-4	22.23	41	Steel

Straight Adapters

Male NPTF / Male NPTF (Cont'd.)

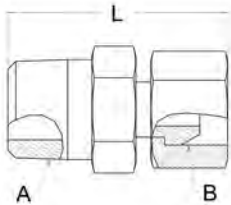
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
4C-7140	1/2-14	-8	3/8-18	-6	22.23	41	Steel
002-6454	1/2-14	-8	1/2-14	-8	22.22	48	Steel
443-2324	1/2-14	-8	1/2-14	-8	—	188.9	Steel
4C-7133	1/2-14	-8	1/2-14	-8	22.23	41	Steel
8C-6905	1/2-14	-8	3/4-14	-12	28.58	49.78	Steel
467-0748	3/4-14	-12	3/8-18	-6	28.58	47.7	Steel
326-9452	3/4-14	-12	1/2-14	-8	28.58	76.2	Steel
004-7270	3/4-14	-12	3/4-14	-12	28.58	49.8	Steel
144-2609	3/4-14	-12	3/4-14	-12	28.58	49.8	Steel
4C-7160	3/4-14	-12	3/4-14	-12	26.99	63	Steel
7E-5719	3/4-14	-12	3/4-14	-12	—	76.2	Steel
7E-8352	3/4-14	-12	3/4-14	-12	—	149.225	Steel
511-3228	1-11.5	-16	1/2-14	-8	34.11	54	Steel
4C-7134	1-11.5	-16	3/4-14	-12	34.93	56	Steel
5S-2392	1-11.5	-16	3/4-14	-12	34.92	54.5	Steel
005-8615	1-11.5	-16	1-11.5	-16	34.92	59.4	Steel
107-9149	1-11.5	-16	1-11.5	-16	—	38	Steel
424-8759	1-11.5	-16	1-11.5	-16	—	225	Steel
389-3736	1-11.5	-16	1-11.5	-16	—	152	Steel
469-7760	1-11.5	-16	1-11.5	-16	—	89	Steel
1P-5598	1 1/4-11.5	-20	1 1/4-11.5	-20	44.45	62.99	Steel
104-4526	1 1/4-11.5	-20	1 1/4-11.5	-20	—	41.275	Steel
268-1536	1 1/2-11.5	-24	1-11.5	-16	50.8	64.8	Steel
109-5605	1 1/2-11.5	-24	1 1/2-11.5	-24	50.8	66.3	Steel
1H-7722	1 1/2-11.5	-24	1 1/2-11.5	-24	—	361.95	Steel
3E-2315	1 1/2-11.5	-24	2-11.5	-32	63.5	68.9	Steel
279-4506	2-11.5	-32	2-11.5	-32	—	178	Steel
415-7244	2-11.5	-32	2-11.5	-32	—	152.4	Steel
434-5630	2-11.5	-32	2-11.5	-32	—	622.3	Steel
434-5631	2-11.5	-32	2-11.5	-32	—	120.65	Steel
8X-3473	2-11.5	-32	2-11.5	-32	—	220	Steel
140-8346	4-8	-64	4-8	-64	—	102	Steel
294-8226	4-8	-64	4-8	-64	—	152.4	Steel
3B-7263	1/8-27	-2	1/8-27	-2	—	51	STL Pipe
003-4711	1/4-18	-4	1/4-18	-4	—	57.15	STL Pipe
3E-2303	1/4-18	-4	1/4-18	-4	—	51	STL Pipe
467-0875	1/4-18	-4	1/4-18	-4	—	140	STL Pipe
514-1031	3/8-18	-6	3/8-18	-6	—	76.2	STL Pipe

Straight Adapters

Male NPTF / Male NPTF (Cont'd.)

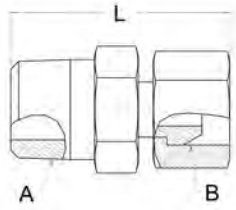
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
441-1658	3/8-18	-6	3/8-18	-6	—	38.1	STL Pipe
441-1680	3/8-18	-6	3/8-18	-6	—	228.6	STL Pipe
470-4054	3/8-18	-6	3/8-18	-6	—	127	STL Pipe
470-4435	3/8-18	-6	3/8-18	-6	—	1676.4	STL Pipe
183-2779	1/2-14	-8	1/2-14	-8	—	115	STL Pipe
125-7407	3/4-14	-12	3/4-14	-12	—	76	STL Pipe
3B-7747	3/4-14	-12	3/4-14	-12	—	89	STL Pipe
469-7854	3/4-14	-12	3/4-14	-12	—	1219.2	STL Pipe
470-4436	3/4-14	-12	3/4-14	-12	—	3276.6	STL Pipe
468-1668	1-11.5	-16	1-11.5	-16	—	406.4	STL Pipe
469-7753	1-11.5	-16	1-11.5	-16	—	660	STL Pipe
469-7754	1-11.5	-16	1-11.5	-16	—	1422	STL Pipe
469-7755	1-11.5	-16	1-11.5	-16	—	2057.4	STL Pipe
469-7756	1-11.5	-16	1-11.5	-16	—	2781	STL Pipe
499-3416	1 1/4-11.5	-20	1 1/4-11.5	-20	—	762	STL Pipe
352-2775	1 1/2-11.5	-24	1 1/2-11.5	-24	—	250	STL Pipe
3L-1258	1 1/2-11.5	-24	1 1/2-11.5	-24	—	101.6	STL Pipe
434-5628	2-11.5	-32	2-11.5	-32	—	106.36	STL Pipe
434-5629	2-11.5	-32	2-11.5	-32	—	1436.69	STL Pipe
396-6376	2-11.5	-32	2-11.5	-32	—	240.7	STL Pipe
511-5614	2 1/2-8	-40	2 1/2-8	-40	—	152.4	STL Pipe
427-0090	4-8	-64	4-8	-64	—	89	STL Pipe

Male NPTF / NPSM



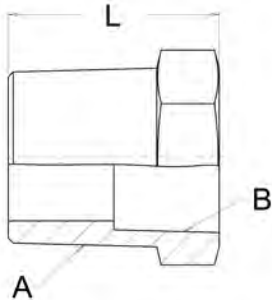
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
336-6906	1/2-14	-8	1/2-14	-8	22.2	38	Brass
4L-8545	1/2-14	-8	1/2-14	-8		62.48	Steel

Male NPTF / NPSM Swivel Nut



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
332-8560	3/8-18	-6	3/8-18	-6	22.2	42.7	Brass
2N-2011	1 1/4-11.5	-20	1 1/4-11.5	-20	47.63	53.1	Brass
5P-2203	1 1/2-11.5	-24	1 1/2-11.5	-24	53.98	54.9	Brass
2R-1922	1/8-27	-2	1/8-27	-2	14.29	25.4	Steel
4D-2560	1/8-27	-2	1/4-18	-4	15.88	26.7	Steel
9J-7600	1/4-18	-4	1/8-27	-2	17.5	30	Steel
4H-6147	1/4-18	-4	1/4-18	-4	15.88	31.75	Steel
3L-7055	1/4-18	-4	3/8-18	-6	22.22	33.3	Steel
2D-0193	3/8-18	-6	1/4-18	-4	22.2	32.8	Steel
2L-3331	3/8-18	-6	3/8-18	-6	22.2	33.3	Steel
2D-0058	3/8-18	-6	1/2-14	-8	23.8	35.6	Steel
6D-6489	1/2-14	-8	3/8-18	-6	22.22	38.1	Steel
336-6905	1/2-14	-8	1/2-14	-8	25	49	Steel
2H-9091	1/2-14	-8	1/2-14	-8	25.4	40.4	Steel
7D-0702	1/2-14	-8	3/4-14	-12	28.58	43.7	Steel
3D-8911	3/4-14	-12	1/2-14	-8	31.75	40.4	Steel
5F-6371	3/4-14	-12	3/4-14	-12	31.75	43.7	Steel
2N-7308	3/4-14	-12	1-11.5	-16	38.1	45.2	Steel
113-7099	1-11.5	-16	3/4-14	-12	38.1	50.3	Steel
1L-5987	1-11.5	-16	1-11.5	-16	38.1	50	Steel
3L-3869	1 1/4-11.5	-20	1 1/4-11.5	-20	47.63	53.1	Steel
1L-1722	1 1/2-11.5	-24	1 1/2-11.5	-24	53.98	54.9	Steel
302-8496	2-11.5	-32	2-11.5	-32	66.68	71.12	Steel

Male NPTF / NPTF Port



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
3B-7384	1/4-18	-4	1/8-27	-2	—	38.1	Black Pipe
327-8578	4-8	-64	3-8	-48	—	56	Black Pipe
002-0639	1/8-27	-2	1/8-27	-2	14.29	22.35	Brass
5H-8936	1/8-27	-2	1/4-18	-4	—	26.9	Brass
3B-6768	1/4-18	-4	1/8-27	-2	15.88	21.6	Brass
039-4966	1/4-18	-4	1/4-18	-4	19.05	25.4	Brass
2R-1576	1/4-18	-4	1/4-18	-4	19.05	25.4	Brass
8B-6021	1/4-18	-4	3/8-18	-6	22.23	31.8	Brass
332-8567	3/8-18	-6	1/8-27	-2	18.87	17.5	Brass
1H-7724	3/8-18	-6	1/4-18	-4	19.05	21.6	Brass

Straight Adapters

Male NPTF / NPTF Port (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
5K-6875	3/8-18	-6	3/8-18	-6	22.22	31.75	Brass
3B-7764	1/2-14	-8	1/4-18	-4	17.08	19.05	Brass
011-5224	3/4-14	-12	3/8-18	-6	34.92	21.6	Brass
012-8140	3/4-14	-12	1/2-14	-8	28.58	21.6	Brass
329-0667	1-11.5	-16	1/2-14	-8	34.93	33	Brass
011-7219	1-11.5	-16	3/4-14	-12	36.32	25.4	Brass
4L-1847	1 1/4-11.5	-20	3/4-14	-12	44.45	25.4	Brass
8T-1492	1 1/4-11.5	-20	1 1/2-11.5	-24	60.32	63.5	Brass
3N-8699	3-8	-48	2-11.5	-32	83.31	41.1	Brass
2F-3360	1/2-14	-8	2-11.5	-32	34.93	32.5	Iron
432-9956	3/4-14	-12	1/2-14	-8	—	16	Iron
4D-3967	1-11.5	-16	1/8-27	-2	28.58	26.67	Iron
3B-7724	1-11.5	-16	1/4-18	-4	28.58	26.67	Iron
3B-7254	1-11.5	-16	3/8-18	-6	28.58	26.59	Iron
2L-0042	1 1/4-11.5	-20	1/2-14	-8	33.34	30.2	Iron
6F-7732	1 1/2-11.5	-24	3/4-14	-12	50.8	33	Iron
8B-5774	1 1/2-11.5	-24	1-11.5	-16	50.8	28.6	Iron
1F-3605	1 1/2-11.5	-24	1 1/4-11.5	-20	50.8	28.6	Iron
7D-4754	2-11.5	-32	1/2-14	-8	34	32.76	Iron
2F-5277	2-11.5	-32	1-11.5	-16	50.8	32.5	Iron
8B-9580	2-11.5	-32	1 1/4-11.5	-20	63.5	31.8	Iron
5B-7660	2-11.5	-32	1 1/2-11.5	-24	62.99	31.8	Iron
3N-9409	2 1/2-8	-40	2-11.5	-32	76.2	41.28	Iron
140-9462	3-8	-48	1 1/2-11.5	-24	—	40.9	Iron
5L-6669	3-8	-48	2-11.5	-32	83.31	40.76	Iron
428-8455	4-8	-64	2-11.5	-32	84.6	48	Iron
419-4168	1/4-18	-4	1/8-27	-2	15.88	19	SST
123-8581	3/8-18	-6	1/4-18	-4	19.05	21.3	SST
303-9532	1/2-14	-8	1/4-18	-4	24	21	SST
432-9698	1/2-14	-8	1/4-18	-4	22.22	28.194	SST
124-3696	3/4-14	-12	1/2-14	-8	38.1	51	SST
162-6622	1-11.5	-16	1/4-18	-4	34.92	33.6	SST
173-4412	1 1/4-11.5	-20	1-11.5	-16	44.45	36.3	SST
8Q-9286	1 1/2-11.5	-24	1/4-18	-4	50.8	32	SST
198-8308	1 1/2-11.5	-24	1 1/4-11.5	-20	50.8	39.9	SST
439-1940	2-11.5	-32	1/4-18	-4	63.5	36.1	SST
454-2772	2-11.5	-32	1-11.5	-16	63.5	44.5	SST
493-1509	2-11.5	-32	1 1/4-11.5	-20	63.5	44.5	SST

Male NPTF / NPTF Port (Cont'd.)

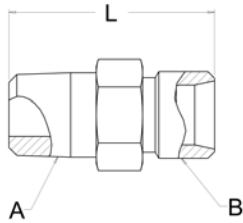
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
281-5850	2-11.5	-32	1 1/2-11.5	-24	63.5	44.4	SST
489-4875	2 1/2-8	-40	2 1/2-8	-40	77	100	SST
6K-6967	1/8-27	-2	1/8-27	-2	15.88	26.4	Steel
126-2565	1/8-27	-2	1/8-27	-2	15.88	46.4	Steel
222-3487	1/8-27	-2	1/8-27	-2	15.88	76.2	Steel
4K-3026	1/8-27	-2	1/8-27	-2	12.7	19.1	Steel
7W-0629	1/8-27	-2	1/8-27	-2	—	22.9	Steel
4H-0553	1/8-27	-2	1/4-18	-4	19.05	30.7	Steel
4M-5317	1/4-18	-4	1/8-27	-2	15.88	21.6	Steel
309-0912	1/4-18	-4	1/8-27	-2	—	19	Steel
9L-0638	1/4-18	-4	1/8-27	-2	14.29	19.05	Steel
432-3697	1/4-18	-4	1/8-27	-2	—	14.73	Steel
3P-1823	1/4-18	-4	1/4-18	-4	19.05	35.3	Steel
432-2046	1/4-18	-4	1/4-18	-4	—	32	Steel
442-3539	1/4-18	-4	1/4-18	-4	14.29	32.51	Steel
030-8370	1/4-18	-4	3/8-18	-6	22.22	36.6	Steel
162-6207	1/4-18	-4	3/8-18	-6	22.2	54	Steel
4L-7412	1/4-18	-4	1/2-14	-8	28.58	40	Steel
445-9718	1/4-18	-4	3/4-14	-12	25.4	34.45	Steel
3B-7721	3/8-18	-6	1/8-27	-2	19.05	18.7	Steel
169-0454	3/8-18	-6	1/8-27	-2	19.05	21.6	Steel
3B-7722	3/8-18	-6	1/4-18	-4	19.05	21.6	Steel
203-7959	3/8-18	-6	3/8-18	-6	22.22	46	Steel
032-3506	3/8-18	-6	1/2-14	-8	28.58	42.7	Steel
030-7139	3/8-18	-6	3/4-14	-12	34.93	44.5	Steel
8B-1931	1/2-14	-8	1/8-27	-2	22.22	27.9	Steel
6B-5072	1/2-14	-8	1/4-18	-4	22.22	27.9	Steel
9S-9370	1/2-14	-8	1/4-18	-4	22.23	20.6	Steel
3B-7255	1/2-14	-8	3/8-18	-6	22.22	27.9	Steel
004-6557	1/2-14	-8	3/8-18	-6	22.22	38.1	Steel
210-6962	1/2-14	-8	3/8-18	-6	22.22	21	Steel
7D-4903	1/2-14	-8	1/2-14	-8	28.58	47.5	Steel
1L-5620	1/2-14	-8	1/2-14	-8	25.4	38.1	Steel
115-9167	1/2-14	-8	1/2-14	-8	29	73	Steel
007-0950	1/2-14	-8	3/4-14	-12	34.92	49	Steel
249-1243	1/2-14	-8	1-11.5	-16	41.28	55.6	Steel
7B-2176	3/4-14	-12	1/8-27	-2	26.924	23.11	Steel

Straight Adapters

Male NPTF / NPTF Port (Cont'd.)

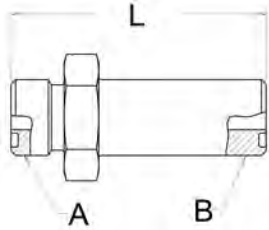
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
9B-3523	3/4-14	-12	1/4-18	-4	28.58	29.7	Steel
6B-4661	3/4-14	-12	3/8-18	-6	28.58	29.72	Steel
8B-2664	3/4-14	-12	1/2-14	-8	28.58	29.7	Steel
281-5832	3/4-14	-12	1/2-14	-8	28.58	29.7	Steel
432-5415	3/4-14	-12	1/2-14	-8	—	44	Steel
202-1205	3/4-14	-12	3/4-14	-12	34.92	49	Steel
004-5703	3/4-14	-12	1-11.5	-16	41.28	55.4	Steel
131-9367	1-11.5	-16	1/4-18	-4	34.9	25.4	Steel
493-6746	1-11.5	-16	1/4-18	-4	34.93	34.5	Steel
6B-1628	1-11.5	-16	3/8-18	-6	34.92	34.5	Steel
061-9593	1-11.5	-16	1/2-14	-8	35	27	Steel
6B-9081	1-11.5	-16	3/4-14	-12	34.92	34.5	Steel
432-3802	1-11.5	-16	3/4-14	-12	—	20.5	Steel
434-5564	1 1/4-11.5	-20	3/8-18	-6	—	29.5	Steel
8F-8306	1 1/4-11.5	-20	3/4-14	-12	44.45	28.54	Steel
3B-7257	1 1/4-11.5	-20	1-11.5	-16	44.45	36.3	Steel
4P-9254	1 1/4-11.5	-20	1-11.5	-16	—	18.5	Steel
6B-7280	1 1/2-11.5	-24	1/4-18	-4	50.8	40	Steel
6V-4516	1 1/2-11.5	-24	1/2-14	-8	50.8	39.9	Steel
489-1530	1 1/2-11.5	-24	3/4-14	-12	50.8	39.9	Steel
5R-7326	1 1/2-11.5	-24	1-11.5	-16	50.8	39.88	Steel
297-7935	1 1/2-11.5	-24	1 1/4-11.5	-20	50.8	39.9	Steel
485-8524	1 1/2-11.5	-24	1 1/4-11.5	-20	—	25.4	Steel
183-7257	1 1/2-11.5	-24	2-11.5	-32	73.02	66.8	Steel
6F-7699	2-11.5	-32	3/4-14	-12	63.5	34.13	Steel
141-2502	2-11.5	-32	1-11.5	-16	63.5	31.8	Steel
489-1529	2-11.5	-32	1 1/2-11.5	-24	63.5	44.5	Steel
9D-9658	2-11.5	-32	2-11.5	-32	73.02	67.6	Steel
1U-0655	2 1/2-8	-40	1/4-18	-4	—	27	Steel
509-0786	2 1/2-8	-40	2-11.5	-32	64.5	45	Steel
287-7338	3-8	-48	2-11.5	-32	94.5	49	Steel
213-7961	3-8	-48	2 1/2-8	-40	89	43	Steel
509-0785	3-8	-48	2 1/2-8	-40	98	38.9	Steel
509-0784	4-8	-64	3-8	-48	120.7	62	Steel

Male NPTF to Male 24° Flareless-SAE J514



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
5P-7907	1/8-27	-2	5/16-24	-2	11.11	26.4	Steel
1P-3861	1/8-27	-2	7/16-20	-4	12.7	28.4	Steel
5P-4317	1/4-18	-4	9/16-18	-6	15.88	34	Steel
5P-5876	3/8-18	-6	3/4-16	-8	20.64	36.6	Steel
5P-5877	1/2-14	-8	7/8-14	-10	15.88	44.44	Steel
5P-6922	3/4-14	-12	1 1/16-12	-12	28.58	47.8	Steel
5P-5878	3/4-14	-12	1 3/16-12	-14	19.05	47.8	Steel

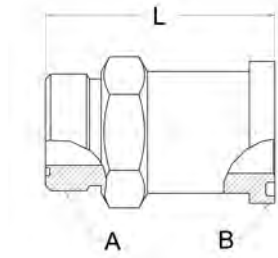
Male ORFS / Bulkhead Male ORFS



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
459-0769	11/16-16	-6	11/16-16	-6	25.4	53	SST
6V-8993	9/16-18	-4	9/16-18	-4	20.64	48	Steel
6V-8994	11/16-16	-6	11/16-16	-6	25.4	53	Steel
150-0128	11/16-16	-6	11/16-16	-6	25.4	61.2	Steel
8T-5890	11/16-16	-6	11/16-16	-6	25.4	90.5	Steel
8T-0129	11/16-16	-6	13/16-16	-8	28.58	56.6	Steel
8T-6445	11/16-16	-6	13/16-16	-8	28.58	51.7	Steel
6V-8995	13/16-16	-8	13/16-16	-8	28.58	58.5	Steel
208-2859	13/16-16	-8	13/16-16	-8	28.58	69	Steel
268-1547	13/16-16	-8	1-14	-10	33.34	63.9	Steel
6V-9353	1-14	-10	13/16-16	-8	28.58	62.5	Steel
6V-8996	1-14	-10	1-14	-10	33.34	66.5	Steel
163-9960	1 3/16-12	-12	1-14	-10	32	68.1	Steel
6V-8997	1 3/16-12	-12	1 3/16-12	-12	38.1	69	Steel
162-2896	1 3/16-12	-12	1 3/16-12	-12	38.1	75.2	Steel
323-5953	1 3/16-12	-12	1 3/16-12	-12	38.1	69	Steel
8C-8493	1 7/16-12	-16	1 3/16-12	-12	44.45	69.6	Steel
6V-8998	1 7/16-12	-16	1 7/16-12	-16	44.45	70	Steel
7X-2464	1 7/16-12	-16	1 7/16-12	-16	44.45	118	Steel
9X-2317	1 11/16-12	-20	1 7/16-12	-16	50.8	70.1	Steel
110-9160	1 11/16-12	-20	1 11/16-12	-20	50.8	70	Steel
451-0496	2-12	-24	2-12	-24	60.32	70	Steel

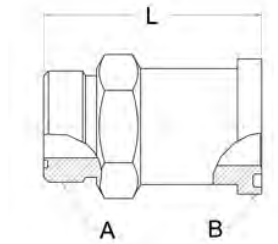
Straight Adapters

Male ORFS / Code 61 Head Flange



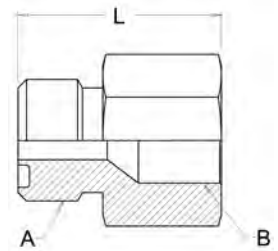
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
474-2586	1 3/16-12	-12	Dash 12	32	70	Steel
262-5529	1 7/16-12	-16	Dash 16	41	72	Steel
459-0662	1 11/16-12	-20	Dash 20	47.63	77	Steel
474-2628	1 11/16-12	-20	Dash 24	53.98	83.6	Steel

Male ORFS / Code 62 Head Flange



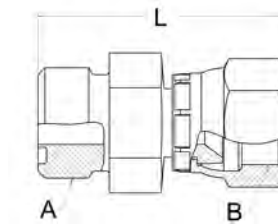
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
459-0666	13/16-16	-8	Dash 8	28.58	65.6	Steel
228-3671	1 7/16-12	-16	Dash 20		77.5	Steel
432-9983	1 11/16-12	-20	Dash 20		77.47	Steel
442-9593	1 11/16-12	-20	Dash 20		77.47	Steel

Male ORFS / JIC 37° Port



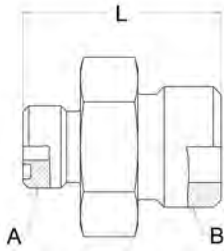
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
8T-6701	9/16-18	-4	7/16-20	-4	17.46	24	Steel
146-7082	11/16-16	-6	9/16-18	-6	19.05	25	Steel

Male ORFS / JIC 37° Swivel Nut



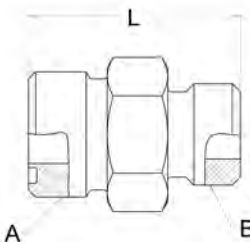
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
112-2564	11/16-16	-6	9/16-18	-6	19.05	29	Steel
112-2565	13/16-16	-8	3/4-16	-8	22.22	33.5	Steel
199-6702	1 3/16-12	-12	1 1/16-12	-12	31.75	41.4	Steel

Male ORFS / Male BSPP Flat Face-ISO 1179



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
439-1951	9/16-18	-4	1/8-28	-2	17	26	Steel
293-1934	9/16-18	-4	1/4-19	-4	15.88	30	Steel
377-9597	9/16-18	-4	1/4-19	-4	19	30.9	Steel
216-2367	9/16-18	-4	3/8-19	-6	24	31	Steel
377-9598	9/16-18	-4	3/8-19	-6	22	31.6	Steel
513-8036	9/16-18	-4	1/2-14	-8	27	34.5	Steel
175-9457	11/16-16	-6	1/4-19	-4	19	31.5	Steel
334-5077	11/16-16	-6	1/4-19	-4	19	32	Steel
386-6212	11/16-16	-6	1/4-19	-4	19	32	Steel
395-8763	11/16-16	-6	1/4-19	-4	19	32	Steel
396-0392	11/16-16	-6	3/8-19	-6	22	33.5	Steel
8C-6781	11/16-16	-6	3/8-19	-6	22	32	Steel
293-5883	11/16-16	-6	1/2-14	-8	27	37	Steel
175-9493	13/16-16	-8	1/4-19	-4	22	38	Steel
268-1557	13/16-16	-8	1/4-19	-4	22	37.5	Steel
136-4098	13/16-16	-8	3/8-19	-6	22	34.6	Steel
279-8487	13/16-16	-8	1/2-14	-8	27	47	Steel
368-1126	13/16-16	-8	1/2-14	-8	27	62	Steel
377-9591	13/16-16	-8	1/2-14	-8	27	38	Steel
178-2651	13/16-16	-8	3/4-14	-12	32	42.7	Steel
451-0357	13/16-16	-8	3/4-14	-12	32	41.9	Steel
448-5773	1-14	-10	1/2-14	-8	27	41	Steel
162-8711	1-14	-10	1/2-14	-8	27	40.1	Steel
448-9003	1 3/16-12	-12	1/2-14	-8	32	48.5	Steel
248-6013	1 3/16-12	-12	3/4-14	-12	36	45	Steel
377-9590	1 3/16-12	-12	3/4-14	-12	32	46.1	Steel
426-4165	1 7/16-12	-16	3/4-14	-12	38.1	46	Steel
451-0358	1 7/16-12	-16	3/4-14	-12	38	50.3	Steel
377-9592	1 7/16-12	-16	1-11	-16	41	49.8	Steel

Male ORFS / Male BSPP STOR-JIS B2351



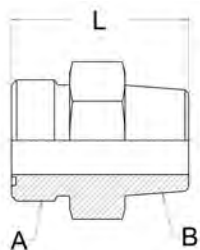
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
176-8381	11/16-16	-6	3/8-19	-6	22	31.5	Steel
474-2593	13/16-16	-8	3/8-19	-6	22	35	Steel
165-1094	13/16-16	-8	1/2-14	-8	27	37	Steel
279-8488	13/16-16	-8	1/2-14	-8	27	87	Steel

Straight Adapters

Male ORFS / Male BSPP STOR-JIS B2351 (Cont'd.)

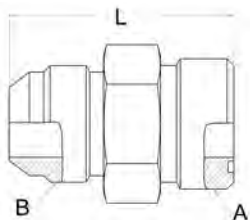
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
165-1059	13/16-16	-8	3/4-14	-12	32	40.3	Steel
297-3301	1-14	-10	3/8-19	-6		45	Steel
371-7207	1-14	-10	1/2-14	-8	27	39.5	Steel
099-6839	1-14	-10	3/4-14	-12	36	43.5	Steel
136-4097	1-14	-10	3/4-14	-12	36	43.1	Steel
086-2746	1 3/16-12	-12	3/4-14	-12	36	45	Steel
096-6223	1 7/16-12	-16	1-11	-16	41	51.5	Steel
209-5888	1 7/16-12	-16	1-11	-16	41	51.5	Steel

Male ORFS / Male BSPT-ISO 7-1



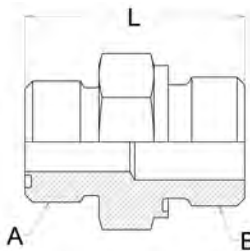
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
8U-1341	11/16-16	-6	1/4-19	-4	18	33.9	Steel
420-7641	13/16-16	-8	1/2-14	-8	27	45	Steel
451-0493	13/16-16	-8	1/2-14	-8	28.58	64.5	Steel
339-0546	1 7/16-12	-16	1-11	-16	41	53.2	Steel
371-7195	1 11/16-12	-20	1 1/4-11	-20	47.63	58.4	Steel

Male ORFS / Male JIC 37°



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
107-3877	11/16-16	-6	9/16-18	-6	19.05	34	Steel
8C-7306	13/16-16	-8	3/4-16	-8	22.22	39.3	Steel
8C-7307	1-14	-10	7/8-14	-10	26.99	46.4	Steel
8C-7308	1 3/16-12	-12	1 1/16-12	-12	31.75	52	Steel

Male ORFS / Male Metric Flat Face-ISO 9974



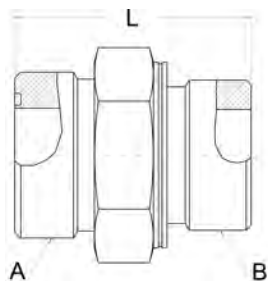
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
386-6226	1-14	-10	M27x2	32	46	SST
171-8728	9/16-18	-4	M10x1	15.88	26	Steel
329-5549	9/16-18	-4	M12x1.5	17.7	29.7	Steel
7R-6371	9/16-18	-4	M14x1.5	19.05	32.1	Steel
426-4096	9/16-18	-4	M16x1.5	22	32.5	Steel
171-8729	11/16-16	-6	M10x1	19	28.3	Steel
398-5646	11/16-16	-6	M12x1.5	19	35.3	Steel
169-1578	11/16-16	-6	M14x1.5	19	32	Steel

Male ORFS / Male Metric Flat Face-ISO 9974 (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
451-0427	11/16-16	-6	M16x1.5	22	32	Steel
417-7778	11/16-16	-6	M16x1.5	22	33.5	Steel
474-2634	11/16-16	-6	M18x1.5	24	33	Steel
448-9022	13/16-16	-8	M16x1.5	22	32	Steel
8U-1378	13/16-16	-8	M18x1.5	24	37.5	Steel
230-4474	13/16-16	-8	M18x1.5	24	35	Steel
258-8589	13/16-16	-8	M22x1.5	27	44	Steel
258-8591	13/16-16	-8	M26x1.5	34.92	46	Steel
366-4664	1 3/16-12	-12	M22x1.5	32	45	Steel
439-1870	1 3/16-12	-12	M26x1.5	32	46	Steel
196-9015	1 3/16-12	-12	M26x1.5	31.75	46	Steel
161-3189	1 7/16-12	-16	M26x1.5	38.1	49.5	Steel
367-5998	1 7/16-12	-16	M33x2	41	50	Steel

Straight Adapters

Male ORFS / Male Metric STOR



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
228-6047	9/16-18	-4	M10x1	17	27	Steel
117-9983	9/16-18	-4	M12x1.5	17.46	31.5	Steel
8T-7487	9/16-18	-4	M12x1.5	17	28.5	Steel
241-6220	9/16-18	-4	M14x1.5	19	29.5	Steel
119-6407	11/16-16	-6	M10x1	19.05	28.6	Steel
304-7986	11/16-16	-6	M12x1.5	19	32	Steel
123-7341	11/16-16	-6	M12x1.5	19	61.2	Steel
8T-7489	11/16-16	-6	M14x1.5	19	32	Steel
175-9456	11/16-16	-6	M14x1.5		32	Steel
8T-6725	11/16-16	-6	M16x1.5	22	33.5	Steel
439-1734	11/16-16	-6	M16x1.5	24	33.5	Steel
268-1554	11/16-16	-6	M18x1.5	24	36	Steel
341-0117	11/16-16	-6	M20x1.5	27	36.5	Steel
260-9141	11/16-16	-6	M27x2	32	42.5	Steel
287-7281	11/16-16	-6	M8x1	22	30.5	Steel
369-6819	13/16-16	-8	M12x1.5	22	35	Steel
8U-6888	13/16-16	-8	M14x1.5	22	35	Steel
8U-5923	13/16-16	-8	M14x1.5	22	92.8	Steel
8T-7488	13/16-16	-8	M16x1.5	22.22	36.5	Steel
8T-7490	13/16-16	-8	M18x1.5	24	38	Steel
8T-7491	13/16-16	-8	M22x1.5	27	39.5	Steel
281-5958	13/16-16	-8	M22x1.5	26.99	39.5	Steel
281-5883	13/16-16	-8	M27x2	32	44.5	Steel
227-0062	1-14	-10	M18x1.5	27	41	Steel
480-2991	1-14	-10	M22x1.5	27	90	Steel
227-0064	1-14	-10	M22x1.5	27	42	Steel
8T-7495	1-14	-10	M27x2	32	47	Steel
459-0646	1 3/16-12	-12	M22x1.5	32	120	Steel
484-8797	1 3/16-12	-12	M22x1.5	32	105	Steel
8T-7492	1 3/16-12	-12	M22x1.5	32	45	Steel
310-5888	1 3/16-12	-12	M22x1.5	32	45	Steel
8T-7494	1 3/16-12	-12	M27x2	32	48.5	Steel
307-9782	1 3/16-12	-12	M33x2	41	51.5	Steel
281-5873	1 7/16-12	-16	M22x1.5	41	48	Steel
342-8379	1 7/16-12	-16	M33x2	38.1	110	Steel
8T-7496	1 7/16-12	-16	M33x2	41	52	Steel
322-3504	1 7/16-12	-16	M33x2		151.5	Steel

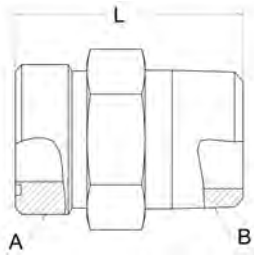
Straight Adapters

Male ORFS / Male Metric STOR (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
8T-7497	1 11/16-12	-20	M33x2	44.45	52.3	Steel
227-0066	1 11/16-12	-20	M42x2	50	54.5	Steel

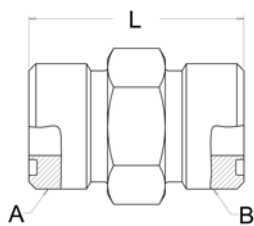
Straight Adapters

Male ORFS / Male NPTF



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
8C-6865	9/16-18	-4	1/8-27	-2	15.88	27.2	Steel
8C-6866	9/16-18	-4	1/4-18	-4	15.88	31.5	Steel
367-6013	9/16-18	-4	3/8-18	-6	19.05	36.5	Steel
8C-6867	9/16-18	-4	3/8-18	-6	19.05	31.5	Steel
101-0387	11/16-16	-6	1/8-27	-2	19.05	28.5	Steel
8C-6868	11/16-16	-6	1/4-18	-4	19.05	33	Steel
2T-2416	11/16-16	-6	3/8-18	-6	19	35.3	Steel
8C-6869	11/16-16	-6	3/8-18	-6	19.05	33	Steel
8C-6870	11/16-16	-6	1/2-14	-8	22.22	39.4	Steel
8C-6871	13/16-16	-8	3/8-18	-6	22.22	37.6	Steel
8C-6872	13/16-16	-8	1/2-14	-8	22.22	40.9	Steel
431-8071	13/16-16	-8	3/4-14	-12	28.58	42.93	Steel
211-5237	13/16-16	-8	3/4-14	-12	28.58	42.9	Steel
150-7158	1-14	-10	3/8-18	-6	26.99	39.86	Steel
8C-6873	1-14	-10	1/2-14	-8	27	43.7	Steel
249-2924	1-14	-10	3/4-14	-12	28.58	46.2	Steel
431-8064	1 3/16-12	-12	1/2-14	-8	31.75	46.74	Steel
365-0682	1 3/16-12	-12	1/2-14	-8	31.75	49	Steel
199-4673	1 3/16-12	-12	1-11.5	-16	36	57.7	Steel
315-9833	1 7/16-12	-16	3/4-14	-12	38.1	47.2	Steel
8C-6875	1 7/16-12	-16	1-11.5	-16	38.1	53.9	Steel
150-7159	1 11/16-12	-20	1/2-14	-8	44.45	54	Steel
117-3050	1 11/16-12	-20	1-11.5	-16	47.63	54	Steel
201-5551	1 11/16-12	-20	1 1/4-11.5	-20	47.63	58.42	Steel
445-9765	2-12	-24	1 1/2-11.5	-24	53.98	57.4	Steel
296-5728	2-12	-24	1 1/2-11.5	-24	53.98	61	Steel

Male ORFS / Male ORFS



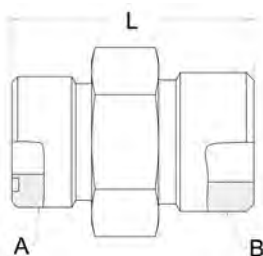
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
205-5120	13/16-16	-8	9/16-18	-4	22.23	37.5	SST
6V-8729	9/16-18	-4	9/16-18	-4	15.88	27.5	Steel
6V-8736	11/16-16	-6	9/16-18	-4	19.05	30	Steel
6V-8730	11/16-16	-6	11/16-16	-6	19.05	31	Steel
6V-8737	13/16-16	-8	11/16-16	-6	22.22	33.5	Steel
6V-8731	13/16-16	-8	13/16-16	-8	22.22	35.5	Steel
474-2631	13/16-16	-8	13/16-16	-8	22.22	35.5	Steel

Male ORFS / Male ORFS (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
8T-5082	13/16-16	-8	1 3/16-12	-12	31.75	43	Steel
6V-8738	1-14	-10	13/16-16	-8	26.99	40	Steel
6V-8732	1-14	-10	1-14	-10	26.99	42.5	Steel
6V-8739	1 3/16-12	-12	1-14	-10	31.75	45.5	Steel
6V-8733	1 3/16-12	-12	1 3/16-12	-12	31.75	47	Steel
6V-8740	1 7/16-12	-16	1 3/16-12	-12	38.1	49	Steel
6V-8734	1 7/16-12	-16	1 7/16-12	-16	38.1	49.5	Steel
6V-8741	1 11/16-12	-20	1 7/16-12	-16	44.45	51.5	Steel
109-5289	1 11/16-12	-20	1 11/16-12	-20	44.45	51.5	Steel
7X-0823	2-12	-24	2-12	-24	53.98	53	Steel

Straight Adapters

Male ORFS / Male STOR



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
426-4082	13/16-16	-8	1 1/16-12	-12	31.75	44.5	SST
081-5622	9/16-18	-4	3/8-24	-3	15.88	27	Steel
6V-8647	9/16-18	-4	7/16-20	-4	15.88	29	Steel
353-4662	9/16-18	-4	7/16-20	-4	15.88	28	Steel
220-2073	9/16-18	-4	7/16-20	-4	15.88	61	Steel
301-2866	9/16-18	-4	7/16-20	-4	19.05	29	Steel
6V-9010	9/16-18	-4	7/16-20	-4	15.88	71.5	Steel
8T-6988	9/16-18	-4	1/2-20	-5	15.88	29.5	Steel
6V-8641	9/16-18	-4	9/16-18	-6	17.46	31	Steel
145-2237	9/16-18	-4	9/16-18	-6	17.46	47	Steel
156-8801	9/16-18	-4	9/16-18	-6	19.05	83.2	Steel
156-8845	9/16-18	-4	9/16-18	-6	19.05	57	Steel
267-4041	9/16-18	-4	9/16-18	-6	17.46	67	Steel
087-0677	9/16-18	-4	3/4-16	-8	22.3	33	Steel
112-9783	9/16-18	-4	3/4-16	-8	22.23	33.5	Steel
6V-9872	11/16-16	-6	7/16-20	-4	19.05	34	Steel
8T-5043	11/16-16	-6	1/2-20	-5	19.05	30.8	Steel
281-5911	11/16-16	-6	9/16-18	-6	19.05	146	Steel
345-3907	11/16-16	-6	9/16-18	-6	19.05	62	Steel
396-0385	11/16-16	-6	9/16-18	-6		28	Steel
8T-8887	11/16-16	-6	9/16-18	-6	19.05	83.2	Steel
237-6095	11/16-16	-6	9/16-18	-6	19.05	57.5	Steel
6V-8636	11/16-16	-6	9/16-18	-6	19.05	32	Steel
136-1901	11/16-16	-6	9/16-18	-6	19.05	77.4	Steel
166-3032	11/16-16	-6	9/16-18	-6	19.05	71	Steel
116-5435	11/16-16	-6	9/16-18	-6	19.05	29.83	Steel
8T-0075	11/16-16	-6	9/16-18	-6	19.05	50	Steel
8T-1779	11/16-16	-6	9/16-18	-6	19.05	45	Steel
8C-0597	11/16-16	-6	9/16-18	-6	19.05	90	Steel
9X-2297	11/16-16	-6	9/16-18	-6	19.05	62	Steel
092-3635	11/16-16	-6	3/4-16	-8	22.2	66	Steel
199-8495	11/16-16	-6	3/4-16	-8	22.22	54	Steel
6V-8634	11/16-16	-6	3/4-16	-8	22.23	34.5	Steel
395-8602	11/16-16	-6	3/4-16	-8	22.2	35.1	Steel
8T-0076	11/16-16	-6	3/4-16	-8	22.22	54	Steel
439-1948	11/16-16	-6	7/8-14	-10	26.99	79.5	Steel
6V-8715	11/16-16	-6	7/8-14	-10	25.4	38.5	Steel
9X-6550	11/16-16	-6	7/8-14	-10	25.4	54.8	Steel

Straight Adapters

Male ORFS / Male STOR (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
418-4430	11/16-16	-6	1 1/16-12	-12	38.1	37	Steel
418-4454	11/16-16	-6	1 1/16-12	-12	38.1	37	Steel
371-7193	11/16-16	-6	1 1/16-12	-12	31.75	42.5	Steel
156-6131	13/16-16	-8	7/16-20	-4	22.23	36.5	Steel
365-0600	13/16-16	-8	9/16-18	-6	20.64	49	Steel
6V-9873	13/16-16	-8	9/16-18	-6	22.23	37.5	Steel
8T-5050	13/16-16	-8	9/16-18	-6	22.23	66	Steel
6V-8639	13/16-16	-8	3/4-16	-8	22.23	36.5	Steel
8T-0077	13/16-16	-8	3/4-16	-8	22.23	68	Steel
123-1904	13/16-16	-8	3/4-16	-8	22.22	76	Steel
9X-2304	13/16-16	-8	3/4-16	-8	22.23	114	Steel
480-3010	13/16-16	-8	7/8-14	-10	25.4	40.5	Steel
104-9054	13/16-16	-8	7/8-14	-10	25.4	72	Steel
6V-8638	13/16-16	-8	7/8-14	-10	25.4	40.5	Steel
126-9745	13/16-16	-8	7/8-14	-10	26.99	117.5	Steel
126-9903	13/16-16	-8	7/8-14	-10	26.99	82.5	Steel
228-7372	13/16-16	-8	7/8-14	-10	25.4	117.6	Steel
5I-4370	13/16-16	-8	7/8-14	-10	22	51	Steel
4I-7745	13/16-16	-8	1 1/16-12	-12	31.75	163.5	Steel
6V-8633	13/16-16	-8	1 1/16-12	-12	31.75	44.5	Steel
207-0650	13/16-16	-8	1 1/16-12	-12	31.75	99	Steel
9T-2136	13/16-16	-8	1 3/16-12	-14	34.92	44.4	Steel
9X-8408	13/16-16	-8	1 5/16-12	-16	38.1	45.5	Steel
8T-0405	1-14	-10	1/2-20	-5	26.99	40.8	Steel
8C-6758	1-14	-10	9/16-18	-6	26.99	41.5	Steel
6V-8632	1-14	-10	3/4-16	-8	27	45	Steel
137-9076	1-14	-10	3/4-16	-8	26.99	74.5	Steel
156-9791	1-14	-10	3/4-16	-8	26.99	75	Steel
172-0677	1-14	-10	3/4-16	-8	26.99	37	Steel
172-0679	1-14	-10	3/4-16	-8	26.99	54	Steel
297-6678	1-14	-10	7/8-14	-10	26.99	83	Steel
488-1844	1-14	-10	7/8-14	-10	26.99	43	Steel
6V-8642	1-14	-10	7/8-14	-10	26.99	43	Steel
8T-1576	1-14	-10	7/8-14	-10	26.99	79.5	Steel
168-9393	1-14	-10	7/8-14	-10	27	52.5	Steel
176-4694	1-14	-10	7/8-14	-10	26.99	148	Steel
117-7065	1-14	-10	7/8-14	-10	26.99	99.1	Steel

Straight Adapters

Male ORFS / Male STOR (Cont'd.)

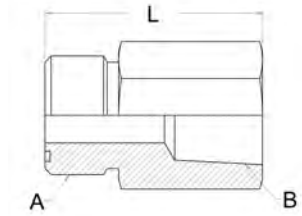
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
202-1673	1-14	-10	7/8-14	-10	26.99	116	Steel
287-7268	1-14	-10	1 1/16-12	-12	31.75	70	Steel
109-5815	1-14	-10	1 1/16-12	-12	31.5	88.5	Steel
6V-8713	1-14	-10	1 1/16-12	-12	31.75	47	Steel
260-9213	1-14	-10	1 1/16-12	-12	31.75	90	Steel
125-1915	1-14	-10	1 5/16-12	-16	38.1	45.09	Steel
138-7538	1-14	-10	1 5/16-12	-16	38.1	48	Steel
326-0306	1-14	-10	1 5/16-12	-16	38.1	45.5	Steel
450-1697	1 3/16-12	-12	9/16-18	-6	—	36.51	Steel
6V-9874	1 3/16-12	-12	3/4-16	-8	31.75	48.5	Steel
268-1640	1 3/16-12	-12	7/8-14	-10	31.75	56.9	Steel
6V-8640	1 3/16-12	-12	7/8-14	-10	31.75	50.5	Steel
132-8815	1 3/16-12	-12	7/8-14	-10	31.75	128.6	Steel
3E-7420	1 3/16-12	-12	7/8-14	-10	31.75	99.6	Steel
9X-6656	1 3/16-12	-12	7/8-14	-10	31.75	131	Steel
282-5642	1 3/16-12	-12	1 1/16-12	-12	31.75	135.5	Steel
4I-8979	1 3/16-12	-12	1 1/16-12	-12	31.75	48.6	Steel
8T-9023	1 3/16-12	-12	1 1/16-12	-12	31.75	95.5	Steel
109-5823	1 3/16-12	-12	1 1/16-12	-12	31.5	88.5	Steel
6V-8637	1 3/16-12	-12	1 1/16-12	-12	31.75	48.5	Steel
8C-8417	1 3/16-12	-12	1 1/16-12	-12	31.75	95.5	Steel
110-5897	1 3/16-12	-12	1 1/16-12	-12	31.5	113.5	Steel
262-7035	1 3/16-12	-12	1 1/16-12	-12	31.75	113.5	Steel
8T-0078	1 3/16-12	-12	1 1/16-12	-12	31.75	73	Steel
6V-9162	1 3/16-12	-12	1 1/16-12	-12	31.75	83.5	Steel
8C-8498	1 3/16-12	-12	1 1/16-12	-12	31.75	60.5	Steel
208-3786	1 3/16-12	-12	1 3/16-12	-14	34.92	180	Steel
302-8832	1 3/16-12	-12	1 3/16-12	-14	34.92	163.5	Steel
2T-2991	1 3/16-12	-12	1 3/16-12	-14	34.92	48.6	Steel
7E-7264	1 3/16-12	-12	1 3/16-12	-14	34.93	133.5	Steel
125-7426	1 3/16-12	-12	1 5/16-12	-16	38.1	135.5	Steel
184-9330	1 3/16-12	-12	1 5/16-12	-16	38.1	98.5	Steel
286-6395	1 3/16-12	-12	1 5/16-12	-16	38.1	64.7	Steel
109-5821	1 3/16-12	-12	1 5/16-12	-16	38.1	75	Steel
6V-8716	1 3/16-12	-12	1 5/16-12	-16	38.1	49.5	Steel
152-9254	1 3/16-12	-12	1 5/16-12	-16	38.1	123.5	Steel
278-6506	1 3/16-12	-12	1 5/16-12	-16	38.1	133.5	Steel

Male ORFS / Male STOR (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
8T-0197	1 3/16-12	-12	1 5/16-12	-16	38.1	83.5	Steel
8C-3370	1 7/16-12	-16	3/4-16	-8	38.1	50	Steel
8T-9386	1 7/16-12	-16	7/8-14	-10	38.1	52	Steel
8C-4000	1 7/16-12	-16	7/8-14	-10	38.1	92.8	Steel
347-4425	1 7/16-12	-16	1 1/16-12	-12	38.1	54.3	Steel
397-9733	1 7/16-12	-16	1 1/16-12	-12	41	84.5	Steel
6V-8714	1 7/16-12	-16	1 1/16-12	-12	38.1	54.3	Steel
206-4831	1 7/16-12	-16	1 3/16-12	-14	38.1	110	Steel
254-4100	1 7/16-12	-16	1 3/16-12	-14	27	95	Steel
8T-6453	1 7/16-12	-16	1 3/16-12	-14	38.1	49.5	Steel
176-5880	1 7/16-12	-16	1 3/16-12	-14	38.1	123.4	Steel
8C-8807	1 7/16-12	-16	1 3/16-12	-14	38.1	93.5	Steel
8T-8898	1 7/16-12	-16	1 5/16-12	-16	38.1	105	Steel
6V-8635	1 7/16-12	-16	1 5/16-12	-16	38.1	50	Steel
215-2432	1 7/16-12	-16	1 5/16-12	-16	38.1	136.5	Steel
238-7836	1 7/16-12	-16	1 5/16-12	-16	38.1	106.9	Steel
307-4919	1 7/16-12	-16	1 5/16-12	-16	38.1	83.5	Steel
8C-5723	1 7/16-12	-16	1 5/16-12	-16	38.1	68.5	Steel
8T-0198	1 7/16-12	-16	1 5/16-12	-16	38.1	83.5	Steel
8C-3443	1 7/16-12	-16	1 5/16-12	-16	38.1	118.5	Steel
307-5130	1 7/16-12	-16	1 5/8-12	-20	47.63	78.3	Steel
6V-9875	1 7/16-12	-16	1 5/8-12	-20	47.63	52.5	Steel
8C-3323	1 7/16-12	-16	1 7/8-12	-24	—	54	Steel
347-4407	1 11/16-12	-20	1 1/16-12	-12	44.45	56.3	Steel
480-3003	1 11/16-12	-20	1 1/16-12	-12	44.45	63	Steel
9X-8260	1 11/16-12	-20	1 3/16-12	-14	44.45	56.5	Steel
161-8021	1 11/16-12	-20	1 5/16-12	-16	44.45	121	Steel
8T-7927	1 11/16-12	-20	1 5/16-12	-16	44.45	52.3	Steel
8T-3611	1 11/16-12	-20	1 5/8-12	-20	47.63	52.5	Steel
220-5924	1 11/16-12	-20	1 5/8-12	-20	47.63	116	Steel
109-3657	1 11/16-12	-20	1 7/8-12	-24	53.98	54	Steel
268-1506	2-12	-24	1 5/16-12	-16	53.98	59.6	Steel
8T-8985	2-12	-24	1 5/8-12	-20	53.98	59.6	Steel
201-4160	2-12	-24	1 7/8-12	-24	53.98	133.5	Steel
8T-7926	2-12	-24	1 7/8-12	-24	53.98	54	Steel

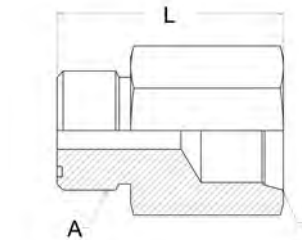
Straight Adapters

Male ORFS / NPTF Port



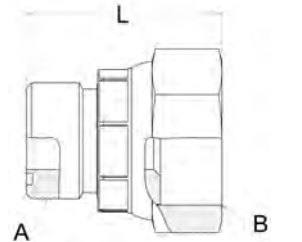
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
8T-4128	9/16-18	-4	1/8-27	-2	15.88	16.9	Steel
8T-6776	9/16-18	-4	1/4-18	-4	19.05	35	Steel
7X-7934	11/16-16	-6	1/4-18	-4	19.05	36.2	Steel
7X-2441	11/16-16	-6	3/8-18	-6	19.05	36.2	Steel
304-8047	13/16-16	-8	3/8-18	-6	22.22	37.8	Steel

Male ORFS / Port STOR



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
164-0193	11/16-16	-6	9/16-18	-6	22.23	33.7	Steel
8T-6663	11/16-16	-6	9/16-18	-6	19.05	36	Steel
6I-6851	13/16-16	-8	9/16-18	-6	23.81	36	Steel
310-5889	13/16-16	-8	3/4-16	-8	25.4	45	Steel
157-8510	1 3/16-12	-12	1 1/16-12	-12	41.28	46.25	Steel
9X-6643	1 3/16-12	-12	1 5/16-12	-16	38.1	47	Steel
4I-0893	1 3/16-12	-12	1 5/16-12	-16	41	82	Steel
8T-7813	1 7/16-12	-16	1 5/16-12	-16	44.45	47.5	Steel

Male ORFS / Swivel Nut ORFS

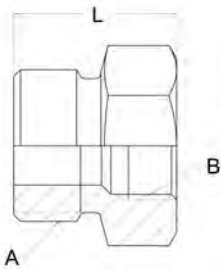


Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
6V-8934	9/16-18	-4	11/16-16	-6	20.64	27.8	Steel
489-4877	11/16-16	-6	11/16-16	-6	19.05	44.8	Steel
6V-8936	11/16-16	-6	13/16-16	-8	23.81	32.5	Steel
175-9489	11/16-16	-6	1 3/16-12	-12	34.92	27	Steel
304-7975	13/16-16	-8	9/16-18	-4	22.22	35	Steel
3E-7403	13/16-16	-8	11/16-16	-6	22.22	41	Steel
211-4040	13/16-16	-8	13/16-16	-8	23.81	65	Steel
214-3245	13/16-16	-8	13/16-16	-8	23.81	35	Steel
506-3309	13/16-16	-8	13/16-16	-8	—	28.45	Steel
175-9494	13/16-16	-8	1 3/16-12	-12	36	28	Steel
471-0103	13/16-16	-8	1 3/16-12	-12	35.1	27.9	Steel
426-4059	1-14	-10	13/16-16	-8	25.4	51	Steel
449-1438	1-14	-10	13/16-16	-8	26.99	45.97	Steel
6V-8943	1-14	-10	1 3/16-12	-12	34.92	43	Steel
6V-8945	1-14	-10	1 7/16-12	-16	—	32	Steel
288-9733	1 3/16-12	-12	1-14	-10	31.75	50.8	Steel

Male ORFS / Swivel Nut ORFS (Cont'd.)

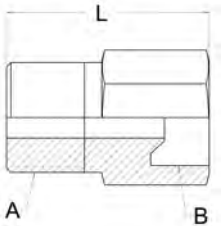
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
451-1784	1 3/16-12	-12	1-14	-10	31.75	50.55	Steel
396-0398	1 3/16-12	-12	1 3/16-12	-12	31.75	58	Steel
337-8772	1 3/16-12	-12	1 3/16-12	-12	31.75	125.6	Steel
364-3072	1 3/16-12	-12	1 7/16-12	-16	38.1	67.5	Steel
6V-8946	1 3/16-12	-12	1 7/16-12	-16	41.28	46.5	Steel
6V-8947	1 3/16-12	-12	1 11/16-12	-20	—	33.5	Steel
203-6688	1 7/16-12	-16	1 3/16-12	-12	38.1	54.86	Steel
371-7210	1 7/16-12	-16	1 7/16-12	-16	41.28	50	Steel
6V-8948	1 7/16-12	-16	1 11/16-12	-20	47.63	47.5	Steel
239-5032	1 11/16-12	-20	1 7/16-12	-16	44.45	57.9	Steel

Male STOR / 45° Flare-SAE J512 Port



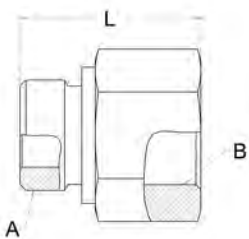
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
6N-3898	7/8-14	-10	5/8-18	-6	25.4	23.9	Steel

Male STOR / 45° Inverted Flare-SAE J512 Port



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
5P-7662	1/2-20	-5	7/16-24	-4	15.88	23.368	Brass

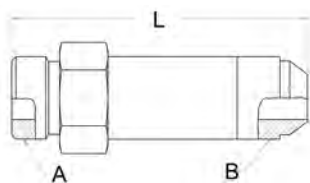
Male STOR / BSPP STOR-JIS B2351 Port



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
2U-8951	9/16-18	-6	1/4-19	-4	19.05	28	Steel
196-4196	1 1/16-12	-12	3/4-14	-12	36	49.5	Steel
237-7180	1 5/16-12	-16	3/4-14	-12	52	52.6	Steel

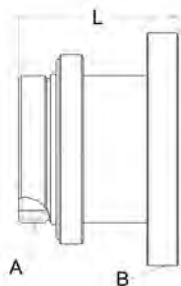
Straight Adapters

Male STOR / Bulkhead Male JIC 37°



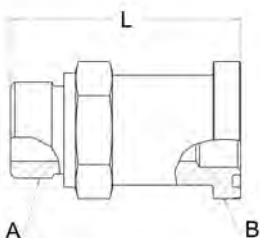
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
030-8110	3/4-16	-8	3/4-16	-8	22.23	68.6	Steel
7G-4850	7/8-14	-10	7/8-14	-10	28.58	60.5	Steel

Male STOR / Code 61 Head Flange



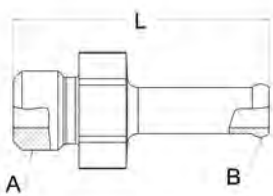
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
9U-7440	1 5/16-12	-16	25.40	44.45	143.76	Steel
9U-7443	1 5/16-12	-16	Dash 12	41.28	127.51	Steel
9U-7445	1 5/16-12	-16	Dash 20	44.45	134.11	Steel
442-3486	3-12	-48	Dash 40		80.78	Steel
442-3488	3-12	-48	Dash 40		82.6	Steel

Male STOR / Code 62 Head Flange



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
7X-2430	1 5/16-12	-16	Dash 16	41.28	79.8	Steel
7X-2608	1 5/16-12	-16	Dash 20	44.45	94.5	Steel
473-9869	2 1/2-12	-32	Dash 32		95	Steel

Male STOR / Hose Bead



Part Number	Thread Size (A)	Dash Size (A)	Hose ID (mm) (B)	Dash Size (B)	HEX Size	Length (L)	Material
245-1398	7/16-20	-4	6.35	-4	14.29	35.3	Brass
345-3923	3/4-16	-8	12.70	-8	22.22	57.8	Brass
439-1904	9/16-18	-6	9.52	-6	17.46	56	SST
337-8766	3/8-24	-3	6.35	-4	12.7	52.7	Steel
310-5893	7/16-20	-4	6.35	-4	14.29	54.2	Steel
092-6629	7/16-20	-4	9.52	-6	14.29	55.1	Steel
151-1975	1/2-20	-5	7.94	-5	17.46	37	Steel
297-7964	9/16-18	-6	12.70	-8	17.5	55.9	Steel
379-4369	9/16-18	-6	14.29		17.46	54.4	Steel
426-4018	9/16-18	-6	15.88	-10	22.22	56.7	Steel
268-4045	9/16-18	-6	6.35	-4	17.46	56.6	Steel
157-1669	9/16-18	-6	7.94	-5	17.5	56.6	Steel

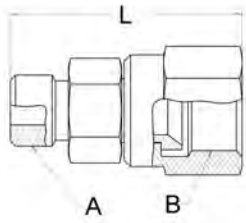
Straight Adapters

Male STOR / Hose Bead (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Hose ID (mm) (B)	Dash Size (B)	HEX Size	Length (L)	Material
474-8989	9/16-18	-6	9.52	-6		35.6	Steel
5P-1046	9/16-18	-6	9.52	-6	17.46	56	Steel
034-3679	3/4-16	-8	12.70	-8	22.22	58.4	Steel
168-8806	3/4-16	-8	15.88	-10	22.22	58.4	Steel
377-9605	3/4-16	-8	19.05	-12	22.22	57.8	Steel
357-4579	3/4-16	-8	25.40	-16	31.75	65	Steel
515-4951	3/4-16	-8	6.35	-4	22.22	58.4	Steel
347-7623	3/4-16	-8	8		22.22	46.6	Steel
149-8142	3/4-16	-8	9.52	-6	22.22	57.8	Steel
143-3158	7/8-14	-10	12.70	-8	25.4	61	Steel
131-2171	7/8-14	-10	15.88	-10	25.4	61.7	Steel
195-7930	7/8-14	-10	19.05	-12	25.4	61.7	Steel
208-7552	7/8-14	-10	25.40	-16	31.75	66.5	Steel
142-4881	7/8-14	-10	9.52	-6	25.4	61	Steel
033-6783	1 1/16-12	-12	19.05	-12	31.75	65.8	Steel
069-4269	1 1/16-12	-12	25.40	-16	31.75	65.8	Steel
247-4603	1 3/16-12	-14	25.40	-16	34.93	65.1	Steel
326-0296	1 5/16-12	-16	19.05	-12	38.1	65.1	Steel
5P-4362	1 5/16-12	-16	25.40	-16	38.1	66.5	Steel
9X-3962	1 5/16-12	-16	31.75	-20	38.1	66.5	Steel
451-0470	1 5/8-12	-20	38.10	-24	47.63	68.6	Steel
5P-1947	1 7/8-12	-24	38.10	-24	53.98	65.8	Steel
341-0091	1 7/8-12	-24	50.8	-32	54	69.7	Steel

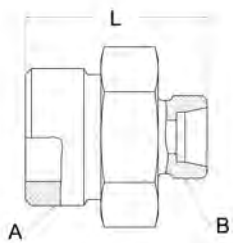
Straight Adapters

Male STOR / JIC 37° Swivel Nut



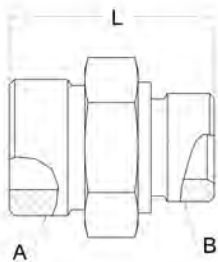
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
200-8459	7/16-20	-4	9/16-18	-6	14.29	36.32	Steel
6V-8104	9/16-18	-6	9/16-18	-6	17.46	29	Steel
5P-4588	9/16-18	-6	3/4-16	-8	20.63	27	Steel
501-8727	3/4-16	-8	3/4-16	-8	22.23	40.9	Steel
5P-4269	1 1/16-12	-12	1 1/16-12	-12	31.75	33.78	Steel
194-4122	1 5/16-12	-16	1 5/16-12	-16	38.1	41.8	Steel

Male STOR / Male 24° Cone-ISO 8434-1



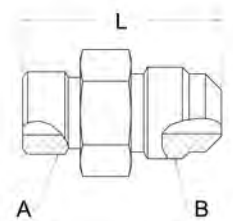
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
317-8509	9/16-18	-6	M16x1.5	19	32	Steel
519-7630	9/16-18	-6	M18x1.5	19	29.5	Steel

Male STOR / Male 30° Flare-JIS



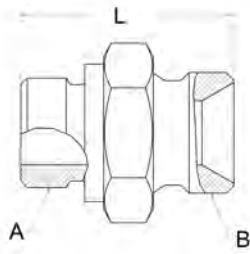
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
138-8342	7/16-20	-4	3/8-19	-6	18	25.5	Brass
173-8070	3/4-16	-8	3/4-14	-12	30	53.2	Steel
132-1730	1 5/16-12	-16	3/4-14	-12	38.1	57	Steel
7X-2432	1 5/16-12	-16	3/4-14	-12	38.1	50.2	Steel
4C-6494	1 5/16-12	-16	1-11	-16	41.28	52.32	Steel

Male STOR / Male 45° Flare-SAE J512



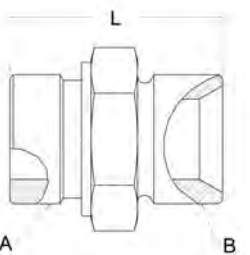
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
6V-3674	1/2-20	-5	5/8-18	-6	15.88	32	Brass
7X-0902	9/16-18	-6	5/8-18	-6	19.05	34.5	Steel
107-9343	9/16-18	-6	3/4-16	-8	19.05	37.7	Steel
155-5508	9/16-18	-6	3/4-16	-8	22.22	73.93	Steel
8C-3120	9/16-18	-6	7/8-14	-10	25.4	42.53	Steel
9X-6650	3/4-16	-8	7/8-14	-10	25.4	43.7	Steel

Male STOR / Male 60° Cone-BS5200



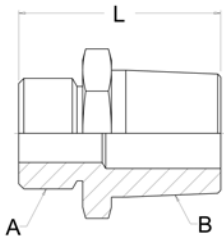
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
099-5927	9/16-18	-6	1/4-19	-4	19.05	30	Steel
262-0515	3/4-16	-8	1/4-19	-4	22	34.8	Steel
193-5101	3/4-16	-8	3/8-19	-6	30	36	Steel
262-0514	3/4-16	-8	3/8-19	-6	22	35.8	Steel
418-5064	3/4-16	-8	3/8-19	-6	22	32	Steel
459-0583	3/4-16	-8	1/2-14	-8	27	37	Steel

Male STOR / Male BSPP Flat Face-ISO 1179



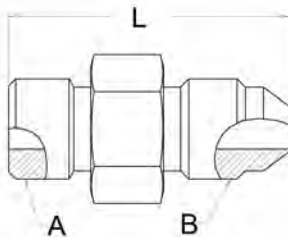
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
395-8728	9/16-18	-6	1/4-19	-4	19	30.2	Steel
8T-8897	1 1/16-12	-12	3/4-14	-12	31.75	47.1	Steel
7I-8331	1 1/16-12	-12	3/4-14	-12	36	50.5	Steel
5I-7408	1 5/16-12	-16	1-11	-16	41	55	Steel

Male STOR / Male BSPT-ISO 7-1



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
309-0723	3/4-16	-8	3/8-19	-6	25.4	36	Steel
252-7238	3/4-16	-8	1/2-14	-8	25.4	35.13	Steel
7Q-6091	1 1/16-12	-12	1/2-14	-8	31.75	43	Steel

Male STOR / Male JIC 37°



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
364-9621	1/2-20	-5	7/16-20	-4	15.88	31.2	SST
364-9629	3/4-16	-8	7/16-20	-4	22.2	34.8	SST
497-6356	1 1/16-12	-12	3/4-16	-8	31.75	44.7	SST
119-8096	5/16-24	-2	7/16-20	-4	14.29	32	Steel
6V-0394	5/16-24	-2	7/16-20	-4	14.29	29.7	Steel
3G-7409	3/8-24	-3	7/16-20	-4	12.7	29.7	Steel
137-9145	7/16-20	-4	7/16-20	-4	14.29	28.1	Steel
3J-7352	7/16-20	-4	7/16-20	-4	14.29	31.2	Steel
9K-5469	7/16-20	-4	7/16-20	-4	14.29	52.8	Steel

Straight Adapters

Male STOR / Male JIC 37° (Cont'd.)

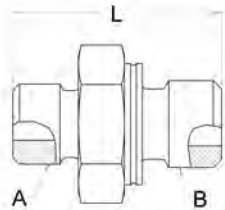
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
030-3978	7/16-20	-4	9/16-18	-6	15.88	32.2	Steel
030-6984	1/2-20	-5	7/16-20	-4	15.88	31.2	Steel
6K-9354	1/2-20	-5	1/2-20	-5	15.88	31.2	Steel
5P-2618	1/2-20	-5	9/16-18	-6	15.88	32.2	Steel
217-6416	1/2-20	-5	7/8-14	-10	25.4	41.9	Steel
2P-1314	9/16-18	-6	7/16-20	-4	17.5	32.7	Steel
7I-2022	9/16-18	-6	7/16-20	-4	17.46	55	Steel
5P-0419	9/16-18	-6	1/2-20	-5	17.46	32.7	Steel
353-5118	9/16-18	-6	9/16-18	-6	20.64	104.8	Steel
2R-6806	9/16-18	-6	9/16-18	-6	17.5	33	Steel
030-7936	9/16-18	-6	9/16-18	-6	17.46	47.8	Steel
1P-1376	9/16-18	-6	9/16-18	-6	17.46	58.7	Steel
147-3396	9/16-18	-6	9/16-18	-6	17.46	58.7	Steel
283-7206	9/16-18	-6	9/16-18	-6	17.46	29.5	Steel
6S-7744	9/16-18	-6	9/16-18	-6	17.4	42	Steel
8M-0506	9/16-18	-6	3/4-16	-8	20.64	36.6	Steel
6V-4362	9/16-18	-6	7/8-14	-10	25.4	40.4	Steel
030-8193	3/4-16	-8	7/16-20	-4	22.2	34.8	Steel
030-8188	3/4-16	-8	9/16-18	-6	22.2	35.1	Steel
369-6867	3/4-16	-8	9/16-18	-6	22.2	78	Steel
8M-0505	3/4-16	-8	3/4-16	-8	22.23	37.6	Steel
9D-2673	3/4-16	-8	3/4-16	-8	22.23	57.15	Steel
2P-7636	3/4-16	-8	7/8-14	-10	23.8	41.7	Steel
030-4285	3/4-16	-8	7/8-14	-10	25.4	71.4	Steel
5P-2574	3/4-16	-8	1 1/16-12	-12	28.58	49.2	Steel
030-8195	7/8-14	-10	7/16-20	-4	25.4	37.9	Steel
030-8194	7/8-14	-10	9/16-18	-6	25.4	38.1	Steel
033-5691	7/8-14	-10	3/4-16	-8	25.4	74.7	Steel
6K-3607	7/8-14	-10	3/4-16	-8	25.4	40.7	Steel
2P-1292	7/8-14	-10	7/8-14	-10	25.4	77.2	Steel
030-8196	7/8-14	-10	1 1/16-12	-12	28.58	47.7	Steel
8T-0195	7/8-14	-10	1 3/16-12	-14	31.75	51.3	Steel
031-4140	7/8-14	-10	1 5/16-12	-16	34.9	52.6	Steel
486-7970	1 1/16-12	-12	7/16-20	-4	31.75	42.1	Steel
488-3237	1 1/16-12	-12	9/16-18	-6	31.75	42.1	Steel
030-8189	1 1/16-12	-12	3/4-16	-8	31.75	44.7	Steel
030-8190	1 1/16-12	-12	7/8-14	-10	31.75	47.2	Steel

Straight Adapters

Male STOR / Male JIC 37° (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
2R-6276	1 1/16-12	-12	1 1/16-12	-12	31.75	50	Steel
9D-0884	1 1/16-12	-12	1 1/16-12	-12	31.75	69.8	Steel
3R-6790	1 1/16-12	-12	1 5/16-12	-16	34.9	50.5	Steel
6V-1906	1 1/16-12	-12	1 5/16-12	-16	38.1	97.6	Steel
8K-0802	1 3/16-12	-14	7/8-14	-10	34.92	47.2	Steel
9K-1242	1 3/16-12	-14	1 1/16-12	-12	34.93	49.7	Steel
7E-1456	1 3/16-12	-14	1 1/16-12	-12	34.92	134.99	Steel
7J-7187	1 3/16-12	-14	1 3/16-12	-14	34.93	50.5	Steel
5P-3237	1 3/16-12	-14	1 5/16-12	-16	34.92	51.8	Steel
196-4647	1 3/16-12	-14	1 5/8-12	-20	47.63	126.89	Steel
2P-8430	1 5/16-12	-16	3/4-16	-8	38.1	45.4	Steel
068-6074	1 5/16-12	-16	7/8-14	-10	38.1	48	Steel
4S-6680	1 5/16-12	-16	1 1/16-12	-12	38.1	50.6	Steel
5P-4248	1 5/16-12	-16	1 5/16-12	-16	38.1	101.1	Steel
030-7935	1 5/16-12	-16	1 5/16-12	-16	38.1	51.8	Steel
3P-0440	1 5/16-12	-16	1 5/16-12	-16	38.1	66.5	Steel
7D-5318	1 5/16-12	-16	1 5/8-12	-20	42.86	59.2	Steel
2P-2061	1 5/8-12	-20	1 1/16-12	-12	47.63	52.8	Steel
4S-6797	1 5/8-12	-20	1 5/16-12	-16	47.63	53.8	Steel
031-8759	1 5/8-12	-20	1 5/8-12	-20	47.63	55.1	Steel
315-3715	1 7/8-12	-24	1 5/16-12	-16	53.98	55.9	Steel
6K-3461	1 7/8-12	-24	1 7/8-12	-24	53.98	60.2	Steel
7X-7678	2 1/2-12	-32	2 1/2-12	-32	69.85	70.6	Steel

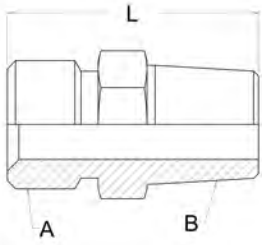
Male STOR / Male Metric STOR-ISO 6149



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
314-2490	7/16-20	-4	M12x1.5	19	28	Steel
6C-6762	3/4-16	-8	M22x1.5	27	36.8	Steel
347-4445	1 5/8-12	-20	M42x2	50	69.5	Steel

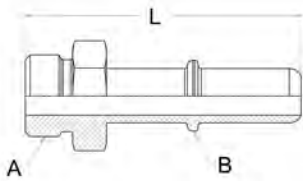
Straight Adapters

Male STOR / Male NPTF



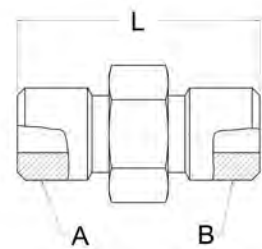
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
184-2518	7/16-20	-4	1/2-14	-8	22.22	39.1	SST
3N-8278	7/16-20	-4	1/2-14	-8	23.1	40	SST
108-2197	7/16-20	-4	1/8-27	-2	14.29	26	Steel
1F-3278	7/16-20	-4	1/8-27	-2	14.29	23.02	Steel
9X-0263	7/16-20	-4	1/8-27	-2	14.29	26.7	Steel
141-5147	7/16-20	-4	1/4-18	-4	14.29	30.5	Steel
9X-0435	7/16-20	-4	1/4-18	-4	17.46	29.9	Steel
3N-7078	7/16-20	-4	3/8-18	-6	17.27	29.5	Steel
144-7687	9/16-18	-6	1/4-18	-4	30.2	76	Steel
235-3567	9/16-18	-6	3/8-18	-6	17.46	34.04	Steel
345-3921	3/4-16	-8	3/8-18	-6	22.22	33.9	Steel
311-8082	3/4-16	-8	3/4-14	-12	30	50	Steel
171-9423	3/4-16	-8	3/4-14	-12	—	124	Steel
1W-6256	7/8-14	-10	1/2-14	-8	23.81	41.2	Steel
230-5944	1 1/16-12	-12	3/4-14	-12	31.75	45.7	Steel
281-7821	1 5/16-12	-16	3/4-14	-12	38.1	45.5	Steel
144-8618	1 5/16-12	-16	1-11.5	-16	38.1	51.7	Steel
8C-3991	1 7/8-12	-24	1 1/2-11.5	-24	53.98	57	Steel

Male STOR / Male SAE J2044



Part Number	Thread Size (A)	Dash Size (A)	Hose ID (mm) (B)	Dash Size (B)	HEX Size	Length (L)	Material
376-7350	3/4-16	-8	12.70	-8	22.22	64.5	SST
474-2603	9/16-18	-6	15.88	-10	23.81	74	Steel
422-7026	3/4-16	-8	9.52	-6	22.22	56.6	Steel

Male STOR / Male STOR



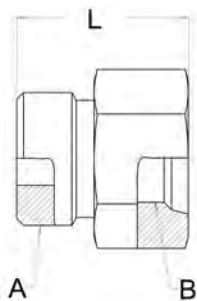
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
353-5120	9/16-18	-6	9/16-18	-6	17.46	35.8	SST
108-5678	7/16-20	-4	7/16-20	-4	14.29	34.74	Steel
9X-0262	7/16-20	-4	7/16-20	-4	14.29	25.3	Steel
145-8822	7/16-20	-4	7/16-20	-4	14.29	24.63	Steel
386-6204	7/16-20	-4	7/16-20	-4	14.29	29.1	Steel
5P-4272	9/16-18	-6	9/16-18	-6	17.46	35.8	Steel
8T-1031	9/16-18	-6	9/16-18	-6	17.46	27.8	Steel

Straight Adapters

Male STOR / Male STOR (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
235-3595	3/4-16	-8	7/16-20	-4	22.22	38.6	Steel
134-6852	3/4-16	-8	7/16-20	-4	24	50	Steel
132-3726	3/4-16	-8	9/16-18	-6	22.22	35.8	Steel
6V-0467	3/4-16	-8	3/4-16	-8	25.4	35	Steel
6V-5320	3/4-16	-8	3/4-16	-8	22.22	41.66	Steel
8C-3178	3/4-16	-8	3/4-16	-8	22.22	60	Steel
3E-5276	7/8-14	-10	7/16-20	-4	25.4	32	Steel
209-3558	7/8-14	-10	7/8-14	-10	25.4	46	Steel
321-0236	1 1/16-12	-12	3/4-16	-8	32	47	Steel
5P-9560	1 1/16-12	-12	1 1/16-12	-12	31.75	54	Steel
227-3951	1 1/16-12	-12	1 5/16-12	-16	38.1	42.1	Steel
4T-1862	1 3/16-12	-14	1 1/16-12	-12	34.93	42	Steel
5P-8924	1 5/16-12	-16	1 5/16-12	-16	38.1	61.9	Steel
8C-9029	1 5/16-12	-16	1 5/16-12	-16	38.1	49.8	Steel
113-4676	1 5/16-12	-16	1 5/16-12	-16	41.28	67.4	Steel
8C-9026	1 5/16-12	-16	1 7/8-12	-24	53.98	60.6	Steel
9U-5228	1 5/16-12	-16	1 7/8-12	-24	53.98	48.77	Steel
377-9550	1 5/8-12	-20	1 5/8-12	-20	47.63	54.1	Steel
9U-5229	1 5/8-12	-20	1 7/8-12	-24	53.98	48.77	Steel
371-7221	1 7/8-12	-24	1 7/8-12	-24	54	55	Steel
442-3417	2 1/2-12	-32	2 1/2-12	-32	69.85	54.1	Steel

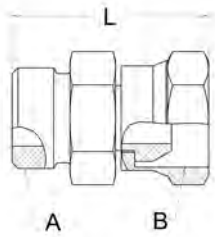
Male STOR / Metric STOR-ISO 6149 Port



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
330-9739	7/16-20	-4	M14x1.5	22.25	33	Steel
389-3683	1/2-20	-5	M12x1.5	17	29	Steel
335-3999	9/16-18	-6	M12x1.5	17	30	Steel
121-7656	9/16-18	-6	M14x1.5	19	40	Steel
331-1137	9/16-18	-6	M14x1.5	17.46	31	Steel
360-2358	3/4-16	-8	M12x1.5	23.81	35	Steel
366-4683	3/4-16	-8	M12x1.5	23.81	28	Steel
369-6812	3/4-16	-8	M14x1.5	22.22	24.6	Steel
371-7199	7/8-14	-10	M12x1.5	25.4	28	Steel
257-3471	1 1/16-12	-12	M18x1.5	36	19	Steel

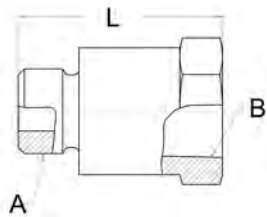
Straight Adapters

Male STOR / NPSM Swivel Nut



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
4D-6534	7/16-20	-4	1/4-18	-4	14.29	26.2	Steel
6D-4529	1/2-20	-5	1/4-18	-4	15.88	25.4	Steel
6D-1891	9/16-18	-6	1/4-18	-4	17.5	34.6	Steel
6D-4095	9/16-18	-6	3/8-18	-6	22.2	29	Steel
5P-0234	3/4-16	-8	3/4-14	-12	25.4	35.7	Steel
8J-3705	7/8-14	-10	1/2-14	-8	25.4	33.3	Steel
8D-7276	7/8-14	-10	3/4-14	-12	25.4	37.2	Steel
6D-4492	1 1/16-12	-12	1/2-14	-8	25.4	37.5	Steel
6D-6081	1 1/16-12	-12	3/4-14	-12	31.75	39.6	Steel
7L-7280	1 5/16-12	-16	1-11.5	-16	38.1	41.4	Steel

Male STOR / NPTF Port

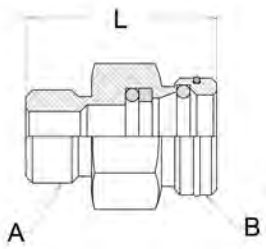


Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
183-6811	9/16-18	-6	1/4-18	-4	19.05	27.69	SST
198-5318	9/16-18	-6	3/8-18	-6	22.22	32.51	SST
5P-5528	7/16-20	-4	1/8-27	-2	14.29	24.6	Steel
5P-2937	7/16-20	-4	1/4-18	-4	19.05	27	Steel
9J-3855	1/2-20	-5	1/8-27	-2	15.7	25.4	Steel
5P-4487	1/2-20	-5	1/8-27	-2	15.88	26	Steel
219-1644	1/2-20	-5	1/4-18	-4	19	35.3	Steel
139-7064	1/2-20	-5	1/4-18	-4	19.05	33	Steel
5P-4675	1/2-20	-5	1/4-18	-4	19.05	30.6	Steel
3Y-2888	9/16-18	-6	1/8-27	-2	17.46	19	Steel
395-5136	9/16-18	-6	1/8-27	-2	19.05	23.1	Steel
5P-3501	9/16-18	-6	1/4-18	-4	19.05	29.97	Steel
204-3716	9/16-18	-6	3/8-18	-6	19.05	36.2	Steel
9T-6635	3/4-16	-8	1/8-27	-2	22.22	20.3	Steel
8J-7844	3/4-16	-8	1/4-18	-4	22.22	27	Steel
4Y-6112	3/4-16	-8	3/8-18	-6	22	45	Steel
5P-1838	3/4-16	-8	3/8-18	-6	22.22	32	Steel
198-0961	3/4-16	-8	1/2-14	-8	28.58	38.1	Steel
9Y-2238	3/4-16	-8	3/4-14	-12	38.1	13	Steel
260-9197	7/8-14	-10	1/8-27	-2	25.4	20.5	Steel
6H-4746	7/8-14	-10	1/8-27	-2		23.02	Steel
297-7704	7/8-14	-10	1/4-18	-4	25.4	36.7	Steel
3P-0764	7/8-14	-10	1/4-18	-4	25.4	27.7	Steel

Male STOR / NPTF Port (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
5P-4481	7/8-14	-10	1/2-14	-8	28.58	39	Steel
126-3230	1 1/16-12	-12	1/8-27	-2	31.75	27.7	Steel
7G-8478	1 1/16-12	-12	1/4-18	-4	31.75	27.7	Steel
5P-3415	1 1/16-12	-12	1/4-18	-4	31.75	27.69	Steel
9N-1595	1 1/16-12	-12	3/8-18	-6	31.75	19.05	Steel
6L-9952	1 1/16-12	-12	1/2-14	-8	31.75	35.8	Steel
6V-7483	1 1/16-12	-12	3/4-14	-12	34.93	43.7	Steel
6V-6760	1 3/16-12	-14	1/2-14	-8	34.92	27.7	Steel
3T-0811	1 5/16-12	-16	1/4-18	-4	38.1	28.4	Steel
119-0572	1 5/16-12	-16	1/2-14	-8	38.1	25.4	Steel
5P-0492	1 5/16-12	-16	1-11.5	-16	41.15	47.8	Steel
301-2748	1 5/16-12	-16	1-11.5	-16	41.1	47.8	Steel
167-9288	1 5/8-12	-20	1 1/4-11.5	-20	50.8	50	Steel

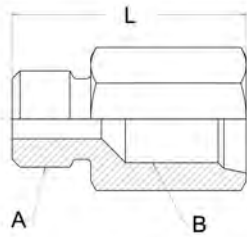
Male STOR / STC Port



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
179-7002	9/16-18	-6	Dash 6	19	28.7	Steel
192-2969	7/8-14	-10	Dash 10	27	38.8	Steel
269-4955	7/8-14	-10	Dash 10	26.9	38	Steel
269-4958	1 1/16-12	-12	Dash 12	32	47	Steel

Straight Adapters

Male STOR / STOR Port



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
221-8234	9/16-18	-6	7/8-14	-10	25.4	39.14	Brass
164-3652	3/4-16	-8	3/8-24	-3	22.2	20.3	Brass
8T-2362	3/8-24	-3	7/16-20	-4	17.46	30	Steel
392-0786	3/8-24	-3	7/16-20	-4	17.46	30	Steel
6Z-2052	3/8-24	-3	1/2-20	-5	20.64	32	Steel
371-7226	7/16-20	-4	7/16-20	-4	14.29	27.1	Steel
164-7900	7/16-20	-4	7/16-20	-4	17.46	57.14	Steel
423-8180	7/16-20	-4	7/16-20	-4	17.46	45	Steel
8T-2353	7/16-20	-4	9/16-18	-6	22.22	29.5	Steel
246-9947	7/16-20	-4	9/16-18	-6	22.22	52.1	Steel
260-9211	7/16-20	-4	9/16-18	-6	22.22	50	Steel
488-1842	7/16-20	-4	9/16-18	-6	22.22	31.5	Steel
8C-7325	7/16-20	-4	3/4-16	-8	25.4	32	Steel
177-5852	1/2-20	-5	7/16-20	-4	17.46	40	Steel
4B-8993	1/2-20	-5	1/2-20	-5	17.56	24.9	Steel
136-0853	9/16-18	-6	3/8-24	-3	19.05	25	Steel
164-3651	9/16-18	-6	3/8-24	-3	19.05	18.5	Steel
108-7516	9/16-18	-6	7/16-20	-4	17.46	25	Steel
5P-9617	9/16-18	-6	7/16-20	-4	17.46	26.2	Steel
368-0370	9/16-18	-6	7/16-20	-4	19.05	62	Steel
2W-7672	9/16-18	-6	7/16-20	-4	17.46	32	Steel
4I-8812	9/16-18	-6	7/16-20	-4	19.05	25	Steel
9X-2650	9/16-18	-6	7/16-20	-4	17.46	96	Steel
205-3079	9/16-18	-6	1/2-20	-5	20.64	27.7	Steel
8T-0151	9/16-18	-6	9/16-18	-6	22.35	35	Steel
203-3470	9/16-18	-6	9/16-18	-6	19.05	76.2	Steel
341-0083	9/16-18	-6	9/16-18	-6	19.05	32	Steel
7E-0156	9/16-18	-6	9/16-18	-6	22	61	Steel
7W-7381	9/16-18	-6	9/16-18	-6	22	33.5	Steel
239-1780	9/16-18	-6	9/16-18	-6	19.05	121.2	Steel
5P-8874	9/16-18	-6	3/4-16	-8	25.4	32.5	Steel
7X-2477	9/16-18	-6	3/4-16	-8	26.99	35	Steel
222-2210	9/16-18	-6	1 1/16-12	-12	34.9	42.9	Steel
326-0308	3/4-16	-8	3/8-24	-3	22.23	16.1	Steel
367-5995	3/4-16	-8	3/8-24	-3	22.22	20.3	Steel
3P-1932	3/4-16	-8	7/16-20	-4	22.22	20.3	Steel
5P-4674	3/4-16	-8	1/2-20	-5	22.22	19.05	Steel

Straight Adapters

Male STOR / STOR Port (Cont'd.)

Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
5P-6944	3/4-16	-8	9/16-18	-6	22.2	28.5	Steel
8W-2756	3/4-16	-8	9/16-18	-6	22.22	26.9	Steel
8T-1715	3/4-16	-8	3/4-16	-8	27	45.2	Steel
190-7852	3/4-16	-8	3/4-16	-8		40.13	Steel
304-8027	3/4-16	-8	3/4-16	-8	27	70.57	Steel
439-1938	3/4-16	-8	3/4-16	-8	26.99	27	Steel
3E-2322	3/4-16	-8	3/4-16	-8	26.99	60	Steel
9X-2493	3/4-16	-8	3/4-16	-8	27	52.2	Steel
231-3914	3/4-16	-8	7/8-14	-10	28.58	39.6	Steel
281-5871	3/4-16	-8	1 1/16-12	-12	34.92	41.43	Steel
216-6202	7/8-14	-10	3/8-24	-3	25.4	20.1	Steel
8K-4739	7/8-14	-10	7/16-20	-4	25.4	23.6	Steel
9J-4807	7/8-14	-10	1/2-20	-5	25.4	23.62	Steel
108-3866	7/8-14	-10	9/16-18	-6	30	28.7	Steel
5P-1404	7/8-14	-10	9/16-18	-6	25.4	23.6	Steel
4T-9905	7/8-14	-10	9/16-18	-6	25.4	30	Steel
6V-2606	7/8-14	-10	9/16-18	-6	25.4	23.6	Steel
245-7918	7/8-14	-10	3/4-16	-8	25.4	67.5	Steel
273-5156	7/8-14	-10	3/4-16	-8	25.4	60	Steel
6V-7420	7/8-14	-10	3/4-16	-8	25.4	33	Steel
219-8136	7/8-14	-10	7/8-14	-10	28.58	37.3	Steel
5P-1042	7/8-14	-10	1 1/16-12	-12	34.93	42.9	Steel
224-6316	1 1/16-12	-12	3/8-24	-3	31.75	21.5	Steel
5P-4499	1 1/16-12	-12	7/16-20	-4	31.75	27	Steel
6P-4975	1 1/16-12	-12	7/16-20	-4	31.75	27.7	Steel
2P-8421	1 1/16-12	-12	9/16-18	-6	31.75	27	Steel
211-9695	1 1/16-12	-12	9/16-18	-6	31.75	40	Steel
8C-6860	1 1/16-12	-12	9/16-18	-6	31.75	21	Steel
467-0030	1 1/16-12	-12	9/16-18	-6	30	158	Steel
6V-1722	1 1/16-12	-12	3/4-16	-8	31.75	26.4	Steel
360-8788	1 1/16-12	-12	3/4-16	-8	31.75	33	Steel
360-8789	1 1/16-12	-12	3/4-16	-8	31.75	28.3	Steel
360-8790	1 1/16-12	-12	3/4-16	-8	31.75	26.1	Steel
214-9060	1 1/16-12	-12	3/4-16	-8	31.75	25	Steel
214-9061	1 1/16-12	-12	3/4-16	-8	31.75	28.5	Steel
324-6241	1 1/16-12	-12	3/4-16	-8	31.75	53.16	Steel
9T-0975	1 1/16-12	-12	3/4-16	-8	31.75	39	Steel

Straight Adapters

Male STOR / STOR Port (Cont'd.)

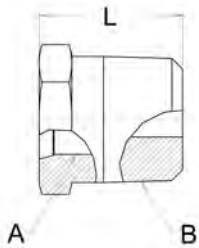
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
5P-2211	1 1/16-12	-12	7/8-14	-10	31.75	41.3	Steel
341-0103	1 1/16-12	-12	1 1/16-12	-12	35.05	45	Steel
3T-4965	1 1/16-12	-12	1 1/16-12	-12	31.75	55.09	Steel
448-9008	1 1/16-12	-12	1 1/16-12	-12	34.92	45	Steel
8X-7851	1 1/16-12	-12	1 1/16-12	-12	38.1	48.6	Steel
330-2175	1 1/16-12	-12	1 1/16-12	-12	34.92	100	Steel
6V-5258	1 1/16-12	-12	1 5/16-12	-16	41.28	47.8	Steel
326-0313	1 3/16-12	-14	7/16-20	-4	34.92	30.5	Steel
9J-0477	1 3/16-12	-14	1/2-20	-5	34.92	34	Steel
8J-3233	1 3/16-12	-14	1/2-20	-5	34.92	27.7	Steel
132-9877	1 3/16-12	-14	9/16-18	-6	34.92	62	Steel
6V-3510	1 3/16-12	-14	9/16-18	-6	34.92	27.7	Steel
107-1341	1 3/16-12	-14	3/4-16	-8	34.92	27.7	Steel
101-7198	1 3/16-12	-14	1 1/16-12	-12	38.1	52.5	Steel
8D-8428	1 5/16-12	-16	7/16-20	-4	38.1	28.4	Steel
8J-0426	1 5/16-12	-16	9/16-18	-6	38.1	28.4	Steel
8J-3830	1 5/16-12	-16	9/16-18	-6	38.1	42.2	Steel
8J-8559	1 5/16-12	-16	9/16-18	-6	38.1	28.4	Steel
9T-5212	1 5/16-12	-16	9/16-18	-6	38.1	20.1	Steel
8E-3695	1 5/16-12	-16	9/16-18	-6	38.1	28.4	Steel
5P-5777	1 5/16-12	-16	3/4-16	-8	38.1	25.5	Steel
268-1520	1 5/16-12	-16	3/4-16	-8	38.1	37	Steel
131-5681	1 5/16-12	-16	7/8-14	-10	38.1	37.09	Steel
6V-0301	1 5/16-12	-16	1 1/16-12	-12	38.1	44.5	Steel
8C-3051	1 5/16-12	-16	1 5/16-12	-16	41.28	65	Steel
451-0489	1 5/16-12	-16	1 5/16-12	-16	41.28	50	Steel
9T-6865	1 5/8-12	-20	7/16-20	-4	47.63	30.5	Steel
107-3585	1 5/8-12	-20	9/16-18	-6	47.63	52.5	Steel
123-2151	1 5/8-12	-20	9/16-18	-6	47.63	30.5	Steel
9J-9288	1 5/8-12	-20	9/16-18	-6	33.34	44.45	Steel
5P-8905	1 5/8-12	-20	3/4-16	-8	47.63	25.5	Steel
4S-6679	1 5/8-12	-20	1 1/16-12	-12	47.63	25.4	Steel
3T-9549	1 5/8-12	-20	1 1/16-12	-12	47.63	24.3	Steel
138-2549	1 5/8-12	-20	1 3/16-12	-14	47.63	67.2	Steel
7X-2470	1 5/8-12	-20	1 5/16-12	-16	47.63	25.4	Steel
250-1444	1 5/8-12	-20	1 5/8-12	-20	47.63	45	Steel
123-2564	1 7/8-12	-24	9/16-18	-6	53.98	32.3	Steel

Straight Adapters

Male STOR / STOR Port (Cont'd.)

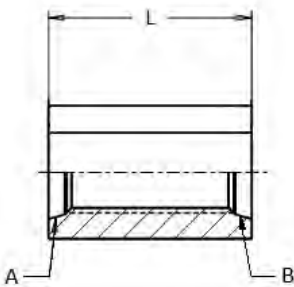
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
5P-3903	1 7/8-12	-24	3/4-16	-8	53.98	32.5	Steel
1Z-9033	1 7/8-12	-24	1 1/16-12	-12	53.98	36	Steel
8V-7764	1 7/8-12	-24	1 5/16-12	-16	53.98	32.5	Steel
480-2990	1 7/8-12	-24	1 5/8-12	-20	53.98	47.9	Steel
5P-2231	2 1/2-12	-32	1 1/16-12	-12	69.85	36.3	Steel
3V-7750	2 1/2-12	-32	1 7/8-12	-24	69.85	36.3	Steel
395-9716	2 1/2-12	-32	2 1/2-12	-32		45.7	Steel

Metric STOR-ISO 6149 Port / Male NPTF



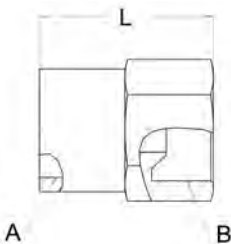
Part Number	Thread Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
250-1468	M12x1.5	1/2-14	-8	24	36	Steel
355-9605	M12x1.5	1/2-14	-8	22.22	24.6	Steel

Metric STOR-ISO 6149 Port / Metric STOR-ISO 6149 Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
445-2324	M12x1.5	M12x1.5	17	30	Steel
128-3976	M8x1	M12x1.5		30	Steel

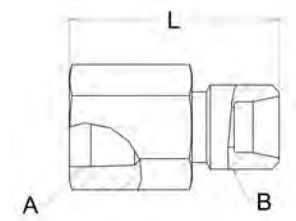
NPTF Port / 45° Inverted Flare-SAE J512 Port



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
5K-9979	1/8-27	-2	7/16-24	-4	13.49	19.1	Brass
9S-7692	1/8-27	-2	1/2-20	-5	15.09	19.8	Brass
6K-8076	1/4-18	-4	5/8-18	-6	19.05	26.2	Brass
5K-9894	3/8-18	-6	3/4-18	-8	23.02	27.7	Brass
6V-4361	1/2-14	-8	3/4-18	-8	26.99	33	Brass
9S-7694	1/2-14	-8	7/8-18	-10	26.99	33.3	Brass

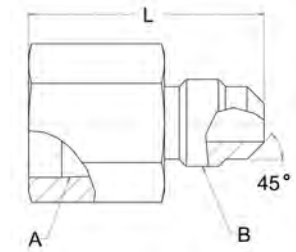
Straight Adapters

NPTF Port / Male 24° Flareless-SAE J514



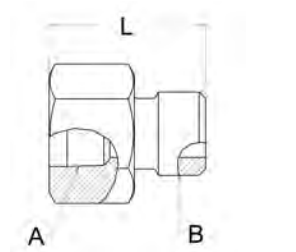
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
5P-6115	1/8-27	-2	7/16-20	-4	11.11	27.7	Steel
5P-5526	1/8-27	-2	1/2-20	-5	35.05	27.4	Steel

NPTF Port / Male 45° Flare-SAE J512



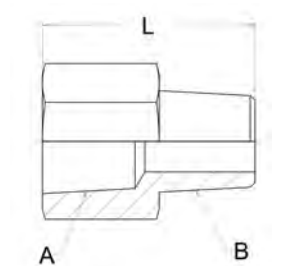
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
3D-2675	1/8-27	-2	7/16-20	-4	14.29	26.67	Brass
4D-4184	1/4-18	-4	7/16-20	-4	17.48	30	Brass

NPTF Port / Male BSPP Flat Face-ISO1179



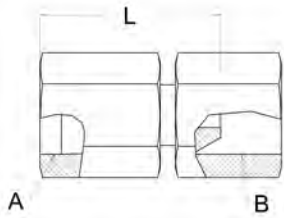
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
459-0628	1/8-27	-2	1/4-19	-4	19	24.6	Steel
7X-2480	3/4-14	-12	3/4-14	-12	34.92	45	Steel

NPTF Port / Male BSPT-ISO 7-1



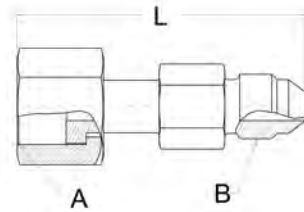
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
332-8553	3/8-18	-6	3/8-19	-6	22.22	35.05	Brass
102-6496	1/8-27	-2	1/8-28	-2	17	29	Steel
150-5679	1/8-27	-2	1/8-28	-2	14	30	Steel
4Y-9423	1/8-27	-2	1/8-28	-2	7.94	26.4	Steel

NPTF Port / NPSM Swivel Nut



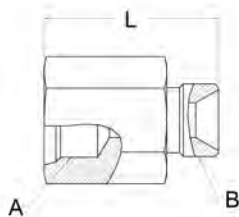
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
3D-9253	1/8-27	-2	1/8-27	-2	14.29	23.9	Steel
7D-0215	1/8-27	-2	1/4-18	-4	17.5	27.2	Steel
2J-4211	1/4-18	-4	1/4-18	-4	17.5	32.5	Steel
4D-0513	3/8-18	-6	3/8-18	-6	22.2	33.3	Steel
8M-0792	1/2-14	-8	1/2-14	-8	25.4	38.1	Steel
1L-2702	3/4-14	-12	3/4-14	-12	31.75	41.1	Steel
7F-7807	1-11.5	-16	1-11.5	-16	38.1	50	Steel

ORFS Swivel Nut / Male JIC 37°



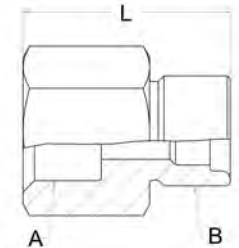
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
8C-7309	9/16-18	-4	7/16-20	-4	17.46	41.6	Steel
8C-7310	11/16-16	-6	9/16-18	-6	19.05	40.8	Steel
8C-7311	13/16-16	-8	3/4-16	-8	23.81	49.5	Steel
8C-7312	1-14	-10	7/8-14	-10	28.58	57	Steel
8C-7313	1 3/16-12	-12	1 1/16-12	-12	31.75	63.5	Steel
8C-7334	1 7/16-12	-16	1 5/16-12	-16	34.92	69.9	Steel
8C-7335	1 11/16-12	-20	1 5/8-12	-20	47.63	71	Steel

STOR Port / Male 30° Flare-JIS



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
7X-2431	9/16-18	-6	1/2-14	-8	27	27.4	Steel
8T-7912	3/4-16	-8	3/8-19	-6	25.4	40.4	Steel
8T-7914	7/8-14	-10	1/2-14	-8	28.58	46	Steel
8T-7916	1 1/16-12	-12	1-11	-16	41.28	54.6	Steel
8T-7917	1 5/16-12	-16	1-11	-16	41.28	54.6	Steel

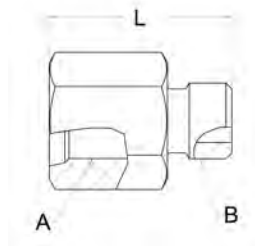
STOR Port / Male 45° Flare-SAE J512



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
212-6067	3/4-16	-8	3/4-16	-8	13	36	Steel

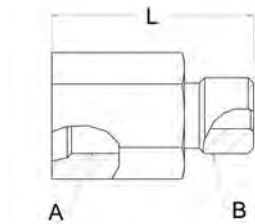
Straight Adapters

STOR Port / Male BSPP Flat Face-ISO 1179



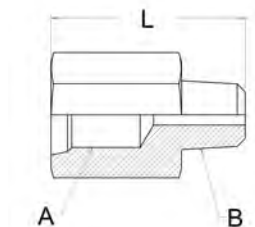
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
395-8615	7/16-20	-4	1/4-19	-4	19.05	28.6	Steel
8T-7909	7/16-20	-4	1/4-19	-4	19.05	36.3	Steel
5I-8775	1/2-20	-5	1/2-14	-8	27	45	Steel
507-8352	9/16-18	-6	1/4-19	-4	20.64	31.8	Steel
8T-7910	9/16-18	-6	1/4-19	-4	20.64	36.8	Steel
8T-7915	1 1/16-12	-12	3/4-14	-12	34.92	51.8	Steel
451-0505	1 5/16-12	-16	1-11	-16	44.45	48.8	Steel

STOR Port / Male BSPP STOR-JIS B2351



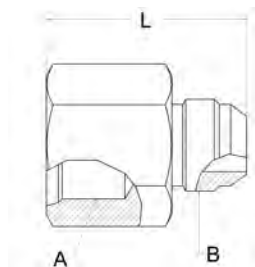
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
8T-7908	7/16-20	-4	1/8-28	-2	17.46	32.5	Steel
7X-2613	9/16-18	-6	1/8-28	-2	20.64	37.1	Steel
190-8529	9/16-18	-6	1/4-19	-4	19	35	Steel
392-4054	9/16-18	-6	3/4-14	-12	32	24	Steel

STOR Port / Male BSPT-ISO 7-1



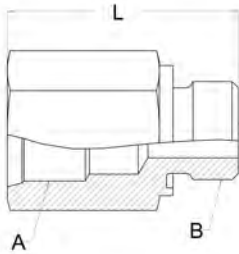
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
218-0919	7/16-20	-4	1/8-28	-2	17.46	29.2	Brass
135-2368	7/16-20	-4	1/8-28	-2	17	30.5	Steel
7X-2615	9/16-18	-6	3/8-19	-6	20.64	37.8	Steel

STOR Port / Male JIC 37°



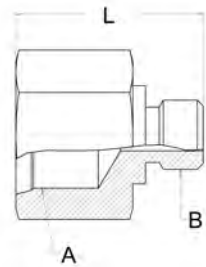
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
1V-7443	3/8-24	-3	7/16-20	-4	17.46	52.58	Steel
469-0586	1 5/16-12	-16	1 1/16-12	-12	38.1	58.7	Steel

STOR Port / Male Metric Flat Face-ISO 9974



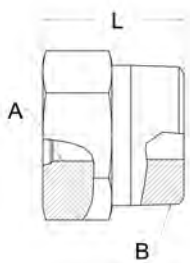
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
430-9586	7/16-20	-4	M30x1.5		22	Steel
136-8482	9/16-18	-6	M10x1	22.22	29.77	Steel
310-5897	3/4-16	-8	M18x1.5	25.4	42.4	Steel
90-5446	7/8-14	-10	M26x1.5	40.33	40	Steel
6E-4353	1 1/16-12	-12	M26x1.5	36	75	Steel

STOR Port / Male Metric STOR-ISO 6149



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
203-6798	3/8-24	-3	M16x1.5	25	27	Steel
8T-7859	7/16-20	-4	M10x1	17.46	34	Steel
8T-7860	7/16-20	-4	M12x1.5	17.46	35.6	Steel
380-6685	1/2-20	-5	M12x1.5	19	30	Steel
6V-8926	9/16-18	-6	M10x1	22.22	29.77	Steel
426-4101	9/16-18	-6	M12x1.5	22	43	Steel
243-0919	9/16-18	-6	M14x1.5	22	36.4	Steel
8T-7861	9/16-18	-6	M14x1.5	20.64	37.3	Steel
139-3344	9/16-18	-6	M16x1.5	22.2	30.5	Steel
285-5729	9/16-18	-6	M22x1.5	26	20	Steel
274-8062	3/4-16	-8	M12x1.5	25.4	32.5	Steel
8T-7862	3/4-16	-8	M16x1.5	25.4	40.9	Steel
8T-7863	3/4-16	-8	M18x1.5	25.4	35.1	Steel
8T-7864	7/8-14	-10	M20x1.5	28.58	46.5	Steel
8T-7865	7/8-14	-10	M22x1.5	28.58	47.5	Steel
8T-7867	1 1/16-12	-12	M27x2	34.92	55.1	Steel
8T-7868	1 5/16-12	-16	M33x2	17.46	56.1	Steel

STOR Port / Male NPTF



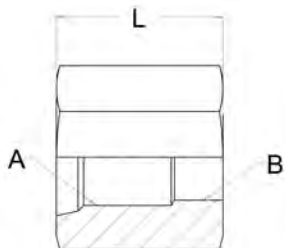
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
164-3649	3/8-24	-3	1/4-18	-4	15.88	21.6	Brass
164-3648	3/8-24	-3	1/2-14	-8	22.2	19	Brass
141-7280	7/8-14	-10	1-11.5	-16	34.92	35.5	Brass
439-1959	3/4-16	-8	1 1/2-11.5	-24	50.8	49	SST
147-9351	3/8-24	-3	1/2-14	-8	22.2	27.9	Steel
6V-7529	7/16-20	-4	1/8-27	-2	17.5	27.7	Steel
8C-6427	7/16-20	-4	1/4-18	-4	17.46	32.4	Steel

Straight Adapters

STOR Port / Male NPTF (Cont'd.)

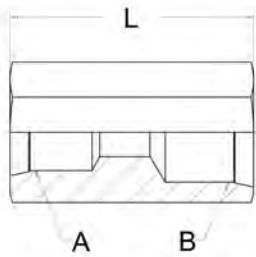
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
7D-6865	7/16-20	-4	3/8-18	-6	17.48	23.9	Steel
5R-5304	7/16-20	-4	1/2-14	-8	22	24.6	Steel
362-1142	1/2-20	-5	1/8-27	-2	19.05	29	Steel
8F-4731	1/2-20	-5	3/8-18	-6	19.05	30.2	Steel
155-2078	9/16-18	-6	1/8-27	-2	19.05	30	Steel
6V-9601	9/16-18	-6	1/4-18	-4	22.22	34.5	Steel
8C-4985	9/16-18	-6	3/8-18	-6	22.22	34.9	Steel
305-8354	9/16-18	-6	1/2-14	-8	22.2	37.5	Steel
8T-3285	9/16-18	-6	1/2-14	-8	22.22	24.6	Steel
117-0291	9/16-18	-6	1-11.5	-16	41	28	Steel
130-2883	9/16-18	-6	1 1/4-11.5	-20	47.63	38	Steel
132-3873	3/4-16	-8	1/4-18	-4	25.4	44	Steel
4I-7483	3/4-16	-8	3/8-18	-6	25.4	50	Steel
8T-4238	3/4-16	-8	3/8-18	-6	25.4	36.8	Steel
170-3528	3/4-16	-8	1/2-14	-8	25.4	45	Steel
353-5440	3/4-16	-8	1/2-14	-8		35	Steel
500-4238	3/4-16	-8	1/2-14	-8	25.4	35	Steel
8C-6523	3/4-16	-8	3/4-14	-12	28.58	29.7	Steel
284-3468	3/4-16	-8	1-11.5	-16	34.9	34.9	Steel
8C-6524	3/4-16	-8	1-11.5	-16	34.92	46.5	Steel
315-9825	3/4-16	-8	1 1/2-11.5	-24	50.8	49	Steel
264-2487	3/4-16	-8	2-11.5	-32		57.5	Steel
8T-2227	7/8-14	-10	1/2-14	-8	31.75	45	Steel
6V-9157	7/8-14	-10	3/4-14	-12	31.75	46	Steel
131-9472	1 1/16-12	-12	1/2-14	-8	44.45	58	Steel
8C-5053	1 5/16-12	-16	1-11.5	-16	41.28	54.1	Steel
488-4816	1 5/16-12	-16	1 1/2-11.5	-24	50.8	56	Steel

STOR Port / NPTF Port



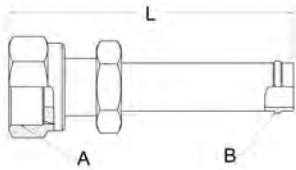
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
3T-2167	1/2-20	-5	1/8-27	-2	19.05	20	Steel
231-0187	1/2-20	-5	3/8-18	-6	25.4	38.1	Steel
4C-5561	9/16-18	-6	1/8-27	-2	25.4	24	Steel
171-1879	9/16-18	-6	1/4-18	-4	28.58	37.1	Steel

STOR Port / STOR Port



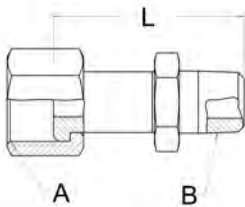
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
310-5898	7/16-20	-4	9/16-18	-6	17.46	35	Steel
8W-0222	9/16-18	-6	9/16-18	-6		34	Steel
6G-6917	3/4-16	-8	9/16-18	-6	25.4	35	Steel
309-5146	3/4-16	-8	3/4-16	-8	25.4	37	Steel
176-5868	1 1/16-12	-12	1 1/16-12	-12	38.1	50	Steel

Swivel Nut ORFS / Hose Bead



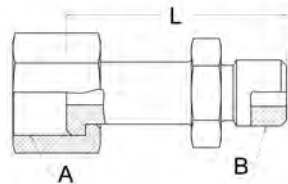
Part Number	Thread Size (A)	Dash Size (A)	Hose ID (mm) (B)	Dash Size (B)	HEX Size	Length (L)	Material
269-6650	11/16-16	-6	9.52	-6	20.64	60	Steel
484-4251	1 3/16-12	-12	19.05	-12	31.75	114	Steel

Swivel Nut ORFS / Male NPTF



Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
197-8947	9/16-18	-4	1/4-18	-4	15.88	41.6	Steel
371-7247	11/16-16	-6	1/4-18	-4	19.05	42.44	Steel
197-8948	13/16-16	-8	1/2-14	-8	22.22	55.5	Steel
197-8949	1 3/16-12	-12	3/4-14	-12	31.75	61.3	Steel
297-7947	1 7/16-12	-16	1-11.5	-16	38.1	72.9	Steel

Swivel Nut ORFS / Male STOR



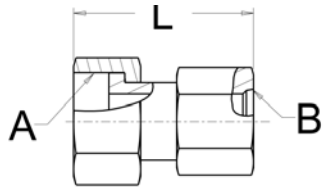
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
386-6207	9/16-18	-4	7/16-20	-4	15.88	37	Brass
7X-3162	9/16-18	-4	7/16-20	-4	15.88	37	Steel
4I-6287	11/16-16	-6	9/16-18	-6	19.05	40	Steel
341-0076	11/16-16	-6	9/16-18	-6	19.05	40.2	Steel
9X-2847	13/16-16	-8	9/16-18	-6	23.81	62.8	Steel
7X-3164	13/16-16	-8	3/4-16	-8	22.22	49.5	Steel
381-8327	1-14	-10	3/4-16	-8	30	65	Steel
7X-3165	1-14	-10	7/8-14	-10	26.99	54	Steel
381-8328	1-14	-10	1 1/16-12	-12	32	69	Steel
7I-8310	1 3/16-12	-12	1 1/16-12	-12	31.75	59.5	Steel
7R-0042	1 3/16-12	-12	1 1/16-12	-12	35.05	76.13	Steel
4I-6140	1 3/16-12	-12	1 5/16-12	-12	38.1	60.6	Steel

Straight Adapters

Swivel Nut ORFS / Male STOR (Cont'd.)

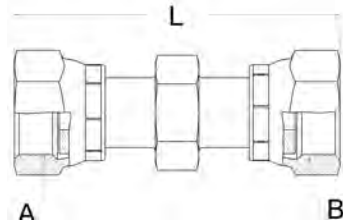
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
41-6141	1 7/16-12	-16	1 5/16-12	-16	38.1	67.5	Steel
202-7000	1 7/16-12	-16	1 5/16-12	-16	41.28	55	Steel
7X-3168	1 11/16-12	-20	1 5/8-12	-20	47.63	67.5	Steel
7X-3169	2-12	-24	1 7/8-12	-24	—	67.5	Steel

Swivel Nut ORFS / STOR Port



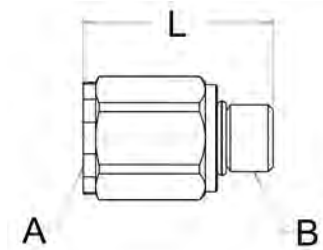
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
434-5513	11/16-16	-6	7/16-20	-4	19.05	31.75	Steel
132-2453	11/16-16	-6	9/16-18	-6	20.64	43.9	Steel
451-1764	13/16-16	-8	7/16-20	-4	22.22	39.88	Steel
241-6188	1 7/16-12	-16	7/8-14	-10	34.93	68.43	Steel

Swivel Nut ORFS / Swivel Nut ORFS



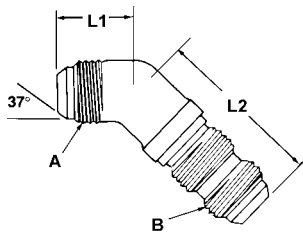
Part Number	Thread Size (A)	Dash Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material
377-9599	11/16-16	-6	11/16-16	-6	19.05	62	Steel
287-7332	13/16-16	-8	13/16-16	-8	22.22	53.85	Steel
395-8670	1 7/16-12	-16	1 7/16-12	-16	36.5	75	Steel

WEO Plug-In STOR



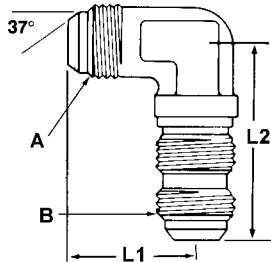
Part Number	Adapter Port Size (A)	Thread Size (B)	Dash Size (B)	HEX Size	Length (L)	Material	STOR Class
500-8848	-6	9/16 - 18	-6	24	41	Steel	Heavy Duty
500-8849	-8	3/4 - 16	-8	28	43	Steel	Heavy Duty
500-8850	-12	1-1/16 - 12	-12	36	55	Steel	Light Duty
529-7517	-12	1-1/16 - 12	-12	41	59	Steel	Heavy Duty

37° Flare Bulkhead 45° Elbow



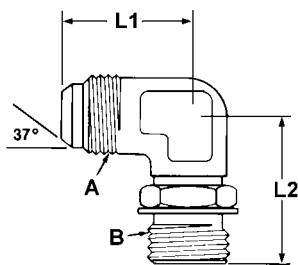
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
7K-6462	7/16 - 20	-4	7/16 - 20	-4	18.3	38.9	Steel
2P-1325	3/4 - 16	-8	3/4 - 16	-8	24.9	49.3	Steel
5P-8113	7/8 - 14	-10	7/8 - 14	-10	28.2	55.1	Steel
5P-4968	1 1/16 - 12	-12	1 1/16 - 12	-12	32.5	62	Steel
434-5512	1 5/16 - 12	-16	1 5/16 - 12	-16	37.8	65	Steel

37° Flare Bulkhead 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
2P-7216	7/16 - 20	-4	7/16 - 20	-4	24.6	40.4	Steel
268-1524	7/16 - 20	-4	7/16 - 20	-4	24.6	52.4	Steel
5P-2647	1/2 - 20	-5	1/2 - 20	-5	26.9	43.7	Steel
2P-7215	9/16 - 18	-6	9/16 - 18	-6	27.7	46	Steel
2P-2204	3/4 - 16	-8	3/4 - 16	-8	34.5	53.6	Steel
439-1811	7/8 - 14	-10	3/4 - 16	-8	39.6	57.7	Steel
2P-1326	7/8 - 14	-10	7/8 - 14	-10	39.6	60.7	Steel
5P-3621	1 1/16 - 12	-12	1 1/16 - 12	-12	45.2	67.8	Steel
5P-1775	1 5/16 - 12	-16	1 5/16 - 12	-16	49.3	71.1	Steel
8T-0575	1 5/8 - 12	-20	1 5/8 - 12	-20	55.1	79.2	Steel

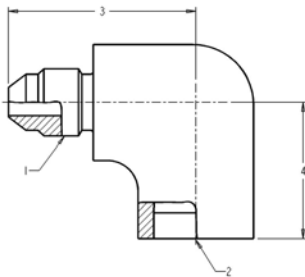
37° Flare Male / ISO 1179 BSPP Flat Face Male 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread				
515-4947	7/16 - 20	-4	1/8 - 28		22.5	26.5	Steel
451-0488	7/16 - 20	-4	1/4 - 19		27	32	SST
451-0371	7/16 - 20	-4	1/4 - 19		25.5	32	Steel
426-4174	7/16 - 20	-4	3/8 - 19		29	37	Steel
426-4148	9/16 - 18	-6	1/4 - 19		31.8	26.9	Steel
305-0837	9/16 - 18	-6	3/8 - 19		37	29.2	Steel
217-6168	3/4 - 16	-8	3/8 - 19		31.8	36.8	Steel
217-6158	3/4 - 16	-8	1/2 - 14		33.8	43.2	Steel
217-6159	7/8 - 14	-10	3/4 - 14		39.2	49.3	Steel
516-5238	1 1/16 - 12	-12	1 - 11		52	44.7	Steel
213-3123	1 5/16 - 12	-16	3/4 - 14		46	48.2	Steel
242-3724	1 5/16 - 12	-16	1 - 11		48.8	53.5	Steel

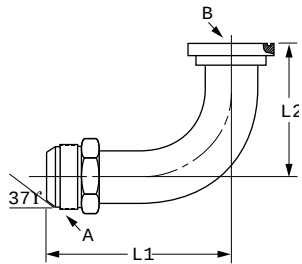
Elbow Adapters

37° Flare Male / NPTF Female 90° Elbow



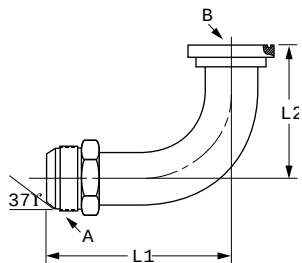
Part Number	End 1		End 2		Length 3	Length 4	Material
	Thread	Dash Size	Thread	Dash Size			
3S-1099	7/16 - 20	-4	1/8 - 27	-2	27.4	16.8	Steel
186-8192	7/16 - 20	-4	1/4 - 18	-4	30.9	22.4	Steel
123-8579	7/16 - 20	-4	1/4 - 18	-4	30.9	22.4	SST
8J-3031	1/2 - 20	-5	1/4 - 18	-4	26.16	22.61	Steel
5P-1883	9/16 - 18	-6	1/4 - 18	-4	31.2	22.4	Steel
5P-3273	9/16 - 18	-6	3/8 - 18	-6	33.5	25.9	Steel
210-1607	3/4 - 16	-8	1/2 - 14	-8	38.7	31.2	Steel
493-6434	3/4 - 16	-8	1/4 - 18	-4	36.1	25.6	SST
3N-3893	1-5/16 - 12	-16	1-11 - 1/2	-16	55.1	41.1	Steel
506-9354	2-1/2 - 12	-32	2-11 - 1/2	-32	83.8	60.7	Steel

37° Flare Male / SAE Code 61 Flange Head 90° Elbow



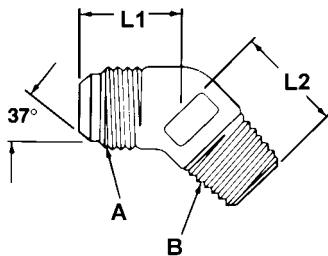
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Dash Size	Dash Size			
145-5504	1 5/16 - 12	-16	-16	-16	71	60	Steel
213-7430	1 5/8 - 12	-20	-20	-20	52.3	66.5	Steel
508-5806	1 5/8 - 12	-20	-24	-24	101.1	79	Steel
108-4371	1 7/8 - 12	-24	-24	-24	90.9	69.9	Steel
508-5802	1 7/8 - 12	-24	-24	-24	116.07	92.96	Steel
323-1343	1 7/8 - 12	-24	-32	-32	91	70	Steel
148-0207	2 1/2 - 12	-32	-32	-32	120	91	Steel
109-0070	3 - 12	-40	-40	-40	148.8	131.8	Steel

37° Flare Male / SAE Code 62 Flange Head



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Dash Size	Dash Size			
508-5805	1 5/16 - 12	-16	-16	-16	86.1	72.9	Steel
450-2508	1 5/8 - 12	-20	-20	-20	94.2	66.5	Steel

37° Flare Male / NPTF Male 45° Elbow

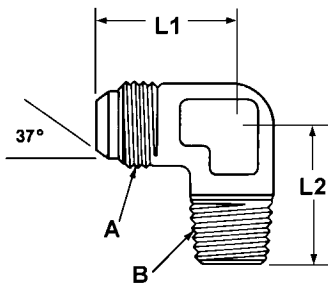


Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
9L-5125	7/16 - 20	-4	1/8 - 27	-2	18.3	16.3	Steel
183-6686	7/16 - 20	-4	1/4 - 18	-4	20.8	21.8	SST
5J-7303	7/16 - 20	-4	1/4 - 18	-4	20.8	21.8	Steel
121-5729	7/16 - 20	-4	1/2 - 14	-8	22.1	29.7	Steel
001-6498	9/16 - 18	-6	1/4 - 18	-4	21.1	21.8	Steel
4V-4076	9/16 - 18	-6	3/8 - 18	-6	22.1	24.1	Steel
191-0786	3/4 - 16	-8	3/8 - 18	-6	24.9	24.1	SST
2N-1288	3/4 - 16	-8	3/8 - 18	-6	24.9	24.1	Steel
001-7043	3/4 - 16	-8	1/2 - 14	-8	28.2	29.7	Steel

37° Flare Male / NPTF Male 45° Elbow (Cont'd.)

Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
434-5648	3/4 - 16	-8	3/4 - 14	-12	27.9	30.5	Steel
090-3000	7/8 - 14	-10	3/8 - 18	-6	28.2	29.5	Steel
9L-5254	7/8 - 14	-10	1/2 - 14	-8	28.2	29.7	Steel
239-5983	7/8 - 14	-10	3/4 - 14	-12	29.5	30.5	Steel
031-6303	1 1/16 - 12	-12	1/2 - 14	-8	32.5	30.5	Steel
001-6304	1 1/16 - 12	-12	3/4 - 14	-12	32.5	30.5	Steel
033-8734	1 1/16 - 12	-12	1 - 11.5	-16	36	37.6	Steel
2P-1311	1 3/16 - 12	-14	3/4 - 14	-12	36.8	33	Steel
001-7042	1 5/16 - 12	-16	3/4 - 14	-12	37.3	32.8	Steel
2P-1312	1 5/16 - 12	-16	1 - 11.5	-16	37.3	37.6	Steel
032-1416	1 5/8 - 12	-20	1 1/2 - 11.5	-24	41.9	45	Steel
031-4629	1 7/8 - 12	-24	1 1/2 - 11.5	-24	45.2	45	Steel
196-3187	2 1/2 - 12	-32	2 - 11.5	-32	56.4	53.6	Steel

37° Flare Male / NPTF Male 90° Elbow



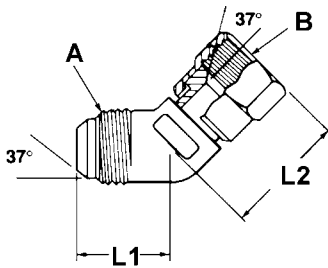
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
7K-3030	3/8 - 24	-3	1/8 - 27	-2	21.1	18.3	Steel
2N-1287	7/16 - 20	-4	1/8 - 27	-2	22.6	19.8	Steel
2U-4132	7/16 - 20	-4	1/8 - 27	-2	22.5	39.48	Steel
5P-4479	7/16 - 20	-4	1/8 - 27	-2	22.61	30.23	Steel
123-8580	7/16 - 20	-4	1/4 - 18	-4	26.9	27.7	SST
6K-1972	7/16 - 20	-4	1/4 - 18	-4	26.6	27.7	Steel
5P-2657	7/16 - 20	-4	1/4 - 18	-4	26.67	43.18	Steel
203-0414	7/16 - 20	-4	3/8 - 18	-6	28.5	31	Steel
189-4399	7/16 - 20	-4	1/2 - 14	-8	30.7	37.3	Steel
7J-6420	1/2 - 20	-5	1/8 - 27	-2	24.1	19.8	Steel
5P-8238	1/2 - 20	-5	1/4 - 18	-4	26.6	27.7	Steel
203-0393	1/2 - 20	-5	3/8 - 18	-6	43	41	Brass
5P-4592	9/16 - 18	-6	1/8 - 27	-2	26.9	22.9	Steel
032-1268	9/16 - 18	-6	1/4 - 18	-4	26.9	27.7	Steel
223-6396	9/16 - 18	-6	3/8 - 18	-6	29.2	31	Brass
2N-8037	9/16 - 18	-6	3/8 - 18	-6	29.2	31	Steel
183-6683	9/16 - 18	-6	1/2 - 14	-8	31	37.3	SST
7D-8793	9/16 - 18	-6	1/2 - 14	-8	31	37.3	Steel
186-8899	9/16 - 18	-6	1/2 - 14	-8	31	37.3	Steel
470-4422	9/16 - 18	-6	3/4 - 14	-12	33.3	40.4	Steel
6L-9777	3/4 - 16	-8	1/4 - 18	-4	31.8	31	Steel
009-9696	3/4 - 16	-8	1/4 - 18	-4	31.8	56.4	Steel
7L-7262	3/4 - 16	-8	3/8 - 18	-6	31.8	31	Steel
169-4278	3/4 - 16	-8	1/2 - 14	-8	33.8	37.3	SST
2N-3378	3/4 - 16	-8	1/2 - 14	-8	33.8	37.3	Steel
003-0633	3/4 - 16	-8	1/2 - 14	-8	34.3	107.9	Steel
033-0442	3/4 - 16	-8	1/2 - 14	-8	34	56.9	Steel
4R-6450	3/4 - 16	-8	1/2 - 14	-8	35.8	37.34	Steel
052-0741	3/4 - 16	-8	3/4 - 14	-12	36.1	40.4	Steel
498-1847	3/4 - 16	-8	1 - 11.5	-16	38.6	50	Steel
006-2325	7/8 - 14	-10	3/8 - 18	-6	36.8	32.5	Steel
032-1269	7/8 - 14	-10	1/2 - 14	-8	36.8	37.3	Steel

Elbow Adapters

37° Flare Male / NPTF Male 90° Elbow (Cont'd.)

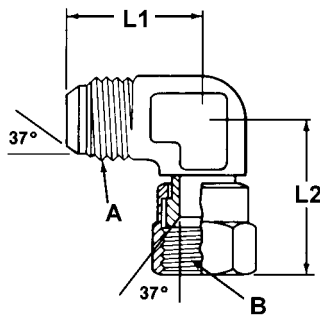
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
001-6936	7/8 - 14	-10	1/2 - 14	-8	36.83	56.39	Steel
031-6742	7/8 - 14	-10	1/2 - 14	-8	36.8	108.7	Steel
033-0414	7/8 - 14	-10	1/2 - 14	-8	36.8	48	Steel
061-6717	7/8 - 14	-10	3/4 - 14	-12	39.2	40.4	Steel
441-1584	1 1/16 - 12	-12	3/8 - 18	-6	42.2	35.6	Steel
031-1358	1 1/16 - 12	-12	1/2 - 14	-8	42.2	40.4	Steel
171-2356	1 1/16 - 12	-12	3/4 - 14	-12	42.2	40.4	SST
001-6301	1 1/16 - 12	-12	3/4 - 14	-12	42.2	40.4	Steel
001-7039	1 1/16 - 12	-12	3/4 - 14	-12	42.16	61.98	Steel
486-7973	1 1/16 - 12	-12	1 - 11.5	-16	44.7	50	SST
2P-8511	1 1/16 - 12	-12	1 - 11.5	-16	44.7	50	Steel
031-0782	1 3/16 - 12	-14	3/4 - 14	-12	45.7	42.9	Steel
9L-4007	1 5/16 - 12	-16	3/4 - 14	-12	46	45.2	Steel
6V-8649	1 5/16 - 12	-16	3/4 - 14	-12	46	58.8	Steel
183-6684	1 5/16 - 12	-16	1 - 11.5	-16	46	50	SST
9S-7296	1 5/16 - 12	-16	1 - 11.5	-16	46	50	Steel
030-0702	1 5/16 - 12	-16	1 1/4 - 11.5	-20	51	60.5	Steel
6K-3458	1 5/8 - 12	-20	1 1/4 - 11.5	-20	52.3	60.5	Steel
032-1357	1 5/8 - 12	-20	1 1/2 - 11.5	-24	55.9	67.1	Steel
032-1523	1 7/8 - 12	-24	1 1/2 - 11.5	-24	59.2	67.1	Steel
143-9307	2 1/2 - 12	-32	2 - 11.5	-32	77.7	76.2	Steel
140-2319	3 - 12	-40	2 1/2 - 8	-40	86.1	90.7	Steel

37° Flare Male / Swivel 45° Elbow



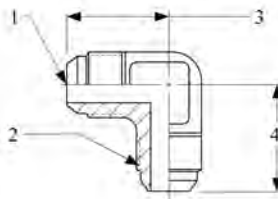
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
281-5838	7/16 - 20	-4	7/16 - 20	-4	18.3	23.9	SST
030-7961	7/16 - 20	-4	7/16 - 20	-4	18.3	23.9	Steel
031-1864	1/2 - 20	-5	1/2 - 20	-5	19.6	25.4	Steel
030-7962	9/16 - 18	-6	9/16 - 18	-6	21.1	28.4	Steel
224-0682	9/16 - 18	-6	3/4 - 16	-8	21.1	32.5	Brass
153-7487	3/4 - 16	-8	9/16 - 18	-6	24.9	32.5	Steel
030-7963	3/4 - 16	-8	3/4 - 16	-8	24.9	32.5	Steel
030-7964	7/8 - 14	-10	7/8 - 14	-10	28.2	36.6	Steel
030-7965	1 1/16 - 12	-12	1 1/16 - 12	-12	32.5	38.1	Steel
5P-0789	1 3/16 - 12	-14	1 3/16 - 12	-14	36.8	41.1	Steel
030-7966	1 5/16 - 12	-16	1 5/16 - 12	-16	37.3	44.4	Steel
030-7967	1 5/8 - 12	-20	1 5/8 - 12	-20	40.4	51.6	Steel
106-3378	1 7/8 - 12	-24	1 7/8 - 12	-24	45.2	57.2	Steel

37° Flare Male / Swivel 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
281-5837	7/16 - 20	-4	7/16 - 20	-4	22.6	25.4	SST
7K-9197	7/16 - 20	-4	7/16 - 20	-4	22.6	25.4	Steel
148-1740	7/16 - 20	-4	9/16 - 18	-6	26.6	31.8	Steel
7K-3324	1/2 - 20	-5	1/2 - 20	-5	24.1	26.9	Steel
5P-9464	9/16 - 18	-6	7/16 - 20	-4	27	28.58	Steel
171-3442	9/16 - 18	-6	9/16 - 18	-6	26.9	31.7	SST
6K-9194	9/16 - 18	-6	9/16 - 18	-6	26.9	31.8	Steel
112-4387	3/4 - 16	-8	9/16 - 18	-6	31.8	34	Steel
8M-0547	3/4 - 16	-8	3/4 - 16	-8	31.8	35.1	Steel
487-5069	3/4 - 16	-8	1 1/16 - 12	-12	36.1	44.4	Steel
8K-2396	7/8 - 14	-10	3/4 - 16	-8	36.8	38.1	Steel
030-7972	7/8 - 14	-10	7/8 - 14	-10	36.8	41.1	Steel
493-6741	1 1/16 - 12	-12	1 1/16 - 12	-12	42.2	44.4	SST
3R-9704	1 1/16 - 12	-12	1 1/16 - 12	-12	42.2	44.4	Steel
448-2121	1 1/16 - 12	-12	1 1/16 - 12	-12	71.4	59.7	Steel
6S-2910	1 3/16 - 12	-14	1 3/16 - 12	-14	45.7	45.2	Steel
371-7232	1 5/16 - 12	-16	7/8 - 14	-10	46	50.8	Steel
281-5892	1 5/16 - 12	-16	1 5/16 - 12	-16	46	50.8	SST
031-5744	1 5/16 - 12	-16	1 5/16 - 12	-16	46	50.8	Steel
030-7975	1 5/8 - 12	-20	1 5/8 - 12	-20	52.3	58.7	Steel
5R-8894	1 7/8 - 12	-24	1 7/8 - 12	-24	59.2	47.2	Steel
149-0027	2 1/2 - 12	-32	2 1/2 - 12	-32	77.7	85.9	Steel

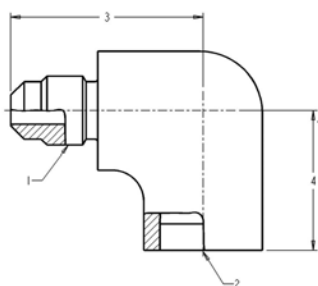
37° Flare Male 90° Elbow



Part Number	End 1		End 2		Length 3	Length 4	Material
	Thread	Dash Size	Thread	Dash Size			
067-6495	7/16 - 20	-4	7/16 - 20	-4	22.6	22.6	Steel
196-8173	7/16 - 20	-4	9/16 - 18	-6	51.8	26.9	Steel
061-8257	9/16 - 18	-6	9/16 - 18	-6	26.9	26.9	Steel
493-6745	3/4 - 16	-8	7/16 - 20	-4	31.8	28.5	Steel
5P-6399	3/4 - 16	-8	3/4 - 16	-8	31.8	31.8	Steel
250-1496	7/8 - 14	-10	7/8 - 14	-10	36.8	36.8	Steel
250-1496	7/8 - 14	-10	7/8 - 14	-10	36.8	36.8	Steel
5P-4900	7/8 - 14	-10	7/8 - 14	-10	36.8	36.8	Steel
3R-3976	1 1/16 - 12	-12	1 1/16 - 12	-12	42.2	42.2	Steel
5P-0912	1 5/16 - 12	-16	1 5/16 - 12	-16	46	46	Steel
5P-2303	1 5/8 - 12	-20	1 5/8 - 12	-20	52.3	52.3	Steel
5R-9235	1 7/8 - 12	-24	1 7/8 - 12	-24	59.2	59.2	Steel

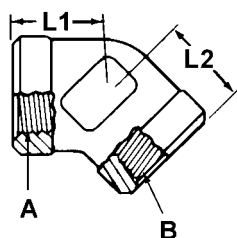
Elbow Adapters

45° Flare Male / NPTF Female 90° Elbow



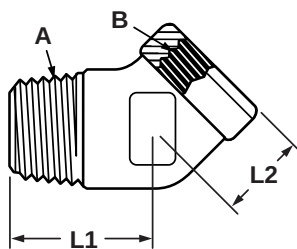
Part Number	End 1		End 2		Length 3	Length 4	Material
	Thread	Dash Size	Thread	Dash Size			
2L-6094	7/16 - 20	-4	1/8 - 27	-2	22.22	22.22	Brass
3R-1291	5/8 - 18	-6	3/8 - 18	-6	29.0	17.0	Brass
476-9411	3/4 - 16	-8	1/2 - 14	-8	34.9	20.6	Brass
7S-7507	7/8 - 14	-10	1/2 - 14	-8	38.1	25.4	Brass
476-9412	7/8 - 14	-10	3/4 - 14	-12	41.3	31.8	Brass

ASME NPT Port / Port 45° Elbow



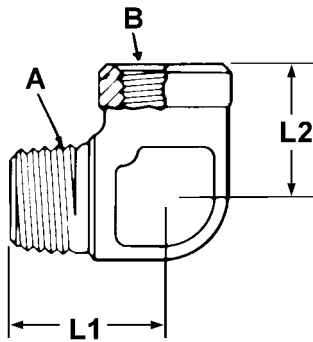
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
3B-6497	1/2 - 14	-8	1/2 - 14	-8	22.2	22.2	Iron
3B-7728	3/4 - 14	-12	3/4 - 14	-12	25.4	25.4	Iron
4B-9030	1 - 11.5	-16	1 - 11.5	-16	28.4	28.4	Iron
2N-3542	1 1/4 - 11.5	-20	1 1/4 - 11.5	-20	31	31	Brass
3D-2186	1 1/4 - 11.5	-20	1 1/4 - 11.5	-20	33.3	33.3	Iron
160-7086	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	42.9	42.9	Iron
2L-2813	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	36.3	36.3	Iron
5N-2638	2 - 11.5	-32	2 - 11.5	-32	37	37	Brass
8F-3271	2 - 11.5	-32	2 - 11.5	-32	42.7	42.7	Iron
7F-7652	3 1/2 - 8	-56	3 1/2 - 8	-56	60.3	60.3	Iron
140-9461	4 - 8	-64	4 - 8	-64	66.3	66.3	Iron

ASME NPTF Male / Port 45° Elbow



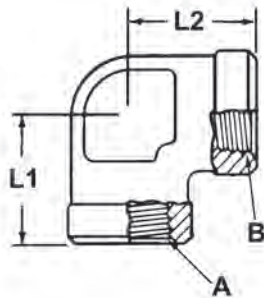
Part Number	End A		End B		L1	L2	Material
	Thread	Dash Size	Thread	Dash Size			
177-3477	1/8 - 27	-2	1/8 - 27	-2	17.5	4.3	Brass
3B-7730	1/4 - 18	-4	1/4 - 18	-4	23.8	15.8	Iron
7F-6289	3/8 - 18	-6	3/8 - 18	-6	27	17.4	Iron
3B-7731	1/2 - 14	-8	1/2 - 14	-8	30.2	20.6	Iron
2N-3543	1 1/4 - 11.5	-20	1 1/4 - 11.5	-20	41.7	31	Brass
3D-2187	1 1/4 - 11.5	-20	1 1/4 - 11.5	-20	42.7	33.3	Iron
2D-4080	2 - 11.5	-32	2 - 11.5	-32	56.4	42.7	Iron
5E-3952	3 - 8	-48	3 - 8	-48	76.2	55.1	Iron

ASME NPTF Male / Port 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
397-2476	1/8 - 27	-2	1/8 - 27	-2	20.8	14	Brass
3B-6773	1/4 - 18	-4	1/4 - 18	-4	28.2	18	Brass
3B-6553	1/4 - 18	-4	1/4 - 18	-4	30	20.6	Iron
4B-6067	3/8 - 18	-6	3/8 - 18	-6	36.5	23.8	Iron
3B-6554	3/4 - 14	-12	3/4 - 14	-12	47.5	33.3	Iron
3L-7024	3/4 - 14	-12	1 - 11.5	-16	47.5	38.1	Iron
3B-6555	1 - 11.5	-16	1 - 11.5	-16	54	36.5	Iron
8B-2777	1 - 11.5	-16	1 1/4 - 11.5	-20	53.98	44.45	Iron
6B-6765	1 1/4 - 11.5	-20	1 1/4 - 11.5	-20	57	43	Brass
3B-6556	1 1/4 - 11.5	-20	1 1/4 - 11.5	-20	63.5	44.4	Iron
7B-8057	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	62.48	46.74	Brass
5B-7666	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	68.3	49.2	Iron
7B-7138	2 - 11.5	-32	2 - 11.5	-32	82.55	57.15	Iron
488-4819	2 - 11.5	-32	2 - 11.5	-32	84	64	Steel
192-1264	4 - 8	-64	4 - 8	-64	144	97	Iron

ASME NPTF Port / Port 90° Elbow



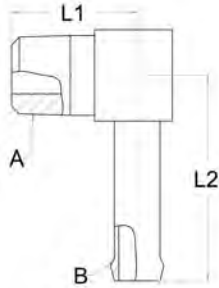
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
3B-6494	1/8 - 27	-2	1/8 - 27	-2	17.5	17.5	Iron
282-7858	1/4 - 18	-4	1/4 - 18	-4	20.6	20.6	SST
3B-7729	1/4 - 18	-4	1/4 - 18	-4	20.64	20.64	Iron
7B-1480	3/8 - 18	-6	1/4 - 18	-4	22.4	22.9	Iron
3B-6495	3/8 - 18	-6	3/8 - 18	-6	23.8	23.8	Iron
5B-8279	1/2 - 14	-8	3/8 - 18	-6	22.3	28.4	Iron
3B-6496	1/2 - 14	-8	1/2 - 14	-8	28.5	28.5	Iron
3F-1783	3/4 - 14	-12	1/2 - 14	-8	30.48	30.98	Iron
319-6193	3/4 - 14	-12	1/2 - 14	-8	33.3	35.1	Iron
4B-5984	3/4 - 14	-12	3/4 - 14	-12	33.3	33.3	Iron
149-5211	1 - 11.5	-16	1 - 11.5	-16	38.1	38.1	Iron
1L-0254	1 - 11.5	-16	1 - 11.5	-16	41.4	41.4	Iron
6V-7538	1 1/4 - 11.5	-20	3/4 - 14	-12	36.8	41.2	Iron
3L-9071	1 1/4 - 11.5	-20	1 - 11.5	-16	39.6	41.1	Iron
6B-6766	1 1/4 - 11.5	-20	1 1/4 - 11.5	-20	42.9	42.9	Brass
3B-6499	1 1/4 - 11.5	-20	1 1/4 - 11.5	-20	44.5	44.5	Iron
018-6477	1 1/2 - 11.5	-24	1 - 11.5	-16	41.9	45.7	Iron
6L-4382	1 1/2 - 11.5	-24	1 1/4 - 11.5	-20	46.2	47.8	Iron
7B-3395	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	46.7	46.7	Brass
6B-3685	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	49	49	Iron
141-1246	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	49.3	49.3	SST
6V-8253	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	51	51	Steel
6F-8856	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	52.8	52.8	Iron
131-9366	2 - 11.5	-32	1 1/4 - 11.5	-20	49.2	54	STL Pipe
8B-9913	2 - 11.5	-32	1 1/2 - 11.5	-24	57.15	49	Iron
3N-7602	2 - 11.5	-32	2 - 11.5	-32	54	54	Brass
439-1874	2 - 11.5	-32	2 - 11.5	-32	57.2	57.2	SST
246-1470	2 - 11.5	-32	2 - 11.5	-32	60.45	60.45	Black Pipe
8Q-9642	2 - 11.5	-32	2 - 11.5	-32	63.5	63.5	Iron
140-7300	2 1/2 - 8	-40	2 1/2 - 8	-40	68.6	68.6	Iron
506-9362	2 1/2 - 8	-40	2 1/2 - 8	-40	74.7	74.7	Iron

Elbow Adapters

ASME NPTF Port / Port 90° Elbow (Cont'd.)

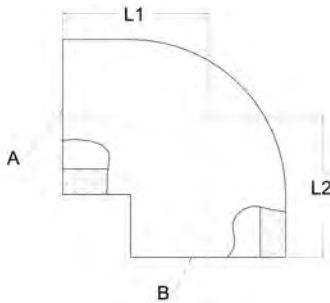
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
140-5979	3 - 8	-48	3 - 8	-48	78.23	78.23	Iron
319-6195	3 - 8	-48	3 - 8	-48	85.9	85.9	Iron
7F-7651	3 1/2 - 8	-56	3 1/2 - 8	-56	87.3	87.3	Iron
146-8875	4 - 8	-64	4 - 8	-64	96.3	96.3	Iron

BSPT Male / Hose Bead 90° Elbow



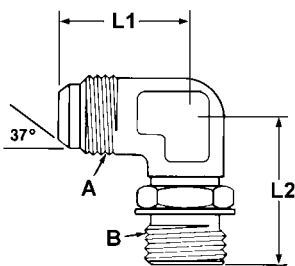
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Hose ID (mm)	Dash Size			
269-0986	1/4 - 19	-4	7.94	-5	21.8	35.6	Brass
217-5469	3/8 - 19	-6	15		25	33	Steel

ISO 1179 BSPP Flat Face Male / Port 90° Elbow



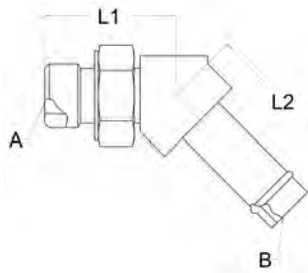
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
387-2727	1/4 - 19	-4	1/4 - 19	-4	36.5	30.5	Steel
417-2760	1/4 - 19	-4	1/4 - 19	-4	36	30	Steel
147-2444	3/4 - 14	-12	3/4 - 14	-12	30	29	Brass

ISO 6149 Metric STOR Male / 37° Flare Male 90° Elbow



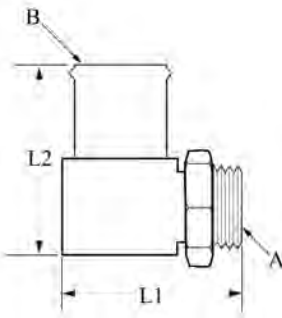
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread				
286-5030	7/16 - 20	-4	M14 x 1.5		26.9	29.2	Brass
216-7951	9/16 - 18	-6	M14 x 1.5		27	33.5	Steel
111-8815	3/4 - 16	-8	M16 x 1.5		31.8	38	Steel
7V-7502	1 5/16 - 12	-16	M26 x 1.5		46	46.3	Steel

ISO 6149 Metric STOR Male / Hose Bead 45° Elbow



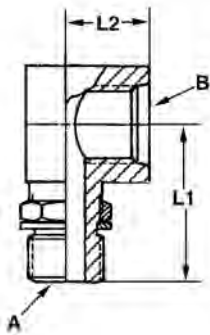
Part Number	End A	End B		L1 Length	L2 Length	Material
	Thread	Hose ID (mm)	Dash Size			
332-8546	M16 x 1.5	12.7	-8	33	40.5	Steel
315-9856	M16 x 1.5	15.88	-10	40	41.1	Steel
459-0698	M18 x 1.5	15.88	-10	33	51.9	Steel

ISO 6149 Metric STOR Male / Hose Bead 90° Elbow



Part Number	End A	End B		L1 Length	L2 Length	Material
	Thread	Hose ID (mm)	Dash Size			
321-8628	M16 x 1.5	9.52	-6	31.75	30.48	Brass
297-7960	M16 x 1.5	12.7	-8	33	40.5	Steel
218-6645	M16 x 1.5	15.88	-10	34.3	39.1	Steel
71-0375	M16 x 1.5	15.88	-10	40	40	Steel
178-5425	M16 x 1.5	15.88	-10	40	35	Steel
385-0183	M27 x 2	25.4	-16	42.68	42.42	Steel

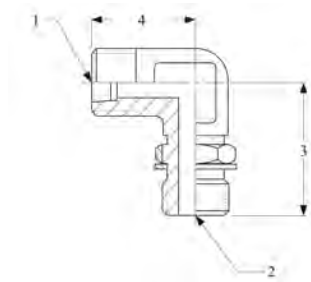
ISO 6149 Metric STOR Male / Port 90° Elbow



Part Number	End A	End B	L1 Length	L2 Length	Material
	Thread	Thread			
367-6024	M12 x 1.5	M12 x 1.5	33	15	Steel
216-4596	M12 x 1.5	M12 x 1.5	33	28	Steel
510-6510	M14 x 1.5	M12 x 1.5	35.5	18	Steel
459-0606	M14 x 1.5	M14 x 1.5	35.5	23.5	SST

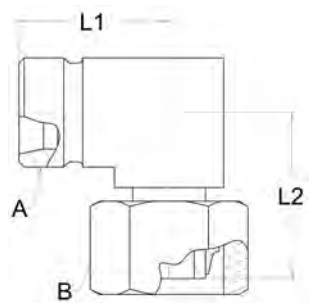
Elbow Adapters

ISO 8434-1 24° Cone Male / ISO 1179 BSPP Flat Face Male 90° Elbow



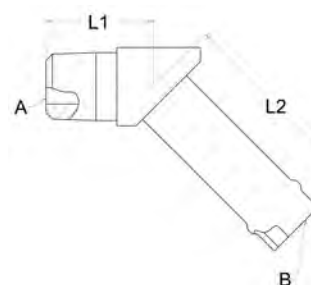
Series	Part Number	End 1		End 2		Length 3	Length 4	Material
		Thread	Tube Dia. (mm)	Thread	Dash Size			
L - Series (Light Duty)	395-1239	M14 x 1.5	8	1/4 - 19	-4	32	23	Steel
	373-5665	M14 x 1.5	8	1/4 - 19	-4	32	23	Steel
	373-5666	M16 x 1.5	10	1/4 - 19	-4	27	22.5	Steel
	384-2416	M18 x 1.5	12	3/8 - 19	-6	28	19	Steel
	175-9509	M26 x 1.5	18	1/4 - 19	-4	49	31	Steel
S - Series (Heavy Duty)	231-9828	M30 x 2	20	3/4 - 14	-12	39.7	36.5	Steel

ISO 8434-1 24° Cone Male / Swivel 90° Elbow



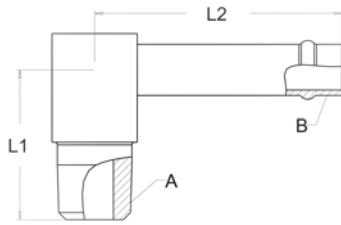
Part Number	Thread	End A		End B		L1 Length	L2 Length	Material
		Thread	Tube Dia. (mm)	Thread	Tube Dia. (mm)			
330-2610	M16 x 1.5	M16 x 1.5	10	M16 x 1.5	10	26	22.5	Steel
468-7743	M16 x 1.5	M16 x 1.5	10	M16 x 1.5	10	22	29	Steel
487-4394	M18 x 1.5	M18 x 1.5	12	M18 x 1.5	12	24	29.5	Steel
474-9218	M18 x 1.5	M18 x 1.5	12	M18 x 1.5	12	24	29.5	Steel
327-4383	M20 x 1.5	M20 x 1.5	12	M20 x 1.5	12	28	32.4	Steel
487-5651	M24 x 1.5	M24 x 1.5	16	M24 x 1.5	16	33	37.5	Steel
487-3162	M26 x 1.5	M26 x 1.5	18	M26 x 1.5	18	31	35.5	Steel

NPTF Male / Hose Bead 45° Elbow



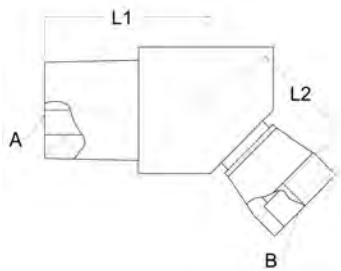
Part Number	Thread	Dash Size	End B		L1 Length	L2 Length	Material
			Hose ID (mm)	Dash Size			
6V-1323	1/4 - 18	-4	6.35	-4	21.8	43.2	Steel
5P-4566	1/4 - 18	-4	9.52	-6	21.8	42.4	Steel
253-1383	1/4 - 18	-4	12.7	-8	21.9	41.2	Steel
030-0709	3/8 - 18	-6	9.52	-6	24.2	43	Steel
068-3251	3/8 - 18	-6	12.7	-8	24.2	44.2	Steel
032-1339	1/2 - 14	-8	12.7	-8	29.8	43.7	Steel
033-3168	1/2 - 14	-8	15.88	-10	29.8	44.5	Steel
032-4036	3/4 - 14	-12	19.05	-12	30.5	45.2	Steel
477-0693	3/4 - 14	-12	25.4	-16	26.7	35.1	Brass
103-1746	3/4 - 14	-12	25.4	-16	30.5	44.5	Steel
274-5919	3/4 - 14	-12	25.4	-16	30.89	54.61	Steel
104-7992	1 - 11.5	-16	31.75	-20	37.6	45.2	Steel

NPTF Male / Hose Bead 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Hose ID (mm)	Dash Size			
386-6202	1/8 - 27	-2	6.35	-4	19.1	44.5	Brass
2Y-9402	1/8 - 27	-2	6.35	-4	19.1	44.45	Steel
366-4690	1/8 - 27	-2	9.52	-6	19.8	44.5	Steel
6V-6757	1/4 - 18	-4	6.35	-4	15.8	19.8	Brass
5P-9517	1/4 - 18	-4	7.94	-5	22	28.3	Brass
067-2935	1/4 - 18	-4	9.52	-6	27.8	46	Steel
472-8989	3/8 - 18	-6	9.52	-6	25	35	Steel
8B-1847	3/8 - 18	-6	12.7	-8	31	48.5	Steel
004-6810	3/8 - 18	-6	15.88	-10	31	48.5	Brass
3K-7928	3/8 - 18	-6	15.88	-10	31	48.5	Steel
5P-1065	1/2 - 14	-8	9.52	-6	37.3	50	Steel
9X-3959	1/2 - 14	-8	12.7	-8	31.75	31.75	Brass
030-8316	1/2 - 14	-8	12.7	-8	37.3	50	Steel
032-3631	1/2 - 14	-8	15.88	-10	37.3	50	Steel
6V-0675	1/2 - 14	-8	19.05	-12	31.75	30.7	Brass
5P-1064	3/4 - 14	-12	15.88	-10	40.4	52.3	Steel
207-2159	3/4 - 14	-12	19.05	-12	32.3	33.8	Brass
032-2154	3/4 - 14	-12	19.05	-12	40.4	52.3	Steel
5P-3179	3/4 - 14	-12	25.4	-16	34.9	44.4	Brass
7W-1890	3/4 - 14	-12	25.4	-16	40.4	52.3	Steel
032-8707	1 - 11.5	-16	19.05	-12	50	55.6	Steel
033-0820	1 - 11.5	-16	25.4	-16	50	55.6	Steel

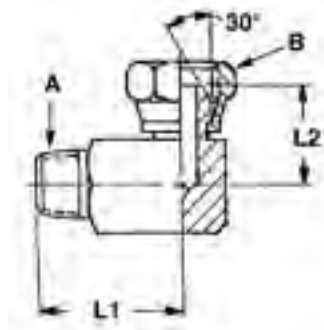
NPTF Male / NPSM Swivel 45° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
4D-0582	3/8 - 18	-6	3/8 - 18	-6	26.2	20.8	Steel
332-8563	3/8 - 18	-6	3/8 - 18	-6	35.5	24.1	Brass
3S-8666	1/2 - 14	-8	1/4 - 18	-4	33.5	21.3	Steel
3S-9175	1/2 - 14	-8	3/8 - 18	-6	33.5	21.8	Steel
4D-3734	1/2 - 14	-8	1/2 - 14	-8	33.5	22.4	Steel
4D-6314	3/4 - 14	-12	1/2 - 14	-8	38.1	22.4	Steel
6H-8297	3/4 - 14	-12	3/4 - 14	-12	38.1	25.4	Steel
185-1899	3/4 - 14	-12	1 - 11.5	-16	33.3	26.56	Steel
001-5262	1 - 11.5	-16	1 - 11.5	-16	38.1	27.7	Steel
6L-5955	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	49.3	33.8	Steel

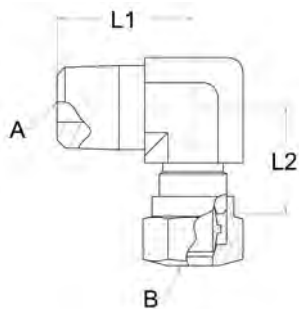
Elbow Adapters

NPTF Male / NPSM Swivel 90° Elbow



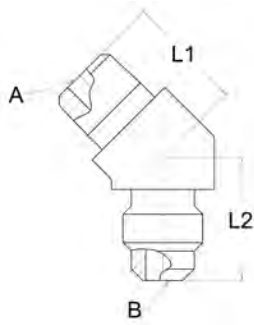
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
4D-6475	1/8 - 27	-2	1/8 - 27	-2	24.25	16.9	Steel
5K-3771	1/8 - 27	-2	1/8 - 27	-2	41.7	16.3	Steel
7K-2094	1/8 - 27	-2	1/8 - 27	-2	91.9	16.3	Steel
4S-7606	1/8 - 27	-2	1/4 - 18	-4	26.4	19.8	Steel
202-1138	1/4 - 18	-4	1/8 - 27	-2	27.7	19.3	Steel
4D-0124	1/4 - 18	-4	1/4 - 18	-4	63.5	19.8	Steel
5H-4778	1/4 - 18	-4	1/4 - 18	-4	31	19.8	Steel
1S-0401	1/4 - 18	-4	3/8 - 18	-6	38.1	23.4	Steel
332-8565	3/8 - 18	-6	1/4 - 18	-4	39.6	23.9	Steel
4J-3914	3/8 - 18	-6	1/4 - 18	-4	38.1	22.2	Steel
332-8566	3/8 - 18	-6	3/8 - 18	-6	39.6	28.4	Steel
4D-0577	3/8 - 18	-6	3/8 - 18	-6	38.1	23.4	Steel
2D-8910	3/8 - 18	-6	1/2 - 14	-8	40.4	25.4	Steel
3D-8913	1/2 - 14	-8	3/8 - 18	-6	41.5	24.9	Steel
2H-3940	1/2 - 14	-8	1/2 - 14	-8	45.2	25.4	Steel
7D-0477	1/2 - 14	-8	3/4 - 14	-12	50.8	30.2	Steel
003-7030	3/4 - 14	-12	3/8 - 18	-6	50.8	28.1	Steel
2L-8228	3/4 - 14	-12	1/2 - 14	-8	50.8	38.9	Steel
2H-3939	3/4 - 14	-12	3/4 - 14	-12	50.8	30.2	Steel
159-1691	3/4 - 14	-12	1 - 11.5	-16	35.3	55.5	Steel
004-3935	1 - 11.5	-16	3/4 - 14	-12	59.4	35	Steel
191-1716	1 - 11.5	-16	3/4 - 14	-12	50.04	46.23	Steel
3H-9690	1 - 11.5	-16	1 - 11.5	-16	59.4	35.1	Steel
2L-7070	1 1/4 - 11.5	-20	1 1/4 - 11.5	-20	65	39.6	Steel
1L-0766	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	71.4	43.7	Steel
6V-7349	2 - 11.5	-32	2 - 11.5	-32	85.6	61	Steel

NPTF Male / SAE J246 Compression Swivel 90° Elbow



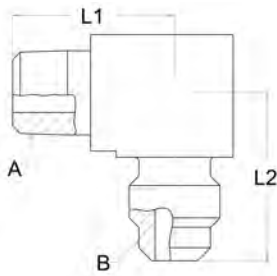
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Tube OD (mm)	Dash Size			
5P-4459	1/4 - 18	-4	6.35	-4	22.4	17.5	Steel
5P-4461	1/4 - 18	-4	12.7	-8	24.9	22.4	Steel
5P-4452	3/8 - 18	-6	9.52	-6	27.9	21.6	Steel

NPTF Male / SAE J512 45° Flare Male 45° Elbow



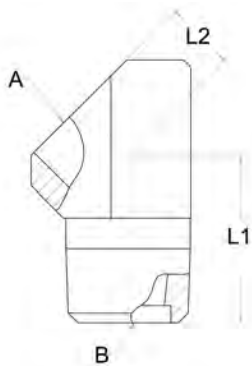
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
3K-3982	1/8 - 27	-2	7/16 - 20	-4	16.3	17	Brass

NPTF Male / SAE J512 45° Flare Male 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
3B-9406	1/8 - 27	-2	7/16 - 20	-4	19.8	20.6	Brass
472-8953	1/8 - 27	-2	7/16 - 20	-4	20.5	20	Steel
3K-3415	1/4 - 18	-4	7/16 - 20	-4	23.9	23.1	Brass
472-8962	1/4 - 18	-4	7/16 - 20	-4	23.9	22.4	Steel
3B-9408	1/4 - 18	-4	5/8 - 18	-6	27	25	Brass
472-8946	1/4 - 18	-4	5/8 - 18	-6	28	26.2	Steel
009-1068	1/4 - 18	-4	3/4 - 16	-8	29.36	30.95	Brass
1F-4502	3/8 - 18	-6	5/8 - 18	-6	26	27	Brass
472-8939	3/8 - 18	-6	5/8 - 18	-6	24.6	26.2	Steel
3B-9409	3/8 - 18	-6	3/4 - 16	-8	29	31	Brass
472-8951	3/8 - 18	-6	3/4 - 16	-8	28	31.8	Steel
7S-7369	1/2 - 14	-8	7/8 - 14	-10	35.05	35.81	Brass

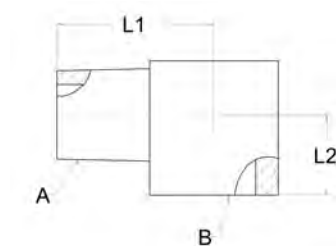
NPTF Male / SAE J512 45° Inverted Flare Port 45° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
9S-7720	1/8 - 27	-2	7/16 - 24	-4	14.7	6.9	Brass
6K-6826	3/8 - 18	-6	3/4 - 18	-8	23.1	9.7	Steel
9S-7724	1/2 - 14	-8	7/8 - 18	-10	27.7	11.4	Brass

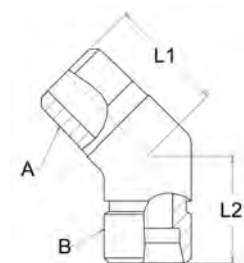
Elbow Adapters

NPTF Male / SAE J512 45° Inverted Flare Port 90° Elbow



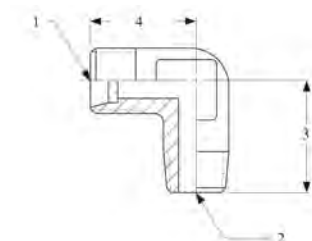
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
9S-7696	1/8 - 27	-2	5/16 - 28	-2	14.6	6.9	Brass
9S-7697	1/8 - 27	-2	3/8 - 24	-3	15.5	6.9	Brass
3L-1337	1/8 - 27	-2	7/16 - 24	-4	16.4	8.4	Brass
5K-9243	1/8 - 27	-2	7/16 - 24	-4	16.5	8.4	Brass
9S-7698	1/8 - 27	-2	1/2 - 20	-5	17.2	11.9	Brass
1L-6939	1/8 - 27	-2	5/8 - 18	-6	19	15.5	Brass
5K-9241	1/4 - 18	-4	7/16 - 24	-4	21.6	7.1	Brass
5P-2559	1/4 - 18	-4	1/2 - 20	-5	22.1	11.4	Brass
5K-9235	1/4 - 18	-4	5/8 - 18	-6	23.9	13.5	Brass
7K-0498	1/4 - 18	-4	3/4 - 18	-8	26	14.99	Brass
5K-9237	3/8 - 18	-6	5/8 - 18	-6	23.9	12.7	Brass
5K-9244	3/8 - 18	-6	3/4 - 18	-8	25.9	15	Brass
7K-1517	1/2 - 14	-8	3/4 - 18	-8	30	16.8	Brass
5K-9240	1/2 - 14	-8	7/8 - 18	-10	32.7	17	Brass

NPTF Male / SAE J514 24° Flareless Male 45° Elbow



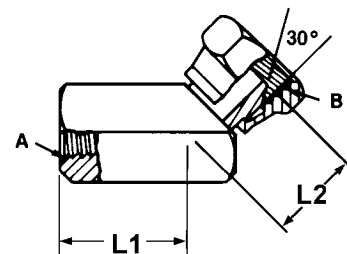
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
5P-6087	1/4 - 18	-4	9/16 - 18	-6	21.8	21.1	Steel
5P-6085	1/2 - 14	-8	7/8 - 14	-10	29.7	27.4	Steel

NPTF Male / SAE J514 24° Flareless Male 90° Elbow



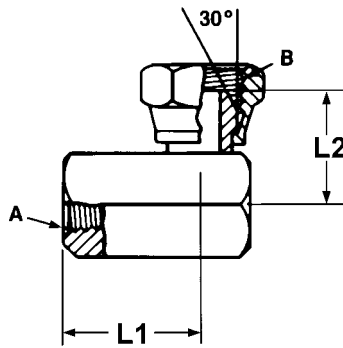
Part Number	End 1		End 2		Length 3	Length 4	Material
	Thread	Dash Size	Thread	Dash Size			
5P-6315	5/16 - 24	-2	1/8 - 27	-2	18.3	19.6	Steel
1P-3862	7/16 - 20	-4	1/8 - 27	-2	19.8	22.6	Steel
5P-3917	1/2 - 20	-5	1/8 - 27	-2	19.8	24.1	Steel
5P-6073	3/4 - 16	-8	3/8 - 18	-6	31	31.8	Steel
5P-5718	7/8 - 14	-10	1/2 - 14	-8	37.3	36.1	Steel

NPTF Port / NPSM Swivel 45° Elbow



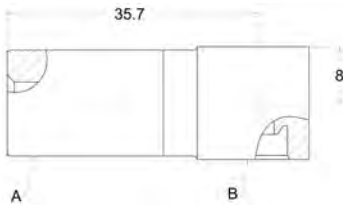
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
4D-6585	1/4 - 18	-4	1/4 - 18	-4	23.1	18.3	Steel
4D-2016	3/8 - 18	-6	3/8 - 18	-6	26.2	20.8	Steel
2H-3938	3/4 - 14	-12	3/4 - 14	-12	31.8	25.4	Steel

NPTF Port / NPSM Swivel 90° Elbow



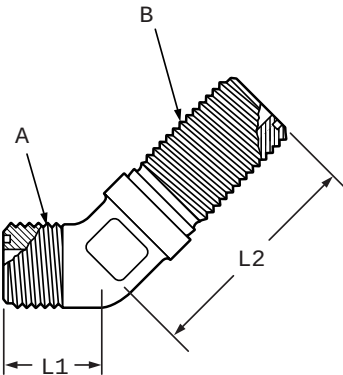
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
5D-0269	1/8 - 27	-2	1/8 - 27	-2	19.1	18.8	Steel
4D-4267	1/4 - 18	-4	1/4 - 18	-4	23.9	19.8	Steel
2D-8912	3/8 - 18	-6	1/2 - 14	-8	31	25.4	Steel
2L-3622	1/2 - 14	-8	1/2 - 14	-8	31	25.4	Steel
1L-4762	1 - 11.5	-16	1 - 11.5	-16	43.7	35.1	Steel
6V-9013	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	57.2	40.9	Steel

NPTF Port / SAE J512 45° Inverted Flare Port 90° Elbow



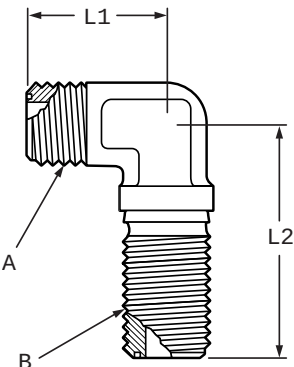
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
9S-7712	1/8 - 27	-2	7/16 - 24	-4	13.4	13.4	Brass
4W-8404	1/8 - 27	-2	7/16 - 24	-4	35.7	8	Brass
9S-7710	1/4 - 18	-4	5/8 - 18	-6	17.05	16.65	Brass
9S-7715	3/8 - 18	-6	3/4 - 18	-8	20.6	20.2	Brass

SAE J1453 ORFS Bulkhead 45° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
6V-8986	9/16 - 18	-4	9/16 - 18	-4	16	44	Steel
6V-8987	11/16 - 16	-6	11/16 - 16	-6	19	48.5	Steel
6V-9351	11/16 - 16	-6	13/16 - 16	-8	19	51	Steel
6V-8988	13/16 - 16	-8	13/16 - 16	-8	20.5	51	Steel
8C-3251	1 - 14	-10	13/16 - 16	-8	23.5	54.1	Steel
6V-8989	1 - 14	-10	1 - 14	-10	23.5	56.5	Steel
6V-8990	1 3/16 - 12	-12	1 3/16 - 12	-12	26	60.5	Steel
124-0195	1 7/16 - 12	-16	1 3/16 - 12	-12	30	65	Steel
6V-8991	1 7/16 - 12	-16	1 7/16 - 12	-16	30	65	Steel
442-3312	1 11/16 - 12	-20	1 11/16 - 12	-20	32	67	Steel

SAE J1453 ORFS Bulkhead 90° Elbow



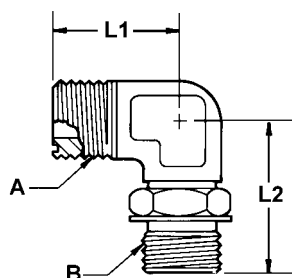
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
143-9665	9/16 - 18	-4	9/16 - 18	-4	22.5	72	Steel
6V-8979	9/16 - 18	-4	9/16 - 18	-4	22.5	47	Steel
6V-8980	11/16 - 16	-6	11/16 - 16	-6	26	52	Steel
184-7415	11/16 - 16	-6	11/16 - 16	-6	26	58.5	Steel
8T-5465	11/16 - 16	-6	13/16 - 16	-8	27.5	55.5	Steel
8T-0130	13/16 - 16	-8	11/16 - 16	-6	29	53.1	Steel
6V-8981	13/16 - 16	-8	13/16 - 16	-8	29	55.5	Steel
184-6892	13/16 - 16	-8	13/16 - 16	-8	29	61	Steel
6V-9796	13/16 - 16	-8	1 - 14	-10	32.5	63	Steel
8T-1810	1 - 14	-10	13/16 - 16	-8	34.5	61	Steel

Elbow Adapters

SAE J1453 ORFS Bulkhead 90° Elbow (Cont'd.)

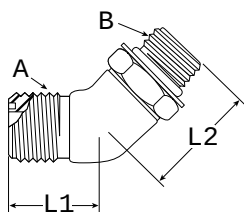
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
6V-8982	1 - 14	-10	1 - 14	-10	34.5	63	Steel
6V-8983	1 3/16 - 12	-12	1 3/16 - 12	-12	38.5	67	Steel
215-3226	1 7/16 - 12	-16	1 3/16 - 12	-12	42.5	70.7	Steel
6V-8984	1 7/16 - 12	-16	1 7/16 - 12	-16	42.5	71	Steel
3E-7426	1 11/16 - 12	-20	1 7/16 - 12	-16	45.5	75.5	Steel
6V-8985	1 11/16 - 12	-20	1 11/16 - 12	-20	45.5	75.5	Steel
202-6663	2 - 12	-24	2 - 12	-24	49.5	79.5	Steel

SAE J1453 ORFS Male / ISO 1179 BSPP Flat Face Male 90° Elbow



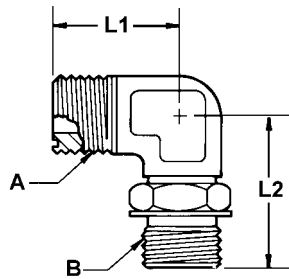
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
207-7224	9/16 - 18	-4	1/8 - 28	-2	21.5	30	Steel
304-8033	9/16 - 18	-4	1/8 - 28	-2	21.5	30	Steel
313-3479	9/16 - 18	-4	1/4 - 19	-4	23.5	35	Steel
196-6538	11/16 - 16	-6	1/8 - 28	-2	25	35	Steel
451-0472	11/16 - 16	-6	1/4 - 19	-4	25	36	Steel
351-5235	11/16 - 16	-6	3/8 - 19	-6	27	67	Steel
421-6176	11/16 - 16	-6	3/8 - 19	-6	26.5	38	Steel
293-7312	13/16 - 16	-8	3/8 - 19	-6	28	40.6	Steel
211-9537	1 - 14	-10	3/4 - 14	-12	33.5	51.5	Steel
304-8040	1 3/16 - 12	-12	1 - 11	-16	41.5	58	Steel
215-8849	1 7/16 - 12	-16	3/4 - 14	-12	38	58	Steel
175-9477	1 7/16 - 12	-16	1 - 11	-16	42	58	Steel
304-7194	1 7/16 - 12	-16	1 - 11	-16	41.7	58	Steel
293-2252	1 11/16 - 12	-20	1 1/4 - 11	-20	45	60	Steel
451-0449	1 11/16 - 12	-20	1 1/2 - 11	-24	49	64.5	Steel
487-5070	2 - 12	-24	1 1/2 - 11	-24	49	64.5	Steel

SAE J1453 ORFS Male / ISO 6149 Metric STOR Male 45° Elbow



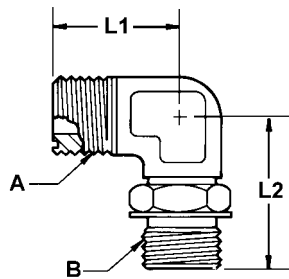
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
347-4401	11/16 - 16	-6	M14 x 1.5		19	31.5	Steel
371-7205	11/16 - 16	-6	M16 x 1.5		19	33.5	Steel
232-4869	1 - 14	-10	M22 x 1.5		23.5	44	Steel
306-9190	1 3/16 - 12	-12	M27 x 2		26	50.5	Steel
341-0112	1 11/16 - 12	-20	M42 x 2		32	54	Steel

SAE J1453 ORFS Male / ISO 6149 Metric STOR Male 90° Elbow



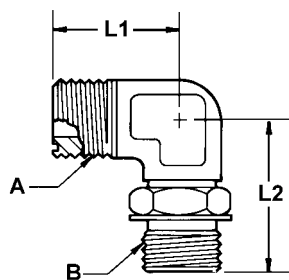
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
228-6049	9/16 - 18	-4	M10 x 1		21.5	29.5	Steel
295-4107	9/16 - 18	-4	M12 x 1.5		21.5	33	Steel
227-5714	11/16 - 16	-6	M12 x 1.5		25	35.5	Steel
218-1755	11/16 - 16	-6	M16 x 1.5		25	37.5	Steel
421-6167	11/16 - 16	-6	M16 x 1.5		22.3	37.5	Steel
227-0061	13/16 - 16	-8	M16 x 1.5		28	38	Steel
268-1552	13/16 - 16	-8	M18 x 1.5		28	41	Steel
379-4372	13/16 - 16	-8	M22 x 1.5		31.5	49	Steel
227-0056	1 - 14	-10	M18 x 1.5		33.5	47.5	Steel
227-0057	1 - 14	-10	M22 x 1.5		33.5	49	Steel
215-3665	1 3/16 - 12	-12	M22 x 1.5		37.5	49.5	Steel
474-2630	1 3/16 - 12	-12	M22 x 1.5		37.5	49	Steel
215-9090	1 3/16 - 12	-12	M27 x 2		37.5	55.5	Steel
250-1460	1 3/16 - 12	-12	M33 x 2		41.5	59.5	Steel
227-0059	1 7/16 - 12	-16	M33 x 2		41.7	59.5	Steel
227-0060	1 11/16 - 12	-20	M42 x 2		44.5	63	Steel

SAE J1453 ORFS Male / ISO 9974 Metric Flat Face Male 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
123-8829	9/16 - 18	-4	M10 x 1		21.5	31.4	Steel
152-3406	11/16 - 16	-6	M14 x 1.5		25	36.2	Steel
124-3109	13/16 - 16	-8	M18 x 1.5		28	41	Steel

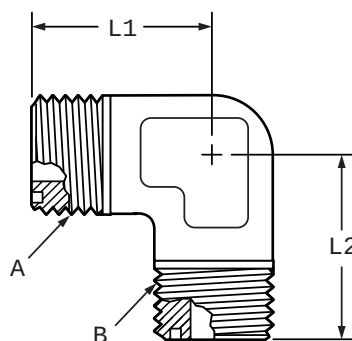
SAE J1453 ORFS Male / JIS B2351 BSPP STOR Male 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
183-9044	9/16 - 18	-4	1/4 - 19	-4	21	26	Steel
200-4635	9/16 - 18	-4	1/4 - 19	-4	26	37	Steel
175-4792	13/16 - 16	-8	1/2 - 14	-8	35.5	35.5	Steel
199-0543	13/16 - 16	-8	1/2 - 14	-8	28	46	Steel
199-0546	13/16 - 16	-8	1/2 - 14	-8	28	64	Steel
099-7551	1 - 14	-10	3/4 - 14	-12	37	35	Steel
096-4920	1 3/16 - 12	-12	3/4 - 14	-12	37	55	Steel

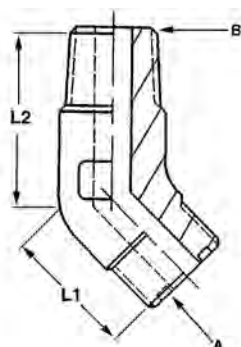
Elbow Adapters

SAE J1453 ORFS Male / Male 90° Elbow



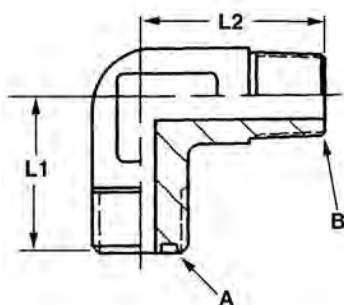
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
6V-9806	9/16 - 18	-4	9/16 - 18	-4	21.5	21.5	Steel
6V-9807	11/16 - 16	-6	11/16 - 16	-6	25	25	Steel
6V-9808	13/16 - 16	-8	13/16 - 16	-8	28	28	Steel
6V-9809	1 - 14	-10	1 - 14	-10	33.5	33.5	Steel
6V-9810	1 3/16 - 12	-12	1 3/16 - 12	-12	37.5	37.5	Steel
451-0415	1 3/16 - 12	-12	1 3/16 - 12	-12	60.59	38.5	Steel
8T-6777	1 3/16 - 12	-12	1 7/16 - 12	-16	41	41.5	Steel
6V-9649	1 7/16 - 12	-16	1 7/16 - 12	-16	41.5	41.5	Steel

SAE J1453 ORFS Male / NPTF Male 45° Elbow



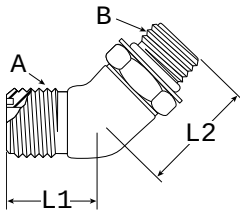
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
184-6893	9/16 - 18	-4	1/8 - 27	-2	16	18.28	Steel
511-7746	11/16 - 16	-6	1/4 - 18	-4	18.8	21.8	Steel
103-7268	11/16 - 16	-6	3/8 - 18	-6	19	26.4	Steel
103-7268	11/16 - 16	-6	3/8 - 18	-6	18.8	24.1	Steel
2T-2171	13/16 - 16	-8	3/8 - 18	-6	20.3	24.6	Steel
3E-7449	13/16 - 16	-8	1/2 - 14	-8	20.8	30.5	Steel
117-3034	1 11/16 - 12	-20	1 - 11.5	-16	32	53.6	Steel
426-4057	2 - 12	-24	1 1/2 - 11.5	-24	36.8	45.7	Steel

SAE J1453 ORFS Male / NPTF Male 90° Elbow



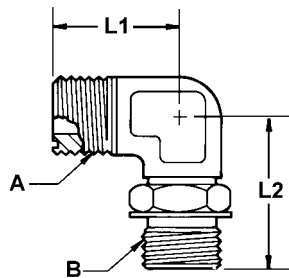
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
377-9577	9/16 - 18	-4	1/8 - 27	-2	21.5	19.8	Brass
7X-0492	9/16 - 18	-4	1/8 - 27	-2	21.5	19.8	Steel
377-9563	9/16 - 18	-4	1/4 - 18	-4	23.3	27.4	Brass
7X-5331	9/16 - 18	-4	1/4 - 18	-4	23.3	27.4	Steel
2T-2305	11/16 - 16	-6	1/4 - 18	-4	25	27.7	Steel
2T-1925	11/16 - 16	-6	3/8 - 18	-6	26.4	31.7	Steel
459-0590	11/16 - 16	-6	1/2 - 14	-8	29.2	33	Steel
250-1494	13/16 - 16	-8	1/4 - 18	-4	28	31	Steel
2T-2396	13/16 - 16	-8	3/8 - 18	-6	28	31	Steel
2T-1922	13/16 - 16	-8	1/2 - 14	-8	28	37.3	Steel
122-8905	13/16 - 16	-8	3/4 - 14	-12	33.5	41.9	Steel
361-4992	1 - 14	-10	1/2 - 14	-8	33.2	37.3	Steel
117-3033	1 - 14	-10	3/4 - 14	-12	33.3	40.4	Steel
7X-7902	1 3/16 - 12	-12	1/2 - 14	-8	37.3	42	Steel
9X-2398	1 3/16 - 12	-12	3/4 - 14	-12	37.3	40.4	Steel
131-4863	1 7/16 - 12	-16	1 - 11.5	-16	41.7	50	Steel
5E-8917	1 11/16 - 12	-20	1 1/4 - 11.5	-20	44.7	61.21	Steel

SAE J1453 ORFS Male / SAE J1926 STOR Male 45° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
6V-9000	9/16 - 18	-4	7/16 - 20	-4	16	30	Steel
8T-0164	9/16 - 18	-4	9/16 - 18	-6	17.5	33	Steel
8T-7546	11/16 - 16	-6	7/16 - 20	-4	19	31	Steel
8C-3246	11/16 - 16	-6	1/2 - 20	-5	19	31	Steel
6V-9001	11/16 - 16	-6	9/16 - 18	-6	19	33	Steel
219-1883	11/16 - 16	-6	9/16 - 18	-6	33	19	Steel
6V-9876	11/16 - 16	-6	3/4 - 16	-8	19	36.5	Steel
310-5899	11/16 - 16	-6	7/8 - 14	-10	20	44.5	Steel
9X-2085	13/16 - 16	-8	9/16 - 18	-6	20.5	32.4	Steel
6V-9002	13/16 - 16	-8	3/4 - 16	-8	20.5	36.5	Steel
503-2216	13/16 - 16	-8	7/8 - 14	-10	21.5	44.5	Steel
127-1647	13/16 - 16	-8	1 1/16 - 12	-12	22.5	50	Steel
8T-2530	1 - 14	-10	3/4 - 16	-8	23.5	40.2	Steel
6V-9003	1 - 14	-10	7/8 - 14	-10	23.5	44.5	Steel
8T-0120	1 - 14	-10	1 1/16 - 12	-12	24.5	50	Steel
195-0037	1 - 14	-10	1 1/16 - 12	-12	23.4	127	Steel
8C-6920	1 3/16 - 12	-12	3/4 - 16	-8	26	41.6	Steel
8T-5389	1 3/16 - 12	-12	7/8 - 14	-10	26	45.9	Steel
464-3819	1 3/16 - 12	-12	7/8 - 14	-10	25.9	50.038	Steel
6V-9004	1 3/16 - 12	-12	1 1/16 - 12	-12	26	50	Steel
419-7158	1 3/16 - 12	-12	1 3/16 - 12	-14	29.5	52.5	Steel
8T-4149	1 3/16 - 12	-12	1 5/16 - 12	-16	29.5	52.5	Steel
8T-7970	1 7/16 - 12	-16	1 1/16 - 12	-12	30	51.7	Steel
6V-9005	1 7/16 - 12	-16	1 5/16 - 12	-16	30	52.5	Steel
303-5020	1 7/16 - 12	-16	1 5/16 - 12	-16	68	62	Steel
143-4281	1 7/16 - 12	-16	1 5/8 - 12	-20	32	53.5	Steel
369-6870	1 7/16 - 12	-16	1 7/8 - 12	-24	37	53.5	Steel
152-9840	1 11/16 - 12	-20	1 5/16 - 12	-16	32	53.5	Steel
6V-9006	1 11/16 - 12	-20	1 5/8 - 12	-20	32	53.5	Steel
204-9378	2 - 12	-24	1 7/8 - 12	-24	37	53.5	Steel

SAE J1453 ORFS Male / SAE J1926 STOR Male 90° Elbow



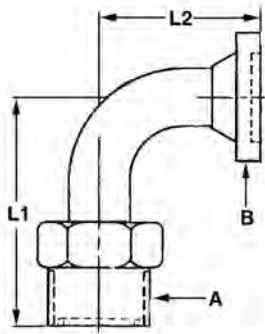
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
294-4821	9/16 - 18	-4	3/8 - 24	-3	21.5	30.23	Steel
267-4045	9/16 - 18	-4	7/16 - 20	-4	21.5	56.5	Steel
165-2016	9/16 - 18	-4	7/16 - 20	-4	21.5	63	Steel
100-7603	9/16 - 18	-4	1/2 - 20	-5	23.5	35.5	Steel
153-6267	9/16 - 18	-4	9/16 - 18	-6	21.5	72	Steel
6V-8627	9/16 - 18	-4	9/16 - 18	-6	23.5	37	Steel
267-4047	9/16 - 18	-4	9/16 - 18	-6	23.7	66.8	Steel
205-4135	9/16 - 18	-4	3/4 - 16	-8	24.7	40.6	Steel
6V-9200	11/16 - 16	-6	7/16 - 20	-4	25	35	Steel
7X-0901	11/16 - 16	-6	1/2 - 20	-5	25	35	Steel
6V-8724	11/16 - 16	-6	9/16 - 18	-6	25	37	Steel
8T-1905	11/16 - 16	-6	9/16 - 18	-6	25	72	Steel
292-7430	11/16 - 16	-6	9/16 - 18	-6	25	80	Steel
341-0101	11/16 - 16	-6	9/16 - 18	-6	25	52	Steel
3E-7432	11/16 - 16	-6	9/16 - 18	-6	25	37	Steel
471-4197	11/16 - 16	-6	9/16 - 18	-6	24.9	36.8	Steel
6V-8723	11/16 - 16	-6	3/4 - 16	-8	26.5	40.5	Steel

Elbow Adapters

SAE J1453 ORFS Male / SAE J1926 STOR Male 90° Elbow (Cont'd.)

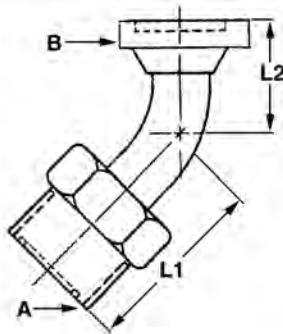
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
9X-2134	11/16 - 16	-6	7/8 - 14	-10	30	50	Steel
6V-9343	11/16 - 16	-6	1 1/16 - 12	-12	32.5	55	Steel
235-3601	13/16 - 16	-8	7/16 - 20	-4	28	45.9	Steel
8T-6876	13/16 - 16	-8	9/16 - 18	-6	28	36.4	Steel
8T-7521	13/16 - 16	-8	9/16 - 18	-6	28	65.5	Steel
5E-9683	13/16 - 16	-8	3/4 - 16	-8	28	75	Steel
6V-8625	13/16 - 16	-8	3/4 - 16	-8	28	40.5	Steel
8T-1686	13/16 - 16	-8	3/4 - 16	-8	28	65.5	Steel
6V-8721	13/16 - 16	-8	7/8 - 14	-10	31.5	50	Steel
270-0013	13/16 - 16	-8	7/8 - 14	-10	30.8	106.1	Steel
270-0015	13/16 - 16	-8	7/8 - 14	-10	30.8	66.1	Steel
287-7328	13/16 - 16	-8	7/8 - 14	-10	30.8	76.1	Steel
8T-5429	13/16 - 16	-8	1 1/16 - 12	-12	34	55	Steel
241-2451	1 - 14	-10	9/16 - 18	-6	33.5	41.5	Steel
6V-8722	1 - 14	-10	3/4 - 16	-8	33.5	46	Steel
287-7330	1 - 14	-10	7/8 - 14	-10	30.8	106.1	Steel
8T-0404	1 - 14	-10	1 1/16 - 12	-12	36	55	Steel
211-6257	1 - 14	-10	1 1/16 - 12	-12	37	102	Steel
6V-9877	1 3/16 - 12	-12	3/4 - 16	-8	37.5	46.5	Steel
087-4588	1 3/16 - 12	-12	3/4 - 16	-8	37.3	62	Steel
348-4996	1 3/16 - 12	-12	3/4 - 16	-8	37.3	86.1	Steel
6V-8629	1 3/16 - 12	-12	7/8 - 14	-10	37.5	50.9	Steel
6V-9007	1 3/16 - 12	-12	1 1/16 - 12	-12	37.5	55	Steel
128-6841	1 3/16 - 12	-12	1 1/16 - 12	-12	37.3	52	Steel
369-6831	1 3/16 - 12	-12	1 1/16 - 12	-12	57	82.7	Steel
194-9040	1 3/16 - 12	-12	1 1/16 - 12	-12	37.3	203	Steel
194-9041	1 3/16 - 12	-12	1 1/16 - 12	-12	37.3	154	Steel
235-3611	1 3/16 - 12	-12	1 1/16 - 12	-12	37.3	75	Steel
337-1177	1 3/16 - 12	-12	1 1/16 - 12	-12	37.3	90.8	Steel
345-3911	1 3/16 - 12	-12	1 1/16 - 12	-12	37.5	55	Steel
8C-8400	1 3/16 - 12	-12	1 1/16 - 12	-12	37.5	101	Steel
6V-9182	1 3/16 - 12	-12	1 5/16 - 12	-16	41	59.5	Steel
371-7155	1 3/16 - 12	-12	1 5/16 - 12	-16	41.2	131.7	Steel
162-3122	1 3/16 - 12	-12	1 5/16 - 12	-16	43.2	49.5	Steel
195-0036	1 3/16 - 12	-12	1 5/16 - 12	-16	37.3	96.4	Steel
202-1713	1 3/16 - 12	-12	1 5/16 - 12	-16	37.3	115	Steel
321-8661	1 3/16 - 12	-12	1 5/16 - 12	-16	37.3	100	Steel
119-6220	1 7/16 - 12	-16	7/8 - 14	-10	41.5	54.5	Steel
8T-6684	1 7/16 - 12	-16	1 1/16 - 12	-12	41.5	58.7	Steel
8T-8986	1 7/16 - 12	-16	1 3/16 - 12	-14	41.7	59	Steel
433-2445	1 7/16 - 12	-16	1 3/16 - 12	-14	41.7	109	Steel
5E-9684	1 7/16 - 12	-16	1 5/16 - 12	-16	41.5	114.5	Steel
6V-9008	1 7/16 - 12	-16	1 5/16 - 12	-16	41.5	59.5	Steel
194-1958	1 7/16 - 12	-16	1 5/16 - 12	-16	90	59.9	Steel
255-2024	1 7/16 - 12	-16	1 5/8 - 12	-20	44.7	137	Steel
199-1773	1 11/16 - 12	-20	1 5/8 - 12	-20	44.7	112.2	Steel
6V-9009	1 11/16 - 12	-20	1 5/8 - 12	-20	44.5	62	Steel
3E-7433	1 11/16 - 12	-20	1 7/8 - 12	-24	48.8	65.8	Steel
158-7594	2 - 12	-24	1 5/8 - 12	-20	49	66	Steel
8T-1682	2 - 12	-24	1 7/8 - 12	-24	49	66	Steel

SAE J1453 ORFS Male / SAE J518 Code 61 Flange Head 90° Elbow



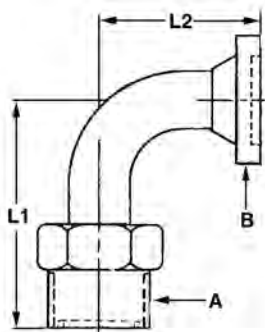
Part Number	End A		End B	L1 Length	L2 Length	Material
	Thread	Dash Size	Dash Size			
151-8866	1 3/16 - 12	-12	-12	50	25	Steel
397-9744	1 3/16 - 12	-12	-12	43	42	Steel
287-7339	1 3/16 - 12	-12	-12	49.5	46	Steel
347-4415	1 3/16 - 12	-12	-12	67.3	54	Steel
480-2998	1 3/16 - 12	-12	-12	42.2	54	Steel
268-1526	1 3/16 - 12	-12	-16	48	25	Steel
262-5492	1 7/16 - 12	-16	-16	41.7	60.2	Steel
163-3098	1 7/16 - 12	-16	-16	81.8	60.2	Steel
395-5438	1 11/16 - 12	-20	-20	33.35	60.2	Steel
432-9432	1 11/16 - 12	-20	-24	59.2	80	Steel
395-5439	2 - 12	-24	-24	59.18	80.81	Steel

SAE J1453 ORFS Male / SAE J518 Code 62 Flange Head 45° Elbow



Part Number	End A		End B	L1 Length	L2 Length	Material
	Thread	Dash Size	Dash Size			
127-7056	1 3/16 - 12	-12	-12	49.2	35.9	Steel
7X-9737	1 7/16 - 12	-16	-12	53.7	32	Steel
138-7796	1 7/16 - 12	-16	-16	30	47	Steel
489-1534	1 7/16 - 12	-16	-16	31.8	52.6	Steel

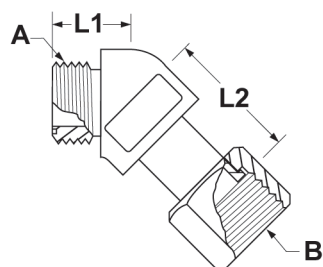
SAE J1453 ORFS Male / SAE J518 Code 62 Flange Head 90° Elbow



Part Number	End A		End B	L1 Length	L2 Length	Material
	Thread	Dash Size	Dash Size			
270-0344	1 3/16 - 12	-12	-8	59	52	Steel
398-5630	1 3/16 - 12	-12	-12	37	54	Steel
434-5384	1 3/16 - 12	-12	-12	42.16	54.1	Steel
480-2999	1 3/16 - 12	-12	-16	55.1	61.5	Steel
439-0448	1 7/16 - 12	-16	-12	67.48	54.1	Steel
369-6822	1 7/16 - 12	-16	-16	108	71.4	Steel
426-4036	1 7/16 - 12	-16	-16	72	70	Steel
489-1534	1 7/16 - 12	-16	-16	31.8	53.6	Steel
7X-9733	1 7/16 - 12	-16	-16	83	57	Steel
7X-9738	1 7/16 - 12	-16	-16	83	100	Steel
432-9579	1 7/16 - 12	-16	-20	52.32	70.1	Steel
434-5383	1 11/16 - 12	-20	-20	52.32	70.1	Steel
432-9445	1 11/16 - 12	-20	-24	59.2	80	Steel
442-3362	2 - 12	-24	-20	50.8	70.1	Steel

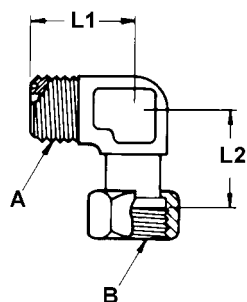
Elbow Adapters

SAE J1453 ORFS Male / Swivel 45° Elbow



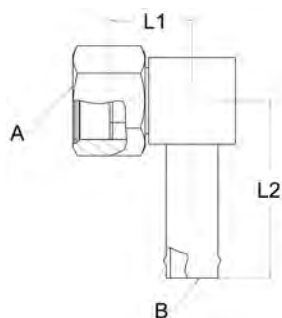
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
8C-8408	9/16 - 18	-4	9/16 - 18	-4	16	25	Steel
8C-8988	11/16 - 16	-6	11/16 - 16	-6	19	28.5	Steel
8C-8989	13/16 - 16	-8	13/16 - 16	-8	20.3	37.8	Steel
8C-7563	1 - 14	-10	1 - 14	-10	23.4	38.9	Steel
8T-8899	1 3/16 - 12	-12	1 3/16 - 12	-12	26	39	Steel
142-0038	1 7/16 - 12	-16	1 7/16 - 12	-16	30	47.5	Steel
229-1444	1 11/16 - 12	-20	1 11/16 - 12	-20	54.4	45.5	Steel
295-4101	2 - 12	-24	2 - 12	-24	36.8	61.3	Steel

SAE J1453 ORFS Male / Swivel Nut 90° Elbow



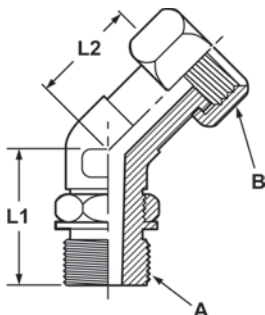
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
6V-9849	9/16 - 18	-4	9/16 - 18	-4	21.5	26.5	Steel
288-0267	9/16 - 18	-4	9/16 - 18	-4	21.5	46	Steel
6V-9850	11/16 - 16	-6	11/16 - 16	-6	25	29	Steel
439-1818	11/16 - 16	-6	11/16 - 16	-6	25	70	Steel
152-3411	11/16 - 16	-6	13/16 - 16	-8	26.5	38	Steel
3E-2333	13/16 - 16	-8	11/16 - 16	-6	28	35	Steel
6V-9851	13/16 - 16	-8	13/16 - 16	-8	28	38	Steel
459-0630	13/16 - 16	-8	1 - 14	-10	31.5	41	Steel
6V-9852	1 - 14	-10	1 - 14	-10	33.5	41	Steel
8T-1718	1 3/16 - 12	-12	1 - 14	-10	37.5	44	Steel
6V-9853	1 3/16 - 12	-12	1 3/16 - 12	-12	37.5	46.5	Steel
103-1328	1 3/16 - 12	-12	1 3/16 - 12	-12	45	36	Steel
109-5824	1 3/16 - 12	-12	1 3/16 - 12	-12	36	36	Steel
109-5825	1 3/16 - 12	-12	1 3/16 - 12	-12	36	42	Steel
6V-9854	1 7/16 - 12	-16	1 7/16 - 12	-16	41.5	53.5	Steel
6V-9855	1 11/16 - 12	-20	1 11/16 - 12	-20	44.5	58	Steel
102-3437	2 - 12	-24	1 11/16 - 12	-20	49	61	Steel
174-5811	2 - 12	-24	2 - 12	-24	49	61	Steel

SAE J1453 ORFS Swivel / Hose Bead 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Hose ID (mm)	Dash Size			
287-7257	11/16 - 16	-6	12.7	-8	29.3	40.5	Steel
451-0388	1 - 14	-10	19.05	-12	41	54.7	Steel
268-1650	1 3/16 - 12	-12	19.05	-12	37.7	65	Steel
451-0356	1 3/16 - 12	-12	19.05	-12	30.2	65	Steel

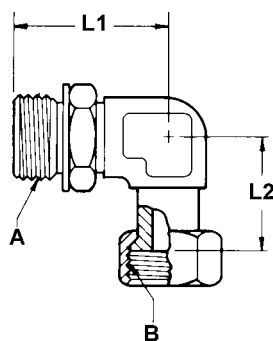
SAE J1453 ORFS Swivel / SAE J1926 STOR Male 45° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
8T-2335	9/16 - 18	-6	11/16 - 16	-6	33	29.3	Steel
8T-0252	3/4 - 16	-8	13/16 - 16	-8	36.8	37.9	Steel
208-5148	1 1/16 - 12	-12	1 - 14	-10	50	34	Steel

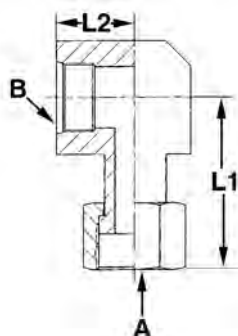
Elbow Adapters

SAE J1453 ORFS Swivel / SAE J1926 STOR Male 90° Elbow



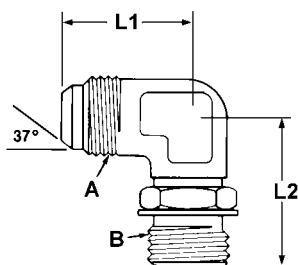
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
249-0008	7/16 - 20	-4	11/16 - 16	-6	36.8	29.3	Steel
8T-0788	9/16 - 18	-6	11/16 - 16	-6	37	29	Steel
9X-2091	3/4 - 16	-8	11/16 - 16	-6	40.5	35	Steel
424-8479	3/4 - 16	-8	13/16 - 16	-8	40.6	34	Steel
8T-0249	3/4 - 16	-8	13/16 - 16	-8	40.5	38	Steel
8T-3001	7/8 - 14	-10	1 - 14	-10	50	41	Steel
330-9591	1 1/16 - 12	-12	1 - 14	-10	55	44	Steel
153-6229	1 5/16 - 12	-16	1 - 14	-10	59.7	44.45	Steel
8T-6451	1 1/16 - 12	-12	1 3/16 - 12	-12	55	46.5	Steel
4C-5089	1 5/16 - 12	-16	1 3/16 - 12	-12	57.15	46.23	Steel
143-4262	3/4 - 16	-8	1 7/16 - 12	-16	65.1	130.6	Steel
250-1425	1 1/16 - 12	-12	1 7/16 - 12	-16	59	53.4	Steel
124-8333	1 5/16 - 12	-16	1 7/16 - 12	-16	59.5	53.5	Steel
170-6541	1 5/8 - 12	-20	1 11/16 - 12	-20	62	58	Steel

SAE J1453 ORFS Swivel / SAE J1926 STOR Port 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
213-3745	9/16 - 18	-4	9/16 - 18	-6	31.5	28	Steel
396-0400	1 3/16 - 12	-12	1 1/16 - 12	-12	53	30.7	Steel
9X-2538	1 3/16 - 12	-12	1 1/16 - 12	-12	53.3	30.7	Steel

SAE J1926 STOR Male / 37° Flare Male 90° Elbow

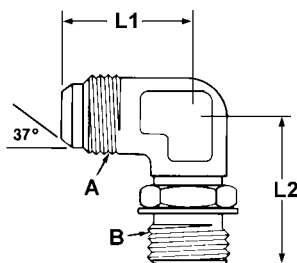


Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
205-1581	7/16 - 20	-4	3/8 - 24	-3	22.6	23.4	Steel
171-6469	7/16 - 20	-4	7/16 - 20	-4	22.6	26.2	SST
030-7946	7/16 - 20	-4	7/16 - 20	-4	22.6	26.2	Steel
5P-3426	7/16 - 20	-4	7/16 - 20	-4	22.6	43.9	Steel
364-9627	9/16 - 18	-6	7/16 - 20	-4	26.9	30.3	SST
5P-2645	9/16 - 18	-6	7/16 - 20	-4	26.9	30.3	Steel
6V-0416	9/16 - 18	-6	7/16 - 20	-4	26.92	40	Steel
364-9625	7/16 - 20	-4	1/2 - 20	-5	24.1	28.7	SST
3N-1294	7/16 - 20	-4	1/2 - 20	-5	24.1	28.7	Steel
030-6816	1/2 - 20	-5	1/2 - 20	-5	24.1	28.7	Steel
8K-0968	9/16 - 18	-6	1/2 - 20	-5	26.9	30.3	Steel
7J-4026	7/16 - 20	-4	9/16 - 18	-6	26.6	31.8	Steel
030-7947	9/16 - 18	-6	9/16 - 18	-6	26.9	31.8	Steel
2P-7214	9/16 - 18	-6	9/16 - 18	-6	26.9	52.8	Steel
347-4403	9/16 - 18	-6	9/16 - 18	-6	26.9	44	Steel
4R-8684	3/4 - 16	-8	9/16 - 18	-6	31.8	34	SST

SAE J1926 STOR Male / 37° Flare Male 90° Elbow (Cont'd.)

Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
4K-6297	3/4 - 16	-8	9/16 - 18	-6	31.8	33.5	Steel
030-8276	3/4 - 16	-8	9/16 - 18	-6	31.8	70.9	Steel
162-6803	3/4 - 16	-8	9/16 - 18	-6	31.8	70.8	Steel
281-5916	7/16 - 20	-4	3/4 - 16	-8	29	36.8	Steel
364-9631	9/16 - 18	-6	3/4 - 16	-8	29	36.8	SST
164-6865	3/4 - 16	-8	3/4 - 16	-8	31.8	36.8	SST
118-4728	3/4 - 16	-8	3/4 - 16	-8	31.8	36.8	Steel
030-8027	3/4 - 16	-8	3/4 - 16	-8	31.75	112.8	Steel
273-4881	3/4 - 16	-8	3/4 - 16	-8	31.8	36.8	Steel
1P-7625	7/8 - 14	-10	3/4 - 16	-8	36.8	39.1	Steel
032-8414	1 1/16 - 12	-12	3/4 - 16	-8	42.2	41.2	Steel
138-5049	9/16 - 18	-6	7/8 - 14	-10	31	43.2	Steel
183-6805	3/4 - 16	-8	7/8 - 14	-10	33.8	43.2	SST
005-4173	3/4 - 16	-8	7/8 - 14	-10	33.8	43.2	Steel
069-3256	3/4 - 16	-8	7/8 - 14	-10	34.2	43.2	Steel
149-4230	7/8 - 14	-10	7/8 - 14	-10	36.8	70	Steel
8K-6686	7/8 - 14	-10	7/8 - 14	-10	36.8	56.4	Steel
068-4174	1 1/16 - 12	-12	7/8 - 14	-10	42.2	45.2	Steel
297-4690	1 1/16 - 12	-12	7/8 - 14	-10	42.2	40.4	Steel
268-1591	1 5/16 - 12	-16	7/8 - 14	-10	46	48	Steel
3P-2298	3/4 - 16	-8	1 1/16 - 12	-12	36.1	49.3	Steel
005-0658	7/8 - 14	-10	1 1/16 - 12	-12	39.2	49.3	Steel
030-7950	1 1/16 - 12	-12	1 1/16 - 12	-12	42.2	49.3	Steel
034-2136	1 1/16 - 12	-12	1 1/16 - 12	-12	41.7	64	Steel
5P-3411	1 1/16 - 12	-12	1 1/16 - 12	-12	42.16	84.84	Steel
008-8381	1 5/16 - 12	-16	1 1/16 - 12	-12	46	52.1	Steel
397-0822	1 5/16 - 12	-16	1 1/16 - 12	-12	45.97	52.07	Steel
031-7600	1 3/16 - 12	-14	1 3/16 - 12	-14	45.7	50.8	Steel
5P-6416	1 5/16 - 12	-16	1 3/16 - 12	-14	46	52.1	Steel
489-4872	3/4 - 16	-8	1 5/16 - 12	-16	38.6	52.1	Steel
5P-3466	1 1/16 - 12	-12	1 5/16 - 12	-16	44.7	52.1	Steel
183-6807	1 5/16 - 12	-16	1 5/16 - 12	-16	46	52.1	SST
030-7951	1 5/16 - 12	-16	1 5/16 - 12	-16	46	52.1	Steel
008-6325	1 5/8 - 12	-20	1 5/16 - 12	-16	52.3	57.2	Steel
030-0701	1 5/16 - 12	-16	1 5/8 - 12	-20	51	57.2	Steel
6M-5652	1 5/8 - 12	-20	1 5/8 - 12	-20	52.3	57.2	Steel
5P-3725	1 7/8 - 12	-24	1 5/8 - 12	-20	59.2	60.7	Steel
6V-5601	1 5/8 - 12	-20	1 7/8 - 12	-24	55.9	60.7	Steel
030-7953	1 7/8 - 12	-24	1 7/8 - 12	-24	59.2	60.7	Steel

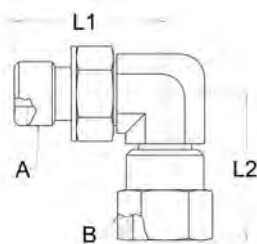
SAE J1926 STOR Male / 37° Flare Male 90° Elbow with Filter



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
323-2203	1/2 - 20	-5	9/16 - 18	-6	26.9	31.8	SST
122-5273	3/4 - 16	-8	3/4 - 16	-8	31.8	36.8	Steel

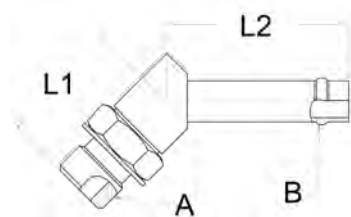
Elbow Adapters

SAE J1926 STOR Male / 37° Flare Swivel 90° Elbow



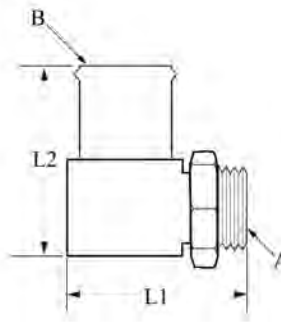
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
031-2716	7/16 - 20	-4	7/16 - 20	-4	26.2	25.4	Steel
033-8129	9/16 - 18	-6	7/16 - 20	-4	31.8	30	Steel
008-6817	9/16 - 18	-6	9/16 - 18	-6	31.8	31.8	Steel
5P-9808	3/4 - 16	-8	3/4 - 16	-8	36.8	35.1	Steel
166-1757	3/4 - 16	-8	7/8 - 14	-10	45.3	44.4	Steel
031-0919	1 1/16 - 12	-12	1 1/16 - 12	-12	49.28	44.45	Steel
8K-6898	1 5/16 - 12	-16	1 5/16 - 12	-16	53.1	50.8	Steel

SAE J1926 STOR Male / Hose Bead 45° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Hose ID (mm)	Dash Size			
6V-8245	7/16 - 20	-4	6.35	-4	26.6	25	Steel
297-7987	7/16 - 20	-4	9.52	-6	26.7	40.9	Steel
347-4434	7/16 - 20	-4	12.7	-8	26.6	43.8	Steel
451-0494	9/16 - 18	-6	9.52	-6	29.1	42.9	SST
7X-1448	9/16 - 18	-6	9.52	-6	29.1	42.9	Steel
6V-1230	3/4 - 16	-8	12.7	-8	33	42.9	Steel
5P-9615	3/4 - 16	-8	15.88	-10	33	41.9	Steel
315-9863	3/4 - 16	-8	25.4	-16	41.4	42.9	Steel
260-9244	7/8 - 14	-10	9.52	-6	38.6	43	Steel
347-4436	7/8 - 14	-10	12.7	-8	27.2	44.7	Steel
194-4864	7/8 - 14	-10	15.88	-10	38.6	43.2	Steel
371-7166	7/8 - 14	-10	25.4	-16	38.5	41.7	Steel
5P-1045	1 1/16 - 12	-12	15.88	-10	37.3	35	Steel
245-1400	1 1/16 - 12	-12	25.4	-16	37.3	35	Brass
5P-1230	1 1/16 - 12	-12	25.4	-16	43.9	43.2	Steel
245-1399	1 3/16 - 12	-14	25.4	-16	45.72	31.8	Brass
180-1548	1 3/16 - 12	-14	25.4	-16	39.9	63.5	Steel
6V-7486	1 5/16 - 12	-16	25.4	-16	47.1	47.2	Steel
198-7655	1 5/16 - 12	-16	31.75	-20	46.7	44.7	Steel
474-2595	1 5/16 - 12	-16	38.1	-24	48.5	45.7	Steel
250-1463	1 5/8 - 12	-20	38.1	-24	48.8	48.1	Steel
345-3909	1 7/8 - 12	-24	38.1	-24	48.5	49.9	Steel

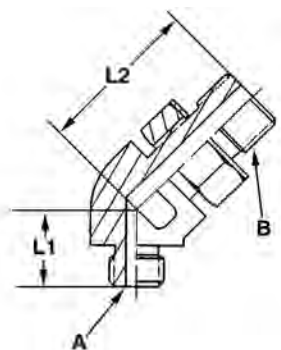
SAE J1926 STOR Male / Hose Bead 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Hose ID (mm)	Dash Size			
341-0098	3/8 - 24	-3	6.35	-4	23.7	43.66	Steel
6V-1355	7/16 - 20	-4	6.35	-4	26.2	44.5	Steel
3E-4091	7/16 - 20	-4	9.52	-6	26.2	44.5	Steel
337-8788	7/16 - 20	-4	12.7	-8	26.2	44.5	Steel
335-4003	9/16 - 18	-6	6.35	-4	31.8	46	Steel
5P-4924	9/16 - 18	-6	9.52	-6	31.5	46	Steel
090-5725	9/16 - 18	-6	12.7	-8	31.8	46	Steel
474-2598	9/16 - 18	-6	15.88	-10	35.6	50	Brass
416-6022	3/4 - 16	-8	7.94	-5	36.83	48.4	Steel
386-6194	3/4 - 16	-8	9.52	-6	36.83	48.51	SST
9X-3982	3/4 - 16	-8	9.52	-6	36.8	48.4	Steel
6V-4292	3/4 - 16	-8	12.7	-8	36.8	48.5	Steel
379-4371	3/4 - 16	-8	14.29	N/A	36.6	48.4	Steel
383-5686	3/4 - 16	-8	15.88	-10	35.5	33.3	Brass
5P-4906	3/4 - 16	-8	15.88	-10	36.8	48.5	Steel
365-0593	3/4 - 16	-8	19.05	-12	36.8	48.4	Steel
9X-3966	3/4 - 16	-8	25.4	-16	48.8	45	Steel
379-4412	7/8 - 14	-10	7.94	-5	43.2	50	Steel
184-9114	7/8 - 14	-10	9.52	-6	52	50	Steel
448-9007	7/8 - 14	-10	9.52	-6	66	50	Steel
6V-5653	7/8 - 14	-10	12.7	-8	43.2	50	Steel
379-4370	7/8 - 14	-10	14.29	N/A	43.2	50	Steel
6V-9208	7/8 - 14	-10	15.88	-10	43.2	50	Steel
275-4918	7/8 - 14	-10	19.05	-12	43.18	50	Steel
459-0596	7/8 - 14	-10	25.4	-16	45.7	52.3	Steel
249-6673	7/8 - 14	-10	25.4	-16	43	33	Steel
090-0744	1 1/16 - 12	-12	15.88	-10	49.3	52.3	Steel
032-8487	1 1/16 - 12	-12	19.05	-12	49.3	52.3	Steel
034-4679	1 1/16 - 12	-12	19.05	-12	65	52.3	Steel
245-1401	1 1/16 - 12	-12	25.4	-16	44.45	40.64	Brass
3E-4041	1 1/16 - 12	-12	25.4	-16	48.8	52.4	Steel
5P-2080	1 1/16 - 12	-12	25.4	-16	85.9	74.7	Steel
5P-5713	1 1/16 - 12	-12	25.4	-16	49.3	101.6	Steel
335-4006	1 3/16 - 12	-14	19.05	-12	50.8	54	Steel
247-4602	1 3/16 - 12	-14	25.4	-16	50.8	53.8	Steel
300-9696	1 5/16 - 12	-16	19.05	-12	52.1	55.6	Steel
034-4202	1 5/16 - 12	-16	25.4	-16	51.8	55.6	Steel
173-3323	1 5/16 - 12	-16	31.75	-20	52.1	55.6	Steel
421-5680	1 5/16 - 12	-16	38.1	-24	55.1	58.8	Steel
5P-7506	1 5/8 - 12	-20	31.75	-20	57.2	60.5	Steel
8C-9022	1 5/8 - 12	-20	38.1	-24	57.2	60.5	Steel
5P-7507	1 7/8 - 12	-24	31.75	-20	60.7	63.5	Steel
315-9865	1 7/8 - 12	-24	38.1	-24	60.3	63.5	Steel
386-6223	2 1/2 - 12	-32	50.8	-32	73.4	71.4	Steel

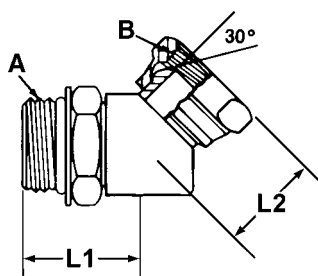
Elbow Adapters

SAE J1926 STOR Male / Male 45° Elbow



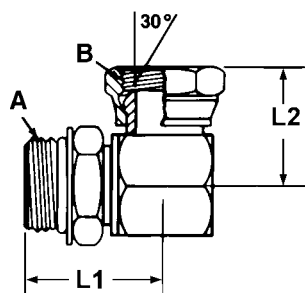
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
9X-8403	7/16 - 20	-4	9/16 - 18	-6	16	33	Steel
210-0066	7/8 - 14	-10	7/8 - 14	-10	22.8	44.7	Steel
8C-9028	1 5/16 - 12	-16	1 5/16 - 12	-16	35.8	55.9	Steel

SAE J1926 STOR Male / NPSM Swivel 45° Elbow



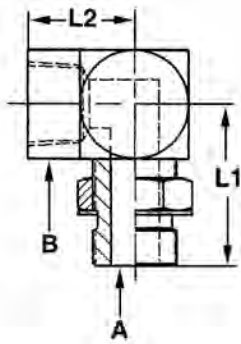
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
5P-7915	7/16 - 20	-4	1/4 - 18	-4	25.4	18.3	Steel
5P-7916	9/16 - 18	-6	1/4 - 18	-4	27	17.5	Steel
5P-7917	9/16 - 18	-6	3/8 - 18	-6	26.9	20.8	Steel
6V-0468	3/4 - 16	-8	3/8 - 18	-6	28.4	19	Steel
5P-7918	3/4 - 16	-8	1/2 - 14	-8	33	22.4	Steel
5P-7919	7/8 - 14	-10	1/2 - 14	-8	38.6	20.6	Steel
030-7976	1 1/16 - 12	-12	3/4 - 14	-12	38.1	25.4	Steel
5P-7920	1 5/16 - 12	-16	1 - 11.5	-16	42.2	27.7	Steel

SAE J1926 STOR Male / NPSM Swivel 90° Elbow



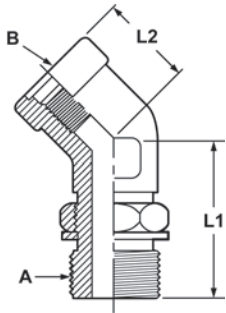
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
5P-7981	7/16 - 20	-4	1/4 - 18	-4	28.2	19.8	Steel
5P-7982	9/16 - 18	-6	1/4 - 18	-4	33	22.9	Steel
030-6817	9/16 - 18	-6	3/8 - 18	-6	31.8	22.9	Steel
030-6818	3/4 - 16	-8	3/8 - 18	-6	38.1	23.9	Steel
6V-8549	3/4 - 16	-8	1/2 - 14	-8	38.1	25.4	Steel
030-6819	3/4 - 16	-8	3/4 - 14	-12	41.7	30.2	Steel
030-7977	7/8 - 14	-10	1/2 - 14	-8	43.2	24.9	Steel
1W-7534	7/8 - 14	-10	1/2 - 14	-8	43.2	24.9	Steel
6V-4363	7/8 - 14	-10	3/4 - 14	-12	45	30.5	Steel
030-7978	1 1/16 - 12	-12	3/4 - 14	-12	49.3	33.8	Steel
5P-7984	1 5/16 - 12	-16	3/4 - 14	-12	53.1	33.4	Steel
030-7979	1 5/16 - 12	-16	1 - 11.5	-16	53.1	35.1	Steel

SAE J1926 STOR Male / NPTF Port 90° Elbow



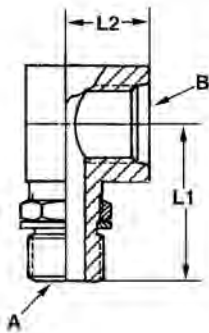
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
2L-6094	7/16 - 20	-4	1/8 - 27	-2	22.225	22.225	Brass
268-1550	7/16 - 20	-4	1/2 - 14	-8	41.3	34.5	Steel
106-2105	9/16 - 18	-6	1/4 - 18	-4	33.3	22.4	Steel
426-4086	9/16 - 18	-6	1/4 - 18	-4	34	16	Steel
2T-2475	3/4 - 16	-8	3/8 - 18	-6	37.1	25.9	Steel
6I-6547	3/4 - 16	-8	3/8 - 18	-6	37.3	16	Steel
6V-1085	7/8 - 14	-10	1/2 - 14	-8	46	19	Steel
9X-2604	1 1/16 - 12	-12	3/4 - 14	-12	51.8	34.5	Steel
7X-7705	1 5/16 - 12	-16	1 - 11.5	-16	117.3	41.1	Steel

SAE J1926 STOR Male / Port 45° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
297-7941	7/16 - 20	-4	7/16 - 20	-4	51.7	18.3	Steel
448-9002	7/16 - 20	-4	7/16 - 20	-4	27.7	13.5	Steel
6V-8077	9/16 - 18	-6	9/16 - 18	-6	28	23	Steel
305-6991	7/8 - 14	-10	3/4 - 16	-8	35.8	24.6	Steel

SAE J1926 STOR Male / Port 90° Elbow



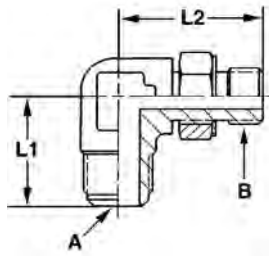
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
124-0396	3/8 - 24	-3	3/8 - 24	-3	26.2	16.5	Steel
151-5145	7/16 - 20	-4	7/16 - 20	-4	31.8	21	Steel
253-5327	7/16 - 20	-4	7/16 - 20	-4	50	23.1	Steel
135-9941	7/16 - 20	-4	9/16 - 18	-6	29	21	Steel
6V-3305	1/2 - 20	-5	1/2 - 20	-5	31	23	Steel
8C-6712	9/16 - 18	-6	7/16 - 20	-4	31.8	21	Steel
6V-8076	9/16 - 18	-6	9/16 - 18	-6	37	24	Steel
085-7356	9/16 - 18	-6	9/16 - 18	-6	39.5	16	Steel
285-2664	9/16 - 18	-6	9/16 - 18	-6	72.5	16	Steel
6V-0484	9/16 - 18	-6	9/16 - 18	-6	33	19.05	Steel
115-5411	3/4 - 16	-8	9/16 - 18	-6	40.6	26.5	Steel
376-7314	3/4 - 16	-8	3/4 - 16	-8	40	19	SST
178-5883	3/4 - 16	-8	3/4 - 16	-8	41.1	17	Steel
189-3434	3/4 - 16	-8	3/4 - 16	-8	50	35	Steel
456-7225	3/4 - 16	-8	3/4 - 16	-8	65.8	16	Steel
160-4876	3/4 - 16	-8	1 1/16 - 12	-12	46.8	33	Steel
268-1530	7/8 - 14	-10	3/4 - 16	-8	43.2	36.8	Steel
305-2221	7/8 - 14	-10	3/4 - 16	-8	60.7	36.8	Steel
129-2327	7/8 - 14	-10	7/8 - 14	-10	43	37	Steel
480-3031	7/8 - 14	-10	7/8 - 14	-10	50.7	37	Steel
371-7242	7/8 - 14	-10	1 1/16 - 12	-12	50	33.8	Steel
341-0107	1 1/16 - 12	-12	1 1/16 - 12	-12	55	33	Steel

Elbow Adapters

SAE J1926 STOR Male / Port 90° Elbow (Cont'd.)

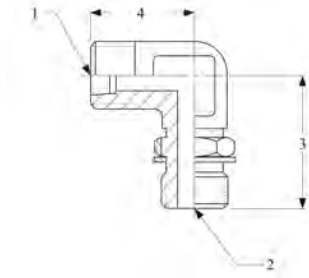
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
8T-3491	1 1/16 - 12	-12	1 1/16 - 12	-12	50.8	33	Steel
168-6453	1 5/16 - 12	-16	9/16 - 18	-6	33.15	28	Steel
173-0064	1 5/16 - 12	-16	1 5/16 - 12	-16	57.4	33.78	Steel
337-8776	1 5/16 - 12	-16	1 5/16 - 12	-16	77.4	53.8	Steel
310-5904	1 7/8 - 12	-24	1 7/8 - 12	-24	65.8	42	Steel

SAE J1926 STOR Male / SAE J512 45° Flare Male 90° Elbow



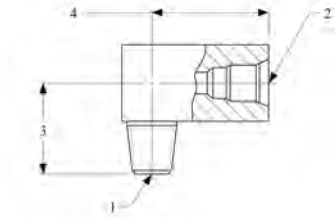
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
109-5169	5/8 - 18	-6	9/16 - 18	-6	26	28	Steel
123-8835	5/8 - 18	-6	9/16 - 18	-6	26	28	Steel
103-4675	7/8 - 14	-10	3/4 - 16	-8	36.6	39.4	Steel
124-3045	7/8 - 14	-10	3/4 - 16	-8	36.6	39.4	Steel

SAE J1926 STOR Male / SAE J514 24° Flareless Male 90° Elbow



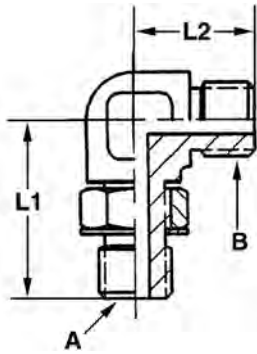
Part Number	End 1		End 2		Length 3	Length 4	Material
	Thread	Dash Size	Thread	Dash Size			
5P-9373	7/16 - 20	-4	7/16 - 20	-4	26.2	22.6	Steel
1P-0269	1/2 - 20	-5	1/2 - 20	-5	27.7	24.1	Steel
5P-7963	9/16 - 18	-6	9/16 - 18	-6	31.8	26.7	Steel

SAE J1926 STOR Port / NPTF Male 90° Elbow



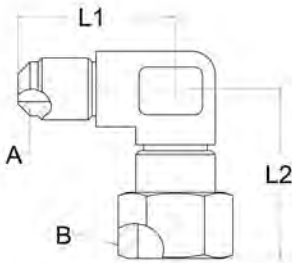
Part Number	End 1		End 2		Length 3	Length 4	Material
	Thread	Dash Size	Thread	Dash Size			
6V-9330	1/8 - 27	-2	9/16 - 18	-6	22.2	25	Steel
250-2573	3/8 - 18	-6	9/16 - 18	-6	31	25.9	Steel

SAE J1926 STOR Male / Male 90° Elbow



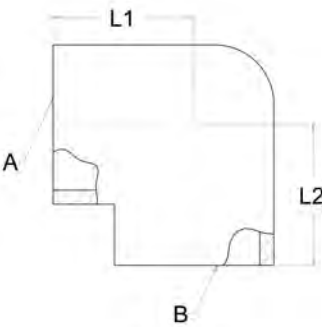
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
117-0067	7/16 - 20	-4	7/16 - 20	-4	27.2	18.5	Steel
313-3497	7/16 - 20	-4	9/16 - 18	-6	31.5	21.5	Steel
223-1624	9/16 - 18	-6	7/16 - 20	-4	31.8	25.4	Brass
3E-2332	9/16 - 18	-6	7/16 - 20	-4	31.8	25.4	Steel
480-4249	7/8 - 14	-10	9/16 - 18	-6	43.2	40	Steel

SAE J512 45° Flare Male / Swivel 90° Elbow



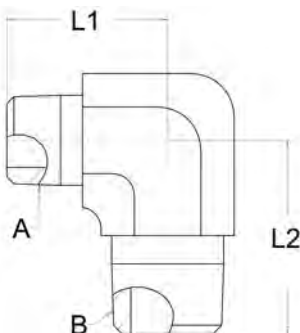
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
268-1565	3/8 - 24	-3	3/8 - 24	-3	19.8	21.3	Brass
417-3724	5/8 - 18	-6	5/8 - 18	-6	28.44	26.41	Brass
241-6154	3/4 - 16	-8	3/4 - 16	-8	31.75	24.13	Steel

SAE J512 45° Inverted Flare Port / Port 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
9S-7702	3/8 - 24	-3	3/8 - 24	-3	11.9	11.9	Brass
9S-7703	7/16 - 24	-4	7/16 - 24	-4	12.8	12.8	Brass
9S-7704	5/8 - 18	-6	5/8 - 18	-6	17	17	Brass
9S-7706	3/4 - 18	-8	3/4 - 18	-8	20.6	20.6	Brass
9S-7707	7/8 - 18	-10	7/8 - 18	-10	23.9	23.9	Brass

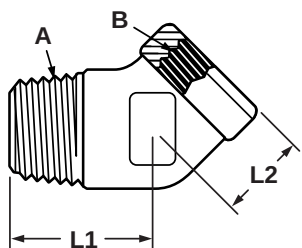
SAE NPTF Male / Male 90° Elbow



Part Number	End A		End B		Length 1	Length 2	Material
	Thread	Dash Size	Thread	Dash Size			
173-4415	1/4 - 18	-4	1/4 - 18	-4	27.7	27.7	SST
8J-4788	1/4 - 18	-4	1/4 - 18	-4	27.7	27.7	Steel
249-7697	3/8 - 18	-6	1/2 - 14	-8	31	37.34	Steel
173-4416	1/2 - 14	-8	1/2 - 14	-8	37.3	37.3	SST
037-4685	1/2 - 14	-8	1/2 - 14	-8	37.3	37.3	Steel
196-6833	3/4 - 14	-12	3/4 - 14	-12	40.4	40.4	SST
450-0842	1 1/4 - 11.5	-20	1 1/4 - 11.5	-20	60.5	60.5	SST
451-3900	2 - 11.5	-32	2 - 11.5	-32	76.2	76.2	Steel

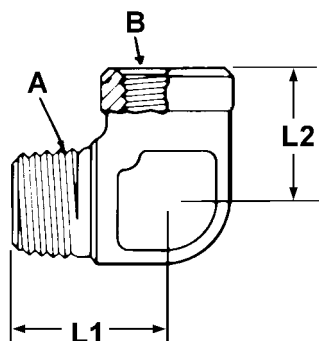
Elbow Adapters

SAE NPTF Male / Port 45° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
8L-5008	1/8 - 27	-2	1/8 - 27	-2	18.3	11.9	Steel
260-4057	1/8 - 27	-2	1/4 - 18	-4	18.3	15.7	Steel
6V-7535	1/4 - 18	-4	1/4 - 18	-4	17.8	13.7	Brass
2N-1931	1/4 - 18	-4	1/4 - 18	-4	26.7	15.7	Steel
1L-2279	3/8 - 18	-6	3/8 - 18	-6	26.9	18.3	Steel
205-9883	3/8 - 18	-6	3/8 - 18	-6	21.5	9.2	Steel
5B-1585	1/2 - 14	-8	1/2 - 14	-8	25.4	19	Brass
000-7244	1/2 - 14	-8	1/2 - 14	-8	34	23.1	Steel
000-7246	3/4 - 14	-12	3/4 - 14	-12	35.1	24.6	Steel
002-5743	1 - 11.5	-16	1 - 11.5	-16	43.7	28.4	Steel

SAE NPTF Male / Port 90° Elbow

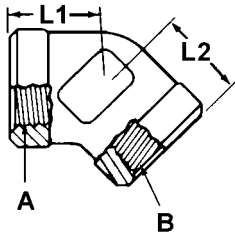


Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
4H-5451	1/8 - 27	-2	1/8 - 27	-2	21.4	19	Brass
3B-8822	1/8 - 27	-2	1/8 - 27	-2	22.35	13.97	Brass
3H-0120	1/8 - 27	-2	1/8 - 27	-2	13.88	6.35	Steel
2D-1683	1/8 - 27	-2	1/8 - 27	-2	18.5	6.35	Steel
3B-6552	1/8 - 27	-2	1/8 - 27	-2	19.8	16.8	Steel
313-1681	1/8 - 27	-2	1/8 - 27	-2	35	7.88	Steel
6V-3342	1/8 - 27	-2	1/4 - 18	-4	18.3	11.43	Brass
332-8564	1/4 - 18	-4	1/8 - 27	-2	27.7	16.8	Brass
6V-4245	1/4 - 18	-4	1/8 - 27	-2	27.7	16.8	Steel
7F-9311	1/4 - 18	-4	1/4 - 18	-4	19.9	11.9	Brass
377-9582	1/4 - 18	-4	1/4 - 18	-4	27.7	22.4	Brass
1Y-3604	1/4 - 18	-4	1/4 - 18	-4	27.69	22.35	SST
189-4401	1/4 - 18	-4	1/4 - 18	-4	24.6	8.7	Steel
3D-8884	1/4 - 18	-4	1/4 - 18	-4	26.9	11.11	Steel
7J-8611	1/4 - 18	-4	1/4 - 18	-4	27.7	27.7	Steel
2T-2169	1/4 - 18	-4	3/8 - 18	-6	31	25.9	Steel
176-1308	3/8 - 18	-6	1/4 - 18	-4	31	25.9	Steel
9M-5501	3/8 - 18	-6	3/8 - 18	-6	24.6	19.8	Brass
5L-8722	3/8 - 18	-6	3/8 - 18	-6	31.8	21.1	Brass
219-4328	3/8 - 18	-6	3/8 - 18	-6	25	12.7	Steel
7J-0482	3/8 - 18	-6	3/8 - 18	-6	26.9	11.18	Steel
003-2143	3/8 - 18	-6	3/8 - 18	-6	31	25.9	Steel
120-7391	3/8 - 18	-6	3/8 - 18	-6	31	25.9	Steel
004-4659	3/8 - 18	-6	1/2 - 14	-8	29.7	34.8	Steel
030-8324	1/2 - 14	-8	3/8 - 18	-6	37.3	25.9	Steel
9L-3560	1/2 - 14	-8	1/2 - 14	-8	31.75	26.42	Brass
8T-6756	1/2 - 14	-8	1/2 - 14	-8	37.3	31.2	Steel
164-0228	1/2 - 14	-8	3/4 - 14	-12	40.4	34.5	Steel
031-9746	3/4 - 14	-12	1/2 - 14	-8	40.4	34.3	Steel
003-9163	3/4 - 14	-12	3/4 - 14	-12	40.4	34.5	Steel
006-5707	1 - 11.5	-16	1 - 11.5	-16	50	41.1	Steel
6V-1881	1 - 11.5	-16	1 1/4 - 11.5	-20	50	43.2	Brass
491-5271	1 1/4 - 11.5	-20	1 1/4 - 11.5	-20	60.5	43.2	SST
005-7541	1 1/4 - 11.5	-20	1 1/4 - 11.5	-20	60.5	43.2	Steel

SAE NPTF Male / Port 90° Elbow (Cont'd.)

Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
250-1435	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	67.1	52.8	Steel
493-1513	2 - 11.5	-32	2 - 11.5	-32	76.2	60.7	SST
480-2987	2 - 11.5	-32	2 - 11.5	-32	76.2	60.7	Steel

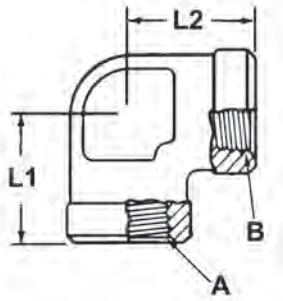
SAE NPTF Port / NPTF Port 45° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
3B-6493	1/8 - 27	-2	1/8 - 27	-2	12.7	12.7	Steel
5P-4818	1/4 - 18	-4	1/4 - 18	-4	17.5	17.5	Steel
5P-8934	3/8 - 18	-6	3/8 - 18	-6	19	19	Steel
211-8759	3/4 - 14	-12	3/4 - 14	-12	25.4	25.4	SST
341-0082	1 - 11.5	-16	1 - 11.5	-16	30.2	30.2	Steel
153-6269	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	37.1	37.1	Steel

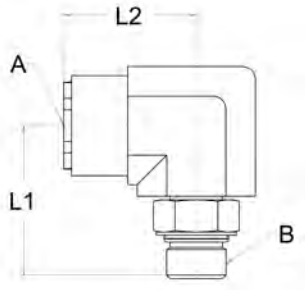
Elbow Adapters

SAE NPTF Port / Port 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
3B-6769	1/8 - 27	-2	1/8 - 27	-2	13.97	13.97	Brass
8B-4884	1/8 - 27	-2	1/8 - 27	-2	16.8	16.8	Steel
003-8747	1/4 - 18	-4	1/4 - 18	-4	22.4	22.4	Steel
008-2649	3/8 - 18	-6	3/8 - 18	-6	21.34	21.34	Brass
003-9014	3/8 - 18	-6	3/8 - 18	-6	25.9	25.9	Steel
1H-1363	1/2 - 14	-8	3/8 - 18	-6	27	39.7	STL Pipe
8F-9055	1/2 - 14	-8	1/2 - 14	-8	27.69	27.69	Brass
1Y-0412	1/2 - 14	-8	1/2 - 14	-8	31.2	31.2	Steel
1K-6937	3/4 - 14	-12	3/4 - 14	-12	34.5	34.5	Steel
3B-6498	1 - 11.5	-16	1 - 11.5	-16	36.5	36.5	Steel
152-9842	1 - 11.5	-16	1 - 11.5	-16	41.4	41.4	Steel
152-9843	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	52.8	52.8	Steel

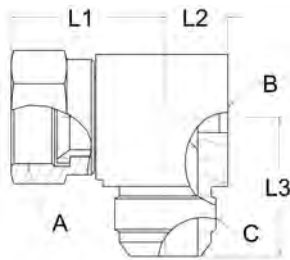
WEO Plug-In STOR Adjustable 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material	STOR Class
	Thread	Dash Size	Thread	Dash Size				
529-7516	3/4 - 16	-8	—	-8	49.0	42.5	Steel	Heavy Duty

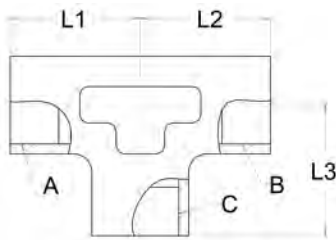
Tee Adapters

37° Flare-SAE J514 Swivel Nut / NPTF Port / Male 37° Flare-SAE J514 - Tee



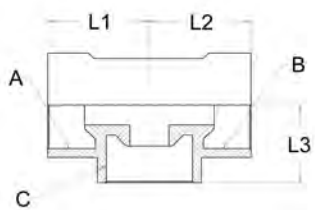
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Thread Size	L2 Length	Thread Size	Thread Size	L3 Length	
6V-0434	1 5/16-12	-16	50.8	1/8-27	-2	16.66	1 5/16-12	-16	45.97	Steel

45° Flare-SAE J512 Port / 45° Flare-SAE J512 Port / 45° Flare-SAE J512 Port - Tee



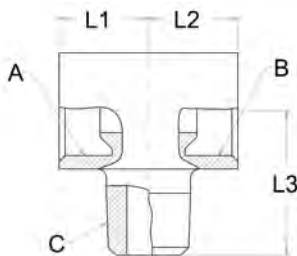
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
6R-9166	1/2-20	-5	21.5	1/2-20	-5	21.5	1/2-20	-5	21.5	Brass

45° Inverted Flare-SAE J512 Port / 45° Inverted Flare-SAE J512 Port / 45° Inverted Flare-SAE J512 Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
9L-8557	7/16-24	-4	14.2	7/16-24	-4	14.2	7/16-24	-4	10.7	Brass
4D-6956	7/16-24	-4	14.22	7/16-24	-4	14.22	1/2-20	-5	11.68	Brass
4D-8122	7/16-24	-4	12.7	1/2-20	-5	12.7	7/16-24	-4	20.6	Brass
5K-9988	5/8-18	-6	18.65	5/8-18	-6	18.65	5/8-18	-6	14.2	Brass
7K-2543	3/4-18	-8	22.2	3/4-18	-8	22.2	3/4-18	-8	17	Brass

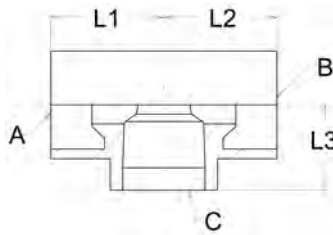
45° Inverted Flare-SAE J512 Port / 45° Inverted Flare-SAE J512 Port / Male NPTF - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
9L-8496	7/16-24	-4	10.7	7/16-24	-4	10.7	1/8-27	-2	16.4	Brass
9S-7728	1/2-20	-5	11.95	1/2-20	-5	11.95	1/8-27	-2	17.1	Brass
5K-9989	5/8-18	-6	14.75	5/8-18	-6	14.75	1/4-18	-4	23.7	Brass
9S-7730	3/4-18	-8	17.55	3/4-18	-8	17.55	3/8-18	-6	25.8	Brass
9S-7731	7/8-18	-10	19.8	7/8-18	-10	19.8	1/2-14	-8	32.6	Brass

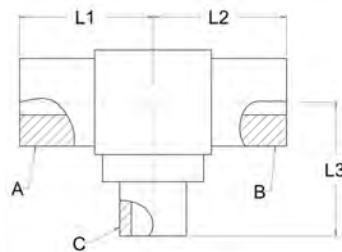
Tee Adapters

45° Inverted Flare-SAE J512 Port / 45° Inverted Flare-SAE J512 Port / NPTF Port - Tee



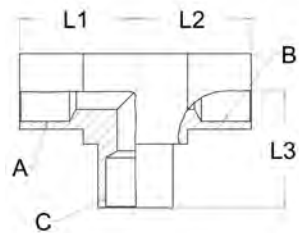
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
9S-7744	5/8-18	-6	18.65	5/8-18	-6	18.65	1/4-18	-4	14.2	Brass
6K-8078	3/4-18	-8	22.2	3/4-18	-8	22.2	3/8-18	-6	17	Brass
9S-7747	7/8-18	-10	24.65	7/8-18	-10	24.65	1/2-14	-8	19	Brass

BSPP Flat Face-ISO 1179 Port / BSPP Flat Face-ISO 1179 Port / NPTF Port - Tee



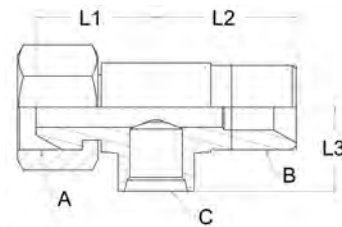
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
492-3329	3/8-19	-6	32	3/8-19	-6	32	3/8-18	-6	32	Steel

BSPP STOR-JIS B2351 Port / BSPP STOR-JIS B2351 Port / BSPP STOR-JIS B2351 Port - Tee



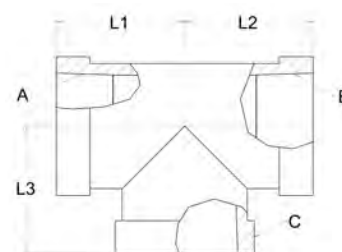
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
314-5071	1/4-19	-4	31	1/4-19	-4	31	1/4-19	-4	31	Steel
203-0374	3/8-19	-6	22	3/8-19	-6	22	3/8-19	-6	22	Brass
147-2441	3/4-14	-12	30.5	3/4-14	-12	30.5	3/4-14	-12	24	Brass

BSPP STOR-JIS B2351 Swivel Nut / Male 30° Flare-JIS / STOR Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
7X-2434	1/4-19	-4	27	1/4-19	-4	26.4	9/16-18	-6	16.3	Steel
7X-2435	3/8-19	-6	28.7	3/8-19	-6	30.99	9/16-18	-6	17.5	Steel
7X-2433	1/2-14	-8	30	1/2-14	-8	35	9/16-18	-6	20.83	Steel

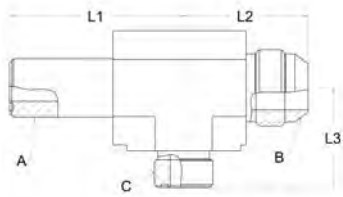
BSPT-ISO 7-1 Port / BSPT-ISO 7-1 Port / BSPT-ISO 7-1 Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
211-3338	1/4-19	-4	22.5	1/4-19	-4	22.5	1/4-19	-4	22.5	Steel
203-0373	1/2-14	-8	26.5	1/2-14	-8	26.5	1/2-14	-8	26.5	Brass
166-4998	1-11	-16	38.1	1-11	-16	38.1	1-11	-16	38.1	Steel

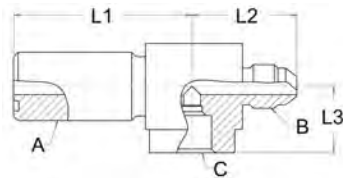
Tee Adapters

Bulkhead Male ORFS / Male 37° Flare-SAE J514 / Male ORFS - Tee



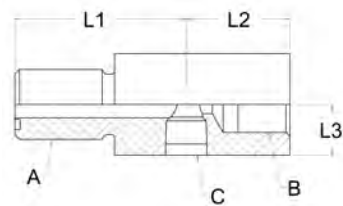
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
217-7065	13/16-16	-8	61.5	1 1/16-12	-12	44	13/16-16	-8	35.2	Steel

Bulkhead Male ORFS / Male 37° Flare-SAE J514 / STOR Port - Tee



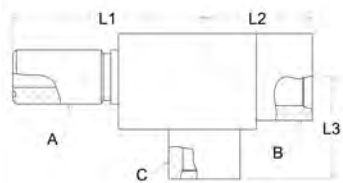
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
155-7621	11/16-16	-6	46	7/16-20	-4	27	7/16-20	-4	17	Steel

Bulkhead Male ORFS / Metric STOR Port / NPTF Port - Tee



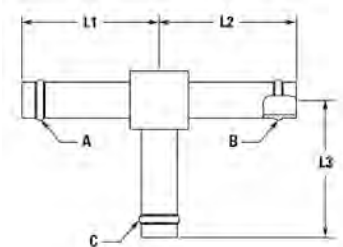
Part Number	End A			End B		End C		Material
	Thread Size	Dash Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
122-9060	11/16-16	-6	34.5	M14x1.5	34.5	1/8-27	12.5	Steel

Bulkhead Male ORFS / STOR Port / STOR Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
304-7983	11/16-16	-6	61.6	3/4-16	-8	34.7	9/16-18	-6	32.9	Steel
273-4210	13/16-16	-8	55.5	3/4-16	-8	23	3/4-16	-8	38.5	Steel

Hose Bead / Hose Bead / Hose Bead - Tee



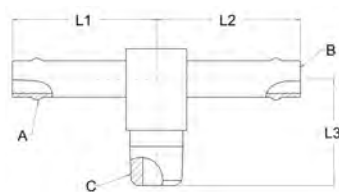
Part Number	End A			End B			End C			Material
	Hose ID (mm)	Dash Size	L1 Length	Hose ID (mm)	Dash Size	L2 Length	Hose ID (mm)	Dash Size	L3 Length	
287-7250	12.70	-8	48.4	12.70	-8	48.4	12.70	-8	48.4	Steel
9X-3965	12.70	-8	45	12.70	-8	45	12.70	-8	45	Steel
478-5154	12.70	-8	31.8	12.70	-8	31.8	4.76	-3	31.8	Brass
7C-0754	15.88	-10	41	15.88	-10	41	15.88	-10	40	Steel
393-5940	15.88	-10	48.4	15.88	-10	48.4	9.52	-6	48.4	Steel
208-5455	19.05	-12	45.7	19.05	-12	45.7	19.05	-12	45.7	Steel

Tee Adapters

Hose Bead / Hose Bead / Hose Bead - Tee (Cont'd.)

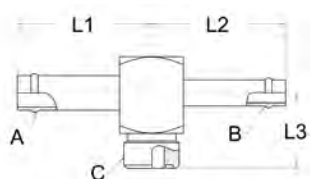
Part Number	End A			End B			End C			Material
	Hose ID (mm)	Dash Size	L1 Length	Hose ID (mm)	Dash Size	L2 Length	Hose ID (mm)	Dash Size	L3 Length	
232-0252	19.05	-12	55.3	25.40	-16	55.3	25.40	-16	55.3	Steel
247-7279	25.40	-16	54	19.05	-12	51	19.05	-12	51	Steel
212-3863	25.40	-16	54	25.40	-16	54	12.70	-8	53	Steel
142-8320	25.40	-16	55.3	25.40	-16	55.3	19.05	-12	55.3	Steel
271-0109	25.40	-16	66	25.40	-16	66	25.40	-16	66	SST
459-0734	31.75	-20	58.7	25.40	-16	58.7	25.40	-16	58.7	Steel
399-9673	31.75	-20	58.75	31.75	-20	58.75	19.05	-12	58.75	Steel
271-0110	31.75	-20	66	31.75	-20	66	25.40	-16	66	SST
331-6108	44.44		70	44.44		70	25.40	-16	80	SST
278-1541	6.35	-4	49.9	19.05	-12	49.9	25.40	-16	49.9	Steel
192-5425	6.35	-4	31.5	6.35	-4	31.5	6.35	-4	31.5	Steel
439-1955	9.52	-6	48.5	9.52	-6	48.5	12.70	-8	48.5	SST
287-7302	9.52	-6	41.9	9.52	-6	41.9	6.35	-4	41.9	Steel
419-5087	9.52	-6	45	9.52	-6	45	9.52	-6	45	SST

Hose Bead / Hose Bead / Male NPTF - Tee



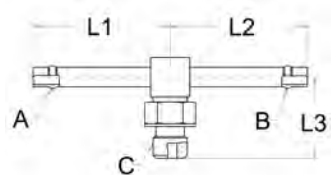
Part Number	End A			End B			End C			Material
	Hose ID (mm)	Dash Size	L1 Length	Hose ID (mm)	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
302-4255	9.52	-6	37.64	9.52	-6	37.64	1/4-18	-4	27.74	Steel

Hose Bead / Hose Bead / Male ORFS - Tee



Part Number	End A			End B			End C			Material
	Hose ID (mm)	Dash Size	L1 Length	Hose ID (mm)	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
352-6489	12.70	-8	50	9.52	-6	50	13/16-16	-8	28	Steel

Hose Bead / Hose Bead / Male STOR - Tee



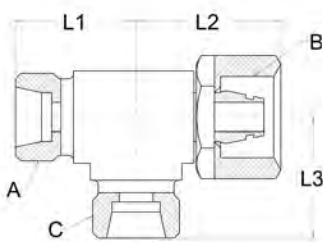
Part Number	End A			End B			End C			Material
	Hose ID (mm)	Dash Size	L1 Length	Hose ID (mm)	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
334-1017	6.35	-4	44.5	6.35	-4	44.5	7/16-20	-4	26.2	Steel
274-7407	9.52	-6	45.97	9.52	-6	45.97	9/16-18	-6	31.75	Steel
321-8625	9.52	-6	46.1	9.52	-6	46.1	9/16-18	-6	31.8	Steel

Tee Adapters

Hose Bead / Hose Bead / Male STOR - Tee (Cont'd.)

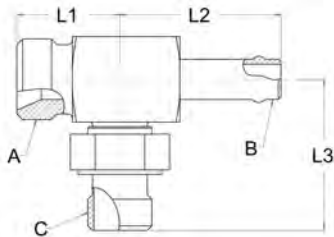
Part Number	End A			End B			End C			Material
	Hose ID (mm)	Dash Size	L1 Length	Hose ID (mm)	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
309-5140	12.70	-8	48.51	12.70	-8	48.51	3/4-16	-8	36.83	Steel
122-1113	12.70	-8	50.04	12.70	-8	50.04	7/8-14	-10	43.18	Steel
351-0287	12.70	-8	50	15.88	-10	50	7/8-14	-10	43.2	Steel
297-7932	9.52	-6	75.8	25.40	-16	82.6	1 3/16-12	-14	50.8	Steel
420-7636	38.10	-24	59.5	31.75	-20	59.5	1 5/8-12	-20	82.5	Steel

Male 24° Cone-ISO 8434-1 / 24° Cone-ISO 8434-1 Swivel Nut / Male 24° Cone-ISO 8434-1 - Tee



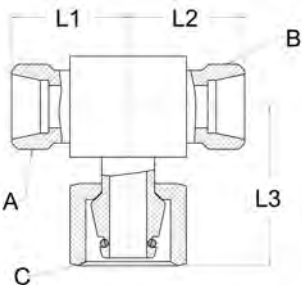
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
460-9846	M18x1.5	32	M18x1.5	29.2	M18x1.50	32	Steel
460-9845	M22x1.5	36.5	M22x1.5	32.5	M22x1.50	36	Steel

Male 24° Cone-ISO 8434-1 / Hose Bead / 37° Flare-SAE J514 Swivel Nut - Tee



Part Number	End A		End B			End C			Material
	Thread Size	L1 Length	Hose ID (mm)	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
386-0825	M16x1.5	20.4	7.94	-5	31.9	1/2-20	-5	30	Steel

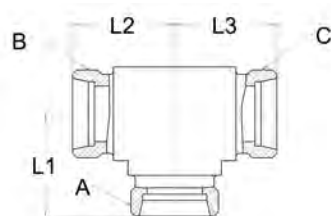
Male 24° Cone-ISO 8434-1 / Male 24° Cone-ISO 8434-1 / 24° Cone-ISO 8434-1 Swivel Nut - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
468-7741	M16x1.5	22	M16x1.5	22	M16x1.50	29	Steel
373-5676	M16x1.5	22	M16x1.5	22	M16x1.50	29	Steel

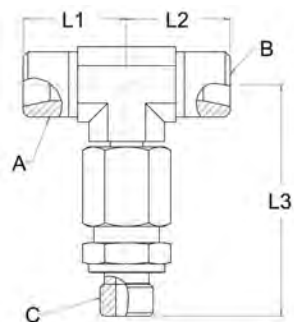
Tee Adapters

Male 24° Cone-ISO 8434-1 / Male 24° Cone-ISO 8434-1 / Male 24° Cone-ISO 8434-1 - Tee



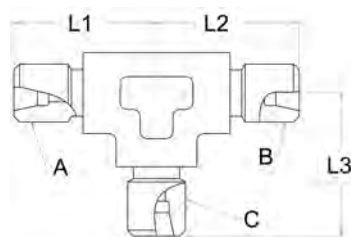
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
487-7821	10	29.5	10	30	10	30	Steel
474-9219	15	36	12	36	12	36	Steel

Male 24° Cone-ISO 8434-1 / Male 24° Cone-ISO 8434-1 / Male BSPP Flat Face-ISO 1179 - Tee



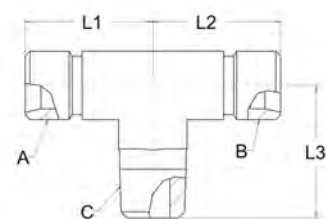
Part Number	End A		End B		End C			Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	Dash Size	L3 Length	
453-9926	M12x1.5	19	M12x1.5	19	1/8-28	-2	42.5	Steel

Male 24° Flareless-SAE J514 / Male 24° Flareless-SAE J514 / Male 24° Flareless-SAE J514 - Tee



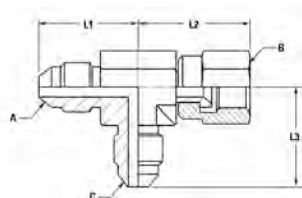
Part Number	End A			End B		End C				Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
8C-9006	5/16-24	-2	19.6	5/16-24	-2	19.6	5/16-24	-2	19.6	Steel
5P-4252	1/2-20	-5	24.1	1/2-20	-5	24.1	1/2-20	-5	24.1	Steel

Male 24° Flareless-SAE J514 / Male 24° Flareless-SAE J514 / Male NPTF - Tee



Part Number	End A			End B		End C				Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread size	Dash Size	L3 Length	
5P-7247	9/16-18	-6	26.7	9/16-18	-6	26.7	1/4-18	-4	27.7	Steel

Male 37° Flare-SAE J514 / 37° Flare-SAE J514 Swivel Nut / Male 37° Flare-SAE J514 - Tee



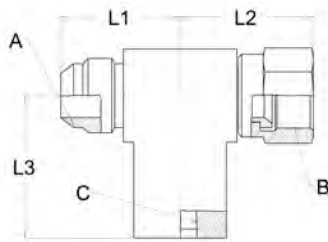
Part Number	End A			End B		End C				Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
052-0572	7/16-20	-4	22.6	7/16-20	-4	25.4	7/16-20	-4	22.6	Steel
5P-4982	1/2-20	-5	24.1	1/2-20	-5	26.9	1/2-20	-5	24.1	Steel

Tee Adapters

Male 37° Flare-SAE J514 / 37° Flare-SAE J514 Swivel Nut / Male 37° Flare-SAE J514 - Tee (Cont'd.)

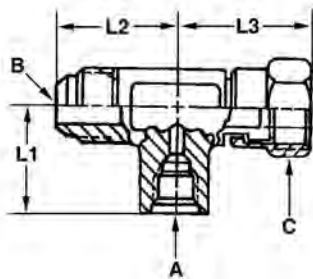
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
061-9258	9/16-18	-6	26.9	9/16-18	-6	31.8	9/16-18	-6	26.9	Steel
391-4604	3/4-16	-8	31.8	3/4-16	-8	31.8	7/16-20	-4	26.9	Steel
113-2934	3/4-16	-8	31.8	3/4-16	-8	33	9/16-18	-6	30	Steel
6S-5693	3/4-16	-8	31.8	3/4-16	-8	35.1	3/4-16	-8	31.8	Steel
9S-0176	7/8-14	-10	36.8	7/8-14	-10	41.1	7/8-14	-10	36.8	Steel
7D-0978	1 1/16-12	-12	42.2	1 1/16-12	-12	44.4	1 1/16-12	-12	42.2	Steel
5P-4984	1 3/16-12	-14	45.7	1 3/16-12	-14	45.2	1 3/16-12	-14	45.7	Steel
5P-2242	1 5/16-12	-16	46	1 5/16-12	-16	50.8	1 5/16-12	-16	46	Steel
5P-4983	1 5/8-12	-20	52.3	1 5/8-12	-20	58.7	1 5/8-12	-20	52.3	Steel

Male 37° Flare-SAE J514 / 37° Flare-SAE J514 Swivel Nut / NPTF Port - Tee



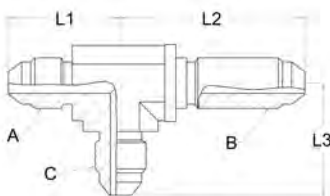
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
480-3000	7/8-14	-10	36.8	7/8-14	-10	41.1	1/8-27	-2	43.8	Brass

Male 37° Flare-SAE J514 / 37° Flare-SAE J514 Swivel Nut / STOR Port



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
111-6690	7/16-20	-4	18	7/16-20	-4	27	7/16-20	-4	27	Steel
5G-2740	3/4-16	-8	37.1	1 1/16-12	-12	42.2	1 1/16-12	-12	44.45	Steel
474-2604	9/16-18	-6	28	1 5/16-12	-16	46	1 5/16-12	-16	50.8	SST

Male 37° Flare-SAE J514 / Bulkhead Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 - Tee



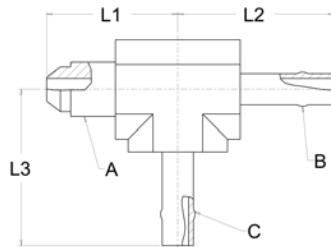
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
8T-3300	7/16-20	-4	24.6	7/16-20	-4	40.4	7/16-20	-4	24.6	Steel
6V-5535	9/16-18	-6	27.7	9/16-18	-6	46	9/16-18	-6	27.7	Steel
2P-8130	3/4-16	-8	34.5	3/4-16	-8	53.6	3/4-16	-8	34.5	Steel

Tee Adapters

Male 37° Flare-SAE J514 / Bulkhead Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 - Tee (Cont'd.)

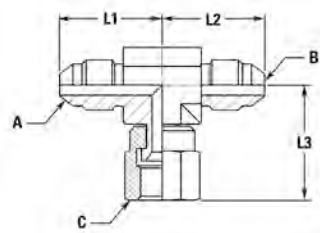
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
5P-7154	1 1/16-12	-12	45.2	1 1/16-12	-12	67.8	1 1/16-12	-12	45.2	Steel
236-1429	1 5/16-12	-16	49.3	1 5/16-12	-16	71.1	1 5/16-12	-16	49.3	Steel

Male 37° Flare-SAE J514 / Hose Bead / Hose Bead - Tee



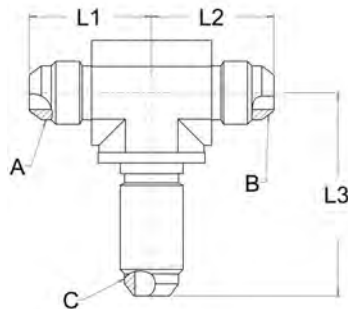
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Hose ID (mm)	Dash Size	L2 Length	Hose ID (mm)	Dash Size	L3 Length	
227-5922	7/16-20	-4	26.7	6.35	-4	31.8	6.35	-4	31.8	Steel

Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 / 37° Flare-SAE J514 Swivel Nut - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
2N-8142	7/16-20	-4	22.6	7/16-20	-4	22.6	7/16-20	-4	25.4	Steel
053-0700	9/16-18	-6	26.9	9/16-18	-6	26.9	9/16-18	-6	31.8	Steel
5P-3166	3/4-16	-8	31.8	3/4-16	-8	31.8	3/4-16	-8	35.1	Steel
061-8284	7/8-14	-10	36.8	7/8-14	-10	36.8	7/8-14	-10	41.1	Steel
5P-3165	1 1/16-12	-12	42.2	1 1/16-12	-12	42.2	1 1/16-12	-12	44.4	Steel
5P-0788	1 3/16-12	-14	45.7	1 3/16-12	-14	45.7	1 3/16-12	-14	45.2	Steel
5P-4494	1 5/16-12	-16	46	1 5/16-12	-16	46	1 5/16-12	-16	50.8	Steel
177-2112	1 7/8-12	-24	59.2	1 7/8-12	-24	59.2	1 7/8-12	-24	65.8	Steel

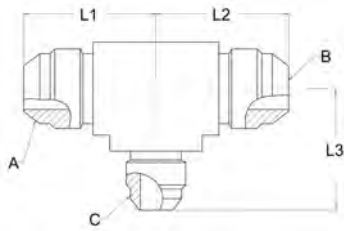
Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 / Bulkhead Male 37° Flare-SAE J514 - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
0A-3732	7/16-20	-4	24.6	7/16-20	-4	24.6	7/16-20	-4	40.4	Steel
2P-9376	9/16-18	-6	27.7	9/16-18	-6	27.7	9/16-18	-6	46	Steel
2P-7213	9/16-18	-6	31.8	9/16-18	-6	31.8	3/4-16	-8	53.6	Steel
061-8408	3/4-16	-8	34.5	3/4-16	-8	34.5	3/4-16	-8	53.6	Steel
061-7738	7/8-14	-10	39.6	7/8-14	-10	39.6	7/8-14	-10	60.7	Steel
061-8827	1 1/16-12	-12	45.2	1 1/16-12	-12	45.2	1 1/16-12	-12	67.8	Steel
053-2928	1 5/16-12	-16	49.3	1 5/16-12	-16	49.3	1 5/16-12	-16	71.1	Steel

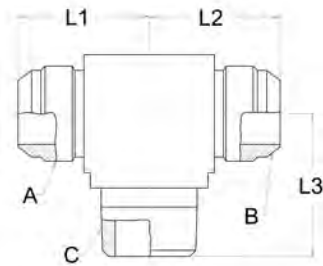
Tee Adapters

Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
211-4494	7/16-20	-4	22.6	7/16-20	-4	22.6	7/16-20	-4	22.6	Brass
281-5849	7/16-20	-4	22.6	7/16-20	-4	22.6	7/16-20	-4	22.6	SST
005-5421	7/16-20	-4	22.6	7/16-20	-4	22.6	7/16-20	-4	22.6	Steel
2P-8447	7/16-20	-4	26.9	7/16-20	-4	26.9	9/16-18	-6	26.9	Steel
2P-1291	1/2-20	-5	24.1	1/2-20	-5	24.1	1/2-20	-5	24.1	Steel
4S-3652	9/16-18	-6	26.9	9/16-18	-6	26.9	9/16-18	-6	26.9	Steel
450-2050	3/4-16	-8	31.8	3/4-16	-8	31.8	9/16-18	-6	29	Steel
032-1270	3/4-16	-8	31.8	3/4-16	-8	31.8	3/4-16	-8	31.8	Steel
003-8581	7/8-14	-10	36.8	7/8-14	-10	36.8	7/8-14	-10	36.8	Steel
4S-3572	1 1/16-12	-12	42.2	1 1/16-12	-12	42.2	9/16-18	-6	33.8	Steel
005-9702	1 1/16-12	-12	42.2	1 1/16-12	-12	42.2	1 1/16-12	-12	42.2	Steel
6S-2899	1 3/16-12	-14	45.7	1 3/16-12	-14	45.7	1 3/16-12	-14	45.7	Steel
6K-4235	1 5/16-12	-16	46	1 5/16-12	-16	46	1 5/16-12	-16	46	Steel
6K-3448	1 5/8-12	-20	52.3	1 5/8-12	-20	52.3	1 5/8-12	-20	52.3	Steel

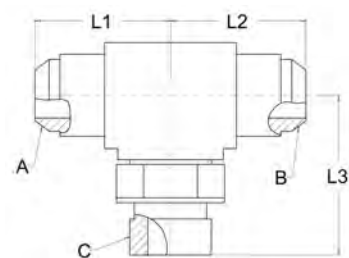
Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 / Male NPTF - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
8D-0071	7/16-20	-4	22.6	7/16-20	-4	22.6	1/8-27	-2	19.8	Steel
183-6689	7/16-20	-4	22.6	7/16-20	-4	22.6	1/8-27	-2	19.8	Steel
194-4423	7/16-20	-4	26.6	7/16-20	-4	26.6	1/4-18	-4	27.7	Steel
7K-4128	9/16-18	-6	26.9	9/16-18	-6	26.9	1/4-18	-4	27.7	Steel
469-7843	9/16-18	-6	26.7	9/16-18	-6	26.7	3/8-18	-6	31	Steel
8J-1040	3/4-16	-8	31.8	3/4-16	-8	31.8	3/8-18	-6	31	Steel
001-6300	3/4-16	-8	33.8	3/4-16	-8	33.8	1/2-14	-8	37.3	Steel
061-8261	1 1/16-12	-12	42.2	1 1/16-12	-12	42.2	3/4-14	-12	40.4	Steel
508-5799	1 5/16-12	-16	46	1 5/16-12	-16	46	3/4-14	-12	45.2	Steel
6K-3449	1 5/16-12	-16	46	1 5/16-12	-16	46	1-11.5	-16	50	Steel

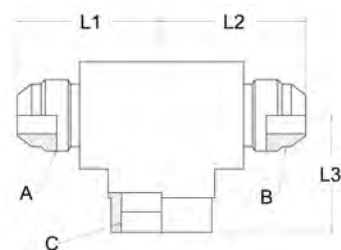
Tee Adapters

Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 / Male STOR - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
4S-4857	7/16-20	-4	22.6	7/16-20	-4	22.6	7/16-20	-4	26.2	Steel
005-9129	7/16-20	-4	22.6	7/16-20	-4	22.6	9/16-18	-6	31.8	Steel
235-3566	7/16-20	-4	23.6	7/16-20	-4	23.6	3/4-16	-8	29.46	Steel
031-5894	1/2-20	-5	24.1	1/2-20	-5	24.1	1/2-20	-5	28.7	Steel
030-7955	9/16-18	-6	26.9	9/16-18	-6	26.9	9/16-18	-6	31.8	Steel
031-2582	9/16-18	-6	29	9/16-18	-6	29	3/4-16	-8	36.8	Steel
4S-4869	3/4-16	-8	31.8	3/4-16	-8	31.8	3/4-16	-8	36.8	Steel
2P-1297	1 1/16-12	-12	42.2	1 1/16-12	-12	42.2	1 1/16-12	-12	49.3	Steel
8K-3520	1 1/16-12	-12	44.7	1 1/16-12	-12	44.7	1 5/16-12	-16	52.1	Steel
2P-1298	1 3/16-12	-14	43.9	1 3/16-12	-14	43.9	1 3/16-12	-14	50.8	Steel
067-9921	1 5/16-12	-16	46	1 5/16-12	-16	46	1 5/16-12	-16	52.1	Steel
6V-7485	1 5/8-12	-20	52.3	1 5/8-12	-20	52.3	1 5/8-12	-20	57.2	Steel

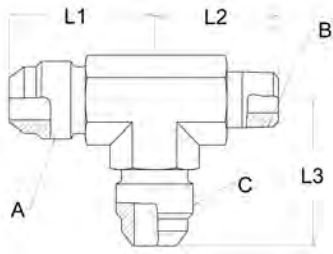
Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 / NPTF Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
211-4527	1/2-20	-5	30	1/2-20	-5	30	1/4-18	-4	12.5	Brass
498-1846	3/4-16	-8	38.7	3/4-16	-8	38.7	1/2-14	-8	31.2	SST

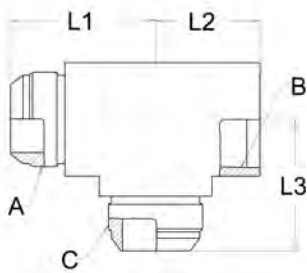
Tee Adapters

Male 37° Flare-SAE J514 / Male NPTF / Male 37° Flare-SAE J514 - Tee



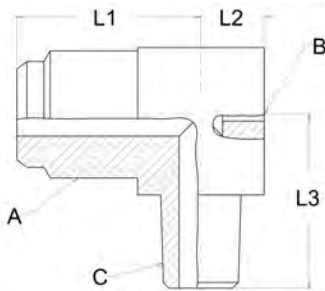
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
9S-7695	7/16-20	-4	22.6	1/8-27	-2	19.8	7/16-20	-4	22.6	Steel
164-5637	7/16-20	-4	26.6	1/4-18	-4	27.7	7/16-20	-4	26.6	SST
176-1305	7/16-20	-4	26.6	1/4-18	-4	27.7	7/16-20	-4	26.6	Steel
204-5341	9/16-18	-6	26.9	1/8-27	-2	22.9	9/16-18	-6	26.9	Steel
6S-2289	9/16-18	-6	26.9	1/4-18	-4	27.7	9/16-18	-6	26.9	Steel
9X-2623	9/16-18	-6	29	3/8-18	-6	31	9/16-18	-6	29	Steel
5P-4495	3/4-16	-8	31.8	3/8-18	-6	31	3/4-16	-8	31.8	Steel
001-6842	3/4-16	-8	33.8	1/2-14	-8	37.3	3/4-16	-8	33.8	Steel
8T-2864	7/8-14	-10	36.8	1/2-14	-8	37.3	7/8-14	-10	36.8	Steel
006-0315	1 1/16-12	-12	42.2	3/4-14	-12	40.4	1 1/16-12	-12	42.2	Steel
6K-8748	1 5/16-12	-16	46	1-11.5	-16	50	1 5/16-12	-16	46	Steel

Male 37° Flare-SAE J514 / NPTF Port / Male 37° Flare-SAE J514 - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
6S-2365	9/16-18	-6	31.2	1/4-18	-4	22.4	9/16-18	-6	31.2	Steel
5R-8895	1 7/8-12	-24	73.41	1 1/2-11.5	-24	52.8	1 7/8-12	-24	66.3	Steel

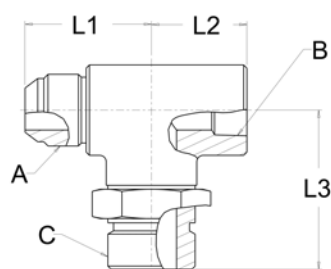
Male 37° Flare-SAE J514 / NPTF Port / Male NPTF - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
002-5393	1 3/16-12	-14	43.66	1/8-27	-2	15.88	3/4-14	-12	41.28	Steel

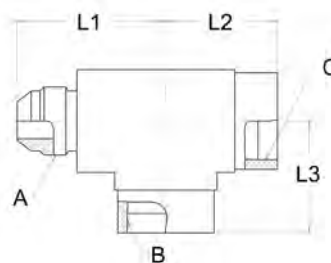
Tee Adapters

Male 37° Flare-SAE J514 / NPTF Port / Male STOR - Tee



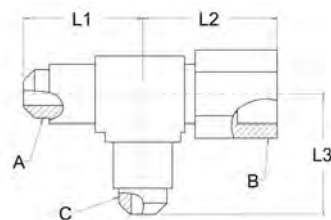
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
120-8401	3/4-16	-8	36.1	1/2-14	-8	31.2	3/4-16	-8	41.1	Steel
149-5207	7/8-14	-10	39.1	3/8-18	-6	29.5	1 1/16-12	-12	49.3	Steel

Male 37° Flare-SAE J514 / NPTF Port / NPTF Port - Tee



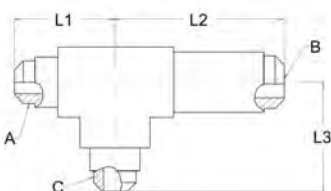
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L3 Length	Thread Size	Dash Size	L2 Length	
513-9662	3/4-16	-8	41.7	1/2-14	-8	31.2	1/2-14	-8	31.2	Steel

Male 45° Flare-SAE J512 / 45° Flare-SAE J512 Swivel Nut / Male 45° Flare-SAE J512 - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
507-6910	7/16-20	-4	23	7/16-20	-4	25	7/16-20	-4	23	Steel

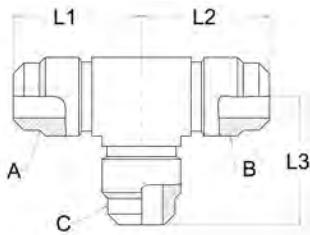
Male 45° Flare-SAE J512 / Bulkhead Male 45° Flare-SAE J512 / Male 45° Flare-SAE J512 - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
507-6903	5/8-18	-6	42.7	3/4-16	-8	42.7	5/8-18	-6	35	Steel

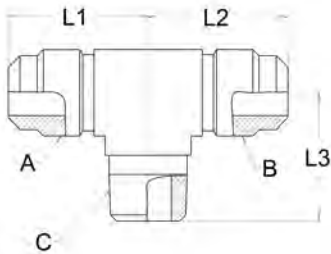
Tee Adapters

Male 45° Flare-SAE J512 / Male 45° Flare-SAE J512 / Male 45° Flare-SAE J512 - Tee



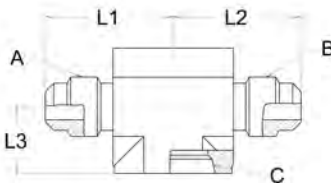
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
133-9660	3/8-24	-3	19	3/8-24	-3	19	3/8-24	-3	19	Brass
474-2609	3/4-16	-8	31	3/4-16	-8	31	3/4-16	-8	31	Brass
476-9410	7/8-14	-10	35.8	7/8-14	-10	35.8	7/8-14	-10	35.8	Brass

Male 45° Flare-SAE J512 / Male 45° Flare-SAE J512 / Male NPTF - Tee



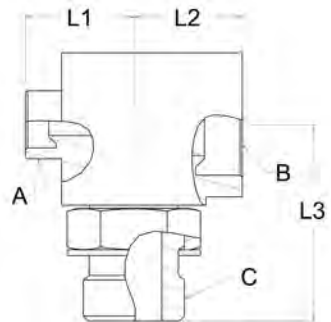
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
474-2601	3/4-16	-8	31	3/4-16	-8	31	3/8-18	-6	28.4	Brass

Male 45° Flare-SAE J512 / Male 45° Flare-SAE J512 / STOR Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
211-4499	7/16-20	-4	24	7/16-20	-4	24	9/16-18	-6	12.5	Brass

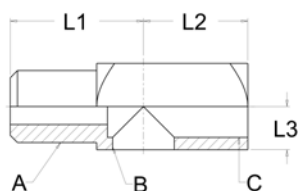
Male 45° Inverted Flare-SAE J512 / 45° Inverted Flare-SAE J512 Port / Male STOR - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
5P-7603	7/16-24	-4	23.9	7/8-18	-10	23.9	7/8-14	-10	43.2	Steel

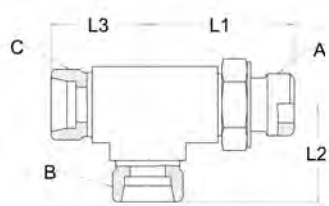
Tee Adapters

Male BSPP Flat Face-ISO 1179 / BSPT-ISO 7-1 Port / BSPP Flat Face-ISO 1179 Port - Tee



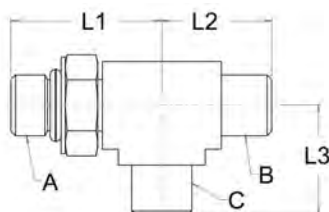
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L3 Length	Thread Size	Dash Size	L2 Length	
250-0241	1/8-28	-2	18.5	1/8-28	-2	6	1/8-28	-2	14.5	Brass

Male BSPP STOR-JIS B2351 / Male 24° Cone-ISO 8434-1 / Male 24° Cone-ISO 8434-1 - Tee



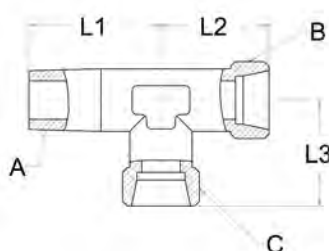
Part Number	End A			End B		End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length		
384-2496	1/2-14	-8	50	M18x1.5	26	M18x1.50	26		Steel

Male BSPP STOR-JIS B2351 / Male 60° Cone-BS5200 / Male 60° Cone-BS5200 - Tee



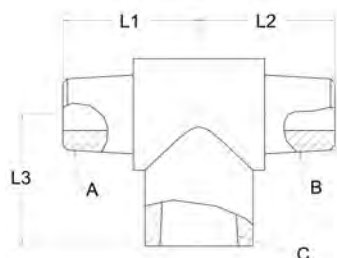
Part Number	End A			End B		End C			Material	
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size		L3 Length
140-5113	1/4-19	-4	28	1/4-19	-4	26	1/4-19	-4	26	Steel

Male BSPT / Male Metric Flat Face-ISO 9974 / Male Metric Flat Face-ISO 9974 - Tee



Part Number	End A			End B		End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length		
221-1584	1/4-19	-4	25	M16x1.5	25	M16x1.50	22		Brass

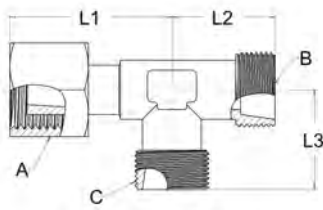
Male BSPT-ISO 7-1 / Male BSPT-ISO 7-1 / BSPT-ISO 7-1 Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
212-0095	3/8-19	-6	29	3/8-19	-6	29	3/8-19	-6	28	Steel

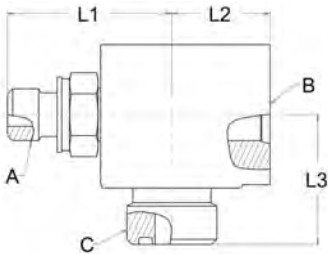
Tee Adapters

Male Metric Flat Face-ISO 9974 / Metric Flat Face-ISO 9974 Swivel Nut / Male Metric Flat Face-ISO 9974 - Tee



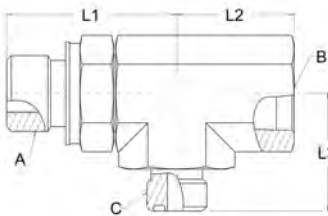
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
330-2595	M16x1.5	33	M16x1.5	21	M16x1.50	20	Steel

Male Metric STOR / Metric STOR Port / Male ORFS - Tee



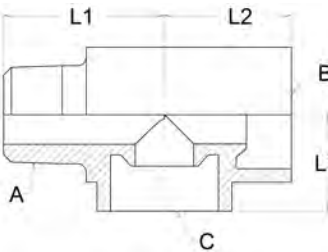
Part Number	End A		End B		End C			Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	Dash Size	L3 Length	
451-0469	M10x1	31.8	M10x1	19	11/16-16	-6	25	Steel
304-8007	M12x1.5	31.87	M12x1.5	16	9/16-18	-4	21.5	Brass
337-8782	M12x1.5	31.87	M12x1.5	16	9/16-18	-4	21.5	Steel
459-0663	M22x1.5	49	M12x1.5	21.6	1 3/16-12	-12	37.5	Steel
282-0913	M22x1.5	49.5	M12x1.5	21.6	1 3/16-12	-12	37.6	Steel

Male Metric STOR / NPTF Port / Male ORFS - Tee



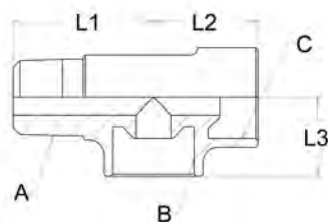
Part Number	End A		End B			End C			Material
	Thread Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
367-6015	M18x1.5	40.6	3/8-18	-6	28	9/16-18	-4	28	Steel

Male NPTF / 45° Inverted Flare-SAE J512 Port / 45° Flare-SAE J512 Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
6K-8214	3/8-18	-6	28.4	3/4-18	-8	22.4	3/4-18	-8	17	Brass

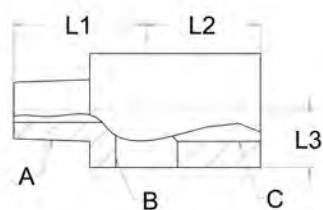
Male NPTF / 45° Inverted Flare-SAE J512 Port / 45° Inverted Flare-SAE J512 Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L3 Length	Thread Size	Dash Size	L2 Length	
9L-9045	1/8-27	-2	19.1	7/16-24	-4	10.7	7/16-24	-4	14.2	Brass
9S-7752	1/8-27	-2	21.6	1/2-20	-5	11.4	1/2-20	-5	15.7	Brass
6K-8498	1/4-18	-4	27.5	5/8-18	-6	14.2	5/8-18	-6	19	Brass
6K-8080	1/2-14	-8	35.9	7/8-18	-10	19	7/8-18	-10	24.6	Brass

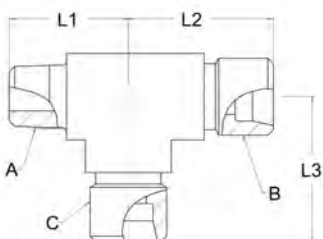
Tee Adapters

Male NPTF / BSPP STOR-JIS B2351 Port / BSPP STOR-JIS B2351 Port - Tee



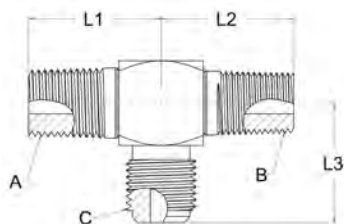
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
291-4211	1/4-28	N/A	12	1/8-28	-2	14	1/8-28	-2	14	Steel

Male NPTF / Male 24° Flareless-SAE J514 / Male 24° Flareless-SAE J514 - Tee



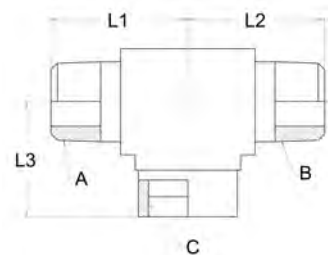
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
5P-5525	1/8-27	-2	19.8	1/2-20	-5	24.1	1/2-20	-5	24.1	Steel
5P-6044	1/4-18	-4	27.7	9/16-18	-6	26.7	9/16-18	-6	26.7	Steel

Male NPTF / Male NPTF / Male 37° Flare-SAE J514 - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
442-3414	1/2-14	-8	37.38	1/2-14	-8	37.3	3/4-16	-8	33.53	Steel

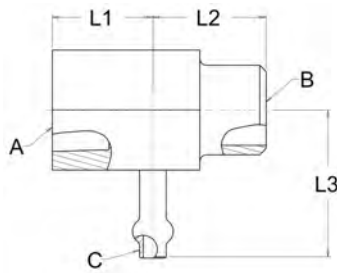
Male NPTF / Male NPTF / NPTF Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
5P-9385	1/8-27	-2	19.8	1/8-27	-2	19.8	1/8-27	-2	16.8	Steel
511-3223	1/2-14	-8	37.3	1/2-14	-8	37.3	1/2-14	-8	31.2	Steel

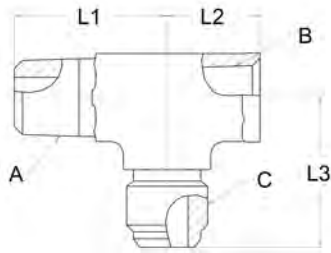
Tee Adapters

Male NPTF / NPTF Port / Hose Bead - Tee



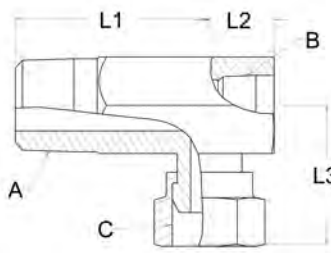
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Hose ID (mm)	Dash Size	L3 Length	
6N-3802	1/2-14	-8	24	1/2-14	-8	27	6.35	-4	35	Steel

Male NPTF / NPTF Port / Male 37° Flare-SAE J514 - Tee



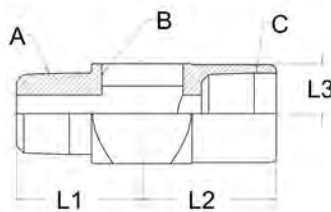
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
341-3168	1/4-18	-4	27.4	1/4-18	-4	16.7	9/16-18	-6	26.9	Steel

Male NPTF / NPTF Port / NPSM Swivel Nut - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
9D-3351	1/2-14	-8	45.2	1/4-18	-4	0	3/8-18	-6	24.9	Steel

Male NPTF / NPTF Port / NPTF Port - Tee



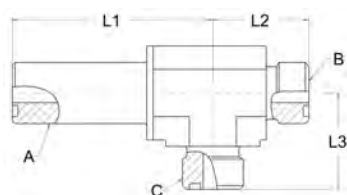
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L3 Length	Thread Size	Dash Size	L2 Length	
030-9208	1/8-27	-2	16.8	1/8-27	-2	13.89	1/8-27	-2	14	Brass
319-9173	1/8-27	-2	18.5	1/8-27	-2	6	1/8-27	-2	14.5	Brass
5P-3422	1/8-27	-2	19.8	1/8-27	-2	16.8	1/8-27	-2	16.8	Steel
514-1950	1/8-27	-2	16	1/8-27	-2	6.4	1/8-27	-2	17	Steel
3L-6521	1/4-18	-4	27	1/4-18	-4	20.6	1/4-18	-4	20.6	Iron
2D-7325	1/4-18	-4	27.7	1/4-18	-4	22.4	1/4-18	-4	22.4	Steel
7J-6740	3/8-18	-6	26.16	3/8-18	-6	21.34	3/8-18	-6	21.34	Brass
6B-7639	3/8-18	-6	36.51	3/8-18	-6	23.81	3/8-18	-6	23.81	Iron
281-5830	3/8-18	-6	31	3/8-18	-6	25.9	3/8-18	-6	25.9	SST
8L-6005	3/8-18	-6	31	3/8-18	-6	25.9	3/8-18	-6	25.9	Steel

Tee Adapters

Male NPTF / NPTF Port / NPTF Port - Tee (Cont'd.)

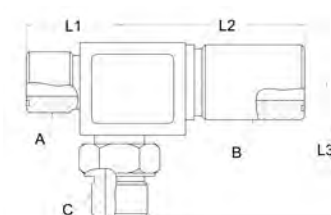
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L3 Length	Thread Size	Dash Size	L2 Length	
6A-3591	1/2-14	-8	31.8	1/2-14	-8	27.18	1/2-14	-8	27.18	Brass
5L-5502	1/2-14	-8	37.3	1/2-14	-8	31.2	1/2-14	-8	31.2	Steel
4K-2430	3/4-14	-12	40.4	1/2-14	-8	34.5	1/2-14	-8	30.2	Steel
1N-8559	3/4-14	-12	47.6	3/4-14	-12	33.3	3/4-14	-12	33.3	Iron
052-0726	3/4-14	-12	40.4	3/4-14	-12	34.5	3/4-14	-12	34.5	Steel
1L-4031	1-11.5	-16	53.98	1-11.5	-16	38.1	1-11.5	-16	38.1	Iron
4L-1848	1 1/4-11.5	-20	61.91	1 1/4-11.5	-20	44.45	1 1/4-11.5	-20	44.45	Brass

Male ORFS / Bulkhead Male ORFS / Male ORFS - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
8C-6444	9/16-18	-4	22.5	9/16-18	-4	47	9/16-18	-4	22.5	Steel
7X-0820	11/16-16	-6	26	11/16-16	-6	52	11/16-16	-6	26	Steel
439-1820	11/16-16	-6	27.5	13/16-16	-8	55.5	11/16-16	-6	27.5	Steel
8T-6895	13/16-16	-8	29	13/16-16	-8	55.5	13/16-16	-8	29	Steel
148-6757	13/16-16	-8	34.5	13/16-16	-8	59	1-14	-10	34.5	Steel
110-4628	13/16-16	-8	34.8	13/16-16	-8	62	1 3/16-12	-12	59.9	Steel
241-6225	13/16-16	-8	34.7	1-14	-10	65.7	1 3/16-12	-12	38.5	Steel
6V-9352	1-14	-10	34.5	13/16-16	-8	59	1-14	-10	34.5	Steel
268-1610	1-14	-10	34.5	1-14	-10	63.1	9/16-18	-4	28.9	Steel
6V-9350	1-14	-10	34.5	1-14	-10	63	1-14	-10	34.5	Steel
319-6190	1-14	-10	37	1-14	-10	63.1	1 3/16-12	-12	38.5	Steel
8T-1809	1 3/16-12	-12	38.5	13/16-16	-8	62	1-14	-10	37.5	Steel
379-6986	1 3/16-12	-12	38.5	1-14	-10	65.5	1-14	-10	37	Steel
3E-7443	1 3/16-12	-12	42	1 3/16-12	-12	71.2	1 7/16-12	-16	42.5	Steel
138-1916	1 7/16-12	-16	41.7	1 3/16-12	-12	67.2	1 3/16-12	-12	41.2	Steel
154-7159	1 7/16-12	-16	42.5	1 7/16-12	-16	71	1 7/16-12	-16	42.5	Steel
516-4484	2-12	-24	49.5	2-12	-24	79.5	1 7/16-12	-16	49.5	Steel

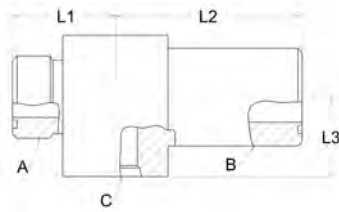
Male ORFS / Bulkhead Male ORFS / Male STOR - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
268-1648	13/16-16	-8	31.8	1-14	-10	63.1	3/4-16	-8	45.7	Steel

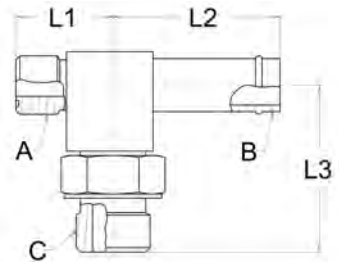
Tee Adapters

Male ORFS / Bulkhead Male ORFS / STOR Port - Tee



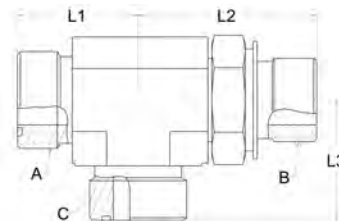
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
451-0431	1-14	-10	32	1 3/16-12	-12	57.5	9/16-18	-4	24.5	Steel

Male ORFS / Hose Bead / Male STOR - Tee



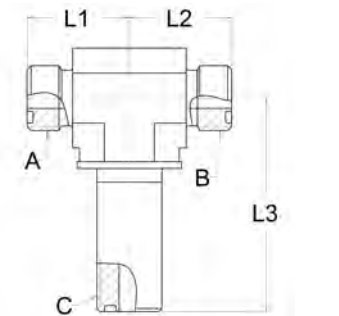
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Hose ID (mm)	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
251-9304	11/16-16	-6	27.9	12.70	-8	50.1	7/8-14	-10	42.49	Steel
251-9303	1 3/16-12	-12	37.3	12.70	-8	52.1	7/8-14	-10	47.24	Steel

Male ORFS / Male Metric STOR / Male ORFS - Tee



Part Number	End A			End B		End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	L2 Length	Thread Size	Dash Size	L3 Length	
321-8621	1 3/16-12	-12	37.5	M27x2	55.5	1 3/16-12	-12	37.5	Steel
297-7951	1 7/16-12	-16	41.7	M33x2	59.7	1 7/16-12	-16	41.7	Steel

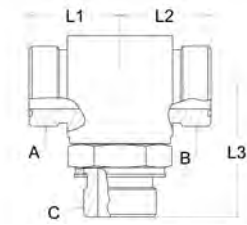
Male ORFS / Male ORFS / Bulkhead Male ORFS - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
8T-9027	9/16-18	-4	22.5	9/16-18	-4	22.5	9/16-18	-4	47	Steel
8T-0379	11/16-16	-6	26	11/16-16	-6	26	11/16-16	-6	52	Steel
7X-7715	13/16-16	-8	29	13/16-16	-8	29	13/16-16	-8	55.5	Steel
132-5152	1 3/16-12	-12	38.5	1 3/16-12	-12	38.5	1 3/16-12	-12	67	Steel
241-6196	1 7/16-12	-16	42.5	1 7/16-12	-16	42.5	1 7/16-12	-16	71	Steel
451-0413	1 3/16-12	-12	38.5	1 3/16-12	-12	38.5	1 3/16-12	-12	60.59	Steel

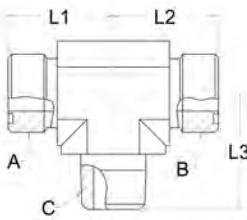
Tee Adapters

Male ORFS / Male ORFS / Male Metric STOR - Tee



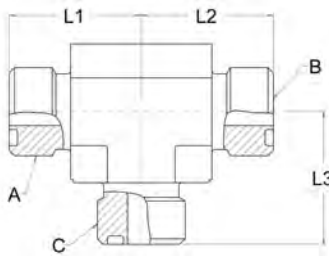
Part Number	End A		L1 Length	End B		L2 Length	End C		Material
	Thread Size	Dash Size		Thread Size	Dash Size		Thread Size	L3 Length	
175-9478	13/16-16	-8	28	13/16-16	-8	28	M18x1.50	41	Steel
448-8995	1 7/16-12	-16	41.5	1 7/16-12	-16	41.5	M33x2.00	59.5	Steel

Male ORFS / Male ORFS / Male NPTF - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
7R-9570	13/16-16	-8	27.9	13/16-16	-8	27.9	3/8-18	-6	30.7	Steel
106-5151	1 3/16-12	-12	37.3	1 3/16-12	-12	37.3	3/4-14	-12	41.9	Steel

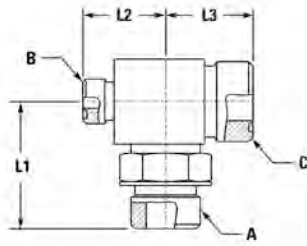
Male ORFS / Male ORFS / Male ORFS - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
6V-8787	9/16-18	-4	21.5	9/16-18	-4	21.5	9/16-18	-4	21.5	Steel
8T-8983	9/16-18	-4	23.5	9/16-18	-4	23.5	11/16-16	-6	25	Steel
6V-8788	11/16-16	-6	25	11/16-16	-6	25	11/16-16	-6	25	Steel
8T-3444	11/16-16	-6	26.5	11/16-16	-6	26.5	13/16-16	-8	28	Steel
8T-2363	13/16-16	-8	28	11/16-16	-6	26.5	13/16-16	-8	28	Steel
6V-9158	13/16-16	-8	31.2	13/16-16	-8	31.2	1-14	-10	33.3	Steel
6V-9043	13/16-16	-8	31.2	1-14	-10	33.3	1-14	-10	33.3	Steel
6V-9272	1-14	-10	33.3	13/16-16	-8	31.2	13/16-16	-8	31.2	Steel
6V-9031	1-14	-10	33.3	1-14	-10	33.3	13/16-16	-8	31.2	Steel
6V-8790	1-14	-10	33.5	1-14	-10	33.5	1-14	-10	33.5	Steel
361-4991	1-14	-10	34.5	1-14	-10	34.5	1-14	-10	63	Steel
7X-7703	1-14	-10	35.8	1-14	-10	35.8	1 3/16-12	-12	37.3	Steel
313-3476	1-14	-10	39.7	1-14	-10	39.7	1 7/16-12	-16	41.7	Steel
8T-0248	1 3/16-12	-12	37.3	13/16-16	-8	34.2	13/16-16	-8	34.2	Steel
121-7697	1 3/16-12	-12	37	1 3/16-12	-12	37	13/16-16	-8	46	Steel
8T-1012	1 3/16-12	-12	41.2	1 3/16-12	-12	41.2	1 7/16-12	-16	41.7	Steel
8T-6755	1 3/16-12	-12	41.2	1 7/16-12	-16	41.7	1-14	-10	39.7	Steel
158-4307	1 7/16-12	-16	41.7	1 3/16-12	-12	37.3	1 3/16-12	-12	37.3	Steel
6V-8792	1 7/16-12	-16	41.5	1 7/16-12	-16	41.5	1 7/16-12	-16	41.5	Steel
502-5673	1 11/16-12	-20	44.5	1 7/16-12	-16	44.5	1 7/16-12	-16	44.5	Steel
8T-5907	1 11/16-12	-20	44.7	1 11/16-12	-20	44.7	1 7/16-12	-16	44.7	Steel

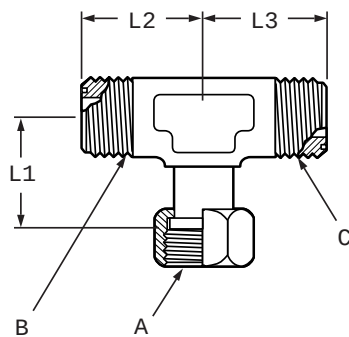
Tee Adapters

Male ORFS / Male ORFS / Male STOR - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
6V-8773	7/16-20	-4	33	9/16-18	-4	21.5	9/16-18	-4	21.5	Steel
268-1504	9/16-18	-6	37	9/16-18	-4	23.5	9/16-18	-4	23.5	Steel
371-7164	7/8-14	-10	40.6	9/16-18	-4	26.5	1-14	-10	28	Steel
7X-0838	7/16-20	-4	35	11/16-16	-6	25	11/16-16	-6	25	Steel
6V-8774	9/16-18	-6	37	11/16-16	-6	25	11/16-16	-6	25	Steel
238-4986	9/16-18	-6	36.8	11/16-16	-6	25	11/16-16	-6	25	Steel
098-5687	3/4-16	-8	40.5	11/16-16	-6	26.5	11/16-16	-6	26.5	Steel
297-7929	9/16-18	-6	41.6	11/16-16	-6	25	13/16-16	-8	30.6	Steel
8T-6696	3/4-16	-8	40.6	11/16-16	-6	26.5	13/16-16	-8	28	Steel
287-7251	9/16-18	-6	35.9	13/16-16	-8	28	13/16-16	-8	28	Steel
6V-8775	3/4-16	-8	40.5	13/16-16	-8	28	13/16-16	-8	28	Steel
302-3210	3/4-16	-8	46.7	13/16-16	-8	33.5	1 3/16-12	-12	37.3	Steel
250-1470	9/16-18	-6	41.6	1-14	-10	33.3	13/16-16	-8	30.6	Steel
109-5811	3/4-16	-8	46	1-14	-10	28	1-14	-10	28	Steel
6V-8776	7/8-14	-10	50	1-14	-10	33.5	1-14	-10	33.5	Steel
8T-8984	7/8-14	-10	51	1 3/16-12	-12	37.5	1 3/16-12	-12	37.5	Steel
6V-8777	1 1/16-12	-12	55	1 3/16-12	-12	37.5	1 3/16-12	-12	37.5	Steel
102-1384	1 5/16-12	-16	59.5	1 3/16-12	-12	41	1 3/16-12	-12	41	Steel
305-6926	1 5/16-12	-16	55	1 3/16-12	-12	43.2	1 3/16-12	-12	43.2	Steel
8T-1120	1 5/8-12	-20	62.2	1 3/16-12	-12	44.2	1 7/16-12	-16	44.7	Steel
134-6954	1 1/16-12	-12	60	1 7/16-12	-16	41.7	1-14	-10	39.7	Steel
108-7005	1 1/16-12	-12	59	1 7/16-12	-16	41.7	1 3/16-12	-12	37.3	Steel
439-1857	1 1/16-12	-12	58.5	1 7/16-12	-16	41.5	1 7/16-12	-16	41.5	Steel
165-3938	1 5/8-12	-20	62	1 11/16-12	-20	44.5	1 11/16-12	-20	44.5	Steel
212-4991	1 7/8-12	-24	66	2-12	-24	49	2-12	-24	49	Steel

Male ORFS / Male ORFS / ORFS Swivel Nut - Tee



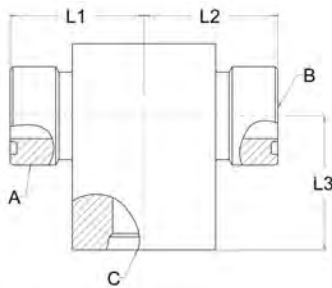
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
6V-9842	9/16-18	-4	26.5	9/16-18	-4	21.5	9/16-18	-4	21.5	Steel
6V-9843	11/16-16	-6	29	11/16-16	-6	25	11/16-16	-6	25	Steel
422-8812	11/16-16	-6	29	11/16-16	-6	25	11/16-16	-6	25	Steel
287-7326	13/16-16	-8	38	13/16-16	-8	28	11/16-16	-6	26.5	Steel
6V-9844	13/16-16	-8	38	13/16-16	-8	28	13/16-16	-8	28	Steel
268-1573	1-14	-10	41.2	13/16-16	-8	30.8	13/16-16	-8	30.8	Steel

Tee Adapters

Male ORFS / Male ORFS / ORFS Swivel Nut - Tee (Cont'd.)

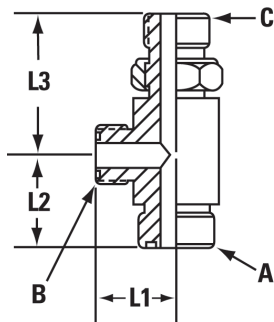
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
371-7228	1-14	-10	41	13/16-16	-8	28	1-14	-10	33.5	Steel
287-7308	13/16-16	-8	38.7	1-14	-10	33.3	1-14	-10	33.3	Steel
6V-9845	1-14	-10	41	1-14	-10	33.5	1-14	-10	33.5	Steel
420-7645	1 7/16-12	-16	53.5	1-14	-10	39.5	1 3/16-12	-12	41	Steel
6V-9846	1 3/16-12	-12	46.5	1 3/16-12	-12	37.5	1 3/16-12	-12	37.5	Steel
3E-7407	1 3/16-12	-12	52.5	1 7/16-12	-16	41.5	1 7/16-12	-16	41.5	Steel
6V-9847	1 7/16-12	-16	53.5	1 7/16-12	-16	41.5	1 7/16-12	-16	41.5	Steel
9X-6653	1 11/16-12	-20	58	1 11/16-12	-20	44.5	1 11/16-12	-20	44.5	Steel

Male ORFS / Male ORFS / STOR Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
8T-0082	13/16-16	-8	28	13/16-16	-8	28	9/16-18	-6	28	Steel
423-3131	1-14	-10	40	1 7/16-12	-16	42	1 5/16-12	-16	42	Steel

Male ORFS / Male STOR / Male ORFS - Tee



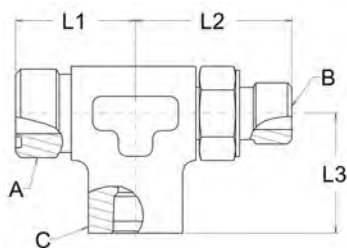
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L3 Length	
6V-8780	9/16-18	-4	21.5	9/16-18	-4	21.5	7/16-20	-4	33	Steel
086-9035	9/16-18	-4	23.5	9/16-18	-4	23.5	9/16-18	-6	37	Steel
268-1625	9/16-18	-4	23.5	11/16-16	-6	25	9/16-18	-6	36.8	Steel
515-8378	9/16-18	-4	28	1-14	-10	33.5	7/8-14	-10	50	Steel
6V-8781	11/16-16	-6	25	11/16-16	-6	25	9/16-18	-6	37	Steel
307-5098	11/16-16	-6	27	13/16-16	-8	31.2	7/8-14	-10	50	Steel
8T-2883	11/16-16	-6	32.5	1 3/16-12	-12	37.5	1 1/16-12	-12	55	Steel
153-6270	13/16-16	-8	28	13/16-16	-8	28	9/16-18	-6	36.5	Steel
267-4049	13/16-16	-8	31	13/16-16	-8	51	9/16-18	-6	40	Steel
6V-8782	13/16-16	-8	28	13/16-16	-8	28	3/4-16	-8	40.5	Steel
239-1995	13/16-16	-8	33.5	1 3/16-12	-12	37.3	3/4-16	-8	46.7	Steel
115-8634	13/16-16	-8	31.5	13/16-16	-8	31.5	7/8-14	-10	50	Steel
119-6346	13/16-16	-8	34	9/16-18	-4	30.5	1 1/16-12	-12	55	Steel
215-3448	13/16-16	-8	33.5	1 3/16-12	-12	37.3	1 1/16-12	-12	55.1	Steel

Tee Adapters

Male ORFS / Male STOR / Male ORFS - Tee (Cont'd.)

Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L3 Length	
297-7936	13/16-16	-8	37.3	1 3/16-12	-12	37.3	1 1/16-12	-12	55.1	Steel
134-6953	13/16-16	-8	33	1 7/16-12	-16	41.7	1 1/16-12	-12	60	Steel
307-3344	1-14	-10	33.5	13/16-16	-8	31.5	3/4-16	-8	45.5	Steel
268-6052	1-14	-10	33.5	1-14	-10	33.5	3/4-16	-8	46	Steel
113-2378	1-14	-10	33	13/16-16	-8	28	7/8-14	-10	50	Steel
6V-8783	1-14	-10	33.5	1-14	-10	33.5	7/8-14	-10	50	Steel
6V-9032	1-14	-10	36	1 3/16-12	-12	37.5	7/8-14	-10	51	Steel
332-8571	1-14	-10	36	9/16-18	-4	30.5	1 1/16-12	-12	55	Steel
118-4569	1-14	-10	36	1 3/16-12	-12	37.5	1 1/16-12	-12	55	Steel
8T-1684	1-14	-10	39.7	1-14	-10	39.7	1 5/16-12	-16	59.7	Steel
4I-7651	1 3/16-12	-12	37.3	13/16-16	-8	32	3/4-16	-8	40.6	Steel
319-6198	1 3/16-12	-12	37.3	1-14	-10	35.8	3/4-16	-8	46.7	Steel
310-5902	1 3/16-12	-12	37.3	1 3/16-12	-12	37.3	3/4-16	-8	46.7	Steel
122-9088	1 3/16-12	-12	37.5	1 3/16-12	-12	37.5	7/8-14	-10	51	Steel
214-4506	1 3/16-12	-12	37.5	13/16-16	-8	34	1 1/16-12	-12	55	Steel
102-0773	1 3/16-12	-12	35	1-14	-10	37	1 1/16-12	-12	50	Steel
6V-9175	1 3/16-12	-12	37.3	1-14	-10	36.3	1 1/16-12	-12	55.1	Steel
6V-8784	1 3/16-12	-12	37.5	1 3/16-12	-12	37.5	1 1/16-12	-12	55	Steel
128-7625	1 3/16-12	-12	37.3	1 7/16-12	-16	41.7	1 1/16-12	-12	59.7	Steel
109-5819	1 3/16-12	-12	35	1-14	-10	37	1 5/16-12	-16	50	Steel
8T-1685	1 3/16-12	-12	41	1 3/16-12	-12	41	1 5/16-12	-16	59.5	Steel
356-9220	1 3/16-12	-12	91.2	1 3/16-12	-12	41	1 5/16-12	-16	59.5	Steel
441-4276	1 3/16-12	-12	41.2	1 3/16-12	-12	41.2	1 5/16-12	-16	59.7	Steel
287-7264	1 3/16-12	-12	44.2	1 11/16-12	-20	44.7	1 5/8-12	-20	62.2	Steel
211-3468	1 7/16-12	-16	41.5	1 3/16-12	-12	74.7	1 5/16-12	-16	103.5	Steel
126-3902	1 11/16-12	-20	44.5	1 3/16-12	-12	44	1 1/16-12	-12	61.2	Steel
6V-8786	1 11/16-12	-20	44.5	1 11/16-12	-20	44.5	1 5/8-12	-20	62	Steel

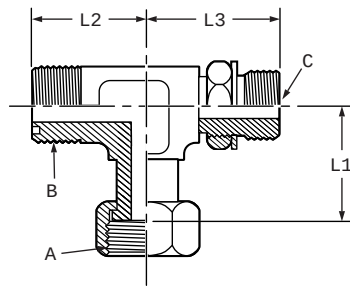
Male ORFS / Male STOR / NPTF Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
8C-3322	13/16-16	-8	28	9/16-18	-6	36.5	1/8-27	-2	28	Steel

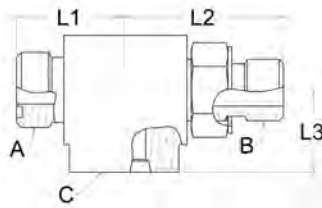
Tee Adapters

Male ORFS / Male STOR / ORFS Swivel Nut - Tee



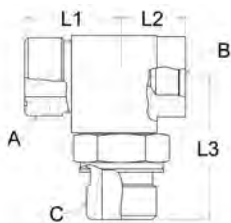
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
8T-2556	11/16-16	-6	29.3	11/16-16	-6	25	9/16-18	-6	36.8	Steel
268-6051	13/16-16	-8	37.9	13/16-16	-8	28	3/4-16	-8	40.6	Steel
307-9062	1 11/16-12	-20	58.2	13/16-16	-8	35.3	1 5/8-12	-20	62.2	Steel

Male ORFS / Male STOR / STOR Port - Tee



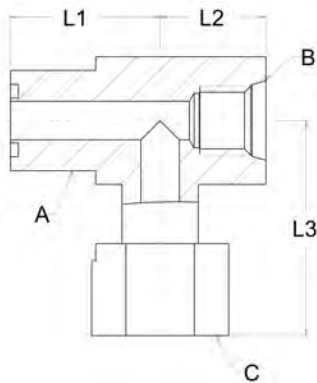
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
081-5648	9/16-18	-4	25	9/16-18	-6	37	9/16-18	-6	25	Steel
3E-2310	11/16-16	-6	25	9/16-18	-6	34.8	9/16-18	-6	25	Steel
499-4232	11/16-16	-6	25	9/16-18	-6	37	7/16-20	-4	19.1	Steel
8T-6338	13/16-16	-8	28	3/4-16	-8	40.5	9/16-18	-6	28	Steel
8C-7514	13/16-16	-8	30.5	7/8-14	-10	50	7/8-14	-10	33.3	Steel
337-8768	1-14	-10	28	7/8-14	-10	50	9/16-18	-6	26	Steel
278-6425	1-14	-10	33.3	1 1/16-12	-12	55.1	9/16-18	-6	33.3	Steel
8C-0569	1 3/16-12	-12	37.3	1 1/16-12	-12	55.1	9/16-18	-6	26	Steel
8T-8900	1 3/16-12	-12	43.7	1 1/16-12	-12	61.5	1 1/16-12	-12	37.3	Steel
346-8791	1 3/16-12	-12	27.5	1 3/16-12	-14	44.3	9/16-18	-6	22	Steel
109-6511	1 3/16-12	-12	41	1 5/16-12	-16	59.7	9/16-18	-6	41.7	Steel
250-1441	1 3/16-12	-12	41.2	1 5/16-12	-16	59.7	1 1/16-12	-12	41.2	Steel
117-7734	1 3/16-12	-12	41.2	1 5/16-12	-16	59.7	1 5/16-12	-16	36.6	Steel
371-7230	1 3/16-12	-12	42.2	1 5/8-12	-20	62.2	1 5/16-12	-16	33.8	Steel
268-5353	1 7/16-12	-16	41.7	1 3/16-12	-14	59	9/16-18	-6	41.7	Steel
239-1834	1 7/16-12	-16	45	1 5/16-12	-16	75	1 5/16-12	-16	49	Steel
268-1515	1 11/16-12	-20	44.7	1 5/16-12	-16	62.2	3/4-16	-8	44.7	Steel

Male ORFS / Metric STOR Port / Male Metric STOR - Tee



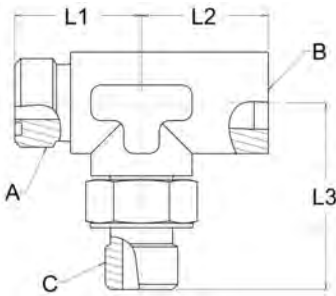
Part Number	End A			End B		End C		Material
	Thread Size	Dash Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
321-8611	1 3/16-12	-12	37.3	M14x1.5	24.7	M27x2.00	55.1	Steel

Male ORFS / Metric STOR Port / ORFS Swivel Nut - Tee



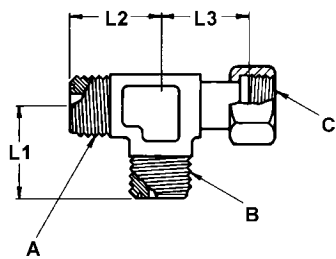
Part Number	End A			End B		End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	L2 Length	Thread Size	Dash Size	L3 Length	
422-8808	11/16-16	-6	26	M12x1.5	18.4	11/16-16	-6	30	Steel

Male ORFS / NPTF Port / Male STOR - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
149-4125	11/16-16	-6	25	1/8-27	-2	25	9/16-18	-6	36.8	Steel
146-9571	11/16-16	-6	25	1/4-18	-4	25	9/16-18	-6	36.8	Steel
180-1725	1 7/16-12	-16	41.7	1/8-27	-2	0	1 5/16-12	-16	59.7	Steel

Male ORFS / ORFS Swivel Nut / Male ORFS - Tee



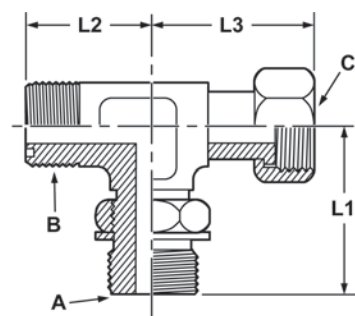
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L3 Length	
6V-9835	9/16-18	-4	21.5	9/16-18	-4	21.5	9/16-18	-4	26.5	Steel
214-4252	9/16-18	-4	24.7	13/16-16	-8	28	13/16-16	-8	37.9	Steel
6V-9836	11/16-16	-6	25	11/16-16	-6	25	11/16-16	-6	29	Steel
144-8070	11/16-16	-6	25	11/16-16	-6	25	11/16-16	-6	29	Steel
214-0900	11/16-16	-6	25	13/16-16	-8	25	11/16-16	-6	29.3	Steel
222-6967	11/16-16	-6	26.5	11/16-16	-6	25	13/16-16	-8	38	Steel
101-0052	13/16-16	-8	28	13/16-16	-8	28	11/16-16	-6	35	Steel
214-4254	13/16-16	-8	28	9/16-18	-4	25	13/16-16	-8	38	Steel
206-5122	13/16-16	-8	28	11/16-16	-6	26.5	13/16-16	-8	37.9	Steel
6V-9837	13/16-16	-8	28	13/16-16	-8	28	13/16-16	-8	38	Steel
287-7261	13/16-16	-8	30.7	1-14	-10	33.3	1-14	-10	41.2	Steel
296-5724	13/16-16	-8	33.5	13/16-16	-8	33.5	1 3/16-12	-12	46.3	Steel
490-5452	13/16-16	-8	37.5	1 3/16-12	-12	41	1 7/16-12	-16	53.5	SST
377-9624	1-14	-10	33.5	1-14	-10	33.5	13/16-16	-8	37	Steel
308-3959	1-14	-10	33.3	13/16-16	-8	33.5	1-14	-10	41.2	Steel
6V-9838	1-14	-10	33.5	1-14	-10	33.5	1-14	-10	41	Steel

Tee Adapters

Male ORFS / ORFS Swivel Nut / Male ORFS - Tee (Cont'd.)

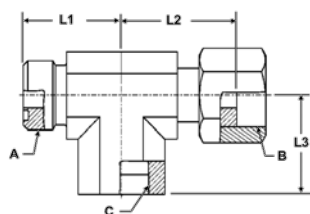
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L3 Length	
281-5970	1 3/16-12	-12	37.5	1 3/16-12	-12	37.5	1-14	-10	44	Steel
480-3040	1 3/16-12	-12	37.5	1 3/16-12	-12	37.5	1 3/16-12	-12	46.5	Steel
6V-9839	1 3/16-12	-12	37.5	1 3/16-12	-12	37.5	1 3/16-12	-12	46.5	Steel
420-7644	1 3/16-12	-12	41	1-14	-10	39.5	1 7/16-12	-16	53.5	Steel
139-1802	1 7/16-12	-16	41.7	1 3/16-12	-12	41.7	1 7/16-12	-16	100	Steel
341-0119	1 7/16-12	-16	41.5	1 3/16-12	-12	41	1 7/16-12	-16	53.5	Steel
6V-9840	1 7/16-12	-16	41.5	1 7/16-12	-16	41.5	1 7/16-12	-16	53.5	Steel
7X-2429	1 11/16-12	-20	44.5	1 11/16-12	-20	44.5	1 11/16-12	-20	58	Steel
244-2776	2-12	-24	49	2-12	-24	49	2-12	-24	61	Steel

Male ORFS / ORFS Swivel Nut / Male STOR - Tee



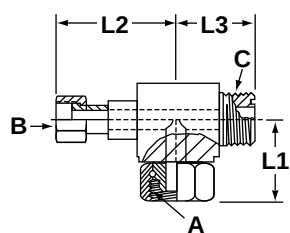
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
268-1638	9/16-18	-6	36.8	11/16-16	-6	25	11/16-16	-6	29.3	Steel
267-4043	7/8-14	-10	50	11/16-16	-6	27	1 3/16-12	-12	46.3	Steel
8C-6798	1 5/16-12	-16	59.7	1 7/16-12	-16	41.7	1 7/16-12	-16	53.4	Steel

Male ORFS / ORFS Swivel Nut / NPTF Port - Tee



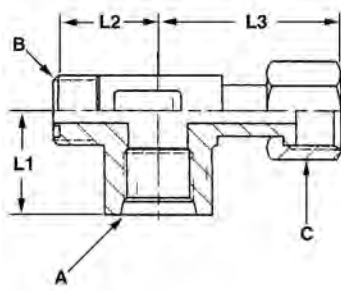
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
162-6817	9/16-18	-4	21.5	9/16-18	-4	26.5	1/8-27	-2	21.5	Steel
8T-2352	11/16-16	-6	25	11/16-16	-6	29.3	1/4-18	-4	25	Steel

Male ORFS / ORFS Swivel Nut / ORFS Swivel Nut - Tee



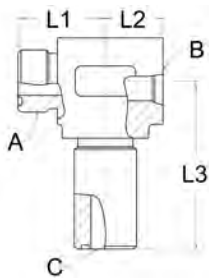
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
8T-6454	1 11/16-12	-20	57.4	1 7/16-12	-16	57.4	1 7/16-12	-16	44.7	Steel

Male ORFS / ORFS Swivel Nut / STOR Port - Tee



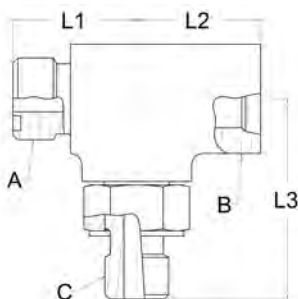
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
7X-2444	9/16-18	-6	21.5	9/16-18	-4	21.5	9/16-18	-4	28.2	Steel
143-7681	9/16-18	-6	—	11/16-16	-6	0	11/16-16	-6	0	Steel
8T-8902	9/16-18	-6	25	11/16-16	-6	25	11/16-16	-6	29	Steel
127-3026	3/8-24	-3	28	13/16-16	-8	28	13/16-16	-8	37.9	Steel
459-0661	7/16-20	-4	13.5	13/16-16	-8	23.1	13/16-16	-8	32.3	Steel
7X-0871	9/16-18	-6	28	13/16-16	-8	28	13/16-16	-8	38	Steel
110-2218	3/4-16	-8	45	13/16-16	-8	30	13/16-16	-8	40	Steel
154-8150	3/4-16	-8	28	13/16-16	-8	30	13/16-16	-8	37.9	Steel
520-1370	7/16-20	-4	33.5	1-14	-10	33.5	1-14	-10	41	Steel
7X-0872	9/16-18	-6	33.3	1-14	-10	33.3	1-14	-10	41.2	Steel
127-2141	3/4-16	-8	33.3	1-14	-10	33.3	1-14	-10	41.2	Steel
319-6203	7/8-14	-10	33.3	1-14	-10	33.3	1-14	-10	41.2	Steel
426-4098	7/16-20	-4	22.4	1 3/16-12	-12	37.3	1 3/16-12	-12	46.3	Steel
7X-0873	9/16-18	-6	37.3	1 3/16-12	-12	37.5	1 3/16-12	-12	46.5	Steel
315-9838	3/4-16	-8	43	1 3/16-12	-12	37.5	1 3/16-12	-12	46.5	Steel
492-9115	7/16-20	-4	25	1 7/16-12	-16	36.2	1 7/16-12	-16	36.2	Steel

Male ORFS / STOR Port / Bulkhead Male ORFS - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
194-2554	13/16-16	-8	28.9	9/16-18	-6	19	13/16-16	-8	55.4	Steel

Male ORFS / STOR Port / Male STOR - Tee



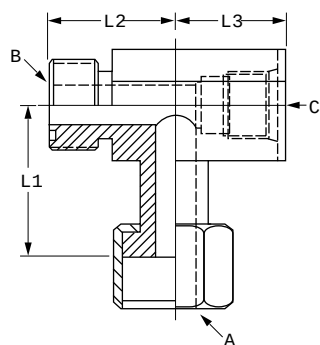
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
308-9568	9/16-18	-4	21.5	9/16-18	-6	22	7/16-20	-4	33	Steel
8T-3311	9/16-18	-4	23.5	9/16-18	-6	24.5	9/16-18	-6	40.8	Steel
459-0700	11/16-16	-6	25	9/16-18	-6	25	7/16-20	-4	35	Steel
213-8386	11/16-16	-6	25	9/16-18	-6	25	9/16-18	-6	36.8	Steel
7X-2459	11/16-16	-6	25	9/16-18	-6	25	9/16-18	-6	37	Steel
8C-3415	11/16-16	-6	26.5	9/16-18	-6	24.5	3/4-16	-8	40.8	Steel

Tee Adapters

Male ORFS / STOR Port / Male STOR - Tee (Cont'd.)

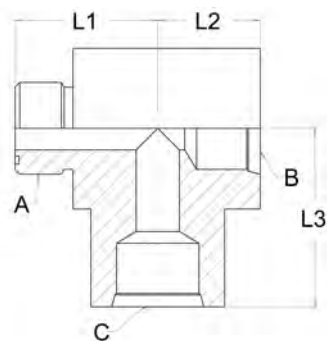
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
126-8306	13/16-16	-8	28	9/16-18	-6	28	3/4-16	-8	40.6	Steel
171-0714	13/16-16	-8	28	9/16-18	-6	24.5	7/8-14	-10	50	Steel
9X-2541	1 3/16-12	-12	41.2	9/16-18	-6	24.7	7/8-14	-10	51	Steel
3E-2345	1 3/16-12	-12	41.2	9/16-18	-6	24.7	1 1/16-12	-12	55.1	Steel
8T-3312	1 3/16-12	-12	41.2	9/16-18	-6	24.7	1 5/16-12	-16	59.7	Steel
338-5995	1 3/16-12	-12	37.3	1 5/16-12	-16	49	1 5/16-12	-16	59.7	Steel
8C-4082	1 7/16-12	-16	41.7	9/16-18	-6	41.7	1 1/16-12	-12	59.7	Steel
8C-6515	1 7/16-12	-16	41.5	9/16-18	-6	41.5	1 5/16-12	-16	59.5	Steel
351-0284	1 7/16-12	-16	41.5	1 5/16-12	-16	41.5	1 1/16-12	-12	58.5	Steel
297-7920	1 11/16-12	-20	44.7	7/16-20	-4	30	1 5/16-12	-16	62.2	Steel

Male ORFS / STOR Port / ORFS Swivel Nut - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
149-4289	9/16-18	-4	27.9	9/16-18	-4	22.6	7/16-20	-4	19.6	Steel
294-8409	9/16-18	-4	26.5	9/16-18	-4	21.5	7/16-20	-4	17	Steel
298-4919	9/16-18	-4	26.5	9/16-18	-4	21.5	9/16-18	-6	22	Steel
123-2169	11/16-16	-6	30	11/16-16	-6	26	9/16-18	-6	18.4	Steel
135-5985	1-14	-10	41	1-14	-10	33.5	3/4-16	-8	31.2	Steel

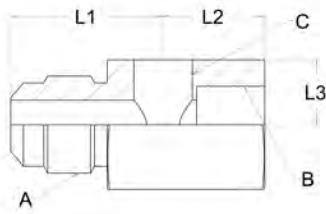
Male ORFS / STOR Port / STOR Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
122-1852	13/16-16	-8	32	3/4-16	-8	23	3/4-16	-8	40	Steel

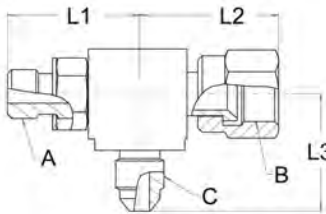
Tee Adapters

Male SAE 45° / BSPT-ISO 7-1 Port / BSPT-ISO 7-1 Port - Tee



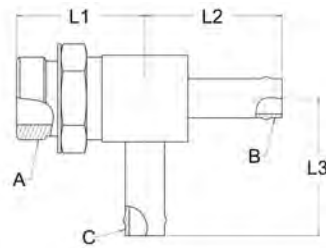
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
203-0394	3/4-16	-8	25	3/8-19	-6	25	1/4-19	-4		Brass

Male STOR / 37° Flare-SAE J514 Swivel Nut / Male 37° Flare-SAE J514 - Tee



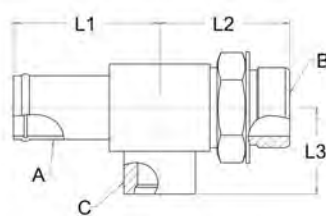
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
210-2015	7/16-20	-4	30.3	9/16-18	-6	31.8	9/16-18	-6	26.9	Steel

Male STOR / Hose Bead / Hose Bead - Tee



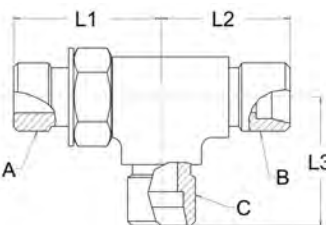
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Hose ID (mm)	Dash Size	L2 Length	Hose ID (mm)	Dash Size	L3 Length	
230-3045	1 1/16-12	-12	49.3	19.05	-12	52.3	19.05	-12	52.3	Steel
177-9567	1 5/8-12	-20	57.2	31.75	-20	60.3	25.40	-16	60.3	Steel

Male STOR / Hose Bead / STOR Port - Tee



Part Number	End A			End B			End C			Material
	Hose ID (mm)	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
310-4012	25.40	-16	58	1 5/16-12	-16	59.69	3/4-16	-8	34.5	Steel

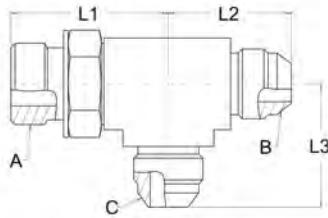
Male STOR / Male 24° Flareless-SAE J514 / Male 24° Flareless-SAE J514 - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
1P-0270	1/2-20	-5	27.7	1/2-20	-5	24.1	1/2-20	-5	24.1	Steel

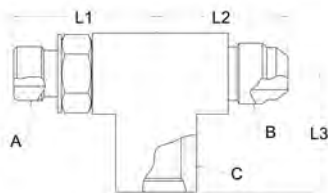
Tee Adapters

Male STOR / Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 - Tee



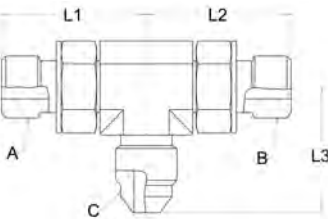
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
030-7957	7/16-20	-4	26.2	7/16-20	-4	22.6	7/16-20	-4	22.6	Steel
104-9200	7/16-20	-4	60	7/16-20	-4	22.6	7/16-20	-4	22.6	Steel
2P-8098	7/16-20	-4	30.3	9/16-18	-6	26.9	9/16-18	-6	26.9	Steel
031-6281	1/2-20	-5	28.7	1/2-20	-5	24.1	1/2-20	-5	24.1	Steel
6M-6853	9/16-18	-6	31.8	9/16-18	-6	26.9	9/16-18	-6	26.9	Steel
115-8730	3/4-16	-8	36.8	9/16-18	-6	29.2	3/4-16	-8	31.8	Steel
5P-2191	3/4-16	-8	36.8	3/4-16	-8	31.8	7/16-20	-4	25.4	Steel
030-7959	3/4-16	-8	36.8	3/4-16	-8	31.8	3/4-16	-8	31.8	Steel
119-2604	7/8-14	-10	43.2	3/4-16	-8	33.8	3/4-16	-8	33.8	Steel
521-5508	7/8-14	-10	43.2	3/4-16	-8	33.8	3/4-16	-8	33.8	Steel
031-4136	7/8-14	-10	43.2	7/8-14	-10	36.8	7/8-14	-10	36.8	Steel
2P-7211	1 1/16-12	-12	49.3	1 1/16-12	-12	42.2	1 1/16-12	-12	42.2	Steel
030-7960	1 5/16-12	-16	52.1	1 5/16-12	-16	46	1 5/16-12	-16	46	Steel

Male STOR / Male 37° Flare-SAE J514 / STOR Port - Tee



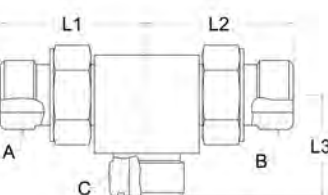
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
6V-6967	1/2-20	-5	33.5	9/16-18	-6	31	1/2-20	-5	27.8	Steel
8C-2948	9/16-18	-6	35.8	9/16-18	-6	31	9/16-18	-6	22.9	Steel
5P-0220	1 5/16-12	-16	52.07	1 5/16-12	-16	45.97	1 1/16-12	-12	38.1	Steel

Male STOR / Male STOR / Male 37° Flare-SAE J514 - Tee



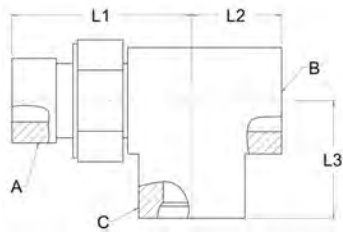
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
168-9984	7/16-20	-4	26.2	7/16-20	-4	26.2	7/16-20	-4	22.6	Steel
168-3357	7/16-20	-4	30.3	9/16-18	-6	31.8	9/16-18	-6	26.9	Steel

Male STOR / Male STOR / Male ORFS - Tee



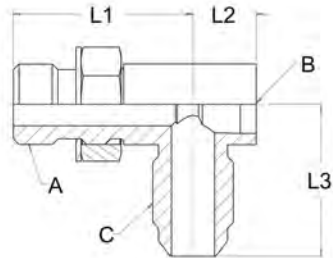
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
304-6749	3/4-16	-8	40.6	3/4-16	-8	40.6	13/16-16	-8	28	Steel

Male STOR / Metric Flat Face-ISO 9974 Port / STOR Port - Tee



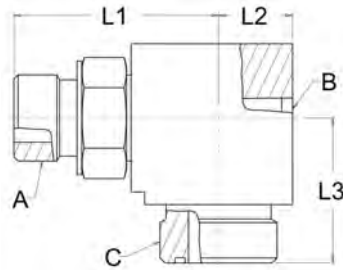
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
498-3803	3/4-16	-8	40.6	M14x1.5		20.3	9/16-18	-6	25	Steel

Male STOR / NPTF Port / Male 37° Flare-SAE J514 - Tee



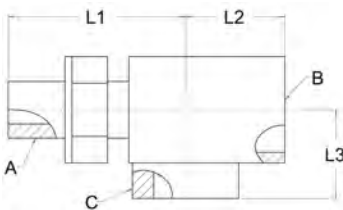
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
5P-4375	9/16-18	-6	31.8	1/8-27	-2	11.2	9/16-18	-6	26.9	Steel

Male STOR / NPTF Port / Male ORFS - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
141-4735	7/8-14	-10	52.7	1/8-27	-2	18.64	1 3/16-12	-12	37.3	Steel

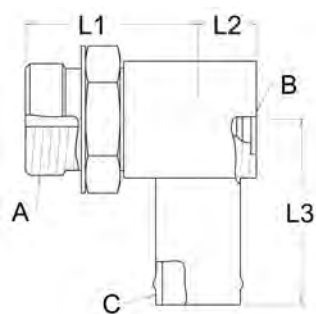
Male STOR / STOR Port / BSPP STOR-JIS B2351 Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Thread Size	L2 Length	Thread Size	Thread Size	L3 Length	
229-8728	3/8-24	-3	25	7/16-20	-4	14	1/8-28	-2	12.5	Steel

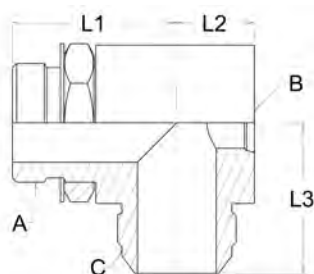
Tee Adapters

Male STOR / STOR Port / Hose Bead - Tee



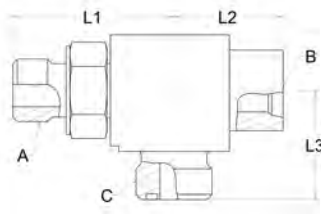
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Hose ID (mm)	Dash Size	L3 Length	
115-4184	9/16-18	-6	34.93	9/16-18	-6	24.79	9.52	-6	49.28	Steel
9Y-9168	7/8-14	-10	44	7/16-20	-4	21	19.05	-12	50	Steel
324-9781	1 1/16-12	-12	49.3	3/4-16	-8	33	25.40	-16	45	Steel
341-0105	1 5/16-12	-16	51.8	7/16-20	-4	17.5	25.40	-16	55.6	Steel

Male STOR / STOR Port / Male 37° Flare-SAE J514 - Tee



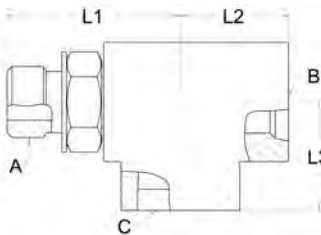
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
203-1854	1 5/16-12	-16	57.2	3/4-16	-8	22.5	1 5/8-12	-20	52.3	Steel
448-9018	1 5/8-12	-20	57.2	3/4-16	-8	27	1 5/8-12	-20	52.3	Steel

Male STOR / STOR Port / Male ORFS - Tee



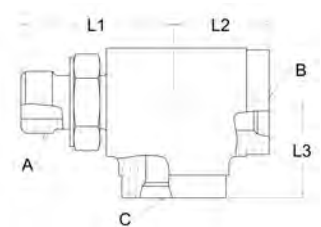
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
8T-3313	7/16-20	-4	32.7	9/16-18	-6	21.5	9/16-18	-4	26.5	Steel
128-5890	7/16-20	-4	34.79	9/16-18	-6	23.62	11/16-16	-6	25.91	Steel
201-9170	9/16-18	-6	36.8	7/16-20	-4	17	9/16-18	-4	23.7	Steel
503-6541	9/16-18	-6	37	7/16-20	-4	25	11/16-16	-6	25	Steel
8C-3309	9/16-18	-6	36.8	9/16-18	-6	21.5	9/16-18	-4	23.5	Steel
126-6872	9/16-18	-6	37	9/16-18	-6	25	11/16-16	-6	25	Steel
9X-2492	9/16-18	-6	28	3/4-16	-8	40.6	13/16-16	-8	28	Steel
213-7731	3/4-16	-8	43	9/16-18	-6	24.5	11/16-16	-6	26.5	Steel
268-1599	3/4-16	-8	45.7	3/4-16	-8	33.3	11/16-16	-6	29.2	Steel
156-8835	7/8-14	-10	50	9/16-18	-6	33	13/16-16	-8	34	Steel
260-9216	7/8-14	-10	50	9/16-18	-6	29.2	1-14	-10	33.3	Steel
278-6493	1 1/16-12	-12	55.1	9/16-18	-6	37.3	1-14	-10	36.3	Steel
8T-8901	1 1/16-12	-12	61.5	1 1/16-12	-12	37.3	1 3/16-12	-12	43.7	Steel
250-1457	1 5/16-12	-16	59.5	9/16-18	-6	35.6	1 7/16-12	-16	41.5	Steel
213-3455	1 5/16-12	-16	59.7	7/8-14	-10	41.7	1 7/16-12	-16	41.7	Steel
369-6890	1 5/16-12	-16	59.7	1 1/16-12	-12	57.2	1 7/16-12	-16	41.7	Steel
239-1833	1 5/16-12	-16	79.7	1 5/16-12	-16	54	1 7/16-12	-16	41.7	Steel
296-6939	1 5/16-12	-16	59.5	1 5/16-12	-16	105.3	1 7/16-12	-16	41.5	Steel

Male STOR / STOR Port / NPTF Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
9X-2296	7/16-20	-4	35	7/16-20	-4	22	1/4-18	-4	22	Steel
233-4462	9/16-18	-6	35.1	9/16-18	-6	21.8	3/8-18	-6	21.8	Steel

Male STOR / STOR Port / STOR Port - Tee



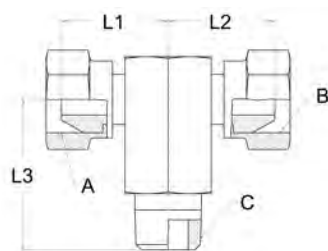
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
186-4045	7/16-20	-4	34.8	7/16-20	-4	17	7/16-20	-4	17	Steel
241-6160	7/16-20	-4	31.2	7/16-20	-4	18.8	7/16-20	-4	18.8	Steel
395-7291	7/16-20	-4	31.2	7/16-20	-4	18.8	7/16-20	-4	18.8	Steel
369-6869	7/16-20	-4	40.6	9/16-18	-6	28	9/16-18	-6	28	Steel
41-0900	9/16-18	-6	39	7/16-20	-4	20	9/16-18	-6	17	Steel

Tee Adapters

Male STOR / STOR Port / STOR Port - Tee (Cont'd.)

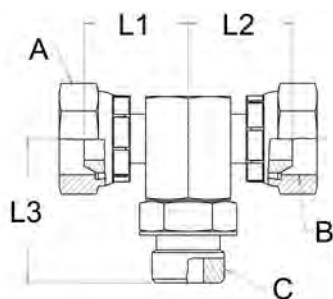
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
4I-1694	9/16-18	-6	41	9/16-18	-6	25	9/16-18	-6	19	Steel
304-8022	9/16-18	-6	35.1	9/16-18	-6	21.8	9/16-18	-6	21.8	Steel
313-3471	9/16-18	-6	39.8	9/16-18	-6	24.5	9/16-18	-6	24.5	Steel
3E-7410	9/16-18	-6	34.8	9/16-18	-6	25	9/16-18	-6	25	Steel
210-2768	9/16-18	-6	39.4	3/4-16	-8	28	9/16-18	-6	19	Steel
105-7704	3/4-16	-8	40.6	9/16-18	-6	28	9/16-18	-6	28	Steel
268-6133	3/4-16	-8	40.6	3/4-16	-8	23.7	3/8-24	-3	29	Steel
118-0911	3/4-16	-8	40.6	3/4-16	-8	33.3	3/4-16	-8	33.3	Steel
309-5126	7/8-14	-10	46	7/8-14	-10	30	7/8-14	-10	30	Steel
380-7362	1 1/16-12	-12	55.1	7/16-20	-4	28	9/16-18	-6	28	Steel
208-0616	1 1/16-12	-12	58.8	3/4-16	-8	20	3/8-24	-3	29	Steel
287-7342	1 1/16-12	-12	55.1	1 1/16-12	-12	38.1	1 1/16-12	-12	38.1	Steel
1U-8302	1 5/16-12	-16	47.37	1 5/16-12	-16	47.63	9/16-18	-6	28.58	Steel

NPSM Swivel Nut / NPSM Swivel Nut / Male NPTF - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
3S-6115	1/4-18	-4	21	1/4-18	-4	21	1/4-18	-4	31	Steel
003-6997	1/4-18	-4	23.35	1/4-18	-4	23.35	1/2-14	-8	45.2	Steel
7J-5996	3/8-18	-6	27.7	3/8-18	-6	27.7	3/8-18	-6	38.9	Steel
4D-4917	1/2-14	-8	25	1/2-14	-8	25	1/2-14	-8	45.9	Steel

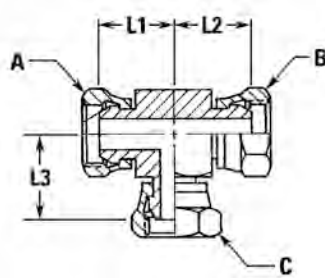
NPSM Swivel Nut / NPSM Swivel Nut / Male STOR - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
5P-7930	1/2-14	-8	27.5	1/2-14	-8	27.5	3/4-16	-8	38.1	Steel

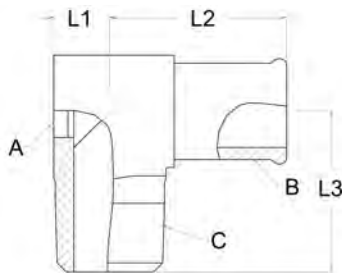
Tee Adapters

NPSM Swivel Nut / NPSM Swivel Nut / NPSM Swivel Nut - Tee



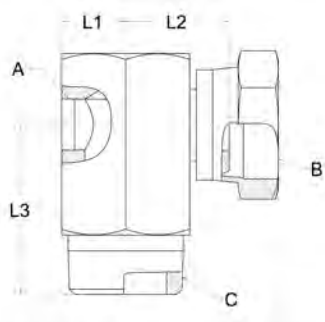
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
4D-9976	1/4-18	-4	21	1/4-18	-4	21	1/4-18	-4	19.8	Steel

NPTF Port / Hose Bead / Male NPTF - Tee



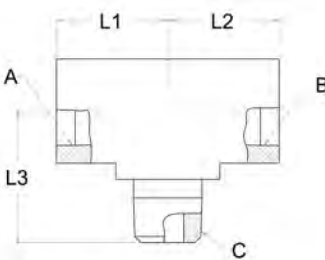
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Hose ID (mm)	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
6V-0676	1/8-27	-2	0	19.05	-12	34.92	1/2-14	-8	31.75	Brass

NPTF Port / NPSM Swivel Nut / Male NPTF - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
8X-6293	1/2-14	-8	27	1 1/2-11.5	-24	43.7	1 1/2-11.5	-24	71.4	Steel

NPTF Port / NPTF Port / Male NPTF - Tee



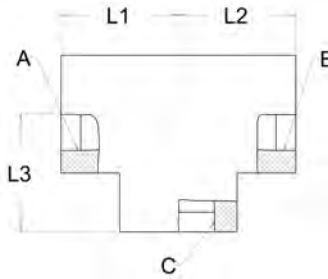
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
6V-1240	1/8-27	-2	16.8	1/8-27	-2	16.8	1/8-27	-2	19.8	Steel
270-6959	1/8-27	-2	9.55	1/8-27	-2	9.55	1/8-27	-2	31.7	Steel
004-5933	1/4-18	-4	22.4	1/4-18	-4	22.4	1/4-18	-4	27.7	Steel
316-8399	1/4-18	-4	25	1/4-18	-4	25	1/4-18	-4	24	Steel
6V-3530	3/8-18	-6	21.3	3/8-18	-6	21.3	3/8-18	-6	24.6	Brass
002-5299	3/8-18	-6	25.9	3/8-18	-6	25.9	3/8-18	-6	31	Steel
033-2177	1/2-14	-8	31.2	1/2-14	-8	31.2	1/2-14	-8	37.3	Steel

Tee Adapters

NPTF Port / NPTF Port / Male NPTF - Tee (Cont'd.)

Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
5P-8753	3/4-14	-12	34.5	3/4-14	-12	34.5	3/4-14	-12	40.4	Steel
2P-1306	1-11.5	-16	41.1	1-11.5	-16	41.1	1-11.5	-16	50	Steel

NPTF Port / NPTF Port / NPTF Port - Tee



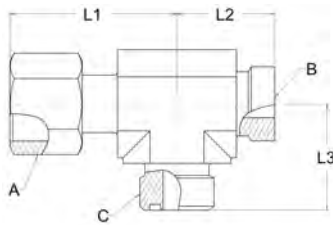
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
3B-7900	1/8-27	-2	13.7	1/8-27	-2	13.7	1/8-27	-2	13.7	Brass
5P-3741	1/8-27	-2	16.8	1/8-27	-2	16.8	1/8-27	-2	16.8	Steel
9B-1964	1/8-27	-2	19.8	1/8-27	-2	19.8	1/4-18	-4	19.8	Brass
9U-6389	1/4-18	-4	18.25	1/4-18	-4	18.25	1/8-27	-2	15.88	Brass
3B-7762	1/4-18	-4	17.5	1/4-18	-4	17.5	1/4-18	-4	17.5	Brass
8B-1261	1/4-18	-4	20.6	1/4-18	-4	20.6	1/4-18	-4	20.6	Iron
006-0210	1/4-18	-4	22.4	1/4-18	-4	22.4	1/4-18	-4	22.4	Steel
6V-1739	3/8-18	-6	24	3/8-18	-6	24	1/4-18	-4	24	Steel
6B-2982	3/8-18	-6	23.8	3/8-18	-6	23.8	3/8-18	-6	23.8	Iron
003-8470	3/8-18	-6	25.9	3/8-18	-6	25.9	3/8-18	-6	25.9	Steel
2L-3623	1/2-14	-8	28.6	1/4-18	-4	28.6	1/2-14	-8	28.6	Iron
2L-0332	1/2-14	-8	27	1/2-14	-8	27	3/8-18	-6	27	Iron
8F-0884	1/2-14	-8	25.7	1/2-14	-8	25.7	1/2-14	-8	25.7	Brass
5B-8979	1/2-14	-8	28.6	1/2-14	-8	28.6	1/2-14	-8	28.6	Iron
1Y-0413	1/2-14	-8	31.2	1/2-14	-8	31.2	1/2-14	-8	31.2	Steel
3L-3358	1/2-14	-8	28.4	1/2-14	-8	28.4	3/4-14	-12	33.3	Iron
8C-3346	1/2-14	-8	42.9	1 1/2-11.5	-24	49.3	1 1/2-11.5	-24	49.3	Steel
473-6155	3/4-14	-12	33.3	1/4-18	-4	33.3	3/4-14	-12	33.3	Iron
5L-3993	3/4-14	-12	30.2	1/2-14	-8	28.5	1/2-14	-8	31.8	Iron
473-6154	3/4-14	-12	33.3	3/4-14	-12	33.3	1/4-18	-4	33.3	Iron
004-2378	3/4-14	-12	34.5	3/4-14	-12	34.5	3/4-14	-12	34.5	Brass
1L-8444	3/4-14	-12	33.3	3/4-14	-12	33.3	3/4-14	-12	33.3	Iron
6F-0496	3/4-14	-12	33.3	3/4-14	-12	33.3	1-11.5	-16	38.1	Iron
2N-3599	1-11.5	-16	35.1	1-11.5	-16	35.1	3/4-14	-12	38.4	Steel
149-5210	1-11.5	-16	38.1	1-11.5	-16	38.1	1-11.5	-16	38.1	Iron
4B-7770	1-11.5	-16	38.1	1-11.5	-16	38.1	1-11.5	-16	38.1	Steel
520-8518	1-11.5	-16	51	1-11.5	-16	51	1-11.5	-16	51	Steel
278-4529	1-11.5	-16	69.6	3-8	-48	78.2	3-8	-48	78.2	Iron
1Y-7453	1 1/4-11.5	-20	38.1	1 1/4-11.5	-20	38.1	3/4-14	-12	41.28	Iron
6V-6940	1 1/4-11.5	-20	43.2	1 1/4-11.5	-20	43.2	1 1/4-11.5	-20	43.2	Brass

Tee Adapters

NPTF Port / NPTF Port / NPTF Port - Tee (Cont'd.)

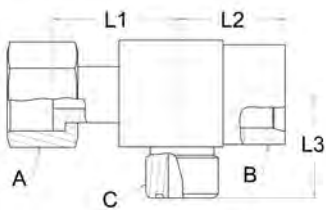
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
8B-9579	1 1/4-11.5	-20	44.45	1 1/4-11.5	-20	44.45	1 1/4-11.5	-20	44.45	Iron
491-5272	1 1/4-11.5	-20	43.2	1 1/4-11.5	-20	43.2	1 1/4-11.5	-20	43.2	SST
1L-2782	1 1/2-11.5	-24	49.2	1 1/2-11.5	-24	49.2	1 1/2-11.5	-24	49.2	Iron
6F-7701	1 1/2-11.5	-24	54.1	1 1/2-11.5	-24	54.1	1 1/2-11.5	-24	54.1	Iron
439-1877	1 1/2-11.5	-24	49.3	1 1/2-11.5	-24	49.3	1 1/2-11.5	-24	49.3	SST
6V-8251	1 1/2-11.5	-24	51	1 1/2-11.5	-24	51	1 1/2-11.5	-24	51	Steel
328-7438	2-11.5	-32	63.5	2-11.5	-32	63.5	2-11.5	-32	63.5	Iron
385-5789	2-11.5	-32	57.2	2-11.5	-32	57.2	2-11.5	-32	57.2	Iron
6L-7322	2-11.5	-32	57	2-11.5	-32	57	2-11.5	-32	57	Iron
421-6203	2-11.5	-32	57.2	2-11.5	-32	57.2	2-11.5	-32	57.2	SST

ORFS Swivel Nut / Metric Flat Face-ISO 9974 Port / Male ORFS - Tee



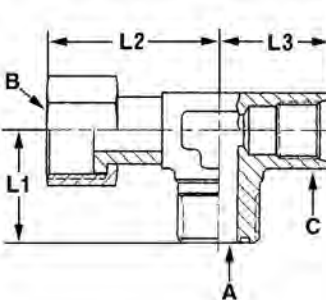
Part Number	End A			End B		End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	L2 Length	Thread Size	Dash Size	L3 Length	
125-4085	11/16-16	-6	29	M12x1.5	23	11/16-16	-6	25	Steel

ORFS Swivel Nut / Metric STOR Port / Male ORFS - Tee



Part Number	End A			End B		End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	L2 Length	Thread Size	Dash Size	L3 Length	
304-7980	11/16-16	-6	31.2	M16x1.5	24.9	11/16-16	-6	24.9	Steel

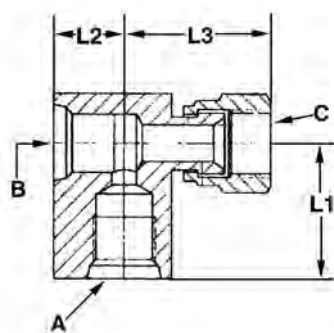
ORFS Swivel Nut / STOR Port / Male ORFS - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
081-5645	13/16-16	-8	28	13/16-16	-8	38	9/16-18	-6	28	Steel
304-8025	1 3/16-12	-12	37.6	1 3/16-12	-12	46.5	7/16-20	-4	23.4	Steel

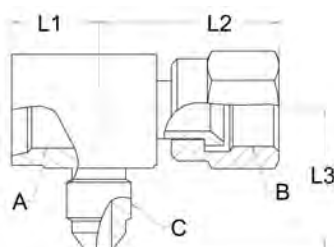
Tee Adapters

ORFS Swivel Nut / STOR Port / STOR Port - Tee



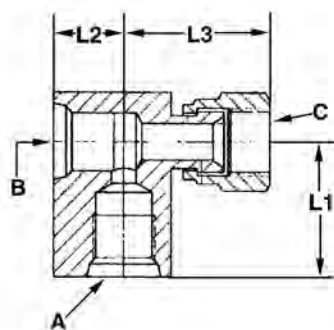
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
51-4376	9/16-18	-6	28	9/16-18	-6	15	11/16-16	-6	23.9	Steel
196-9858	1 1/16-12	-12	41.2	3/4-16	-8	37.4	1 3/16-12	-12	51.6	Steel

STOR Port / 37° Flare-SAE J514 Swivel Nut / Male 37° Flare-SAE J514 - Tee



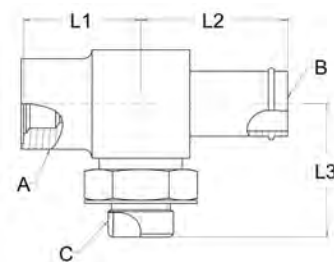
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
104-9113	9/16-18	-6	15	9/16-18	-6	31	7/16-20	-4	24	Steel

STOR Port / 37° Flare-SAE J514 Swivel Nut / STOR Port - Tee



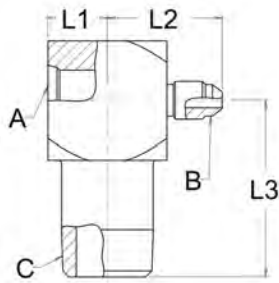
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
51-4075	7/16-20	-4	17	7/16-20	-4	15	7/16-20	-4	29.8	Steel
51-4015	7/16-20	-4	20	9/16-18	-6	15	9/16-18	-6	31	Steel
51-3190	9/16-18	-6	28	9/16-18	-6	15	9/16-18	-6	31	Steel
237-2849	7/8-14	-10	30	7/8-14	-10	19.8	7/8-14	-10	30.5	Steel

STOR Port / Hose Bead / Male STOR - Tee



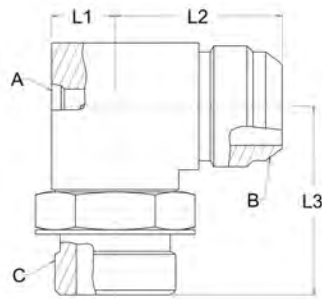
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Hose ID (mm)	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
283-9579	3/4-16	-8	45.6	25.40	-16	57.2	1 5/16-12	-16	51.8	Steel

STOR Port / Male 37° Flare-SAE J514 / Male NPTF - Tee



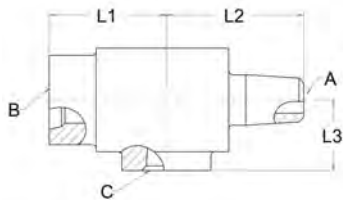
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
5P-1271	7/16-20	-4	31	7/16-20	-4	26.7	1/8-27	-2	22.2	Steel
451-0421	3/4-16	-8	17.5	7/16-20	-4	33.7	3/4-14	-12	51.7	Steel

STOR Port / Male 37° Flare-SAE J514 / Male STOR - Tee



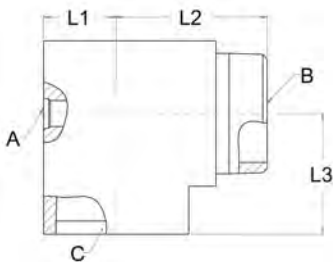
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
144-6650	7/16-20	-4	17.5	1 5/16-12	-16	46	1 5/16-12	-16	52	Steel
392-0660	7/16-20	-4	30	1 5/8-12	-20	52.3	1 5/16-12	-16	57.2	Steel
226-2946	9/16-18	-6	17	1 1/16-12	-12	42.2	1 5/16-12	-16	52.1	Steel
120-9127	3/4-16	-8	31.2	3/4-16	-8	36.1	3/4-16	-8	41.1	Steel
154-3291	3/4-16	-8	31.2	3/4-16	-8	36.1	1 1/16-12	-12	47	Steel
351-1372	1 1/16-12	-12	19.1	1 1/16-12	-12	48.4	1 5/16-12	-16	55.1	Steel

STOR Port / Male BSPT-ISO 7-1 / BSPT-ISO 7-1 Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L3 Length	
242-8717	1/8-28	-2	29.3	7/16-20	-4	25	1/8-28	-2	15	Steel

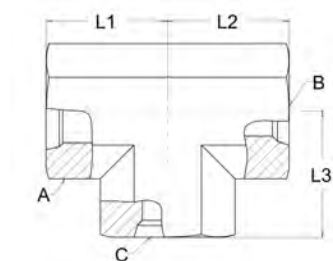
STOR Port / Male NPTF / NPTF Port - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
516-8704	9/16-18	-6	36.6	2-11.5	-32	76.2	2-11.5	-32	60.7	Steel

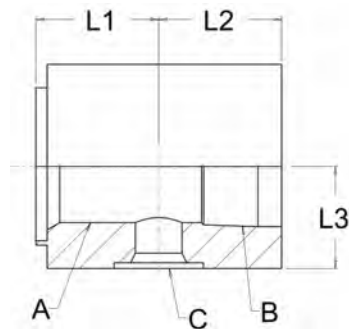
Tee Adapters

STOR Port / Metric STOR Port / Metric STOR Port - Tee



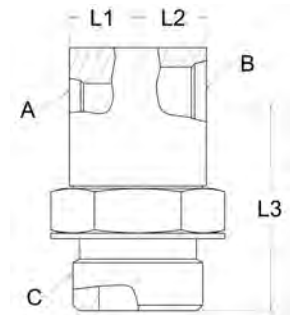
Part Number	End A			End B		End C		Material
	Thread Size	Dash Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
387-2637	9/16-18	-6	25	M12x1.5	25	M12x1.50	25.9	Steel

STOR Port / NPTF Port / STOR Port - Tee



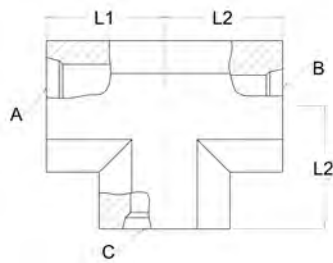
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
1U-8300	1 5/16-12	-16	34.4	1-11.5	-16	34.4	9/16-18	-6	28.58	Steel

STOR Port / STOR Port / Male STOR - Tee



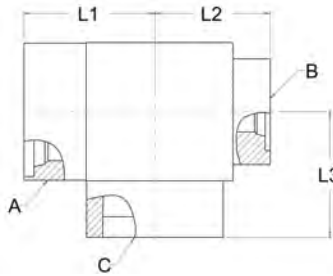
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
451-0425	7/16-20	-4	15.875	3/4-16	-8	15.875	1 3/16-12	-14	47.8	Steel
216-1302	9/16-18	-6	28	9/16-18	-6	28	7/16-20	-4	34.5	Steel
8C-8431	9/16-18	-6	24.5	9/16-18	-6	24.5	9/16-18	-6	40.8	Steel
6V-1625	9/16-18	-6	21	3/4-16	-8	21	9/16-18	-6	35	Steel
142-7620	9/16-18	-6	36.5	3/4-16	-8	23.5	7/8-14	-10	51	Steel
310-5909	9/16-18	-6	32	1 1/16-12	-12	32	7/8-14	-10	51.3	Steel
168-3332	3/4-16	-8	22.4	3/4-16	-8	22.4	3/4-16	-8	40.4	Steel
268-1562	7/8-14	-10	24	7/16-20	-4	24	7/8-14	-10	49.3	Steel
1U-8303	1 5/16-12	-16	42.2	9/16-18	-6	34.25	1 5/16-12	-16	48.01	Steel
448-9011	1 5/16-12	-16	33.8	1 5/16-12	-16	33.8	1 5/16-12	-16	57.15	Steel
174-4360	1 5/8-12	-20	48.77	9/16-18	-6	31.43	1 5/8-12	-20	54.24	Steel

STOR Port / STOR Port / Metric STOR Port - Tee



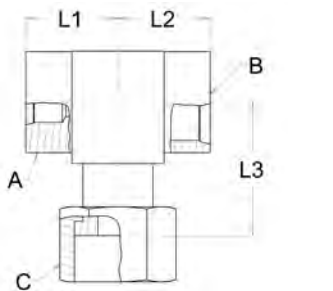
Part Number	End A			End B			End C		Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	L3 Length	
390-2263	3/4-16	-8	25	9/16-18	-6	25	M16x1.50	25.9	Steel

STOR Port / STOR Port / NPTF Port - Tee



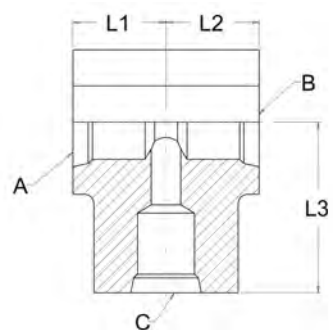
Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
1U-8301	1 5/16-12	-16	42.2	9/16-18	-6	37.18	1-11.5	-16	40.39	Steel

STOR Port / STOR Port / ORFS Swivel Nut - Tee



Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
313-3473	9/16-18	-6	32	1 1/16-12	-12	32	1 3/16-12	-12	46.3	Steel

STOR Port / STOR Port / STOR Port - Tee

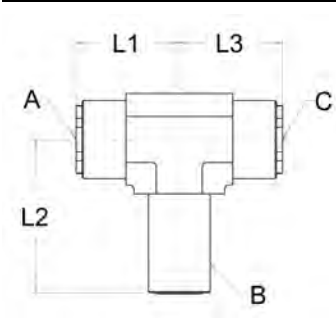


Part Number	End A			End B			End C			Material
	Thread Size	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Thread Size	Dash Size	L3 Length	
196-8722	9/16-18	-6	16.4	9/16-18	-6	16.4	7/16-20	-4	30	Steel
450-0487	1 5/16-12	-16	38.5	1 5/16-12	-16	38.5	1 5/16-12	-16	38.5	Steel

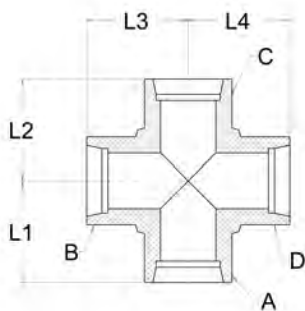
Tee Adapters

WEO Plug-In ORFS - Tee

	End A		End B		End C			Material
	Dash Size	L1 Length	Thread Size	Dash Size	L2 Length	Dash Size	L3 Length	
Part Number								
529-7515	-8	42.5	1 - 14	-10	63	-8	42.5	Steel

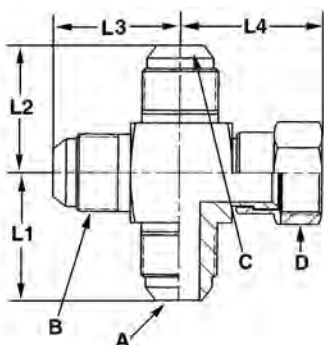


24° Cone ISO 8434-1 Male / Male / Male / Male-Cross



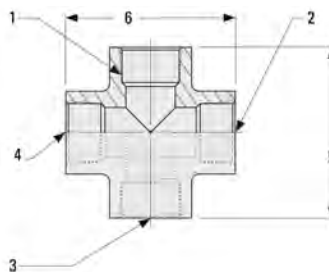
Part Number	End A		End B		End C		End D		L	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size		
422-3520	M12 x 1	8	M12 x 1	8	M12 x 1	8	M12 x 1	8	11.35	SST

37° JIC Male / Male / Male / Swivel Nut-Cross



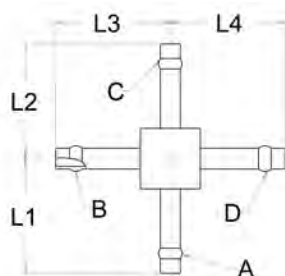
Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size					
3E-2344	7/8 - 14	-10	7/8 - 14	-10	7/8 - 14	-10	7/8 - 14	-10	36.8	36.8	36.8	41.1	Steel

ASME NPT Pipe Port / Port / Port / Port-Cross



Part Number	End 1		End 2		End 3		End 4		Length 5	Length 6	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size			
319-6192	1/2 - 14	-8	1/2 - 14	-8	1/2 - 14	-8	1/2 - 14	-8	63.6	63.6	Iron
3D-4022	1/2 - 14	-8	1/2 - 14	-8	1/2 - 14	-8	1/2 - 14	-8	57	57	Iron
8L-7971	3/4 - 14	-12	3/4 - 14	-12	3/4 - 14	-12	3/4 - 14	-12	66.7	66.7	Iron
5P-1907	1 - 11 1/2	-16	1 - 11 1/2	-16	1 - 11 1/2	-16	1 - 11 1/2	-16	76.2	76.2	Iron
349-0734	2 - 11 1/2	-32	2 - 11 1/2	-32	2 - 11 1/2	-32	2 - 11 1/2	-32	127	127	Iron

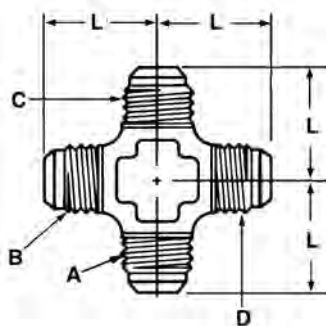
Hose Bead Male / Male / Male / Male-Cross



Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Hose ID (mm)	Dash Size	Hose ID (mm)	Dash Size	Hose ID (mm)	Dash Size	Hose ID (mm)	Dash Size					
247-0067	15.88	-10	19.05	-12	19.05	-12	6.35	-4	44	46	46	43	Steel

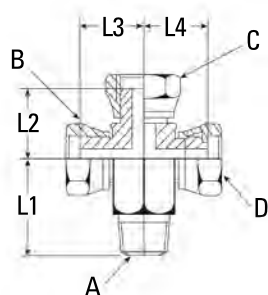
Cross Adapters

JIC 37° Male / JIC 37° Male / JIC 37° Male / JIC 37° Male-Cross



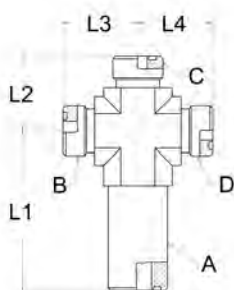
Part Number	End A			End B		End C		End D		L	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread		
6V-0426	7/16 - 20	-4	7/16 - 20	-4	7/16 - 20	-4	7/16 - 20	-4	7/16 - 20	22.6	Steel
6S-2231	9/16 - 18	-6	9/16 - 18	-6	9/16 - 18	-6	9/16 - 18	-6	9/16 - 18	26.9	Steel
7J-6742	3/4 - 16	-8	3/4 - 16	-8	3/4 - 16	-8	3/4 - 16	-8	3/4 - 16	31.8	Steel
5P-5613	1 1/16 - 12	-12	1 1/16 - 12	-12	1 1/16 - 12	-12	1 1/16 - 12	-12	1 1/16 - 12	42.2	Steel

NPTF Male / NPSM Swivel Nut / NPSM Swivel Nut / NPSM Swivel Nut-Cross



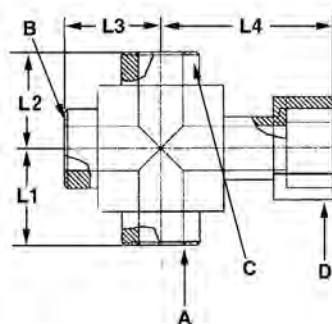
Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size					
6V-0581	1/2 - 14	-8	1/2 - 14	-8	1/2 - 14	-8	1/2 - 14	-8	45.2	25.4	27.5	27.5	Steel

ORFS Bulkhead / Male / Male / Male-Cross



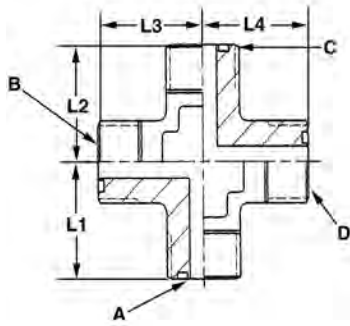
Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size					
398-5617	13/16 - 16	-8	11/16 - 16	-6	11/16 - 16	-6	11/16 - 16	-6	55.5	26	26	26	Steel
287-7336	13/16 - 16	-8	13/16 - 16	-8	13/16 - 16	-8	13/16 - 16	-8	55.5	28	28	28	Steel
364-7708	13/16 - 16	-8	13/16 - 16	-8	1 7/16 - 12	-16	1 7/16 - 12	-16	67	41	41.5	41.5	Steel
488-2774	13/16 - 16	-8	1 3/16 - 12	-12	1 3/16 - 12	-12	13/16 - 16	-8	62	38.5	38.5	35.4	Steel
224-2684	1 - 14	-10	13/16 - 16	-8	1 - 14	-10	11/16 - 16	-6	63	32	32	26.2	Steel

ORFS Male / Male / Male / Swivel-Nut Cross



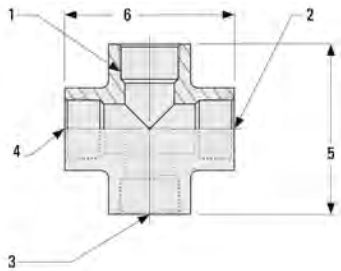
Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size					
386-6209	9/16 - 18	-4	9/16 - 18	-4	9/16 - 18	-4	9/16 - 18	-4	21.5	21.5	21.5	26.5	Brass
267-4035	9/16 - 18	-4	9/16 - 18	-4	9/16 - 18	-4	9/16 - 18	-4	21.5	21.5	21.5	26.5	Steel
207-2484	13/16 - 16	-8	13/16 - 16	-8	13/16 - 16	-8	13/16 - 16	-8	28	28	28	38	Steel
233-2300	1 - 14	-10	1 - 14	-10	1 - 14	-10	1 - 14	-10	33.3	33.3	33.3	41.2	Steel
117-5208	1 7/16 - 12	-16	1 7/16 - 12	-16	1 7/16 - 12	-16	1 7/16 - 12	-16	41.5	41.5	41.5	53.5	Steel

ORFS Male / ORFS Male / ORFS Male / ORFS Male-Cross



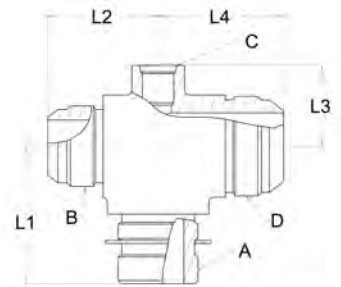
Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size					
7X-3406	11/16 - 16	-6	11/16 - 16	-6	11/16 - 16	-6	11/16 - 16	-6	25	25	25	25	Steel
260-9136	1 - 14	-10	1 - 14	-10	1 - 14	-10	1 - 14	-10	33.5	33.5	33.5	33.5	Steel
261-7957	1 3/16 - 12	-12	1 3/16 - 12	-12	1 3/16 - 12	-12	1 3/16 - 12	-12	37.5	37.5	37.5	37.5	Steel

SAE NPTF Pipe Port / Port / Port / Port-Cross



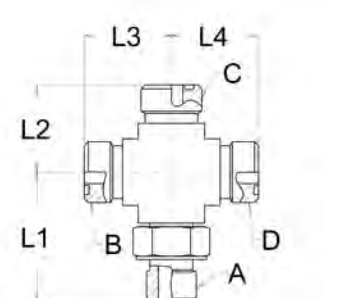
Part Number	End 1		End 2		End 3		End 4		Length 5	Length 6	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size			
5P-2423	1/8 - 27	-2	1/8 - 27	-2	1/8 - 27	-2	1/8 - 27	-2	33.5	33.5	Steel
194-4940	1/4 - 18	-4	1/4 - 18	-4	1/4 - 18	-4	1/4 - 18	-4	44.8	44.8	Steel
7B-0192	1/4 - 18	-4	1/4 - 18	-4	1/4 - 18	-4	1/4 - 18	-4	37	37	Brass
1Y-7446	3/8 - 18	-6	3/8 - 18	-6	3/8 - 18	-6	3/8 - 18	-6	50	50	Steel
6R-4061	3/8 - 18	-6	3/8 - 18	-6	3/8 - 18	-6	3/8 - 18	-6	41.6	41.6	Brass
130-5977	1/2 - 14	-8	1/2 - 14	-8	1/2 - 14	-8	1/2 - 14	-8	62.4	62.4	Steel
162-6615	1 - 11 1/2	-16	1 - 11 1/2	-16	1 - 11 1/2	-16	1 - 11 1/2	-16	82.2	82.2	SST
169-3678	1 1/2 - 11 1/2	-24	1 1/2 - 11 1/2	-24	1 1/2 - 11 1/2	-24	1 1/2 - 11 1/2	-24	105.6	105.6	Steel

STOR Male / 37° JIC Male / STOR Port / 37° JIC Male-Cross



Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size					
8C-6516	1 5/16 - 12	-16	1 5/16 - 12	-16	9/16 - 18	-6	1 5/8 - 12	-20	57.2	46	33.5	52.3	Steel
8T-7009	1 5/8 - 12	-20	1 5/8 - 12	-20	9/16 - 18	-6	1 5/8 - 12	-20	57.2	52.3	20.64	52.3	Steel

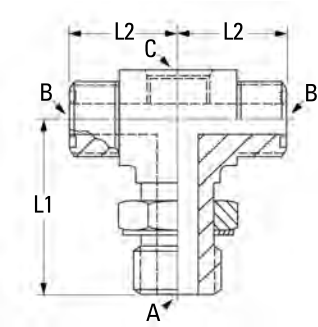
STOR Male / ORFS Male / ORFS Male / ORFS Male-Cross



Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size					
214-4508	9/16 - 18	-6	11/16 - 16	-6	11/16 - 16	-6	11/16 - 16	-6	37	25	25	25	Steel
197-9460	9/16 - 18	-6	13/16 - 16	-8	11/16 - 16	-6	13/16 - 16	-8	36.5	28	26.5	28	Steel
268-1645	3/4 - 16	-8	13/16 - 16	-8	13/16 - 16	-8	13/16 - 16	-8	40.5	28	28	28	Steel
513-9668	7/8 - 14	-10	1 - 14	-10	9/16 - 18	-4	1 - 14	-10	50	33.5	28	33.5	Steel
235-3572	1 1/16 - 12	-12	1 3/16 - 12	-12	1 3/16 - 12	-12	1 3/16 - 12	-12	55	37.5	37.5	37.5	Steel

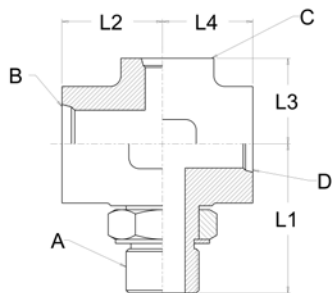
Cross Adapters

STOR Male / ORFS Male / STOR Port / ORFS Male-Cross



Part Number	End A		End B		End C		L1	L2	L3	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size				
163-6018	3/4 - 16	-8	11/16 - 16	-6	9/16 - 18	-6	40.6	25	11.1	Steel
081-5604	3/4 - 16	-8	11/16 - 16	-6	9/16 - 18	-6	39	25	28.5	Steel

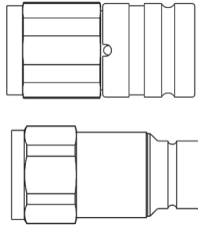
STOR Male / Port / Port / Port-Cross



Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size					
125-2589	3/8 - 24	-3	3/8 - 24	-3	3/8 - 24	-3	7/16 - 20	-4	33.27	11.18	20.57	11.05	Steel
260-9176	1 1/16 - 12	-12	1 1/16 - 12	-12	9/16 - 18	-6	3/4 - 16	-8	55.1	37.3	31.7	33.5	Steel

Quick Disconnect Couplers

ISO 16028 Quick Disconnects



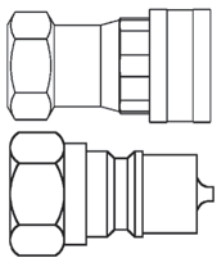
Part Number	Coupler Size mm - in	Coupler End Form	Threaded Connection Type	Thread Form	Thread Size	Dash Size	Body Material	Internal Seal Material	Maximum Working Pressure MPa	Caps
204-5098	6.3 - 0.25	Female	SAE STOR-SAE J1926	Port	9/16-18	-6	Steel	NBR	31.5	214-1447
152-8181	6.3 - 0.25	Male	SAE STOR-SAE J1926	Port	9/16-18	-6	Steel	NBR	31.5	214-1446
426-4049	6.3 - 0.25	Female	ORFS-SAE J1453	Bulk-head Male	11/16-16	-6	Steel	NBR	31.5	214-1447
426-4048	6.3 - 0.25	Male	ORFS-SAE J1453	Bulk-head Male	11/16-16	-6	Steel	NBR	31.5	214-1446
153-2997	10 - 0.375	Female	SAE STOR-SAE J1926	Port	3/4-16	-8	Steel	NBR	25	161-2561
421-6169	10 - 0.375	Male	SAE STOR-SAE J1926	Port	3/4-16	-8	Steel	NBR	25	161-2560
156-3600	10 - 0.375	Female	SAE STOR-SAE J1926	Male (Stud)	3/4-16	-8	Steel	NBR	25	161-2561
156-3631	10 - 0.375	Male	SAE STOR-SAE J1926	Male (Stud)	3/4-16	-8	Steel	NBR	25	161-2560
426-4050	10 - 0.375	Male	ORFS-SAE J1453	Bulk-head Male	13/16-16	-8	Steel	NBR	25	161-2560
426-4046	12.5 - 0.5	Female	SAE STOR-SAE J1926	Male (Stud)	3/4-16	-8	Steel	NBR	25	152-5717
426-4044	12.5 - 0.5	Male	SAE STOR-SAE J1926	Male (Stud)	3/4-16	-8	Steel	NBR	25	152-5718
153-2994	12.5 - 0.5	Female	SAE STOR-SAE J1926	Port	7/8-14	-10	Steel	NBR	25	152-5717
421-6171	12.5 - 0.5	Male	SAE STOR-SAE J1926	Port	7/8-14	-10	Steel	NBR	25	152-5718
193-8335	12.5 - 0.5	Female	ORFS-SAE J1453	Bulk-head Male	1-14	-10	Steel	NBR	25	152-5717
193-8334	12.5 - 0.5	Male	ORFS-SAE J1453	Bulk-head Male	1-14	-10	Steel	NBR	25	152-5718
195-6525	12.5 - 0.5	Female	SAE STOR-SAE J1926	Port	1-1/16-12	-12	Steel	NBR	25	152-5717
421-6170	12.5 - 0.5	Male	SAE STOR-SAE J1926	Port	1-1/16-12	-12	Steel	NBR	25	152-5718
241-6190	12.5 - 0.5	Female	ORFS-SAE J1453	Bulk-head Male	1-7/16-12	-16	Steel	NBR	25	152-5717
241-6189	12.5 - 0.5	Male	ORFS-SAE J1453	Bulk-head Male	1-7/16-12	-16	Steel	NBR	25	152-5718
426-4047	16 - 0.625	Female	SAE STOR-SAE J1926	Male (Stud)	7/8-14	-10	Steel	NBR	25	187-5302
426-4045	16 - 0.625	Male	SAE STOR-SAE J1926	Male (Stud)	7/8-14	-10	Steel	NBR	25	187-5174

Quick Disconnect Couplers

ISO 16028 Quick Disconnects (Cont'd.)

Part Number	Coupler Size mm - in	Coupler End Form	Threaded Connection Type	Thread Form	Thread Size	Dash Size	Body Material	Internal Seal Material	Maximum Working Pressure MPa	Caps
142-8949	16 - 0.625	Female	SAE STOR-SAE J1926	Port	1-1/16-12	-12	Steel	NBR	25	187-5302
142-8948	16 - 0.625	Male	SAE STOR-SAE J1926	Port	1-1/16-12	-12	Steel	NBR	25	187-5174
426-4042	19 - 0.75	Female	SAE STOR-SAE J1926	Port	1-1/16-12	-12	Steel	NBR	25	517-2484
426-4043	19 - 0.75	Male	SAE STOR-SAE J1926	Port	1-1/16-12	-12	Steel	NBR	25	517-2482
106-0401	19 - 0.75	Female	SAE STOR-SAE J1926	Port	1-5/16-12	-16	Steel	NBR	25	517-2484
106-0406	19 - 0.75	Male	SAE STOR-SAE J1926	Port	1-5/16-12	-16	Steel	NBR	25	517-2482
426-4017	25 - 1.00	Female	SAE STOR-SAE J1926	Port	1-5/8-12	-20	Steel	NBR	20	214-1453
426-4016	25 - 1.00	Male	SAE STOR-SAE J1926	Port	1-5/8-12	-20	Steel	NBR	20	214-1452

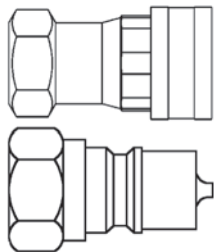
ISO 5675 Quick Disconnects



Part Number	Coupler Size mm - in	Coupler End Form	Threaded Connection Type	Thread Form	Thread Size	Dash Size	Body Material	Internal Seal Material	Maximum Working Pressure MPa	Caps
9X-2018	12.5 - 0.5	Male	NPTF-SAE J476/J514	Port	1/2-14	-8	Steel	NBR	25	159-6071
6V-0398	12.5 - 0.5	Female	SAE STOR-SAE J1926	Port	7/8-14	-10	Steel	NBR	25	168-4599
8R-3303*	12.5 - 0.5	Female	SAE STOR-SAE J1926	Port	7/8-14	-10	Steel	NBR	25	168-4599
8R-3304*	12.5 - 0.5	Female	SAE STOR-SAE J1926	Port	7/8-14	-10	Steel	NBR	25	168-4599
159-5898	12.5 - 0.5	Male	SAE STOR-SAE J1926	Port	7/8-14	-10	Steel	NBR	25	159-6071

* Part contains a manually operated ball valve.

ISO 7241 Series A Quick Disconnects



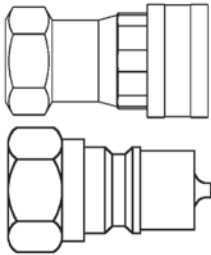
Part Number	Coupler Size mm - in	Coupler End Form	Threaded Connection Type	Thread Form	Thread Size	Dash Size	Body Material	Internal Seal Material	Maximum Working Pressure MPa	Caps
5R-5674	10 - 0.375	Female	NPTF-SAE J476/J514	Port	3/8-18	-6	Steel	NBR	31.5	5R-5676
5R-5675	10 - 0.375	Male	NPTF-SAE J476/J514	Port	3/8-18	-6	Steel	NBR	31.5	5R-5677
5R-6868	10 - 0.375	Female	SAE STOR-SAE J1926	Port	9/16-18	-6	Steel	NBR	31.5	5R-5676
5R-6867	10 - 0.375	Male	SAE STOR-SAE J1926	Port	9/16-18	-6	Steel	NBR	31.5	5R-5677

Quick Disconnect Couplers

ISO 7241 Series A Quick Disconnects (Cont'd.)

Part Number	Coupler Size mm - in	Coupler End Form	Threaded Connection Type	Thread Form	Thread Size	Dash Size	Body Material	Internal Seal Material	Maximum Working Pressure MPa	Caps
287-7278	12.5 - 0.5	Male	SAE STOR-SAE J1926	Port	3/4-16	-8	Steel	NBR	25	159-6071
5R-6307	16 - 0.625	Female	SAE STOR-SAE J1926	Port	3/4-16	-8	Steel	NBR	25	5R-6301
5R-6306	16 - 0.625	Male	SAE STOR-SAE J1926	Port	3/4-16	-8	Steel	NBR	25	5R-6302
5R-5700	20 - 0.75	Female	NPTF-SAE J476/J514	Port	3/4-14	-12	Steel	NBR	25	5R-5718
5R-5701	20 - 0.75	Male	NPTF-SAE J476/J514	Port	3/4-14	-12	Steel	NBR	25	5R-5719
5R-6304	20 - 0.75	Female	SAE STOR-SAE J1926	Port	1-1/16-12	-12	Steel	NBR	25	5R-5718
5R-6305	20 - 0.75	Male	SAE STOR-SAE J1926	Port	1-1/16-12	-12	Steel	NBR	25	5R-5719
173-7639	25 - 1.00	Female	SAE STOR-SAE J1926	Port	1-5/16-12	-16	Steel	NBR	20	116-0415
173-7638	25 - 1.00	Male	SAE STOR-SAE J1926	Port	1-5/16-12	-16	Steel	NBR	20	116-0416
6V-7301	25 - 1.00	Female	NPTF-SAE J476/J514	Port	1-11.5	-16	Steel	FKM	10	116-0416

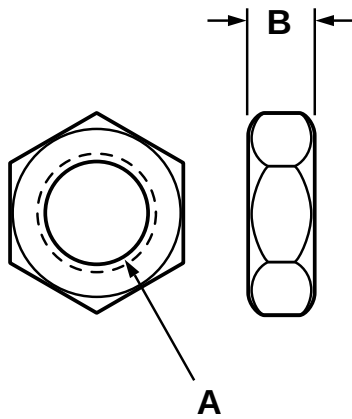
ISO 7241 Series B Quick Disconnects



Part Number	Coupler Size mm - in	Coupler End Form	Threaded Connection Type	Thread Form	Thread Size	Dash Size	Body Material	Internal Seal Material	Maximum Working Pressure MPa	Caps
5R-6303	6.3 - 0.25	Female	NPTF-SAE J476/J514	Port	1/4-18	-4	Brass	NBR	6.8	5R-6848
5R-6398	6.3 - 0.25	Male	NPTF-SAE J476/J514	Port	1/4-18	-4	Brass	NBR	6.8	5R-6847
5R-5560	6.3 - 0.25	Female	NPTF-SAE J476/J514	Port	1/4-18	-4	Steel	NBR	25	5R-6848
5R-5561	6.3 - 0.25	Male	NPTF-SAE J476/J514	Port	1/4-18	-4	Steel	NBR	25	5R-6847
5R-5724	10 - 0.375	Female	NPTF-SAE J476/J514	Port	3/8-18	-6	Brass	NBR	6.8	5R-6849
5R-5725	10 - 0.375	Male	NPTF-SAE J476/J514	Port	3/8-18	-6	Brass	NBR	6.8	5R-6846
5V-8610	12.5 - 0.5	Female	NPTF-SAE J476/J514	Port	1/2-14	-8	Brass	NBR	6.8	437-0893

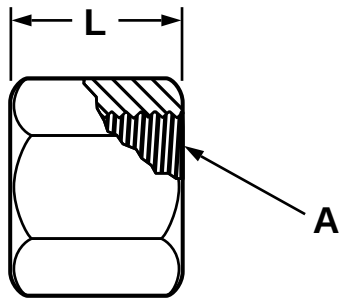
Swivel and Bulkhead Nuts

JIC 37° Bulkhead Nuts



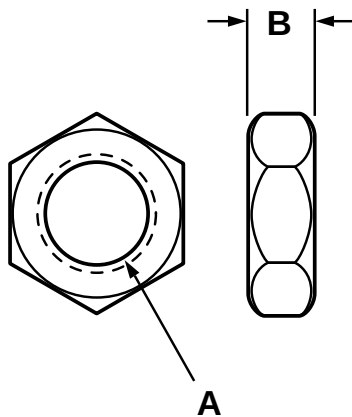
Part Number	THREAD DASH SIZE	THREAD SIZE	NUT THICKNESS (mm - in)
5B-3254	-4	7/16-20	6 - .24
2P-1279	-6	9/16-18	7 - .28
7F-2050	-8	3/4-16	8 - .31
7F-2060	-10	7/8-14	9 - .35
6K-8420	-12	1 1/16-12	10 - .39
2P-1286	-16	1 5/16-12	10 - .39
2V-2043	-20	1 5/8-12	10 - .39

JIC 37° Swivel Nuts



Part Number	THREAD DASH SIZE	THREAD SIZE	NUT THICKNESS (mm - in)
8L-3161	-4	7/16-20	16 - .63
001-7014	-5	1/2-20	17 - .67
3R-4437	-6	9/16-18	18 - .71
1P-1441	-8	3/4-16	21 - .83
5H-0275	-10	7/8-14	25 - .98
8M-0744	-12	1 1/16-12	26 - 1.02
6S-2898	-14	1 3/16-12	27 - 1.06
1P-0043	-16	1 5/16-12	28 - 1.10
2P-8148	-20	1 5/8-12	31 - 1.22

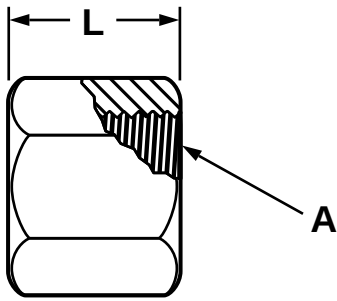
ORFS Bulkhead



Part Number	THREAD DASH SIZE	THREAD SIZE	NUT THICKNESS (mm - in)
6V-9168	-6	11/16-16	8 - .31
6V-9169	-8	13/16-16	9 - .35
6V-9170	-10	1-14	10 - .39
6V-9172	-16	1 7/16-12	10 - .39
6V-9173	-20	1 11/16-12	10 - .39

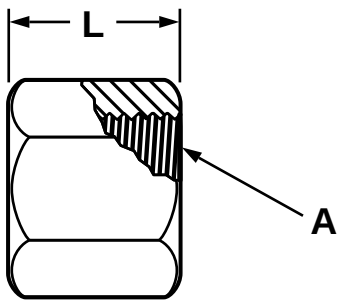
Swivel and Bulkhead Nuts

ORFS Swivel Nuts Non-Plated



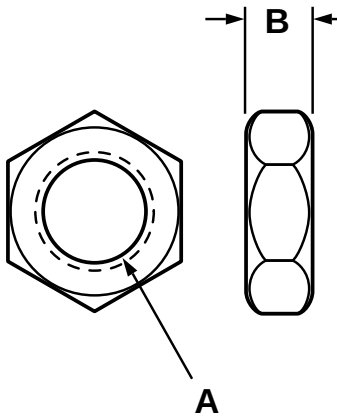
Part Number	THREAD DASH SIZE	THREAD SIZE	NUT THICKNESS (mm - in)
6V-8552	-4	9/16-18	15 - .59
6V-8553	-6	11/16-16	17 - .67
6V-8554	-8	13/16-16	21 - .83
6V-8555	-10	1-14	24 - .94
6V-8556	-12	1 3/16-12	26 - 1.02
6V-8557	-16	1 7/16-12	28 - 1.10
6V-8558	-20	1 11/16-12	28 - 1.10
8T-1681	-24	2-12	28 - 1.10

ORFS Swivel Nuts Plated



Part Number	THREAD DASH SIZE	THREAD SIZE	NUT THICKNESS (mm - in)
9X-6582	-8	13/16-16	21 - .83
9X-6581	-10	1-14	24 - .94
9X-6580	-12	1 3/16-12	26 - 1.02
9X-6579	-16	1 7/16-12	28 - 1.10
9X-6578	-20	1 11/16-12	28 - 1.10
9X-6577	-24	2-12	28 - 1.10

STOR Bulkhead



Part Number	THREAD DASH SIZE	THREAD SIZE	NUT THICKNESS (mm - in)
9X-6395	-8	3/4-16	10 - .39

Protective Caps and Plugs	488
Metal Caps and Plugs	499

Protective Caps and Plugs

Thread Dash Size	NPTF Male Pipe	NPTF Female Pipe	NPSM Female Pipe	Straight Thread O-Ring Boss JIC 37° Male	JIC 37° Female Swivel	SAE 45° Male	SAE 45° Inverted Male Swivel	SAE 45° Female Swivel	SAE 45° Inverted Female Swivel	SAE Code 61 Flange	SAE Code 62 Flange Caterpillar Flange	ORFS Female Swivel
-2	9U-7069	179-4455		179-4467								
-3				179-4468		179-4434	179-4477	179-4477				
-4	9U-7071	179-4456	179-4435	179-4523	179-4435	179-4436	179-4523	179-4523				179-4524
-5			179-4437	179-4469	179-4437	179-4437	179-4469	179-4469				
-6	179-4460	179-4457	4C-9521	179-4470	179-4438	179-4438	179-4471	179-4471				179-4525
-8	179-4461	179-4458	7C-6466	125-1373	7C-6466	6V-1822	125-1373	125-1373	179-4491	179-4445		179-4526
-10			7C-6465	179-7380	7C-6465	7M-7644	179-7380	179-7380	179-4492			179-4527
-12	179-4462	179-4459	179-4440	179-4472	179-4440		179-4472	179-4472	243-5685	179-4450		179-4528
-14			179-4441	179-4474								
-15												
-16	179-4463	7C-7811	179-4442	2P-0470					179-4493	179-4451		179-4529
-18												
-20	179-4464	9U-7085	179-4443	179-4475					179-4494	179-4452		179-4530
-22												
-24	179-4465	9U-7088		219-7003					179-4495	179-4453		179-4531
-26												
-28												
-30												
-32	179-4466	9U-7090		179-4476					179-4496	179-4454		
-34												
-36												
-40									179-4497			
-42												
-45												
-48									179-4498			
-52												

NOTE: The caps and plugs listed above are intended to be used in a protective application only. Do not use these items to plug or cap a pressurized opening of any kind. Using the protective cap or plug to cover a pressurized opening may result in serious injury.

These protective caps and plugs are the best way to prevent contamination from entering the hose assembly. They should not be removed until the hose assembly has been routed and ready for final connection.

Protective Caps and Plugs

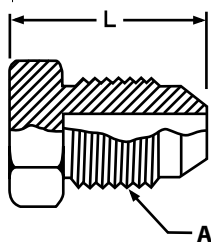
Thread Dash Size	Metric Standpipe	Metric 24° Cone Male-Heavy Duty	Metric 24° Cone Male-Light Duty	Metric Female Swivel-Spherical Seat - Heavy Duty	Metric Female Swivel-Spherical Seat - Light Duty	Metric Female Swivel-Spherical Seat W/ O-Ring - Heavy Duty	Metric Female Swivel-Spherical Seat W/ O-Ring - Light Duty	JIS 60° Cone Male	JIS BSPP 60° Female Male	French GAZ Male	French GAZ Female Swivel	French Metric Female Swivel	JIS-BSPT Tapered
-2												9U-7067	
-3													
-4					9U-7071	179-4431						9U-7069	
-5													
-6	179-4512				179-4460	179-4432						9U-7072	
-8	179-4513				179-4461	179-4433						9U-7075	
-10	179-4514				179-4440	179-4523							
-12	179-4515	9U-7146		179-4483	179-4462	179-4522					179-4483	9U-7078	
-14		9U-7147	179-4484	179-4484							179-4484		
-15	179-4516												
-16		9U-7148	9U-7139	9U-7139	179-4463	179-4521					9U-7139	9U-7082	
-18	179-4517	9U-7149	179-4485	179-4485							179-4485		
-20		9U-7150	9U-7141		9U-7087	179-4490	9U-7150	9U-7141	9U-7141	9U-7141	9U-7085		
-22	179-4518	9U-7151	179-4486	179-4486							179-4486		
-24		9U-7152	9U-7143			179-7382	9U-7152	9U-7143					
-26		9U-7153		9U-7144									
-28	179-4519												
-30		179-4444	179-7381	179-7381			179-4444	179-7381					
-32													
-34													
-36		179-4509	179-4448	179-4448			179-4446	179-4448					
-40													
-42		179-4510	179-4490	179-4490									
-45		179-4489					179-4489	179-4508					
-48													
-52		179-4511	179-4447										

NOTE: The caps and plugs listed above are intended to be used in a protective application only. Do not use these items to plug or cap a pressurized opening of any kind. Using the protective cap or plug to cover a pressurized opening may result in serious injury.

These protective caps and plugs are the best way to prevent contamination from entering the hose assembly. They should not be removed until the hose assembly has been routed and ready for final connection.

Protective Caps and Plugs

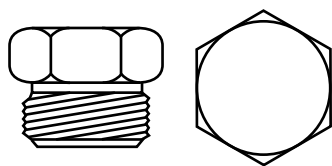
JIC 37° Plugs



Part Number	Thread Dash Size (A)	Thread Size (A) (in - TPI)	L Length (In)
9S-5518	-4	7/16 - 20	0.79
5P-4996	-5	1/2 - 20	0.79
9S-8927	-6	9/16 - 18	0.83
5P-2909	-8	3/4 - 16	0.94
2P-9697	-10	7/8 - 14	1.10
9S-8895	-12	1 1/16 - 12	1.26
5P-4299	-14	1 3/16 - 12	1.30
5P-2299	-16	1 5/16 - 12	1.34

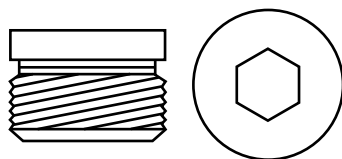
Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

Heavy Duty Straight Thread O-Ring - Hex Head Plugs



Part Number	Thread Size (in - TPI)	O-Ring Seal
360-3688	5/16-24	4J-7533
360-3689	3/8-24	7J-0204
360-3690	7/16-20	3J-7354
360-3691	1/2-20	1J-9671
360-3692	9/16-18	3J-1907
360-3693	3/4-16	3K-0360
360-3694	7/8-14	2M-9780
360-3695	1-1/16-12	3D-2824
360-3696	1-3/16-12	4K-1388
360-3697	1-5/16-12	7M-8485
360-3698	1-5/8-12	2S-4078
360-3699	1-7/8-12	6K-6307
360-3700	2-1/2-12	030-4606

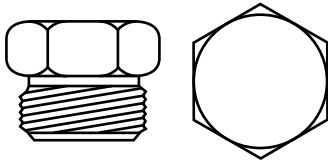
Heavy Duty Straight Thread O-Ring - Allen Drive Plugs



Part Number	Thread Size (in - TPI)	O-Ring Seal
360-3675	5/16-24	4J-7533
360-3676	3/8-24	7J-0204
360-3677	7/16-20	3J-7354
360-3678	1/2-20	1J-9671
360-3679	9/16-18	3J-1907
360-3680	3/4-16	3K-0360
360-3681	7/8-14	2M-9780
360-3682	1-1/16-12	3D-2824
360-3683	1-3/16-12	4K-1388
360-3684	1-5/16-12	7M-8485
360-3685	1-5/8-12	2S-4078
360-3686	1-7/8-12	6K-6307
360-3687	2-1/2-12	030-4606

Protective Caps and Plugs

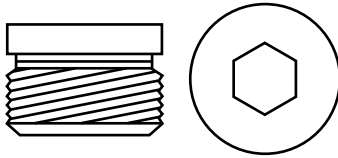
Straight Thread O-Ring - Hex Head Plugs



Part Number	Thread Size (in - TPI)	O-Ring Seal
9S-4180	5/16 - 24	4J-7533
9S-4181	1 5/16 - 12	7M-8485
9S-4183	1 1/16 - 12	3D-2824
9S-4188	1 3/16 - 12	4K-1388
9S-6130	1 5/8 - 12	2S-4078
9S-7583	2 1/2 - 12	030-4606
1N-5998	1 7/8 - 12	6K-6307
1N-5999	3/8 - 24	7J-0204
3K-8460	1/2 - 20	1J-9671
9S-4190	7/8 - 14	2M-9780
9S-4185	3/4 - 16	3K-0360
9S-4191	9/16 - 18	3J-1907
9S-4182	7/16 - 20	3J-7354

Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

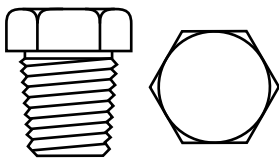
Straight Thread O-Ring - Allen Drive Plugs



Part Number	Thread Size (in - TPI)	O-Ring Seal
5P-7684	1 7/8 - 12	6K-6307
9S-8001	5/16 - 24	4J-7533
9S-8002	7/16 - 20	3J-7354
9S-8003	1/2 - 20	1J-9671
9S-8004	9/16 - 18	3J-1907
9S-8005	3/4 - 16	3K-0360
9S-8008	1 1/16 - 12	3D-2824
9S-8006	7/8 - 14	2M-9780
9S-8009	1 3/16 - 12	4K-1388
9S-8010	1 5/8 - 12	2S-4078
9S-9334	1 5/16 - 12	7M-8485
9S-8007	3/8 - 24	7J-0204

Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

Pipe - Hex Head Plugs

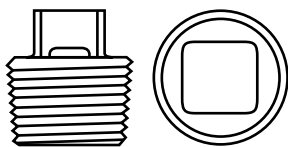


Part Number	Thread Size (in - TPI)
090-9019	1 - 11 1/2
2S-7905	1/16 - 27
3M-7045	3/4 - 14
4J-4382	1/2 - 14
5M-6214	1/8 - 27
3J-5390	3/8 - 18
5M-6213	1/4 - 18

Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

Protective Caps and Plugs

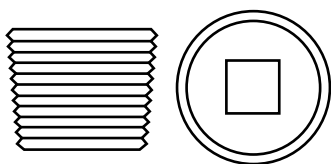
Pipe - Square Head Plugs



Part Number	Thread Size (in - TPI)
068-0710	1 1/4 - 11 1/2
2B-7408	1/8 - 27
2B-7409	1/4 - 18
2B-7457	3/8 - 18
5P-3320	3/4 - 14
5B-9169	1/2 - 14
7L-2505	1 - 11 1/2
4B-8586	2 - 11 1/2

Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

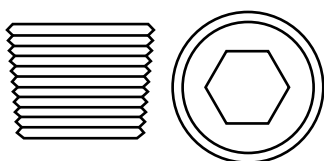
Pipe - Square Drive Plugs



Part Number	Thread Size (in - TPI)
1B-5170	1 1/4 - 11 1/2
2B-0858	1/2 - 14
4B-4845	3/8 - 18
6V-1897	2 - 11 1/2
6V-3280	2 1/2 - 8
7B-9665	1 1/2 - 11 1/2
1B-5174	3/4 - 14
3B-0551	1 - 11 1/2
7F-9504	1/4 - 18
6V-3257	3 1/2 - 8

Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

Pipe - Allen Drive Plugs

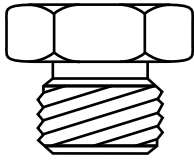


Part Number	Thread Size (in - TPI)
2R-5657	1 - 11 1/2
7H-3171	1/4 - 18
7M-7410	3/8 - 18
9F-2247	1/8 - 27
4D-0514	1/16 - 27
3L-1850	1/2 - 14

Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

Protective Caps and Plugs

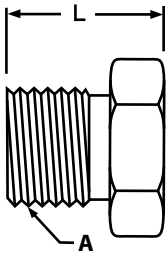
JIS - BSPP Shipping Plugs



Part Number	JIS-BSPP Thread Size (in - TPI)
093-1321	1/4 - 19
096-6073	3/8 - 19
093-1323	3/4 - 14
096-3829	1 - 11
093-1322	1/2 - 14

Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

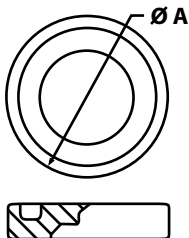
Metric Plugs



Part Number	Thread Size	Light Duty Tube O.D. (mm)	Heavy Duty Tube O.D. (mm)	L Length (in) (mm)
2Y-6462	M14 x 1.5	8	6	0.63 in, 16 mm
8C-4424	M22 x 1.5	14	14	1.06 in, 27 mm
9T-6322	M14 x 1.5	8	6	0.87 in, 22 mm
2Y-5841	M16 x 1.5	10	8	0.63 in, 16 mm
2Y-6461	M16 x 1.5	10	8	0.71 in, 18 mm

Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

SAE Code 61 Flange Port Cover

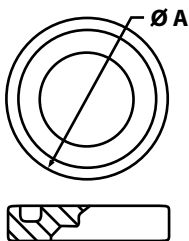


Part Number	Head Size (A) (in)	Flange (mm)
5H-4017	1.19	30.2
5H-4018	1.50	38.1
5H-4019	1.75	44.5
5H-4020	2.00	50.8
2J-2668	2.38	60.3
2J-5608	2.81	71.4

All of these parts, when properly used, are rated to be acceptable for standard working pressures that SAE J518 Code 61 parts are designed to withstand.

Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage.

Cat Flange Port Cover

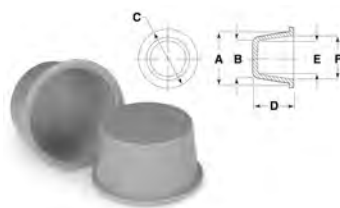


Part Number	Head Size (A) (in)	Flange (mm)
5P-0045	1.25	31.8
5P-0046	1.63	41.3
5P-0047	1.88	47.6
5P-0048	2.12	54.0
5P-0049	2.50	63.5
5P-0050	3.13	79.4

Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

Protective Caps and Plugs

Tapered Dual-Function Caps and Plugs



- The tapered design allows the part to plug multiple inner diameters or cap multiple outside diameters
- Protects against damage, dirt, moisture and corrosion during storage and shipping
- Material: Low-Density Polyethylene
- Color: Blue
- Applicable Spec: NAS 834 (supersedes MIL-C-5501/7, MIL-C-52078)
- Tapered Dual-Function Caps and Plugs

To assure a proper fit, dimension "E" should be approximately .020 in smaller than the opening diameter of the part to be protected, or dimension "A" should be approximately .020 in larger than the opening diameter of the part to be protected.

Part Number	Package Quantity	Length (A)		Length (B)		Length (C)		Length (D)		Length (E)	Length(F)
		(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(in)
9U-7090	50	2.26	57	2.23	57	2.50	64	0.50	13	2.17	2.20
9U-7091	50	2.47	63	2.30	58	2.63	67	1.00	25	2.24	2.40
9U-7067	250	0.40	10	0.33	8	0.56	14	0.38	10	0.27	0.33
9U-7068	250	0.43	11	0.36	9	0.59	15	0.38	10	0.30	0.37
9U-7069	250	0.49	12	0.42	11	0.59	15	0.38	10	0.36	0.42
9U-7070	250	0.55	14	0.49	12	0.72	18	0.50	13	0.41	0.49
9U-7071	250	0.62	16	0.53	13	0.75	19	0.50	13	0.47	0.55
9U-7073	250	0.73	18	0.64	16	0.88	22	0.50	13	0.58	0.67
9U-7074	250	0.75	19	0.67	17	0.88	22	0.63	16	0.62	0.69
9U-7075	250	0.79	20	0.69	18	0.94	24	0.63	16	0.63	0.72
9U-7076	250	0.85	22	0.75	19	1.03	26	0.63	16	0.69	0.79
9U-7077	250	0.91	23	0.80	20	1.09	28	0.75	19	0.74	0.85
9U-7078	250	0.98	25	0.87	22	1.11	28	0.63	16	0.81	0.92
9U-7079	250	1.04	26	0.90	23	1.16	29	0.75	19	0.83	0.98
9U-7080	250	1.09	28	0.97	25	1.25	32	0.75	19	0.90	1.03
9U-7081	250	1.15	29	1.00	25	1.31	33	0.75	19	0.94	1.08
9U-7082	250	1.23	31	1.11	28	1.52	39	0.75	19	1.04	1.18
9U-7085	250	1.60	41	1.45	37	1.75	44	0.75	19	1.39	1.54
9U-7087	100	1.68	43	1.56	40	1.88	48	0.75	19	1.50	1.62
9U-7088	100	1.88	48	1.75	44	2.03	52	0.75	19	1.69	1.82
9U-7089	100	1.94	49	1.81	46	2.13	54	1.00	25	1.75	1.88
276-0748	250	0.67	17	0.58	15	0.87	22	0.53	13	0.52	0.60
276-0749	250	0.69	18	0.61	15	0.84	21	0.50	13	0.54	0.63
276-0750	250	0.93	24	0.82	21	1.12	29	0.62	15	0.75	0.86
276-0751	250	1.35	34	1.22	31	1.50	38	0.75	19	1.16	1.29
276-0752	250	1.45	40	1.29	33	1.62	41	1.00	25	1.22	1.39
276-0753	250	1.46	37	1.31	33	1.62	41	0.75	19	1.24	1.40
276-0754	100	1.75	44	1.60	41	1.93	49	0.75	19	1.56	1.68
276-0755	100	2.02	51	1.84	47	2.12	54	1.00	25	1.78	1.93
276-0756	100	2.16	55	1.98	50	2.25	57	1.00	25	1.91	2.11
276-0757	100	2.25	57	2.06	52	2.43	62	1.03	26	2.00	2.17
276-0731	250	0.18	5	0.11	3	0.31	8	0.40	10	0.05	0.11
276-0740	250	0.24	6	0.17	4	0.37	10	0.37	10	0.10	0.17
276-0741	250	0.27	7	0.20	5	0.43	11	0.37	10	0.15	0.20
276-0742	250	0.30	8	0.24	6	0.46	12	0.37	10	0.17	0.24
276-0743	250	0.33	9	0.26	7	0.46	12	0.37	10	0.20	0.27
276-0744	250	0.36	9	0.30	8	0.53	13	0.37	10	0.23	0.30

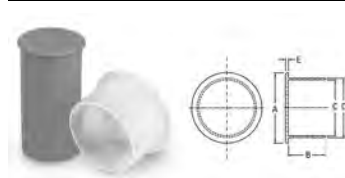
Protective Caps and Plugs

Tapered Dual-Function Caps and Plugs (Cont'd.)

Part Number	Package Quantity	Length (A)		Length (B)		Length (C)		Length (D)		Length (E)	Length(F)
		(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(in)
276-0745	250	0.46	12	0.39	10	0.62	16	0.37	10	0.32	0.39
276-0746	250	0.51	13	0.44	11	0.62	16	0.40	10	0.38	0.44
9U-7072	250	0.63	16	0.55	14	0.78	20	0.50	13	0.49	0.57
9U-7084	250	1.35	34	1.24	31	1.50	38	0.75	19	1.17	1.30
9U-7086	100	1.60	41	1.52	39	1.75	44	0.75	19	1.46	1.54
276-0758	50	2.60	66	2.39	61	2.62	67	1.00	25	2.33	2.54
276-0759	50	2.69	68	2.56	65	2.87	73	0.75	19	2.50	2.62
6V-7494	50	3.00	76	2.74	70	3.13	79	1.00	25	2.68	2.94
276-0760	50	3.24	82	2.98	76	3.37	86	1.00	25	2.90	3.16
9U-7095	50	3.58	91	3.24	82	3.94	100	1.00	25	3.16	3.49
276-0761	50	3.75	95	3.55	90	4.00	102	1.00	25	3.47	3.67
9U-7096	50	4.46	113	4.22	107	5.00	127	1.00	25	4.14	4.38
6V-7496	50	4.62	117	4.37	111	5.00	127	1.00	25	4.29	4.50
276-0747	250	0.56	14	0.50	13	0.75	19	0.43	11	0.43	0.50
7E-8716	250	1.29	33	1.18	30	1.44	37	0.75	19	1.11	1.22
9U-7092	50	2.79	71	2.65	67	3.00	76	0.50	13	2.58	2.73
9U-7094	50	3.45	88	3.32	84	3.63	92	0.50	13	3.24	3.37
276-0762	50	3.92	100	3.80	97	4.12	105	0.68	17	3.71	3.84

Protective Caps and Plugs

Straight Cap



Part Number	Package Quantity	Material*	Length (A)		Length (B)		Length (C)		Length (D)		Length (E)
			(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	
217-1591	50	1	1.25	31.65	0.67	17	1	25.22	1.06	26.82	0.05

* 1 - Grade 1 Virgin Polyethylene 2 - Low Density Polyethylene 3 - High Density Polyethylene

Non-threaded Caps

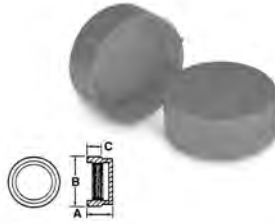


Part Number	Package Quantity	Material*	Diameter (A) (in)	Length (B)	
				(in)	(mm)
9U-7166	250	1	0.13	0.63	16
9U-7167	250	1	0.25	0.88	22
9U-7168	250	1	0.30	0.88	22
9U-7170	250	1	0.44	0.88	22
9U-7171	250	1	0.50	0.88	22
9U-7174	100	1	0.69	0.88	22
9U-7175	100	1	0.75	0.88	22
9U-7176	100	1	0.81	0.88	22
9U-7177	100	1	0.88	0.88	22
9U-7178	100	1	1.00	0.75	19
9U-7180	100	1	1.19	1.00	25
9U-7183	100	1	1.38	0.88	22
9U-7184	100	1	1.44	0.88	22
9U-7185	100	1	1.50	0.88	22
9U-7191	100	1	2.13	0.88	22
9U-7181	100	1	1.25	0.88	22
9U-7169	250	1	0.38	0.88	22
9U-7172	250	1	0.56	0.88	22
9U-7173	250	1	0.63	0.88	22
9U-7179	100	1	1.06	0.88	22
9U-7182	100	1	1.31	0.88	22
9U-7188	100	1	1.75	0.88	22
9U-7187	100	1	1.69	0.88	22
9U-7189	100	1	1.88	0.88	22
9U-7190	100	1	2.00	0.88	22
9U-7193	100	1	2.50	0.88	22
9U-7194	50	1	3.13	1.38	35
9U-7186	100	1	1.63	1.00	25
9U-7192	100	1	2.38	0.88	22

* 1 - Grade 1 Virgin Polyethylene 2 - Low Density Polyethylene 3 - High Density Polyethylene

Protective Caps and Plugs

Metric Threaded Cap Protectors



Part Number	Package Quantity	Material*	Diameter x Pitch	Length (A)		Length (B)		Length (C)	
				(in)	(mm)	(in)	(mm)	(in)	(mm)
9U-7145	100	2	M10 x 1.0	0.39	10	0.54	14	0.29	8
9U-7146	100	2	M12 x 1.5	0.47	12	0.62	16	0.37	10
9U-7149	100	2	M18 x 1.5	0.55	14	0.85	22	0.45	12
9U-7150	100	2	M20 x 1.5	0.55	14	0.92	24	0.37	10
9U-7151	50	2	M22 x 1.5	0.54	14	1.02	26	0.45	12
9U-7152	50	2	M24 x 1.5	0.55	14	1.14	29	0.45	12
9U-7153	50	2	M26 x 1.5	0.55	14	1.18	30	0.45	12
9U-7148	100	2	M16 x 1.5	0.47	12	0.78	20	0.37	10
9U-7147	100	2	M14 x 1.5	0.47	12	0.70	18	0.37	10

* 1 - Grade 1 Virgin Polyethylene 2 - Low Density Polyethylene 3 - High Density Polyethylene

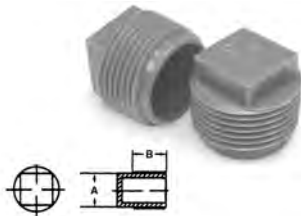
Metric Threaded Plug Protectors



Part Number	Package Quantity	Material*	Diameter x Pitch	Length (A)		Length (B)		Length (C)	
				(in)	(mm)	(in)	(mm)	(in)	(mm)
9U-7136	100	2	M10 x 1.0	0.57	15	0.60	15	0.41	10
9U-7137	100	2	M12 x 1.0	0.66	17	0.73	19	0.42	11
9U-7140	50	2	M18 x 1.5	0.72	18	0.96	24	0.54	14
9U-7141	50	2	M20 x 1.5	0.72	18	1.04	26	0.55	14
9U-7142	50	2	M22 x 1.5	0.72	18	1.11	28	0.54	14
9U-7143	50	2	M24 x 1.5	0.73	19	1.23	31	0.54	14
9U-7144	50	2	M26 x 1.5	0.73	19	1.46	37	0.54	14
9U-7138	50	2	M14 x 1.5	0.68	17	0.73	19	0.37	10
9U-7139	50	2	M16 x 1.5	0.68	17	0.87	22	0.50	13

* 1 - Grade 1 Virgin Polyethylene 2 - Low Density Polyethylene 3 - High Density Polyethylene

Plug Protectors for NPT Thread - Square Head

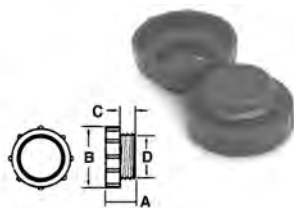


Part Number	Package Quantity	Material*	Thread Size (in - TPI)	Length (A)		Length (B)	
				(in)	(mm)	(in)	(mm)
9U-7098	250	3	1/8 - 27	0.28	7	0.38	10
9U-7099	250	3	1/4 - 18	0.38	10	0.44	11
9U-7101	250	3	1/2 - 14	0.56	14	0.56	14
9U-7100	250	3	3/8 - 18	0.44	11	0.50	13
9U-7102	100	3	3/4 - 14	0.69	17	0.63	16

* 1 - Grade 1 Virgin Polyethylene 2 - Low Density Polyethylene 3 - High Density Polyethylene

Protective Caps and Plugs

Plug Protectors for NPT Thread - Knurled Head



Part Number	Package Quantity	Material*	Thread Size (in - TPI)	Length (A)		Length (B)		Length (C)		Length (D)	
				(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
9U-7103	100	3	1 - 11 1/2	0.50	13	1.57	40	0.25	6	1.18	30

* 1 - Grade 1 Virgin Polyethylene 2 - Low Density Polyethylene 3 - High Density Polyethylene

Tear Cap Protectors for Standard Thread



Part Number	Package Quantity	Material*	Thread Size (in - TPI)	JIC/SAE Fitting	Length (A)		Length (B)	
					(in)	(mm)	(in)	(mm)
9U-7122	250	1	9/16 - 18	6-TS	0.48	12	0.55	14
9U-7123	250	1	11/16 - 16	7-TS	0.48	12	0.67	17
9U-7125	250	1	13/16 - 16	9-TS	0.56	14	0.80	20
9U-7128	250	1	11/16 - 12	12-TS	0.75	19	1.05	27
9U-7120	250	1	7/16 - 20	4-TS	0.46	12	0.43	11
9U-7131	100	1	1 7/16 - 12	17-TS	0.75	19	1.43	36
9U-7121	250	1	1/2 - 20	5-TS	0.46	12	0.49	12
9U-7124	250	1	3/4 - 16	8-TS	0.56	14	0.74	19
9U-7126	250	1	7/8 - 14	10-TS	0.65	17	0.87	22
9U-7127	250	1	1 - 14	11-TS	0.65	17	0.99	25
9U-7129	250	1	13/16 - 12	13-TS	0.75	19	1.17	30
9U-7132	100	1	1 5/8 - 12	20-TS	0.83	21	1.62	41
9U-7133	100	1	1 11/16 - 12	21-TS	0.83	21	1.67	42
9U-7134	100	1	1 7/8 - 12	24-TS	0.95	24	1.87	48
9U-7135	50	1	2 1/2 - 12	32-TS	1.20	30	2.49	63
9U-7130	100	1	15/16 - 12	16-TS	0.75	19	1.30	33

* 1 - Grade 1 Virgin Polyethylene 2 - Low Density Polyethylene 3 - High Density Polyethylene

WEO Plug-In Female Stop Cap

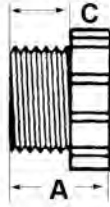
Part Number	Head Dash Size	Material
576-6123	-6	Steel
576-6124	-8	Steel
576-6125	-12	Steel

WEO Plug-In Male Stop Plug

Part Number	Head Dash Size	Material
576-6126	-6	Steel
576-6127	-8	Steel
576-6128	-12	Steel

Metal Caps and Plugs

British Thread - BSP-GAS Plug Protectors



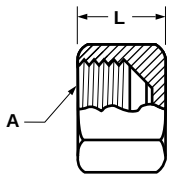
Part Number	Package Quantity	Material*	Thread Size (in - TPI)	Length (A)		Length (B)		Length (C)	
				(in)	(mm)	(in)	(mm)	(in)	(mm)
9U-7195	100	2	1/8 - 28	0.41	11	0.65	16	0.16	4
9U-7197	100	2	3/8 - 19	0.47	12	0.90	23	0.27	6
9U-7200	50	2	3/4 - 14	0.67	17	1.27	32	0.43	11
9U-7196	100	2	1/4 - 19	0.50	13	0.74	19	0.26	7
9U-7198	100	2	1/2 - 14	0.68	17	1.10	28	0.41	10
9U-7199	50	2	5/8 - 14	0.72	18	1.23	31	0.51	13
9U-7201	50	2	7/8 - 14	0.71	18	1.50	38	0.53	14
9U-7202	50	2	1 - 11	0.66	17	1.57	40	0.42	11

* 1 - Grade 1 Virgin Polyethylene

2 - Low Density Polyethylene

3 - High Density Polyethylene

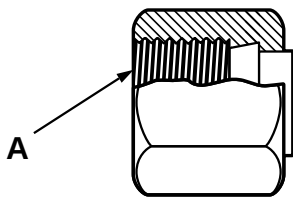
JIC 37° Cap



Part Number	Thread Dash Size	Thread Size	Length
9L-8493	-4	7/16 - 20	0.59 in, 15.0 mm
5P-0405	-5	1/2 - 20	0.63 in, 16.0 mm
8S-4950	-6	9/16 - 18	0.63 in, 16.0 mm
8S-4951	-8	3/4 - 16	0.75 in, 19.0 mm
6J-7366	-10	7/8 - 14	0.83 in, 21.0 mm
9S-8896	-12	1 1/16 - 12	0.91 in, 23.0 mm
8L-9137	-14	1 3/16 - 12	0.98 in, 25.0 mm
3R-6789	-16	1 5/16 - 12	1.02 in, 26.0 mm
8T-1458	-20	1 5/8 - 12	1.22 in, 31.0 mm

Note: The caps and plugs listed above are composed of metal and may be used in a pressure sealing application. Using these metal caps and plugs will seal an opening port in order to contain fluids and prevent contamination while a hose assembly is being serviced.

ORFS Cap



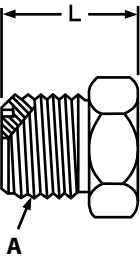
Part Number	Thread Dash Size	Thread Size
6V-9828	-4	9/16 - 18
6V-9829	-6	11/16 - 16
6V-9830	-8	13/16 - 16
6V-9831	-10	1 - 14
6V-9832	-12	1 3/16 - 12
6V-9833	-16	1 7/16 - 12
6V-9834	-20	1 11/16 - 12

Note: The caps and plugs listed above are composed of metal and may be used in a pressure sealing application. Using these metal caps and plugs will seal an opening port in order to contain fluids and prevent contamination while a hose assembly is being serviced.

Metal Caps and Plugs

ORFS Plugs

- Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage



Part Number	Thread Dash Size (A)	Thread Size (A) (in - TPI)	L Length
6V-9507	-4	9/16 - 18	0.67 in, 17 mm
6V-9508	-6	11/16 - 16	0.75 in, 19 mm
6V-9509	-8	13/16 - 16	0.87 in, 22 mm
6V-9510	-10	1 - 14	1.02 in, 26 mm
6V-9511	-12	1 3/16 - 12	1.06 in, 27 mm
6V-9512	-16	1 7/16 - 12	1.10 in, 28 mm
6V-9513	-20	1 11/16 - 12	1.10 in, 28 mm
231-3942	-24	2-12	1.10 in, 28 mm

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Seal Application Chart

Seal Application Chart

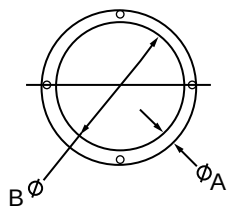
Material Type	Typical Duro A Hardness ⁽¹⁾	Operating Temperature Range ⁽²⁾	Air	Engine Oils	Diesel Fuel	Coolant	Hydraulic Oil / Automatic Transmission Fluid	Biodiesel
NBR (Nitrile Butadiene Rubber)	75, 90	-40°C to 100°C (-40°F to 212°F)	✓	✓	✓	✓	✓	
HNBR (Hydrogenated Nitrile Butadiene Rubber)	78, 90	-40°C to 115°C (-40°F to 239°F)	✓	✓	✓	✓ ⁽³⁾	✓	✓
EPDM (Ethylene Propylene Diene Monomer)	70	-55°C to 121°C (-67°F to 250°F)	✓			✓		
Silicone	70	-55°C to 150°C (-67°F to 302°F)	✓	✓				
FKM (Fluoroelastomer)	75, 90	-40°C to 175°C (-40°F to 347°F)	✓	✓	✓		✓	✓

Nitrile	This material has good abrasion and cut resistance. Compatible With:⁽³⁾ air, ethylene glycol, petroleum based fluids (e.g. engine oil, hydraulic oil), diesel fuel, silicone fluids, greases, water, water based coolants, urea, transmission fluids Not Compatible With: brake fluids, high levels of ozone, biodiesel fuel
HNBR	HNBR provides excellent abrasion and cut resistance. It works well with Air, Engine Oil, Diesel Fuel, Hydraulic Oil and Automatic Transmission Fluid applications. Compatible With: diesel fuels, petroleum based fluids (e.g. engine oil, hydraulic oil), greases, transmission fluids, silicone fluids, steam, water based coolants⁽³⁾, urea⁽³⁾ Not Compatible With: brake fluids, chlorinated hydrocarbons
EPDM	This material has good abrasion and cut resistance. Compatible With: water, water based coolants, urea, alcohols, silicone fluids, steam (200°C max), air, ozone Not Compatible With: petroleum based fluids (e.g. engine oil, hydraulic oil), hydrocarbons (e.g. diesel fuel, biodiesel fuel), transmission fluids, brake fluids
Silicone	This material performs well in a wide range of temperatures - from extremely low to very high. It has limited strength and abrasion/cut resistance. Recommended for low pressure applications. Compatible With: air, ethylene glycol, high aniline point oil⁽³⁾, ozone Not Compatible With: organic solvents, petroleum based fluids (e.g. engine oil, hydraulic oil), hydrocarbons (e.g. diesel fuel, biodiesel fuel), low aniline point oil, steam, hot water, water based coolants, transmission fluids, urea
FKM	This material provides superior performance in most applications, and is highly resistant to compression set. It is effective at high temperatures, and has good abrasion and cut resistance. Compatible With: petroleum based fluids (e.g. engine oil, hydraulic oil), hydrocarbons (e.g. diesel fuel, biodiesel fuel), silicone fluids, air Not Compatible With: amines, brake fluids, water based coolants, fire resistant fluids, steam, water

- 1 Material hardness can vary depending on the part number. Typically 75A materials are for applications where pressure < 1500 psi and 90A materials are for applications where pressure is >1500 psi.
- 2 Temperature limits are general and can vary by specific material. Repeated or constant exposure to temperatures higher than the normal operating range can drastically reduce seal life, resulting in premature leakage.
- 3 Compatibility is dependent on the specific type of material. Contact dealer support for additional information.

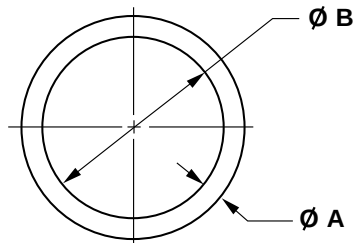
Seals

20° Tapered Face Seals



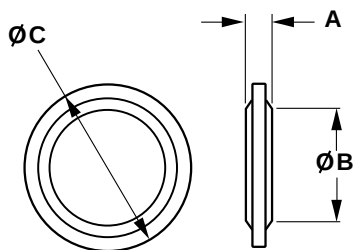
Part Number	Thread Size	Thread Dash Size	Seal Thickness	Seal I.D.
4I-8888	1 - 14	-10	0.08 in, 2.0 mm	0.62 in, 15.8 mm
4I-8889	1 3/16 - 12	-12	0.08 in, 2.0 mm	0.78 in, 19.8 mm
4I-8891	1 7/16 - 12	-16	0.08 in, 2.0 mm	0.98 in, 24.8 mm

A/C O-Ring Seals



Part Number	Seal Thickness	Seal Outside Diameter
9X-7380	0.07 in, 1.78 mm	0.30 in, 7.65 mm
9X-7381	0.07 in, 1.78 mm	0.43 in, 10.82 mm
9X-7382	0.07 in, 1.78 mm	0.55 in, 14.00 mm
9X-7383	0.07 in, 1.78 mm	0.68 in, 17.17 mm
9X-7384	0.07 in, 1.78 mm	1.05 in, 26.70 mm

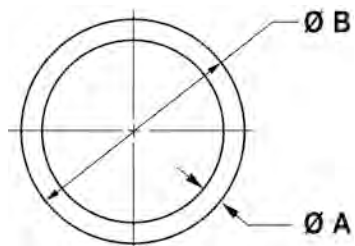
BSPP - (British Standard Pipe Parallel) - Dowty Port Seals



Part Number	Thread Size	Thread Dash Size	Seal Thickness	Seal I.D.	Seal O.D.
6V-0404	1/8 - 28	-2	0.11 in, 2.8 mm	0.41 in, 10.3 mm	0.63 in, 15.9 mm
6V-0405	1/4 - 19	-4	0.11 in, 2.8 mm	0.54 in, 13.7 mm	0.81 in, 20.6 mm
6V-0406	3/8 - 19	-6	0.11 in, 2.8 mm	0.68 in, 17.3 mm	0.94 in, 23.9 mm
6V-0407	1/2 - 14	-8	0.13 in, 3.2 mm	0.85 in, 21.5 mm	1.13 in, 28.6 mm
8C-6504	5/8 - 14	-10	0.13 in, 3.2 mm	0.93 in, 23.5 mm	1.25 in, 31.8 mm
6V-0408	3/4 - 14	-12	0.13 in, 3.2 mm	1.06 in, 27.0 mm	1.38 in, 35.0 mm
6V-0409	1 - 11	-16	0.16 in, 4.1 mm	1.33 in, 33.9 mm	1.69 in, 42.9 mm
9X-7423	1 1/4 - 11	-20	0.16 in, 4.1 mm	1.69 in, 42.9 mm	2.06 in, 52.4 mm
8T-1568	1 1/2 - 11	-24	0.16 in, 4.1 mm	1.91 in, 48.4 mm	2.31 in, 58.7 mm

Seal is required with a port connection only. No seal is required with a BSPP Female Swivel 60° Cone or Spherical Seat.

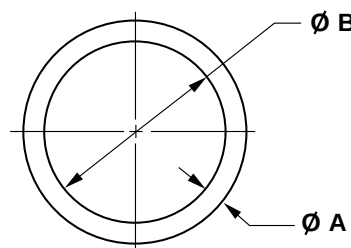
Flange - Cat Flange D-Ring Seals



Flange Dash Size	Head Size	NITRILE	FKM	Seal Thickness	Seal Outside Diameter
-8	1.25 in, 31.8 mm	1P-3700	235-2472	0.19 in, 4.95 mm	1.02 in, 25.83 mm
-12	1.63 in, 41.30 mm	1P-3702	235-2473	0.19 in, 4.95 mm	1.27 in, 32.23 mm
-16	1.88 in, 47.65 mm	1P-3703	235-2474	0.19 in, 4.95 mm	1.52 in, 38.66 mm
-20	2.13 in, 54.00 mm	1P-3704	235-2475	0.19 in, 4.95 mm	1.77 in, 45.00 mm
-24	2.50 in, 63.50 mm	1P-3705	235-2476	0.19 in, 4.95 mm	2.03 in, 51.50 mm
-32	3.13 in, 79.40 mm	1P-3709	235-2480	0.19 in, 4.95 mm	2.78 in, 70.70 mm

NOTE: For use with Cat Flange Head Couplings only.

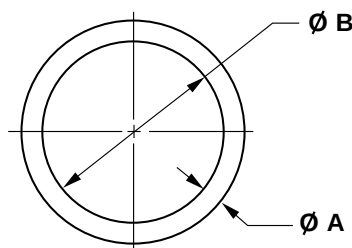
Flange - Code 61/62 Flange O-Ring Seals



Flange Dash Size	NITRILE	FKM	Seal Thickness	Seal Inside Diameter
-8	4J-5140	189-0193	0.14 in, 3.53 mm	0.73 in, 18.64 mm
-12	4J-5267	109-3205	0.14 in, 3.53 mm	0.98 in, 24.99 mm
-16	4J-0520	170-5715	0.14 in, 3.53 mm	1.30 in, 32.92 mm
-20	4J-0522	190-7673	0.14 in, 3.53 mm	1.48 in, 37.69 mm
-24	4J-0524	234-3544	0.14 in, 3.53 mm	1.86 in, 47.22 mm
-32	4J-0527	6V-4590	0.14 in, 3.53 mm	2.23 in, 56.74 mm
-40	6J-2680	8T-0568	0.14 in, 3.53 mm	2.73 in, 69.44 mm
-48	117-1266	-	0.14 in, 3.53 mm	3.36 in, 85.32 mm
-56	9X-4611	5W-5480	0.14 in, 3.53 mm	3.86 in, 98.02 mm
-64	3E-6703	-	0.14 in, 3.53 mm	4.36 in, 110.72 mm
-80	316-2517	-	0.14 in, 3.53 mm	5.36 in, 136.12 mm

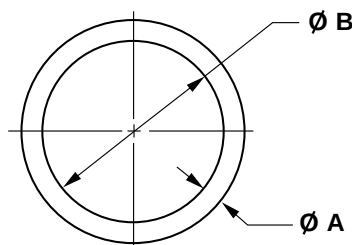
Seals

Metric DIN Light O-Rings



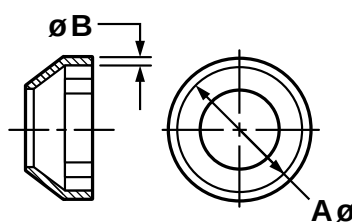
Thread Size	Part Number	Seal Thickness	Seal Inside Diameter	Material
M12 x 1.5	3E-4288	0.06 in, 1.5 mm	0.18 in, 4.5 mm	Nitrile 90 Duro
M14 x 1.5	3E-4289	0.06 in, 1.5 mm	0.26 in, 6.5 mm	Nitrile 90 Duro
M16 x 1.5	3E-4296	0.06 in, 1.5 mm	0.31 in, 8.0 mm	Nitrile 90 Duro
M18 x 1.5	3E-4297	0.06 in, 1.5 mm	0.40 in, 10.0 mm	Nitrile 90 Duro
M22 x 1.5	3E-4298	0.08 in, 2.0 mm	0.47 in, 12.0 mm	Nitrile 90 Duro
M26 x 1.5	122-9250	0.08 in, 2.0 mm	0.60 in, 15.0 mm	Nitrile (90)
M30 x 2	3E-6761	0.08 in, 2.0 mm	0.79 in, 20.0 mm	Nitrile 90 Duro
M36 x 2	092-2304	0.08 in, 2.0 mm	1.02 in, 26.0 mm	Buna N 75 Duro
M45 x 2	9X-7447	0.10 in, 2.5 mm	1.26 in, 32.0 mm	Nitrile 90 Duro
M52 x 2	177-2936	0.10 in, 2.5 mm	1.50 in, 38.0 mm	Nitrile (90)

Metric DIN Heavy O-Rings



Thread Size	Part Number	Seal Thickness	Seal Inside Diameter	Material
M14 x 1.5	3E-4288	0.06 in, 1.5 mm	0.18 in, 4.5 mm	Nitrile 90 Duro
M16 x 1.5	3E-4289	0.06 in, 1.5 mm	0.26 in, 6.5 mm	Nitrile 90 Duro
M18 x 1.5	3E-4296	0.06 in, 1.5 mm	0.31 in, 8.0 mm	Nitrile 90 Duro
M20 x 1.5	3E-4297	0.06 in, 1.5 mm	0.40 in, 10.0 mm	Nitrile 90 Duro
M22 x 1.5	3E-4298	0.08 in, 2.0 mm	0.47 in, 12.0 mm	Nitrile 90 Duro
M24 x 1.5	8U-6457	0.08 in, 2.0 mm	0.51 in, 13.0 mm	Nitrile (90)
M30 x 2	3E-4299	0.09 in, 2.4 mm	0.64 in, 16.3 mm	Nitrile 90 Duro
M36 X 2	3E-6762	0.09 in, 2.4 mm	0.80 in, 20.3 mm	Nitrile 90 Duro
M42 x 2	3E-6763	0.09 in, 2.4 mm	1.00 in, 25.3 mm	Nitrile 90 Duro
M52 x 2	460-6296	0.09 in, 2.4 mm	1.31 in, 33.3 mm	Nitrile Rubber

JIC 37° Copper Seals



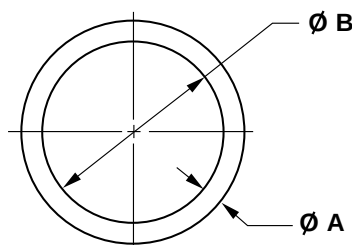
Part Number	Thread Size	Thread Dash Size	Seal O.D.	Seal Thickness
6V-7333	9/16 - 18	-6	0.48 in, 12.2 mm	0.01 in, 0.13 mm
6V-7332	3/4 - 16	-8	0.65 in, 16.5 mm	0.01 in, 0.25 mm
6V-7331	7/8 - 14	-10	0.78 in, 19.8 mm	0.01 in, 0.25 mm
6V-7330	1 1/16 - 12	-12	0.94 in, 23.9 mm	0.01 in, 0.25 mm
6V-7329	1 5/16 - 12	-16	1.19 in, 30.2 mm	0.01 in, 0.25 mm
6V-7328	1 5/8 - 12	-20	1.50 in, 38.1 mm	0.01 in, 0.25 mm
6V-7327	1 7/8 - 12	-24	1.75 in, 44.5 mm	0.01 in, 0.25 mm

NOTE: Copper seals are available for use in stopping leaks on 37° JIC fittings. The seal fits over the 37° tapered seat of the fitting body and interfaces with the mating 37° tube Flare. The copper seal provides a soft malleable material between the two surfaces that deforms under compression - filling scratches, nicks and other surface imperfections which can allow leaks.

STOR - (Metric)

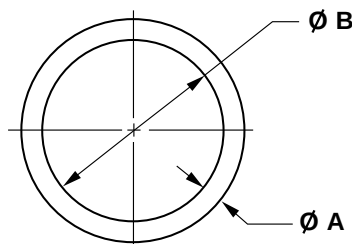
Thread Size	NITRILE	FKM	EPDM	Seal Thickness	Seal Inside Diameter
M8 x 1	-	228-7099	-	0.06 in, 1.5 mm	0.24 in, 6.2 mm
M10 x 1	8T-7876	8C-3076	262-9990	0.06 in, 1.5 mm	0.32 in, 8.2 mm
M12 x 1.5	6V-9028	228-7100	219-0669	0.08 in, 2.1 mm	0.37 in, 9.4 mm
M14 x 1.5	6V-6560	228-7101	216-8579	0.08 in, 2.1 mm	0.45 in, 11.4 mm
M16 x 1.5	8T-6850	228-7102	291-8174	0.08 in, 2.1 mm	0.53 in, 13.4 mm
M18 x 1.5	8T-7524	228-7103	199-9751	0.08 in, 2.1 mm	0.61 in, 15.4 mm
M20 x 1.5	8T-7877	228-7104	-	0.08 in, 2.1 mm	0.69 in, 17.4 mm
M22 x 1.5	6V-7970	228-7105	216-7485	0.08 in, 2.1 mm	0.76 in, 19.4 mm
M27 x 2	8T-7525	228-7106	216-8578	0.11 in, 2.8 mm	0.93 in, 23.7 mm
M33 x 2	8T-7526	215-4639	216-8580	0.11 in, 2.8 mm	1.17 in, 29.7 mm
M42 x 2	8C-5193	228-7108	-	0.11 in, 2.8 mm	1.52 in, 38.7 mm
M48 x 2	291-8177	216-9642	-	0.11 in, 2.8 mm	1.76 in, 44.7 mm
M60 x 2	291-8178	209-5798	294-9065	0.11 in, 2.8 mm	2.23 in, 56.7 mm

STOR - (Imperial)



Dash Size	Thread Size	NITRILE	FKM	EPDM	Seal Thickness	Seal Inside Diameter
-2	5/16 - 24	4J-7533	238-5078	8T-9587	0.06 in, 1.63 mm	0.24 in, 6.07 mm
-3	3/8 - 24	7J-0204	238-5079	8K-0001	0.06 in, 1.63 mm	0.30 in, 7.65 mm
-4	7/16 - 20	3J-7354	214-7566	6V-9027	0.07 in, 1.83 mm	0.35 in, 8.92 mm
-5	1/2 - 20	1J-9671	214-7567	291-8144	0.07 in, 1.83 mm	0.41 in, 10.52 mm
-6	9/16 - 18	3J-1907	214-7568	6V-3250	0.08 in, 1.98 mm	0.47 in, 11.89 mm
-8	3/4 - 16	3K-0360	238-5080	6V-6609	0.09 in, 2.21 mm	0.64 in, 16.36 mm
-10	7/8 - 14	2M-9780	238-5081	6V-3251	0.10 in, 2.46 mm	0.76 in, 19.18 mm
-12	1-1/16 - 12	3D-2824	238-5082	6V-5063	0.12 in, 2.95 mm	0.92 in, 23.47 mm
-14	1-3/16 - 12	4K-1388	238-5083	291-8145	0.12 in, 2.95 mm	1.05 in, 26.62 mm
-16	1-5/16 - 12	7M-8485	238-5084	6V-5064	0.12 in, 2.95 mm	1.17 in, 29.74 mm
-20	1-5/8 - 12	2S-4078	228-7096	6V-5065	0.12 in, 3.00 mm	1.48 in, 37.47 mm
-24	1-7/8 - 12	6K-6307	238-5086	8C-0562	0.12 in, 3.00 mm	1.72 in, 43.69 mm
-32	2-1/2 - 12	030-4606	228-7097	-	0.12 in, 3.00 mm	2.34 in, 59.36 mm

ORFS - (O-Ring Face Seal)



Thread Size	NITRILE	FKM	EPDM	Seal Thickness	Seal Outside Diameter
9/16 - 18	4J-5477	228-7088	121-4345	0.07 in, 1.78 mm	0.44 in, 11.23 mm
11/16 - 16	6V-8397	228-7089	6D-7128	0.07 in, 1.78 mm	0.51 in, 12.83 mm
13/16 - 16	6V-8398	228-7090	180-8424	0.07 in, 1.78 mm	0.63 in, 16.03 mm
1 - 14	7J-9108	228-7091	6V-5138	0.07 in, 1.78 mm	0.76 in, 19.28 mm
1-3/16 - 12	6V-9746	228-7092	294-9072	0.07 in, 1.78 mm	0.89 in, 22.5 mm
1-7/16 - 12	5K-9090	228-7093	-	0.07 in, 1.78 mm	1.07 in, 27.22 mm
1-11/16 - 12	6V-8400	228-7094	-	0.07 in, 1.78 mm	1.32 in, 33.57 mm
2 - 12	8T-0315	228-7095	294-9075	0.07 in, 1.78 mm	1.64 in, 41.54 mm

Seals

WE0 Plug-In Dust Seal-O-Ring

Part Number	Thread Dash Size	Seal Thickness	Seal I.D.
519-9199	-6	0.06 in, 1.5 mm	0.39 in, 10.0 mm
5D-0834	-8	0.06 in, 1.6 mm	0.50 in, 12.7 mm
8U-5951	-12	0.08 in, 2.0 mm	0.75 in, 19.0 mm

Full O-Ring Seal Kit Nitrile - 270-1528



Full Kit - SAE STOR, ORFS & Code 61/62 Flange O-Rings - Nitrile

- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower costs per hour.

Quantity	O-Ring Part Number	Name	Material	Dash Size	Thread Size	Termination Type
20		Seal-O-Ring	90A NBR	-02	5/16 -24	STOR
20		Seal-O-Ring	90A NBR	-03	3/8 -24	STOR
20		Seal-O-Ring	90A NBR	-04	7/16 -20	STOR
20		Seal-O-Ring	90A NBR	-05	1/2 -20	STOR
20		Seal-O-Ring	90A NBR	-06	9/6 -18	STOR
20		Seal-O-Ring	90A NBR	-08	3/4 -16	STOR
20		Seal-O-Ring	90A NBR	-10	7/8 -14	STOR
20		Seal-O-Ring	90A NBR	-12	1-1/16 -12	STOR
20		Seal-O-Ring	90A NBR	-14	1-3/16 -12	STOR
20		Seal-O-Ring	90A NBR	-16	1-5/16 -12	STOR
20	2S-4078 ⁽¹⁾	Seal-O-Ring	90A NBR	-20	1-5/8 -12	STOR
20		Seal-O-Ring	90A NBR	-24	1-7/8 -12	STOR
10		Seal-O-Ring	90A NBR	-32	2-1/2 -12	STOR
20		Seal-O-Ring	90A NBR	-04	9/16 -18	ORFS
20		Seal-O-Ring	90A NBR	-06	11/16 -16	ORFS
20		Seal-O-Ring	90A NBR	-08	13/16 -16	ORFS
20		Seal-O-Ring	90A NBR	-10	1 -14	ORFS
20		Seal-O-Ring	90A NBR	-12	1-3/16 -12	ORFS
20		Seal-O-Ring	90A NBR	-16	1-7/16 -12	ORFS
20		Seal-O-Ring	90A NBR	-20	1-11/16 -12	ORFS
20		Seal-O-Ring	90A NBR	-24	2 12	ORFS
20		Seal-O-Ring	90A NBR	-08	-	Code 61 / 62
20		Seal-O-Ring	90A NBR	-12	-	Code 61 / 62
15		Seal-O-Ring	90A NBR	-16	-	Code 61 / 62

1 (Part of 8S-9967) Recommended spare parts

Seal Kits

Full O-Ring Seal Kit Nitrile - 270-1528 (Cont'd.)

15		Seal-O-Ring	90A NBR	-20	-	Code 61 / 62
15		Seal-O-Ring	90A NBR	-24	-	Code 61 / 62
10		Seal-O-Ring	90A NBR	-32	-	Code 61 / 62
15		Seal-O-Ring	90A NBR		-	Non-standard Code 61/62
15		Seal-O-Ring	90A NBR		-	Non-standard Code 61/62
15		Seal-O-Ring	90A NBR		-	Non-standard Code 61/62
10		Seal-O-Ring	90A NBR		-	Non-standard Code 61/62
10		Seal-O-Ring	90A NBR		-	Non-standard Code 61/62
1	276-9576 ⁽²⁾	Box-Utility	-			

2 Not available for individual sale

Flange - Cat D-Ring Seal Kit Nitrile - 270-1535



Cat Flange D-Rings - Nitrile

- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower costs per hour.

Quantity	O-Ring Part Number	Name	Material	Dash Size	Thread Size	Termination Type
10		Seal-Rectangular	90A NBR	-8	-	Cat Flange
10		Seal-Rectangular	90A NBR	-12	-	Cat Flange
10		Seal-Rectangular	90A NBR	-16	-	Cat Flange
10		Seal-Rectangular	90A NBR	-20	-	Cat Flange
10		Seal-Rectangular	90A NBR	-24	-	Cat Flange
10		Seal-Rectangular	90A NBR			Cat Flange
10		Seal-Rectangular	90A NBR			Cat Flange
5		Seal-Rectangular	90A NBR			Cat Flange
5		Seal-Rectangular	90A NBR	-32	-	Cat Flange
1	276-9578 ⁽³⁾	Box-Utility	-	-	-	-

Seal Kits

STOR Metric O-Ring Seal Kit Nitrile - 270-1537



Metric STOR (Straight Thread O-Rings) - Nitrile

- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower costs per hour.

Quantity	O-Ring Part Number	Name	Material	Dash Size	Thread Size	Termination Type
15		Seal-O-Ring	90A NBR	-	M14 x 1.5	Metric STOR
10		Seal-O-Ring	90A NBR	-	M22 x 1.5	Metric STOR
15		Seal-O-Ring	90A NBR	-	M12 x 1.5	Metric STOR
15		Seal-O-Ring	90A NBR	-	M16 x 1.5	Metric STOR
15		Seal-O-Ring	90A NBR	-	M18 x 1.5	Metric STOR
10		Seal-O-Ring	90A NBR	-	M27 x 2	Metric STOR
5		Seal-O-Ring	90A NBR	-	M33 x 2	Metric STOR
15		Seal-O-Ring	90A NBR	-	M10 x 1	Metric STOR
15		Seal-O-Ring	90A NBR	-	M20 x 1.5	Metric STOR
10		Seal-O-Ring	90A NBR	-		Metric STOR
1	276-9578 ⁽⁴⁾	Box-Utility	-	-	-	-

4 Not available for individual sale

ORFS O-Ring Seal Kit Nitrile - 270-1539



ORFS (O-Ring Face Seal) - Nitrile

- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower costs per hour.

Quantity	O-Ring Part Number	Name	Material	Dash Size	Thread Size	Termination Type
20		Seal-O-Ring	90A NBR	-04	9/16 -18	ORFS
20		Seal-O-Ring	90A NBR	-06	11/16 -16	ORFS
20		Seal-O-Ring	90A NBR	-08	13/16 -16	ORFS
20	7J-9108 ⁽⁵⁾	Seal-O-Ring	90A NBR	-10	1 -14	ORFS
10		Seal-O-Ring	90A NBR	-12	1-3/16 -12	ORFS
10		Seal-O-Ring	90A NBR	-16	1-7/16 -12	ORFS
10		Seal-O-Ring	90A NBR	-20	1-11/16 -12	ORFS
10		Seal-O-Ring	90A NBR	-24	2 - 12	ORFS
1	276-9578 ⁽⁶⁾	Box-Utility	-	-	-	-

5 Part of 9U-6253 Removal Shaft Assembly and part of 9U-6254 Installation Shaft Assembly (both assemblies are part of 9U-6250 Pump Tool)

6 Not available for individual sale

Seal Kits

Air Conditioning O-Ring Seal Kit HNBR - 270-1540



Air Conditioning Seals - HNBR (Hydrogenated Nitrile Butadiene Rubber)

- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower costs per hour.

Also includes seals for other A/C connections such as pressure switch, quick disconnect, and compressor.

Quantity	O-Ring Part Number	Name	Material	Dash Size	Thread Size	Termination Type
15		Seal-O-Ring	78A HNBR			A/C O-Ring Seals
15		Seal-O-Ring	78A HNBR			A/C O-Ring Seals
15		Seal-O-Ring	78A HNBR	Various	Various	A/C O-Ring Seals
15		Seal-O-Ring	78A HNBR	Various	Various	A/C O-Ring Seals
15		Seal-O-Ring	78A HNBR	Various	Various	A/C O-Ring Seals
10		Seal-O-Ring	78A HNBR	Various	Various	A/C O-Ring Seals
10		Seal-O-Ring	78A HNBR	Various	Various	A/C O-Ring Seals
15		Seal-O-Ring	78A HNBR	Various	Various	A/C O-Ring Seals
10		Seal-O-Ring	80A NBR			A/C O-Ring Seals
10		Seal-O-Ring	78A HNBR			A/C O-Ring Seals
10		Seal-O-Ring	No info			A/C O-Ring Seals
10		Seal-O-Ring	78A HNBR			A/C O-Ring Seals
1	276-9578 ⁽⁷⁾	Box-Utility	-	-	-	-

7 Not available for individual sale

Flange Code 61/62 O-Ring Seal Kit Nitrile - 270-1545



Code 61/62 Flange O-Rings - Nitrile

- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower costs per hour.

Quantity	O-Ring Part Number	Name	Material	Dash Size	Thread Size	Termination Type
10		Seal-O-Ring	90A NBR	-08	-	Code 61 / 62
10		Seal-O-Ring	90A NBR	-12	-	Code 61 / 62
10		Seal-O-Ring	90A NBR	-16	-	Code 61 / 62
10		Seal-O-Ring	90A NBR	-20	-	Code 61 / 62
10		Seal-O-Ring	90A NBR	-24	-	Code 61 / 62
10		Seal-O-Ring	90A NBR	-32	-	Code 61 / 62
1	276-9578 ⁽⁸⁾	Box-Utility	-	-	-	-

ORFS O-Ring Seal Kit FKM / High Temperature - 271-0459



ORFS (O-Ring Face Seal) - FKM (Fluoroelastomer) / High Temperature

- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower costs per hour.

Quantity	O-Ring Part Number	Name	Material	Dash Size	Thread Size	Termination Type
5		Seal-O-Ring	90A FKM	-04	9/16 -18	ORFS
5		Seal-O-Ring	90A FKM	-06	11/16 -16	ORFS
5		Seal-O-Ring	90A FKM	-08	13/16 -16	ORFS
5		Seal-O-Ring	90A FKM	-10	1 -14	ORFS
5		Seal-O-Ring	90A FKM	-12	1-3/16 -12	ORFS
5		Seal-O-Ring	90A FKM	-16	1-7/16 -12	ORFS
5		Seal-O-Ring	90A FKM	-20	1-11/16 -12	ORFS

Seal Kits

ORFS O-Ring Seal Kit FKM / High Temperature - 271-0459 (Cont'd.)

5		Seal-O-Ring	90A FKM	-24	2 -12	ORFS
1	276-9578 ⁽⁹⁾	Box-Utility	-	-	-	-

9 Not available for individual sale

STOR O-Ring Seal Kit FKM / High Temperature - 271-0460



STOR (Straight Thread O-Rings) - FKM (Fluoroelastomer) / High Temperature

- Include frequently used o-ring sizes, reducing the need to order individual seals.
- Come in individual compartments with a rugged plastic container that latches shut for protection.
- Exceed SAE and other seal specifications, ensuring longer life and lower costs per hour.

Quantity	O-Ring Part Number	Name	Material	Dash Size	Thread Size	Termination Type
5	238-5078	Seal-O-Ring	90A FKM	-02	5/16 - 24	STOR
5	238-5079	Seal-O-Ring	90A FKM	-03	3/8 - 24	STOR
5	214-7566	Seal-O-Ring	90A FKM	-04	7/16 -20	STOR
5	214-7567	Seal-O-Ring	90A FKM	-05	1/2 -20	STOR
5	214-7568	Seal-O-Ring	90A FKM	-06	9/6 -18	STOR
5	238-5080	Seal-O-Ring	90A FKM	-08	3/4 -16	STOR
5	238-5081	Seal-O-Ring	90A FKM	-10	7/8 -14	STOR
5	238-5082	Seal-O-Ring	90A FKM	-12	1-1/16 -12	STOR
5	238-5083	Seal-O-Ring	90A FKM	-14	1-3/16 -12	STOR
5	238-5084	Seal-O-Ring	90A FKM	-16	1-5/16 -12	STOR
5	228-7096	Seal-O-Ring	90A FKM	-20	1-5/8 -12	STOR
5	238-5086	Seal-O-Ring	90A FKM	-24	1-7/8 -12	STOR
5	228-7097	Seal-O-Ring	90A FKM	-32	2-1/2 -12	STOR
1	276-9578 ⁽¹⁰⁾	Box-Utility	-	-	-	-

Split Flanges and Hardware	520
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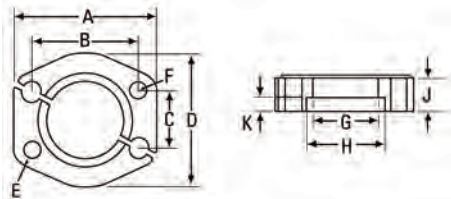
Split Flanges and Hardware

Code 61 Split Flanges & Hardware (for Inch Bolts)

Head Size	Flange Dash Size	Split Flange	Bolt	Bolt Size Dia-TPI x LG.	Flat Hard Washer	Washer Size OD x ID x THK (in)
1.19 in, 30.2 mm	-8	1P-4574	6V-5782	5/16-18 x 1.25	8T-4224	.630 x .346 x .079
1.34 in, 34.0 mm	-10	1P-4575	6V-5782	5/16-18 x 1.25	8T-4224	.630 x .346 x .079
1.50 in, 38.1 mm	-12	1P-4576	5S-7382	3/8-16 x 1.38	8T-4896	.728 x .402 x .098
1.75 in, 44.5 mm	-16	1P-4577	5S-7382	3/8-16 x 1.38	8T-4896	.728 x .402 x .098
2.00 in, 50.8 mm	-20	1P-4578	8T-8916	7/16-14 x 1.50	8T-5360	.886 x .472 x .098
2.37 in, 60.3 mm	-24	1P-4579	8T-8919	1/2-13 x 1.75	8T-4223	1.00 x .531 x .118
2.81 in, 71.4 mm	-32	1P-4582	8T-8919	1/2-13 x 1.75	8T-4223	1.00 x .531 x .118
3.31 in, 84.1 mm	-40	1P-4584	—	—	8T-4223	1.00 x .531 x .118
4.00 in, 101.6 mm	-48	1P-4585	—	—	9X-8257	1.18 x .688 x .137
4.50 in, 114.3 mm	-56	1P-7016	7X-0346	5/8-11 x 1.38	8T-4122	1.25 x .669 x .118
5.00 in, 127 mm	-64	1P-7017	8T-4140	—	9X-8257	1.18 x .688 x .137

Code 61 Split Flanges (for Inch Bolts)

Dimensions in mm and inch



Part Number	Head Size	Flange Dash Size	A	B	C	D	E	F	G	H	J	K
1P-4574	1.19 in, 30.2 mm	-8	2.12 in, 53.8 mm	1.50 in, 38.1 mm	0.69 in, 17.5 mm	1.81 in, 46.0 mm	0.33 in, 8.3 mm	0.31 in, 7.9 mm	0.97 in, 24.6 mm	1.22 in, 31.0 mm	0.63 in, 16.0 mm	0.24 in, 6.1 mm
1P-4575	1.34 in, 34.0 mm	-10	2.37 in, 60.3 mm	1.69 in, 42.9 mm	0.78 in, 19.8 mm	1.94 in, 49.2 mm	0.34 in, 8.7 mm	0.31 in, 7.9 mm	1.13 in, 28.6 mm	1.37 in, 34.9 mm	0.66 in, 16.7 mm	0.24 in, 6.2 mm
1P-4576	1.50 in, 38.1 mm	-12	2.56 in, 64.9 mm	1.87 in, 47.6 mm	0.87 in, 22.2 mm	2.05 in, 52.0 mm	0.41 in, 10.3 mm	0.34 in, 8.6 mm	1.28 in, 32.5 mm	1.53 in, 38.9 mm	0.70 in, 17.7 mm	0.24 in, 6.2 mm
1P-4577	1.75 in, 44.5 mm	-16	2.74 in, 69.6 mm	2.06 in, 52.4 mm	1.03 in, 26.2 mm	2.32 in, 59.0 mm	0.41 in, 10.3 mm	0.34 in, 8.6 mm	1.53 in, 38.9 mm	1.78 in, 45.2 mm	0.70 in, 17.7 mm	0.30 in, 7.5 mm
1P-4578	2.00 in, 50.8 mm	-20	3.13 in, 79.5 mm	2.31 in, 58.7 mm	1.19 in, 30.2 mm	2.88 in, 73.2 mm	0.47 in, 11.9 mm	0.41 in, 10.4 mm	1.73 in, 44.0 mm	2.03 in, 51.6 mm	0.70 in, 17.7 mm	0.30 in, 7.5 mm
1P-4579	2.37 in, 60.3 mm	-24	3.69 in, 93.7 mm	2.75 in, 69.9 mm	1.41 in, 35.7 mm	3.23 in, 82.0 mm	0.53 in, 13.5 mm	0.47 in, 11.9 mm	2.02 in, 51.2 mm	2.41 in, 61.1 mm	0.76 in, 19.3 mm	0.29 in, 7.3 mm
1P-4582	2.81 in, 71.4 mm	-32	4.00 in, 101.7 mm	3.06 in, 77.8 mm	1.69 in, 42.9 mm	3.82 in, 97.0 mm	0.53 in, 13.5 mm	0.47 in, 11.9 mm	2.48 in, 63.1 mm	2.84 in, 72.2 mm	0.76 in, 19.3 mm	0.35 in, 8.8 mm

¹ E = Hole Diameter

² F = Radius

Split Flanges and Hardware

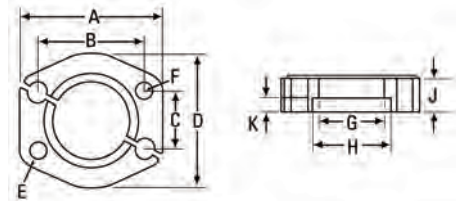
Code 61 Split Flanges & Hardware (for Metric Bolts)

Flanges and Hardware for use with Bolts with metric threads

Head Size	Flange Dash Size	Split Flange	Bolt	Bolt Size DIA x Pitch x LG.	Flat Hard Washer	Washer Size OD x ID x THK (mm)
1.19 in, 30.2 mm	-8	1P-4574	8T-7547	M8 x 1.25 x 30	8T-4224	16.0 x 8.8 x 2.0
1.34 in, 34.0 mm	-10	1P-4575	8T-7547	M8 x 1.25 x 30	8T-4224	16.0 x 8.8 x 2.0
1.50 in, 38.1 mm	-12	8C-3205	8T-4196	M10 x 1.50 x 35	8T-4121	21.0 x 11.0 x 2.5
1.75 in, 44.5 mm	-16	8C-3206	8T-4196	M10 x 1.50 x 35	8T-4121	21.0 x 11.0 x 2.5
2.00 in, 50.8 mm	-20	6V-0397	8T-4183	M12 x 1.75 x 40	8T-4223	25.5 x 13.5 x 3.0
2.37 in, 60.3 mm	-24	1P-4579	8T-4184	M12 x 1.75 x 45	8T-4223	25.5 x 13.5 x 3.0
2.81 in, 71.4 mm	-32	1P-4582	8T-4184	M12 x 1.75 x 45	8T-4223	25.5 x 13.5 x 3.0

Code 61 Split Flanges (for Metric Bolts)

Dimensions in mm and inch



Part Number	Head Size	Flange Dash Size	A	B	C	D	E	F	G	H	J	K
1P-4574	1.19 in, 30.2 mm	-8	2.12 in, 53.8 mm	1.50 in, 38.1 mm	0.69 in, 17.5 mm	1.81 in, 46.0 mm	0.33 in, 8.3 mm	0.31 in, 7.9 mm	0.97 in, 24.6 mm	1.22 in, 31.0 mm	0.63 in, 16.0 mm	0.24 in, 6.1 mm
1P-4575	1.34 in, 34.0 mm	-10	2.37 in, 60.3 mm	1.69 in, 42.9 mm	0.78 in, 19.8 mm	1.94 in, 49.2 mm	0.34 in, 8.7 mm	0.31 in, 7.9 mm	1.13 in, 28.6 mm	1.37 in, 34.9 mm	0.66 in, 16.7 mm	0.24 in, 6.2 mm
8C-3205	1.50 in, 38.1 mm	-12	2.56 in, 64.9 mm	1.87 in, 47.6 mm	0.87 in, 22.2 mm	2.05 in, 52.0 mm	0.43 in, 11.0 mm	0.34 in, 8.6 mm	1.28 in, 32.5 mm	1.53 in, 38.9 mm	0.70 in, 17.7 mm	0.24 in, 6.2 mm
8C-3206	1.75 in, 44.5 mm	-16	2.74 in, 69.6 mm	2.06 in, 52.4 mm	1.03 in, 26.2 mm	2.36 in, 60.0 mm	0.43 in, 11.0 mm	0.34 in, 8.6 mm	1.53 in, 38.9 mm	1.78 in, 45.2 mm	0.70 in, 17.7 mm	0.29 in, 7.4 mm
6V-0397	2.00 in, 50.8 mm	-20	3.13 in, 79.5 mm	2.31 in, 58.7 mm	1.19 in, 30.2 mm	2.88 in, 73.2 mm	0.51 in, 13.0 mm	0.41 in, 10.4 mm	1.73 in, 44.0 mm	2.03 in, 51.6 mm	0.70 in, 17.7 mm	0.28 in, 7.1 mm
1P-4579	2.37 in, 60.3 mm	-24	3.69 in, 93.7 mm	2.75 in, 69.9 mm	1.41 in, 35.7 mm	3.23 in, 82.0 mm	0.53 in, 13.5 mm	0.47 in, 11.9 mm	2.02 in, 51.2 mm	2.41 in, 61.1 mm	0.76 in, 19.3 mm	0.29 in, 7.3 mm
1P-4582	2.81 in, 71.4 mm	-32	4.00 in, 101.7 mm	3.06 in, 77.8 mm	1.69 in, 42.9 mm	3.82 in, 97.0 mm	0.53 in, 13.5 mm	0.47 in, 11.9 mm	2.48 in, 63.1 mm	2.84 in, 72.2 mm	0.76 in, 19.3 mm	0.35 in, 8.8 mm

¹ E = Diameter

² F = Radius

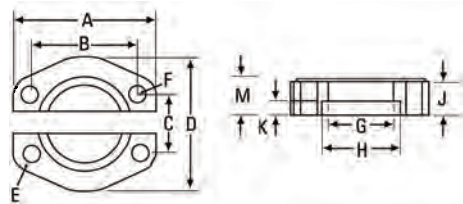
Split Flanges and Hardware

Code 62 Split Flanges & Hardware (for Inch Bolts)

Flanges & Hardware for use with Bolts with inch threads

Head Size	Flange Dash Size	Split Flange	Bolt	Bolt Size		Washer Size
				Dia-TPI x LG.	Flat Hard Washer	D x ID x THK (in)
1.25 in, 31.8 mm	-8	124-4286	6V-8918	5/16 - 18 x 1.25	8T-4224	.630 x .346 x .079
1.63 in, 41.3 mm	-12	124-4287	4L-9337	3/8 - 16 x 1.50	8T-4896	.728 x .402 x .098
1.87 in, 47.6 mm	-16	124-4288	8C-6877	7/16 - 14 x 1.75	8T-5360	.886 x .472 x .098
2.13 in, 54.0 mm	-20	2T-3001	8T-8919	1/2 - 13 x 1.75	8T-4223	1.004 x .531 x .118
2.50 in, 63.5 mm	-24	2T-3000	7X-0347	5/8 - 11 x 2.25	8T-4122	1.260 x .669 x .138
3.13 in, 79.6 mm	-32	124-4289	8C-6857	3/4 - 10 x 2.75	8T-4994	1.438 x .787 x .138

Code 62 Split Flanges (for Inch Bolts)



Part Number	Head Size	Flange Dash Size	A	B	C	D	E	F	G	H	J	K	M
124-4286	1.25 in, 31.8 mm	-8	2.22 in, 56.4 mm	1.59 in, 40.5 mm	0.71 in, 18.0 mm	1.86 in, 47.2 mm	0.34 in, 8.7 mm	0.31 in, 8.0 mm	0.97 in, 24.6 mm	1.28 in, 32.5 mm	0.63 in, 16.0 mm	0.28 in, 7.2 mm	0.87 in, 22.0 mm
124-4287	1.63 in, 41.3 mm	-12	2.81 in, 71.4 mm	2.00 in, 50.8 mm	0.94 in, 24.0 mm	2.36 in, 60.0 mm	0.41 in, 10.3 mm	0.39 in, 10.0 mm	1.28 in, 32.5 mm	1.66 in, 42.1 mm	0.75 in, 19.0 mm	0.33 in, 8.3 mm	1.10 in, 28.0 mm
124-4288	1.87 in, 47.6 mm	-16	3.19 in, 81.0 mm	2.25 in, 57.2 mm	1.17 in, 29.8 mm	2.74 in, 69.6 mm	0.47 in, 11.9 mm	0.47 in, 12.0 mm	1.53 in, 38.9 mm	1.91 in, 48.4 mm	0.94 in, 24.0 mm	0.35 in, 9.0 mm	1.30 in, 33.0 mm
2T-3001	2.13 in, 54.0 mm	-20	3.75 in, 95.2 mm	2.63 in, 66.7 mm	1.21 in, 30.8 mm	3.04 in, 77.2 mm	0.59 in, 15.0 mm	0.55 in, 14.0 mm	1.75 in, 44.5 mm	2.15 in, 54.7 mm	1.06 in, 26.9 mm	0.39 in, 9.8 mm	1.50 in, 38.1 mm
2T-3000	2.50 in, 63.5 mm	-24	4.44 in, 112.8 mm	3.13 in, 79.4 mm	1.44 in, 36.6 mm	3.74 in, 95.0 mm	0.66 in, 16.7 mm	0.67 in, 17.0 mm	2.03 in, 51.6 mm	2.53 in, 64.3 mm	1.18 in, 30.0 mm	0.48 in, 12.1 mm	1.69 in, 43.0 mm
124-4289	3.13 in, 79.6 mm	-32	5.25 in, 133.4 mm	3.81 in, 96.8 mm	1.75 in, 44.4 mm	4.48 in, 113.8 mm	0.78 in, 19.8 mm	0.71 in, 18.0 mm	2.66 in, 67.6 mm	3.16 in, 80.2 mm	1.46 in, 37.0 mm	0.48 in, 12.1 mm	2.05 in, 52.0 mm

Dimensions in mm and inch

¹ NOTE: For use with SAE Code 62 Couplings only

² E = Hole Diameter

³ F = Radius

Code 62 Split Flanges & Hardware (for Metric Bolts)

Flanges & Hardware for use with Bolts with metric threads

Head Size	Flange Dash Size	Split Flange	Bolt	Bolt Size		Washer Size
				Dia x Pitch x LG	Flat Hard Washer	OD x ID x Thk (in)
1.25 in, 31.8 mm	-8	124-4286	8T-7547	M8 x 1.25 x 30	8T-4224	16.0 x 8.8 x 2.0
1.63 in, 41.3 mm	-12	5W-9857	8T-4196	M10 x 1.50 x 35	8T-4121	21.0 x 11.0 x 2.5
1.87 in, 47.6 mm	-16	8U-0284	8T-4184	M12 x 1.75 x 45	8T-4223	25.5 x 13.5 x 3.0
2.13 in, 54.0 mm	-20	131-3025	8T-4184	M12 x 1.75 x 45	8T-4223	25.5 x 13.5 x 3.0
2.50 in, 63.5 mm	-24	2T-3000	099-0169	M16 x 2.0 x 55	9X-8257	30.0 x 17.5 x 3.5
3.13 in, 79.6 mm	-32	124-4289	8T-4141	M20 x 2.50 x 70	8T-4123	35.0 x 22.0 x 3.5

Split Flanges and Hardware

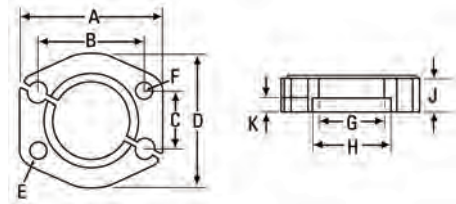
Cat Flange Split Flanges & Hardware (for Inch Bolts)

Flanges and Hardware for use with Bolts with inch threads

Head Size	Flange Dash Size	Split Flange	Bolt	Bolt Size Dia-TPI x LG.	Flat Hard Washer	Washer Size OD x ID x THK (in)
1.63 in, 41.3 mm	-12	1P-5765	5S-7383	3/8 - 16 x 1.75	8T-4896	.728 x .402 x 0.98
1.87 in, 7.6 mm	-16	1P-5766	8C-6877	7/16 - 14 x 1.75	8T-5360	.886 x .472 x 0.98
2.13 in, 54.0 mm	-20	1P-5767	8T-4835	1/2 - 13 x 2.00	8T-4223	1.004 x .531 x .118
2.50 in, 63.5 mm	-24	5P-8077	8T-6871	5/8 - 11 x 2.50	8T-4122	1.260 x .669 x .138
3.13 in, 79.6 mm	-32	6V-0402	8C-6857	3/4 - 10 x 2.75	8T-4994	1.438 x .787 x .138

Cat Flange Split Flanges (for Inch Bolts)

Dimensions in mm and inch



Part Number	Head Size	Flange Dash Size	A	B	C	D	E	F	G	H	J	K
1P-5765	1.63 in, 41.3 mm	-12	2.82 in, 71.6 mm	2.00 in, 50.8 mm	0.94 in, 23.8 mm	2.38 in, 60.4 mm	0.41 in, 10.3 mm	0.41 in, 10.4 mm	1.27 in, 32.3 mm	1.63 in, 41.5 mm	1.10 in, 28.0 mm	0.53 in, 13.5 mm
1P-5766	1.87 in, 47.6 mm	-16	3.19 in, 81.0 mm	2.25 in, 57.2 mm	1.09 in, 27.8 mm	2.76 in, 70.0 mm	0.47 in, 11.9 mm	0.47 in, 11.9 mm	1.55 in, 39.4 mm	1.89 in, 47.9 mm	1.10 in, 28.0 mm	0.53 in, 13.5 mm
1P-5767	2.13 in, 54.0 mm	-20	3.75 in, 95.3 mm	2.63 in, 66.7 mm	1.25 in, 31.8 mm	3.07 in, 78.0 mm	0.53 in, 13.5 mm	0.56 in, 14.3 mm	1.70 in, 43.3 mm	2.16 in, 54.8 mm	1.10 in, 28.0 mm	0.53 in, 13.5 mm
5P-8077	2.50 in, 63.5 mm	-24	4.46 in, 113.4 mm	3.13 in, 79.4 mm	1.44 in, 36.5 mm	3.78 in, 96.0 mm	0.66 in, 16.7 mm	0.67 in, 17.0 mm	2.08 in, 52.8 mm	2.51 in, 63.7 mm	1.26 in, 32.0 mm	0.53 in, 13.5 mm
459-0709*	2.50 in, 63.5 mm	-24	4.44 in, 112.8 mm	3.13 in, 79.4 mm	1.44 in, 36.5 mm	3.74 in, 95.0 mm	0.66 in, 16.7 mm	0.67 in, 17.0 mm	2.03 in, 51.6 mm	2.53 in, 64.3 mm	1.26 in, 32.0 mm	0.53 in, 13.5 mm
6V-0402	3.13 in, 79.6 mm	-32	5.24 in, 133.0 mm	3.81 in, 96.8 mm	1.75 in, 44.4 mm	4.49 in, 114.0 mm	0.83 in, 21.0 mm	0.72 in, 18.3 mm	2.64 in, 67.1 mm	3.13 in, 79.6 mm	1.44 in, 36.5 mm	0.53 in, 13.5 mm
459-0710*	3.13 in, 79.6 mm	-32	5.24 in, 133.1 mm	3.81 in, 96.8 mm	1.75 in, 44.5 mm	4.48 in, 113.8 mm	0.83 in, 21.0 mm	0.72 in, 18.3 mm	2.66 in, 67.6 mm	3.16 in, 80.2 mm	1.46 in, 37.0 mm	0.53 in, 13.5 mm

¹ E = Hole Diameter

² F = Radius

³ * = Not diagonally split for HMS

Split Flanges and Hardware

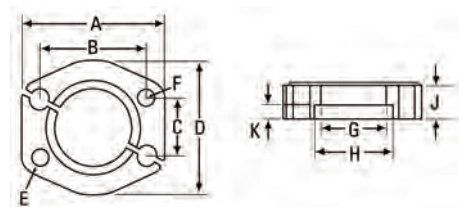
Cat Flange Split Flanges & Hardware (for Metric Bolts)

Flanges and Hardware for use with Bolts with metric threads

Head Size	Flange Dash Size	Split Flange	Bolt	Bolt Size DIA x Pitch x LG.	Flat Hard Washer	Washer Size OD x ID x THK (mm)
1.63 in, 41.3 mm	-12	8T-9403	8T-4182	M10 x 1.50 x 45	8T-4121	21.0 x 11.0 x 2.5
1.87 in, 47.6 mm	-16	6V-0400	8T-4184	M12 x 1.75 x 45	8T-4223	25.5 x 13.5 x 3.0
2.13 in, 54.0 mm	-20	1P-5767	8T-4194	M12 x 1.75 x 50	8T-4223	25.5 x 13.5 x 3.0
2.50 in, 63.5 mm	-24	5P-8077	8T-4140	M16 x 2.00 x 60	8T-4122	32.0 x 17.0 x 3.5
3.13 in, 79.6 mm	-32	6V-0402	8T-4141	M20 x 2.50 x 70	8T-4994	36.5 x 20.0 x 3.5

Cat Flange Split Flanges (for Metric Bolts)

Dimensions in mm and inch



Part Number	Head Size	Flange Dash Size	A	B	C	D	E	F	G	H	J	K
8T-9403	1.63 in, 41.3 mm	-12	2.82 in, 71.6 mm	2.00 in, 50.8 mm	0.94 in, 23.8 mm	2.36 in, 60.0 mm	0.43 in, 11.0 mm	0.41 in, 10.4 mm	1.27 in, 32.3 mm	1.63 in, 41.5 mm	1.10 in, 28.0 mm	0.53 in, 13.5 mm
6V-0400	1.87 in, 47.6 mm	-16	3.19 in, 81.0 mm	2.25 in, 57.2 mm	1.09 in, 27.8 mm	2.76 in, 70.0 mm	0.51 in, 13.0 mm	0.47 in, 11.9 mm	1.55 in, 39.4 mm	1.89 in, 47.9 mm	1.10 in, 28.0 mm	0.53 in, 13.5 mm
1P-5767	2.13 in, 54.0 mm	-20	3.75 in, 95.3 mm	2.63 in, 66.7 mm	1.25 in, 31.8 mm	3.07 in, 78.0 mm	0.53 in, 13.5 mm	0.56 in, 14.3 mm	1.70 in, 43.3 mm	2.16 in, 54.8 mm	1.10 in, 28.0 mm	0.53 in, 13.5 mm
235-3570	2.13 in, 54.0 mm	-20	3.75 in, 95.3 mm	2.63 in, 66.7 mm	1.25 in, 31.8 mm	3.07 in, 78.0 mm	0.59 in, 15.0 mm	0.55 in, 14.0 mm	1.70 in, 43.3 mm	2.16 in, 54.8 mm	1.10 in, 28.0 mm	0.53 in, 13.5 mm
5P-8077	2.50 in, 63.5 mm	-24	4.46 in, 113.4 mm	3.13 in, 79.4 mm	1.44 in, 36.5 mm	3.78 in, 96.0 mm	0.66 in, 16.7 mm	0.67 in, 17.0 mm	2.08 in, 52.8 mm	2.51 in, 63.7 mm	1.26 in, 32.0 mm	0.53 in, 13.5 mm
459-0709*	2.50 in, 63.5 mm	-24	4.44 in, 112.8 mm	3.13 in, 79.4 mm	1.44 in, 36.5 mm	3.74 in, 95.0 mm	0.66 in, 16.7 mm	0.67 in, 17.0 mm	2.03 in, 51.6 mm	2.53 in, 64.3 mm	1.26 in, 32.0 mm	0.53 in, 13.5 mm
6V-0402	n/a	-32	5.24 in, 133.1 mm	3.81 in, 96.8 mm	1.75 in, 44.5 mm	4.49 in, 114.0 mm	0.83 in, 21.0 mm	0.72 in, 18.3 mm	2.64 in, 67.1 mm	3.13 in, 79.6 mm	1.44 in, 36.5 mm	0.53 in, 13.5 mm
459-0710*	3.13 in, 79.6 mm	-32	5.24 in, 133.1 mm	3.81 in, 96.8 mm	1.75 in, 44.5 mm	4.48 in, 113.8 mm	0.83 in, 21.0 mm	0.72 in, 18.3 mm	2.66 in, 67.6 mm	3.16 in, 80.2 mm	1.46 in, 37.0 mm	0.53 in, 13.5 mm

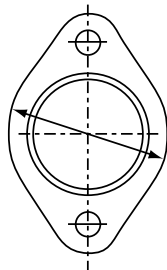
¹ E = Hole Diameter

² F = Radius

³ * = Not diagonally split for HMS

2 Hole Flange (Pre-install)

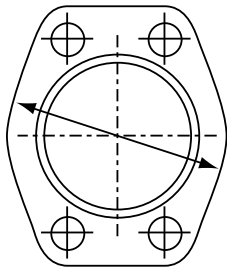
Must be installed on the coupling prior to assembly



Part Number	Used on Couplings
2M-5762	6V-4652, 6V-4659, 6V-4662, 6V-4665, 6V-4669, 6V-4672, 6V-4673, 6V-4676, 6V-4677, 6V-4679
6K-8298	6V-4652, 6V-4659, 6V-4662, 6V-4665, 6V-4669, 6V-4672, 6V-4673, 6V-4676, 6V-4677, 6V-4679
3V-5642	7S-3122, 2P-1313, 1P-7930

4 Hole Flange (Pre-install)

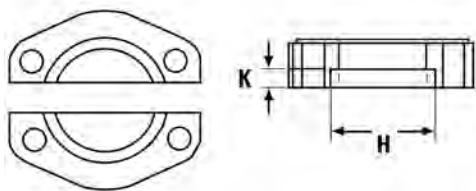
Must be installed on the coupling prior to assembly



Part Number	Used on Couplings
5P-5052	6V-4652, 6V-4659, 6V-4662, 6V-4665, 6V-4669, 6V-4672, 6V-4673, 6V-4676, 6V-4677, 6V-4679

Thick Flanges

Thick Flanges



Part Number	Flange Dash Size	Flange Head Size (H) (mm)	Continuous Bore Depth (K) (mm)	Flat Hard Washer
451-0454	12	41.3	13.5	8T-4121
451-0455	16	47.6	13.5	8T-4223
451-0457	20	54.0	13.5	7X-0510
451-0456	24	63.5	13.5	8T-4122
451-0458	32	79.4	13.5	8T-4123

Tooling

Note: Please refer to Dealer Service Tools Catalogue for a full range of tightening tools available.

Hose Clamps Clips and Screw Types..... 530

 Single Line Hose Clamps..... 530

 Double Line Hose Clamps..... 530

 Screw-Type Hose Clamps - Uniform Load..... 531

 Screw-Type Hose Clamps..... 531

 Screw-Type Hose Clamps - Heavy Duty..... 531

Armor Guard..... 534

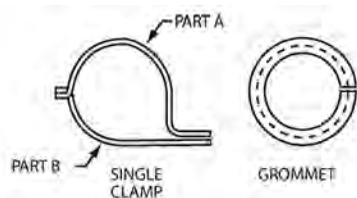
Whip Checks..... 542

 542

 Lanyards..... 543

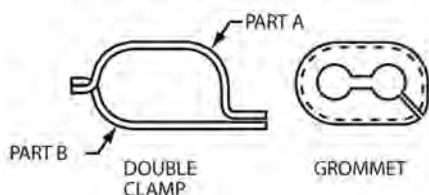
Hose Clamps Clips and Screw Types

Single Line Hose Clamps



Grommet I.D.	Grommet Part Number	Clamp Part A Number	Clamp Part B Number	XT-6 ES	XT-6	XT-5	XT-3 ES	1956	716	294	844	1028	2760	556 1130	1543J
0.75 in, 19.0 mm	6V-0683	5P-7462	5P-7463	-6			-6	-6	-8	-6		-8		-8	-10
0.87 in, 22.0 mm	6V-1249	5P-7464	5P-7465	-8	-6		-8	-8	-10	-8				-10	-12
1.18 in, 30.0 mm	5P-8112	5P-7466	5P-7467	-12			-12	-12						-16	
1.06 in, 27.0 mm	6V-4349	5P-7468	5P-7469						-12	-12					-14
0.98 in, 25.0 mm	6V-7359	5P-7464	5P-7465		-8		-10	-10				-12		-12	
0.94 in, 24.0 mm	8T-9518	5P-7468	5P-7469							-10					
1.34 in, 34.0 mm	8T-7087	5P-7468	5P-7469		-12				-16						
1.46 in, 37.0 mm	5P-8444	5P-7468	5P-7469	-16		-16	-16	-16		-16	-16			-20	
1.57 in, 40.0 mm	8T-2525	5P-7468	5P-7469		-16									-24	
1.73 in, 44.0 mm	6V-0545	5P-7468	5P-7469								-20				
1.81 in, 46.0 mm	5P-8182	5P-7470	5P-7471				-20	-20	-20	-20					
1.89 in, 48.0 mm	6V-1875	5P-7470	5P-7471	-20	-20	-20		-20	-24						
2.05 in, 52.0 mm	5P-7703	5P-7470	5P-7471				-24			-24	-24				
2.20 in, 56.0 mm	6V-1574	6V-1572	6V-1573	-24	-24	-24		-24							
2.56 in, 65.0 mm	6V-1869	6V-1867	6V-1868				-32		-32						
1.22 in, 31.0 mm	6V-1874	5P-7468	5P-7469			-12					-12				

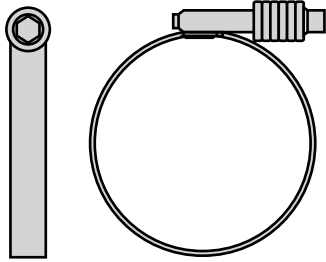
Double Line Hose Clamps



Grommet I.D.	Part Number	Clamp Part A Number	Clamp Part B Number	XT-6ES	XT-6	XT-5	XT-3ES	1956	716	294	844	1028	2760	556, 1130	1543J
0.87 in, 22.0 mm	3G-8047	3G-8057	3G-8054	-8	-8		-8	-8	-10	-10				-10	-12
0.79 in, 20.0 mm	6V-0974	3G-8057	3G-8054		-6		-6	-6	-8	-8		-8			-10
2.20 in, 56.0 mm	6V-1577	6V-1575	6V-1576	-24	-24	-24	-	-24		-	-24				
2.56 in, 65.0 mm	6V-1872	6V-1870	6V-1871				-32		-32						
1.89 in, 48.0 mm	6V-1877	6V-1575	6V-1576	-20	-20	-20		-20	-24		-20				
1.22 in, 31.0 mm	6V-1876	7G-5985	7G-5984			-12					-12				
1.81 in, 46.0 mm	7G-3415	7G-3413	7G-3414				-20			-20					
1.18 in, 30.0 mm	7G-3832	7G-3834	7G-3833	-12			-12	-12						-16	
1.46 in, 37.0 mm	7G-5986	7G-5985	7G-5984	-16		-16	-16	-16		-16	-16			-20	
1.57 in, 40.0 mm	8T-3440	7G-5985	7G-5984		-16				-20					-24	
1.34 in, 34.0 mm	8T-7088	7G-5985	7G-5984	-	-12				-16						
2.05 in, 52.0 mm	6V-1324	7G-3413	7G-3414				-24			-24					
1.02 in, 26.0 mm	8C-3174	7G-3834	7G-3833				-10	-10	-12	-12		-12		-12	-14

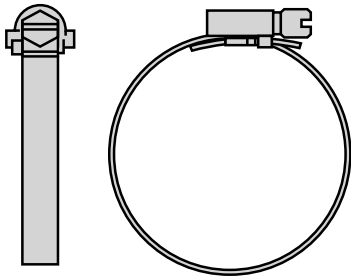
Hose Clamps Clips and Screw Types

Screw-Type Hose Clamps - Uniform Load



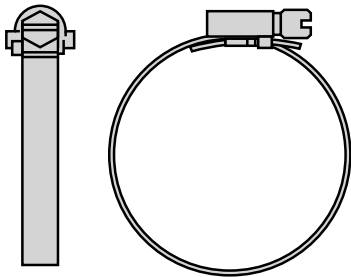
Part Number	MIN. - MAX. (in)	MIN. - MAX. (mm)	Band Thickness (mm)
8T-4983	1 1/4 - 2 1/8	32-54	12.5
8T-6703	1 3/4 - 2 5/8	45-67	12.5
8T-4984	2 1/4 - 3 1/8	57-79	12.5
8T-6675	2 3/4 - 3 5/8	70-92	12.5
8T-4985	3 1/4 - 4 1/8	83-105	12.5
8T-4986	4 1/4 - 5 1/8	108-130	12.5
8T-4987	5 1/4 - 6 1/8	133-156	12.5
8T-4988	6 1/4 - 7 1/8	159-181	12.5
8T-4989	7 1/4 - 8 1/8	184-206	12.5
8T-4990	8 1/4 - 9 1/8	210-232	12.5

Screw-Type Hose Clamps



Part Number	MIN. - MAX. (in)	MIN. - MAX. (mm)	Band Thickness (mm)
1P-4278	7/32 - 5/8	6-16	12.5
5D-1026	9/16 - 11/16	16-27	12.5
9M-7958	15/16 - 1 3/4	22-45	12.5
9M-0164	1 9/16 - 2 1/2	43-64	12.5
9M-7959	2 9/16 - 3 1/2	65-89	12.5
9M-6738	3 5/16 - 4 1/4	89-108	12.5

Screw-Type Hose Clamps - Heavy Duty



Part Number	MIN. - MAX. (in)	MIN. - MAX. (mm)	Band Thickness (mm)
5P-2230	1 1/4 - 2	32-54	14.2
5P-0597	1 3/4 - 2 5/8	45-67	14.2
5P-0598	2 1/8 - 4 1/8	54-105	14.2
5P-0599	4 - 6 1/8	133-156	14.2
5P-0600	6 - 9	156-229	14.2

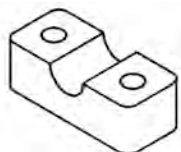
¹ NOTE: Heavy Duty Screw-Type Hose Clamps are made of stainless steel.

Hose Clamps Clips and Screw Types

Stauff Clamps

Hose Type	716					294				
Hose ID	Clamp + In- sert ID	Clamp or Clamp/ Insert Part Number		Weld Plate	Cover Plate	Clamp + In- sert ID	Clamp or Clamp/ Insert Part Number		Weld Plate	Cover Plate
-4	12.7	491-8031	491-8032	451-1869	435-7441	15.0	438-6498		451-1869	435-7441
-6	16.0	468-9694		451-1868	435-0692	17.2	491-8031	468-9702	451-1869	435-7441
-8	19.0	491-8031	520-3708	451-1869	435-7441	20.0	468-9679	471-6343	339-6074	435-7022
-10	24.0	468-9679	471-6342	339-6074	435-7022	24.0	468-9679	471-6342	339-6074	435-7022
-12	26.9	468-9673		451-1869	435-7441	26.9	468-9673		451-1869	435-7441
-16	32.0	468-9679	487-0854	339-6074	435-7022	35.0	478-0930	468-9710	451-1870	435-0693
-20	40.0	478-0930	487-0855	451-1870	435-0693	45.5	478-0930	503-3024	451-1870	435-0693
-24	48.0	478-0930	487-1760	451-1870	435-0693	51.0	478-0930	468-9685	451-1870	435-0693
-32	60.0	499-6550	468-9686	451-1871	435-6716	63.5	499-6550	498-9651	451-1871	435-6716

Hose Type	4198					XT3				
Hose ID	Clamp + In- sert ID	Clamp or Clamp/ Insert Part Number		Weld Plate	Cover Plate	Clamp + In- sert ID	Clamp or Clamp/ Insert Part Number		Weld Plate	Cover Plate
-4	12.7	491-8031	491-8032	451-1869	435-7441	N/A	N/A	N/A	N/A	N/A
-6	16.0	468-9694		451-1868	435-0692	19.0	491-8031	520-3708	451-1869	435-7441
-8	19.0	491-8031	520-3708	451-1869	435-7441	24.0	468-9679	471-6342	339-6074	435-7022
-10	24.0	468-9679	471-6342	339-6074	435-7022	25.0	468-9679	468-9682	339-6074	435-7022
-12	26.9	468-9673		451-1869	435-7441	28.0	468-9679	491-1363	339-6074	435-7022
-16	35.0	478-0930	468-9710	451-1870	435-0693	35.0	478-0930	468-9710	451-1870	435-0693
-20	N/A	N/A	N/A	N/A	N/A	45.5	478-0930	503-3024	451-1870	435-0693
-24	N/A	N/A	N/A	N/A	N/A	51.0	478-0930	468-9685	451-1870	435-0693
-32	N/A	N/A	N/A	N/A	N/A	63.5	499-6550	498-9651	451-1871	435-6716



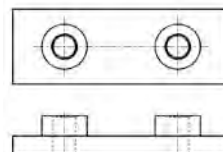
Smooth
Clamp



Ribbed Clamp



Ribbed Clamp
Insert



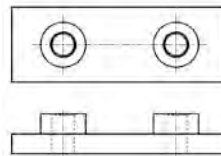
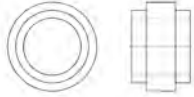
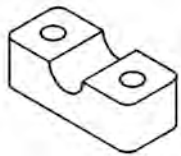
Weld Plate



Cover Plate

Hose Clamps Clips and Screw Types

Hose Type	XT5					XT6				
Hose ID	Clamp + Insert ID	Clamp or Clamp/Insert Part Number		Weld Plate	Cover Plate	Clamp + Insert ID	Clamp or Clamp/Insert Part Number		Weld Plate	Cover Plate
-4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-6	N/A	N/A	N/A	N/A	N/A	19.0	491-8031	520-3708	451-1869	435-7441
-8	N/A	N/A	N/A	N/A	N/A	24.0	468-9679	471-6342	339-6074	435-7022
-10	N/A	N/A	N/A	N/A	N/A	25.0	468-9679	468-9682	339-6074	435-7022
-12	30.0	468-9679	468-9681	339-6074	435-7022	28.0	468-9679	491-1363	339-6074	435-7022
-16	35.0	478-0930	468-9710	451-1870	435-0693	35.0	478-0930	468-9710	451-1870	435-0693
-20	45.5	478-0930	503-3024	451-1870	435-0693	45.5	478-0930	503-3024	451-1870	435-0693
-24	53.4	478-0930	487-0853	451-1870	435-0693	53.4	478-0930	487-0853	451-1870	435-0693
-32	68.0	499-6550	486-3340	451-1871	435-6716	68.0	499-6550	486-3340	451-1871	435-6716



Smooth Clamp



Ribbed Clamp



Ribbed Clamp Insert



Weld Plate



Cover Plate

Clamp Part No.	Dim L2	Stauff Group	Bolts	Weld Plate	Cover Plate
438-6498	45	4S	M10 x 60	451-1869	435-7441
468-9673	45	4S	M10 x 60	451-1186	435-7441
468-9694	33	3S	M10 x 45	451-1868	435-0692
468-9679	60	5S	M10 x 70	339-6074	435-7022
478-0930	90	6S	M12 x 100	451-1870	435-0693
491-8031	45	4S	M10 x 60	451-1869	435-7441
499-6550	122	7S	M16 x 130	451-1871	435-6716

Armor Guard

Bulk Metal Armor Guard



Part Number	Guard I.D.	XT-6ES	XT-6	XT-5ES	XT-3ES	1956	716	294	844	1028
6V-0743	0.94 in, 23.8 mm	-6	-6		-6	-6	-8	-6		-8
6V-0754	2.97 in, 75.5 mm			-32						
6V-0744	1.06 in, 27.0 mm	-8	-8		-8	-8	-10	-8		
6V-0745	1.34 in, 34.0 mm	-12			-12	-12		-12		
6V-0746	1.65 in, 42.0 mm	-16	-12	-16	-16	-16	-16	-16	-16	
6V-0747	2.01 in, 51.0 mm		-16		-20		-20	-20		
6V-0748	2.28 in, 58.0 mm				-24			-24		
6V-0749	2.83 in, 71.8 mm				-32	-32	-32	-32	-32	
6V-0752	2.17 in, 55.0 mm	-20	-20	-20		-20	-24		-20	
6V-0756	1.41 in, 35.8 mm			-12					-12	
6V-0757	2.41 in, 61.3 mm	-24		-24		-24			-24	
9X-2856	0.72 in, 18.3 mm						-6	-4-5		-5-6
8C-7557	1.18 in, 30.0 mm				-10	-10	-12			-12
9X-6186	0.56 in, 14.2 mm						-4			-3-4

Note: Sold by the centimeter.

Note: To find the proper bulk armor guard part number, first locate the appropriate hose type column in the chart above. Then, read down to find the hose inside diameter given in dash size and select the corresponding guard part number shown at the far left.

Armor Guard Clip

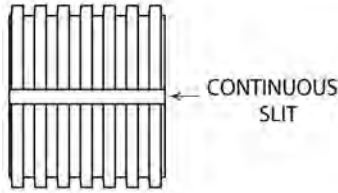


Part Number	Min	Max
3E-4070	1.50 in, 38.1 mm	2.00 in, 50.8 mm
3E-4071	0.37 in, 9.5 mm	1.00 in, 25.4 mm
3E-4062	1.25 in, 31.8 mm	1.50 in, 38.1 mm

Parts for Improved Spring Guard Retention

Part Number	Description
384-0397	Saddle clamp
385-1393	Band
385-1392	Band

Bulk Air Conditioning (1543J)



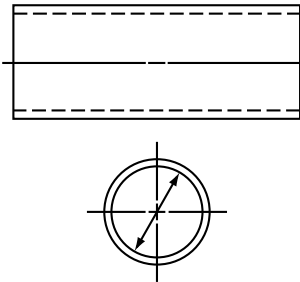
Part Number	Guard I.D.	Hose Dash Size
8C-5063	0.56 in, 14.2 mm	-5
8C-5064	0.70 in, 17.8 mm	-6
7X-7702	0.92 in, 23.4 mm	-10

Note: Sold by centimeter

Nylon Abrasive Sleeve

For abrasion resistance and bundling of hose lines. Note: MSHA approved. Fire resistant and MSHA approved. Tested against abrasion for 350,000 cycles
Meets ISO6945 Abrasion Standards

Installation Method: Attachment of metallic clamps installed over the sleeve at the shell portion of the coupling



Part Number	Guard I.D.	XT-6 ES	XT-6	XT-5	XT-3 ES	1956	716	294	844	Material
541-7087	0.71 in, 18.0 mm									Nylon
541-7088	1.00 in, 25.4 mm						-4 -6	-4 -5 -6		Nylon
541-7089	1.13 in, 28.7 mm					-6				Nylon
541-7090	1.25 in, 31.8 mm	-6			-6					Nylon
541-7091	1.59 in, 40.4 mm	-8			-8	-8 -10	-8 -10	-8 -10		Nylon
541-7092	1.75 in, 44.5 mm	-12	-12	-12	-10 -12	-12	-12	-12	-12	Nylon
541-7093	2.07 in, 52.6 mm					-16	-16	-16	-16	Nylon
541-7094	2.38 in, 60.5 mm	-16	-16	-16	-16		-20	-20	-20	Nylon
541-7095	2.54 in, 64.5 mm					-24	-24	-24	-24	Nylon
541-7096	2.86 in, 72.6 mm	-20 -24	-20 -24	-20 -24	-20 -24		-32	-32	-32	Nylon
541-7097	3.34 in, 84.8 mm			-32	-32	-32				Nylon

Double Ply Nylon Sleeve

Intended for spray suppression in high pressure applications such as Mining.
Meets ISO 3457.

Withstands a minimum burst pressure of 414 Bar (6000 PSI) without rupture.

Operating Temperature Range: Up to 121°C (250°F)

Installation Method: Attachment of metallic clamps installed over the sleeve at the shell portion of the coupling

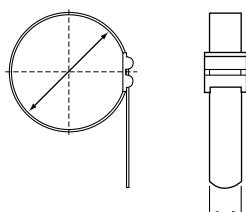
Part Number	Size
462-8844	30.7
462-8845	35.8
462-8846	41.1
462-8847	46.0
462-8848	53.3

Armor Guard

Single Ply - Red Nylon Sleeve

Part Number	Size
543-0394	31.0
543-0395	53.0
592-6091	73.0

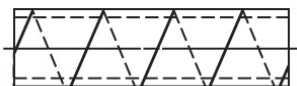
Nylon Abrasive Sleeve Steel Band



Part Number	Guard I.D. (in - mm)
384-4127	1.37 - 34.9
384-4128	1.98 - 50.4
384-4129	3.00 - 76.2
460-3311	4.00 - 101.6

Used to attach nylon abrasive sleeve to hose assembly. For other applications, use nylon cable ties. Note: Refer to the Tooling section of this guide for related assembly tooling.

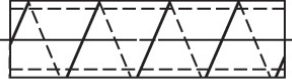
Light Duty Plastic Bulk Guard



Part Number	Guard I.D.	Wall Thickness	XT-6ES	XT-6	XT-3ES	1956	716	294	844
7I-7439	0.51 in, 13.0 mm	0.07 in, 1.8 mm					-4 -6	-4 -5 -6	
7I-1024	0.79 in, 20.0 mm	0.09 in, 2.3 mm	-6 -8	-6	-6 -8	-6 -8	-8 -10	-8	
7Y-5074	0.98 in, 25.0 mm	0.11 in, 2.8 mm	-12	-8	-10 -12	-10	-12	-10 -12	-12

Note: Sold by the centimeter.

Heavy Duty Plastic Bulk Guard



Part Number	Color	Guard I.D.	Wall Thickness	XT-6 ES	XT-6	XT-5	XT-3 ES	1956	716	294	844
206-2725	Black	1.50 in, 38.1 mm	0.14 in, 3.6 mm	—	-12	-12	—	-12	-16	-16	-12
206-2726	Black	2.00 in, 50.8 mm	0.16 in, 4.1 mm	-16 -20	-16 -20	-16 -20	-16 -20	-16	-20	-20	-16
206-2729	Black	3.50 in, 88.9 mm	0.25 in, 6.4 mm	—	—	—	—	—	—	—	—
206-2730	Black	4.00 in, 101.6 mm	0.25 in, 6.4 mm	—	—	—	—	—	—	—	—
206-2722	Black	0.75 in, 19.1 mm	0.11 in, 2.8 mm	—	—	—	—	—	-4 -6	-4 -5 -6	—
206-2723	Black	1.00 in, 25.4 mm	0.12 in, 3.1 mm	-6 -8	-6 -8	—	-6 -8	-6 -8	-8 -10	-8	—
206-2724	Black	1.25 in, 31.8 mm	0.13 in, 3.4 mm	-12	—	—	-10 -12	-10	-12	-10 -12	—
206-2737	Yellow	2.50 in, 63.5 mm	0.21 in, 5.3 mm	-24	-24	-24	-24	-20 -24	-24	-24	-20 -24
206-2738	Yellow	3.00 in, 76.2 mm	0.22 in, 5.5 mm	—	—	-32	-32	-32	-32	-32	-32
206-2739	Yellow	3.50 in, 88.9 mm	0.25 in, 6.4 mm	—	—	—	—	—	—	—	—
206-2740	Yellow	4.00 in, 101.6 mm	0.25 in, 6.4 mm	—	—	—	—	—	—	—	—
206-2741	Yellow	6.00 in, 152.4 mm	0.25 in, 6.4 mm	—	—	—	—	—	—	—	—
206-2732	Yellow	0.75 in, 19.1 mm	0.11 in, 2.8 mm	—	—	—	—	—	-4 -6	-4 -5 -6	—
206-2733	Yellow	1.00 in, 25.4 mm	0.12 in, 3.1 mm	-6 -8	-6 -8	—	-6 -8	-6 -8	-8 -10	-8	—
206-2734	Yellow	1.25 in, 31.8 mm	0.13 in, 3.4 mm	-12	—	—	-10 -12	-10	-12	-10 -12	—
206-2735	Yellow	1.50 in, 38.1 mm	0.14 in, 3.6 mm	—	-12	-12	—	-12	-16	-16	-12
206-2736	Yellow	2.00 in, 50.8 mm	0.16 in, 4.1 mm	-16 -20	-16 -20	-16 -20	-16 -20	-16	-20	-20	-16
206-2727	Black	2.50 in, 63.5 mm	0.21 in, 5.3 mm	-24	-24	-24	-24	-20 -24	-24	-24	-20 -24
206-2728	Black	3.00 in, 76.2 mm	0.22 in, 5.5 mm	—	—	-32	-32	-32	-32	-32	-32
206-2731	Black	6.00 in, 152.4 mm	0.25 in, 6.4 mm	—	—	—	—	—	—	—	—

Note: Sold by the centimeter.

FRAS Guard

Flame Resistant and Anti-Static
Tested to AS 1180-10b or ISO 8030

Part Number	Size	Color	Material
450-1577	12.5	Black	Polyethylene
450-1578	16.0	Black	Polyethylene
450-1579	21.0	Black	Polyethylene
450-1580	27.0	Black	Polyethylene
450-1581	34.0	Black	Polyethylene
450-1582	44.0	Black	Polyethylene
450-1583	55.0	Black	Polyethylene
450-1584	66.0	Black	Polyethylene

Armor Guard

FRAS Guard (Cont'd.)

Part Number	Size	Color	Material
450-1585	79.0	Black	Polyethylene
450-1586	99.0	Black	Polyethylene

Sleeve for Fuel Lines

Armor Guard Part Number	Guard I.D.	Hose I. D.	Hose Type	Hose Dash Size
235-9830	0	9.5	716	-6

Stainless Steel Guarding

Part Number	Size (in-mm)
549-5696	0.3-7.62
549-5698	0.5-12.7
549-5699	0.75-19.05
549-5700	1.00-25.4
549-5701	1.25-31.75

Thermal Protection Guard*

Silicone coated, fiberglass sleeve for use on hydraulic hose used in applications with exposure to extremely high external heat and flame.

Protects hose from continuous exposure up to 260°C (500°F), and short-term exposure up to 1090°C (1994°F) for 15 minutes and up to 1650°C (3002°F) for 15 seconds.

Installation Method: Attachment of Nylon Abrasive Sleeve Steel Bands over the sleeve at the shell portion of the coupling (*see section: Armor Guard - Nylon Abrasive Sleeve Steel Band*).

Armor Guard Part Number	Guard I.D. (MM)	Hose I. D. (MM)	Hose Type	Hose Dash Size
193-6910	6.4	0	—	—
324-9702	7.9	0	—	—
324-9703	9.5	0	—	—
326-3565	12.7	4.8	743	-3
326-3565	12.7	4.8	1028	-3
326-3565	12.7	4.8	2929	-3
326-3565	12.7	6.4	2760	-3
326-3565	12.7	6.4	2929	-4
324-9704	15.9	6.4	716	-4
324-9704	15.9	6.4	294CP	-4
324-9704	15.9	6.4	294TG	-4
324-9704	15.9	6.4	716TG	-4
324-9704	15.9	6.4	1028	-4
324-9704	15.9	6.4	2786	-4
324-9704	15.9	6.4	294	-4
324-9704	15.9	7.9	743	-5
324-9704	15.9	7.9	1028	-5
324-9704	15.9	7.9	2760	-5
324-9704	15.9	7.9	2929	-5

Thermal Protection Guard* (Cont'd.)

Armor Guard Part Number	Guard I.D. (MM)	Hose I. D. (MM)	Hose Type	Hose Dash Size
324-9704	15.9	9.5	2760	-6
324-9704	15.9	9.5	2929	-6
326-3566	19.1	7.9	294TG	-5
326-3566	19.1	7.9	294	-5
326-3566	19.1	9.5	743	-6
326-3566	19.1	9.5	716TG	-6
326-3566	19.1	9.5	294CP	-6
326-3566	19.1	9.5	1028	-6
326-3566	19.1	9.5	2786	-6
326-3566	19.1	12.7	1028	-8
326-3566	19.1	12.7	2760	-8
326-3566	19.1	12.7	2929	-8
193-6911	22.3	9.5	XT-3ES	-6
193-6911	22.3	9.5	XT-3TG	-6
193-6911	22.3	9.5	294TG	-6
193-6911	22.3	9.5	294	-6
193-6911	22.3	9.5	1956	-6
193-6911	22.3	9.5	XT-6TG	-6
193-6911	22.3	9.5	XT-6ES	-6
193-6911	22.3	12.7	743	-8
193-6911	22.3	12.7	716TG	-8
193-6911	22.3	12.7	716	-8
193-6911	22.3	12.7	294CP	-8
193-6911	22.3	12.7	2786	-8
541-7154	25.4	12.7	294	-8
541-7154	25.4	12.7	1956	-8
541-7154	25.4	12.7	XT-6TG	-8
541-7154	25.4	12.7	XT-6ES	-8
541-7154	25.4	12.7	294TG	-8
541-7154	25.4	12.7	XT-3TG	-8
541-7154	25.4	12.7	XT-3ES	-8
541-7154	25.4	15.9	2786	-10
541-7154	25.4	15.9	743	-10
541-7154	25.4	15.9	716TG	-10
541-7154	25.4	15.9	716	-10
541-7154	25.4	15.9	294CP	-10
326-3567	28.6	12.7	1028	-8
326-3567	28.6	15.9	294	-10
326-3567	28.6	15.9	1956	-10
326-3567	28.6	15.9	XT-3TG	-10
326-3567	28.6	15.9	XT-6ES	-10
326-3567	28.6	15.9	294TG	-10
326-3567	28.6	15.9	XT-3ES	-10
326-3567	28.6	19.1	2786	-12
326-3567	28.6	19.1	716	-12
326-3567	28.6	19.1	716TG	-12
326-3567	28.6	19.1	743	-12
541-7155	31.8	0	—	—
324-9706	34.9	19.1	XT-3ES	-12

Armor Guard

Thermal Protection Guard* (Cont'd.)

Armor Guard Part Number	Guard I.D. (MM)	Hose I. D. (MM)	Hose Type	Hose Dash Size
324-9706	34.9	19.1	844	-12
324-9706	34.9	19.1	294TG	-12
324-9706	34.9	19.1	XT-6ES	-12
324-9706	34.9	19.1	XT-5TG	-12
324-9706	34.9	19.1	XT-5ES	-12
324-9706	34.9	19.1	XT-3TG	-12
324-9706	34.9	19.1	XT-6TG	-12
324-9706	34.9	19.1	1956	-12
324-9706	34.9	19.1	294	-12
326-3568	38.1	25.4	743	-16
326-3568	38.1	25.4	716TG	-16
326-3568	38.1	25.4	716	-16
326-3568	38.1	25.4	2786	-16
326-3569	41.3	25.4	294	-16
326-3569	41.3	25.4	1956	-16
326-3569	41.3	25.4	XT-5TG	-16
326-3569	41.3	25.4	XT-3TG	-16
326-3569	41.3	25.4	XT-5ES	-16
326-3569	41.3	25.4	XT-6ES	-16
326-3569	41.3	25.4	XT-6TG	-16
326-3569	41.3	25.4	294TG	-16
326-3569	41.3	25.4	844	-16
326-3569	41.3	25.4	XT-3ES	-16
541-7156	44.5	0	—	—
541-7157	50.8	31.8	844	-20
324-9708	50.8	31.8	XT-3ES	-20
324-9708	50.8	31.8	716	-20
324-9708	50.8	31.8	294	-20
324-9708	50.8	31.8	1956	-20
324-9708	50.8	31.8	XT-6TG	-20
324-9708	50.8	31.8	XT-6ES	-20
324-9708	50.8	31.8	XT-3TG	-20
324-9708	50.8	31.8	XT-5ES	-20
324-9708	50.8	31.8	XT-5TG	-20
541-7158	60.3	0	—	—
326-3563	63.5	38.1	XT-5TG	-24
326-3563	63.5	38.1	XT-5ES	-24
326-3563	63.5	38.1	XT-6ES	-24
326-3563	63.5	38.1	XT-6TG	-24
326-3563	63.5	38.1	1956	-24
326-3563	63.5	38.1	294	-24
326-3570	69.9	50.8	XT-3ES	-32
326-3570	69.9	50.8	844	-32
326-3570	69.9	50.8	294HT	-32
326-3570	69.9	50.8	716	-32
326-3570	69.9	50.8	1956	-32
326-3570	69.9	50.8	294	-32
541-7159	88.9	0	—	—

Thermal Protection Guard* (Cont'd.)

* Color: Red

Cable Tie Mounts and Straps



Part Number	Detailed Description
206-2423	Small Swivel Mount. Used for hose-to-hose abrasion contact points
200-6345	Large Swivel Mount. Used for hose-to-hose abrasion contact points <i>(pictured)</i>
177-2215	Dual Cable Tie Mount - 13" length. Used to guide two hoses in parallel and prevent abrasion
178-3620	Dual Cable Tie Mount - 19" length. Used to guide two hoses in parallel and prevent abrasion
193-3973	Cable Tie. 0.5" Width and 15" Length

Whip Checks

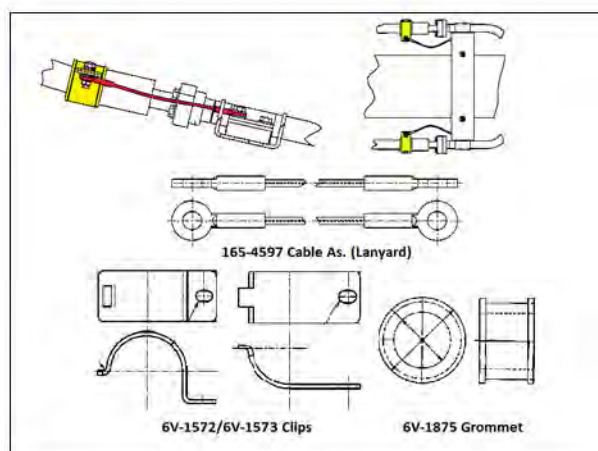
Two piece clamp with a grommet and lanyard anchored to random bolt or mounting spot on the machine.

Typically intended for Mining applications.

Clamp (Male & Female)	ID	Grommet	Diameter (OD/ID)	XT Hose Type for this clamp and grommet		
				XT3	XT5	XT6
5P-7462 5P-7463	30	6V-0683	30/19	-6	NA	-6
5P-7464 5P-7465	37	6V-1249 6V-7359	37/22 37/25	-8 -10	NA NA	-8 -10
5P-7466 5P-7467	46	5P-8112	46/30	-12	-12	-12
5P-7468 5P-7469	52	8T-9518	52/24	-10	-12	-10
		6V-4349	52/27			
		6V-1874	52/31			
		8T-7087	52/34	-16	-16	-16
		5P-8444	52/37			
		8T-2525	52/40			
		6V-0545	52/44	-20		
5P-7470 5P-7471	65	5P-8182 5P-7703	65/46 65/52	-24	-20	-20
6V-1572 6V-1573	79	6V-1875 6V-1574	70/48 70/56			
6V-1867 6V-1868	80	6V-1869	80/65	-32	-32	-32

Lanyards

Lanyard Part Number	All dimensions in mm				Maximum Rated Load	Material
	OAL	Eye 1	Eye 2	Cable		
214-4636	270	12	12	3	1,100 lb	Galvanized Steel
5T-0448	480	12.5	12.5	3.2	2,000 lb	Galvanized Steel
4V-8604	266.3	12.7	12.7	4.8	4,200 lb	Galvanized Steel
253-9770	250	13	13	4	675 lb	Stainless Steel
165-4597	320	13	13	5	3,000 lb	Galvanized Steel
179-2229	375	13	13	5	3,000 lb	Galvanized Steel
312-6065	470	14	14	4	N/A	Galvanized Steel
7T-4209	300	14	24	6.35	2,023 lb	Galvanized Steel
9W-9577	370	14	24	6.35	2,023 lb	Galvanized Steel
7G-8282	425	14	24	6.35	2,023 lb	Galvanized Steel
199-8211	476	14	24	6.35	2,023 lb	Galvanized Steel

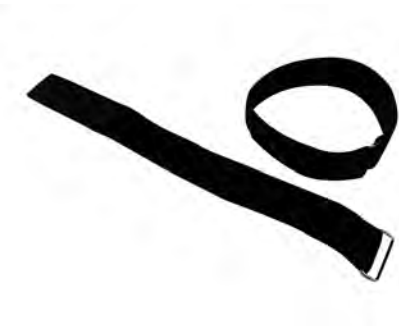


Whip Checks

Hose Bundle Straps

Hose Bundle Straps

Warranty: Caterpillar® Six Months
[See, page 546](#) Technical Support
Section



- Nylon with Heavy Duty Nickle Plated Steel Buckle
- Allows Hose Expansion and Contraction Without Damage
- Easy Installation and Removal
- UV and Weather Resistant
- Varied Lengths from 21 to 29 inches long

Part Number	Width	Length
391-2683	3.81 mm (1.5 in)	533 mm (21 in)
391-2684	3.81 mm (1.5 in)	635 mm (25 in)
391-2685	3.81 mm (1.5 in)	737 mm (29 in)

Crimputer (Used on 325 and S6)..... 546

Crimputer Software..... 546

..... 575

..... 575

Hose Assembly Tools

Technical Support, Warranty and Service

For Technical Support, Warranty on Equipment, or Service Needs, contact:

Global Dealer Solutions Network, Parts Technical Support Team

North America (Toll-Free): 1-877-228-2420

Asia-Pacific: +1 309 578 7372

China: +86 10 5921 1515

All Regions (non toll free): +1 309 266 4421

Electronically using Product Support Customer Relationship Management (PSCRM) System or by visiting <https://pscrmweb-forms.cat.com/GDSNquickentry.aspx>

For Access and Tutorial visit: <https://caterpillar.sharepoint.com/teams/PSCRMSharepointGroup/>

Please provide a basic explanation of the problem, part number, serial number, table values and HMI revisions (found during boot-up on Crimper.)

Crimper (Used on 325 and S6)

The Crimper software is a proprietary software developed by Cat to make crimping quick, easy, and help assure correct crimp dimensions are built into the product the first time. Through a touch screen panel, the user is able to input the key component information including Hose Type, Coupling Series, and Dash Size. From there, the system tells which crimping dies to install and sets machine parameters to correctly crimp the coupling. Verification can be made with a built-in caliper interface which checks crimp dimensions at four locations to confirm crimp diameter is in tolerance.

Updates are made to the Crimper software as new hoses, sizes and couplings are released and made available to dealers. The table below shows which crimping machines use the Crimper. Updates are available on the [catdealer.com](https://catdealer.com/en/bt/service-operations-strategy/service-tools/crimper-software.html) website (<https://catdealer.com/en/bt/service-operations-strategy/service-tools/crimper-software.html>). The updates can also be accessed through the HIS 2.0 website: (<https://his2.cat.com/hose-coupling>). Updates are downloaded to a flash drive from the website and then uploaded to the Crimper via a USB port. Verifying that you have the most up-to-date software is as easy as comparing the latest revision shown on the website to the revision information seen while the Crimper is booting up.

The Crimper package is available on previous and current versions of the 325 and S6.

The older-style CLC290 with C3 upgrade is no longer supported but the software remains available on the website.

Crimper Software

325	S6	HM290 w/C3 Crimper	HM290
			
423-4361	533-1146 533-1147 533-1148	Software still supported	Not Supported

The latest software updates are available here: <https://catdealer.com/en/bt/service-operations-strategy/service-tools/crimper-software.html>

C5 Crimputer

Model Usage: All

Warranty: Manufacturer's Two Years:

[See, page 546](#) Technical Support
Section



European Union Compliant, CE marked

- Touch screen
- Built-in Electronics (PLC)
- Adjustable viewing position for operator ergonomics
- Easy to use, full color display (menus have embedded help screens)
- Ability to track and store multiple crimp data values
- Password protected for multiple operators
- Die Change Stop and Auto Open features included
- Support for multiple languages

References

- NEHS1331-00 - Tooling Operating Manual, Crimputer V Setup and Operation

Overall Dimensions

- Length: 250 mm (9.84 in)
- Width: 200 mm (7.87 in)
- Thickness: 50 mm (1.97 in)

Part Number	Detailed Description
528-5353	Crimputer V

Note: Integration with Pressure Test Bench

The latest software updates are available here: <https://catdealer.com/en/bt/service-operations-strategy/service-tools/crimputer-software.html>

Hose Assembly Tools

325 Radial Hose Machine

Model Usage: All

Warranty: Manufacturer's Two Years [See, page 546](#) Technical Support Section



European Union Compliant, CE marked

- Used to crimp permanent couplings on Caterpillar low, medium, and high-pressure hoses
- Package will crimp all field serviced hose couplings up to 4"

Hose Machine

- Crimputer operated touch screen controller
- Production crimper capable of continuous operation
- Lube-less low maintenance radial head design
- Die range 12-121 mm (0.47-4.76 in)

Hose machine includes the following (die group sold separately):

- Radial Hose Machine
- Crimputer V (C5) Controller
- 8" Digital Caliper with Caliper Cable

- Die-Changing Tool
- Die Extraction tool
- Calibration Mandrel
- Single Footswitch (for use with C5 controller)
- Open/Close Footswitch to operate hose machine.
- Adapter Die Set (423-4367)

Reference

- NEHS1099 - Crimputer III Setup and Operation
- NEHS1331 - Tool Operating Manual - C5 Crimputer V Setup and Operation (533-1146, 533-1147, 533-1148, 423-4361, and 528-5353)
- NEHS1153 - 4-Inch Radial Hose Machine

Specifications		Crimping Capabilities
Dimensions	1600 x 600 x 1600 mm	2.0" XT-3ES 2.0" XT-5ES 2.0" XT-6ES 4.0" LMP
Weight	750 kg (1650 lb)	
Oil Capacity	100 l (26.5 gal)	
Open Diameter without Dies	215 mm (8.5 in)	
Electrical Requirements	3 Phase 220 - 480 V, 50/60 Hz (motor 4 kW)	
Die Range	12 - 121 mm (0.47 - 4.76 in)	
Note: Radial Hose Machine shipped without hydraulic oil		

Part Number	Detailed Description
423-4361	Radial Hose Machine Group
526-5494	Die Group
Note: Radial Hose Machine does not come with dies. The Die Group will also need to be ordered to complete the package in order to crimp hose assemblies.	

526-5494 Die Group

239 Die Set Series		
Part Number	Diameter	Retention Pin
526-5529	12 mm (.47 in)	566-7505 ⁽¹⁾
526-5530	14 mm (.55 in)	566-7505 ⁽¹⁾
526-5531	17 mm (.67 in)	566-7505 ⁽¹⁾
526-5532	20 mm (.79 in)	566-7505 ⁽¹⁾
526-5533	22 mm (.87 in)	566-7505 ⁽¹⁾
526-5534	24 mm (.94 in)	566-7505 ⁽¹⁾
526-5535	26 mm (1.02 in)	566-7505 ⁽¹⁾
526-5536	28 mm (1.10 in)	566-7505 ⁽¹⁾
526-5537	30 mm (1.18 in)	566-7505 ⁽¹⁾
526-5538	32 mm (1.26 in)	566-7505 ⁽¹⁾
526-5539	36 mm (1.42 in)	566-7505 ⁽¹⁾
526-5540	40 mm (1.57 in)	566-7505 ⁽¹⁾
526-5541	44 mm (1.73 in)	566-7505 ⁽¹⁾
358-4560	47 mm (1.85 in)	566-7505 ⁽¹⁾
358-4561	50 mm (1.97 in)	566-7505 ⁽¹⁾
358-4562	54 mm (2.13 in)	566-7505 ⁽¹⁾
358-4563	57 mm (2.24 in)	566-7505 ⁽¹⁾
358-4564	62 mm (2.44 in)	566-7505 ⁽¹⁾
237L Die Set Series		
Part Number	Diameter	Retention Pin
423-4365	67 mm (2.64 in)	233-8077 ⁽²⁾
423-4366	71 mm (2.80 in)	233-8077 ⁽²⁾
521-4296	78 mm (3.07 in)	233-8077 ⁽²⁾
424-1400	84 mm (3.31 in)	233-8077 ⁽²⁾
424-1401	96 mm (3.78 in)	233-8077 ⁽²⁾
424-1402	103 mm (4.06 in)	233-8077 ⁽²⁾
526-5543	121 mm (4.76 in)	233-8077 ⁽²⁾

- 1 Retention pins should be replaced when they are damaged. Package quantity is eight per package. Plastic die pins are preferred and are 566-7505. Metal die pins are 330-3951.
- 2 Sold and Serviced Individually

Hose Assembly Tools

325 Maintenance Parts		
Part Number	Parts System Description	Detailed Description
233-8046	Tool - Die Changer	Die Changer Tool for PB239 Dies
233-8047	Tool - Die Release	Die Release Tool for Adapter Dies, PB237 Dies and PB266 Dies
233-8077	Pin	Steel Die Pin (232L/266L/237L Series Large Die and Adapters) (1 piece)
233-8084	Holder - Die	Plastic Die Holder for Racks (1 piece)
330-3951	Pin - Die	Steel Die Pins (239 Series Small Dies) (8 pieces)
358-4535	Crimputer 3	Crimputer 3
358-4536	Caliper Electronic	Caliper , 8" Length, 3" Jaw Depth
358-4537	Cable - Caliper	Cable for Caliper
358-4538	Switch As. - Foot	Single Pedal Foot Switch
358-4539	Lever	Crimputer Angle Adjust Lever
358-4544	Switch As. - Foot	Double Pedal Foot Switch
421-2654	Screw - Detent	Ball Detent Kit for Adapter Dies (1 piece)
423-4364	Tool - Mandrel	Calibration Mandrel for 325
423-4367	Die - Adapter	Adapter Die - 325
423-4373	Caliper Electronic (8")	Caliper, 8" Length, 4" Jaw Depth
457-6033	Sensor - Pressure	Pressure Sensor
458-2920	Element - Oil Filter	Oil Filter Element 45 OD x 85 L (777.331)
458-2921	Element - Oil Filter	Oil Filter Element 45 OD x 88 L (777.351)
482-4417	Tool Gp - (Plunger - Master Die)	Plunger Detent Kit for Master Dies-325 (1 piece)
561-2023	Cable -USB Conn (Crimper)	Internal USB Connector/Cable-C3
561-2024	Switch Operator (Estop-Crimper)	Crimputer E-Stop Switch-C3 & C5
561-2025	Plate KT-Bearing (325 Crimper)	Complete Slide Bearing Kit-325
561-2026	Spring Kt (325 Crimper)	Master Die Spring Kit-325 (24 pieces)
566-7502	Potentiometer	Path Sensor (Potentiometer)
566-7503	Shim Kit	Shim Kit - Slide Bearings (0.05, 0.1, 0.15, 0.2 mm) (2 each)
566-7504	Die (Complete Master Die Gp)	Complete Master Die Group-325
566-7505	Pin Kt - Die	Die Pins, Plastic (For 239 Series Dies) (8 pieces)
578-6149	Screw - Detent	Ball Detent Kit for Adapter Dies (8 pieces)
606-1516	Controller - USB	Crimputer Compatible USB Stick
627-1975	Pin - Die	Die Pins, Steel (239 Series, Short Thread, Small Dies) (8 Pieces)

Hose Assembly Tools

325 Hose Assembly Capabilities		
Hose Type	Coupling Series	Hose Dash Size
294	MN	-4, -5, -6, -8, -10, -12, -16, -20, -24, -32, -40, -48
294TG	MN	-4, -6, -8, -10, -12, -16, -20, -24, -32
294HT	MN	-20, -24, -32, -40
294CP	MN	-4, -6, -8, -10, -12, -16
	BN	-10
294CPTG	MN	-4, -6
662	MN	-4, -6, -8
716	MN	-4, -6, -8, -10, -12, -16, -20, -24, -32
716TG	MN	-4, -6, -8, -10, -12, -16
716CP	MN	-4, -6, -8, -10, -12, -16
743	JN	-3
	MH	-4, -5, -6, -8, -10, -12, -16
844	MN	-12, -16, -20, -24, -32, -40, -56
	SW	-48, -64
945	JN	-3
	MH	-4, -5, -6, -8, -12
1028	56	-3, -4, -5, -6, -8, -12
CAT AC (1543J) FC	A/C	-6, -8, -10, -12, -14
1956TG	DS4	-4, -6
2760	JN	-4, -5, -6, -8
2771A	JN	-4, -5, -6, -8, 10, -12, -14
2786	MN	-4, -6, -8, -10, -12, -16
2929	MH	-4, -5, -6, -8
2929TG	MH	-4, -6, -8
4636	MN	-8, -12
	BN	-10, -16
4636TG	MN	-8, -12
	BN	-10, -16
4901HT	MN	-4, -6, -8, 10, -12, -16, -20, -24, -32, -40, -48
5014	MN	-4, -6, -8, -12
5065	DS4	-4, -6
5083	MN	-6, -8
5356	TP	-2, -3, -4, -5, -6, -8, -10, -12, -16

325 Hose Assembly Capabilities		
Hose Type	Coupling Series	Hose Dash Size
5356NC	TP	-2, -3, -4, -5, -6, -8, -10, -12, -16
5357	TP	-3, -4, -6, -8, -10, -12, -16
5357NC	TP	-3, -4, -6, -8, -10, -12, -16
5385	MN	-16
5398	XN4	-40
XT-3ES	ESA	-10, -12, -16
	S4G	-16, -20, -24, -32
	TR	-6, -8, -10, -12, -16
	XN	-6, -8, -10, -12, -16
	XN4	-20, -24
XT-3ESTG	ESA	-10, -12, -16
	S4G	-16, -20, -24, -32
	TR	-6, -8, -10, -12, -16
	XN	-6, -8, -10, -12, -16
	XN4	-20, -24
XT-5ES	PL	-12, -16
	MCSH	-12, -16, -20, -24, -32
	MCSX	-12, -16, -20, -24
	XN	-12, -16
	XN6	-20, -24
	XS6	-32
XT-5ESTG	PL	-12, -16
	MCSH	-12, -16, -20, -24
	MCSX	-12, -16, -20, -24
	XN	-12, -16
	XN6	-20, -24
XT-6ES	IN	-6, -8, -10, -12, -16, -20, -24
	MCSM	-6, -12, -16, -20, -24
	XN	-6, -8, -10, -12, -16
	XN6	-20, -24
	XS6	-32
XT-6ESTG	IN	-6, -8, -10, -12, -16, -20, -24
	MCSM	-6, -12, -16, -20, -24
	XN	-6, -8, -10, -12, -16
	XN6	-20, -24

Hose Assembly Tools

S6 Radial Hose Machine

Warranty: *Manufacturer's Two Years*
[See, page 546](#) *Technical Support*
Section

European Union compliant, CE marked

- Used to crimp permanent couplings on Caterpillar low, medium, and high-pressure hose
- Package will crimp most field serviced hose couplings 1/4 to 3 inch I.D.
- Will not crimp -32 XT-5ES or -32 XT-6ES



Hose Machine

- Crimper operated touch screen controller
- Workshop crimper for small to medium size shops
- Lube-less low maintenance radial head design
- Die range 12-92 mm (0.47-3.62 in)
- **Hose machine includes the following:**
 - Radial Hose Machine
 - Crimper V (C5 Controller)
 - 8" Digital Caliper with Caliper Cable
 - Die-Changing Tool
 - Die Extraction Tool
 - Calibration Mandrel
 - Single Footswitch (for use with C5 controller)
 - Open/Close Footswitch to operate hose machine
 - Adapter Die Set (421-2653)
 - Die Group sold separately

References

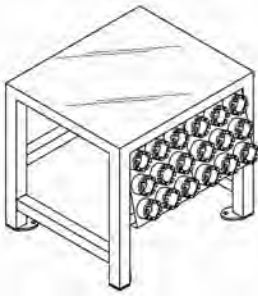
- NEHS1099 - Crimper III Setup and Operation
- NEHS1331 - Tool Operating Manual - C5 Crimper V Setup and Operation (533-1146, 533-1147, 533-1148, 423-4361, and 528-5353)
- NEHS1098 - 358-4528 (380/480 V, 50/60 Hz, 3 Phase), 457-6040 (230V, 60 Hz, Single Phase), 457-6039 (230V, 50 Hz, Single Phase) Hose Machine Group Set-Up and Operation

Specifications		Crimping Capabilities
Dimensions	1000 x 600 x 700 mm	2.0" XT-3ES 1.5" XT-5ES 1.5" XT-6ES 3.0" LMP
Weight	260 kg (575 lb)	
Oil Capacity	50 L (53 qt)	
Opening Diameter without Dies	147 mm (5.8 in)	
Die Range	12 - 92 mm (0.47-3.62 in)	
Note: Radial Hose Machine shipped without hydraulic oil		

Part Number	Detailed Description
533-1146	Single Phase 230V, 50 Hz, Radial Hose Machine
533-1147	Single Phase 230V, 60 Hz, Radial Hose Machine
533-1148	3 Phase 220V - 480V, 50/60 Hz, Radial Hose Machine
358-4545	Universal Table Assembly
526-5493	Die Group

Note: Radial Hose Machine does not come with dies. The Die Group will also need to be ordered to complete the package in order to crimp hose assemblies.

Note: The use of manufactured or artificially generated 3-phase power with 533-1148 Hose Machine that is not specially approved by the manufacturer or Caterpillar will result in voiding the warranty.



358-4545 Universal Table Assembly (optional)

- Heavy-duty table supports 533-1146, 533-1147, 533-1148 Radial Hose Machines at a comfortable working height
- Front-facing, die racks conveniently store up to 18 die sets
- Dimensions (L x W x H): 840 x 815 x 765 mm (33 x 32 x 30 in)
- Requires simple assembly

526-5493 Die Group

239 Die Set Series		
Part Number	Diameter	Retention Pin
526-5529	12 mm (.47 in)	566-7505 ⁽³⁾
526-5530	14 mm (.55 in)	566-7505 ⁽³⁾
526-5531	17 mm (.67 in)	566-7505 ⁽³⁾
526-5532	20 mm (.79 in)	566-7505 ⁽³⁾
526-5533	22 mm (0.86 in)	566-7505 ⁽³⁾
526-5534	24 mm (.94 in)	566-7505 ⁽³⁾
526-5535	26 mm (1.02 in)	566-7505 ⁽³⁾
526-5536	28 mm (1.10 in)	566-7505 ⁽³⁾
526-5537	30 mm (1.18 in)	566-7505 ⁽³⁾
526-5538	32 mm (1.26 in)	566-7505 ⁽³⁾
526-5539	36 mm (1.42 in)	566-7505 ⁽³⁾
526-5540	40 mm (1.57 in)	566-7505 ⁽³⁾
526-5541	44 mm (1.73 in)	566-7505 ⁽³⁾
358-4560	47 mm (1.85 in)	566-7505 ⁽³⁾
358-4561	50 mm (1.97 in)	566-7505 ⁽³⁾
358-4562	54 mm (2.13 in)	566-7505 ⁽³⁾
358-4563	57 mm (2.24 in)	566-7505 ⁽³⁾
358-4564	62 mm (2.44 in)	566-7505 ⁽³⁾
266L Die Set Series		
358-4565	67 mm (2.64 in)	233-8077 ⁽⁴⁾
358-4566	71 mm (2.80 in)	233-8077 ⁽⁴⁾
526-5542	78 mm (3.07 in)	233-8077 ⁽⁴⁾
358-4567	84 mm (3.31 in)	233-8077 ⁽⁴⁾
358-4568	92 mm (3.62 in)	233-8077 ⁽⁴⁾

3 Retention pins should be replaced when they are damaged. Package quantity is eight per package. Plastic die pins are preferred and are 566-7505. Metal die pins are 330-3951.

4 Sold and Serviced Individually

Hose Assembly Tools

S6 Radial Hose Machine

S6 Maintenance Partst		
Part Number	Parts System Description	Detailed Description
233-8045	Tool - Mandrel	Calibration Mandrel-S6
233-8046	Tool - Die Changer	Die Changing Tool for PB239 Dies
233-8047	Tool - Die Release	Die Release Tool for Adapter Dies, PB237 Dies and PB266 Dies
233-8077	Pin	Die Pin, Steel (232L/266L/237L Series Large Die and Adapters) (1 piece)
233-8084	Holder - Die	Plastic Die Holder for Racks (1 piece)
330-3951	Pin - Die	Die Pins, Steel (239 Series Small Dies) (8 pieces)
358-4535	Crimputer 3	Crimputer 3
358-4536	Caliper Electronic	Caliper, 8" Length, 3" Jaw Depth
358-4537	Cable - Caliper	Cable for Caliper
358-4538	Switch As. - Foot	Single Pedal Foot Switch
358-4539	Lever	Crimputer Angle Adjust Lever
358-4544	Switch As. - Foot	Double Pedal Foot Switch
358-4545	Tool As. - Table	Table with Die Holder Rack
416-6391	Kit - Bearing (Rear)	Slide Bearing Kit-S6 (Under Master Dies) (8 pieces)
416-6395	Tool As. - Extraction (Master Die)	Master Die Extraction/Capture Tool-S6
416-6396	Kit - Plunger (Master Die)	Plunger Detent Kit for Master Dies-M6, S6 (1 piece)
416-6401	Kit - Retainer	Rear Retainer Ring Behind Slide Bearings-S6
416-6402	Kit - Bolt	T-Nuts and Bolts for Master Dies-S6 (M6x35) (8 pieces)
416-6403	Die As. - Master	Complete Master Die Assembly-S6 (1 piece)
421-2653	Die - Adapter	Adapter Die-M6, S6
421-2654	Screw - Detent	Ball Detent Kit for Adapter Dies (1 piece)
423-4373	Caliper Electronic (8")	Caliper, 8" Length, 4" Jaw Depth
425-2389	Kit - Bearing (Front)	Front Slide Bearing Kit-S6 (Inside Front Plate) (2 pieces)
457-6033	Sensor - Pressure	Pressure Sensor
462-5664	Capacitor	Capacitor-S6 (Only for Single Phase Machines)
550-9143	Spring Kt (M6 Crimper)	Master Die Spring Kit-M6, S6 (24 pieces)
561-2023	Cable -USB Conn (Crimper)	Internal USB Connector/Cable-C3
561-2024	Switch Operator (Estop-Crimper)	Crimputer E-Stop Switch-C3 & C5
566-7501	Cable (C5 Internal)	Internal USB Connector Cable-C5
566-7502	Potentiometer	Path Sensor (Potentiometer)
566-7503	Shim Kit	Shim Kit - Slide Bearings (0.05, 0.1, 0.15, 0.2 mm) (2 each)
566-7505	Pin Kt - Die	Die Pins, Plastic (For 239 Series Dies) (8 pieces)
578-6149	Screw - Detent	Ball Detent Kit for Adapter Dies (8 pieces)
606-1516	Controller - USB	Crimputer Compatible USB Stick
627-1975	Pin - Die	Die Pins, Steel (239 Series, Short Thread, Small Dies) (8 Pieces)

S6 Hose Assembly Capabilities

Hose Type	Coupling Series	Hose Dash Size
294	MN	-4, -5, -6, -8, -10, -12, -16, -20, -24, -32, -40, 48
294TG	MN	-4, -6, -8, -10, -12, -16, -20, -24, -32
294HT	MN	-20, -24, -32, -40
294CP	MN	-4, -6, -8, -10, -12, -16
	BN	-10
294CPTG	MN	-4, -6
662	MN	-4, -6, -8
716	MN	-4, -6, -8, -10, -12, -16, -20, -24, -32
716TG	MN	-4, -6, -8, -10, -12, -16
716CP	MN	-4, -6, -8, -10, -12, -16
743	JN	-3
	MH	-4, -5, -6, -8, -10, -12, -16
844	MN	-12, -16, -20, -24, -32, -40
	SW	-48
945	JN	-3
	MH	-4, -5, -6, -8, -12
1028	55	-3, -4, -5, -6, -8, -12
CAT A/C (1543J) FC	A/C	-6, -8, -10, -12, -14
1956	S4G	-10, -12, -16
	XN	-10, -12
	DS4	-20, -24, -32
1956TG	DS4	-4, -6
2760	JN	-4, -5, -6, -8
2771A	JN	-4, -5, -6, -8, 10, -12, -14
2786	MN	-4, -6, -8, -10, -12, -16
2929	MH	-4, -5, -6, -8
2929TG	MH	-4, -6, -8
4636	MN	-8, -12
	BN	-10, -16

Hose Type	Coupling Series	Hose Dash Size
4636TG	MN	-8, -12
	BN	-10, -16
4901HT	MN	-4, -6, -8, 10, -12, -16, -20, -24, -32, -40, -48
5014	MN	-4, -6, -8, -12
5356	TP	-2, -3, -4, -5, -6, -8, 10, -12, -16
5356NC	TP	-2, -3, -4, -5, -6, -8, 10, -12, -16
5357	TP	-3, -4, -6, -8, 10, -12, -16
5356NC	TP	-3, -4, -6, -8, 10, -12, -16
5385	MN	-16
5398	XN4	-40
XT-3ES	ESA	-10, -12, -16
	S4G	-6, -8, -16, -20, -24, -32
	TR	-6, -8, -10, -12, -16
	XN	-6, -8, -10, -12, -16
	XN4	-20, -24
XT-3ESTG	ESA	-10, -12, -16
	S4G	-6, -8, -10, -12, -16, -20, -24, -32
	TR	-6, -8, -10, -12, -16
	XN	-6, -8, -10, -12, -16
	XN4	-20, -24
XT-5ES & XT-5ESTG	PL	-12, -16
	MCSH	-12, -16, -20, -24
	MCSX	-12, -16, -20, -24
	XN	-12, -16
	XN6	-20, -24
XT-6ES & XT-6ESTG	IN	-6, -8, -10, -12, -16, -20, -24
	MCSM	-6, -12, -16, -20, -24
	XN	-6, -8, -10, -12, -16
	XN6	-20, -24

Hose Assembly Tools

M6 Radial Hose Machine

Warranty: Manufacturer's Two Years

See, [page 546](#) Technical Support Section



European Union Compliant, CE marked

- Used to crimp permanent couplings on Caterpillar low, medium, and high-pressure hose
- Package will crimp most field serviced hose couplings 1/4 to 2.5 inch I.D.

Hose Machine

- Micrometer controlled crimp dimensions
- Advanced do-it-yourself customers, service trucks, hose vans and hose workshops
- Lube-less low maintenance radial head design
- Die range 12-92 mm (0.47-3.62 in)

Hose machine includes the following:

- Radial Hose Machine
- Separate Power Rack
- Three hose to Connect Power Pack to Crimper
- Die-Changing Tool
- Die Extraction Tool
- Adapter Die Set (421-2653)
- Die Group sold separately

Reference

- NEHS1332 - 508-7865, 508-7866, 508-7867, 508-7868 Hose Crimper
- AEXQ2130 - M6 Crimp Chart for use with Cat Hose and Coupling Products
- NEEG2746 - Coupling Master Crimp Diameter and Length Reference Chart

Note:

To connect the Pump to the Crimper the following is needed:

- (2) -8 XT6 Hoses with -8 ORFS Coupling Ends
- (1) -8 716 Hose with -8 ORFS Coupling Ends

Note: Individual die sets may also be purchased separately.

Click here for M6 crimp chart: <https://catdealer.com/en/bt/service-operations-strategy/service-tools/crimputer-software.html>

Specifications		Crimping Capabilities
Dimensions - Head	500 x 430 x 480 mm	2.0" XT-3ES 1.5" XT-5ES 1.5" XT-6ES 2.5" LMP
Dimensions - Power Pack	718 x 230 x 385 mm	
Weight	172 kg (380 lb)	
Oil Capacity	4 L/5 L (4.2 qt/5.3 qt)	
Open Diameter Without Dies	143 mm (5.6 in)	
Die Range	12 -92 mm (0.47-3.62 in)	
Note: Radial Hose Machine shipped without hydraulic oil		

Part Number	Detailed Description
508-7865	12V DC, 150A
508-7866	24V DC, 83A
508-7867	Single Phase 230V, 50/60 Hz
508-7868	Single Phase 115V, 50/60 Hz
526-5493	Die Group
Note: Radial Hose Machine does not come with dies. The Die Group will also need to be ordered to complete the package in order to crimp hose assemblies.	

526-5493 Die Group

239 Die Set Series		
Part Number	Diameter	Retention Pin
526-5529	12 mm (.47 in)	566-7505 ⁽⁵⁾
526-5530	14 mm (.55 in)	566-7505 ⁽⁵⁾
526-5531	17 mm (.67 in)	566-7505 ⁽⁵⁾
526-5532	20 mm (.79 in)	566-7505 ⁽⁵⁾
526-5533	22 mm (.86 in)	566-7505 ⁽⁵⁾
526-5534	24 mm (.94 in)	566-7505 ⁽⁵⁾
526-5535	26 mm (1.02 in)	566-7505 ⁽⁵⁾
526-5536	28 mm (1.10 in)	566-7505 ⁽⁵⁾
526-5537	30 mm (1.18 in)	566-7505 ⁽⁵⁾
526-5538	32 mm (1.26 in)	566-7505 ⁽⁵⁾
526-5539	36 mm (1.42 in)	566-7505 ⁽⁵⁾
526-5540	40 mm (1.57 in)	566-7505 ⁽⁵⁾
526-5541	44 mm (1.73 in)	566-7505 ⁽⁵⁾
358-4560	47 mm (1.85 in)	566-7505 ⁽⁵⁾
358-4561	50 mm (1.97 in)	566-7505 ⁽⁵⁾
358-4562	54 mm (2.13 in)	566-7505 ⁽⁵⁾
358-4563	57 mm (2.24 in)	566-7505 ⁽⁵⁾
358-4564	62 mm (2.44 in)	566-7505 ⁽⁵⁾

266L Die Set Series		
Part Number	Diameter	Retention Pin
358-4565	67 mm (2.64 in)	233-8077 ⁽⁶⁾
358-4566	71 mm (2.80 in)	233-8077 ⁽⁶⁾
526-5542	78 mm (3.07 in)	233-8077 ⁽⁶⁾
358-4567	84 mm (3.31 in)	233-8077 ⁽⁶⁾
358-4568	92 mm (3.62 in)	233-8077 ⁽⁶⁾

Additional Dies Necessary for Specific Hose and Coupling Types					
239 Series Die Set					
Part Number	Diameter	Retention Pin	Hose	Coupling Type	Hose Dash Size
591-1614	39 mm (1.54 in)	566-7505 ⁽⁵⁾	716CP, 4901, 5385	MN	-16
624-8399	56 mm (2.20 in)	566-7505 ⁽⁵⁾	XT-5ES, XT-5ESTG XT-6ES, XT-6ESTG	XN6	-20
266L Die Set Series					
Part Number	Diameter	Retention Pin	Hose	Coupling Type	Hose Dash Size
591-1618	64 mm (2.52 in)	233-8077 ⁽⁶⁾	XT-5ES, XT-5ESTG XT-6ES, XT-6ESTG	XN6	-24

Note: It is important to use the dies listed in the table to avoid damaging the slide bearings. This crimper is designed so that the outside diameter of the coupling can not be 12 mm larger than the die set being used.

- 5 Retention pins should be replaced when they are damaged. Package quantity is eight per package. Plastic die pins are preferred and are 566-7505. Metal die pins are 330-3951.
- 6 Sold and Serviced Individually

Hose Assembly Tools

M6 Maintenance Parts		
Part Number	Parts System Description	Detailed Description
233-8046	Tool - Die Changer	Die Changing Tool for PB239 Dies
233-8047	Tool - Die Release	Die Release Tool for Adapter Dies, PB237 Dies and PB266 Dies
233-8077	Pin	Die Pin, Steel (232L/266L/237L Series Large Die and Adapters) (1 piece)
233-8084	Holder - Die	Plastic Die Holder for Racks (1 piece)
330-3951	Pin - Die	Die Pins, Steel (239 Series Small Dies) (8 pieces)
358-4545	Tool As. - Table	Table with Die Holder Rack
416-6396	Kit - Plunger (Master Die)	Plunger Detent Kit for Master Dies-M6, S6 (1 piece)
421-2653	Die - Adapter	Adapter Die-M6, S6
421-2654	Screw - Detent	Ball Detent Kit for Adapter Dies (1 piece)
550-9143	Spring Kt (M6 Crimper)	Master Die Spring Kit-M6, S6 (24 pieces)
550-9145	Tool Kt (M6 Crimper)	T-Nuts, Washers and Bolts for Master Dies-M6 (8, 16, 16 pieces)
566-7503	Shim Kit	Shim Kit - Slide Bearings (0.05, 0.1, 0.15, 0.2 mm) (2 each)
566-7505	Pin Kt - Die	Die Pins, Plastic (For 239 Series Dies) (8 pieces)
578-6149	Screw - Detent	Ball Detent Kit for Adapter Dies (8 pieces)
598-1908	Plate Kt-Bearing (M6 Crimper)	Complete Slide Bearing Kit-M6
627-1975	Pin - Die	Die Pins, Steel (239 Series, Short Thread, Small Dies) (8 Pieces)

Hose Assembly Tools

M6 Hose Assembly Capabilities

Hose Type	Coupling Series	Hose Dash Size
294	MN	-4, -6, -8, -10, -12, -16, -20, -24, -32
294TG	MN	-4, -6, -8, -10, -12, -16
294HT	MN	-20, -24, -32, -40
294CP	MN	-4, -6, -8, -10, -12, -16
	BN	-10
294CPTG	MN	-4, -6
662	MN	-4, -6, -8
716	MN	-4, -6, -8, -10, -12, -16, -20, -24, -32
716TG	MN	-4, -6, -8, -10, -12, -16
716CP	MN	-4, -6, -8, -10, -12, -16
743	JN	-3
	MH	-4, -5, -6, -8, -10, -12, -16
844	MN	-12, -16, -20, -24, -32, -40
945	JN	-3
	MH	-4, -6, -8, -12
1028	55	-3, -4, -5, -6, -8, -12
CAT A/C (1543J) FC	A/C	-6, -8, -10, -12, -14
1956	S4G	-10, -12, -16
	XN	-10, -12
	DS4	-20, -24, -32
1956TG	DS4	-4, -6
2760	JN	-4, -5, -6, -8
2771A	JN	-3, -4, -5, -6, -8, 10, -12, -14
2786	MN	-4, -6, -8, -10, -12, -16
2929	MH	-4, -5, -6, -8
2929TG	MH	-4, -6, -8

Hose Type	Coupling Series	Hose Dash Size
4636	MN	-8, -12
	BN	-10, -16
4636TG	MN	-8, -12
	BN	-10, -16
4901HT	MN	-4, -6, -8, 10, -12, -16
5014	MN	-4, -6, -8, -12
5356	TP	-2, -3, -4, -5, -6, -8, 10, -12, -16
5356NC	TP	-2, -3, -4, -5, -6, -8, 10, -12, -16
5357	TP	-3, -4, -6, -8, 10, -12, -16
5356NC	TP	-3, -4, -6, -8, 10, -12, -16
5385	MN	-16
5398	XN4	-40
XT-3ES & XT-3ESTG	TR	-16
	S4G	-16, -20, -24, -32
	XN	-6, -8, -10, -12, -16
	XN4	-20, -24
XT-5ES & XT-5ESTG	PL	-16
	MCSH	-16, -20, -24
	MCSX	-16, -20, -24
	XN	-12, -16
	XN6	-20, -24
XT-6ES & XT-6ESTG	IN	-16, -20, -24
	MCSM	-16, -20, -24
	XN	-6, -8, -10, -12, -16
	XN6	-20, -24

S2 Radial Hose Machine

Warranty: Manufacturer's Two Years
[See, page 546](#) Technical Support
Section



European Union Compliant, CE marked

- Used to crimp permanent couplings on Caterpillar low, medium, and high-pressure hose
- Package will crimp most field serviced hose couplings 1/4 to 1.5 inch I.D.

Hose Machine

- Micrometer controlled crimp dimensions
- Market entry-level, do-it-yourself customers, service trucks, hose vans and hose workshops
- Lube-less low maintenance radial head design
- Die range 14-47 mm (0.55-1.85 in)

Hose machine includes the following:

- Radial Hose Machine
- Integrated Power Rack
- Three hose to Connect Power Pack to Crimper
- Die Group sold separately

Reference

- NEHS1297 - Tool Operating Manual - S2
- AEXQ2131 - S2 Crimp Chart for use with Cat Hose and Coupling Products
- NEEG2746 - Coupling Master Crimp Diameter and Length Reference Chart

NOTE: Individual die sets may also be purchased separately.

Hose Assembly Tools

Click here for S2 crimp chart: <https://catdealer.com/en/bt/service-operations-strategy/service-tools/crimputer-software.html>

Specifications		Crimping Capabilities
Dimensions - Head	450 x 450 x 350 mm	1.25" XT-3ES 1" XT-5ES 1" XT-6ES 1.5" LMP
Weight	41 kg (90 lb)	
Oil Capacity	1.5 L (1.5 qt)	
Open Diameter Without Dies	77 mm (3 in)	
Die Range	14-47 mm (0.55-1.85 in)	
Note: Radial Hose Machine shipped without hydraulic oil		

Part Number	Detailed Description
508-7870	Single Phase 115V, 50/60 Hz
508-7871	12V DC - 150A
508-7872	Single Phase 230V, 50/60 Hz
508-7873	Die Group
Note: Radial Hose Machine does not come with dies. The Die Group will also need to be ordered to complete the package in order to crimp hose assemblies.	

508-7873 Die Group		
Part Number	Diameter	Retention Pin
524-4076	14 mm (.55 in)	517-3483 ⁽⁷⁾
517-2548	17 mm (.67 in)	517-3483 ⁽⁷⁾
517-2549	20 mm (.79 in)	517-3483 ⁽⁷⁾
517-2550	24 mm (.94 in)	517-3483 ⁽⁷⁾
517-3480	28 mm (1.10 in)	517-3483 ⁽⁷⁾
517-3481	32 mm (1.26 in)	517-3483 ⁽⁷⁾
517-3482	40 mm (1.57 in)	517-3483 ⁽⁷⁾
524-4077	47 mm (1.85 in)	517-3483 ⁽⁷⁾
517-3484	Box-Storage	
Note: There is also a 12 mm die sold separately. It is not included in the Die Group. The 12 mm die is used for -3 1028, -4 2760, -3 2771A, -4 2771A, -3 945, -2 5356, -3 5356 and -3 5357		

S2 Maintenance Parts		
Part Number	Parts System Description	Detailed Description
517-3483	Pin - Die (S2 Crimper)	Die Pins-S2 (8 pieces)
561-1991	Plate - Bearing (S2 Crimper)	Slide Bearings-S2 (8 piece)
561-1992	Plate - Front BRG (S2 Crimper)	Round Front Slide Bearing Plate-S2 (1 piece)

7 Retention pins should be replaced when they are damaged. Package quantity is eight per package.

S2 Maintenance Parts		
Part Number	Parts System Description	Detailed Description
561-1993	Spring Kt (Master Die-S2 Crimper)	Master Die Spring Kit-S2 (16 pieces)
561-1994	Seal KT (S2 Crimper)	Seal Kit-S2
561-1995	Pad KT-Pressure (S2 Crimper)	Ball Detent Master Dies-S2 (8 pieces)
561-1997	Spring KT-Retr (S2 Crimper)	Master Die Retractor Springs-S2 (8 pieces)
561-1998	Pin KT-Guide	Guide Pin for Retractor Springs-S2 (2 pieces)
608-8969	DIE ST	12 mm Die Set-S2

Hose Assembly Tools

S2 Hose Assembly Capabilities

Hose Type	Coupling Series	Hose Dash Size
294	MN	-4, -6, -8, -10, -12, -16, -20, -24
294TG	MN	-4, -6, -8, -10, -12, -16
294HT	MN	-20, -24
294CP	MN	-4, -6, -8, -10, -12, -16
	BN	-10
294CPTG	MN	-4, -6
662	MN	-4, -6, -8
716	MN	-4, -6, -8, -10, -12, -16, -20, -24
716TG	MN	-4, -6, -8, -10, -12, -16
716CP	MN	-4, -6, -8, -10, -12, -16
743	JN	-3
	MH	-4, -5, -6, -8, -10, -12, -16
844	MN	-12, -16, -20, -24
945	JN	-3
	MH	-4, -6, -8, -12
CAT A/C (1543J) FC	A/C	-6, -8, -10, -12, -14
1956	S4G	-10, -12, -16
	XN	-10, -12
	DS4	-20, -24, -32
1956TG	DS4	-4, -6
2760	JN	-4, -5, -6, -8
2771A	JN	-3, -4, -5, -6, -8, 10, -12, -14

Hose Type	Coupling Series	Hose Dash Size
2786	MN	-4, -6, -8, -10, -12, -16
2929	MH	-4, -5, -6, -8
2929TG	MH	-4, -6, -8
4636	MN	-8, -12
	BN	-10, -16
4636TG	MN	-8, -12
	BN	-10, -16
4901HT	MN	-4, -6, -8, 10, -12, -16, -20, -24
5014	MN	-4, -6, -8, -12
5356	TP	-2, -3, -4, -5, -6, -8, 10, -12, -16
5356NC	TP	-2, -3, -4, -5, -6, -8, 10, -12, -16
5357	TP	-3, -4, -6, -8, 10, -12, -16
5356NC	TP	-3, -4, -6, -8, 10, -12, -16
5385	MN	-16
	ESA	-16
	S4G	-16, -20
	XN	-6, -8, -10, -12, -16
XT-3ES & XT-3ESTG	XN4	-20
	XN	-12, -16
	MGX	-12
XT-5ES & XT-5ESTG	MGX	-12
XT-6ES & XT-6ESTG	XN	-6, -8, -10, -12, -16

HM290 Radial Hose Machine (with C3 Crimputer)



Software still available for crimpers updated with the C3 controller.

The latest software updates are available here: <https://catdealer.com/en/bt/service-operations-strategy/service-tools/crimputer-software.html>

HM290 Maintenance Parts		
Part Number	Parts System Description	Detailed Description
233-8046	Tool - Die Changer	Die Changing Tool for PB239 Dies
233-8047	Tool - Die Release	Die Release Tool for Adapter Dies, PB237 Dies and PB266 Dies
233-8077	Pin	Die Pin, Steel (232L/266L/237L Series Large Die and Adapters) (1 piece)
233-8082	Die Set-Adapter	Adapter Die-HM290 (8 pieces)
233-8084	Holder - Die	Plastic Die Holder for Racks (1 piece)
233-8085	Potentiometer	Position Sensor-HM290
330-3951	Pin - Die	Die Pins, Steel (239 Series Small Dies) (8 pieces)
457-6031	Tool-Crimputer	Crimputer 3 Update-HM290
457-6033	Sensor-Pressure	Pressure Sensor
466-0748	Pad - Deflector (DIRT)	Dirt Deflector-HM290 (8 pieces)
466-0750	Tool Gp - (Lube Ring)	Ring to Hold Master Dies during Lubing-HM290
566-7505	Pin Kt - Die	Die Pins, Plastic (For 239 series Dies) (8 pieces)

Hose Assembly Tools

Hose-Cutting Machines

- A fume extraction device including a spark arrestor is recommended.
- The solid-steel blade used in the Cat® EM range of hose saws provides a clean-cutting operation and greatly reduces shop contamination, fumes and debris during cutting (compared to alternative abrasive blade saws).
- EM series saws are equipped with the long-lasting steel-grooved TM G Blade (standard). The advanced TM C Blade, with its diamond coated tip, produces a precise cut leading to an even greater reduction in contamination and smoke (ordered separately, EM115 recommended only). All DC powered saws come with the TM Z Blade.
- The EM115 is designed for continuous operation. The EM115 can cut the full Cat® hose product line.
- All other saws are designed for **ON/OFF** use and should not be run continuously.

Hose Assembly Tools

EM115 Hose Saw

Warranty: Manufacturer's
Two Years [See, page 546](#)
Technical Support Section



European Union Compliant, CE marked

- Used to cut Caterpillar low, medium and high-pressure hose
- Will cut all Caterpillar hose up to 3"

Hose Saw

- Pneumatic operation requires minimum 90 psi/0.62 MPa with adequate flow
- Lateral rollers for guiding and positioning the hose for a better cutting quality
- Various bending points selectable for straighter cuts and relief of pinch on the blade
- Exchangeable cutting guide (two sizes) for optimum positioning of different hose sizes
- Large mining machines, high-volume production shops
- Best match with 325 hose crimper
- Spark Arrestor 533-1184 (recommended)
- TM C Blade (recommended)

Hose saw includes the following:

- Hose Saw Cutting Machine
- TM G Blade

Reference

- NEHS1320 - 444-5974 Pneumatic Hose Saw Operating Manual

Specifications		Cutting Capabilities
Dimensions	1210 x 650 x 1650 mm (48 x 26 x 65 in)	2" XT-3ES 2" XT-5ES 2" XT-6ES 3" LMP
Weight	245 kg (540 lb)	
Cutting Blade	520 x 4 x 40 mm	
Maximum Cutting OD	125 mm	
Exhaust Outlet OD	100 mm	
Noise Level	80 dbA	

Part Number	Detailed Description
444-5974	3 Phase 230/380-480V, 50/60 Hz
533-1165	TM G Blade
533-1167	TM C Blade

EM6-P Hose Saw

Warranty: Manufacturer's
Two Years [See, page 546](#)
Technical Support Section



European Union Compliant, CE marked

- Used to cut Caterpillar low, medium and high-pressure hose
- Will cut all Caterpillar hose up to 3"

Hose Saw

- Pneumatic operation requires minimum 90 psi/ 0.62 MPa with adequate flow
- Advanced do-it-yourself customers, standard hose workshops, mobile applications
- Best matched with M6 and S6 hose crimpers
- Adjustable bending pins for straighter cuts and relief of pinch on the blade
- Spark Arrestor 583-3538 (recommended)
- TM C Blade (optional)

Hose saw includes the following:

- Hose Saw Cutting Machine
- TM G Blade

Reference

- NEHS1301 - 516-9369, 516-9370, 517-2539, and 517-2540 EM 6 M and EM 6 P Hose Cutting Machines

Specifications		Cutting Capabilities
Dimensions	820 x 785 x 755 mm (32 x 31 x 30 in)	2" XT-3ES 2" XT-5ES 1.5" XT-6ES 3" LMP
Weight	110 kg (243 lb)	
Cutting Blade	350 x 3 x 30 mm	
Maximum Cutting OD	95 mm	
Exhaust Outlet OD	60 mm	
Noise Level	90 dbA	

Part Number	Detailed Description
516-9370	3 Phase, 220V, 50/60 Hz, 15A
517-2540	3 Phase, 400V, 50/60 Hz, 9.5A
517-2537	TM G Blade
517-2538	TM C Blade

Hose Assembly Tools

EM6-M Hose Saw

Warranty: Manufacturer's Two Years [See, page 546](#) Technical Support Section



European Union Compliant, CE marked

- Used to cut Caterpillar low, medium and high-pressure hose
- Will cut most Caterpillar hose up to 3"

Hose Saw

- Manual operation
- Advanced do-it-yourself customers, standard hose workshops, mobile applications
- Best match with M6 and S6 hose crimpers
- Adjustable bending pins for straighter cuts and relief of pinch on the blade
- Spark Arrestor 583-3538 (recommended)
- TM C Blade (optional)

Hose saw includes the following:

- Hose Saw Cutting Machine
- TM G Blade

Reference

- NEHS1301 - 516-9369, 516-9370, 517-2539, and 517-2540 EM 6 M and EM 6 P Hose Cutting Machines

Specifications		Cutting Capabilities
Dimensions	745 x 690 x 430 mm (29 x 27 x 17 in)	2" XT-3ES 1.5" XT-5ES 1.5" XT-6ES 3" LMP
Weight	75 kg (165 lb)	
Cutting Blade	350 x 3 x 430 mm	
Maximum Cutting OD	85 mm	
Exhaust Outlet OD	60 mm	
Noise Level	90 dbA	

Part Number	Detailed Description
516-9369	3 Phase, 220V, 50/60 Hz, 15A
517-2539	3 Phase, 400V, 50/60 Hz, 9.5A
517-2537	TM G Blade
517-2538	TM C Blade

EM6-E Hose Saw

Warranty: Manufacturer's Two Years [See, page 546](#) Technical Support Section



European Union Compliant, CE marked

- Used to cut Caterpillar low, medium and high-pressure hose
- Will cut most Caterpillar hose up to 2"

Hose Saw

- Manual operation
- Advanced do-it-yourself customers, standard hose workshops, mobile applications
- Best match with M6 and S6 hose crimpers
- Adjustable bending pins for straighter cuts and relief of pinch on the blade
- Spark Arrestor 583-3538 (recommended)
- TM C Blade (optional)

Hose saw includes the following:

- Hose Saw Cutting Machine
- TM G Blade

Reference

- NEHS1298 - 516-9368, 517-2531, 517-2534, 508-7861, 508-7862 EM3 Ecoline, EM3 DC, EM6 Ecoline Hose Cutting Machine

Specifications		Cutting Capabilities
Dimensions	700 x 510 x 700 mm (28 x 20 x 28 in)	2" XT-3ES 1.5" XT-5ES 1.5" XT-6ES 2" LMP
Weight	45 kg (99 lb)	
Cutting Blade	275 x 3 x 25.4 mm	
Maximum Cutting OD	80 mm	
Exhaust Outlet OD	80 mm	
Noise Level	90 dbA	

Part Number	Detailed Description
508-7861	Single Phase, 110-120V, 50/60 Hz, 15A
508-7862	Single Phase, 220-240V, 50/60 Hz, 9.6A
517-2541	TM G Blade
517-2542	TM C Blade

Hose Assembly Tools

EM3-E Hose Saw

Warranty: Manufacturer's Two Years
[See, page 546](#) Technical Support Section



European Union Compliant, CE marked

- Used to cut Caterpillar low, medium and high-pressure hose
- Will cut most Caterpillar hose up to 1.25"

Hose Saw

- Manual operation
- Market entry level, do-it-yourself customers, service trucks and hose vans
- Best matched with S2 hose crimper
- Spark Arrestor 583-3538 (recommended)
- TM C Blade (optional)

Hose saw includes the following:

- Hose Saw Cutting Machine
- TM G Blade

Reference

- NEHS1298 - 516-9368, 517-2531, 517-2534, 508-7861, 508-7862 EM3 Ecoline, EM3 DC, EM6 Ecoline Hose Cutting Machine

Specifications		Cutting Capabilities
Dimensions	400 x 510 x 540 mm (16 x 20 x 21 in)	1.25" XT-3ES 1" XT-5ES 1" XT-6ES 1.25" LMP
Weight	20 kg (44 lb)	
Cutting Blade	200 x 1.6 x 25.4 mm	
Maximum Cutting OD	52 mm	
Exhaust Outlet OD	40 mm	
Noise Level	90 dbA	

Part Number	Detailed Description
516-9368	Single Phase, 230V, 50/60 Hz, 8A
517-2535	TM G Blade
517-2536	TM C Blade

EM3-DC Hose Saw

Warranty: Manufacturer's Two Years
See, page 546 Technical Support
Section



European Union Compliant, CE marked

- Used to cut Caterpillar low, medium and high-pressure hose
- Will cut most Caterpillar hose up to 1.25"

Hose Saw

- Manual operation
- Market entry level, do-it-yourself customers, service trucks and hose vans
- Best matched with S2 hose crimper
- Spark Arrestor 583-3538 (recommended)
- TM C Blade (optional)

Hose saw includes the following:

- Hose Saw Cutting Machine
- TM Z Blade

Reference

- NEHS1298 - 516-9368, 517-2531, 517-2534, 508-7861, 508-7862 EM3 Ecoline, EM3 DC, EM6 Ecoline Hose Cutting Machine

Specifications		Cutting Capabilities
Dimensions	550 x 365 x 410 mm (22 x 14 x 16 in)	1.25" XT-3ES 1" XT-5ES 1" XT-6ES 1.25" LMP
Weight	29 kg (64 lb)	
Cutting Blade	250 x 2 x 40 mm	
Maximum Cutting OD	60 mm	
Exhaust Outlet OD	40 mm	
Noise Level	93 dbA	

Part Number	Detailed Description
517-2531	12V DC, 200A
517-2534	24V DC, 115A
517-2532	TM Z Blade
517-2533	TM C Blade

Hose Saw Blades

High Quality cutting blades that are more cost effective, efficient, and environmentally friendly.

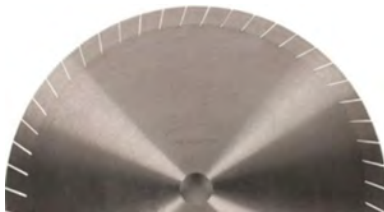
TM G - This long lasting German quality steel blade produces a precise straight cut reducing contaminant and smoke in the hose and shop. The hardness of the cutting blade remains unchanged even at high temperatures. The blade is able to be sharpened multiple times lowering the cost of ownership. Reducing the heat during cutting, reduces the risk of separation of the rubber from the wire and reduced flaring of the stainless-steel braid. Each machine is sold with this blade except EM3-DC.

TM C - Having the same qualities as the TM G, this blade with its special coating substantially reduces the power demand and effort during cutting. Diamond tipped, this blade generates less smoke, debris, and heat than the TM G. Though unable to be sharpened, it lasts 7 times longer and cuts twice as fast. This blade does produce some sparks. A spark arrestor is highly recommended with this blade.

TM Z - Typically metal cutting circular saw blades are a faster way to cut metal. They have extended Life with titanium coated carbide tipped teeth which resists material build up. The cutting teeth stay cleaner and cut cooler with less burring than abrasive blades while reducing material burning. This blade can be re-sharpened and is the best option for a DC powered saw.

Reference

- NEHS1299 - 516-9368, 517-2531, 517-2534, 508-7861, 508-7862 Safety and Usage Advice for Saw Blades



TM G Blade

Part Number	OD	Arbor
533-1165	520 mm	40 mm
517-2537	350 mm	30 mm
517-2541	275 mm	25.4 mm
517-2535	200 mm	25.4 mm



TM C Blade

Part Number	OD	Arbor
533-1167	520 mm	40 mm
517-2538	350 mm	30 mm
517-2542	275 mm	25.4 mm
517-2533	250 mm	40 mm
517-2536	200 mm	25.4 mm
517-2537	250 mm	40 mm



TM Z Blade

Part Number	OD	Arbor
517-2532	250 mm	40 mm

Hose Saw Maintenance Parts		
Part Number	Parts System Description	Detailed Description
561-2027	Coupling-Shaft (Saw)	Motor Shaft Break Away Coupling, EM3-DC
561-2028	Pin KT-Hose (Saw)	Hose Bending Pins, EM3-DC (2 pieces)
561-2029	Pin-Hose (Saw)	Hose Bending Pins, EM-6 (2 pieces)
576-6137	Stand-Table	Universal Table, 840 x 710 x 750 mm
583-3538	Arrestor, Spark	Spark Arrestor, Supports EM3 and EM6 Saws, 40/70 mm Inlet
533-1184	Arrestor, Spark	Spark Arrestor, Supports EM115, 110mm Inlet

Hose Assembly Tools

Hose Abrasive Saw

Warranty: Manufacturer's 6 Months
[See, page 546](#) Technical Support
Section



- Designed to cut hose safely and efficiently
- Rated at 7.5 Horsepower
- Will cut all Caterpillar hose

Hose Saw

- Manual operation
- Large mining machines, high-volume production shops, Market entry level, do-it-yourself customers
- Best matched with 325, S6 and M6 hose crimper
- A fume extraction device including a spark arrestor (recommended)
- Hose Cutting Guides (recommended)

Hose saw includes the following:

- Hose Saw Cutting Machine

Reference

- SMHS8316 - Preparation and Use of 6V6015 Hose Cutoff Machine
- NEHS0747 - 202-6601 Hose Cutting Guide

Note: Hose saw, pictured above does not come with the Hose Cutting Guides. The Hose Cutting Guides need to be order separately.

Note: An abrasive saw will generate excessive foreign material, smoke, and fumes. This method of cutting the hose creates more foreign material that is left inside the hose than other methods. More care must be used to clean the hose after it has been cut. Some type of fume, smoke and debris extractor is highly recommended.

Note: For contamination control purposes, the **EM Series Hose Saws** are recommended

Specifications		Cutting Capabilities
Dimensions	540 x 920 x 1640 mm (21.25 x 36.22 x 64.56 in)	ALL
Weight	188 kg (414 lb)	
Cutting Blade	16 x 1 x 5/32 in	
Maximum Cutting OD	127 mm	

Part Number	Detailed Description
9U-7319	Single Phase, 230V, 50 Hz, 5.6 kW
9U-7320	Single Phase, 230V, 60 Hz, 5.6 kW
6V-6015	3 Phase 220V, 60 Hz, 5.6 kW
250-6807	3 Phase 460V, 60 Hz, 5.6 kW

Abrasive Saw Accessories	
Part Number	Detailed Description
174-8912	Cutoff Wheel
4C-9621	Belt Set
202-8959	Hose Cutting Guides

Repair Parts Reference Guide

Crimpers Repair Parts

Part Number	Detailed Description
HM290 Radial Hose Machine (with C3 Crimper)	
233-8046	Die Changing Tool for PB239 Dies
233-8047	Die Release Tool for Adapter Dies, PB237 Dies and PB266 Dies
233-8077	Die Pin, Steel (232L/266L/237L Series Large Die and Adapters) (1 piece)
233-8082	Adapter Die-HM290 (8 pieces)
233-8084	Plastic Die Holder for Racks (1 piece)
233-8085	Position Sensor-HM290
330-3951	Die Pins, Steel (239 Series Small Dies) (8 pieces)
457-6031	Crimputer 3 Update-HM290
457-6033	Pressure Sensor
466-0748	Dirt Deflector-HM290 (8 pieces)
466-0750	Ring to Hold Master Dies during Lubing-HM290
566-7505	Die Pins, Plastic (For 239 series Dies) (8 pieces)
Crimputer	
358-4539	Crimputer Bracket As. Lever for C3 and C5
528-5353	CV (Crimputer 5)
561-2023	Internal USB Connector/Cable Support C3 Panel
561-2024	E-Stop Operator Support C3 and C5 Panel
566-7501	Internal USB Connector/Cable Support C5 Panel
566-7502	Path Sensor (Potentiometer) Support C3 and C5
325 Radial Hose Machine	
233-8046	Die Changer Tool for PB239 Dies
233-8047	Die Release Tool for Adapter Dies, PB237 Dies and PB266 Dies
233-8077	Die Pin, Steel (232L/266L/237L Series Large Die and Adapters) (1 piece)
233-8084	Plastic Die Holder for Racks (1 piece)
330-3951	Die Pins, Steel (239 Series, Small Dies) (8 pieces)
358-4535	Crimputer 3
358-4536	Caliper , 8" Length, 3" Jaw Depth
358-4537	Cable for Caliper
358-4538	Single Pedal Foot Switch
358-4539	Crimputer Angle Adjust Lever
358-4544	Double Pedal Foot Switch

Hose Assembly Tools

Part Number	Detailed Description
421-2654	Ball Detent Kit for Adapter Dies (1 piece)
423-4364	Calibration Mandrel for 325
423-4367	Adapter Die - 325
423-4373	Caliper, 8" Length, 4" Jaw Depth
457-6033	Pressure Sensor
458-2920	Oil Filter Element 45 OD x 85 L (777.331)
458-2921	Oil Filter Element 45 OD x 88 L (777.351)
482-4417	Plunger Detent for Master Dies (1 piece)
561-2023	Internal USB Connector/Cable-C3
561-2024	Crimputer E-Stop Switch-C3 & C5
561-2025	Complete Slide Bearing Kit-325
561-2026	Master Die Spring Kit-325 (24 pieces)
566-7502	Path Sensor (Potentiometer)
566-7503	Shim Kit - Slide Bearings (0.05, 0.1, 0.15, 0.2 mm) (2 each)
566-7504	Complete Master Die Group-325
566-7505	Die Pins, Plastic (For 239 Series Dies) (8 pieces)
578-6149	Ball Detent Kit for Adapter Dies (8 pieces)
606-1516	Crimputer Compatible USB Stick
627-1975	Die Pins, Steel (239 Series, Short Thread, Small Dies) (8 Pieces)
S6 Radial Hose Machine	
233-8045	Calibration Mandrel-S6
233-8046	Die Changing Tool for PB239 Dies
233-8047	Die Release Tool for Adapter Dies, PB237 Dies and PB266 Dies
233-8077	Die Pin, Steel (232L/266L/237L Series Large Die and Adapters) (1 piece)
233-8084	Plastic Die Holder for Racks (1 piece)
330-3951	Die Pins, Steel (239 Series Small Dies) (8 pieces)
358-4535	Crimputer 3
358-4536	Caliper, 8" Length, 3" Jaw Depth
358-4537	Cable for Caliper
358-4538	Single Pedal Foot Switch
358-4539	Crimputer Angle Adjust Lever
358-4544	Double Pedal Foot Switch
358-4545	Table with Die Holder Rack
416-6391	Slide Bearing Kit-S6 (Under Master Dies) (8 pieces)

Hose Assembly Tools

Part Number	Detailed Description
416-6395	Master Die Extraction/Capture Tool-S6
416-6396	Plunger Detent Kit for Master Dies-M6, S6 (1 piece)
416-6401	Rear Retainer Ring Behind Slide Bearings-S6
416-6402	T-Nuts and Bolts for Master Dies-S6 (M6x35) (8 pieces)
416-6403	Complete Master Die Assembly-S6 (1 piece)
421-2653	Adapter Die-M6, S6
421-2654	Ball Detent Kit for Adapter Dies (1 piece)
423-4373	Caliper, 8" Length, 4" Jaw Depth
425-2389	Front Slide Bearing Kit-S6 (Inside Front Plate) (2 pieces)
457-6033	Pressure Sensor
462-5664	Capacitor-S6 (Only for Single Phase Machines)
550-9143	Master Die Spring Kit-M6, S6 (24 pieces)
566-7502	Internal USB Connector/Cable-C3
566-7503	Crimputer E-Stop Switch-C3 & C5
566-7505	Internal USB Connector Cable-C5
578-6149	Path Sensor (Potentiometer)
606-1516	Crimputer Compatible USB Stick
627-1975	Die Pins, Steel (239 Series, Short Thread, Small Dies) (8 Pieces)
M6 Radial Hose Machine	
233-8046	Die Changing Tool for PB239 Dies
233-8047	Die Release Tool for Adapter Dies, PB237 Dies and PB266 Dies
233-8077	Die Pin, Steel (232L/266L/237L Series Large Die and Adapters) (1 piece)
233-8084	Plastic Die Holder for Racks (1 piece)
330-3951	Die Pins, Steel (239 Series Small Dies) (8 pieces)
358-4545	Table with Die Holder Rack
416-6396	Plunger Detent Kit for Master Dies-M6, S6 (1 piece)
421-2653	Adapter Die-M6, S6
421-2654	Ball Detent Kit for Adapter Dies (1 piece)
550-9143	Master Die Spring Kit-M6, S6 (24 pieces)
550-9145	T-Nuts, Washers and Bolts for Master Dies-M6 (8, 16, 16 pieces)
566-7503	Shim Kit - Slide Bearings (0.05, 0.1, 0.15, 0.2 mm) (2 each)
566-7505	Die Pins, Plastic (For 239 Series Dies) (8 pieces)
578-6149	Ball Detent Kit for Adapter Dies (8 pieces)
598-1908	Complete Slide Bearing Kit-M6

Hose Assembly Tools

Part Number	Detailed Description
627-1975	Die Pins, Steel (239 Series, Short Thread, Small Dies) (8 Pieces)
S2 Radial Hose Machine	
517-3483	Die Pins-S2 (8 pieces)
561-1991	Slide Bearings-S2 (8 piece)
561-1992	Round Front Slide Bearing Plate-S2 (1 piece)
561-1993	Master Die Spring Kit-S2 (16 pieces)
561-1994	Seal Kit-S2
561-1995	Ball Detent Master Dies-S2 (8 pieces)
561-1997	Master Die Retractor Springs-S2 (8 pieces)
561-1998	Guide Pin for Retractor Springs-S2 (2 pieces)
608-8969	12 mm Die Set-S2
Hose Saw Repair Parts	
561-2027	Motor Shaft Break Away Coupling, EM3-DC
561-2028	Hose Bending Pins, EM3-DC (2 pieces)
561-2029	Hose Bending Pins, EM-6 (2 pieces)
576-6137	Universal Table, 840 x 710 x 750 mm
583-3538	Spark Arrestor, Supports EM3 and EM6 Saws, 40/70 mm Inlet
533-1184	Spark Arrestor, Supports EM115, 110mm Inlet

Abrasive Saw Fume Exhauster Attachment

Warranty: Manufacturer's 6 Months
[See, page 546](#) Technical Support
Section



- Optional Accessory for Abrasive Saw
- Exhaust fumes draws dust and debris into cabinet base where it is trapped for later collection
- 251-1207 Fume Exhauster is installed and wired to 6V-6015 Hose Cutting Machine
- 900 CFM Capacity
- 250-6808 Fume Exhauster is installed and wired to 250-6807 Hose Cutting Machine
- 900 CFM Capacity
- Ducting not included. For best results, use 5.00" (127 mm) diameter ducting with a maximum length of 20 ft (6 m)

Part Number	Detailed Description
251-1207	3 Phase 220V, 60 Hz
250-6808	3 Phase 460V, 60 Hz

Note: Not for use with cut off saws 9U-7319 & 9U-7320

Hose Assembly Tools

UVC50 Fume and Dust Collector

Warranty: Manufacturer's Two Years

See, [page 546](#) Technical Support
Section



- Suction Filter System for Hose Cutting Machines
- FSD to clean Fume, Smell and Dust

Different Filter Steps with Pre-Separation through to Fine Separation

- Cyclone Filter-Technology
- Spark Stop Step to Cooling Down of Glowing Particles
- PPI-Filterfoam
- Class H 13 HEPA Mico-Filter for Fine Dust Separation
- Activated Carbon Filter for Smell Reduction

Specifications	
Dimensions	1180 x 730 x 820 mm (46.5 x 29 x 32 in)
Weight	150 kg (330 lb)
Noise Level	< ~70 dB(A)
Maximum Volume Flow	700 m ³ /h
Maximum Vacuum	3250 Pa (negative pressure)
Main Filter Surface	5 m ²
Drive Power	1.9 KW
Intake Diameter	Ø40-80
Dust Collection Container	10 L

Part Number	Detailed Description
622-9425	220-240V/380-415V/440-460V
	PPI-Filterfoam
	Class H 13 HEPA Micro Filter
	Carbon Filter

UVC100 Fume and Dust Collector

Warranty: Manufacturer's Two Years
[See, page 546](#) Technical Support
Section



- Suction Filter System for up to Three Hose Cutting Machines at the same time
- FSD to clean Fume, Smell and Dust (all particles from Air)

Different Filter Steps with Pre-Separation through to Fine Separation

- Cyclone Filter-Technology
- Spark Arrestor to Cooling Down of Glowing Particles
- Class M Dust Filter Cartridge for Dust Separation
- Class H 13 HEPA Mico-Filter for Fine Dust Separation
- Activated Carbon Filter for Smell Reduction

Specifications	
Dimensions	950 x 950 x 2060 mm (37 x 37 x 81 in)
Weight	500 kg (1100 lb)
Noise Level	< ~70 db(A)
Maximum Volume Flow	1440 m³/h
Maximum Vacuum	4600Pa (negative pressure)
Main Filter Surface	10 m²
Drive Power	3 KW
Intake Diameter	Ø160
Dust Collection Container	12 L

Part Number	Detailed Description
622-9426	220-240V/380-415V/440-460V
	Class M Dust Filter
	Class H 13 HEPA Micro Filter
	Carbon Filter

Hose Assembly Tools

Pressure Test Equipment

Warranty: Manufacturer's Two Years



528-5351 Test Bench Control Stand



604-4592 P160 Test Cabinet



604-4593 P160 Test Cabinet with Extension Cabinet



625-7924 P160 Center Section



528-5350 P350 Test Cabinet

European Union Compliant, CE marked

- The Pressure Tester is designed to ensure that a safe and reliable hose assembly has been built and is ready for installation
- The Pressure Tester was designed to comply with the strictest safety standards available, such as MDG 41 Mine Site Guidelines
- The Pressure Tester can operate as a standalone machine and it can also be integrated with a C5 Crimper enabled Hose Crimper and operate as a system
- A Hose Label Printer can be added to print all the hose build information and pressure test data

Features Include:

- New Center Section that can be installed between the P160 Test Cabinet and Extension for added length
- Laptop Computer that enables the user to create a pressure graph and test certificate for the hose assemblies tested
- **Note:** The Laptop Computer is also a "requirement" for the integrated system setup of the Crimper, Pressure Tester and label printer
- New Manifold Connection System
- User Identification through Login and Password
- User-guiding Software and Improved Operation
- Creation of Certification Number that is comprised of Facility Location, Work Order Number, Hose Part Number, Batch Count and Date Code
- Detailed Hose Label Auto Print
- The Crimper or Test Bench Datalog can be downloaded via USB and then uploaded for safe, accurate and record keeping
- Standard solution requires manual download of data memory for complete record keeping and hose business management
- Network Integration set-up option is also available

Reference

- NEHS1331 - C5 Crimper V Setup and Operation (533-1146, 533-1147, 533-1148, 423-4361, and 528-5353)
- NEHS1324 - 528-5359, 528-5360, and 528-5361 Caterpillar Hose Assembly Pressure Test Bench
- NEHSXXXX - Caterpillar Hose Assembly - Integration Instructions - Pressure Test Equipment (TBA)

New Manifold Connection System



Hose Assembly Tools

Part Number	Detailed Description	Weight	Dimensions
528-5351	Test Bench Control Stand	210 kg (463 lb)	850 x 1390 x 810 mm
604-4592	P160 Test Cabinet	200 kg (441 lb)	2210 x 950 x 1325 mm
604-4593	P160 Test Cabinet with Extension Cabinet	390 kg (860 lb)	4100 x 950 x 1325 mm
625-7924	P160 Center Section	190 kg (419 lb)	1890 x 950 x 1325 mm
528-5350	P350 Test Cabinet	650 kg (1433 lb)	2100 x 2170 x 2650 mm
351-9431	3.79 Liter, Caterpillar ELI (Extended Life Inhibitor) Coolant (Must be diluted 95% water to 5% concentration)	-	-
351-9432	20 Liter, Caterpillar ELI (Extended Life Inhibitor) Coolant (Must be diluted 95% water to 5% concentration)	-	-

Pressure Test Bench Packages	
Part Number	Detailed Description
528-5359	P160 Test Cabinet and Test Bench Control Stand
528-5360	P160 Test Cabinet with Extension Cabinet and Test Bench Control Stand
528-5361	P350 Test Cabinet and Test Bench Control Stand

Note: ELI (Extended Life Inhibitor) Coolant **does not** come with packages.

Inhibitor must be purchased separately.

The test fluid needs to be changed regularly every three months, even if the machine is not being utilized.

Note: P160, P160 w/extension and or P160 Center Section requires **9 Liters** of coolant each on initial fill up.

P350 requires **52 Liters** of coolant on initial fill up.

Integration Equipment	
Part Number	Detailed Description
528-5352	Barcode Scanner. Required for use with Integration Software
528-5353	CV Crimputer. Required for use with Integration Software
528-5357	Programmed Laptop. Required for use with Integration Software

Note: There is no longer an adapter package kit. All adapters will have to be purchased separately. Below are lists of adapters that replace the adapters in the original adapter kit.

Caterpillar Adapters	
Part Number	ORFS to STOR
112-9783	-4 ORFS to -8 STOR
6V-8634	-6 ORFS to -8 STOR
6V-8639	-8 ORFS to -8 STOR
6V-8632	-10 ORFS to -8 STOR
6V-9874	-12 ORFS to -8 STOR
8C-3370	-16 ORFS to -8 STOR

Part Number	JIC to STOR
030-8193	-4 JIC to -8 STOR
030-8188	-6 JIC to -8 STOR
8M-0505	-8 JIC to -8 STOR
2P-7636	-10 JIC to -8 STOR
5P-2574	-12 JIC to -8 STOR
030-8307	-16 JIC to -8 STOR
9Y-2238	

Part Number	NPTF to STOR
345-3921	-6 NPTF to -8 STOR
311-8082	-12 NPTF to -8 STOR

Part Number	BSPP to STOR
309-0723	-6 BSPP to -8 STOR
252-7238	-8 BSPP to -8 STOR

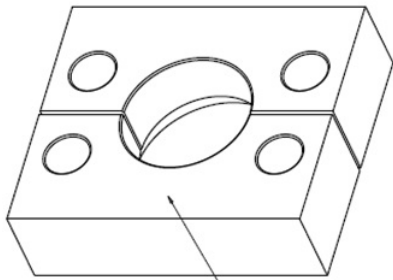
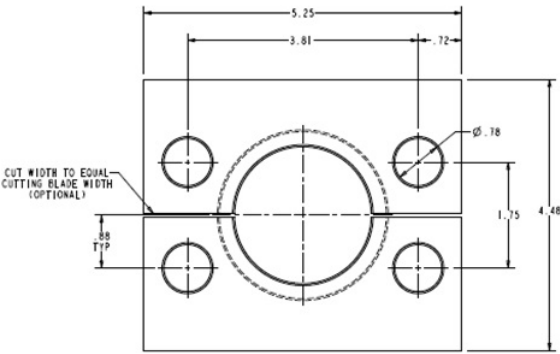
Hose Assembly Tools

NEW Manifold Connection System

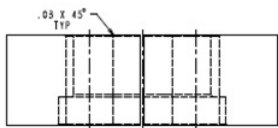
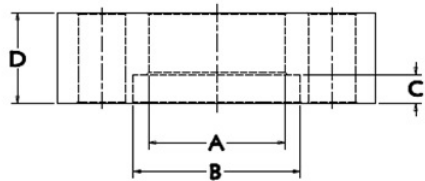
Note: The flange halves will have to be made. Below is a drawing with the dimensions for the split flange halves.

PLATE SIZE CHART

SIZE	A (mm-in)	B (mm-in)	C (mm-in)	D (mm-in)
CODE 61				
-8	24.6-0.97	31.0-1.22	6.10-0.24	25.4-1.00
-10	28.7-1.13	34.8-1.37	6.35-0.25	25.4-1.00
-12	32.5-1.28	38.9-1.53	6.35-0.25	25.4-1.00
-16	38.9-1.53	45.2-1.78	7.62-0.30	38.1-1.50
-20	43.9-1.73	51.6-2.03	7.62-0.30	38.1-1.50
-24	51.3-2.02	61.2-2.41	7.37-0.29	38.1-1.50
-32	63.0-2.48	72.1-2.84	8.9-0.35	38.1-1.50
CODE 62				
-8	24.6-0.97	32.5-1.28	7.1-0.28	25.4-1.00
-12	32.5-1.28	42.2-1.66	8.4-0.33	25.4-1.00
-16	38.9-1.53	48.5-1.91	8.9-0.35	38.1-1.50
-20	44.45-1.75	54.61-2.15	9.91-0.39	38.1-1.50
-24	51.6-2.03	64.3-2.53	12.2-0.48	50.8-2.00
-32	67.6-2.66	80.3-3.16	12.2-0.48	50.8-2.00
CAT FLANGE				
-12	32.3-1.27	41.4-1.63	13.5-0.53	25.4-1.00
-16	39.37-1.55	48.0-1.89	13.5-0.53	38.1-1.50
-20	43.18-1.70	54.9-2.16	13.5-0.53	38.1-1.50
-24	52.83-2.08	63.8-2.51	13.5-0.53	50.8-2.00
-32	67.06-2.64	79.5-3.13	13.5-0.53	50.8-2.00



NOTE STAMP TYPE AND SIZE ON EACH HALF
EXAMPLE
-16 CAT
EXAMPLE
-24 CODE 62



STANDARD TOLERANCES	
UNLESS OTHERWISE SPECIFIED	
X.X	±0.05
X.XX	±0.01
X.XXX	±0.005
ANGULAR DIMENSIONS	
±1° UNLESS OTHERWISE SPECIFIED	

Hose Assembly Tools

Skive Machine

Warranty: Manufacturer's Two Years
See, page 546 Technical Support
Section

European Union Compliant, CE marked



Hose Skiver

- Manual operation
- Allows you to set skive dimensions for each size XT-3ES, XT-5ES and XT-6ES

584-5552 Arbor Group (Sold Separately)

- Comes with three (3) Arbors each for 1", 1-1/4", 1-1/2" and two (2) Arbors for 2"
- 2" XT-5ES and XT-6ES use the same Arbor (skive the same)

Reference

- NEHS1353 - Skive Machine Tool Operating Manual



Typical Arbor



Arbor Rack

Specifications		Skiving Capabilities
Electrical Requirements	3 Phase, 230V/480V, 50/60 Hz	1", 1-1/4", 1-1/2", 2" XT-3ES 1", 1-1/4", 1-1/2", 2" XT-5ES 1", 1-1/4", 1-1/2", 2" XT-6ES
Dimensions	440 x 440 x 545 mm (17.32 x 17.32 x 21.46 in)	
Weight	35 kg (77 lb)	
Tool Speed	110 rpm	

Part Number	Detailed Description
584-5208	USM 10 Skive Machine
584-5552	Arbor Group (11 total)
584-5210	Arbor Rack*
576-6137	Universal Table, 840 x 710 x 750 mm

* Note: Arbor Rack is designed to bolt to Universal Table

584-5552 Arbor Group			
Dash Size	ID (mm, in)	DN	# of Arbors
-16	25.4, 1.00	25	3
-20	31.8, 1.25	31	3
-24	38.1, 1.50	38	3
-32	50.8, 2.00	51	2*

* Note: Since XT-5ES and XT-6ES will be the same

XT Reusable Press

Model Usage: All

Warranty: Manufacturer's Two Years [See, page 546](#) Technical Support Section



European Union Compliant, CE marked

- Used for installing and reclaiming couplings on Caterpillar high-pressure hoses
- Package will service reusable couplings from 1" to 2"

Reference

- NEHS1330 - 540-1208 and 508-7863 XT Press for Reusable Fittings
- NEHS0745 - Assembling Reusable Couplings in the 508-7863, 540-1208, 150-2568 and 173-9805 Hydraulic Hose Machine

Hose Press

- Each unit comes with power supply, press, foot pedal, stand and hoses
- Integrated stand securely holds equipment and press
- XT Tooling is offered separately and is required to service reusable couplings
- All legacy tooling for reclaiming -6 through -32 size reusable couplings can be used with the new XT Reusable Press
- The tooling for reusable couplings for -12 and smaller are no longer contained in this package
- This XT Reusable Press does not function as a hose crimper similar to the previous model

Specifications	
Dimensions	1100 x 500 x 1300 mm (43 x 20 x 51 in)
Weight	350 kg (771 lb)
Oil Capacity	15 L (15.8 qt)

Part Number	Detailed Description
508-7863	Single Phase, 115V, 50/60 Hz
540-1208	Single Phase, 230V, 50/60 Hz

Note: Tooling for reusable press is purchased separately.

Hose Assembly Tools

XT Reusable Tooling

Model Usage: All
Warranty:
Caterpillar Six Months

- Used with XT Hose Assembly Machines as well as the Combination Hose Assembly Machine

Reference

NEHS0750 - Comprehensive Tooling List for Assembling and Disassembling Reusable Couplings

Kit Introduction Table & Information

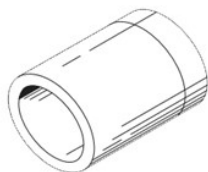
This section provides helpful reusable coupling tooling group information for Assembling and Disassembling Reusable Couplings. The XT tooling has been setup into 5 kits. These 5 kits will supply you with all the tooling necessary to service Reusable couplings. It also allows you to purchase only XT-3ES, XT-5ES or XT-6ES tooling.

Note: The typical life of a Caterpillar Reusable coupling is 5-7 reclaim cycles. If the coupling can be properly reclaimed without the fingers being damaged or cracked, then the coupling can be used again.

Kit Number	Kit Part Number	Detailed Description
1	585-4436	XT Tooling Kit - This group contains tooling that is shared between all XT-3ES, XT-5ES, and XT-6ES Reusable couplings.
2	585-4437	XT-3ES Kit - For servicing XT-3ES Reusable couplings. This kit contains tooling that is specific to XT-3ES but does not include all tooling necessary to service XT-3ES Reusable couplings.
3	585-4438	XT-5ES Kit - For servicing XT-5ES Reusable couplings. This kit contains tooling that is specific to XT-5ES but does not include all tooling necessary to service XT-5ES Reusable couplings.
4	585-4439	XT-3ES and XT-5ES Shared Kit - This kit contains tooling that is shared between XT-3ES and XT-5ES Reusable couplings. This kit completes the tooling in both the XT-3ES Kit and the XT-5ES Kit.
5	585-4441	XT-6ES Kit - For servicing XT-6ES Reusable couplings. This kit contains tooling that is specific to XT-6ES but does not include all tooling necessary to service XT-6ES Reusable couplings.

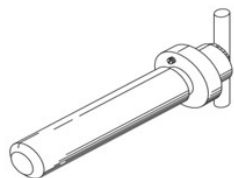
Note: All part numbers in each group can be purchased individually.
All 5 Kits are required to service the complete line of Reusable couplings.

General Kit | 585-4436



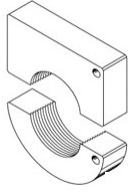
Skive Guide

Hose Skive Guide Kit		
Part Number	Color	Detailed Description
226-7145	Black	Fits -16, 1 in (25.4 mm)
226-7146	White	Fits -20, 1 1/4 in (31.8 mm)
226-7147	Red	Fits -24, 1 1/2 in (38.1 mm)
226-7148	Green	Fits -32, 2 in (50.8 mm)



Squareness Gauge and Skiving Arbor

Squareness Gauge and Skiving Arbor Kit			
Part Number	Color	Setscrew Protrusion	Detailed Description
202-3278	Black	1.524+/-0.25 mm	Fits -16
202-3279	White	2.032+/-0.25 mm	Fits -20
202-3280	Red	2.540+/-0.25 mm	Fits -24
202-3281	Green	3.175+/-0.25 mm	Fits -32



Hose Gripper Collets

Hose Gripper Collets		
Part Number	Detailed Description	
1U-9675	Top	1 in (25.4 mm) -16 & 1 1/4 in (31.8 mm) -20
1U-9676	Bottom	
1U-9677	Top	1 1/2 in (38.1 mm) -24
1U-9678	Bottom	
1U-9679	Top	2 in (50.8 mm) -32
1U-9680	Bottom	



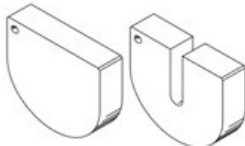
Pusher Assembly

Pusher Assembly ⁽⁸⁾		
Part Number	Detailed Description	
6V-4964	1 in (25.4 mm) -16	
8T-3059	1 1/4 in (31.8 mm) -20	
8T-3061	1 1/2 in (38.1 mm) -24	



Mandrel

Hose Mandrel ⁽⁹⁾		
Part Number	Detailed Description	
6V-4963	1 in (25.4 mm) -16	
8T-3058	1 1/4 in (31.8 mm) -20	
8T-3060	1 1/2 in (38.1 mm) -24	
136-3603	2 in (50.8 mm) -32	



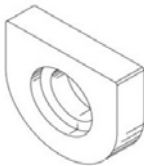
Pusher Plates

Pusher Plates		
Part Number	Detailed Description	
6V-4912	Solid	Fits all
6V-4913	Slotted	Fits all



Finger Expander

Finger Expander ⁽¹⁰⁾		
Part Number	Detailed Description	
5P-0973	1 in (25.4 mm) -16	
5S-2837	1 1/4 in (31.8 mm) -20	

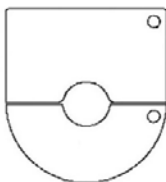


Rear One Piece Collet

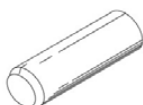
Rear One Piece Collet ⁽¹¹⁾		
Part Number	Detailed Description	
4C-5890	1 in (25.4 mm) -16	
4C-5891	1 1/4 in (31.8 mm) -20	
4C-5892	1 1/2 in (38.1 mm) -24	
4C-5893	2 in (50.8 mm) -32	

- 8 Used with Mandrel
 9 Use with Pusher Assembly for hose removal from coupling
 10 Used with Rear One Piece Collet
 11 Used with Finger Expander

Hose Assembly Tools



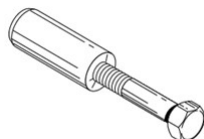
Setscrew Gripper Collets



Stem Pusher



Beveled Horseshoe Collet



Stem Expander



Depth Gauge



Protractor & Skiving Groups

Setscrew Gripper Collets

Part Number	Detailed Description	
127-9928	Bottom	1 in (25.4 mm) -16
127-9929	Top	
127-9930	Bottom	1 1/4 in (31.8 mm) -20
127-9931	Top	
127-9933	Bottom	1 1/2 in (38.1 mm) -24
127-9934	Top	
127-9936	Bottom	2 in (50.8 mm) -32
127-9937	Top	
8C-3996 ⁽¹²⁾	Setscrew (1/4-20 x 1in)	

Stem Pushers

Part Number	Detailed Description
5S-2840	1 1/4 in (31.8 mm) -20
5S-2846	1 1/2 in (38.1 mm) -24

Beveled Horseshoe Collet

Part Number	Detailed Description
4C-6188 ⁽¹³⁾	29 mm Collet Inner Diameter

Stem Expander

Part Number	Detailed Description
5P-5234	Fits all -20

Hose Assembly Tooling

Part Number	Detailed Description	
226-7149	Depth Gauge	Used to mark Skive Length
7S-1125	Protractor Group	Used to Set the Angle of Orientation up to -32
7S-1126	Skiving Tool	Used to Skive Cover off Hose

- 12 Sold individually, Bottom collet uses two setscrews and the Top collet uses one setscrew
 13 This collet is used on bent-stem couplings with short necks or large-heads to eliminate clearance problems.

Hose Assembly Accessory Group

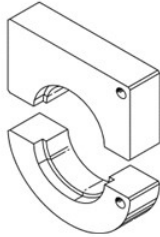
Model Usage: All

Warranty: Caterpillar Six Months

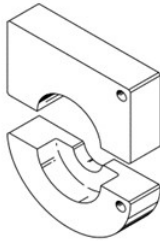
Reference

NEHS0750 - Comprehensive Tooling List for Assembling and Disassembling Reusable Couplings

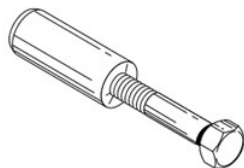
XT-3ES Kit | 585-4437



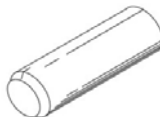
Typical Sleeve Collet



Typical Stem Collet



Stem Expander



Stem Pusher

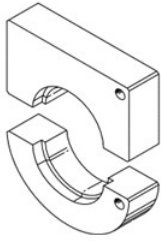
Stem & Sleeve Removal Collets - XT-3ES			
Part Number	Detailed Description		
9U-6743	Red	Top	1 in (25.4 mm) -16 XT-3ES Stem
9U-6744		Bottom	
6V-4897	Orange	Top	1 1/2 in (38.1 mm) -24 XT-3ES Sleeve
6V-4898		Bottom	
6V-4899	White	Top	2 in (50.8 mm) -32 XT-3ES Sleeve
6V-4901		Bottom	
6V-4893	Silver	Top	1 in (25.4 mm) -16 XT-3ES Sleeve & 1 1/2 in (38.1 mm) -24 XT-3ES Stem
6V-4894		Bottom	
6V-9069	Yellow	Top	2 in (50.8 mm) -32 XT-3ES Steem & 1 1/4 in (31.8 mm) -20 XT-3ES Sleeve
6V-9070		Bottom	
6V-4891 ⁽¹⁴⁾	Blue	Top	1 1/4 in (31.8 mm) -20 XT-3ES Stem & 1 in (25.4 mm) -16 XT-6ES Stem
6V-4892 ⁽¹⁴⁾		Bottom	

Stem Expander - XT-3ES	
Part Number	Detailed Description
5P-5236	2 in (50.8 mm) -32 XT-3ES

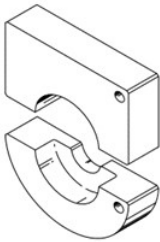
Stem Pusher - XT-3ES	
Part Number	Detailed Description
5S-2852	2 in (50.8 mm) -32 XT-3ES

Hose Assembly Tools

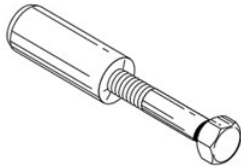
XT-5ES Kit | 585-4438



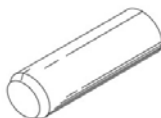
Typical Sleeve Collet



Typical Stem Collet



Stem Expander



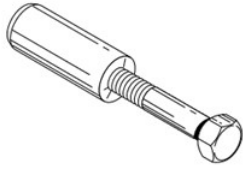
Stem Pusher

Stem & Sleeve Collets - XT-5ES		
Part Number	Detailed Description	
8T-0815	Top	1 in (25.4 mm) -16 XT-5ES Sleeve & 1 1/2 in (38.1 mm) -24 XT-5ES Stem
8T-0816	Bottom	
6V-4917	Top	1 in (25.4 mm) -16 XT-5ES Stem
6V-4918	Bottom	
122-7321	Top	1 1/4 in (31.8 mm) -20 XT-5ES Stem
122-7322	Bottom	
4C-9433 ⁽¹⁵⁾	Top	1 1/4 in (31.8 mm) -20 XT-5ES Sleeve & 1 1/4 in (31.8 mm) -20 XT-6ES Sleeve
4C-9474 ⁽¹⁵⁾	Bottom	
6V-4924	Top	1 1/2 in (38.1 mm) -24 XT-5ES Sleeve & -32 XT-5ES Stem
6V-4925	Bottom	
442-9651	Top	2 in (50.8 mm) -32 XT-5ES Sleeve
442-9652	Bottom	

Stem Expander - XT-5ES	
Part Number	Detailed Description
6V-4972	2 in (50.8 mm) -32 XT-5ES

Stem Pusher - XT-5ES	
Part Number	Detailed Description
126-1023	2 in (50.8 mm) -32 XT-5ES

Shared XT-3ES and XT-5ES Kit | 585-4439



Stem Expander

Stem Expander - XT-3ES & XT-5ES	
Part Number	Detailed Description
170-5689	1 in (25.4 mm) -16 XT-3ES, XT-5ES
5P-5235	1 1/2 in (38.1 mm) -24 XT-3ES, XT-5ES



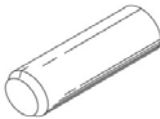
Pusher Assembly

Pusher Assembly - XT-3ES & XT-5ES	
Part Number	Detailed Description
136-3604 ⁽¹⁶⁾	2 in (50.8 mm) -32 XT-3ES, XT-5ES



Finger Expander

Finger Expander - XT-3ES & XT-5ES		
Part Number	Detailed Description	
5S-2843	Orange	1 1/2 in (38.1 mm) -24 XT-3ES, XT-5ES
5S-2849	White	2 in (50.8 mm) -32 XT-3ES, XT-5ES

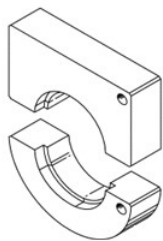


Stem Pusher

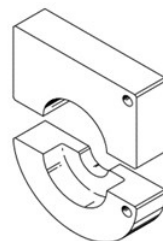
Stem Pusher - XT-3ES & XT-5ES	
Part Number	Description
5P-5234	1 in (24.5 mm) -16 XT-3ES, XT-5ES

Hose Assembly Tools

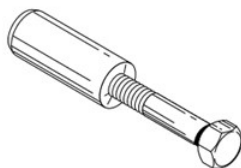
XT-6ES Kit | 585-4441



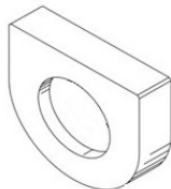
Typical Sleeve Collet



Typical Stem Collet



Stem Expander



Pusher Plate



Stem Pusher

Stem & Sleeve Removal Collets - XT-6ES		
Part Number	Detailed Description	
6V-4922 ⁽¹⁷⁾	Top	1 in (25.4 mm) -16 XT-6ES Sleeve
6V-4923 ⁽¹⁷⁾	Bottom	
4C-9422	Top	1 1/4 in (31.8 mm) -20 XT-6ES Stem
4C-9423	Bottom	
188-1590	Top	1 1/2 in (38.1 mm) -24 XT-6ES Sleeve
188-1591	Bottom	
188-1592	Top	1 1/2 in (38.1 mm) -24 XT-6ES Stem
188-1593	Bottom	
265-5809	Top	2 in (50.8 mm) -32 XT-6ES Sleeve
265-5810	Bottom	
265-5811	Top	2 in (50.8 mm) -32 XT-6ES Stem
265-5812	Bottom	
6V-4891 ⁽¹⁸⁾	Top	1 in (25.4 mm) -16 XT-6ES Stem & 1 1/4 in (31.8 mm) -20 XT-3ES Stem
6V-4892 ⁽¹⁸⁾	Bottom	
4C-9433 ⁽¹⁹⁾	Top	1 1/4 in (31.8 mm) -20 XT-6ES Sleeve & 1 1/4 in (31.8 mm) -20 XT-5ES Stem
4C-9474 ⁽¹⁹⁾	Bottom	
Stem Expander - XT-6ES		
Part Number	Detailed Description	
197-5396	1 in (25.4 mm) -16 XT-6ES	
188-1594	1 1/2 in (38.1 mm) -24 XT-6ES	
265-5817	2 in (50.8 mm) -32 XT-6ES	

Pusher Plate - XT-6ES	
Part Number	Detailed Description
265-5814	2 in (50.8 mm) -32 XT-6ES

Stem Pusher - XT-6ES	
Part Number	Detailed Description
197-5394	1 in (25.4 mm) -16 XT-6ES
265-5813	2 in (50.8 mm) -32 XT-6ES

- 17 Use for non integral Hex Reusable Coupling
 18 Shared with XT-3ES
 19 Shared with XT-5ES



Finger Expander

Finger Expander - XT-6ES	
Part Number	Detailed Description
188-1595	1 1/2 in (38.1 mm) -24 XT-6ES
265-5816	2 in (50.8 mm) -32 XT-6ES



Pusher Assembly

Pusher Assembly - XT-6ES	
Part Number	Detailed Description
197-5395 ⁽²⁰⁾	1 in (25.4 mm) -16 XT-6ES
265-5815 ⁽²¹⁾	2 in (50.8 mm) -32 XT-6ES Stem

Note: The below tooling comes in Kit 585-4437.

If you need to buy tooling just for XT-6ES you will need to also purchase these two collets. If you have already purchase Kit 585-4437 you do not need to purchase these two collets.

Part Number		Detailed Description
6V-4891	Top	1 in (25.4 mm) -16 XT-6ES Stem & 1 1/4" (31.8 mm) -20 XT-3ES Stem
6V-4892	Bottom	

Note: The below tooling comes in Kit 585-4438.

If you need to buy tooling just for XT-6ES you will need to also purchase these two collets. If you have already purchase Kit 585-4438 you do not need to purchase these two collets.

Part Number		Detailed Description
4C-9433	Top	1 1/4" (31.8 mm) -20 XT-5ES Sleeve & 1 1/4" (31.8 mm) -20 XT-6ES Sleeve
4C-9474	Bottom	

20 Used with 6V-4963 Mandrel
21 Used with 136-3603 Mandrel

Hose Assembly Tools

Legacy Reusable Tooling

3/8", 1/2" and 3/4" Tooling

Collets		
Part Number	Detailed Description	
1U-9673	Top	3/8", 1/2" Hose Gripper Collet
1U-9674	Bottom	
131-4367	Top	3/4" Hose Gripper Collet
131-4368	Bottom	
6V-4886	Top	3/8" XT-3 ES Sleeve; 3/4" XT-3 ES Stem
6V-4887	Bottom	
6V-4902	Top	3/8" XT-3 ES Stem; 1/2" XT-3 ES Stem; 3/8" XT-6 Stem; 1/2" XT-6 Stem
6V-4903	Bottom	
6V-4915	Top	3/4" XT-5 ES Stem
6V-4916	Bottom	
6V-4919	Top	3/4" XT-5 ES Sleeve
6V-4921	Bottom	
127-9924	Top	3/4" Hose Reclamation Tooling
127-9926	Bottom	

Misc.	
Part Number	Detailed Description
4C-5887	Collet, 3/8" (6.3 mm) -6
4C-5888	Collet, 1/2" (12.7 mm) -8
4C-5889	Collet, 3/4" (19.1 mm) -12
4C-6187	Beveled Horseshoe Collet, 25.4 mm ID
5S-2805	Finger Expander, 3/8"
5S-2811	Finger Expander, 1/2"
5S-2823	Finger Expander, 3/4"
6V-4961	Mandrel, 3/4"
6V-4962	Pusher As., 3/4"
170-5687	Stem Expander As., 1/2"

Hose Assembly Tools

170-5688	Stem Expander As., 3/8"
170-5690	Stem Expander As., 3/4"
170-5683	Expander Assembly, XT-6 -12 Stem
5S-2808	Pusher, Stem, 3/8"
5S-2814	Pusher, Stem, 1/2"
5S-2826	Pusher, Stem, 3/4"

Skive Guide		
Part Number	Color	Detailed Description
226-7141	Yellow	Fits -6, 3/8" (6.4 mm)
226-7142	Blue	Fits -8, 1/2" (12.7 mm)
226-7143	Orange	Fits -10, 5/8" (15.8 mm)
226-7144	Green	Fits -12, 3/4" (19.1 mm)

Squareness Gauge and Skiving Arbor Kit			
Part Number	Color	Setscrew Protrusion	Detailed Description
209-3320	Yellow	0.762 ± 0.025 mm	Fits -6
209-3322	Blue	0.762 ± 0.025 mm	Fits -8
209-3324	Orange	1.016 ± 0.025 mm	Fits -10
202-3277	Green	1.143 ± 0.025 mm	Fits -12

Hose Assembly Tools

Skive Vise

Model Usage: All
Warranty: Caterpillar Six Months



- Allows for easy skiving of hose
- Blocks have rubber pads to prevent damage to hose

Part Number	Detailed Description
127-1909	Skive Vise
127-1910	Skive Vise Protective Rubber Pads

Hose Assembly Tools

Chain Wrench

Model Usage: All
Warranty: Caterpillar Six Months



- European Union Compliant, CE marked
- Used to break the bond between the hose and reusable couplings
 - Can be used on diameters from 19.05 mm (3/4") through 82.55 mm (3 1/4") hose

Part Number	Detailed Description
1U-8760	Wrench-Chain

Large-Bore Hose Protractor

Model Usage: All
Warranty: Caterpillar
Six Months



- Tool to set the angle of orientation for large-bore hose 63.5 to 78.9 mm (2-1/2 to 3-1/2")

Reference

- NEHS0768 - Hose Products Reference Guide

Part Number	Detailed Description
266-7533	Large-Bore Protractor

Nylon Abrasion Sleeve Band Tool

Model Usage: All
Warranty: Caterpillar
Six Months



- Band-It Tool is used to secure protective covers to hydraulic hose using the following bands

Reference

- NEHS0727- Using the 166-5853 Banding Tool
- [How to Apply BAND-IT® Clamps using the BAND-IT® Tool](#) - Channel1

Part Number	Detailed Description
166-5853	Nylon Abrasion Sleeve Band Tool
Bands	
384-4127	34.9 mm (1.37 in) I.D.
384-4128	50.4 mm (1.98 in) I.D.
619-8622	76.2 mm (3.00 in) I.D.
619-8621	101.6 mm (4.00 in) I.D.

Hose Assembly Tools

Thread Measurement Kit

Model Usage: All
Warranty: Caterpillar Six Months



- European Union Compliant, CE marked
- Allows for measurement and identification of coupling
 - Includes PEGP2007 Coupling Identification Guide
 - Recommended for all dealer hose assembly areas

8T-0450 Thread Measurement Kit

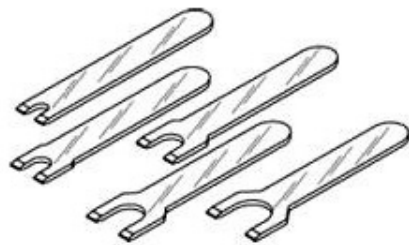
Part Number	Detailed Description
8T-0447	Dial Caliper
8T-0448	Pitch Gauge
8T-0449	Seat Angle Gauge (45° and 37°)
8T-0451	Seat Angle Gauge (12° and 30°)
PEGP2007	Coupling Identification Guide

Snap-to-Connect Coupling Wrenches

Model Usage: All
Warranty: Caterpillar Six Months

European Union Compliant, CE marked

- Provides wrenches for snap-to-connect couplings

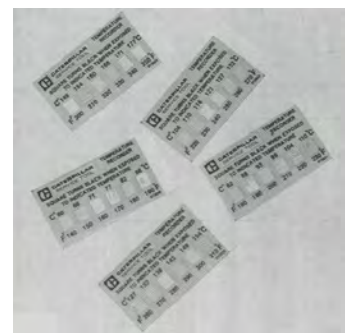


Snap-to-Connect Coupling Wrenches		
Part Number	Detailed Description	Opening Radius
279-1218	Wrench (-6)	5.15 mm (0.203 in)
279-1219	Wrench (-8)	7.05 mm (0.278 in)
279-1220	Wrench (-10)	8.70 mm (0.343 in)
279-1221	Wrench (-12)	10.95 mm (0.431 in)
279-1222	Wrench (-16)	13.90 mm (0.547 in)

Hose Assembly Tools

Temperature Measuring Tools

Model Usage: All
Warranty: Caterpillar Six Months



- Used for checking operating temperatures of the cooling system, engine oil system, hydraulic system and brake system
- Quick, easy, inexpensive method to determine a component's surface temperature
- 6 silver-colored temperature sensitive indicator windows on each recorder; each window turns permanently black when temperature for that window is reached or exceeded
- 5 different temperature recorders for 5 different temperature ranges
- Adhesive back attached to any clean dry surface; remove and keep as permanent record
- Withstands repeated temperature changes, solvents and water
- Consist: 3 each of temperature recorders listed in chart
- Response time: approximately 1 sec

8T-2844 Temperature Recorder Group

Temperature Recorder (Range)						
Part Number	°F (°C)	°F (°C)	°F (°C)	°F (°C)	°F (°C)	°F (°C)
8T-2820	140 (60)	150 (66)	160 (71)	170 (77)	180 (82)	190 (88)
8T-2821	180 (82)	190 (88)	200 (93)	210 (99)	220 (104)	230 (110)
8T-2822	220 (104)	230 (110)	240 (116)	250 (121)	260 (127)	270 (132)
8T-2823	260 (127)	270 (132)	280 (138)	290 (143)	300 (149)	310 (154)
8T-2824	300 (149)	310 (154)	320 (160)	330 (166)	340 (171)	350 (177)

Thermoplastic and Air Conditioning Hose Cutter

Model Usage: All
Warranty: Caterpillar Six Months

- Used for cutting Thermoplastic Hose (1028), Reduced O.D. Thermoplastic Hose (2760), and Air Conditioning Hose (1543)



Part Number	Detailed Description
177-4271	Cutter
177-4272	Blade

Hose Assembly Tools

Thermal Transfer Bar Code Printers

European Union Compliant, CE marked

- Low and High Volume Hose Label Printers
- Allows enhanced information on label (Part Number, Dealer Name and Telephone Number, Assembly Date, QR Codes)
- Operates with starter software on a PC or in a standalone mode using optional accessories (not included)
- Includes basic label template for use with software
- Uses self-lamination labels with protective layer
- Operates on Universal Power Supply between 100–240 VAC 50/60 Hz which connects to a standard PC adapter cable (US PC adapter cable included)
- Optional Plug Adapters are available to support regional electrical standards

Hose Assembly Tools

Low Volume Printer 442-0077

Warranty: Manufacturer's One Year
See, page 546 Technical Support
Section



European Union Compliant, CE marked

- Small, space saving, Low Volume Printer
- High quality double walled clamshell design
- Economical and suitable for less frequent usage
- Uses industry standard ribbons and media
- Head open sensor
- 8MB SDRAM, 4MB Flash Memory
- Supports Ethernet, USB 2.0, serial and parallel connectivity

Reference

- NEHS1352 - 442-0077 and 442-0078 Hose Label Printers
- PEDJ0839 - Machine Hose Inspections & Installation Tracker Overview Instructions | Cat® Inspect App
- PEDJ0883 - Cat® Hose Label Application Guide

The latest software updates are available here:

<https://catdealer.com/en/services-support/parts/wear-maintenance/Hose-and-Coupling/Hose-Label-Printers/hose-label-printer-software-updates-and-Instructions.html>

442-0077 - Low Volume Printer	
Specifications	
Dimensions	140 x 241 x 177 mm (5.5 x 9.5 x 7 in)
Weight	2.5 kg (5.5 lb)
Electrical	100-240 V, 50/60 Hz, 1.8A
Display	Single Line LCD
Ribbon	Maximum 90 meters long
Interface	USB Cable provided Standalone with USB Keyboard (not included)
Label Feed	Continuous Print (for multiple labels)
Label Sizes	-3 to -16 (S) 490 Labels per Roll
	-20 to -56 (L) 175 Labels per Roll

Consumables		
Part Number	Detailed Description	
442-0073	Starter Kit	1 Roll 490 Labels (S) 1 Roll 175 Labels (L) 1 Roll 74 m Ribbon
442-0074	Label Stock	3 Rolls of 490 Labels (S)
442-0075		3 Rolls of 175 Labels (L)
442-0076	Ribbon Stock	6 Rolls of 74 m Ribbons
Service Parts		

Hose Assembly Tools

Consumables		
Part Number	Detailed Description	
Part Number	Detailed Description	
445-9430	Print Head	Single Replacement
445-9431	Platen Assembly	Single Replacement

Voltage Adapters		
European Style Plug Adapter	Australian Style Plug Adapter	UK Style Plug Adapter
270-0578	270-0580	447-8886

High Volume Printer 442-0078

Hose Assembly Tools

Warranty: Manufacturer's One Year
See, page 546 Technical Support
Section



European Union Compliant, CE marked

- Heavy Duty Die-cast aluminum design
- Delivers High-Speed Performance
- Supports Ethernet, USB2 2.0, serial and parallel connectivity
- 300 dpi and 600 dpi resolution options
- Large LCD Display with 6-button menus
- Supports a USB keyboard interface for stand-alone printing
- 32MB SDRAM, 8MB Flash Memory

Reference

- NEHS1352 - Hose label Printers, 442-0077 and 442-0078 Hose Label Printers
- PEDJ0839 - Machine Hose Inspections & Installation Tracker Overview Instructions | Cat® Inspect App
- PEDJ0833 - Cat® Hose Label Application Guide

The latest software updates are available here:

<https://catdealer.com/en/services-support/parts/wear-maintenance/Hose-and-Coupling/Hose-Label-Printers/hose-label-printer-software-updates-and-Instructions.html>

442-0078 - High Volume Printer	
Specifications	
Dimensions	270 x 505 x 308 mm (11 x 20 x 12in)
Weight	15 kg (33 lb)
Electrical	100-240 V, 50/60 Hz, 2A
Display	Multiple Line LCD
Ribbon	Maximum 600 meters long
Interface	USB Cable provided Standalone with USB Keyboard (not included)
Label Feed	Continuous Print with Single Step Present and label backing rewind option (for multiple labels)
Label Sizes	-3 to -16 (S) 900 Labels per Roll
	-20 to -56 (L) 400 Labels per Roll

Consumables		
Part Number	Detailed Description	
442-0069	Starter Kit	1 Roll 900 Labels (S) 1 Roll 400 Labels (L) 1 Roll 450 m Ribbon
442-0070	Label Stock	3 Rolls of 900 Labels (S)
442-0071		3 Rolls of 400 Labels (L)
442-0072	Ribbon Stock	6 Rolls of 450 m Ribbons
Service Parts		
Part Number	Detailed Description	
445-9432	Print Head	Single Replacement

Consumables		
Part Number	Detailed Description	
Voltage Adapters		
European Style Plug Adapter	Australian Style Plug Adapter	UK Style Plug Adapter
270-0578	270-0580	447-8886

Hose Assembly Tools

Clean Seal Heat Shrink Machine

European Union Compliant, CE marked

- Used to apply clean seal capsules in place of plastic plugs and caps to keep contamination out of hose assemblies
- Shrink capsules onto hose end fittings in under 2 seconds
- Even heat distribution for a perfect capsule shrink-fit
- Uses Clean Seal Capsules from 3/4" I.D. (20 mm) 3" I.D. (80 mm) for hose and tube ends from -4 (1/4") through -32 (2")
- Hex Sizes from 8 mm (5/16") to 78 mm (3")
- Clean seal capsules help protect threads and seals from damage
- Heating unit is thermocouple protected against overheating

Heat Shrink Machine

Warranty: Manufacturer's One Year
See, page 546 Technical Support
Section



Heat Shrink 3-Step Process

European Union Compliant, CE marked

- Seal's single or multiple hose or tube assemblies
- White plunger provides surface to hold Clean Seal Capsule in place on coupling
- ON/OFF Rocket Switch illuminates Green when ON
- Hot Air Blower Timer sets in 1-minute increments
- When ON, Timer Light illuminates White
- 24/7 Operating Capacity
- Pre-Filtered Air prohibits airborne contamination

- Heat side of machine is fully insulated
- Brushless internal heat source for industrial applications

Reference

- NEHS0643 - Using the 233-7191, 233-7192, 233-7193, and 265-4959 Hose Cleaning Groups; and 546-5746 and 546-5747 Clean Seal Systems

Specifications	
Dimensions	658 x 330 x 230 mm (26 x 13 x 9 in)
Weight	15.6 kg (34.4 lb)

Part Number	Detailed Description
546-5746	Single Phase, 230 V, 50/60 Hz, 5A

Hose Assembly Tools

Heat Shrink Gun

Warranty: Manufacturer's One Year
[See, page 546](#) Technical Support
Section

European Union Compliant, CE marked

Hand-Held Gun Features:

- Electric Heat-Shrink Gun
- Flex Vacuum Pump Stand
- 95 mm Diffuser

Reference

- NEHS0643 - Using the 233-7191, 233-7192, 233-7193, and 265-4959 Hose Cleaning Groups; and 546-5746 and 546-5747 Clean Seal System



Specifications	
Dimensions	343 x 330 x 127 mm (13.5 x 13 x 5 in)
Weight	3.1 kg (6.9 lb)

Part Number	Detailed Description
546-5747	Single Phase, 120 V, 50/60 Hz, 1500 W

Capsule Dispenser Stand



Dispenser Stand with Tubes

- Clean Seal Capsules are now easily stored and dispensed with the Capsule Dispenser Stand
- The adjustable easel-like Capsule Dispenser Stand can be set on top of a bench or mounted to a wall
- The dispensing tubes keep the capsules organized and contamination free
- The dispensers accommodate the entire range of Capsules sizes using 3 distinct dispensing tubes

Laminated Sizing Chart with Wand

- A laminated sizing chart helps find the proper Capsule size
- The Loading Wand helps load the initial capsules into the dispenser



Laminated Sizing Chart
with Wand

Specifications	
Dimensions	23.65 x 1.69 x 27.87 mm
Weight	7.8 kg (17.3 lb)

Part Number	Detailed Description
620-5300	Capsule Dispenser Stand

Capsule Dispenser Group 620-5303	
Part Number	Detailed Description
620-5300	Capsule Dispenser Stand
620-5301	Capsule Dispenser Sizing Chart, Wand and Lanyard
620-5299	1.0 " Capsule Dispenser
620-5296	1.5 " Capsule Dispenser
620-5297	2.5 " Capsule Dispenser
620-5298	3.0 " Capsule Dispenser

Hose Assembly Tools

Clean Seal Capsules				
CAT Part Number	Qty	ID x Length	Hex Sizes (mm)	Dispenser Tube
612-1136	960	14 x 24 mm (0.5 x .94 in)	10 to 13	1.0"
486-7587	810	20 x 30 mm (0.8 x 1.2 in)	12 to 18	1.5"
486-7588	800	25 x 40 mm (1.0 x 1.6 in)	12 to 22	1.5"
486-7589	720	28 x 40 mm (1.1 x 1.6 in)	22 to 24	1.5"
486-7590	640	31 x 40 mm (1.2 X 1.6 in)	24 to 27	1.5"
486-7591	640	34 X 40 mm (1.3 x 1.6 in)	27 to 30	2.5"
486-7592	640	38 x 40 mm (1.5 x 1.6 in)	30 to 32	2.5"
612-1139	480	43 x 45 mm (1.7 x 1.8 in)	32 to 41	2.5"
486-7593	480	46 x 50 mm (1.8 x 2.0 in)	34 to 44	2.5"
486-7594	400	52 x 60 mm (2.1 x 2.4 in)	41 to 50	3"
486-7595	400	58 x 60 mm (2.3 x 2.4 in)	49 to 56	3"
486-7596	320	67 x 60 mm (2.6 x 2.4 in)	55 to 65	3"
486-7597	420	80 x 60 mm (3.2 x 2.4 in)	64 to 78	NA

Hose Assembly Tools

Hose Cleaning Group (1 1/4" Economy Launcher)

Model Usage: All

Warranty: Caterpillar Six Months



European Union Compliant, CE marked

- Designed for service vehicle or mobile applications
- Includes carrying case with foam inserts
- Can be used with pressurized air or nitrogen gas
- Works on 1/4" (-4) through 1 1/4" (-20) hoses
- Durable plastic handle with Quick-Acting threads and internal brass parts
- Used to remove waste and contaminants from internal surfaces of tubes, lines and hoses while machine is at the job site (works great in field service trucks)
- A clean hydraulic systems will reduce the risk of component failure, increase service life of filters, reduce equipment maintenance costs, and increase productivity
- 308-8524 Hose Cleaning Projectile Launcher can also be purchased separately

References

- NEHS0643 - Using the 233-7191, 233-7192, 233-7193, and 265-4959 Hose Cleaning Groups; and 546-5746 and 546-5747 Clean Seal Systems
- NEHS0634 - Operation Safety Video
- NEHS0768 - Hose Products Reference Guide
- NEEG2955 - Projectile Sizing Chart

Hose Assembly Tools

Specifications	
Dimensions	406 x 330 x 152 mm (16 x 13 x 6 in)
Weight	3.7 kg (8.1 lb)
Air Pressure	80-110 psi (5.5-7.5 bar)
Air Flow	5.5 SCFM (1.6 m ³ /min)

Note: An in-line air filter and regulator are recommended. Air hose should be 13 mm (1/2") ID.

Part Number	Detailed Description
233-7191	Hose Cleaning Group (1 1/4" Economy Launcher)

233-7191 Hose Cleaner Group			
Part Number	Detailed Description		
308-8524	1 1/4" Economy Launcher UC-EL1.25		
130-6068	Quick Release Coupling (1/2" Male Hose Barb)		
215-4585	Nozzle	UC-4FFORX	-4
130-6069	Nozzle	UC-H06	1/4" (6 mm)
130-6070	Nozzle	UC-H08	5/16" (8 mm)
130-6071	Nozzle	UC-H10	3/8" (10 mm)
130-6072	Nozzle	UC-H13	1/2" (13 mm)
130-6073	Nozzle	UC-H16	5/8" (16 mm)
130-6074	Nozzle	UC-H19	3/4" (19 mm)
130-6075	Nozzle	UC-H25	1" (25 mm)
130-6076	Nozzle	UC-H32	1 1/4" (32 mm)

Hose Assembly Tools

Hose Cleaning Group (2" Portable Launcher)

Model Usage: All

Warranty: Caterpillar Six Months



European Union Compliant, CE marked

- Includes a carrying case with foam inserts
- Can be used with pressurized air or nitrogen gas
- Designed for service vehicles or mobile applications
- Works on 1/4" (-4) through 2" (-32) hoses
- Made of precision machined aluminum, and fully anodized for harsh environments and heavy use
- Used to remove waste and contaminants from internal surfaces of tubes, lines and hoses while machine is at the job site (works great in field service trucks)
- A clean hydraulic system will reduce the risk of component failure, increase service life of filters, reduce equipment maintenance costs, and increase productivity
- 233-7190 Hose Cleaning Projectile Launcher can also be purchased separately

References

- NEHS0643 - Using the 233-7191, 233-7192, 233-7193, and 265-4959 Hose Cleaning Groups; and 546-5746 and 546-5747 Clean Seal Systems
- NEHS0634 - Operation Safety Video
- NEHS0768 - Hose Products Reference Guide
- NEEG2955 - Projectile Sizing Chart

Specifications	
Dimensions	609 x 609 x 152 mm (24 x 24 x 6 in)
Weight	4.1 kg (9.1 lb)
Air Pressure	80-110 psi (5.5-7.5 bar)
Air Flow	5.5 SCFM (1.6 m ³ /min)

Note: An in-line air filter and regulator are recommended. Air hose should be 13 mm (1/2") ID.

Part Number	Detailed Description
233-7192	Hose Cleaning Group (2" Portable Launcher)

233-7192 Hose Cleaner Group			
Part Number	Detailed Description		
233-7190	2" Launcher UC-HL2		
130-6068	Quick Release Coupling (1/2" Male Hose Barb)		
130-6062	Ring-Adapter UC-AR1		
215-4585	Nozzle	UC-4FFORX	-4
130-6069	Nozzle	UC-H06	1/4" (6 mm)
130-6070	Nozzle	UC-H08	5/16" (8 mm)
130-6071	Nozzle	UC-H10	3/8" (10 mm)
130-6072	Nozzle	UC-H13	1/2" (13 mm)
130-6073	Nozzle	UC-H16	5/8" (16 mm)
130-6074	Nozzle	UC-H19	3/4" (19 mm)
130-6075	Nozzle	UC-H25	1" (25 mm)
130-6076	Nozzle	UC-H32	1 1/4" (32 mm)
130-6083	Nozzle	UC-J06	1/4" (6 mm)
130-6084	Nozzle	UC-T08	5/16" (8 mm)
130-6085	Nozzle	UC-J10	3/8" (10 mm)
130-6086	Nozzle	UC-J13/T13	1/2" (13 mm)
130-6087	Nozzle	UC-J16/T16	5/8" (16 mm)
130-6088	Nozzle	UC-J19/T19	3/4" (19 mm)
130-6089	Nozzle	UC-J25/T22	1" & 7/8" (25 & 22 mm)
130-6090	Nozzle	UC-J32/T25	1 1/4" & 1" (32 & 25 mm)

Hose Assembly Tools

Hose Cleaning Group (2" Shop Launcher)

Model Usage: All

Warranty: Caterpillar Six Months



European Union compliant

- Designed for the Dealer Hose Assembly Area
- Included stand for the Projectile Launcher and Nozzle Rack
- Can be used with pressurized air or nitrogen gas
- Works on 1/4" (-4) through 2" (-32) hoses
- Made of precision machined aluminum, and fully anodized for harsh environments and heavy use
- Used to remove waste and contaminants from internal surfaces of tubes, lines and hoses while machine is at the job site (works great in field service trucks)
- A clean hydraulic system will reduce the risk of component failure, increase service life of filters, reduce equipment maintenance costs, and increase productivity
- 233-7190 Hose Cleaning Projectile Launcher can also be purchased separately

References

- NEHS0643 - Using the 233-7191, 233-7192, 233-7193, and 265-4959 Hose Cleaning Groups; and 546-5746 and 546-5747 Clean Seal Systems
- NEHS0634 - Operation Safety Video
- NEHS0768 - Hose Products Reference Guide
- NEEG2955 - Projectile Sizing Chart

Hose Assembly Tools

Specifications	
Dimensions	508 x 406 x 457 mm (20 x 16 x 18 in)
Weight	4.3 kg (9.5 lb)
Air Pressure	80-110 psi (5.5-7.5 bar)
Air Flow	5.5 SCFM (1.6 m ³ /min)

Note: An in-line air filter and regulator are recommended. Air hose should be 13 mm (1/2") ID.

Part Number	Detailed Description
233-7193	Hose Cleaning Group (2" Shop Launcher)

233-7193 Hose Cleaner Group			
Part Number	Detailed Description		
233-7190	2" Launcher UC-HL2		
130-6068	Quick Release Coupling (1/2" Male Hose Barb)		
156-0055	Nozzle Organizer Rack UC-NH25		
156-0050	Stand-Launcher UC-5		
130-6062	Ring-Adapter UC-AR1		
215-4585	Nozzle	UC-4FFORX	-4
130-6069	Nozzle	UC-H06	1/4" (6 mm)
130-6070	Nozzle	UC-H08	5/16" (8 mm)
130-6071	Nozzle	UC-H10	3/8" (10 mm)
130-6072	Nozzle	UC-H13	1/2" (13 mm)
130-6073	Nozzle	UC-H16	5/8" (16 mm)
130-6074	Nozzle	UC-H19	3/4" (19 mm)
130-6075	Nozzle	UC-H25	1" (25 mm)
130-6076	Nozzle	UC-H32	1 1/4" (32 mm)
130-6091	Nozzle	UC-H38	1 1/2" (38 mm)
130-6092	Nozzle	UC-H50	2" (50 mm)
130-6097	Nozzle	UC-J38/T38	1 1/2" (38 mm)

Hose Assembly Tools

Hose Cleaning Group (3 1/2" Shop Launcher)

Model Usage: All
Warranty: Caterpillar Six months



European Union compliant, CE Marked

- Designed for the Dealer Hose Assembly Area
- Included stand for the Projectile Launcher and Nozzle Rack
- Can be used with pressurized air or nitrogen gas
- Works on 2 1/2" (-40), 3" (-48) and 3 1/2" (-56) hoses
- Made of precision machined aluminum, and fully anodized for harsh environments and heavy use
- Used to remove waste and contaminants from internal surfaces of tubes, lines and hoses while machine is at the job site (works great in field service trucks)
- A clean hydraulic system will reduce the risk of component failure, increase service life of filters, reduce equipment maintenance costs, and increase productivity
- 265-4958 Launcher can also be purchased separately

References

- NEHS0643 - Using the 233-7191, 233-7192, 233-7193, and 265-4959 Hose Cleaning Groups; and 546-5746 and 546-5747 Clean Seal Systems
- NEHS0634 - Operation Safety Video
- NEHS0768 - Hose Products Reference Guide
- NEEG2955 - Projectile Sizing Chart

Specifications	
Dimensions	588 x 588 x 305 mm (23 x 23 x 12 in)
Weight	1.45 kg (3.2 lb)
Air Pressure	80-110 psi (5.5-7.5 bar)
Air Flow	5.5 SCFM (1.6 m³/min)

Note: An in-line air filter and regulator are recommended. Air hose should be 13 mm (1/2") ID.

Part Number	Detailed Description
265-4959	Hose Cleaning Group (3 1/2" Shop Launcher)

265-4959 Hose Cleaner Group			
Part Number	Detailed Description		
265-4958	3 1/2" Launcher UC-HL3.5		
130-6068	Quick Release Coupling (1/2" Male Hose Barb)		
156-0050	Stand-Launcher UC-5		
-	Small Adapter Ring, UC-AR2 - 1/8" TO 1-1/4" (3 mm to 32 mm) Nozzles		
-	Large Adapter Ring, UC-AR3 - 1-1/2" TO 2" (38 mm to 50 mm) Nozzles		
267-1527	Nozzle	UC-U55/90	2 1/8" - 3 1/2"

Note: Not sold separately

Hose Assembly Tools

Application Charts for Hose Cleaner Groups

Model Usage: All

Warranty: Six Months

European Union Compliant, CE marked

Hose Nozzles and Projectiles

HOSE						
Hose Dash Size	Nominal Inch	DN mm	CAT Nozzle No.	Mfg. Nozzle No.	CAT Projectile No.	Mfg. Projectile No.
-3	3/16"	5	130-6069	UC-AH05-Blue	215-4565	UC-06
-4	1/4"	6	130-6069	UC-H06	215-4568	UC-12
-5	5/16"	8	130-6070	UC-H08	215-4569	UC-14
-6	3/8"	10	130-6071	UC-H10	215-4570	UC-16
-8	1/2"	13	130-6072	UC-H13	215-4572	UC-20
-10	5/8"	16	130-6073	UC-H16	215-4574	UC-24
-12	3/4"	19	130-6074	UC-H19	215-4575	UC-26
-16	1"	25	130-6075	UC-H25	215-4578	UC-36
-20	1-1/4"	32	130-6076	UC-H32	215-4580	UC-45
-24	1-1/2"	38	130-6091	UC-H38	215-4582	UC-55
-32	2"	50	130-6092	UC-H50	215-4584	UC-65
-40	2-1/2"	63	267-1527	UC-U55/90	265-4953	UC-80
-48	3"	76	267-1527	UC-U55/90	265-4955	UC-90
-56	3-1/2"	90	267-1527	UC-U55/90	265-4957	UC-100

JIC COUPLINGS				
Hose Dash Size	CAT Nozzle No.	Mfg. Nozzle No.	CAT Projectile No.	Mfg. Projectile No.
-4	130-6083	UC-J06	215-4566	UC-07
-5	130-6084	UC-T06	215-4567	UC-10
-6	130-6085	UC-J10	215-4568	UC-12
-8	130-6086	UC-J13/T13	215-4570	UC-16
-10	130-6087	UC-J16/T16	215-4573	UC-22
-12	130-6088	UC-J19/T19	215-4575	UC-26
-16	130-6089	UC-J25/T22	215-4577	UC-33
-20	130-6090	UC-J32/T25	215-4579	UC-40
-24	130-6097	UC-J38/T38	215-4581	UC-50
-32	130-6098	UC-J50/T50	215-4583	UC-60

Hose Assembly Tools

JIC COUPLINGS				
Hose Dash Size	CAT Nozzle No.	Mfg. Nozzle No.	CAT Projectile No.	Mfg. Projectile No.
-40	267-1527	UC-U55/90	265-4952	UC-75
-48	267-1527	UC-U55/90	265-4954	UC-85
-56	267-1527	UC-U55/90	265-4956	UC-95

ORFS (O-RING FACE SEAL) COUPLINGS				
Hose Dash Size	CAT Nozzle No.	Mfg. Nozzle No.	CAT Projectile No.	Mfg. Projectile No.
-4	215-4585	UC-4FFORX	215-4565	UC-06
-6	130-6069	UC-H06	215-4568	UC-12
-8	130-6071	UC-H10	215-4570	UC-16
-10	130-6072	UC-H13	215-4573	UC-22
-12	130-6073	UC-H16	215-4575	UC-26
-16	130-6074	UC-H19	215-4577	UC-33
-20	130-6075	UC-H25	215-4579	UC-40

CODE 61, 62 & CAT FLANGE COUPLINGS				
Hose Dash Size	CAT Nozzle No.	Mfg. Nozzle No.	CAT Projectile No.	Mfg. Projectile No.
-8	130-6071	UC-H10	215-4570	UC-16
-10	130-6072	UC-H13	215-4573	UC-22
-12	130-6073	UC-H16	215-4575	UC-26
-16	130-6074	UC-H19	215-4577	UC-33
-20	130-6075	UC-H25	215-4579	UC-40
-24	130-6076	UC-H32	215-4581	UC-50
-32	130-6091	UC-H38	215-4583	UC-60
-40	267-1527	UC-U55/90	265-4952	UC-75
-48	267-1527	UC-U55/90	265-4954	UC-85
-56	267-1527	UC-U55/90	265-4956	UC-95

Hose Assembly Tools

NOMINAL INCH HYDRAULIC TUBING				
OD x Wall	CAT Nozzle No.	Mfg. Nozzle No.	CAT Projectile No.	Mfg. Projectile No.
1/8 x 0.030 in		UC-T03		UC-04
¼ x 0.035 in	130-6084	UC-T06	215-4567	UC-10
¼ x .049 in	130-6084	UC-T06	—	UC-07
¼ x .065 in	130-6084	UC-T06	215-4566	UC-07
5/16 x 0.035 in	130-6084	UC-T06	215-4568	UC-12
3/8 x 0.035 in	130-6095	UC-T10	215-4569	UC-14
3/8 x 0.049 in	130-6095	UC-T10	215-4569	UC-14
3/8 x .065 in	130-6095	UC-T10	215-4568	UC-12
½ x 0.035 in	130-6086	UC-J13/T13	215-4570	UC-16
½ x 0.049 in	130-6086	UC-J13/T13	215-4570	UC-16
½ x 0.065 in	130-6086	UC-J13/T13	215-4570	UC-16
½" x .083 in	130-6086	UC-J13/T13	215-4569	UC-14
5/8 x 0.049 in	130-6087	UC-J16/T16	215-4573	UC-22
5/8 x 0.065 in	130-6087	UC-J16/T16	215-4572	UC-20
5/8 x 0.083 in	130-6087	UC-J16/T16	215-4572	UC-20
¾ x 0.049 in	130-6088	UC-J19/T19	215-4575	UC-26
¾ x 0.065 in	130-6088	UC-J19/T19	215-4575	UC-26
¾ x 0.095 in	130-6088	UC-J19/T19	215-4573	UC-22
7/8 x 0.049 in	130-6089	UC-J25/T22	215-4577	UC-33
7/8 x 0.065 in	130-6089	UC-J25/T22	215-4576	UC-30
7/8 x 0.095 in	130-6073	UC-H16	—	UC-26
1 x 0.065 in	130-6090	UC-J32/T25	215-4577	UC-33
1" x .083 in	130-6090	UC-J32/T25	215-4577	UC-33
1 x 0.095 in	130-6090	UC-J32/T25	215-4577	UC-33
1 x 0.120 in	130-6090	UC-J32/T25	215-4576	UC-30
1-¼ x 0.065 in	130-6096	UC-T32	215-4579	UC-40
1-¼ x .083 in	130-6096	UC-T32	215-4579	UC-40
1-¼ x 0.095 in	130-6096	UC-T32	215-4579	UC-40
1-¼ x .109 in	130-6096	UC-T32	215-4578	UC-36
1-¼ x 0.120 in	130-6096	UC-T32	215-4578	UC-36
1-½ x 0.065 in	130-6097	UC-J38/T38	215-4581	UC-50
1-½ x .083 in	130-6097	UC-J38/T38	215-4581	UC-50
1-½ x 0.095 in	130-6097	UC-J38/T38	215-4581	UC-50
1-½ x 0.120 in	130-6097	UC-J38/T38	215-4581	UC-50

Hose Assembly Tools

NOMINAL INCH HYDRAULIC TUBING				
OD x Wall	CAT Nozzle No.	Mfg. Nozzle No.	CAT Projectile No.	Mfg. Projectile No.
1-½ x .134 in	130-6097	UC-J38/T38	215-4580	UC-45
1-½ x .148 in	130-6097	UC-J38/T38	215-4580	UC-45
2 x 0.065 in	130-6098	UC-J50/T50	215-4583	UC-60
2 x 0.095 in	130-6098	UC-J50/T50	215-4583	UC-60
2 x .109 in	130-6098	UC-J50/T50	215-4583	UC-60
2 x 0.120 in	130-6098	UC-J50/T50	215-4583	UC-60
2 x 0.134 in	130-6098	UC-J50/T50	215-4582	UC-55
2 x .180 in	130-6098	UC-J50/T50	215-4582	UC-55
2 x .188 in	130-6098	UC-J50/T50	215-4582	UC-55

METRIC HYDRAULIC TUBING				
OD x Wall	CAT Nozzle No.	Mfg. Nozzle No.	CAT Projectile No.	Mfg. Projectile No.
3 x .50 in		UC-T03	—	UC-04
3 x .7 in		UC-T03	—	UC-03
6 x 1.0 in		UC-6 x 1.5	215-4566	UC-07
6 x 1.5 in		UC-6 x 1.5	215-4566	UC-07
8 x 1.0 in		UC-8 x 1.5	215-4567	UC-10
8 x 1.5 in		UC-8 x 1.5	215-4567	UC-10
10 x 1.0 in		UC-10 x 1.5	215-4569	UC-14
10 x 1.5 in		UC-10 x 1.5	215-4569	UC-14
12 x 1.0 in		UC-12 x 2.0	215-4570	UC-16
12 x 1.5 in		UC-12 x 2.0	215-4570	UC-16
12 x 2.0 in		UC-12 x 2.0	215-4569	UC-14
14 x 1.0 in		UC-14 x 2.0	215-4571	UC-18
14 x 1.5 in		UC-14 x 2.0	215-4570	UC-16
14 x 2.0 in		UC-14 x 2.0	215-4570	UC-16
15 x 1.0 in		UC-15 x 2.0	215-4572	UC-20
15 x 1.5 in		UC-15 x 2.0	215-4571	UC-18
15 x 2.0 in		UC-15 x 2.0	215-4570	UC-16
16 x 1.0 in		UC-16 x 2.5	215-4573	UC-22
16 x 1.5 in		UC-16 x 2.5	215-4572	UC-20
16 x 2.0 in		UC-16 x 2.5	215-4571	UC-18
16 x 2.5 in		UC-16 x 2.5	215-4570	UC-16

Hose Assembly Tools

METRIC HYDRAULIC TUBING				
OD x Wall	CAT Nozzle No.	Mfg. Nozzle No.	CAT Projectile No.	Mfg. Projectile No.
18 x 1.0 in		UC-18 x 2.5	215-4574	UC-24
18 x 1.5 in		UC-18 x 2.5	215-4574	UC-24
18 x 2.0 in		UC-18 x 2.5	215-4573	UC-22
18 x 2.5 in		UC-18 x 2.5	215-4572	UC-20
20 x 1.5 in		UC-20 x 3.0	215-4575	UC-26
20 x 2.0 in		UC-20 x 3.0	215-4574	UC-24
20 x 2.5 in		UC-20 x 3.0	215-4574	UC-24
20 x 3.0 in		UC-20 x 3.0	215-4573	UC-22
22 x 1.0 in		UC-22 x 2.0	215-4576	UC-30
22 x 1.5 in		UC-22 x 2.0	215-4576	UC-30
22 x 2.0 in		UC-22 x 2.0	215-4576	UC-30
25 x 2.0 in		UC-25X3.0	215-4577	UC-33
25 x 2.5 in		UC-25 x 3.0	215-4576	UC-30
25 x 3.0 in		UC-25 x 3.0	215-4576	UC-30
28 x 2.0 in		UC-28 x 2.5	215-4578	UC-36
28 x 2.5 in		UC-28 x 2.5	215-4578	UC-36
30 x 2.0 in		UC-30 x 4.0	215-4578	UC-36
30 x 2.5 in		UC-30 x 4.0	215-4578	UC-36
30 x 3.0 in		UC-30 x 4.0	215-4578	UC-36
30 x 4.0 in		UC-30 x 4.0	215-4578	UC-36
35 x 2.0 in		UC-35 x 3.0	215-4580	UC-45
35 x 3.0 in		UC-35 x 3.0	215-4579	UC-40
35 x 4.0 in	130-6075	UC-H25	215-4579	UC-40
35 x 5.0 in	130-6075	UC-H25	215-4578	UC-36
38 x 2.5 in		UC-38 x 5.0	215-4581	UC-50
38 x 3.0 in		UC-38 x 5.0	215-4581	UC-50
38 x 4.0 in		UC-38 x 5.0	215-4580	UC-45
38 x 5.0 in		UC-38 x 5.0	215-4579	UC-40
42 x 2.0 in		UC-42 x 3.0	215-4582	UC-55
42 x 3.0 in		UC-42 x 3.0	215-4581	UC-50
50 x 3.0 in		UC-50 x 6.0	215-4583	UC-60
50 x 5.0 in		UC-50 x 6.0	215-4582	UC-55
50 x 6.0 in		UC-50 x 6.0	215-4582	UC-55

Hose Assembly Tools

PIPE				
SCH 40	CAT Nozzle No.	Mfg. Nozzle No.	CAT Projectile No.	Mfg. Projectile No.
¼ in (6.35 mm)	130-6070	UC-H08	215-4569	UC-14
3/8 in (9.53 mm)	130-6072	UC-H13	215-4571	UC-18
½ in (12.7 mm)	130-6073	UC-H16	215-4572	UC-20
¾ in (19.05 mm)	130-6074	UC-H19	215-4576	UC-30
1 in (25.4 mm)	130-6075	UC-H25	215-4578	UC-36
1-¼ in (31.75 mm)	130-6076	UC-H32	215-4580	UC-45
1-½ in (38.1 mm)	130-6091	UC-H38	215-4582	UC-55
2 in (50.8 mm)	130-6092	UC-H50	215-4584	UC-65
2-½ in (63.5 mm)	267-1527	UC-U55/90	265-4952	UC-75
3 in (76.2 mm)	267-1527	UC-U55/90	265-4954	UC-85
3-½ in (88.9 mm)	267-1527	UC-U55/90	265-4957	UC-100
SCH 80	CAT Nozzle No.	Mfg. Nozzle No.	CAT Projectile No.	Mfg. Projectile No.
¼ in (6.35 mm)	130-6069	UC-H06	215-4568	UC-12
3/8 in (9.53 mm)	130-6071	UC-H10	215-4570	UC-16
½ in (12.7 mm)	130-6072	UC-H13	215-4573	UC-20
¾ in (19.05 mm)	130-6073	UC-H19	215-4576	UC-26
1 in (25.4 mm)	130-6075	UC-H25	215-4578	UC-36
1-¼ in (31.75 mm)	130-6076	UC-H32	215-4580	UC-45
1-½ in (38.1 mm)	130-6091	UC-H38	215-4581	UC-50
2 in (50.8 mm)	130-6091	UC-H38	215-4583	UC-60
2-½ in (63.5 mm)	130-6092	UC-H50	—	UC-70
3 in (76.2 mm)	267-1527	UC-U55/90	265-4954	UC-85
3-½ in (88.9 mm)	267-1527	UC-U55/90	265-4957	UC-100
SCH 160	CAT Nozzle No.	Mfg. Nozzle No.	CAT Projectile No.	Mfg. Projectile No.
½ in (12.7 mm)	130-6071	UC-H10	215-4570	UC-16
¾ in (19.05 mm)	130-6073	UC-H16	215-4572	UC-20
1 in (25.4 mm)	130-6074	UC-H19	215-4576	UC-30
1-¼ in (31.75 mm)	130-6075	UC-H25	215-4578	UC-36
1-½ in (38.1 mm)	130-6076	UC-H 32	215-4580	UC-45
2 in (50.8 mm)	130-6091	UC-H38	215-4582	UC-55

Hose Assembly Tools

2-½ in (63.5 mm)	130-6092	UC-H50	215-4584	UC-65
3 in (76.2 mm)	267-1527	UC-U55/90	265-4952	UC-75

Note: The previous nozzle and projectile charts apply to all coupling styles. For couplings that jump down in size, use the nozzle that fits the head size. For couplings that jump up in size, use the nozzle that fits the hose size.

Hose Assembly Tools

Hose Assembly Container Workshops (Options)

Product Family: All Applications

Model Usage: All

Warranty: Manufacturer's

Features and available options:

- Available in Single Wide and Double wide configurations
- A highly advanced jobsite hydraulic workshop solution designed to provide the fastest and most reliable hose assembly replacement services
- Ensures minimal machine downtime during a hose failure situation
- This highly versatile portable shop may also be utilized for other repair shop requirements
- Fully insulated with integrated climate control system. Designed to provide a comfortable work environment in temperatures ranging from -20C(-4F) to 48C (118F).
- Integrated exhaust for increased air quality
- Country compliant electrical and lighting systems
- Highly durable work surfaces
- Innovative hardware & software solution that ensures hose assemblies are built to OEM specs

[Media No. PEHJ0415 details extensive information for the Cat Hose Assembly CONTAINER WORKSHOP available at this link.](#)



Single



Double

Hose Shop Container design guidelines and endorsed supplier list by region are available. Please contact your Hydraulic ASC for further details.

Hose Assembly Tools

Mobile Hose Van (Options)

Model Usage: All

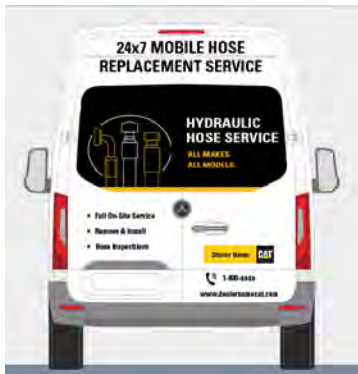
Warranty: Manufacturer's

Features and available options:

- Handle entire jobsite hose services from removal to installation
- Meet the customer at their location at the agreed upon time of arrival with the inventory, tools and technician required to address their needs, all in one trip
- Not just for Cat machines. Cat H&C products offer unrivalled performance and durability for ALL MAKES. ALL MODELS.
- Cat dealer technicians are uniquely skilled to assemble and install H&C products on almost all brands of equipment using the latest tooling, assembly information, routing standards, inspection techniques and contamination control processes

- Cat H&C products are rigorously tested as a system to ensure a perfect fit that delivers maximum safety and dependability
- Country compliant vehicles and brands
- Custom internal layouts, tooling and equipment

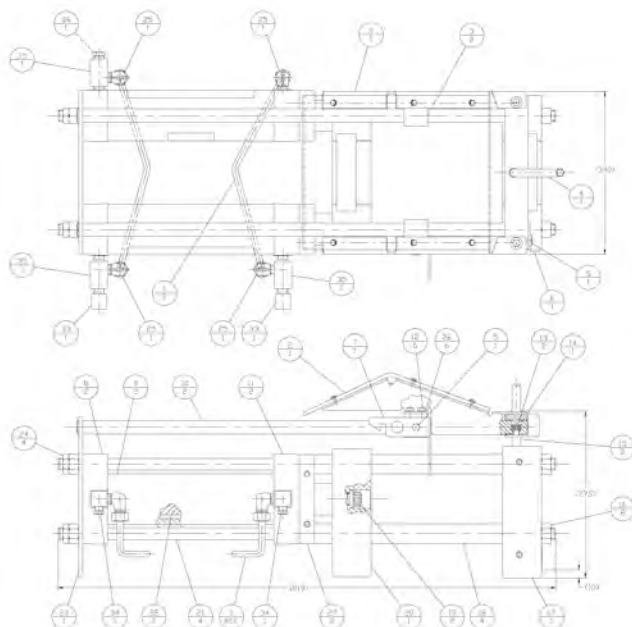
[Media No. PEDJ0809 details extensive information for Hose Services Mobile Solutions available at this link.](#)



Hose Assembly Tools

XT Hose Machine (Discontinued)

Warranty: Caterpillar Six Months When equipped with optional Cat variable crimping bowl assembly and smooth-bore die set, hose machine has capability of crimping many sizes of permanent couplings



Part No.	Detailed Description
150-2568 ⁽²²⁾	XT Hose Machine

Service Parts for 150-2568 XT Hose Assembly Machine		
Item Number	Part Number	Detailed Description
1	6V-4973	Tube-Oil
2	191-6671	Shield
3	4C-9837	Block
4	1U-9681	Screw-Clamping
5	4C-9835	Screw
6	4C-9834	Stop
7	195-3457	Latch
8	191-6668	Cap-Piston End
9	191-6670	Barrel-Cylinder
10	4C-9833	Rail
11	191-6667	Cap-Rod End

Service Parts for 150-2568 XT Hose Assembly Machine		
Item Number	Part Number	Detailed Description
12	0S-1614	Bolt-Hex Head
13	5S-2586	Bolt-Hex Sock HD
14	6V-4914	Bar-Clamp
15	4C-9836	Spacer
16	6B-6682	Hex Nut-Full
17	173-9807	Bolster-Front
18	150-2566	Spacer
19	1S-3794	Bolt
20	150-2567	Bolster-Rear
21	4C-6074	Rod-Tie
22	191-6665	Rod-Piston

22 The 150-2568 XT Hose Presses have been replaced by part numbers 508-7863 and 540-1208. Tooling designed for these machines will work in the new machines.

Hose Assembly Tools

Service Parts for 150-2568 XT Hose Assembly Machine		
Item Number	Part Number	Detailed Description
23	4C-6079	Plate
24	1D-5120	Jam Nut
25	5P-4720	Fitting
26	5P-0537	Washer
27	178-6918	Flange-Cylinder
28*	NEHS0745	Manual
29*	NEHS0748	Manual
30*	NEHS0749	Manual

Service Parts for 150-2568 XT Hose Assembly Machine		
Item Number	Part Number	Detailed Description
31*	NEHS0750	Manual
32*	NEHS0768	Fitting-Adapter
33	135-2535	Plug-Pipe
34	168-3349	Adapter-Fitting
35	136-2062	Plug-Pipe
36	3J-5390	Kit-Seal

* Not shown

Information Systems

Hydraulic Information System (HIS) 2.0	Web Based
Service Information System (SIS) 2.0	Web Based

Reference Material

Training Materials

Note: Sign into catpublications.com before selecting the links below. If not, a search error will occur.

REFERENCE GUIDES / WORKBOOKS

Hose and Coupling Workbook	PEGT6025
Quick Reference – Cat Hose and Coupling	PEGJ0001
Coupling Identification Guide	PEGP2007

FOUNDATIONAL LEARNING DPC (Dealer Performance Center)

For access to DPC, please contact [DPC Support](#)

Hydraulic Hose	54527
Hydraulic Connectors	54528
Hydraulic Assembly Tooling	54531
Hose and Coupling Assembly	54555
Introduction to Cat® Hoses and Couplings	20296
Assembly - Hoses and Tubing (English)	08C0045
Assembly - Couplings and Fittings (English)	08C0046
FBS14 Hoses, Tubing and Couplings	54878
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Hydraulic Information System - (HIS) (English)	08C0198
Basic Service Tasks Level 1 Knowledge Assessment	52106
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Advanced Hydraulics - HYD02 CI Hoses and Couplings II	56835
Advanced Hydraulics - HYD05 Resource Industries	56857
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Technical Information

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Using the 233-7191, 233-7192, 233-7193, and 265-4959 Hose Cleaning Groups; and 546-5746 and 546-5747 Clean Seal Systems	NEHS0643
Crimping Caterpillar 294, 716, 844 Hose and Couplings	NEHS0664
Setup and Basic Operation of the 139-5439 Combination Hose Machine	NEHS0686
Setup and Basic Operation of the 145-5161 Floor Model Hose Machine	NEHS0695
150-3622 Bench Model Hose Machine Operating Instructions	NEHS0715
Using the 164-2691 Printer Group	NEHS0725
Using the 166-5853 Banding Tool	NEHS0727
Use of the 9U-5792, 4C-5052, 4C-5054, 4C-3670 and 4C-3680 Hydraulic Hose Machines	NEHS0744
Assembling Reusable Couplings in the 4C-9900, 150-2568, and 173-9805 Hydraulic Hose Machines	NEHS0745
Assembling Reusable Couplings in the 139-5439, 145-3381, and 152-3910 Combination Hose Machines	NEHS0746
202-6601 Hose Cutting Guide	NEHS0747
Crimping Permanent Couplings using the 136-3642 Crimp Tool Group in the Combination and XT Hose Machine	NEHS0748
Crimping 1028 Thermoplastic and 1543 Air Conditioning Hose	NEHS0749
Comprehensive Tooling List for Assembling and Disassembling Reusable Couplings	NEHS0750
Repair of 139-5459 and 145-3381 Combination Hose Machines	NEHS0752
Setup and Operation of the 145-7042 and 146-5861 Crimputer Groups	NEHS0754
Hose Products Reference Guide	NEHS0768
358-4528 (380/480 V, 50/60 Hz, 3 Phase), 457-6040 (230V, 60 Hz, Single Phase) , 457-6039 (230V, 50 Hz, Single Phase) Hose Machine Group Set-Up and Operation {0599, 0684}	NEHS1098
Crimputer 3 Setup and Operation	NEHS1099
4-Inch Radial Hose Machine	NEHS1153
516-9368, 517-2531, 517-2534, 508-7861, 508-7862 EM3 Ecoline, EM3 DC, EM6 Ecoline Hose Cutting Machine	NEHS1298
516-9368, 517-2531, 517-2534, 508-7861, 508-7862 Safety and Usage Advice for Saw Blades	NEHS1299
444-5974 Pneumatic Hose Saw Operating Manual	NEHS1320
528-5359, 528-5360, and 528-5361 Caterpillar Hose Assembly Pressure Test Bench	NEHS1324
C5 Crimputer V Setup and Operation (533-1146, 533-1147, 533-1148, 423-4361, and 528-5353)	NEHS1331
442-0077 and 442-0078 Hose Label Printers	NEHS1352
Hose Cutting Guide	NEHS6601
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Cat® Hose Label Application Guide	PEDJ0883
Reusable Couplings for Caterpillar XT-3, XT-5, and XT-6	SEBF8176
Cleaning Fluid-Carrying Hose and Tube Assemblies in Shop and Field Applications	SEBF8485
Preparation and Use of 6V-6015 Hose Cutoff Machine	SMHS8316

Reference Material

Information Release Memos (IRM's)

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Branch Packs for Cat XT-3ES and XT-5ES Hose	PELJ0783
Cat Hose and Coupling Distribution Through Second Level Distributors	PELJ0934
Cat High Temperature, Media Pressure Teflon Lined Hose (2771A)	PELJ1017
Cat 2929 and 743 Hoses Improve Dealer Hoses Build Capabilities	PELJ1018
Introduction of 2786 - High Temperature Coolant Hose	PELJ0901
Introduction of Dash 6 and Dash 8 No-Skive Couplings for XT Hose	PELJ1097
New XT-5ES Part Numbers	PELJ1252
Flat Crimp Air Conditioning Couplings and Hose for use with Smooth Bore Dies	PELJ1377
Introduction of Dash 10 (0.625 inch, 15.9 mm) No-Skive Couplings for Hose	PELJ1436
Acrylic Hose Label and Hose Label Printer	PELJ1607
Introduction of Dash 24 (1-1/2 inch, 38.1 mm) No-Skive Couplings for XT-3 Hose	PELJ1643
Introduction of Dash 12 (3/4 inch, 19.1 mm) No-Skive Couplings for XT-3, XT-5 and XT-6 Hose	PELJ1665
Pressure Rating Increase for 294 Dash 40, 63.5 mm Hose	PELJ1671
Thick Flange for HMS	PELJ1690
HMS Hose IRM	PELJ1703
Introduction of Cat High Temperature General Purpose Hose	PELJ1760
Buildable Hose Assembly Distribution Changes	PELJ1880
Introduction of Cat® 716 Compact Hose	PELJ1813
Introduction of 2" Permanent XT-5ES and XT-6ES	PELJ1971
5014 Fire Suppression Hose	PELJ2070
4901 Large Bore Hose	PELJ2071
Coupling Additions for Mixed Fleets	PELJ2114
Introduction of Cat 16XN, 20XN6 and 24XN6 No-Skive Couplings for XT-3ES, XT-5ES and XT-6ES Hose Types	PELJ2185
Review of Cat Coupling Series Identification for XT Hose Type	PELJ2223
Cat Bulk Hose and Armor Guard Transitioning to Metric Unit of Measure	PELJ2234
Cat Hose & Coupling Tooling Products Update	PELJ2259
Cat Bulk Hose and Armor Guard Transition to Metric Unit of Measure Part II	PELJ2260
Cat Integration Software and Hose Build Database	PELJ2261
Review of Staple Lock Coupling Product Line and Availability (Hose and Couplings)	PELJ2351
WEO Plug-In Coupling Product Line and Availability	PELJ2362
Dash 4 (-4) 662 Air Brake Hose Skiving Process	PELJ2469
PECP5030-10 10.1 Edition Cat® Hose Products & Tooling Guide	PELJ2491
Introduction of 100R7-100R8 Standard and Nonconductive Hoses and TP-Series Couplings	PELJ2494
Cat® Bulk Hose and Armor Guard Transitioning to Metric Unit of Measure	PELJ2535
Hydraulic Information System Update - HIS 2.0	PELJ2540
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RTV Silicone for Additional Corrosion Protection on Hydraulic Couplings	PELJ2621
Hydraulic Information System Update - HIS 2.0 Hose Builder Tool and Cross Reference	PELJ2628
Hydraulic Information System Update - HIS 2.0 Stocking Report and Miscellaneous Functions	PELJ2637
Legacy HIS Transition to HIS 2.0	PELJ2643
Hose Assembly Note Interface - Now available for dealer ERP Integration	PELJ2667
Hydraulic Information System - HIS 2.0 Updates - June 2021	PELJ2674
Australia Hose Shop Container Part Number Cancellation Notice	PELJ2746

North America & Canada Hose Shop Container Part Number Cancellation Notice	PELJ2747
Hose & Coupling Rapid Competitive Cross-Reference Service	PELJ2759
Hose Assembly Hose Label QR Codes Transformation Update	PELJ2768
New Hydraulic Hose and Couplings Foundational Training Modules	PELJ2877
Steel Mill Hose Assembly - Wheel Loaders Application	PELJ2878
JAPAN - JIS B8363 30° Type-F Coupling Design Change	PELJ2884
Long Length Stockpiler (-32 Female SSKV Hydraulic Coupling) and 40m Continuous Length -32 1E0294 Braided Hose	PELJ2888
Hose Management Dealer Solution Interface Through Cat® Inspect Analysis	PELJ2894
Introducing Cat® Hose Management System	PELJ2902
Hydraulic Coupling Releases to Service Mixed Fleets - June 2022	PELJ2910

Reference Material

Coupling Crimp Charts & Hose Work Area Posters

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CMC 290 Crimp Chart for use with Cat Hose and Coupling Products	AEXQ2129
M6 Crimp Chart for use with Cat Hose and Coupling Products	AEXQ2130
S2 Crimp Chart for use with Cat Hose and Coupling Products	AEXQ2131
Hose, Die Group, Spacer Ring Selection Chart- Non-Current Machines	NEEG2736
Hose, Die Group, Spacer Ring Selection Chart-XT Machine And Combo Machine	NEEG2737
Coupling Master Crimp Diameter and Length Reference Chart	NEEG2746
Hose, Die Group, Spacer Ring Selection Chart- Bench Model	NEEG2883
Hose Cleaning Projectile Chart	NEEG2955
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Coupling Crimp Chart	NEEG2973
Variable Die Bowl & Smooth Bore Dies Hose, Die Group and Spacer Ring Selection Chart for 4C-3660, 4C-5052, 9U-5792 and 9U-7261 Hydraulic Hose Selection Chart	NEEG3000
Proper Hose Cleaning Procedures	PEPJ0084
Counter Mat - Hydraulic Hose Service for ALL MAKES. ALL MODELS. (Download)	PEWJ0166
XT Hose Assembly Wall Chart	PEWP3013
Coupling Identification Chart	PEWP4128

Videos

Note: Sign into [Caterpillar Channel1](#) before selecting the links below. If not, a search error will occur.

Cat® Hose and Couplings The Difference	Channel1 Website
Cat Hose & Couplings: The Preferred Connection	Channel1 Website
Reduce Downtime with Cat® Hose Service	Channel1 Website
Cat® On-Site Hose Service Solutions	Channel1 Website
Remote Mine Site Takes Down Downtime with Cat® On-Site Hose Solutions	Channel1 Website
Cat® Hose Shop Container for Mining Overview	Channel1 Website
Cat® Hose and Couplings CVA Overview	Channel1 Website
Your Cat® Dealer's Hose Shop	Channel1 Website
Fluid Contamination-The Silent Thief	Channel1 Website
RPE Hose and Coupling Assembly Training Promo	Channel1 Website
Recovery and Assembly of XT Hose Reusable Couplings	Channel1 Website
Identifying Hose Rubs on your Cat Equipment	Channel1 Website
Performing a Daily Cat Machine Walk-Around	Channel1 Website
1. How to Cut a Cat Hose	Channel1 Website
2. How to Clean a Cat Hose	Channel1 Website
3. How to Skive a Cat Hose	Channel1 Website
4. How to Crimp a Cat Hose	Channel1 Website
5. How to set Angle of Orientation on Cat Hose	Channel1 Website
6. How to Cut Caterpillar's 2771A Hose	Channel1 Website
CAT® Hose Assembly	Channel1 Website
Hose Assembly Processes (Playlist)	Channel1 Website
Steel Mill Hose Assembly (Playlist)	Channel1 Website
Hose & Coupling Tooling-Equipment (Playlist)	Channel1 Website
HIS 2.0 (Playlist)	Channel1 Website
Machine Hose Inspections & Installation Tracker Overview Instructions Cat® Inspect App	Channel1 Website
Cat® Inspect Web General Overview	Channel1 Website
Cat® Hydraulic Hose & Couplings-Channel1 Site (Home Page)	Channel1 Website

Reference Material

Marketing Materials

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The Cat Hose & Coupling Value Story Brochure	AEXQ1395
Cat Hydraulic Hose Solutions for Mining Brochure	AEXQ1465
Dealer Rental and Branch Store Hose Awareness Banners	AEXQ2803
Cat® Hydraulic Hose Solutions for Hydraulic Mining Shovels	PEDJ0288
Cat XT Reusable Couplings Value Story Brochure	PEDJ0289
Cat Hose & Coupling Solutions Brochure	PEDJ0292
Cat® Hose & Coupling Products for Underground Mining	PEDJ0350
Cat Hose Assembly Tooling Brochure	PEDJ0351
Hose Services Playbook	PEDJ0551
Hydraulic On-Site Solutions Playbook EAME CI Hose Assembly Mobile Workshop	PEDJ0552
Hose Assembly System USP	PEDJ0636
Hose Services Growth Overview Playbook	PEDJ0692
Hose Services Branch Solutions Playbook	PEDJ0693
Hose Services Jobsite Solutions Playbook	PEDJ0755
Hose Services Mobile Solutions Playbook	PEDJ0809
Hose and Coupling Key Tactics Guide	PEDJ0884
Rapid Cross Reference - Quick Start Guide	PEDJ0899
Hose Services Commercial Vehicles Solutions Guidebook	PEDJ0910
Dealer Service Tools Hose Tooling Announcement	PEDP9135
Bin Labels-XT Hose Couplings	PEEP1003
Bin Labels - 716, 294 and 844 Hose Coupling Bin Labels for all MN Series Couplings	PEEP1004
Bin Labels - Cat® Engine, Air Brake (556, 1130) and Air Conditioning (1543J) Hose Couplings	PEEP6044
Reusable Coupling Stickers (Large)	PEEP7210
Cat ToughGuard™ Hose	PEHJ0077
Cat O-Ring Seal Kits Datasheet	PEHJ0140
Cat Hose Assembly Mobile Workshop	PEHJ0415
Cat® Staple Lock Product Guide	PEKP9438
Cat XT ES and ToughGuard Hose Display (Includes Base, English Sign & Assembly Instructions Only)	PEWP9739
Bin Labels - Cat® 1018 and 2760 Thermoplastic Hose Couplings	PEXP8025
Hose Routing Management Guides	Parts Product Information

Campaign Assets:

Created are a variety of materials to aid your marketing efforts to use alongside our corporate media efforts. Working files are [available for download](#) via **Percolate** and may be customized as needed.

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