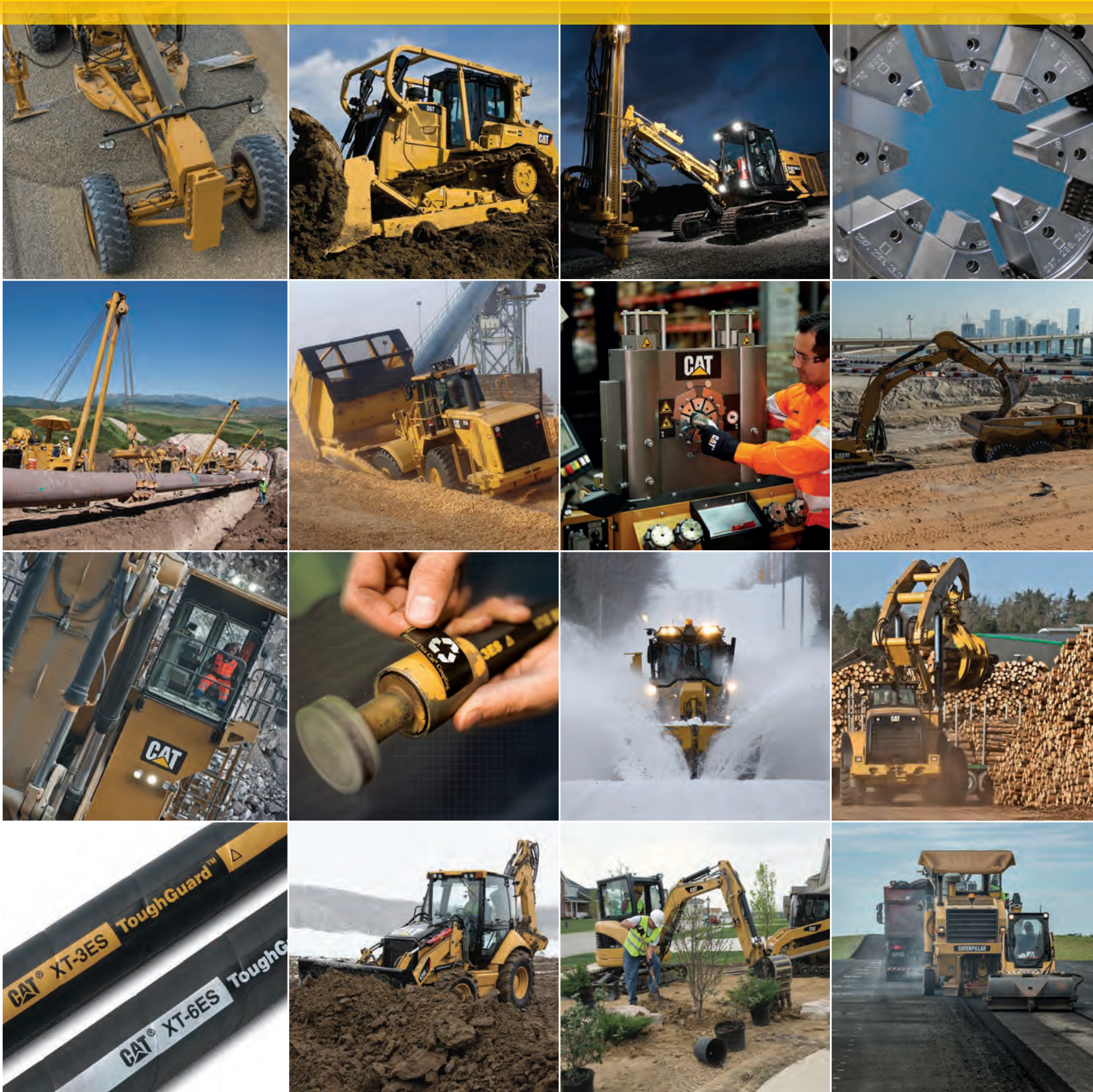


CAT® HOSE PRODUCTS & TOOLING GUIDE

10.1 EDITION



Comprehensive Industry Solutions



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

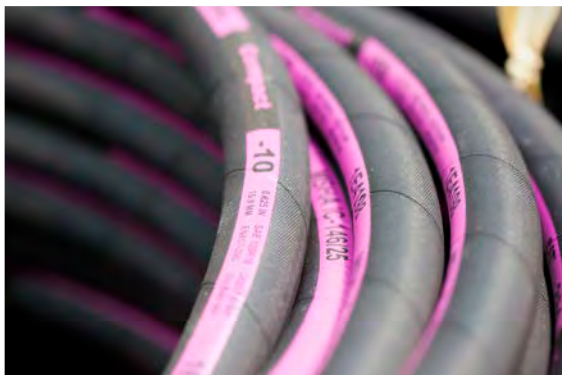
RUGGED DESIGN

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.

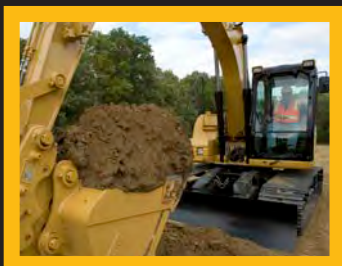
A Longer History of Know-How to Help You

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.



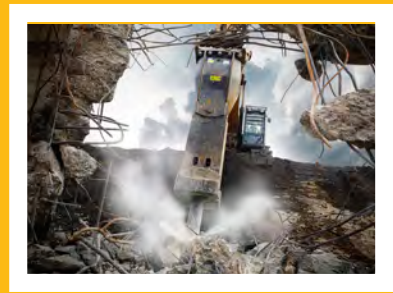
Higher Standards to Reassure You

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.

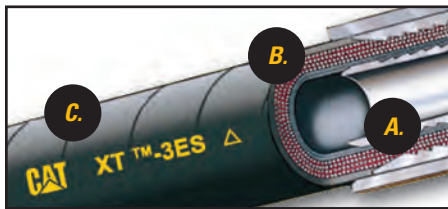


Cat Hydraulic Hose is Durable and Flexible

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.



Proprietary Tooling and Software Ensure Exact 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.



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.



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.

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

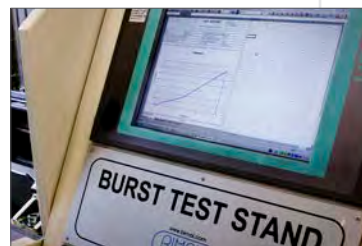
We use an array of measures to evaluate both raw materials and finished components. These include rubber compression and elongation testing; wire tensile-strength testing; hose impulse testing, burst pressure testing, temperature adaptability testing, abrasion testing, flexibility and diameter testing; 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

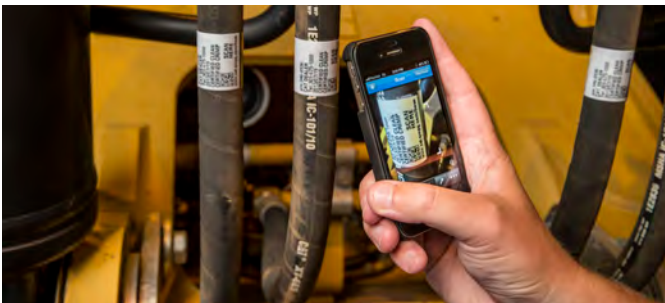
When you need a hose assembly, you need it now. That is why your Cat dealer is uniquely skilled to perform the assembly and installation. Trained dealer technicians use the latest tooling, assembly information, routing standards, inspection techniques and contamination control processes to get your machines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

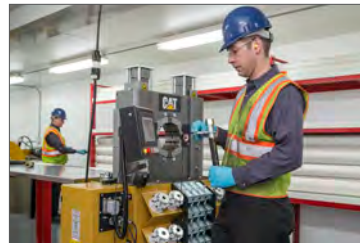
Unmatched Convenience

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 CatHose.com. From there you can place your order online via Parts.cat.com.



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.

On-site Service

When a hose failure occurs at a remote location, you expect a quick, reliable repair. A Cat Hose Assembly Mobile 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 Cat Hose Assembly Mobile 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

IMPORTANT: Cat Bulk Hose and Armor Guard Transitioning to Metric Unit of Measure

With reference to IRM PELJ2260-01 published in June 2018, all bulk hose and armor guard products will be transitioning to a standard unit of measure, centimeter (cm). This transition will result in NEW part numbers for most bulk hose and/or armor guard. For a detailed explanation and timeline breakdown of the part number transition, please refer to the IRM PELJ2260-01.

NOTE - The bulk hose and armor guard part numbers displayed in this Hose Products & Tooling Guide reflect the NEW part numbers which will not be available to order until November 2018 and beyond. Below is a table that lists the old and new part numbers as a reference during the time between the release of this product guide publication (June 2018) and the availability of the new part numbers (November 2018 and beyond).

Hose Type	Hose ID	Old Part Number	New Part Number	Page Number
294	6.4	122-6887	456-8432	116
294	7.9	122-6888	456-8433	116
294	9.5	122-6889	456-8434	116
294	12.7	122-6890	456-8435	116
294	15.9	124-7115	456-8436	116
294	19.1	122-6891	456-8437	116
294	25.4	122-6892	456-8438	116
294	31.8	122-6893	456-8439	116
294	38.1	122-6894	456-8440	116
294	50.8	122-6895	456-8441	116
294	63.5	256-1388	456-8442	116
294	76.2	466-8401	541-7099	116
556	4.8	9X-2362	541-7130	168
556	6.4	9X-2363	541-7131	168
556	7.9	9X-2364	541-7132	168
556	10.3	9X-2365	541-7133	168
556	12.7	9X-2366	541-7134	168
556	15.9	9X-2367	541-7135	168
556	22.2	9X-2368	541-7136	168
556	28.6	9X-2369	541-7137	168
556	34.9	9X-2370	541-7138	168
661	38.1	5P-1291	541-7167	204
661	44.5	5P-1292	541-7168	204
661	50.8	5P-1293	541-7169	204
661	57.2	5P-1294	541-7170	204
661	63.5	5P-1295	541-7171	204
661	88.9	5P-1296	541-7172	204
716	6.4	122-6867	456-8409	114
716	9.5	122-6869	456-8410	114
716	12.7	122-6870	456-8416	114
716	15.9	122-6871	456-8420	114
716	19.1	122-6872	456-8421	114
716	25.4	122-6873	456-8422	114
716	31.8	122-6874	456-8423	114
716	38.1	122-6875	456-8424	114
716	50.8	122-6876	456-8425	114
743	4.8	423-1979	456-8506	184
743	6.4	423-1980	456-8507	184

Introduction

Hose Type	Hose ID	Old Part Number	New Part Number	Page Number
743	7.9	423-1981	456-8508	184
743	9.5	423-1982	456-8509	184
743	12.7	423-1983	456-8510	184
743	15.9	423-1984	456-8511	184
743	19.1	423-1985	456-8512	184
743	25.4	423-1986	456-8513	184
844	19.1	122-6905	456-8457	119
844	25.4	122-6906	456-8458	119
844	31.8	122-6907	456-8459	119
844	38.1	122-6908	456-8460	119
844	50.8	122-6909	456-8461	119
844	63.5	122-6910	456-8462	119
844	76.2	122-6911	456-8463	119
844	88.9	122-6912	456-8464	119
1028	4.8	9X-2380	541-7122	155
1028	6.4	9X-2381	541-7123	155
1028	7.9	9X-2382	541-7124	155
1028	7.9	9X-2386	541-7128	155
1028	9.5	9X-2383	541-7125	155
1028	9.5	9X-2387	541-7129	155
1028	12.7	9X-2384	541-7126	155
1028	19.1	9X-2385	541-7127	155
1036	19.1	9X-2733	456-8482	63
1036	25.4	9X-2734	456-8483	63
1036	31.8	9X-2735	456-8484	63
1036	38.1	9X-2736	456-8485	63
1036	50.8	9X-2737	456-8486	63
1130	4.8	9X-2371	541-7139	169
1130	6.4	9X-2372	541-7140	169
1130	7.9	9X-2373	541-7141	169
1130	10.3	9X-2374	541-7142	169
1130	12.7	9X-2375	541-7143	169
1130	15.9	9X-2376	541-7144	169
1130	22.2	9X-2377	541-7145	169
1130	28.6	9X-2378	541-7146	169
1130	34.9	9X-2379	541-7147	169
2760	6.4	135-7853	541-7100	160
2760	7.9	135-7854	541-7101	160
2760	9.5	135-7855	541-7102	160
2760	12.7	135-7856	541-7103	160
2786	6.4	166-6137	456-8518	120
2786	9.5	166-6138	456-8519	120
2786	12.7	166-6139	456-8520	120
2786	15.9	166-6140	456-8521	120
2786	19.1	166-6141	456-8522	120
2786	25.4	166-6142	456-8523	120
2786	31.8	166-6143	456-8524	120
2929	4.8	423-1969	456-8514	197
2929	6.4	423-1970	456-8515	197
2929	9.5	423-1971	456-8516	197
2929	12.7	423-1972	456-8517	197

Introduction

Hose Type	Hose ID	Old Part Number	New Part Number	Page Number
1543J	7.9	329-9930	541-7161	176
1543J	10.3	329-9931	541-7162	176
1543J	12.7	329-9932	541-7163	176
1543J	15.9	329-9933	541-7164	176
1543J	19.1	329-9934	541-7165	176
2771A	6.4	224-7696	541-7079	189
2771A	7.9	224-7697	541-7080	189
2771A	9.5	224-7698	541-7081	189
2771A	12.7	224-7700	541-7082	189
2771A	15.9	224-7701	541-7083	189
2771A	19.1	297-2798	541-7084	189
2929TG	6.4	308-7530	541-7076	197
2929TG	9.5	278-8507	541-7077	197
2929TG	12.7	308-7531	541-7078	197
294CPT	6.4	423-1973	456-8451	117
294CPT	7.9	n/a	541-7160	117
294CPT	9.5	423-1974	456-8452	117
294CPT	12.7	423-1975	456-8453	117
294CPT	15.9	423-1976	456-8454	117
294CPT	19.1	423-1977	456-8455	117
294CPT	25.4	423-1978	456-8456	117
294CPTG	6.4	303-3092	541-7085	117
294CPTG	9.5	303-3093	541-7086	117
294HT	31.8	213-8687	541-7183	117
294HT	38.1	213-8688	541-7184	117
294HT	50.8	213-8689	456-8449	117
294HT	63.5	213-8690	456-8450	117
294TG	6.4	310-6636	456-8443	116
294TG	9.5	310-6637	456-8444	116
294TG	12.7	310-6638	456-8445	116
294TG	15.9	310-6639	456-8446	116
294TG	19.1	310-6640	456-8447	116
294TG	25.4	310-6641	456-8448	116
515B	15.9	136-1953	456-8660	203
515E	9.5	349-6234	541-7117	203
515E	19.1	8T-9543	541-7121	203
642E	50.8	328-2915	541-7109	204
642E	63.5	328-2916	541-7110	204
642E	76.2	328-2917	541-7111	204
642E	88.9	328-2918	541-7112	204
642E	101.6	328-2919	541-7113	204
642E	114.3	328-2920	541-7114	204
642E	127	328-2921	541-7115	204
642E	139.7	328-2922	541-7116	204
716CPT	6.4	366-6522	456-8538	115
716CPT	9.5	366-6521	456-8539	115
716CPT	12.7	366-6526	456-8540	115
716CPT	15.9	366-6525	456-8541	115
716CPT	19.1	366-6524	456-8542	115
716CPT	25.4	366-6523	456-8543	115
716TG	6.4	213-8702	456-8426	114

Introduction

Hose Type	Hose ID	Old Part Number	New Part Number	Page Number
716TG	9.5	213-8703	456-8427	114
716TG	12.7	213-8704	456-8428	114
716TG	15.9	213-8705	456-8429	114
716TG	19.1	213-8706	456-8430	114
716TG	25.4	213-8707	456-8431	114
844C	63.5	153-1950	456-8465	119
844C	76.2	153-1951	541-7180	119
844C	88.9	153-1952	541-7181	119
844C	101.6	153-5522	541-7182	119
Abrasive Sleeving	18	160-2242	541-7087	395
Abrasive Sleeving	25.4	160-2243	541-7088	395
Abrasive Sleeving	28.7	160-2244	541-7089	395
Abrasive Sleeving	31.8	160-2245	541-7090	395
Abrasive Sleeving	40.4	160-2246	541-7091	395
Abrasive Sleeving	44.5	160-2247	541-7092	395
Abrasive Sleeving	52.6	160-2248	541-7093	395
Abrasive Sleeving	60.5	160-2249	541-7094	395
Abrasive Sleeving	64.5	160-2250	541-7095	395
Abrasive Sleeving	72.6	160-2251	541-7096	395
Abrasive Sleeving	84.8	160-2252	541-7097	395
Fire Sleeve	25.4	9X2-081	541-7154	399
Fire Sleeve	31.8	2Q-0604	541-7155	399
Fire Sleeve	44.5	324-9707	541-7156	400
Fire Sleeve	50.8	324-9708	541-7157	400
Fire Sleeve	60.3	2Q-0584	541-7158	400
Fire Sleeve	88.9	2Q-2153	541-7159	400
XT-3ES	9.5	165-0016	456-8466	79
XT-3ES	12.7	165-0017	456-8467	79
XT-3ES	15.9	165-0018	456-8468	79
XT-3ES	19.1	165-0020	456-8469	79
XT-3ES	25.4	165-0021	456-8470	79
XT-3ES	31.8	165-0023	456-8471	79
XT-3ES	38.1	165-0024	456-8472	79
XT-3ES	50.8	165-0025	456-8473	79
XT-3TG	9.5	238-8337	456-8474	79
XT-3TG	12.7	238-8339	456-8475	79
XT-3TG	15.9	238-8340	456-8476	79
XT-3TG	19.1	238-8341	456-8477	79
XT-3TG	25.4	238-8342	456-8478	79
XT-3TG	31.8	245-1420	456-8479	79
XT-3TG	38.1	245-1421	456-8480	79
XT-3TG	50.8	256-1390	456-8481	79
XT-5TG	19.1	293-4616	456-8487	63
XT-5TG	25.4	293-4617	456-8488	63
XT-5TG	31.8	293-4618	456-8489	63
XT-5TG	38.1	293-4619	456-8490	63
XT-6ES	9.5	161-1833	456-8491	36
XT-6ES	12.7	161-1834	456-8492	36
XT-6ES	15.9	171-2532	456-8493	36
XT-6ES	19.1	161-1835	456-8494	36
XT-6ES	25.4	161-1836	456-8495	36

Introduction

Hose Type	Hose ID	Old Part Number	New Part Number	Page Number
XT-6ES	31.8	161-1837	456-8496	36
XT-6ES	38.1	161-1838	456-8497	36
XT-6ES	50.8	222-4844	456-8498	36
XT-6TG	9.5	238-8343	456-8499	36
XT-6TG	12.7	238-8344	456-8500	36
XT-6TG	15.9	238-8345	456-8501	36
XT-6TG	19.1	238-8346	456-8502	36
XT-6TG	25.4	238-8347	456-8503	36
XT-6TG	31.8	245-1412	456-8504	36
XT-6TG	38.1	245-1413	456-8505	36

Section	Page
Cat® Hose Products	iii
IMPORTANT: Cat Bulk Hose and Armor Guard Transitioning to Metric Unit of Measure	vii
Quick Reference - Hose & Couplings	3
Hose Identification	5
Hose, Coupling & Hose Assembly Procedure Checklist.....	6
Flow Capacity Nomograph.....	8
Hose Failure Analysis.....	9
Hose Installation.....	10
Hose Assembly Routing Tips.....	11
Hose Industry Standard Comparison (SAE EN ISO).....	13
Hose Working Pressure & Fluid Compatibility.....	20
Hose Fluid Compatibility.....	22
Coupling Identification	25
Coupling Series by Hose Type.....	33
Cat High Pressure Hose & Coupling Products	35
XT-6ES Hose & Coupling Products.....	38
XT-6ES Hose Features and Benefits.....	38
XT-5ES Hose & Coupling Products.....	67
XT-5ES Hose Features and Benefits.....	67
XT-3ES Hose & Coupling Products.....	87
XT-3ES Hose Features and Benefits.....	87
Cat Low and Medium Pressure Hose & Coupling Products	123
One-Wire Braid Hoses (716, 716TG, 4488).....	124
Two-Wire Braid Hose (294).....	126
Two-Wire Braid Hose (4636).....	128
Hydraulic Suction Hose (844).....	129
High Temperature Coolant Hose (2786) and Couplings.....	130
High Temperature General Purpose Hose (4901).....	131
Fire Suppression Hose (5014).....	132
Cat Low and Medium Pressure Permanent Couplings.....	133
Cat Special Application Hose & Coupling Products	163
Thermoplastic Hose (1028) and Couplings.....	165
Reduced O.D. Thermoplastic Hose (2760) and Couplings.....	170
Engine and Air Brake Hose (556,1130) and Couplings.....	178
Air Conditioning Hose (1543J) and Couplings.....	186
High Temperature Fuel Hose (743) and Couplings.....	194
Medium Pressure High Temperature Teflon Lined Hose (2771A).....	201
Pilot Hose (2929) and Couplings.....	209
Pilot Hose ToughGuard (2929TG).....	209
Pre-filled Grease Hose.....	216
Specialty Hose.....	217
Adapters	221
Straight Adapters.....	222
Elbow Adapters.....	283
Tee Adapters.....	318
Cross Adapters.....	364
Quick Disconnect Hose.....	368
Swivel and Bulkhead Nuts.....	371
Caps and Plugs	373
Protective Caps and Plugs.....	374

Table of Contents

Metal Caps and Plugs	385
Seals	387
Seal Application Chart.....	388
Seals	389
Seal Kits	393
Flanges - Hardware	399
Split Flanges and Hardware.....	400
Pre-Install Flanges.....	405
Thick Flanges	406
Hose Accessories.....	407
Hose Clamps Clips and Screw Types	408
Armor Guard	411
Whip Checks	418
Hose Assembly Tools	421
Reference Material.....	469
Part Number Index.....	473

Quick Reference - Hose & Couplings

The Society of Automotive Engineers (SAE) has developed standards for hose manufacturers.

These standards address areas like temperature resistance, impulse performance, change in length, etc.

Cat hose products are designed, manufactured and tested to **exceed SAE standards**, something that has made them the preferred choice in earthmoving and many other applications.

The following charts illustrate ways Cat hoses exceed the industry requirements.

CATERPILLAR SPECIFICATIONS VS. INDUSTRY

Cat Hose Type	Temp Range	Applicable Standards	Temp Range
716	-40 to 135 °C -40 to 275 °F	SAE 100R1AT	-40 to 100 °C -40 to 212 °F
		EN 853-1SN	
		ISO 1436-1SN	
294	-40 to 100 °C -40 to 212 °F	SAE 100R2AT	-40 to 100 °C -40 to 212 °F
		EN 853-2SN	
		ISO 1436-2SN	
844	-40 to 135 °C -40 to 275 °F	SAE 100R4	-40 to 100 °C -40 to 212 °F
556	-40 to 121 °C -40 to 250 °F	SAE 100R5	-40 to 100 °C -40 to 212 °F
743	-40 to 135 °C -40 to 275 °F	SAE 100R6	-40 to 100 °C -40 to 212 °F
		ISO 4079-R6	
1028	-40 to 93 °C -40 to 200 °F	SAE 100R7	-40 to 93 °C -40 to 200 °F
XT-3ES	-40 to 121 °C -40 to 250 °F	SAE 100R12	-40 to 121 °C -40 to 250 °F
		EN 856-R12	
		ISO 3862-R12	
XT-5ES	-40 to 121 °C -40 to 250 °F	SAE 100R13	-40 to 121 °C -40 to 250 °F
		EN 856-R13	
		ISO 3862-R13	
2771A	-54 to 232 °C -65 to 450 °F	SAE 100R14	-54 to 204 °C -65 to 400 °F
XT-6ES	-40 to 121 °C -40 to 250 °F	SAE 100R15	-40 to 121 °C -40 to 250 °F
		EN 856-R15	
		ISO 3862-R15	
294CPT	-40 to 100 °C -40 to 212 °F	SAE 100R16	-40 to 100 °C -40 to 212 °F
		EN 857-2SC	
		ISO 11237-2SC	
4636	-40 to 121 °C -40 to 250 °F	SAE 100R19	-40 to 100 °C -40 to 212 °F
		ISO 11237-R19	
716CPT	-40 to 100 °C -40 to 212 °F	EN 857-1SC	-40 to 100 °C -40 to 212 °F
		ISO 11237-1SC	
1130	-40 to 150 °C -40 to 302 °F	SAE J1402 Type All	-40 to 100 °C -40 to 212 °F

Quick Reference - Hose & Couplings

IMPULSE CYCLES

Cat Hose Type	Impulse Cycles	Applicable Standards	Impulse Cycles
716	250,000	SAE 100R1AT	150,000
		EN 853-1SN	
		ISO 1436-1SN	
294	200,000	SAE 100R2AT	200,000
		EN 853-2SN	
		ISO 1436-2SN	
XT-3ES	1,000,000	SAE 100R12	500,000
		EN 856-R12	
		ISO 3862-R12	
XT-5ES	1,000,000	SAE 100R13	500,000
		EN 856-R13	
		ISO 3862-R13	
XT-6ES	1,000,000	SAE 100R15	500,000
		EN 856-R15	
		ISO 3862-R15	
294CPT	200,000	SAE 100R16	200,000
		EN 857-2SC	
		ISO 11237-2SC	
4636	1,000,000	SAE 100R19	200,000
		ISO 11237-R19	
716CPT	150,000	EN 857-1SC	150,000
		ISO 11237-1SC	

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

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 Identification

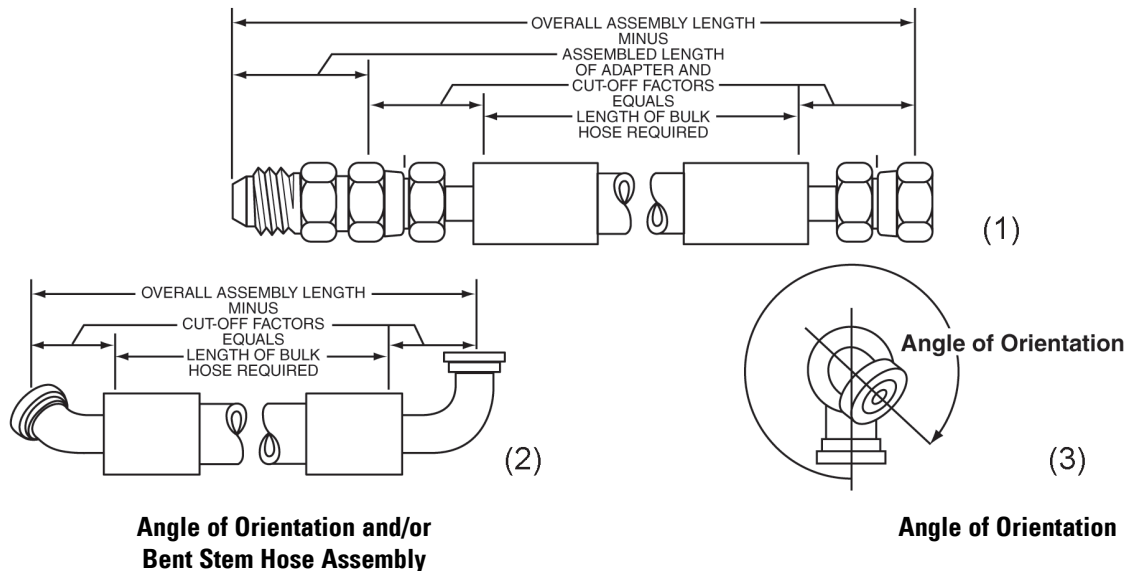
Hose, Coupling & Hose Assembly Procedure Checklist.....	6
Flow Capacity Nomograph.....	8
Hose Failure Analysis	9
Hose Installation.....	10
Hose Assembly Routing Tips	11
Conversion Formulas.....	12
Hose Industry Standard Comparison (SAE EN ISO)	13
Hose Working Pressure & Fluid Compatibility	20
Hose Fluid Compatibility	22

Hose, Coupling & Hose Assembly Procedure Checklist

Step 1- Identify Hose Assembly to be Made

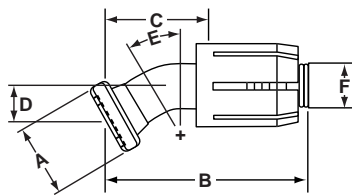
1. Measure total hose assembly length (sealing surface to sealing surface) and record.

Straight Hose Assembly



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 - Identify Coupling Style & Type



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

Refer to Coupling Identification Tables

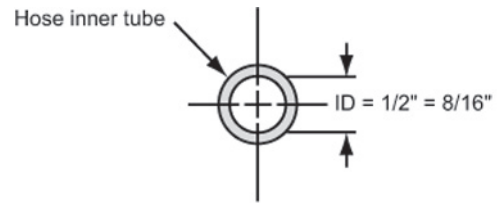
1. Look for markings/part numbers to cross reference.
2. Compare the physical characteristics of the coupling head to the illustration in the Coupling Identification Tables and determine coupling possibilities.
3. Measure the coupling's dimensions in the Coupling Identification Tables to determine coupling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

Hose, Coupling & Hose Assembly Procedure Checklist

Step 3 - Identify What Kind of Hose is to be Replaced

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 - Build Hose Assembly

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.

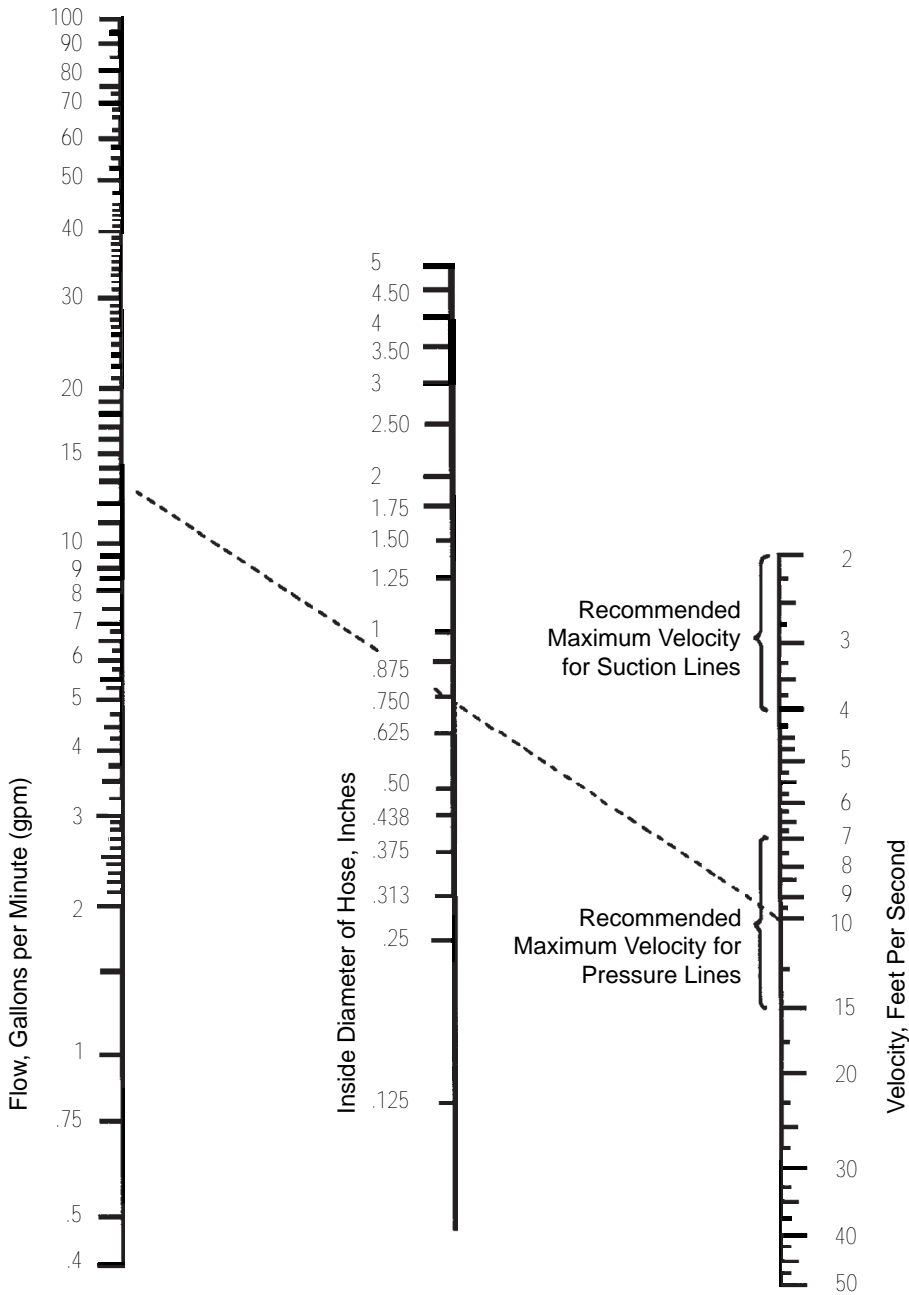
Flow Capacity Nomograph

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.

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





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.

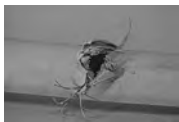


Improper Installation

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 Assembly

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.

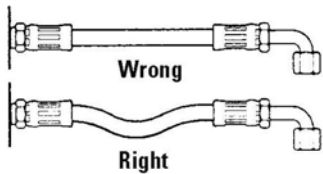
Possible Cause: Constant heat that causes hose to soften.

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

Hose Installation

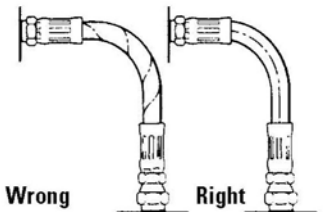
1. Provide for length change.

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%.



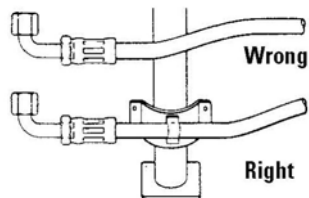
2. Avoid twisting and orient properly.

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.



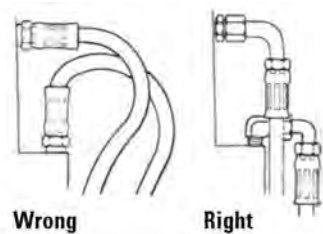
3. Protect from hazardous environment.

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.



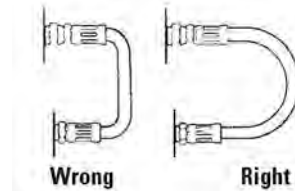
4. Avoid mechanical strain.

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.



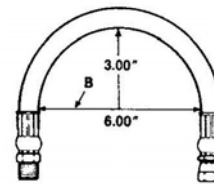
5. Use proper bend radius.

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.



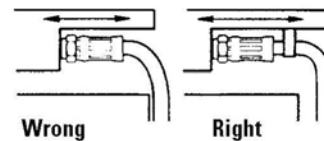
6. Use proper bend radius (cont'd).

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.



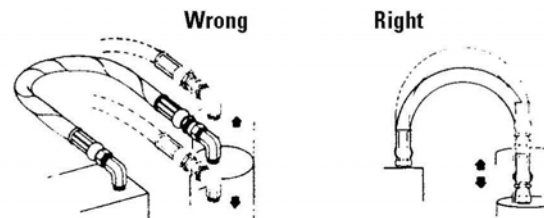
7. Secure for protection.

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.

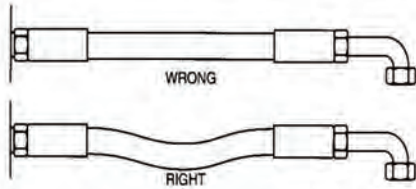
Make sure relative motion of the machine components produces bending rather than twisting of the hose. Hose should be routed so that the flex is in the same plane as the equipment movement.



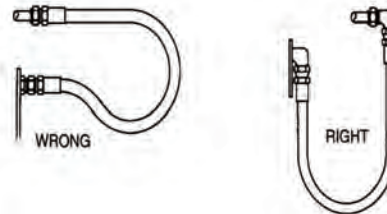
Hose Assembly Routing Tips

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.

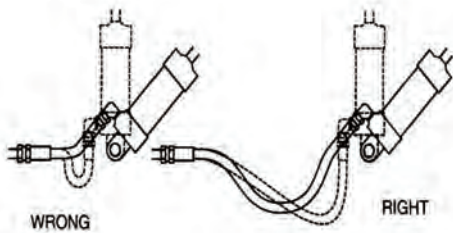
The following diagrams show proper hose installations which provide maximum performance and cost savings. Consider these examples in determining length of a specific assembly.



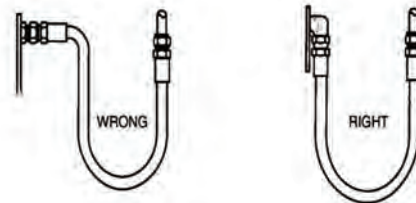
When hose installation is straight, allow enough slack in hose line to provide for length changes which will occur when pressure is applied.



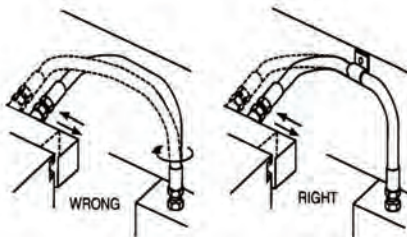
When radius is below the required minimum, use an angle adapter to avoid sharp bends.



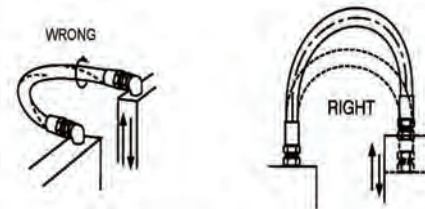
Adequate hose length is necessary to distribute movement on flexing applications and to avoid abrasion.



Use proper angle adapters to avoid tight bend in hose.



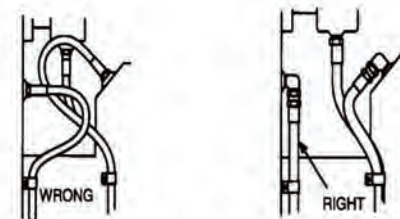
Avoid twisting of hose lines bent in two planes by clamping hose at change of plane.



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

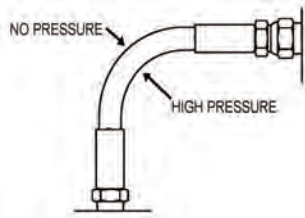


Reduce number of pipe thread joints by using hydraulic adapters instead of pipe fittings.

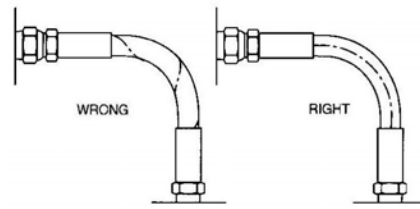


Route hose directly by using 45° and/or 90° adapter and fittings. Avoid excessive hose length to improve appearance.

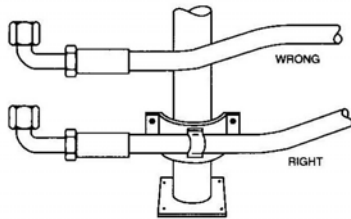
Hose Assembly Routing Tips



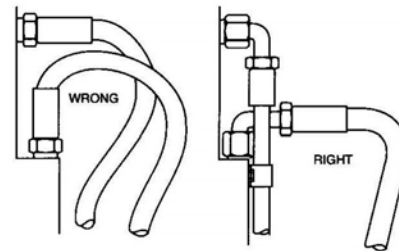
To allow for length changes when hose is pressurized, do not clamp at bends so that curves will absorb changes. Do not clamp high and low pressure lines together.



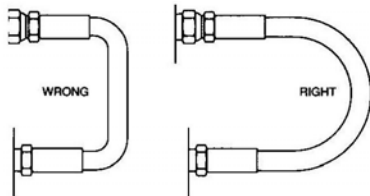
When installing hose, make sure it is not twisted. Pressure applied to a twisted hose can result in hose failure or loosening of connections.



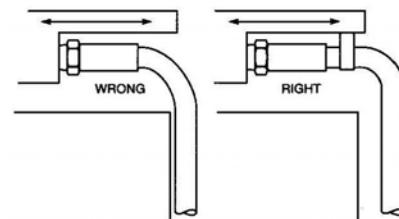
High ambient temperatures shorten hose life, so make sure hose is kept away from hot parts. If this is not possible, insulate hose.



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.



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



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.

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:

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

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

Hose Industry Standard Comparison (SAE EN ISO)

SAE 100R15 vs XT-6ES™ Hose (2836)

Working Pressure ^(A)						
Hose Dash Size	Inner Diameter		100R15 Maximum Working Pressure		XT-6ES Maximum Working Pressure	
	(in)	(mm)	(MPa)	(psi)	(MPa)	(psi)
-3	0.188	4.8	-	-	-	-
-4	0.250	6.4	-	-	-	-
-5	0.313	7.9	-	-	-	-
-6	0.375	9.5	42	6092	42	6092
-8	0.500	12.7	42	6092	42	6092
-10	0.625	15.9	-	-	42	6092
-12	0.750	19.1	42	6092	42	6092
-16	1.000	25.4	42	6092	42	6092
-20	1.250	31.8	42	6092	42	6092
-24	1.500	38.1	42	6092	42	6092
-32	2.000	50.8	-	-	42	6092

(A) Minimum burst pressure will always be 4X the maximum working pressure for both Cat and SAE standard hose.

Impulse Testing

	Test Pressure	Test Temperature	Number of Cycles	Temperature Capabilities
100R15 (All Sizes)	120% of Working Pressure	+250° F (+121° C)	500,000	-40° F to +250° F (-40° C to +121° C)
XT-6ES (All Sizes)	120% of Working Pressure	+250° F (+121° C)	1,000,000	-40° F to +250° F (-40° C to +121° C)

#For this test, XT-6ES hose is aged at +250°F (+121°C) for 150 hours and -25°F (-32°C) for 18 hours prior to impulse testing. In addition, in the middle and at the end of each impulse test, no leaks are allowed after the oil cools to room temperature and the test machine is restarted. SAE does not require aged samples or room temperature leak checks.

SAE 100R13 vs XT-5ES™ Hose (1036)

Working Pressure ^(A)						
Hose Dash Size	Inner Diameter		100R13 Maximum Working Pressure		XT-5ES Maximum Working Pressure	
	(in)	(mm)	(MPa)	(psi)	(MPa)	(psi)
-3	0.188	4.8	-	-	-	-
-4	0.250	6.4	-	-	-	-
-5	0.313	7.9	-	-	-	-
-6	0.375	9.5	-	-	-	-
-8	0.500	12.7	-	-	-	-
-10	0.625	15.9	-	-	-	-
-12	0.750	19.1	35	5076	35	5076
-16	1.000	25.4	35	5076	35	5076
-20	1.250	31.8	35	5076	35	5076
-24	1.500	38.1	35	5076	35	5076
-32	2.000	50.8	35	5076	35	5076

(A) Minimum burst pressure will always be 4X the maximum working pressure for both Cat and SAE standard hose.

Impulse Testing

	Test Pressure	Test Temperature	Number of Cycles	Temperature Capabilities
100R13 (All Sizes)	120% of Working Pressure	+250° F (+121° C)	500,000	-40° F to +250° F (-40° C to +121° C)
XT-5ES (All Sizes)	120% of Working Pressure	+250° F (+121° C)	1,000,000	-40° F to +250° F (-40° C to +121° C)

For this test XT-5ES hose is aged at +250°F (+121°C) for 150 hours and -25°F (-32°C) for 18 hours prior to impulse testing. In addition, in the middle and at the end of each impulse test, no leaks are allowed after the oil cools to room temperature and the test machine is restarted. SAE does not require aged samples or room temperature leak checks.

Hose Industry Standard Comparison (SAE EN ISO)

SAE 100R12 vs XT-3ES™ Hose (736)

Working Pressure ^(A)						
Hose Dash Size	Inner Diameter		100R12 Maximum Working Pressure		XT-3ES Maximum Working Pressure	
	(in)	(mm)	(MPa)	(psi)	(MPa)	(psi)
-3	0.188	4.8	-	-	-	-
-4	0.250	6.4	-	-	-	-
-5	0.313	7.9	-	-	-	-
-6	0.375	9.5	28	4061	28	4061
-8	0.500	12.7	28	4061	28	4061
-10	0.625	15.9	28	4061	28	4061
-12	0.750	19.1	28	4061	28	4061
-16	1.000	25.4	28	4061	28	4061
-20	1.250	31.8	21	3046	24.1	3495
-24	1.500	38.1	17.5	2538	17.5	2538
-32	2.000	50.8	17.5	2538	17.5	2538

(A) Minimum burst pressure will always be 4X the maximum working pressure for both Cat and SAE standard hose.

Impulse Testing

	Test Pressure	Test Temperature	Number of Cycles	Temperature Capabilities	Bend Radius
100R12 (All Sizes)	133% of Working Pressure	+250° F (+121° C)	500,000	-40° F to +250° F (-40° C to +121° C)	SAE
XT-3ES (All Sizes)	133% of Working Pressure	+250° F (+121° C)	1,000,000	-40° F to +250° F (-40° C to +121° C)	1/2 SAE

For this test XT-3ES hose is aged at +250° F(+121° C) for 150 hours and -25° F(-32° C) for 18 hours prior to impulse testing. In addition, in the middle and at the end of each impulse test, no leaks are allowed after the oil cools to room temperature and the test machine is restarted. SAE does not require aged samples or room temperature leak checks.

SAE 100R1AT vs Cat One-Wire Braid Hose (716)

Working Pressure ^(A)						
Hose Dash Size	Inner Diameter		100R1 Maximum Working Pressure		716 Maximum Working Pressure	
	(in)	(mm)	(MPa)	(psi)	(MPa)	(psi)
-3	0.188	4.8	25	3626	-	-
-4	0.250	6.4	22.5	3263	22.5	3263
-5	0.313	7.9	21.5	3118	-	-
-6	0.375	9.5	18	2611	18	2611
-8	0.500	12.7	16	2321	16	2321
-10	0.625	15.9	13	1885	13	1885
-12	0.750	19.1	10.5	1523	10.5	1523
-16	1.000	25.4	8.8	1276	8.8	1276
-20	1.250	31.8	6.3	914	6.3	914
-24	1.500	38.1	5	725	5	725
-32	2.000	50.8	4	580	4	580

(A) Minimum burst pressure will always be 4X the maximum working pressure for both Cat and SAE standard hose.

Hose Industry Standard Comparison (SAE EN ISO)

SAE 100R1AT vs Cat One-Wire Braid Hose (716) (Cont'd.)

Impulse Testing				Temperature Capabilities	
	Test Pressure	Test Temperature	Number of Cycles		
100R1 (-3 to -16)	125% of Working Pressure	+212° F (+100° C)	150,000	-40° F to +212° F (-40° C to +100° C)	
100R1 (-20 to -32)	100% of Working Pressure	+212° F (+100° C)	150,000	-40° F to +212° F (-40° C to +100° C)	
716 (All Sizes)	100% of Working Pressure	+275° F (+135° C)	250,000	-40° F to +275° F (-40° C to +135° C)	
716 (-3 to -16)	125% of Working Pressure	+212° F (+100° C)	150,000	-40° F to +275° F (-40° C to +135° C)	
716 (-20 to -32)	100% of Working Pressure	+212° F (+100° C)	150,000	-40° F to +275° F (-40° C to +135° C)	

For this test 716 hose is aged at +300° F(+150° C) for 200 hours and -25° F(-32° C) for 18 hours prior to impulse testing. In addition, in the middle and at the end of each impulse test, no leaks are allowed after the oil cools to room temperature and the test machine is restarted. SAE does not require aged samples or room temperature leak checks.

ISO 1436 1SN vs Cat One-Wire Braid Hose (716)

Working Pressure ^(A)						
Hose Dash Size	Inner Diameter		1436 1SN Maximum Working Pressure		716 Maximum Working Pressure	
	(in)	(mm)	(MPa)	(psi)	(MPa)	(psi)
-3	0.188	4.8	25	3626	-	-
-4	0.250	6.4	22.5	3263	22.5	3263
-5	0.313	7.9	21.5	3118	-	-
-6	0.375	9.5	18	2611	18	2611
-8	0.500	12.7	16	2321	16	2321
-10	0.625	15.9	13	1885	13	1885
-12	0.750	19.1	10.5	1523	10.5	1523
-16	1.000	25.4	8.8	1276	8.8	1276
-20	1.250	31.8	6.3	914	6.3	914
-24	1.500	38.1	5	725	5	725
-32	2.000	50.8	4	580	4	580

(A) Minimum burst pressure will always be 4X the maximum working pressure for both Cat and SAE standard hose.

Impulse Testing				Temperature Capabilities	
	Test Pressure	Test Temperature	Number of Cycles		
ISO 1436 1SN (-5 to -25)	125% of Working Pressure	+212° F (+100° C)	150,000	-40° F to +212° F (-40° C to +100° C)	
ISO 1436 1SN (-32 to -50)	100% of Working Pressure	+212° F (+100° C)	150,000	-40° F to +212° F (-40° C to +100° C)	
716 (-5 to -25)	125% of Working Pressure	+212° F (+100° C)	150,000	-40° F to +275° F (-40° C to +135° C)	
716 (-32 to -50)	100% of Working Pressure	+212° F (+100° C)	150,000	-40° F to +275° F (-40° C to +135° C)	

For this test, 716 hose was tested against the ISO 1436 1SN specifications for use in ISO applications.

Hose Industry Standard Comparison (SAE EN ISO)

SAE 100R2AT vs Cat Two-Wire Braid Hose (294)

Working Pressure ^(A)						
Hose Dash Size	Inner Diameter		100R2 Maximum Working Pressure		294 Maximum Working Pressure	
	(in)	(mm)	(MPa)	(psi)	(MPa)	(psi)
-3	0.188	4.8	41.5	6019	-	-
-4	0.250	6.4	40	5802	40	5802
-5	0.313	7.9	35	5076	35	5076
-6	0.375	9.5	33	4786	33	4786
-8	0.500	12.7	27.5	3989	27.5	3989
-10	0.625	15.9	25	3626	25	3626
-12	0.750	19.1	21.5	3118	21.5	3118
-16	1.000	25.4	16.5	2393	16.5	2393
-20	1.250	31.8	12.5	1813	12.5	1813
-24	1.500	38.1	9	1305	9	1305
-32	2.000	50.8	8	1160	8	1160
-40	2.500	63.5	7	1015	7	1015
-48	3.000	76.2	-	-	5.9	856

(A) Minimum burst pressure will always be 4X the maximum working pressure for both Cat and SAE standard hose.

Impulse Testing				Temperature Capabilities	
	Test Pressure	Test Temperature	Number of Cycles		
100R2 (All Sizes)	133% of Working Pressure	+212° F (+100° C)	200,000	-40° F to +212° F (-40° C to +100° C)	
294 (All Sizes)	133% of Working Pressure	+212° F (+100° C)	500,000	-40° F to +212° F (-40° C to +100° C)	

For this test, 294 hose is aged at +225° F(+170° C) for 150 hours and -25° F(-32° C) for 18 hours prior to impulse testing. In addition, in the middle and at the end of each impulse test, no leaks are allowed after the oil cools to room temperature and the test machine is restarted. SAE does not require aged samples or room temperature leak checks.

◇ AT designates the thinner cover used on no-skive hose.

ISO 1436 2SN vs Cat Two-Wire Braid Hose (294)

Working Pressure ^(A)						
Hose Dash Size	Inner Diameter		1436 2SN Maximum Working Pressure		294 Maximum Working Pressure	
	(in)	(mm)	(MPa)	(psi)	(MPa)	(psi)
-3	0.188	4.8	41.5	6019	-	-
-4	0.250	6.4	40	5802	40	5802
-5	0.313	7.9	35	5076	35	5076
-6	0.375	9.5	33	4786	33	4786
-8	0.500	12.7	27.5	3989	27.5	3989
-10	0.625	15.9	25	3626	25	3626
-12	0.750	19.1	21.5	3118	21.5	3118
-16	1.000	25.4	16.5	2393	16.5	2393
-20	1.250	31.8	12.5	1813	12.5	1813
-24	1.500	38.1	9	1305	9	1305
-32	2.000	50.8	8	1160	8	1160

(A) Minimum burst pressure will always be 4X the maximum working pressure for both Cat and SAE standard hose.

Impulse Testing				Temperature Capabilities	
	Test Pressure	Test Temperature	Number of Cycles		
ISO 1436 2SN (All Sizes)	133% of Working Pressure	+212° F (+100° C)	200,000	-40°F to +212°F (-40°C to +100°C)	
294 (All Sizes)	133% of Working Pressure	+212° F (+100° C)	200,000	-40°F to +212°F (-40°C to +100°C)	

For this test, 294 hose was tested against the ISO 1436 2SN specifications for use in ISO applications.

Hose Industry Standard Comparison (SAE EN ISO)

SAE 100R4 vs Cat Hydraulic Suction Hose (844)

Working Pressure ^(A)						
Hose Dash Size	Inner Diameter		100R4 Maximum Working Pressure		844 Maximum Working Pressure	
	(in)	(mm)	(MPa)	(psi)	(MPa)	(psi)
-3	0.188	4.8	-	-	-	-
-4	0.250	6.4	-	-	-	-
-5	0.313	7.9	-	-	-	-
-6	0.375	9.5	-	-	-	-
-8	0.500	12.7	-	-	-	-
-10	0.625	15.9	-	-	-	-
-12	0.750	19.1	2.1	305	2.1	305
-16	1.000	25.4	1.7	247	1.7	247
-20	1.250	31.8	1.4	203	1.4	203
-24	1.500	38.1	1.05	152	1.1	160
-32	2.000	50.8	0.7	102	0.7	102
-40	2.500	63.5	0.4	58	-	-
-48	3.000	76.2	0.4	58	-	-
-56	3.500	88.9	0.3	44	-	-
-64	4.000	102	0.25	36	-	-

(A) Minimum burst pressure will always be 4X the maximum working pressure for both Cat and SAE standard hose.

Impulse Testing				Temperature Capabilities
Test Pressure	Test Temperature	Number of Cycles		
100R4 (All Sizes)	No Impulse Testing Performed			-40°F to +212°F (-40°C to +100°C)
844 (All Sizes)	No Impulse Testing Performed			-40°F to +275°F (-40°C to +135°C)

SAE 100R7 vs Cat Thermoplastic Hose (1028)

Working Pressure ^(A)						
Hose Dash Size	Inner Diameter		100R7 Maximum Working Pressure		1028 Maximum Working Pressure	
	(in)	(mm)	(MPa)	(psi)	(MPa)	(psi)
-3	0.188	4.8	21	3046	20.7	3002
-4	0.250	6.4	19.2	2785	19	2756
-5	0.313	7.9	17.5	2538	17.5	2538
-6	0.375	9.5	15.7	2277	15.5	2248
-8	0.500	12.7	14	2031	13.8	2002
-10	0.625	15.9	10.5	1523	-	-
-12	0.750	19.1	8.7	1262	8.6	1247
-16	1.000	25.4	7	1015	-	-
-20	1.250	31.8	-	-	-	-
-24	1.500	38.1	-	-	-	-
-32	2.000	50.8	-	-	-	-

(A) Minimum burst pressure will always be 4X the maximum working pressure for both Cat and SAE standard hose.

Impulse Testing				Temperature Capabilities
Test Pressure	Test Temperature	Number of Cycles		
100R7 (All Sizes)	125% of Working Pressure	+200°F (+93°C)	150,000	-40°F to +200°F (-40°C to +93°C)
1028 (All Sizes)	100% of Working Pressure	+200°F (+93°C)	1,000,000	-70°F to +200°F (-56°C to +93°C)
1028 OR	133% of Working Pressure	+200°F (+93°C)	150,000#	-70°F to +200°F (-56°C to +93°C)

For this test, 1028 hose is aged at +200°F(+93°C) for 150 hours and -25°F(-32°C) for 18 hours prior to impulse testing. In addition, in the middle and at the end of each impulse test, no leaks are allowed after the oil cools to room temperature and the test machine is restarted. SAE does not require aged samples or room temperature leak checks.

Hose Industry Standard Comparison (SAE EN ISO)

SAE 100R5 vs Cat One-Wire Braid Hose - Fabric Covered (556)

Working Pressure ^(A)						
Hose Dash Size	Inner Diameter		100R5 Maximum Working Pressure		556 Maximum Working Pressure	
	(in)	(mm)	(MPa)	(psi)	(MPa)	(psi)
-4	0.188	4.8	-	-	20.7	3002
-5	0.250	6.4	21	3046	20.7	3002
-6	0.313	7.9	21	3046	15.5	2248
-8	0.406	10.3	15.7	2277	13.8	2002
-10	0.500	12.7	14	2031	12.1	1755
-12	0.625	15.9	12.2	1769	10.3	1494
-16	0.875	22.2	10.5	1523	5.5	798
-20	1.125	28.6	5.6	812	4.3	624
-24	1.375	34.9	4.3	624	3.4	493
-32	1.813	46	3.5	508	-	-

(A) Minimum burst pressure will always be 4X the maximum working pressure for both Cat and SAE standard hose.

Impulse Testing				Temperature Capabilities	
	Test Pressure	Test Temperature	Number of Cycles		
100R5 (-4 to -16)	125% of Working Pressure	+212°F (+100°C)	150,000	-40°F to +212°F (-40°C to +100°C)	
100R5 (-20 to -32)	100% of Working Pressure	+212°F (+100°C)	100,000	-40°F to +212°F (-40°C to +100°C)	
556 (-4 to -16)	125% of Working Pressure	+250°F (+120°C)	150,000#	-40°F to +250°F (-40°C to +121°C)	
556 (-20 to -32)	100% of Working Pressure	+250°F (+120°C)	100,000#	-40°F to +250°F (-40°C to +121°C)	

For this test 556 hose is aged at +275°F(+135°C) for 200 hours and -25°F(-32°C) for 18 hours prior to impulse testing. In addition, in the middle and at the end of each impulse test, no leaks are allowed after the oil cools to room temperature and the test machine is restarted. SAE does not require aged samples or room temperature leak checks.

SAE J1402 vs Cat Engine and Air Brake Hose (1130)

Working Pressure ^(A)						
Hose Dash Size	Inner Diameter		J1402 Maximum Working Pressure		1130 Maximum Working Pressure	
	(in)	(mm)	(MPa)	(psi)	(MPa)	(psi)
-4	0.188	4.8	1.5	218	13.8	2002
-5	0.250	6.4	1.5	218	10.3	1494
-6	0.313	7.9	1.5	218	10.3	1494
-8	0.406	10.3	1.5	218	8.6	1247
-10	0.500	12.7	1.5	218	8.6	1247
-12	0.625	15.9	1.5	218	5.2	754
-16	0.875	22.2	1.5	218	2.8	406
-20	1.125	28.6	1.5	218	2.1	305
-24	1.375	34.9	1.5	218	1.7	247
-32	1.813	46	-	-	-	-

(A) Minimum burst pressure will always be 4X the maximum working pressure for both Cat and SAE standard hose.

Impulse Testing				Temperature Capabilities	
	Test Pressure	Test Temperature	Number of Cycles		
J1402 (All Sizes)	No Impulse Testing Performed			-40°F to +200°F (-40°C to +93°C)	
1130 (All Sizes)	No Impulse Testing Performed			-40°F to +275°F (-40°C to +135°C)	

Cat 1130 hose passes a severe hot oil circulation test that exposes the hose liner to +300°F oil for 750 hours with no cracking or leakage permitted; SAE J1402 requires no such test.

Hose Industry Standard Comparison (SAE EN ISO)

SAE J3062 Type C vs Cat Air Conditioning Hose (1543)

Working Pressure ^(A)						
Hose Dash Size	Inner Diameter		J3062 Maximum Working Pressure		1543 Maximum Working Pressure	
	(in)	(mm)	(MPa)	(psi)	(MPa)	(psi)
-4	0.188	4.8	-	-	-	-
-5	0.250	6.4	-	-	-	-
-6	0.313	7.9	2.1	305	2.4	348
-8	0.406	10.3	2.1	305	2.4	348
-10	0.500	12.7	2.1	305	2.4	348
-12	0.625	15.9	2.1	305	2.4	348
-14	0.750	19.1	2.1	305	2.4	348
-20	1.125	28.6	-	-	-	-
-24	1.375	34.9	-	-	-	-
-32	1.813	46	-	-	-	-

(A) Minimum burst pressure will always be 4X the maximum working pressure for both Cat and SAE standard hose.

Impulse Testing			Temperature Capabilities
Test Pressure	Test Temperature	Number of Cycles	
J51-D (All Sizes)	No Impulse Testing Performed		-22°F to +248°F (-30°C to +120°C)
1543 (All Sizes)	No Impulse Testing Performed		-22°F to +257°F (-30°C to +125°C)

1543 meets SAE standards for type-D hose concerning Freon permeation and moisture ingress. 1543 has a maximum Freon permeation of 5 lbs/ft² per year at +300°F (+150°C). 1543 has a maximum moisture ingress of 16 g/100 in² per year. This hose can be used with SAE J2064 R134A refrigerant. Maximum permeation rate is 2 lbs/ft² per year at +176°F (+80°C).

Hose Working Pressure & Fluid Compatibility

Cat Hydraulic Hose Specifications: Maximum Working Pressure (psi, bars, kg/cm²)

Cat Hose	Hose Construction	Units	Dash - 3/ ISO 5	Dash -4/ ISO 6/ Nom 6	Dash -5/ ISO 8	Dash -6/ ISO 10/ Nom 9	Dash -8/ ISO 12/ Nom 12	Dash -10/ ISO 16/ Nom 15	Dash -12/ ISO 20/ Nom 19	Dash -16/ ISO 25/ Nom 25	Dash -20/ ISO 32/ Nom 32	Dash -24/ ISO 40/ Nom 38	Dash -32/ ISO 50/ Nom 50
XT-6ES (2836/ 4136)	4 or 6 spiral wire	psi	*	*	*	6092	6092	6092	6092	6092	6092	6092	6092
		bar	*	*	*	420	420	420	420	420	420	420	420
		kg/cm ²	*	*	*	428	428	428	428	428	428	428	428
XT-5ES (1036)	4 or 6 spiral wire	psi	*	*	*	*	*	*	5076	5076	5076	5076	5076
		bar	*	*	*	*	*	*	350	350	350	350	350
		kg/cm ²	*	*	*	*	*	*	357	357	357	357	357

Maximum Working Pressure (psi, bar, kg/cm²) for the indicated dash size/ISO size/nominal size:

¹ No Cat hose available in this size

Cat Hydraulic Hose Specifications: Maximum Working Pressure (psi, bars, kg/cm²)

Cat Hose	Hose Construction	Units	Dash - 3/ ISO 5	Dash -4/ ISO 6/ Nom 6	Dash -5/ ISO 8	Dash -6/ ISO 10/ Nom 9	Dash -8/ ISO 12/ Nom 12	Dash -10/ ISO 16/ Nom 15	Dash -12/ ISO 20/ Nom 19	Dash -16/ ISO 25/ Nom 25	Dash -20/ ISO 32/ Nom 32	Dash -24/ ISO 40/ Nom 38	Dash -32/ ISO 50/ Nom 50
XT-3ES (736/ 4135)	4 or 6 spiral wire	psi	*	*	*	4061	4061	4061	4061	4061	3495	2538	2538
		bar	*	*	*	280	280	280	280	280	241	175	175
		kg/cm ²	*	*	*	286	286	286	286	286	245	178	178
716	1 wire braid	psi	*	3263	*	2611	2321	1885	1523	1276	914	725	580
		bar	*	225	*	180	160	130	105	88	63	50	40
		kg/cm ²	*	229	*	184	163	133	107	90	64	51	41

Maximum Working Pressure (psi, bar, kg/cm²) for the indicated dash size/ISO size/nominal size:

¹ No Cat hose available in this size

Hose Working Pressure & Fluid Compatibility

Cat Hydraulic Hose Specifications: Maximum Working Pressure (psi, bars, kg/cm²)

Cat Hose	Hose Construction	Units	Dash - 3/ ISO 5	Dash -4/ ISO 6/ Nom 6	Dash -5/ ISO 8	Dash -6/ ISO 10/ Nom 9	Dash -8/ ISO 12/ Nom 12	Dash -10/ISO 16/Nom 15	Dash -12/ISO 20/Nom 19	Dash -16/ISO 25/Nom 25	Dash -20/ISO 32/Nom 32	Dash -24/ISO 40/Nom 38	Dash -32/ISO 50/Nom 50
294	2 wire braid	psi	*	5802	5076	4786	3989	3626	3118	2393	1813	1305	1160
		bar	*	400	350	330	275	250	215	165	125	90	80
		kg/cm ²	*	408	357	336	280	255	219	168	127	92	82
844 (Hydraulic suction)	Helical wire	psi	*	*	*	*	*	*	305	247	203	160	102
		bar	*	*	*	*	*	*	21	17	14	11	7
		kg/cm ²	*	*	*	*	*	*	21	17	14	11	7

Maximum Working Pressure (psi, bar, kg/cm²) for the indicated dash size/ISO size/nominal size:

¹ No Cat hose available in this size

Cat Hydraulic Hose Specifications: Maximum Working Pressure (psi, bar, kg/cm²)

Cat Hose	Hose Construction	Units	-3	-4	-5	-6	-8	-10	-12	-16	-20	-24	-32
1028	Thermoplastic, 2 fiber braid	psi	3002	2756	2495	2248	2002	*	1247	*	*	*	*
		bar	207	190	172	155	138	*	86	*	*	*	*
		kg/cm ²	211	194	175	158	141	*	88	*	*	*	*
2760	Thermoplastic, 2 fiber braid or wire reinforcement	psi	*	1494	1494	1494	1494	*	*	*	*	*	*
		bar	*	103	103	103	103	*	*	*	*	*	*
		kg/cm ²	*	105	105	105	105	*	*	*	*	*	*
556	1 wire braid Fabric Covered	psi	3002	3002	2248	2002	*	1755	1494	798	624	493	*
		bar	207	207	155	138	*	121	103	55	43	34	*
		kg/cm ²	211	211	158	141	*	123	105	56	44	35	*

Maximum Working Pressure (psi, bar, kg/cm²) for the indicated dash size:

¹ No Cat hose available in this size

Hose Fluid Compatibility

AGENT TO BE CARRIED ⁽¹⁾	Hose Type ⁽²⁾						
	Chloroprene	Nitrile	Thermoplastic	CPE	EPDM	PTFE	A/C
	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, 4639, 5014	945, 1028, 2760	1130, 4901	2786	2771A	1543J
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
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

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

Hose Fluid Compatibility

AGENT TO BE CARRIED ⁽³⁾	Hose Type ⁽⁴⁾						
	Chloroprene	Nitrile	Thermoplastic	CPE	EPDM	PTFE	A/C
	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, 4639, 5014	945, 1028, 2760	1130, 4901	2786	2771A	1543J
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
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

3 **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.

4 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

Hose Fluid Compatibility

AGENT TO BE CARRIED ⁽⁵⁾	Hose Type ⁽⁶⁾						
	Chloroprene	Nitrile	Thermoplastic	CPE	EPDM	PTFE	A/C
	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, 4639, 5014	945, 1028, 2760	1130, 4901	2786	2771A	1543J
Sodium Silicate	—	A	—	A			X
Sodium Sulfate	—	A	—	A			X
Sulfur	A	—	A	—			X
Water (over +150° F)	A	C	X	—			X

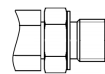
5 **CAUTION:** This chart is meant to offer general guidelines for the use of Cat Hose and Couplings with the substances listed in the chart. Many factors, such as temperature, concentration and length of exposure, are relevant to individual situations. The chart is based on the compatibility of these 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.

6 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

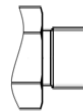
Pressure Chart (in PSI)

		British Threads										
		G 1/8	G 1/4	G 3/8	G 1/2	G 5/8	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2	
ISO 1179-2 Metric Flat Face (Non-Adj.)	Light Duty	3625	3625	3625	3625	-	2320	1450	1450	1450	-	
	Heavy Duty	-	9135	9135	5800	-	5800	5800	3625	3625	-	
	Non-Adj.	4565	4565	4565	3625	-	3625	3625	2320	2320	-	
ISO 1179-3 British Flat Face (Light Duty)	Adj.	2900	2900	2900	2900	-	2900	2900	2320	2320	-	
	With O-Ring	-	5800	5800	5075	5075	4565	3625	2900	2320	1810	
ISO 8434-6 60 Degree Cone	Without O-Ring	5075	5075	5075	4565	4565	3625	2900	2320	1810	1160	

		Metric Threads																		
		M8	M10	M12	M14	M16	M18	M20	M22	M24	M26	M27	M30	M33	M36	M42	M45	M48	M52	M60
ISO 9974-2 Metric Flat Face (Non-Adjustable)	Light Duty	-	3625	3625	3625	3625	3625	-	2320	-	2320	-	-	1450	-	1450	-	1450	-	-
	Heavy Duty	-	-	9135	9135	9135	9135	9135	5800	5800	-	5800	5800	-	5800	3625	-	3625	-	-
	Extra Light Duty	1450	1450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ISO 9974-3 Metric Flat Face (Non-Adjustable)	Light Duty	-	3625	3625	3625	3625	3625	-	2320	-	2320	-	-	1450	-	1450	-	1450	-	-
	Heavy Duty	-	-	5800	5800	5800	5800	5800	5800	-	-	5800	5800	-	3625	2320	-	2320	-	-
	Non-Adj.	9135	9135	9135	9135	9135	9135	5800	9135	-	-	5800	5800	-	3625	3625	-	3625	-	3625
ISO 6149-2 Metric STOR (Heavy Duty)	Adjustable	5800	5800	5800	5800	5800	5800	-	5800	-	-	5800	5075	-	5800	3625	-	2900	-	2320
	Non-Adj.	5800	5800	5800	5800	4565	4565	4565	2900	-	-	2900	2900	-	2900	2900	-	2320	-	3625
	Adjustable	4565	4565	4565	4565	3625	3625	3625	2320	-	-	2320	2320	-	2320	2320	-	1450	-	2320
ISO 8434-1 24 Degree Cone	Extra Light Duty	1450	1450	1450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Light Duty	-	-	3625	3625	3625	3625	-	3625	-	2320	-	-	2320	1450	-	1450	-	1450	-
	Heavy Duty	-	-	-	9135	9135	9135	9135	-	5800	-	-	-	5800	5800	3625	-	-	3625	-



Adjustable



Non-Adjustable

Coupling Identification

SAE Threads																					
	5/16-24	3/8-24	7/16-20	1/2-20	9/16-18	5/8-18	11/16-16	3/4-16	13/16-16	7/8-14	1-14	1-1/16-12	1-3/16-12	1-5/8-12	1-7/8-12	1-7/16-12	1/11/16-12	2-1/2-12	3-12	3-1/2-12	4-1/2-12
SAE J1926-2 Heavy Duty STOR	-	9135	9135	9135	9135	-	-	9135	-	9135	-	6090	6090	4060	4060	-	-	3045	2535	2535	-
SAE J1926-3 Light Duty STOR	5075	5075	5075	5075	5075	-	-	6090	-	6090	-	3625	3000	2535	2535	-	-	2000	1015	1015	505
SAE J 514/ ISO 8434-2 37 Degree Flare (JIC)	5000	5000	5000	5000	5000	-	-	4500	-	3500	-	3500	3000	2500	2000	-	-	1500	-	-	-
SAE J 514 Flare-less Tube	5000	5000	5000	5000	5000	-	-	4500	-	3500	-	3500	3000	2500	2000	-	-	1500	-	-	-
SAE J 513 45 degree flares	500	500	500	500	-	500	-	500	-	500	-	500	-	-	-	-	-	-	-	-	-
SAE J 1453 ORFS	-	-	-	-	9135	9135	9135	-	9135	-	5800	-	5800	5800	-	5800	3625	3625	-	-	-

SAE Pipe Threads									
	1/8-27	1/4-18	3/8-18	1/2-14	3/4-14	1-11-1/2	1-1/4-11-1/2	1-1/2-11-1/2	2-11-1/2
SAE J 514 - NPTF Male	5000	4000	3000	3000	2500	2000	1150	1000	1000
SAE J 514 - NPSM Swivel Nut	5000	5000	4000	3490	2245	2000	1620	1245	1130

Thread Guide

Thread Dash Size	Thread Size								
	NPTF ⁽¹⁾ (in-TPI)	JIC 37° (in-TPI)	SAE 45° (in-TPI)	ORFS ⁽²⁾ (in-TPI)	STOR ⁽³⁾ (in-TPI)	NPSM ⁽⁴⁾ (in-TPI)	SAE INV. ⁽⁵⁾ (in-TPI)	BSP ⁽⁶⁾ (in-TPI)	GAZ ⁽⁷⁾ (dia x pitch)
-2	1/8 - 27	5/16 - 24	5/16 - 24	—	5/16 - 24	1/8 - 27	5/16 - 28	1/8 - 28	—
-3	—	3/8 - 24	3/8 - 24	—	3/8 - 24	—	3/8 - 24	—	—
-4	1/4 - 18	7/16 - 20	7/16 - 20	9/16 - 18	7/16 - 20	1/4 - 18	7/16 - 24	1/4 - 19	—
-5	—	1/2 - 20	1/2 - 20	—	1/2 - 20	—	1/2 - 20	—	—
-6	3/8 - 18	9/16 - 18	5/8 - 18	11/16 - 16	9/16 - 18	3/8 - 18	5/8 - 18	3/8 - 19	M20 x 1.5
-8	1/2 - 14	3/4 - 16	3/4 - 16	13/16 - 16	3/4 - 16	1/2 - 14	3/4 - 18	1/2 - 14	M24 x 1.5
-10	—	7/8 - 14	7/8 - 14	1 - 14	7/8 - 14	—	7/8 - 18	5/8 - 14	M30 x 1.5
-12	3/4 - 14	1 1/16 - 12	1 1/16 - 14	1 3/16 - 12	1 1/16 - 12	3/4 - 14	1 1/16 - 16	3/4 - 14	M36 x 1.5
-14	—	1 3/16 - 12	1 1/4 - 12	—	1 3/16 - 12	—	—	—	—
-16	1 - 11 1/2	1 5/16 - 12	1 3/8 - 12	1 7/16 - 12	1 5/16 - 12	1 - 11 1/2	—	1 - 11	M45 x 1.5
-20	1 1/4 - 11 1/2	1 5/8 - 12	—	1 11/16 - 12	1 5/8 - 12	1 1/4 - 11 1/2	—	1 1/4 - 11	M52 x 1.5
-24	1 1/2 - 11 1/2	1 7/8 - 12	—	2 - 12	1 7/8 - 12	1 1/2 - 11 1/2	—	1 1/2 - 11	—
-32	2 - 11 1/2	2 1/2 - 12	—	—	2 1/2 - 12	2 - 11 1/2	—	2 - 11	—

(1) NPTF - National Pipe Tapered Fuel (REF. SAE J476)

(5) SAE INV. - SAE Inverted Flare (REF. SAE J512)

(2) ORFS - O-Ring Face Seal (REF. SAE J1453)

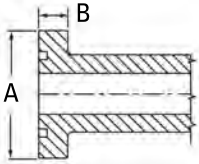
(6) BSP - British Standard Pipe

(3) STOR - SAE Straight Thread O-Ring (REF. SAE J514)

(7) GAZ - French Metric GAZ

(4) NPSM - National Pipe Straight Mechanical

Flange Head Guide



Flange Dash Size	SAE Code 61* Head Size		SAE Code 61* Head Thkns		SAE Code 62** Head Size		SAE Code 62** Head Thkns		Cat Head Size		Cat Head Thkns	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
-8	1.19	30.2	.265	6.7	1.25	31.8	.305	7.8	—	—	—	—
-10***	1.34	34.0	.265	6.7	—	—	—	—	—	—	—	—
-12	1.50	38.1	.265	6.7	1.63	41.3	.345	8.8	1.63	41.3	.560	14.2
-16	1.75	44.5	.315	8.0	1.88	47.6	.375	9.5	1.88	47.6	.560	14.2
-20	2.00	50.8	.315	8.0	2.13	54.0	.405	10.3	2.13	54.0	.560	14.2
-24	2.38	60.3	.315	8.0	2.50	63.5	.495	12.6	2.50	63.5	.560	14.2
-32	2.81	71.4	.375	9.5	3.13	79.4	.495	12.6	3.13	79.4	.560	14.2
-40	3.31	84.1	.375	9.5	—	—	—	—	—	—	—	—
-48	4.00	101.6	.375	9.5	—	—	—	—	—	—	—	—
-56	4.50	114.3	.375	9.5	—	—	—	—	—	—	—	—

Note 1: Reference charts for split flange part numbers

Note 2: SAE Code 61, ISO Form R, and JIS Type I couplings are interchangeable except for bolt sizes.

Note 3: SAE Code 62, ISO Form S, and JIS Type II couplings are interchangeable except for bolt sizes.

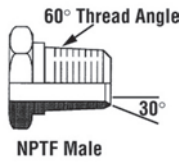
* All Code 61 flange head hose couplings and adapter fittings meet or exceed SAE J518 Code 61 requirements for hydraulic split flange connections. The Code 61 flange head design can withstand a maximum operating pressure of 3000 to 5000 psi depending on size.

** 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

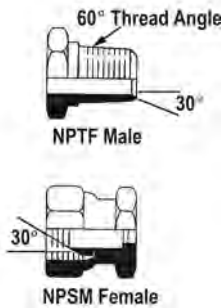
Coupling Identification

Thread Identification Table - National Pipe Tapered for Fuels (NPTF)



Dash Size (dash)	Inch Size (in)	Thread Size (in-TPI)	Female Thread Inside Diameter	Male Thread Outside Diameter
-2	1/8	1/8 - 27	8.7 mm / 0.34 in	10.3 mm / 0.41 in
-4	1/4	1/4 - 18	11.9 mm / 0.47 in	14.3 mm / 0.56 in
-6	3/8	3/8 - 18	15.1 mm / 0.59 in	17.5 mm / 0.69 in
-8	1/2	1/2 - 14	18.3 mm / 0.72 in	21.4 mm / 0.84 in
-12	3/4	3/4 - 14	23.8 mm / 0.94 in	27.0 mm / 1.06 in
-16	1	1 - 11 1/2	30.2 mm / 1.19 in	33.3 mm / 1.31 in
-20	1 1/4	1 1/4 - 11 1/2	38.9 mm / 1.53 in	42.9 mm / 1.69 in
-24	1 1/2	1 1/2 - 11 1/2	44.5 mm / 1.75 in	48.4 mm / 1.91 in
-32	2	2 - 11 1/2	57.2 mm / 2.25 in	60.3 mm / 2.38 in

Thread Identification Table - National Pipe Straight Mechanical (NPSM)



Dash Size (dash)	Inch Size (in)	Thread Size (in-TPI)	Female Thread Size Inside Diameter	Male Thread Size Outside Diameter
-2	1/8	1/8 - 27	8.7 mm / 0.34 in	10.3 mm / 0.41 in
-4	1/4	1/4 - 18	11.9 mm / 0.47 in	14.3 mm / 0.56 in
-6	3/8	3/8 - 18	15.9 mm / 0.63 in	17.5 mm / 0.69 in
-8	1/2	1/2 - 14	19.1 mm / 0.75 in	21.4 mm / 0.84 in
-12	3/4	3/4 - 14	24.6 mm / 0.97 in	27.0 mm / 1.06 in
-16	1	1 - 11 1/2	31.0 mm / 1.22 in	33.3 mm / 1.31 in
-20	1 1/4	1 1/4 - 11 1/2	39.7 mm / 1.56 in	42.9 mm / 1.69 in
-24	1 1/2	1 1/2 - 11 1/2	45.2 mm / 1.78 in	48.4 mm / 1.91 in
-32	2	2 - 11 1/2	57.2 mm / 2.25 in	60.3 mm / 2.38 in

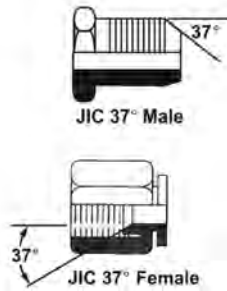
Thread Identification Table - SAE Straight Thread O-Ring Boss



Dash Size (dash)	Inch Size (in)	Thread Size (in-TPI)	Female Thread Inside Diameter	Male Thread Outside Diameter
-2	1/8	5/16 - 24	6.9 mm / 0.27 in	7.8 mm / 0.31 in
-3	3/16	3/8 - 24	8.5 mm / 0.34 in	9.4 mm / 0.37 in
-4	1/4	7/16 - 20	9.9 mm / 0.39 in	11.2 mm / 0.44 in
-5	5/16	1/2 - 20	11.5 mm / 0.45 in	12.6 mm / 0.49 in
-6	3/8	9/16 - 18	12.9 mm / 0.51 in	14.1 mm / 0.56 in
-8	1/2	3/4 - 16	17.5 mm / 0.69 in	18.9 mm / 0.74 in
-10	5/8	7/8 - 14	20.5 mm / 0.81 in	22.1 mm / 0.87 in
-12	3/4	1 1/16 - 12	24.9 mm / 0.98 in	26.9 mm / 1.06 in
-14	7/8	1 3/16 - 12	28.1 mm / 1.11 in	30.0 mm / 1.18 in
-16	1	1 5/16 - 12	31.3 mm / 1.23 in	33.1 mm / 1.31 in
-20	1 1/4	1 5/8 - 12	39.2 mm / 1.54 in	41.1 mm / 1.62 in
-24	1 1/2	1 7/8 - 12	45.6 mm / 1.79 in	47.4 mm / 1.87 in
-32	2	2 1/2 - 12	61.4 mm / 2.42 in	63.3 mm / 2.49 in

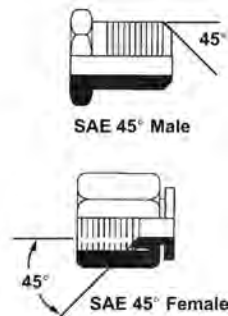
Coupling Identification

Thread Identification Table - JIC 37° Flare



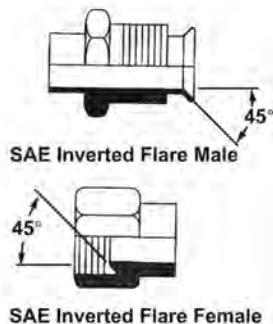
Dash Size (dash)	Inch Size (in)	Thread Size (in-TPI)	Female Thread Size Inside Diameter	Male Thread Size Outside Diameter
-2	1/8	5/16 - 24	6.9 mm / 0.27 in	7.8 mm / 0.31 in
-3	3/16	3/8 - 24	8.5 mm / 0.34 in	9.4 mm / 0.37 in
-4	1/4	7/16 - 20	9.9 mm / 0.39 in	11.2 mm / 0.44 in
-5	5/16	1/2 - 20	11.5 mm / 0.45 in	12.6 mm / 0.49 in
-6	3/8	9/16 - 18	12.9 mm / 0.51 in	14.1 mm / 0.56 in
-8	1/2	3/4 - 16	17.5 mm / 0.69 in	18.9 mm / 0.74 in
-10	5/8	7/8 - 14	20.5 mm / 0.81 in	22.1 mm / 0.87 in
-12	3/4	1 1/16 - 12	24.9 mm / 0.98 in	26.9 mm / 1.06 in
-14	7/8	1 3/16 - 12	28.1 mm / 1.11 in	30.0 mm / 1.18 in
-16	1	1 5/16 - 12	31.3 mm / 1.23 in	33.1 mm / 1.31 in
-20	1 1/4	1 5/8 - 12	39.2 mm / 1.54 in	41.1 mm / 1.62 in
-24	1 1/2	1 7/8 - 12	45.6 mm / 1.79 in	47.4 mm / 1.87 in
-32	2	2 1/2 - 12	61.4 mm / 2.42 in	63.3 mm / 2.49 in

Thread Identification Table - SAE 45° Flare



Dash Size (dash)	Inch Size (in)	Thread Size (in-TPI)	Female Thread Size Inside Diameter	Male Thread Size Outside Diameter
-2	1/8	5/16 - 24	6.9 mm / 0.27 in	7.9 mm / 0.31 in
-3	3/16	3/8 - 24	8.6 mm / 0.34 in	9.6 mm / 0.38 in
-4	1/4	7/16 - 20	9.9 mm / 0.39 in	11.2 mm / 0.44 in
-5	5/16	1/2 - 20	11.4 mm / 0.45 in	12.7 mm / 0.50 in
-6	3/8	5/8 - 18	14.2 mm / 0.56 in	15.7 mm / 0.62 in
-7	7/16	11/16 - 16	15.7 mm / 0.62 in	17.3 mm / 0.68 in
-8	1/2	3/4 - 16	17.0 mm / 0.68 in	19.0 mm / 0.75 in
-10	5/8	7/8 - 14	20.3 mm / 0.80 in	22.3 mm / 0.88 in
-12	3/4	1 1/16 - 14	25.1 mm / 0.99 in	26.9 mm / 1.06 in
-14	7/8	1 1/4 - 12	29.5 mm / 1.16 in	31.7 mm / 1.25 in
-16	1	1 3/8 - 12	32.5 mm / 1.28 in	35.0 mm / 1.38 in

Thread Identification Table - SAE Inverted 45° Flare



Dash Size (dash)	Inch Size (in)	Thread Size (in-TPI)	Female Thread Inside Diameter	Male Thread Outside Diameter
-2	1/8	5/16 - 28	6.9 mm / 0.27 in	7.9 mm / 0.31 in
-3	3/16	3/8 - 24	8.6 mm / 0.34 in	9.6 mm / 0.38 in
-4	1/4	7/16 - 24	9.9 mm / 0.39 in	11.2 mm / 0.44 in
-5	5/16	1/2 - 20	11.4 mm / 0.45 in	12.7 mm / 0.50 in
-6	3/8	5/8 - 18	14.2 mm / 0.56 in	15.7 mm / 0.62 in
-7	7/16	11/16 - 18	15.7 mm / 0.62 in	17.3 mm / 0.68 in
-8	1/2	4/4 - 18	17.0 mm / 0.68 in	19.0 mm / 0.75 in
-10	5/8	7/8 - 18	20.3 mm / 0.80 in	22.3 mm / 0.88 in
-12	3/4	1 1/16 - 16	25.1 mm / 0.99 in	26.9 mm / 1.06 in

Note: 42° Flare on male machined adapters

Coupling Identification

Thread Identification Table - SAE O-Ring Face Seal (ORFS)



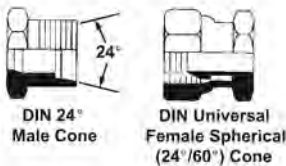
O-ring Face Seal Male



O-ring Face Seal Female

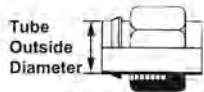
Dash Size (dash)	Inch Size (in)	Thread Size (in-TPI)	Female Thread Inside Diameter	Male Thread Outside Diameter
-4	1/4	9/16 - 18	12.9 mm / 0.51 in	14.1 mm / 0.56 in
-6	3/8	11/16 - 16	15.9 mm / 0.63 in	17.3 mm / 0.68 in
-8	1/2	13/16 - 16	19.1 mm / 0.75 in	20.5 mm / 0.81 in
-10	5/8	1 - 14	23.6 mm / 0.93 in	25.2 mm / 0.99 in
-12	3/4	1 3/16 - 12	28.1 mm / 1.11 in	30.0 mm / 1.18 in
-16	1	1 7/16 - 12	34.4 mm / 1.36 in	36.3 mm / 1.43 in
-20	1 1/4	1 11/16 - 12	40.8 mm / 1.61 in	42.7 mm / 1.68 in
-24	1 1/2	2 - 12	48.7 mm / 1.92 in	50.6 mm / 1.99 in

Thread Identification Table - ISO 24° Cone



DIN 24° Male Cone

DIN Universal Female Spherical (24°/60°) Cone



DIN Female Metric Tube



O-ring
DIN 24° Female Taper with O-ring

Metric Thread (dia x pitch)	Female Thread Inside Diameter	Male Thread Outside Diameter	Tube Outside Diameter Light Series	Tube Outside Diameter Heavy Series
M12 x 1.5	10.5 mm / 0.41 in	12 mm / 0.47 in	6 mm / 0.24 in	*
M14 x 1.5	12.5 mm / 0.49 in	14 mm / 0.55 in	8 mm / 0.31 in	6 mm / 0.24 in
M16 x 1.5	14.5 mm / 0.57 in	16 mm / 0.63 in	10 mm / 0.39 in	8 mm / 0.31 in
M18 x 1.5	16.5 mm / 0.65 in	18 mm / 0.71 in	12 mm / 0.47 in	10 mm / 0.39 in
M20 x 1.5	18.5 mm / 0.73 in	20 mm / 0.79 in	*	12 mm / 0.47 in
M22 x 1.5	20.5 mm / 0.81 in	22 mm / 0.87 in	15 mm / 0.59 in	14 mm / 0.55 in
M24 x 1.5	22.5 mm / 0.89 in	24 mm / 0.94 in	*	16 mm / 0.63 in
M26 x 1.5	24.5 mm / 0.96 in	26 mm / 1.02 in	18 mm / 0.71 in	*
M30 x 2.0	27.9 mm / 1.10 in	30 mm / 1.18 in	22 mm / 0.87 in	20 mm / 0.79 in
M36 x 2.0	33.9 mm / 1.33 in	36 mm / 1.42 in	28 mm / 1.10 in	25 mm / 0.98 in
M42 x 2.0	39.9 mm / 1.57 in	42 mm / 1.65 in	*	30 mm / 1.18 in
M45 x 2.0	42.9 mm / 1.69 in	45 mm / 1.77 in	35 mm / 1.38 in	*
M52 x 2.0	49.9 mm / 1.96 in	52 mm / 2.05 in	42 mm / 1.65 in	38 mm / 1.50 in

* No ISO 24° Cone in this size

Thread Identification Table - ISO 60° Cone



DIN 60° Male Cone

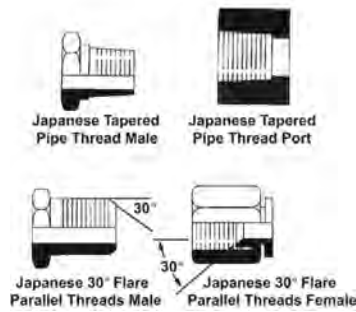


DIN Universal Female Spherical (24°/60°) Sea

Metric Thread (dia x pitch)	Female Thread Inside Diameter	Male Thread Outside Diameter	Tube Outside Diameter 60° Cone
M12 x 1.5	10.5 mm / 0.41 in	12 mm / 0.47 in	6 mm / 0.24 in
M14 x 1.5	12.5 mm / 0.49 in	14 mm / 0.55 in	8 mm / 0.31 in
M16 X 1.5	14.5 mm / 0.57 in	16 mm / 0.63 in	10 mm / 0.39 in
M18 x 1.5	16.5 mm / 0.65 in	18 mm / 0.71 in	12 mm / 0.47 in
M22 x 1.5	20.5 mm / 0.81 in	22 mm / 0.87 in	15 mm / 0.59 in
M26 x 1.5	24.5 mm / 0.96 in	26 mm / 1.02 in	18 mm / 0.71 in
M30 x 1.5	28.5 mm / 1.12 in	30 mm / 1.18 in	22 mm / 0.87 in
M38 x 1.5	36.5 mm / 1.44 in	38 mm / 1.50 in	28 mm / 1.10 in
M45 x 1.5	43.5 mm / 1.71 in	45 mm / 1.77 in	35 mm / 1.38 in
M52 x 1.5	50.5 mm / 1.99 in	52 mm / 2.05 in	42 mm / 1.65 in

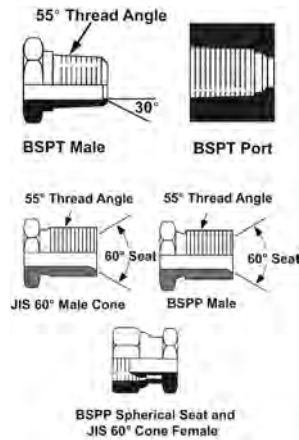
Coupling Identification

Thread Identification Table - JIS Tapered Pipe, 30° Flare Parallel Pipe, and 30° Male Inverted Seat



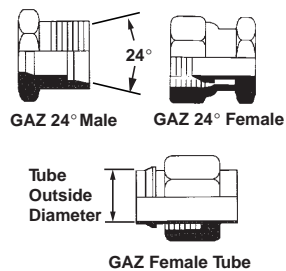
Dash Size (dash)	Inch Size (in)	Thread Size (in-TPI)	Female Thread Inside Diameter	Male Thread Outside Diameter
-2	1/8	1/8 - 28	8.7 mm / 0.34 in	9.5 mm / 0.38 in
-4	1/4	1/4 - 19	11.9 mm / 0.47 in	13.5 mm / 0.53 in
-6	3/8	3/8 - 19	15.1 mm / 0.59 in	16.7 mm / 0.66 in
-8	1/2	1/2 - 14	19.1 mm / 0.75 in	20.6 mm / 0.81 in
-10	5/8	5/8 - 14	20.6 mm / 0.81 in	23.1 mm / 0.91 in
-12	3/4	3/4 - 14	23.8 mm / 0.94 in	26.2 mm / 1.03 in
-16	1	1 - 11	30.2 mm / 1.19 in	33.3 mm / 1.31 in
-20	1 1/4	1 1/4 - 11	38.9 mm / 1.53 in	42.1 mm / 1.66 in
-24	1 1/2	1 1/2 - 11	45.2 mm / 1.78 in	47.6 mm / 1.88 in
-32	2	2 - 11	56.4 mm / 2.22 in	59.5 mm / 2.34 in

Thread Identification Table - British Standard Pipe Tapered (BSPT), British Standard Pipe Parallel Spherical Seat (BSPP) and JIS 60° Cone



Dash Size (dash)	Inch Size (in)	Thread Size (in-TPI)	Female Thread Inside Diameter	Male Thread Outside Diameter
-2	1/8	1/8 - 28	8.7 mm / 0.34 in	9.5 mm / 0.38 in
-4	1/4	1/4 - 19	11.1 mm / 0.44 in	13.5 mm / 0.53 in
-6	3/8	3/8 - 19	15.1 mm / 0.59 in	16.7 mm / 0.66 in
-8	1/2	1/2 - 14	18.3 mm / 0.72 in	20.6 mm / 0.81 in
-10	5/8	5/8 - 14	20.6 mm / 0.81 in	23.0 mm / 0.91 in
-12	3/4	3/4 - 14	23.8 mm / 0.94 in	26.2 mm / 1.03 in
-16	1	1 - 11	30.2 mm / 1.19 in	33.3 mm / 1.31 in
-20	1 1/4	1 1/4 - 11	38.9 mm / 1.53 in	42.1 mm / 1.66 in
-24	1 1/2	1 1/2 - 11	45.2 mm / 1.78 in	47.6 mm / 1.88 in
-32	2	2 - 11	56.4 mm / 2.22 in	59.5 mm / 2.34 in

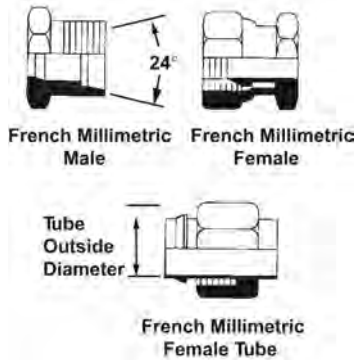
Thread Identification Table - GAZ (gas series) 24° Cone



Metric Thread (dia x pitch)	Female Thread Inside Diameter	Male Thread Outside Diameter	Tube Outside Diameter 24° Cone
M20 x 1.5	18.5 mm / 0.73 in	20.0 mm / 0.78 in	13.25 mm / 0.52 in
M24 x 1.5	22.5 mm / 0.89 in	24.0 mm / 0.94 in	16.75 mm / 0.66 in
M30 x 1.5	28.5 mm / 1.12 in	30.0 mm / 1.18 in	21.25 mm / 0.83 in
M36 x 1.5	34.5 mm / 1.36 in	36.0 mm / 1.41 in	26.75 mm / 1.05 in
M45 x 1.5	43.5 mm / 1.71 in	45.0 mm / 1.77 in	33.50 mm / 1.32 in
M52 x 1.5	50.5 mm / 1.99 in	52.0 mm / 2.04 in	42.25 mm / 1.66 in

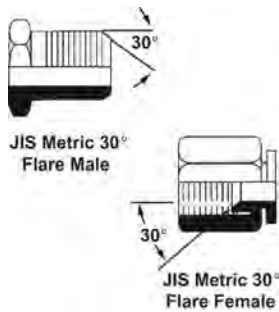
Coupling Identification

Thread Identification Table - French Metric



Metric Thread (dia x pitch)	Female Thread Inside Diameter	Male Thread Outside Diameter	Tube Outside Diameter
M12 x 1.0	11.0 mm / 0.43 in	12.0 mm / 0.47 in	6 mm / 0.24 in
M14 x 1.5	12.5 mm / 0.49 in	14.0 mm / 0.55 in	8 mm / 0.31 in
M16 x 1.5	14.5 mm / 0.57 in	16.0 mm / 0.63 in	10 mm / 0.39 in
M18 x 1.5	16.5 mm / 0.65 in	18.0 mm / 0.71 in	12 mm / 0.47 in
M20 x 1.5	18.5 mm / 0.73 in	20.0 mm / 0.79 in	14 mm / 0.55 in
M22 x 1.5	20.5 mm / 0.81 in	22.0 mm / 0.87 in	15 mm / 0.59 in
M24 x 1.5	22.5 mm / 0.89 in	24.0 mm / 0.94 in	16 mm / 0.63 in
M27 x 1.5	25.5 mm / 1.00 in	27.0 mm / 1.06 in	18 mm / 0.71 in
M30 x 1.5	28.5 mm / 1.12 in	30.0 mm / 1.18 in	22 mm / 0.87 in
M33 x 1.5	31.5 mm / 1.24 in	33.0 mm / 1.30 in	25 mm / 0.98 in
M36 x 1.5	34.5 mm / 1.36 in	36.0 mm / 1.42 in	28 mm / 1.10 in
M39 x 1.5	37.5 mm / 1.48 in	39.0 mm / 1.54 in	30 mm / 1.18 in
M42 x 1.5	40.5 mm / 1.59 in	42.0 mm / 1.65 in	32 mm / 1.26 in
M45 x 1.5	43.5 mm / 1.71 in	45.0 mm / 1.77 in	35 mm / 1.38 in
M48 x 1.5	46.5 mm / 1.83 in	48.0 mm / 1.89 in	38 mm / 1.50 in
M52 x 1.5	50.5 mm / 1.99 in	52.0 mm / 2.05 in	40 mm / 1.57 in
M54 x 2.0	51.9 mm / 2.04 in	54.0 mm / 2.13 in	45 mm / 1.77 in

JIS Metric 30° Flare (Komatsu Style)



Metric Thread (dia x pitch)	Female Thread Inside Diameter	Male Thread Outside Diameter
M18 x 1.5	16.5 mm / 0.65 in	18.0 mm / 0.71 in
M22 x 1.5	20.5 mm / 0.81 in	22.0 mm / 0.87 in
M24 x 1.5	22.5 mm / 0.89 in	24.0 mm / 0.94 in
M30 x 1.5	28.5 mm / 1.12 in	30.0 mm / 1.18 in
M33 x 1.5	31.5 mm / 1.24 in	33.0 mm / 1.30 in
M36 x 1.5	34.5 mm / 1.36 in	36.0 mm / 1.42 in
M42 x 1.5	40.5 mm / 1.59 in	42.0 mm / 1.65 in

Coupling Series by Hose Type

Hose Type	Coupling Series	Coupling Type	Hose Dash Size	Hose Type	Coupling Series	Coupling Type	Hose Dash Size
294	MN	Permanent	-4, -5, -6, -8, -10, -12, -16, -20, -24, -32, -40, -48	2929	MH	Permanent	-3, -4, -6, -8
294TG	MN	Permanent	-4, -6, -8, -10, -12, -16	2929TG	MH	Permanent	-4, -6, -8
294CPT	MN	Permanent	-4, -5, -6, -8, -10, -12, -16	4636 / 4639	MN	Permanent	-8, -12
	BN	Permanent	-10		BN	Permanent	-10, -16
294CPTG	MN	Permanent	-4, -6	4901	MN	Permanent	-4, -6, -8, 10, -12, -16, -20, -24, -32, -40, -48
294HT	MN	Permanent	-20, -24, -32, -40	5014	MN	Permanent	-4, -6, -8, -12
662	MN	Permanent	-6, -8	5065	DS4	Permanent	-4, -6
716	MN	Permanent	-4, -6, -8, -10, -12, -16, -20, -24, -32	XT-3ES / XT-3ESTG	TR	Reusable	-6, -8, -10, -12, -16
716TG	MN	Permanent	-4, -6, -8, -10, -12, -16		ESA	Permanent	-10, -12, -16
716CPT	MN	Permanent	-4, -6, -8, -10, -12, -16		S4G	Permanent	-6, -8, -16, -20, -24, -32
	JN	Permanent	-3		XN	Permanent	-6, -8, -10, -12
743	MH	Permanent	-4, -5, -6, -8, -10, -12, -16		XN4	Permanent	-20, -24
	844	MN	Permanent	-12, -16, -20, -24, -32, -40, -56	PL	Reusable	-16
SW		Permanent	-48	XT-5ES / XT-5ESTG	MCSH	Reusable / Permanent	-16, -20, -24, -32
844HP	MN	Permanent	-40, -56		MCSX	Permanent	-16, -20, -24
	SW	Permanent	-48, -64		XN	Permanent	-12, -16
945	JN	Permanent	-3		XN6	Permanent	-20, -24
	MH	Permanent	-5, -6, -8, -12		XS6	Permanent	-32
1028	56	Permanent	-3, -4, -5, -6, -8, -12	XT-6ES / XT-6ESTG	IN	Reusable / Permanent	-16, -20, -24
CAT A/C (1543J) FC	A/C	Permanent	-6, -8, -10, -12, -14		MCSM	Permanent	-6, -12, -16, -20, -24
					XN	Permanent	-6, -8, -10, -12, -16
2760	JN	Permanent	-4, -5, -6, -8		XN6	Permanent	-20, -24
2771A	JN	Permanent	-4, -5, -6, -8, 10, -12	XS6	Permanent	-32	
2786	MN	Permanent	-4, -6, -8, -10, -12, -16				

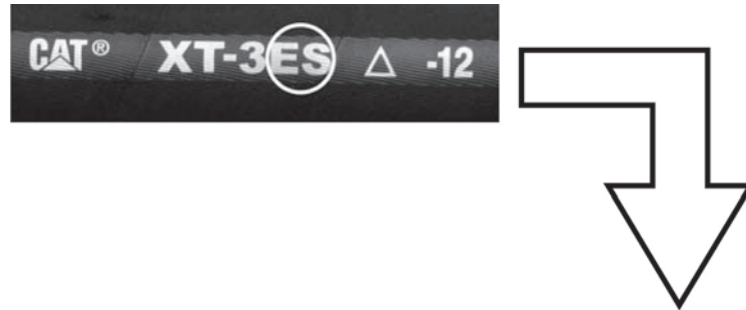
Cat High Pressure Hose & Coupling Products

XT ES Hose.....	37
XT-6ES Hose & Coupling Products.....	38
XT-6ES Hose Features and Benefits	38
XT-6ES Hose (2836/4136).....	38
XT-6ES Hose Reusable Couplings.....	40
XT-6ES Reusable Couplings Features and Benefits.....	40
ORFS	40
Cat Flange.....	41
Double Collet.....	43
Sleeves	43
XT-6ES Hose Permanent Couplings.....	44
ORFS	44
Code 61 Flange	47
Code 62 Flange	51
JIC 37° Female Swivel.....	52
NPTF	54
Cat Flange.....	55
Double Collet.....	60
Komatsu Style Flange.....	60
Metric.....	61
JIS	63
ISO.....	64
BSPP	65
XT-5ES Hose & Coupling Products.....	67
XT-5ES Hose Features and Benefits	67
XT-5ES Hose (1036/4199).....	67
XT-5ES Hose Reusable Couplings.....	68
XT-5ES Reusable Couplings Features and Benefits.....	68
ORFS	68
Code 61 Flange	69
Code 62 Flange	70
NPTF	71
Cat Flange.....	71
Double Collet.....	73
Braze On	74
Sleeves	74
XT-5ES Hose Permanent Couplings.....	75
ORFS	75
Code 61 Flange	76
Code 62 Flange	78
JIC 37°	79
Cat Flange.....	80
Double Collet.....	82
Metric.....	83
JIS	83
ISO.....	84
BSPP	85
XT-3ES Hose & Coupling Products.....	87
XT-3ES Hose Features and Benefits	87
XT-3ES Hose (736/4135).....	87
XT-3ES Hose Reusable Couplings.....	89
XT-3ES Reusable Couplings Features and Benefits.....	89
ORFS	89
Code 61 Flange	90
Code 62 Flange	95
JIC 37°	95

Cat High Pressure Hose & Coupling Products

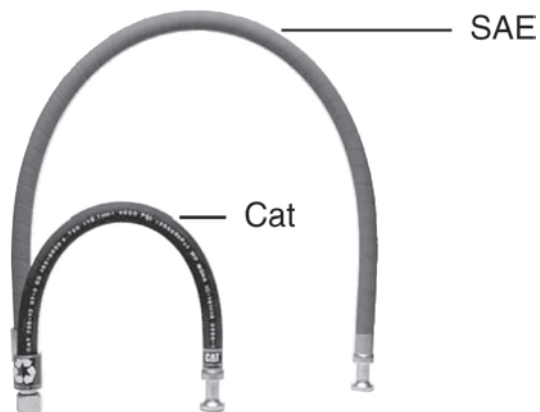
NPTF	96
Cat Flange.....	96
Double Collet.....	97
ISO	97
Braze On	97
Captive Flange Couplings	97
Sleeves	100
XT-3ES Hose Permanent Couplings.....	101
ORFS	101
Code 61 Flange	104
Code 62 Flange	108
JIC 37°	110
NPTF	113
STOR	113
Cat Flange.....	113
Komatsu Style Flange.....	114
Double Collet.....	115
Metric.....	116
JIS	117
ISO	119
BSPP	119
Snap To Connect.....	120

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 proprietary 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.



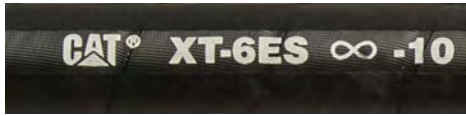
Enhanced Spiral = Extra Toughness!

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.



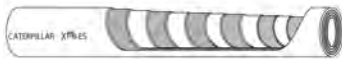
XT-6ES Hose & Coupling Products

XT-6ES Hose Features and Benefits



- 1/2 SAE 100R15 Minimum Bend Radius.
- Exceeds the SAE 100R15 Industry Standard
- Superior Abrasion Resistance Cover.
- Aged Impulse Tested to 1 Million Cycles (2 X Industry Standards).
- Working pressure of 6000 psi
- Black hose with a White embossed 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 (2836)



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	140.0 - 20305	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

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.

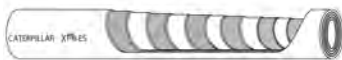
Temperature Range: -40°F to + 250°F (-40°C to +121°C)

Couplings: Collet-type reusable, skive type, IN Series coupling. See XT-6ES Hose Reusable Couplings section. Crimp-on permanent, skive type, XN, XN6 or XS6 Series coupling. 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 for specified Skive Lengths.

¹ Centerline of Hose

XT-6ES ToughGuard (4136)



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

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)

XT-6ES Hose & Coupling Products

XT-6ES ToughGuard (4136) (Cont'd.)

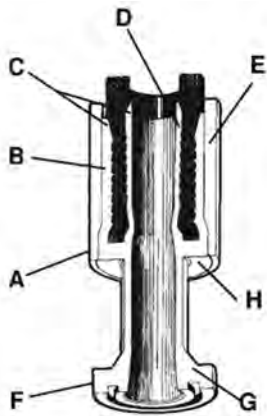
Couplings: Collet-type reusable, skive type, IN Series coupling. See XT-6ES Hose Reusable Couplings section. Crimp-on permanent, skive type, XN or XN Series coupling. Ssee XT-6ES Hose Permanent Couplings section. For related assembly equipment and tooling, see Tooling section.

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 for specified Skive Lengths.

¹ Centerline of Hose

XT-6ES Hose Reusable 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.

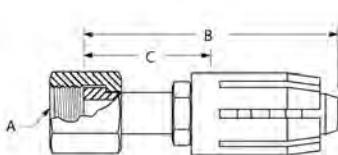
warning!

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.

- ALWAYS match hose, stem assemblies and sleeves according to markings (Δ / + / UHP / ∞).
- 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 (UHP) or XT-6 ES hose, stem assemblies and sleeves marked with an infinity sign (∞).

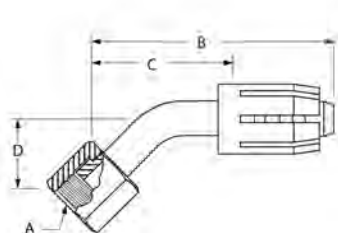


ORFS Female Swivel-Str



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
153-0866	25.4-1.00	-16	IN	1 7/16-12	-16	107.0-4.21	45.0-1.77	5K-9090

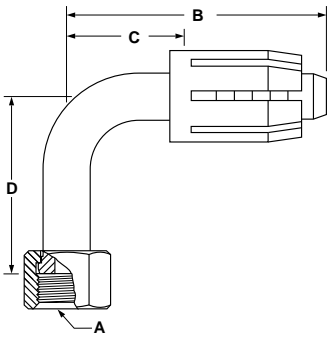
ORFS Female Swivel-45° Elbow



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

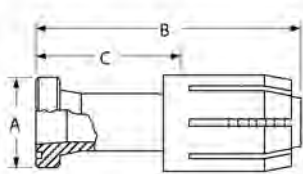
XT-6ES Hose Reusable Couplings

ORFS Female Swivel-90° Elbow



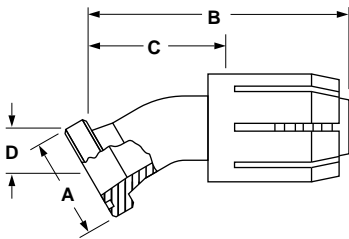
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
153-0870	25.4-1.00	-16	IN	1 7/16-12	-16	140.0-5.51	78.0-3.07	68.0-2.68	5K-9090
153-0872	25.4-1.00	-16	IN	1 7/16-12	-16	140.0-5.51	78.0-3.07	128.0-5.04	5K-9090

Cat Flange-Str



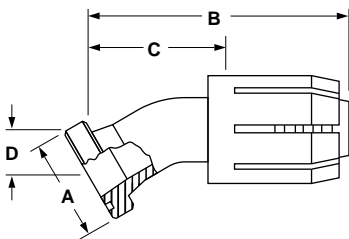
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
153-0835	25.4-1.00	-16	IN	47.6-1.87	-16	153.0-6.02	91.0-3.58	1P-3703
153-0851	25.4-1.00	-16	IN	54.0-2.13	-20	153.0-6.02	91.0-3.58	1P-3704
153-0873	31.8-1.25	-20	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
268-5969	50.8-2.00	-32	IN	79.4-3.13	-32	242.0-9.53	130.0-5.12	1P-3709

Cat Flange-22 1/2° 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)	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

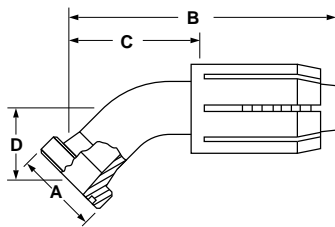
Cat Flange-30° Elbow



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)	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

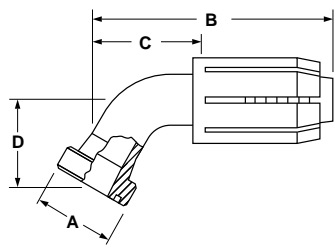
XT-6ES Hose Reusable Couplings

Cat Flange-45° Elbow



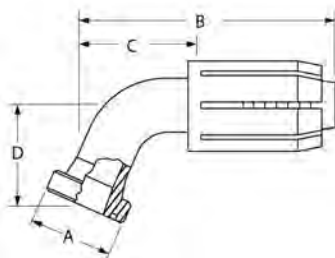
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
153-0842	25.4-1.00	-16	IN	47.6-1.87	-16	142.0-5.59	80.0-3.15	37.0-1.46	1P-3703
243-1916	25.4-1.00	-16	IN	47.6-1.87	-16	154.0-6.06	92.0-3.62	40.0-1.57	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

Cat Flange-60° Elbow



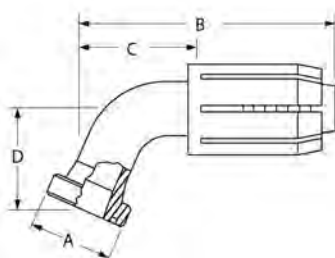
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
153-0844	25.4-1.00	-16	IN	47.6-1.87	-16	145.0-5.71	83.0-3.27	50.0-1.97	1P-3703
243-1917	25.4-1.00	-16	IN	47.6-1.87	-16	167.0-6.57	105.0-4.13	55.0-2.17	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
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

Cat Flange-67 1/2° 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)	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
153-0886	31.8-1.25	-20	IN	63.5-2.50	-24	221.0-8.70	150.2-5.91	60.0-2.36	1P-3705

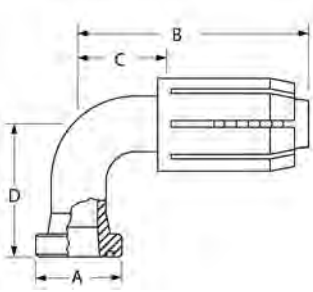
Cat Flange-80° Elbow



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)	O-RING SEAL
257-9359	50.8-2.00	-32	IN	79.4-3.13	-32	276.0-10.87	163.8-6.45	134.8-5.31	1P-3709

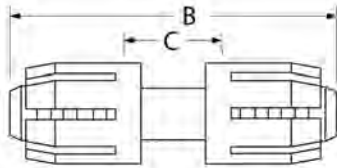
XT-6ES Hose Reusable Couplings

Cat Flange-90° Elbow



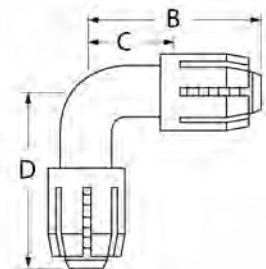
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
153-0847	25.4-1.00	-16	IN	47.6-1.87	-16	139.0-5.47	77.0-3.03	74.0-2.91	1P-3703
243-1931	25.4-1.00	-16	IN	47.6-1.87	-16	140.0-5.51	77.0-3.03	83.0-3.27	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
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

Double Collet-Str



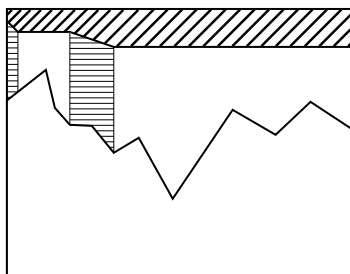
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
153-0861	25.4-1.00	-16	IN	177.0-6.97	53.0-2.09
153-0890	31.8-1.25	-20	IN	189.0-7.44	118.0-4.65

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

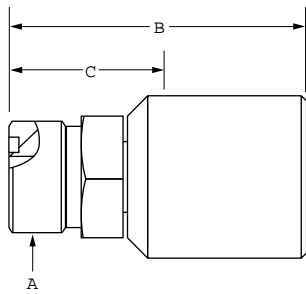
XT-6 ES Sleeve Information



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

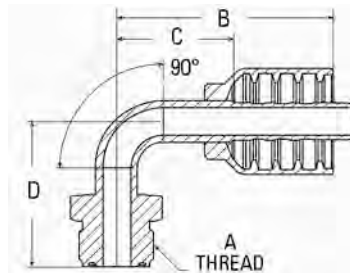
XT-6ES Hose Permanent Couplings

ORFS Male-Str



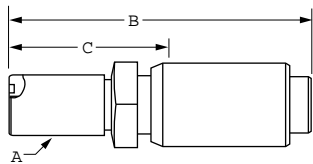
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6174	9.5-.37	-6	XN	11/16-16	-6	62.0-2.44	28.5-1.12	6V-8397
323-6175	9.5-.37	-6	XN	13/16-16	-8	65.0-2.56	31.1-1.22	6V-8398
323-6176	9.5-.37	-6	XN	1-14	-10	67.0-2.64	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
397-1935	15.9-.63	-10	XN	1-14	-10	101.0-3.98	55.0-2.17	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
499-1157	25.4-1.00	-16	XN	1 7/16-12	-16	114.0-4.49	49.0-1.93	5K-9090

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

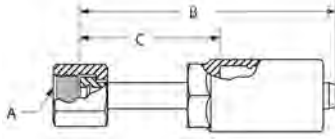
ORFS Male Bulkhead-Str



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
323-6177	9.5-.37	-6	XN	11/16-16	-6	81.0-3.19	47.3-1.86	6V-8397
333-9956	12.7-.50	-8	XN	13/16-16	-8	83.0-3.27	49.2-1.94	6V-8398

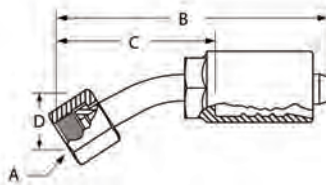
XT-6ES Hose Permanent Couplings

ORFS Female Swivel-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
323-6156	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
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

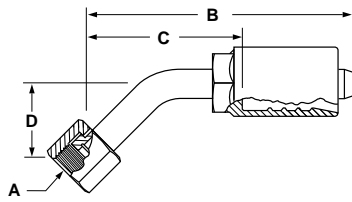
ORFS Female Swivel-30° Elbow



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
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	103.3-4.07	17.0-.67	6V-8400

XT-6ES Hose Permanent Couplings

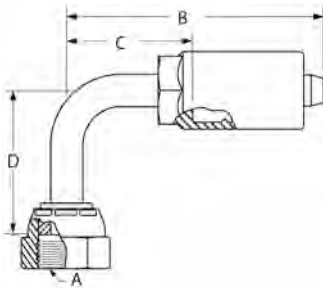
ORFS Female Swivel-45° Elbow



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
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
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
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

XT-6ES Hose Permanent Couplings

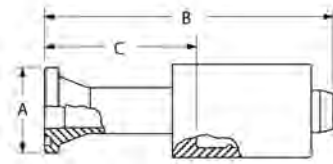
ORFS Female Swivel-90° Elbow



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
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
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	69.6-2.74	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

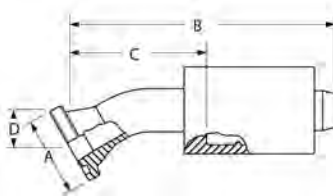
XT-6ES Hose Permanent Couplings

Code 61 Flange-Str



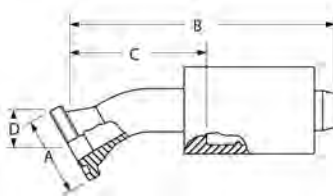
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6214	9.5-.37	-6	XN	30.2-1.19	-8	79.0-3.11	45.3-1.78	4J-5140
328-9137	12.7-.50	-8	XN	30.2-1.19	-8	84.0-3.31	49.7-1.96	4J-5140
328-9138	12.7-.50	-8	XN	38.1-1.50	-12	84.0-3.31	49.7-1.96	4J-5267
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	221.0-8.70	115.0-4.53	4J0-527

Code 61 Flange-22 1/2° 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)	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	131.0-5.16	66.0-2.60	11.0-.43	4J-0520
498-0776	25.4-1.00	-16	XN	50.8-2.00	-20	131.0-5.16	66.0-2.60	11.0-.43	4J-0522

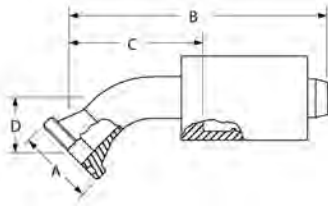
Code 61 Flange-30° Elbow



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)	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

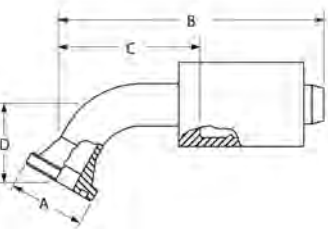
XT-6ES Hose Permanent Couplings

Code 61 Flange-45° Elbow



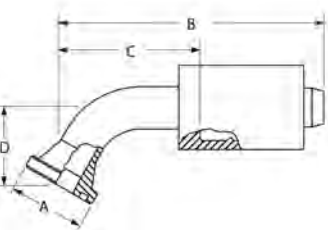
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6215	9.5-.37	-6	XN	30.2-1.19	-8	78.0-3.07	44.2-1.74	17.5-.69	4J-5140
328-9143	12.7-.50	-8	XN	30.2-1.19	-8	84.0-3.31	50.1-1.97	19.8-.78	4J-5140
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
583-1251	19.1-.75	-12	XN	44.5-1.75	-16	129.5-5.10	70.9-2.79	32.0-1.26	4J-0520
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
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

Code 61 Flange-60° 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)	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
583-1250	19.1-.75	-12	XN	44.5-1.75	-16	127.1-5.00	68.5-2.70	44.0-1.73	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
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

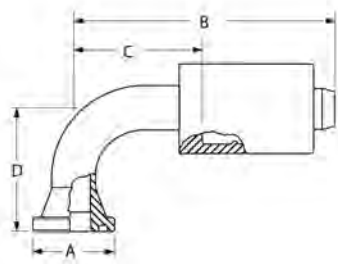
Code 61 Flange-67 1/2° Elbow



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)	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

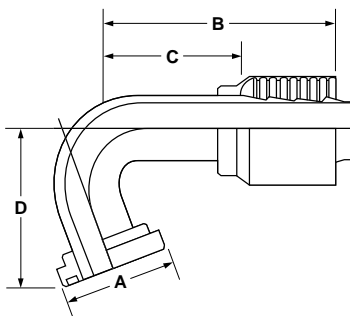
XT-6ES Hose Permanent Couplings

Code 61 Flange-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)	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
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
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
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
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
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
442-5566	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
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

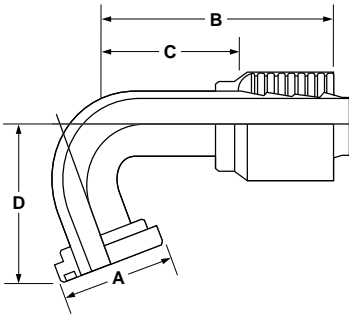
Code 61 Flange-110° Elbow



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)	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
442-5570	31.8-1.25	-20	XN6	50.8-2.00	-20	165.0-6.50	86.3-3.40	84.0-3.31	4J-0522

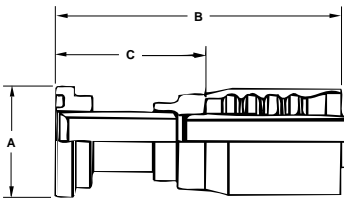
XT-6ES Hose Permanent Couplings

Code 61 Flange-135° Elbow



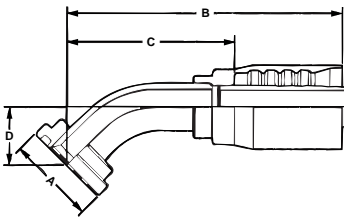
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9158	12.7-.50	-8	XN	30.2-1.19	-8	42.0-1.65	7.7-.30	54.1-2.13	4J-5140
432-2081	19.1-.75	-12	XN	38.1-1.50	-12	116.0-4.57	63.0-2.48	69.0-2.72	4J-5267
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	113.0-4.45	48.0-1.89	70.0-2.76	4J-5267
497-8301	25.4-1.00	-16	XN	44.5-1.75	-16	101.0-3.98	36.0-1.42	88.0-3.46	4J-0520

Code 62 Flange-Str



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)	O-RING SEAL
323-6218	9.5-.37	-6	XN	31.8-1.25	-8	79.0-3.11	45.3-1.78	4J-5140
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	69.0-2.72	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	4J0-527

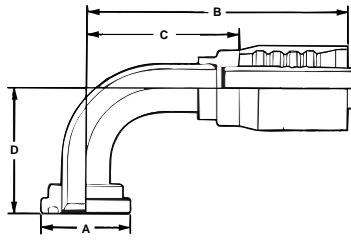
Code 62 Flange-45° Elbow



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)	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
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	4J5-267
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
498-8408	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

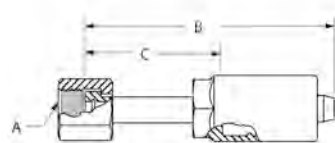
XT-6ES Hose Permanent Couplings

Code 62 Flange-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)	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
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
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
498-8411	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
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
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
505-3902	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
578-6966	50.8-2.0	-32	XS6	71.4-2.81	-32	278.1-10.95	166.6-6.56	150.0-5.91	4J-0524

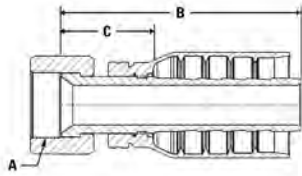
JIC 37° Female Swivel-Str



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)
323-6180	9.5-.37	-6	XN	7/16-20	-4	55.0-2.17	31.5-1.24
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
328-9110	12.7-.50	-8	XN	3/4-16	-8	156.0-6.14	121.9-4.80
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
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	105.0-4.13	40.0-1.57
442-5607	31.8-1.25	-20	XN6	1 5/8-12	-20	122.0-4.80	49.0-1.93

XT-6ES Hose Permanent Couplings

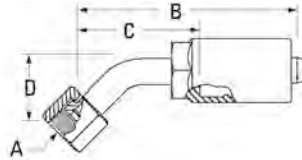
JIC 37° Female Swivel-Str High Pressure



Part Number	HOSE I.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

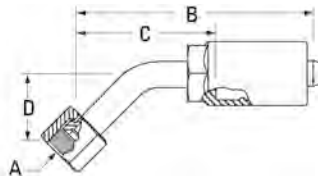
Note: Oversized Hex nut for High Pressure Rating

JIC 37° Female Swivel-30° Elbow



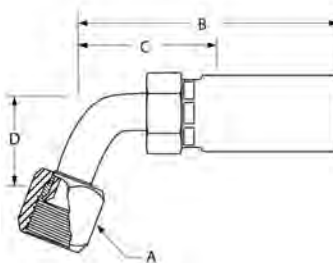
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
499-1159	25.4-1.00	-16	XN	1 5/16-12	-16	155.0-6.10	89.0-3.50	27.0-1.06

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	44.2-1.74	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
328-9115	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

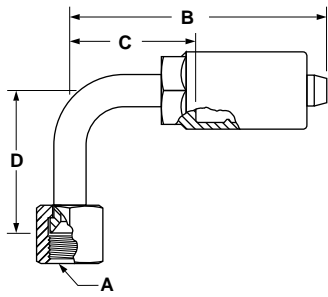
JIC 37° Female Swivel-60° Elbow



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

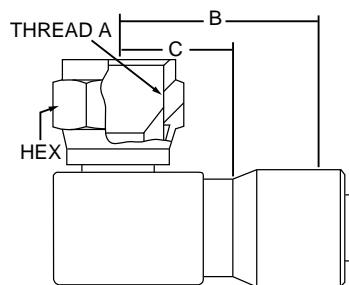
XT-6ES Hose Permanent Couplings

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)
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
323-6194	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
323-6199	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
328-9128	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	93-3.66	47-1.85	52-2.05
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

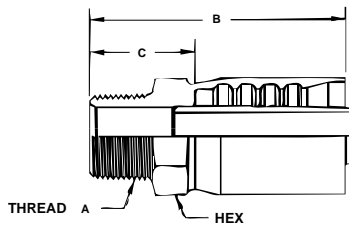
JIC 37° Female Swivel Block-90° Elbow



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)
323-6200	9.5-.37	-6	XN	9/16-18	-6	58.0-2.28	24.0-.94	20.7-.81

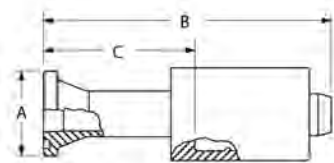
XT-6ES Hose Permanent Couplings

NPTF Male-Str



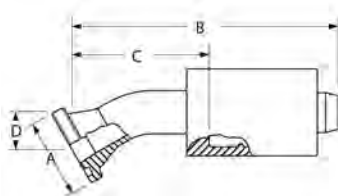
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6208	9.5-.37	-6	XN	1/4-18	-4	64.0-2.52	30.8-1.21
323-6209	9.5-.37	-6	XN	3/8-18	-6	65.0-2.56	31.8-1.25
323-6210	9.5-.37	-6	XN	1/2-14	-8	70.0-2.76	36.4-1.43
328-9133	12.7-.50	-8	XN	3/8-18	-6	67.0-2.64	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	84.0-3.31	38.0-1.50
397-1948	15.9-.63	-10	XN	3/4-14	-12	87.0-3.43	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	107.0-4.21	42.0-1.65
499-1177	25.4-1.00	-16	XN	1-11 1/2	-16	115.0-4.53	49.0-1.93

Cat Flange-Str



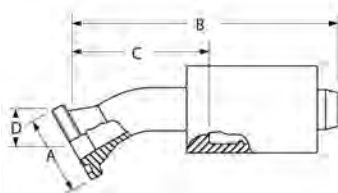
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
328-9165	12.7-.50	-8	XN	41.3-1.63	-12	86.0-3.39	52.2-2.06	1P-3702
432-2105	19.1-.75	-12	XN	41.3-1.63	-12	138.0-5.43	84.0-3.31	1P-3702
432-2116	19.1-.75	-12	XN	47.6-1.87	-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
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
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

Cat Flange-10° 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)	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

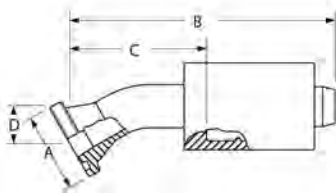
Cat Flange-15° Elbow



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)	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

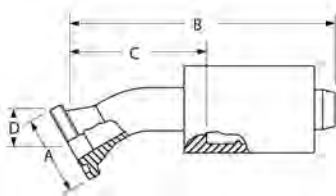
XT-6ES Hose Permanent Couplings

Cat Flange-22 1/2° Elbow



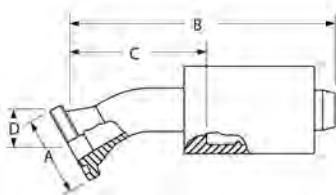
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2106	19.1-.75	-12	XN	41.3-1.63	-12	128.0-5.04	74.0-2.91	17.0-.67	1P-3702
432-2117	19.1-.75	-12	XN	47.6-1.87	-16	128.0-5.04	74.0-2.91	17.0-.67	1P-3703
496-2310	25.4-1.00	-16	XN	47.6-1.87	-16	148.0-5.83	83.0-3.27	18.0-.71	1P-3703
496-9726	25.4-1.00	-16	XN	54.0-2.13	-20	148.0-5.83	83.0-3.27	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

Cat Flange-25° 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)	O-RING SEAL
501-0431	19.1-.75	-12	XN	41.3-1.63	-12	250.0-9.84	197.0-7.76	42.0-1.65	1P-3702

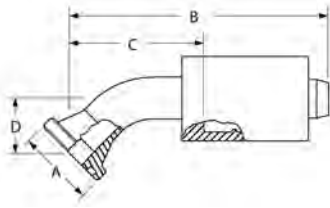
Cat Flange-30° Elbow



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)	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
496-9727	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

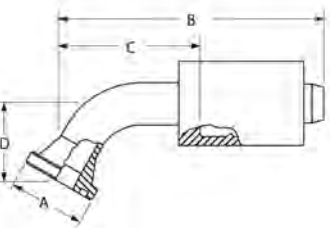
XT-6ES Hose Permanent Couplings

Cat Flange-45° Elbow



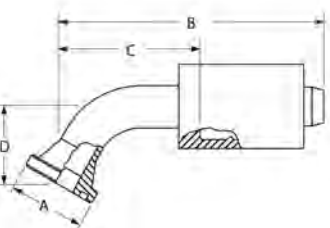
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2108	19.1-.75	-12	XN	41.3-1.63	-12	127.0-5.00	73.0-2.87	35.0-1.38	1P-3702
432-2119	19.1-.75	-12	XN	47.6-1.87	-16	127.0-5.00	73.0-2.87	35.0-1.38	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
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
496-2315	25.4-1.00	-16	XN	47.6-1.87	-16	190.0-7.48	125.0-4.92	78.0-3.07	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-3705
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

Cat Flange-60° 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)	O-RING SEAL
432-2109	19.1-.75	-12	XN	41.3-1.63	-12	123.0-4.84	70.0-2.76	47.0-1.85	1P-3702
432-2120	19.1-.75	-12	XN	47.6-1.87	-16	123.0-4.84	70.0-2.76	47.0-1.85	1P-3703
496-2316	25.4-1.00	-16	XN	47.6-1.87	-16	149.0-5.87	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	84.1-3.31	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
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

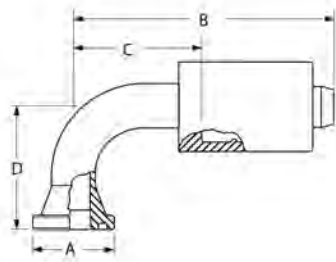
Cat Flange-67 1/2° Elbow



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)	O-RING SEAL
432-2110	19.1-.75	-12	XN	41.3-1.63	-12	120.0-4.72	67.0-2.64	53.0-2.09	1P-3702
496-2317	25.4-1.00	-16	XN	47.6-1.87	-16	145.0-5.71	80.0-3.15	56.0-2.20	1P-3703
496-9730	25.4-1.00	-16	XN	54.0-2.13	-20	145.0-5.71	80.0-3.15	56.0-2.20	1P-3704
496-9731	25.4-1.00	-16	XN	54.0-2.13	-20	150.0-5.91	85.0-3.35	69.0-2.72	1P-3704
347-9724	25.4-1.00	-16	IN	54.0-2.13	-20	183.0-7.20	125.0-4.92	64.5-2.54	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
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

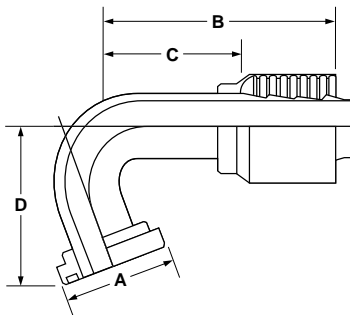
XT-6ES Hose Permanent Couplings

Cat Flange-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 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
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	96.2-3.79	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

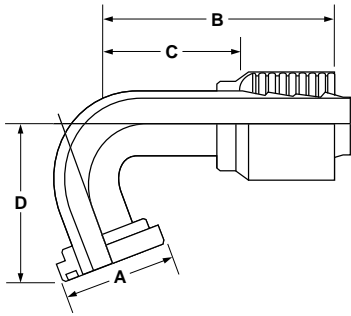
Cat Flange-100° Elbow



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)	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

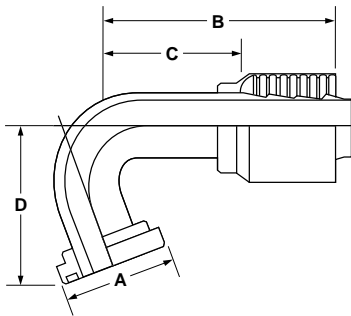
XT-6ES Hose Permanent Couplings

Cat Flange-105° Elbow



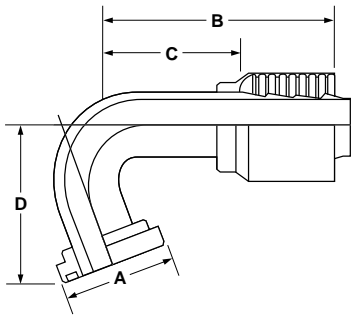
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
583-4906	38.1-1.50	-24	XN6	63.5-2.50	-24	229.3-9.03	147.2-5.80	155.0-6.10	1P-3705
463-0980	50.8-2.00	-32	XS6	79.4-3.13	-32	233.0-9.17	118.0-4.65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

Cat Flange-110° Elbow



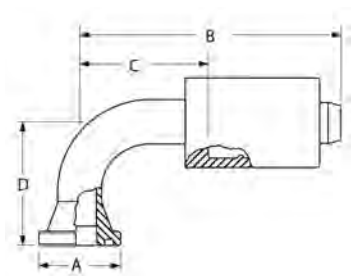
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
496-2323	25.4-1.00	-16	XN	47.6-1.87	-16	120.0-4.72	55.0-2.17	85.0-3.35	1P-3703
496-9735	25.4-1.00	-16	XN	54.0-2.13	-20	120.0-4.72	55.0-2.17	85.0-3.35	1P-3704
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

Cat Flange-120° 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)	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

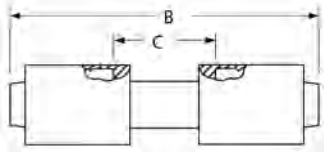
Cat Flange-High Vibration Coupling-90° Elbow Deg



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)	O-RING SEAL
347-9725	25.4-1.00	-16	IN	54.0-2.13	-20	175.0-6.89	116.0-4.57	82.0-3.23	1P-3704

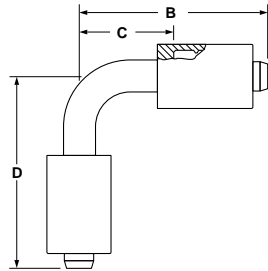
XT-6ES Hose Permanent Couplings

Double Collet-Str



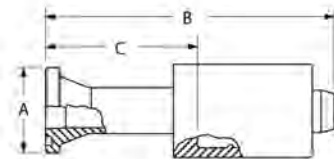
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
332-1650	9.5-.37	-6	XN	113.0-4.45	45.5-1.79
328-9183	12.7-.50	-8	XN	114.0-4.49	45.5-1.79
471-6416	19.1-.75	-12	XN	157.0-6.18	53.0-2.09
499-1175	25.4-1.00	-16	XN	192.0-7.56	52.0-2.05

Double Collet-90° Elbow



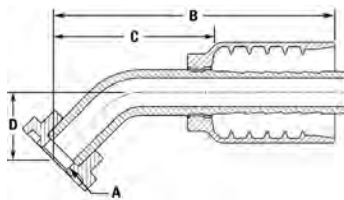
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
328-9185	12.7-.50	-8	XN	123.0-4.84	83.0-3.27	85.0-3.35
328-9184	12.7-.50	-8	XN	85.0-3.35	45.0-1.77	85.0-3.35
432-2135	19.1-.75	-12	XN	115.0-4.53	62.0-2.44	115.0-4.53
499-1176	25.4-1.00	-16	XN	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

Komatsu Style Flange-Str



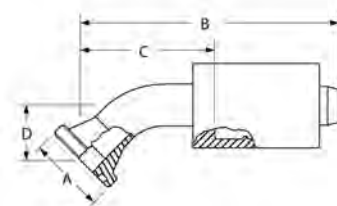
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD DASH SIZE	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
328-9167	12.7-.50	-8	XN	-10	34.0-1.34	84.0-3.31	49.7-1.96	4J-8996
397-1966	15.9-.63	-10	XN	-10	34.1-1.34	96.0-3.78	49.7-1.96	4J-8996

Komatsu Style Flange-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
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

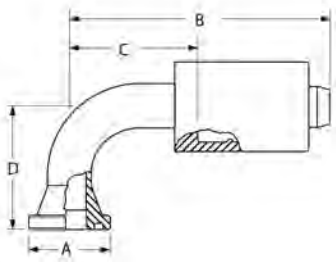
Komatsu Style Flange-60° Elbow



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
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

XT-6ES Hose Permanent Couplings

Komatsu Style Flange-90° 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
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

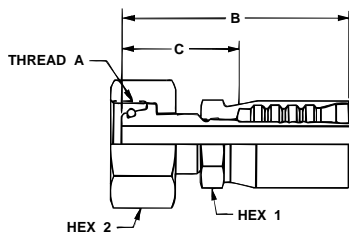
Metric Female Swivel 24° Taper w/O-Ring-45° Elbow (Light)

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
503-7988	9.5-.37	-6	XN	M18 x 1.5	12.0-0.47	78-3.07	45-1.77	19-0.75	8U-0598
503-4448	12.7-.50	-8	XN	M22 x 1.5	15.0-0.59	83-3.27	50-1.97	20-0.79	3E-4298

Metric Male 24° Taper-Str (Heavy)

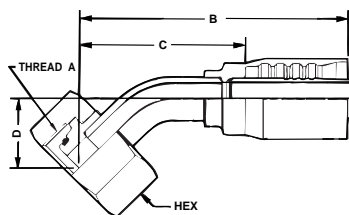
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
397-1965	15.9-.63	-10	XN	M30 x 2.0	86.0-3.39	40.0-1.57
541-4980	25.4-1.00	-16	XN	M42 x 2.0	115.0-4.53	45.6-1.80
501-1380	31.8-1.25	-20	XN6	M52 x 2.0	134.0-5.28	56.1-2.21

Metric Female Swivel 24° Taper w/O-Ring-Str (Heavy)



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
323-6232	9.5-.37	-6	XN	M20 x 1.5	12.0-0.47	64.0-2.52	30.9-1.22	3E-4297
323-6233	9.5-.37	-6	XN	M22 x 1.5	14.0-0.55	68.0-2.68	34.4-1.35	7T-0508
328-9179	12.7-.50	-8	XN	M24 x 1.5	16.0-0.63	70.0-2.76	36.2-1.43	3E-4298
397-1962	15.9-.63	-10	XN	M30 x 2.0	20.0-0.79	99.0-3.90	53.0-2.09	3E-4299
432-2128	19.1-.75	-12	XN	M36 x 2.0	25.0-0.98	110.0-4.33	56.0-2.20	3E-6762
499-1171	25.4-1.00	-16	XN	M36 x 2.0	25.0-0.98	122.0-4.80	57.0-2.24	3E-6762
499-1172	25.4-1.00	-16	XN	M42 x 2.0	30.0-1.18	124.0-4.88	59.0-2.32	3E-6763
442-5611	31.8-1.25	-20	XN6	M52 x 2.0	38.0-1.50	143.0-5.63	64.8-2.55	3E-6764

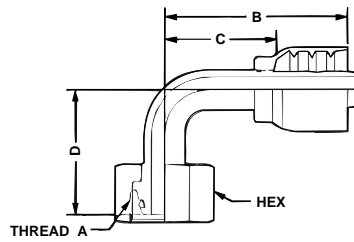
Metric Female Swivel 24° Taper w/O-Ring-45° Elbow (Heavy)



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
432-2129	19.1-.75	-12	XN	M36 x 2.0	25.0-0.98	122-4.80	69-2.72	30-1.18	3E-6762
499-1173	25.4-1.00	-16	XN	M42 x 2.0	30.0-1.18	150-5.91	85-3.35	38-1.50	3E-6733

XT-6ES Hose Permanent Couplings

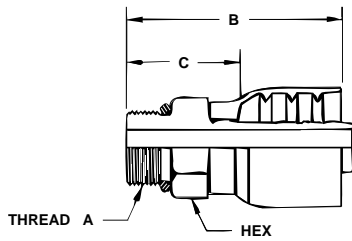
Metric Female Swivel 24° Taper w/O-Ring-90° Elbow (Heavy)



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
323-6236	9.5-.37	-6	XN	M20 x 1.5	12.0-0.47	68.0-2.68	34.2-1.35	37.6-1.48	3E-4297
323-6237	9.5-.37	-6	XN	M22 x 1.5	14.0-0.55	68.0-2.68	34.2-1.35	37.6-1.48	7T-0508
431-9024	9.5-.37	-6	XN	M18 - 1.5	12.0-0.47	68.0-2.68	34.0-1.34	38.0-1.50	3E-4296
328-9181	12.7-.50	-8	XN	M24 x 1.5	16.0-0.63	74.0-2.91	39.5-1.56	43.9-1.73	3E-4298
397-1964	15.9-.63	-10	XN	M30 x 2.0	20.0-0.79	88-3.46	47-1.85	55-2.17	3E-4299
432-2130	19.1-.75	-12	XN	M36 x 2.0	25.0-0.98	107-4.21	53-2.09	58-2.28	3E-6762
499-1174	25.4-1.00	-16	XN	M42 x 2.0	30.0-1.18	135.0-5.31	70.0-2.76	76.0-2.99	3E-6763

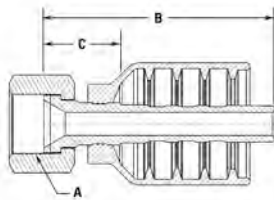
XT-6ES Hose Permanent Couplings

STOR Male-Str



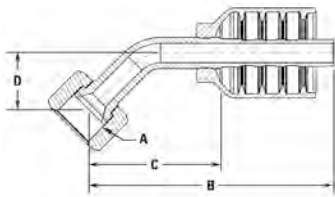
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6212	9.5-.37	-6	XN	9/16-18	-6	59.0-2.32	25.9-1.02	3J-1907
328-9136	12.7-.50	-8	XN	3/4-16	-8	65.0-2.56	30.9-1.22	3K-0360
416-2095	15.9-.63	-10	XN	7/8-14	-10	78.0-3.07	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	107.0-4.21	42.0-1.65	7M-8485

JIS 30° Flare Female Swivel-Str



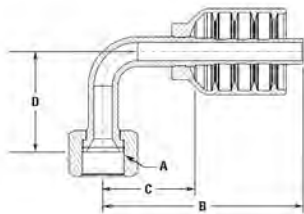
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
519-4716	9.5-.37	-6	XN	3/8-19	-6	53-2.09	20-0.79
519-3997	12.7-.50	-8	XN	1/2-14	-8	57-2.24	24-0.94
397-1956	15.9-.63	-10	XN	M24 x 1.5	-10	87-3.42	35-1.38
519-4009	19.1-.75	-12	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 30° Flare Female Swivel-45° Elbow



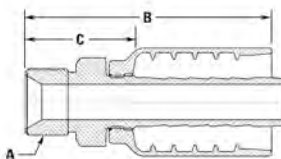
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
519-4717	9.5-.37	-6	XN	3/8-19	-6	80-3.15	47-1.85	20-0.79
519-3998	12.7-.50	-8	XN	1/2-14	-8	84-3.31	50-1.97	22-0.87
519-4010	19.1-.75	-12	XN	3/4-14	-12	120-4.72	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 30° Flare 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)
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

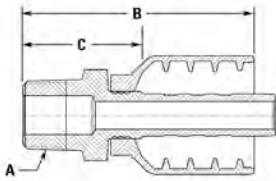
JIS 60° Male-Str



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)
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

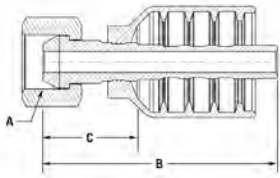
XT-6ES Hose Permanent Couplings

JIS Male Tapered Pipe-Str



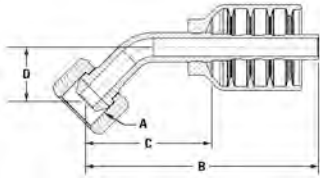
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
513-4472	12.7-.50	-8	XN	1/2-14	-8	70-2.76	36-1.42
513-4473	19.1-.75	-12	XN	3/4-14	-12	95-3.74	42-1.65
513-4474	25.4-1.00	-16	XN	1-11	-16	110-4.33	45-1.77

ISO 8434-6 BSPP Conical Seat-Female Swivel-Str



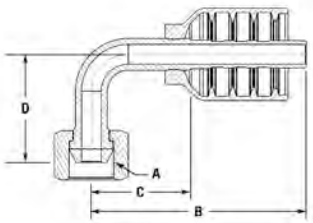
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
518-3997	9.5-.37	-6	XN	3/8-19	-6	67.0-2.64	27.2-1.07
518-0821	12.7-.50	-8	XN	1/2-14	-8	68.0-2.68	27.6-1.09
554-6965	15.9-.63	-10	XN	5/8-14	-10	87.5-3.44	36.0-1.42
554-6966	15.9-.63	-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

ISO 8434-6 BSPP Conical 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)
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

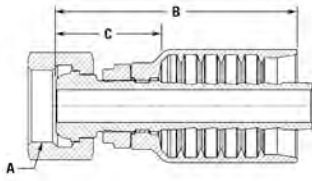
ISO 8434-6 BSPP Conical Seat-Female Swivel-90° Elbow



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)
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

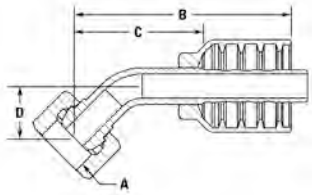
XT-6ES Hose Permanent Couplings

BSPP Spherical Seat-Female Swivel-Str



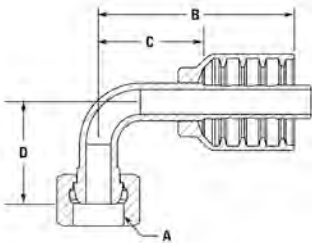
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6221	9.5-.37	-6	XN	3/8-19	-6	61.9-2.44	22.5-0.89
323-6223	9.5-.37	-6	XN	1/2-14	-8	56.6-2.23	23.1-0.91
328-9171	12.7-.50	-8	XN	1/2-14	-8	57.3-2.26	23.2-0.91
397-1960	15.9-.63	-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

BSPP Spherical Seat-Female Swivel-45° Elbow



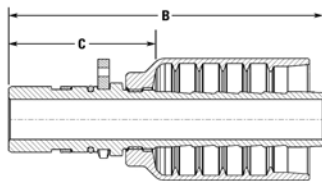
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6224	9.5-.37	-6	XN	3/8-19	-6	80.3-3.16	46.8-1.84	20.1-0.79
328-9172	12.7-.50	-8	XN	1/2-14	-8	84.5-3.33	50.4-1.98	20.1-0.79
416-2091	15.9-.63	-10	XN	5/8-14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

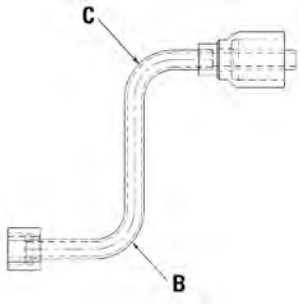
WEO Plug-In Coupling



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	-

XT-6ES Hose Permanent Couplings

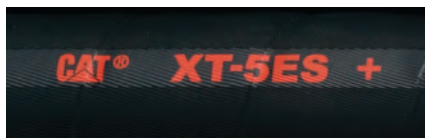
ORFS HFL-Multibend (Used on Backhoe Loaders)



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	7J9108	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

XT-5ES Hose & Coupling Products

XT-5ES Hose Features and Benefits



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

XT-5ES Hose (1036)



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	33.3 - 1.31	-12	XN	140.0 - 20305	35.0 - 5076	120 - 4.72
456-8483	25.4 - 1.00	39.8 - 1.57	-16	PL / MCSH / XN	140.0 - 20305	35.0 - 5076	157 - 6.18
456-8484	31.8 - 1.25	51.3 - 2.02	-20	MCSH	140.0 - 20305	35.0 - 5076	210 - 8.27
456-8485	38.1 - 1.50	58.8 - 2.31	-24	MCSH / XN6	140.0 - 20305	35.0 - 5076	255 - 10.04
456-8486	50.8 - 2.00	72.7 - 2.86	-32	XS6	140.0 - 20305	35.0 - 5076	635 - 25.00

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 or MCSH Series coupling. See XT-5ES Hose Reusable Couplings section. Crimp-on permanent, skive type, MCSH, XN, XN6 or XS6 Series coupling. 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 for specified Skive Lengths.

¹ Centerline of Hose

XT-5ES ToughGuard (4199)



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	33.3 - 1.31	-12	XN	140.0 - 20305	35.0 - 5076	120 - 4.72
456-8488	25.4 - 1.00	39.8 - 1.57	-16	PL / MCSH / XN	140.0 - 20305	35.0 - 5076	157 - 6.18
456-8489	31.8 - 1.25	51.2 - 2.02	-20	MCSH	140.0 - 20305	35.0 - 5076	210 - 8.27
456-8490	38.1 - 1.50	58.8 - 2.31	-24	MCSH / XN6	140.0 - 20305	35.0 - 5076	255 - 10.04

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)

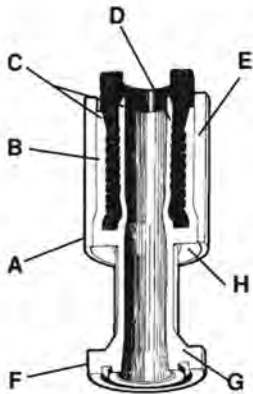
Couplings: Collet-type reusable, skive type, PL or MCSH Series coupling. See XT-5ES Hose Reusable Couplings section. Crimp-on permanent, skive type, MCSH, XN or XN6 Series coupling. See XT-5ES Hose Permanent Couplings section. For related assembly equipment and tooling, see Tooling section.

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 for specified Skive Lengths.

¹ Centerline of Hose

XT-5ES Hose Reusable Couplings

XT-5ES 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

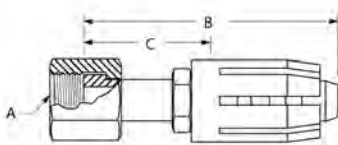
warning!

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.

- ALWAYS match hose, stem assemblies and sleeves according to markings (Δ / + / UHP / ∞).
- 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 (UHP) or XT-6 ES hose, stem assemblies and sleeves marked with an infinity sign (∞).

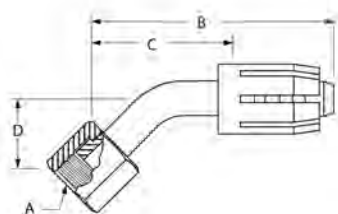


ORFS Female Swivel-Str



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
7X-1452	25.4-1.00	-16	PL	1 7/16-12	-16	112.0-4.41	45.1-1.78	5K-9090

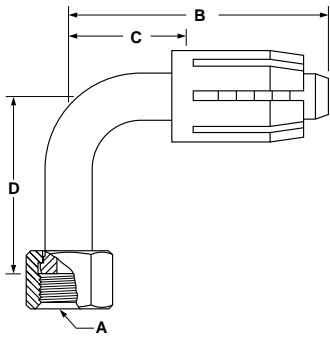
ORFS Female Swivel-45° Elbow



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

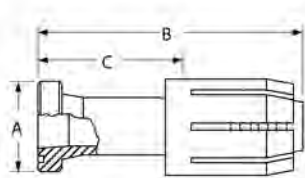
XT-5ES Hose Reusable Couplings

ORFS Female Swivel-90° Elbow



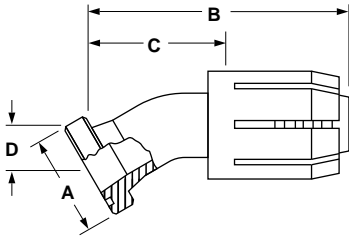
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
7X-4815	25.4-1.00	-16	PL	1 7/16-12	-16	130.0-5.12	62.8-2.47	68.0-2.68	5K-9090
7X-4816	25.4-1.00	-16	PL	1 7/16-12	-16	130.0-5.12	62.8-2.47	128.0-5.04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

Code 61 Flange-Str



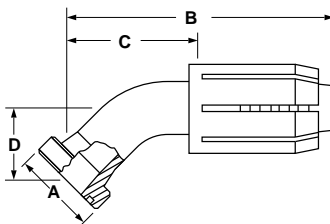
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
155-2866	25.4-1.00	-16	PL	44.5-1.75	-16	151.0-5.94	83.8-3.30	4J-0520
155-2876	25.4-1.00	-16	PL	44.5-1.75	-16	152.0-5.98	85.1-3.35	4J-0520
155-2867	31.8-1.25	-20	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

Code 61 Flange-22 1/2° 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)	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
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

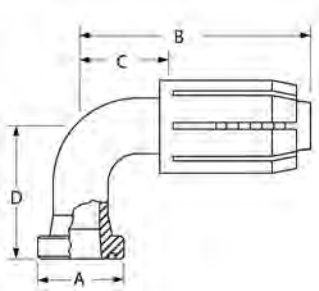
Code 61 Flange-45° Elbow



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)	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

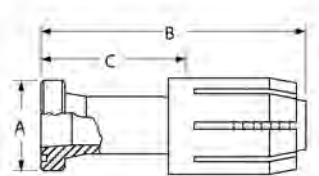
XT-5ES Hose Reusable Couplings

Code 61 Flange-90° Elbow



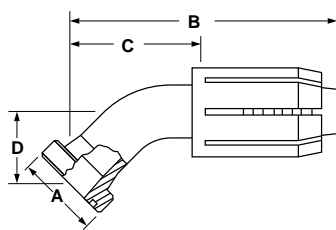
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
155-2872	25.4-1.00	-16	PL	44.5-1.75	-16	151.0-5.94	83.8-3.30	60.5-2.38	4J-0520
155-2873	31.8-1.25	-20	PL	50.8-2.00	-20	184.0-7.24	106.9-4.21	86.3-3.40	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

Code 62 Flange-Str



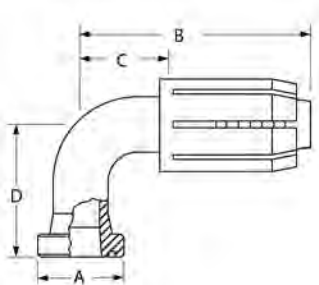
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
155-2877	31.8-1.25	-20	PL	54.0-2.13	-20	160.0-6.30	82.5-3.25	4J-0522	4J-0522
155-2878	38.1-1.50	-24	PL	63.5-2.50	-24	165.0-6.50	82.4-3.24	4J-0524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

Code 62 Flange-45° 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)	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

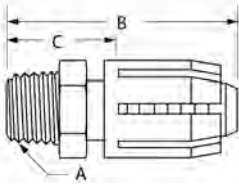
Code 62 Flange-90° Elbow



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)	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

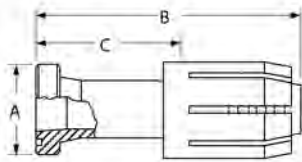
XT-5ES Hose Reusable Couplings

NPTF Male-Str



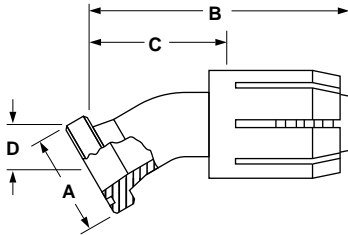
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
6V-2448	25.4-1.00	-16	PL	1-11 1/2	-16	131.0-5.16	63.3-2.49

Cat Flange-Str



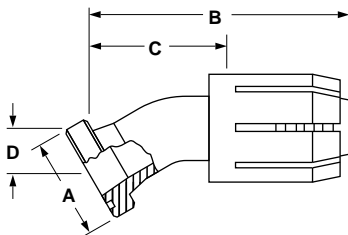
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
5P-1125	25.4-1.00	-16	PL	47.6-1.87	-16	157.0-6.18	89.8-3.54	1P-3703
5P-1131	25.4-1.00	-16	PL	54.0-2.13	-20	157.0-6.18	89.8-3.54	1P-3704
2P-6733	31.8-1.25	-20	PL	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

Cat Flange-22 1/2° 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)	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

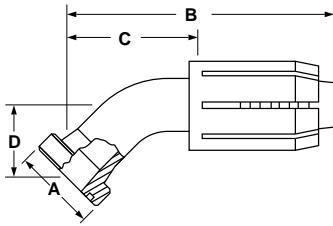
Cat Flange-30° Elbow



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)	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

XT-5ES Hose Reusable Couplings

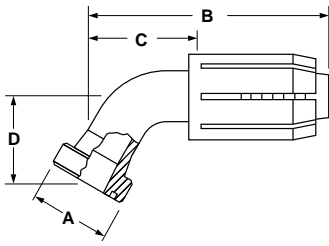
Cat Flange-45° Elbow



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)	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

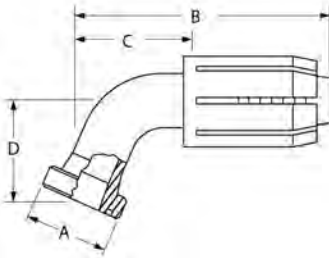
XT-5ES Hose Reusable Couplings

Cat Flange-60° Elbow



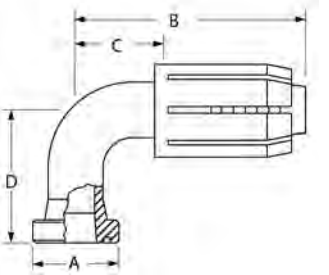
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5P-1129	25.4-1.00	-16	PL	47.6-1.87	-16	145.0-5.71	77.3-3.04	50.0-1.97	1P-3703
5P-1135	25.4-1.00	-16	PL	54.0-2.13	-20	145.0-5.71	77.3-3.04	50.0-1.97	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-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

Cat Flange-67 1/2° Elbow



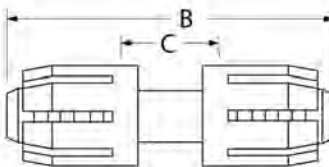
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5P-2620	25.4-1.00	-16	PL	47.6-1.87	-16	156.0-6.14	88.3-3.48	56.5-2.22	1P-3703
5P-2621	25.4-1.00	-16	PL	54.0-2.13	-20	156.0-6.14	88.3-3.48	56.5-2.22	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

Cat Flange-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)	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

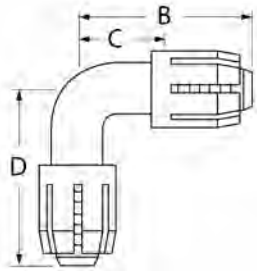
Double Collet-Str



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

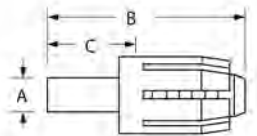
XT-5ES Hose Reusable Couplings

Double Collet-90° Elbow



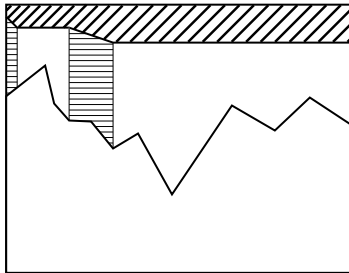
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
5P-1307	25.4-1.00	-16	PL	136.0-5.35	68.3-2.69	135.5-5.33
5P-1308	31.8-1.25	-20	PL	167.0-6.57	89.4-3.52	166.5-6.56

Braze On-Str



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

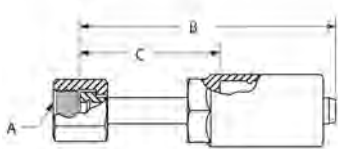
XT-5 ES Sleeve Information



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

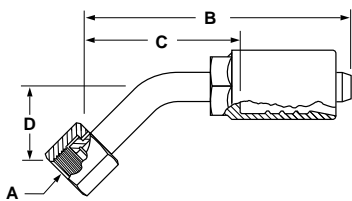
XT-5ES Hose Permanent Couplings

ORFS Female Swivel-Str



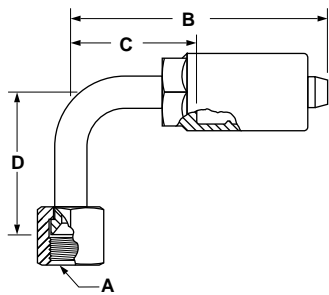
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
432-2022	19.1-.75	-12	XN	1-14	-10	102.0-4.02	48.0-1.89	7J-9108
432-2008	19.1-.75	-12	XN	1 3/16-12	-12	104.0-4.09	50.0-1.97	6V-9746
432-2019	19.1-.75	-12	XN	1 7/16-12	-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

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

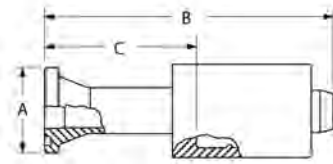
ORFS Female Swivel-90° Elbow



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	69.6-2.74	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

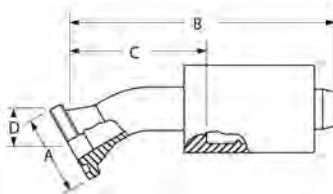
XT-5ES Hose Permanent Couplings

Code 61 Flange-Str



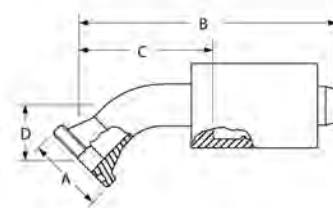
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
432-2070	19.1-.75	-12	XN	38.1-1.50	-12	124.0-4.88	70.0-2.76	4J-5267
432-2083	19.1-.75	-12	XN	44.5-1.75	-16	124.0-4.88	70.0-2.76	4J-0520
432-2093	19.1-.75	-12	XN	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
274-2247	38.1-1.50	-24	MCSH	71.4-2.81	-32	182.0-7.17	105.4-4.15	4J-0527
561-8112	50.8-2.00	-32	XS6	71.4-2.81	-32	221.0-8.70	115.0-4.53	4J0-527

Code 61 Flange-22 1/2° 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)	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	131.0-5.16	66.0-2.60	11.0-.43	4J-0520
498-0776	25.4-1.00	-16	XN	50.8-2.00	-20	131.0-5.16	66.0-2.60	11.0-.43	4J-0522

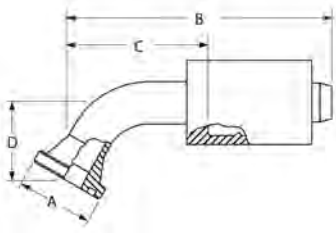
Code 61 Flange-45° Elbow



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)	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
583-1251	19.1-.75	-12	XN	44.5-1.75	-16	129.5-5.10	70.9-2.79	32.0-1.26	4J-0520
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
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
274-2246	31.8-1.25	-20	MCSH	60.3-2.37	-24	201.0-7.91	128.4-5.06	36.6-1.44	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

XT-5ES Hose Permanent Couplings

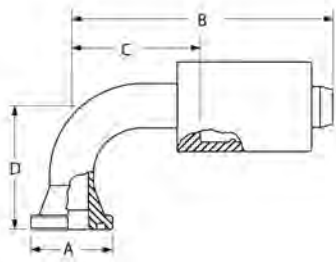
Code 61 Flange-60° Elbow



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)	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
583-1250	19.1-.75	-12	XN	44.5-1.75	-16	127.1-5.00	68.5-2.70	44.0-1.73	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	187.8-7.39	109.5-4.31	45.0-1.77	4J-0522
442-5561	31.8-1.25	-20	XN6	60.3-2.37	-24	187.8-7.39	109.5-4.31	45.0-1.77	4J-0524
588-1166	38.1-1.50	-24	XN4	50.8-2.00	-20	165.0-6.50	107.9-4.25	51.5-2.03	4J-0522
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
579-5138	50.8-2.00	-32	XS6	71.4-2.81	-32	270.0-10.63	158.5-6.24	78.0-3.07	4J-0527

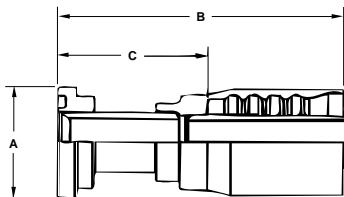
XT-5ES Hose Permanent Couplings

Code 61 Flange-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)	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
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
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
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
442-5566	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
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

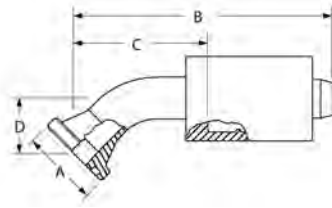
Code 62 Flange-Str



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)	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	69.0-2.72	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
274-2220	38.1-1.50	-24	MCSH	79.4-3.13	-32	182.0-7.17	105.4-4.15	4J-0527
561-8115	50.8-2.00	-32	XS6	71.4-2.81	-32	221.0-8.70	116.0-4.57	4J0-527

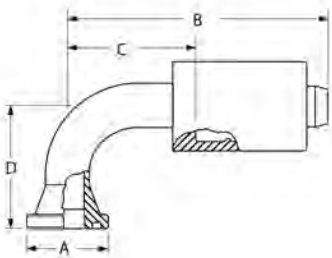
XT-5ES Hose Permanent Couplings

Code 62 Flange-45° Elbow



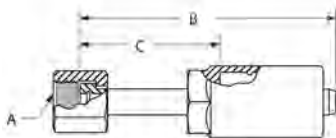
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2100	19.1-.75	-12	XN	41.3-1.63	-12	121.0-4.76	67.0-2.64	29.0-1.14	4J-5267
432-2102	19.1-.75	-12	XN	47.6-1.87	-16	121.0-4.76	68.0-2.68	29.0-1.14	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	4J5-267
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
498-8408	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

Code 62 Flange-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)	O-RING SEAL
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
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
498-8411	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
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
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
505-3902	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
578-6966	50.8-2.0	-32	XS6	71.4-2.81	-32	278.1-10.95	166.6-6.56	150.0-5.91	4J-0524

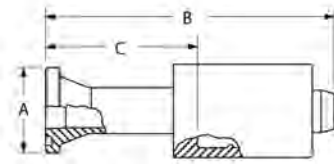
JIC 37° Female Swivel-Str



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)
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	105.0-4.13	40.0-1.57
442-5607	31.8-1.25	-20	XN6	1 5/8-12	-20	122.0-4.80	49.0-1.93

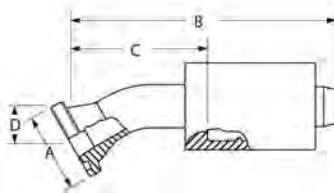
XT-5ES Hose Permanent Couplings

Cat Flange-Str



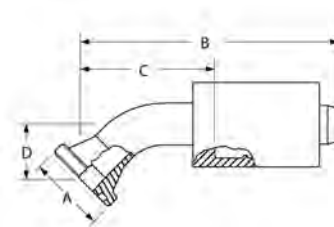
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
432-2105	19.1-.75	-12	XN	41.3-1.63	-12	138.0-5.43	84.0-3.31	1P-3702
432-2116	19.1-.75	-12	XN	47.6-1.87	-16	138.0-5.43	84.0-3.31	1P-3703
496-2307	25.4-1.00	-16	XN	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
456-3393	50.8-2.00	-32	XS6	79.4-3.13	-32	298.0-11.73	193.0-7.60	1P-3709

Cat Flange-30° 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)	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

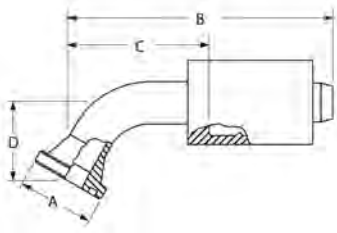
Cat Flange-45° Elbow



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)	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
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
496-2315	25.4-1.00	-16	XN	47.6-1.87	-16	190.0-7.48	125.0-4.92	78.0-3.07	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
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

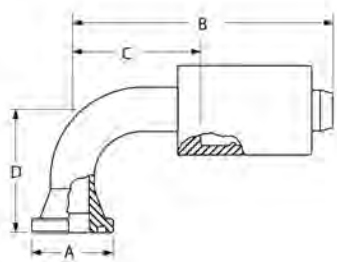
XT-5ES Hose Permanent Couplings

Cat Flange-60° 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)	O-RING SEAL
432-2109	19.1-.75	-12	XN	41.3-1.63	-12	123.0-4.84	70.0-2.76	47.0-1.85	1P-3702
432-2120	19.1-.75	-12	XN	47.6-1.87	-16	123.0-4.84	70.0-2.76	47.0-1.85	1P-3703
496-2316	25.4-1.00	-16	XN	47.6-1.87	-16	149.0-5.87	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	84.1-3.31	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
442-5588	31.8-1.25	-20	XN6	63.5-2.50	-24	196.0-7.72	118.4-4.66	60.0-2.36	1P-3705
505-3887	38.1-1.50	-24	XN6	63.5-2.50	-24	205.0-8.07	122.3-4.81	56.0-2.20	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
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

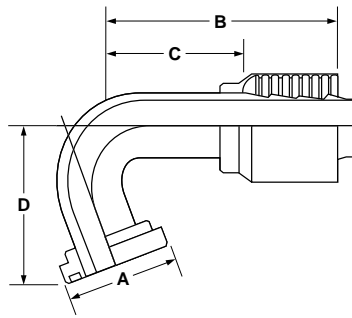
Cat Flange-90° Elbow



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)	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
496-9732	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
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
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
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
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
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

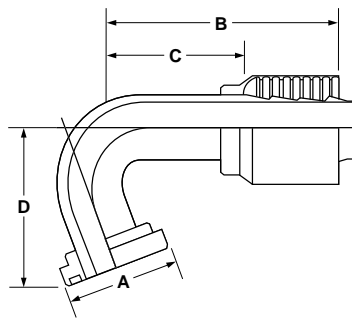
XT-5ES Hose Permanent Couplings

Cat Flange-105° Elbow



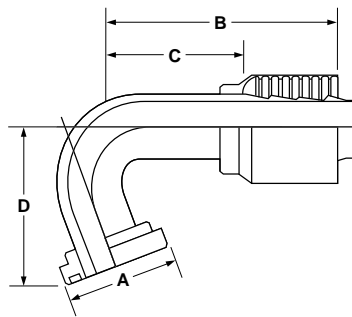
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
583-4906	38.1-1.50	-24	XN6	63.5-2.50	-24	229.3-9.03	147.2-5.80	155.0-6.10	1P-3705
463-0980	50.8-2.00	-32	XS6	79.4-3.13	-32	233.0-9.17	118.0-4.65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

Cat Flange-110° Elbow



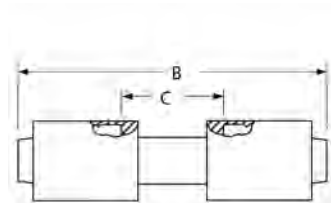
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
496-2323	25.4-1.00	-16	XN	47.6-1.87	-16	120.0-4.72	55.0-2.17	85.0-3.35	1P-3703
496-9735	25.4-1.00	-16	XN	54.0-2.13	-20	120.0-4.72	55.0-2.17	85.0-3.35	1P-3704
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

Cat Flange-120° 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)	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

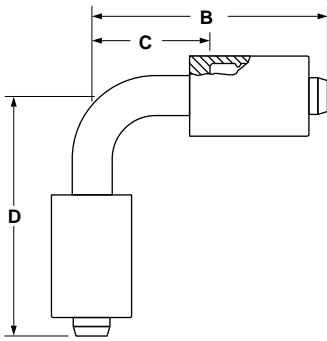
Double Collet-Str



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

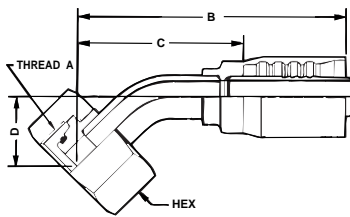
XT-5ES Hose Permanent Couplings

Double Collet-90° Elbow



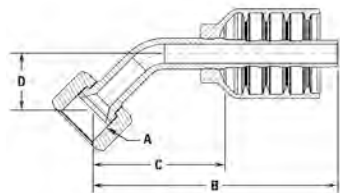
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
432-2135	19.1-.75	-12	XN	115.0-4.53	62.0-2.44	115.0-4.53
499-1176	25.4-1.00	-16	XN	135.0-5.31	70.0-2.76	60.0-2.36
591-1736	31.8-1.25	-20	XN6	172.0-6.77	89.4-3.52	172.0-6.77
505-3890	38.1-1.50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

Metric Female Swivel 24° Taper w/O-Ring-45° Elbow (Heavy)



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
432-2129	19.1-.75	-12	XN	M36 x 2.0	25.0-0.98	122-4.80	69-2.72	30-1.18	3E-6762
499-1173	25.4-1.00	-16	XN	M42 x 2.0	30.0-1.18	150-5.91	85-3.35	38-1.50	3E-6733

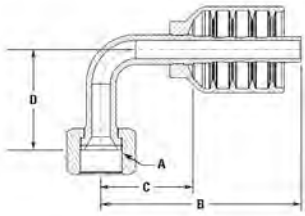
JIS 30° Flare Female Swivel-45° Elbow



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)
519-4010	19.1-.75	-12	XN	3/4-14	-12	120-4.72	68-2.68	29-1.14

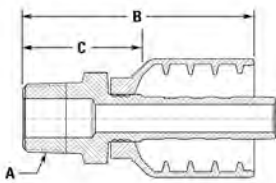
XT-5ES Hose Permanent Couplings

JIS 30° Flare Female Swivel-90° Elbow



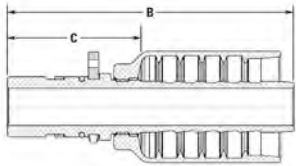
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
519-4011	19.1-.75	-12	XN	3/4-14	-12	106-4.17	53-2.09	58-2.28

JIS Male Tapered Pipe-Str



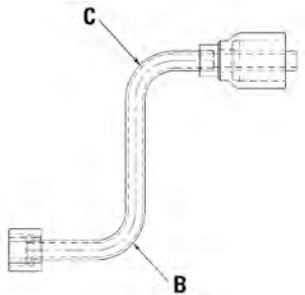
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
513-4473	19.1-.75	-12	XN	3/4-14	-12	95-3.74	42-1.65
513-4474	25.4-1.00	-16	XN	1-11	-16	110-4.33	45-1.77

WEO Plug-In Coupling



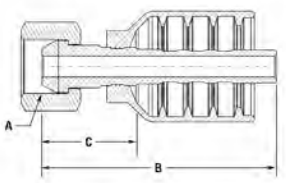
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
505-1188	19.1 - 0.75	-12	XN	-12 - 0.47	110 - 4.33	51 - 2.00	8U-5951
583-7081	19.1 - 0.75	-12	XN	-12 - 0.47	110 - 4.33	51 - 2.00	-

ORFS HFL-Multibend (Used on 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	7J9108	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

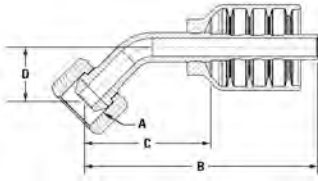
ISO 8434-6 BSPP Conical Seat-Female Swivel-Str



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)
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

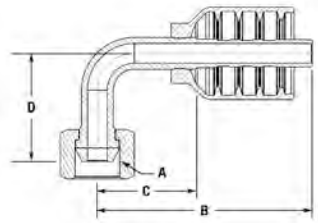
XT-5ES Hose Permanent Couplings

ISO 8434-6 BSPP Conical Seat-Female Swivel-45° Elbow



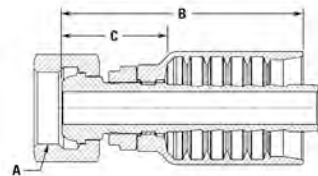
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
502-2107	19.1-.75	-12	XN	3/4-14	-12	126.1-4.96	67.5-2.66	29.0-1.14
499-1180	25.4-1.00	-16	XN	1-11	-16	152.8-6.02	82.3-3.24	35.0-1.38
499-1183	25.4-1.00	-16	XN	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

ISO 8434-6 BSPP Conical Seat-Female Swivel-90° Elbow



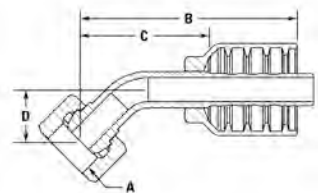
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
518-3999	9.5-.37	-6	XN	3/8-19	-6	73.9-2.91	34.1-1.34	37.0-1.46
518-0823	12.7-.50	-8	XN	1/2-14	-8	80.0-3.15	39.5-1.56	41.0-1.61
554-6968	15.9-.63	-10	XN	5/8-14	-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

BSPP Spherical Seat-Female Swivel-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)
323-6221	9.5-.37	-6	XN	3/8-19	-6	61.9-2.44	22.5-0.89
323-6223	9.5-.37	-6	XN	1/2-14	-8	56.6-2.23	23.1-0.91
397-1960	15.9-.63	-10	XN	5/8-14	-10	87.5-3.44	36.0-1.42

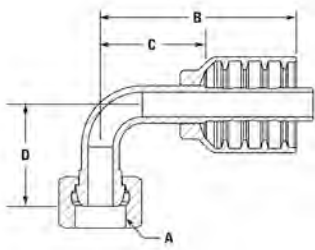
BSPP Spherical Seat-Female Swivel-45° Elbow



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

XT-5ES Hose Permanent Couplings

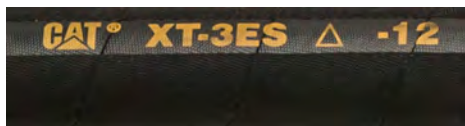
BSPP Spherical Seat-Female Swivel-90° Elbow



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)
323-6225	9.5-.37	-6	XN	3/8-19	-6	67.7-2.67	34.2-1.35	37.1-1.46
416-2093	15.9-.63	-10	XN	5/8-14	-10	98.6-3.88	47.1-1.85	43.7-1.72

XT-3ES Hose & Coupling Products

XT-3ES Hose Features and Benefits



- 1/2 SAE 100R12 Minimum Bend Radius.
- Exceeds the SAE 100R12 Industry Standard
- Superior Abrasion Resistance Cover.
- Aged Impulse Tested to 1 Million Cycles (2 X Industry Standards).
- Working pressure between 2500 to 4000 psi
- Black hose with a Yellow embossed 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 (736)



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 / ESA / XN	112.0 - 16244	28.0 - 4061	102 - 4.02
456-8469	19.1 - .75	30.9 - 1.22	-12	TR / ESA / XN	112.0 - 16244	28.0 - 4061	121 - 4.76
456-8470	25.4 - 1.00	38.2 - 1.50	-16	TR / ESA / 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

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, ESA, 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 for specified Skive Lengths.

¹ Centerline of Hose

XT-3ES ToughGuard (4135)



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 / ESA / XN	112.0 - 16244	28.0 - 4061	102 - 4.02
456-8477	19.1 - .75	30.9 - 1.22	-12	TR / ESA / XN	112.0 - 16244	28.0 - 4061	121 - 4.76
456-8478	25.4 - 1.00	38.2 - 1.50	-16	TR / ESA / 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

XT-3ES Hose & Coupling Products

XT-3ES ToughGuard (4135) (Cont'd.)

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)
456-8480	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

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)

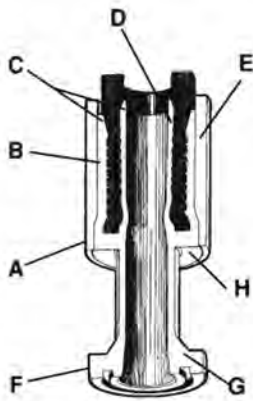
Couplings: Collet-type reusable, skive type, TR Series coupling. See XT-3ES Hose Reusable Couplings section. Crimp-on permanent, skive type, ESA, S4G, XN or XN4 Series coupling. See XT-3ES Hose Permanent Couplings section. For related assembly equipment and tooling, see Tooling section.

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 for specified Skive Lengths.

¹ Centerline of Hose

XT-3ES Hose Reusable Couplings

XT-3ES Reusable Couplings Features and Benefits



XT-3 ES Hose Couplings have the same advantages as XT-5 ES Hose Couplings as well as these added features for 2500 to 4000 psi (17 to 28 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 performance after repeated reuse.

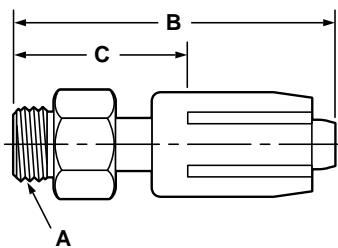
warning!

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.

- ALWAYS match hose, stem assemblies and sleeves according to markings (Δ / + / UHP / ∞).
- 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 (UHP) or XT-6 ES hose, stem assemblies and sleeves marked with an infinity sign (∞).

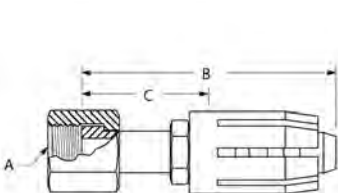


ORFS Male-Str



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
184-7202	31.8-1.25	-20	TR	1 11/16-12	-20	125.0-4.92	68.0-2.68	6V-8400

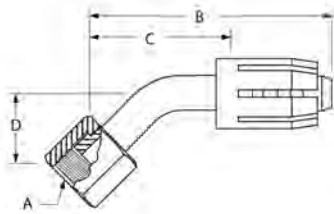
ORFS Female Swivel-Str



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
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

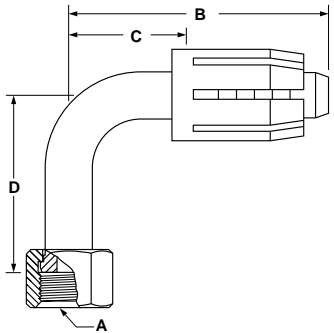
XT-3ES Hose Reusable Couplings

ORFS Female Swivel-45° Elbow



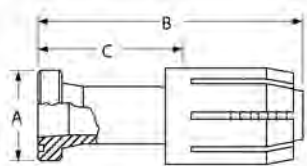
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
6V-9958	25.4-1.00	-16	TR	1 7/16-12	-16	143.0-5.63	93.1-3.67	32.0-1.26	5K-9090
155-2860	31.8-1.25	-20	TR	1 11/16-12	-20	170.0-6.69	110.3-4.34	35.0-1.38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

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

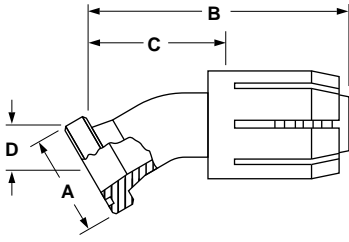
Code 61 Flange-Str



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)	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
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

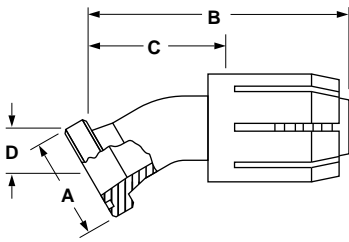
XT-3ES Hose Reusable Couplings

Code 61 Flange-22 1/2° Elbow



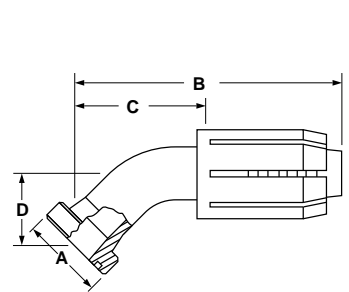
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
3S-8497	25.4-1.00	-16	TR	44.5-1.75	-16	123.0-4.84	73.1-2.88	11.0-.43	4J-0520
7S-0571	25.4-1.00	-16	TR	50.8-2.00	-20	123.0-4.84	73.1-2.88	11.0-.43	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
3S-8569	31.8-1.25	-20	TR	50.8-2.00	-20	129.0-5.08	68.8-2.71	18.0-.71	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
3S-9328	38.1-1.50	-24	TR	60.3-2.37	-24	161.0-6.34	94.8-3.73	22.5-.89	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

Code 61 Flange-30° 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)	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
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
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

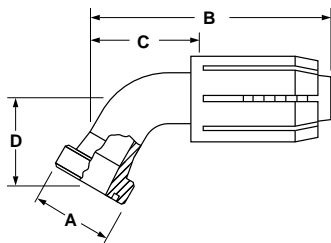
Code 61 Flange-45° Elbow



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)	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

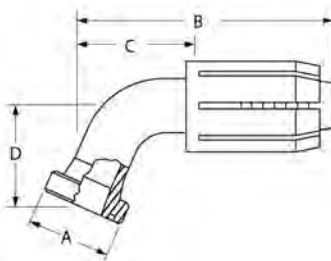
XT-3ES Hose Reusable Couplings

Code 61 Flange-60° Elbow



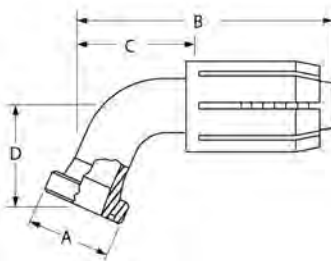
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
3S-8501	25.4-1.00	-16	TR	44.5-1.75	-16	120.0-4.72	69.6-2.74	38.5-1.52	4J-0520
7S-0574	25.4-1.00	-16	TR	50.8-2.00	-20	120.0-4.72	69.6-2.74	38.5-1.52	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
142-5137	38.1-1.50	-24	TR	50.8-2.00	-20	162.0-6.38	95.8-3.77	51.5-2.03	4J-0522
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

Code 61 Flange-67 1/2° Elbow



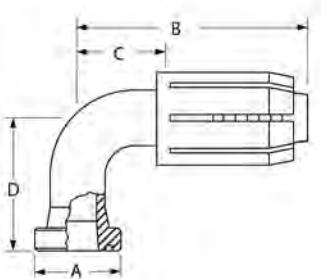
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
3S-8502	25.4-1.00	-16	TR	44.5-1.75	-16	120.0-4.72	70.1-2.76	44.5-1.75	4J-0520
5S-3454	25.4-1.00	-16	TR	50.8-2.00	-20	120.0-4.72	70.1-2.76	44.5-1.75	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

Code 61 Flange-69° 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)	O-RING SEAL
7S-4078	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

Code 61 Flange-90° Elbow



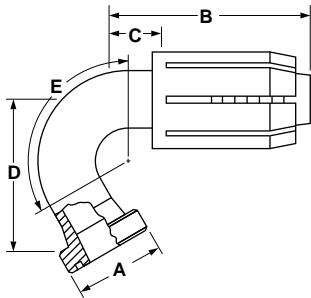
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5S-2105	25.4-1.00	-16	TR	44.5-1.75	-16	120.0-4.72	69.6-2.74	54.0-2.13	4J-0520
7S-0577	25.4-1.00	-16	TR	44.5-1.75	-16	120.0-4.72	69.6-2.74	57.0-2.24	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

XT-3ES Hose Reusable Couplings

Code 61 Flange-90° Elbow (Cont'd.)

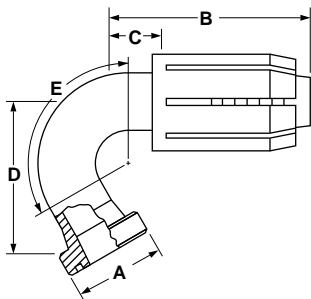
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5S-3811	31.8-1.25	-20	TR	50.8-2.00	-20	132.0-5.20	72.3-2.85	91.0-3.58	4J-0522
5S-3826	31.8-1.25	-20	TR	50.8-2.00	-20	132.0-5.20	72.3-2.85	102.0-4.02	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
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

Code 61 Flange-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
6V-4686	19.1-.75	-12	TR	44.5-1.75	-16	96.0-3.78	50.4-1.98	59.5-2.34	4J-0520

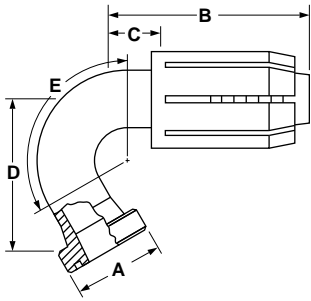
Code 61 Flange-110 Elbow



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
5P-9956	38.1-1.50	-24	TR	60.3-2.37	-24	183.0-7.20	116.3-4.58	119.0-4.69	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

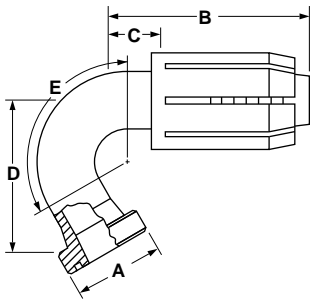
XT-3ES Hose Reusable Couplings

Code 61 Flange-125° Elbow



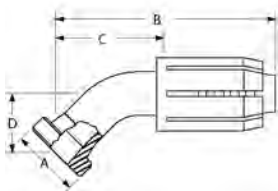
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
5P-4321	50.8-2.00	-32	TR	71.4-2.81	-32	181.0-7.13	108.7-4.28	150.5-5.93	4J-0527

Code 61 Flange-135° Elbow



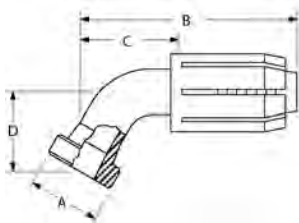
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
6V-4688	19.1-.75	-12	TR	38.1-1.50	-12	128.0-5.04	82.9-3.26	69.0-2.72	4J-5267
6V-1236	25.4-1.00	-16	TR	44.5-1.75	-16	105.0-4.13	54.6-2.15	87.5-3.44	4J-0520

Code 61 Flange No Groove-45° 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)	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

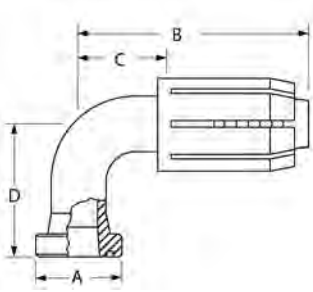
Code 61 Flange No Groove-60° Elbow



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)	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

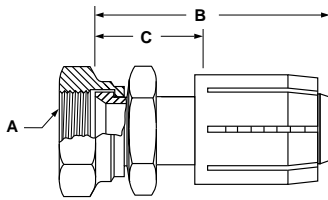
XT-3ES Hose Reusable Couplings

Code 62 Flange-90° Elbow



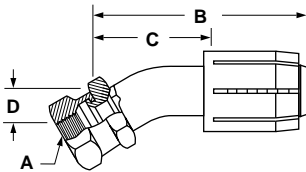
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
196-7776	31.8-1.25	-20	TR	54.0-2.13	-20	142.0-5.59	83.0-3.27	73.0-2.87	4J-0522

JIC 37° Female Swivel-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)
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

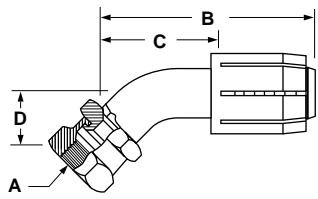
JIC 37° Female Swivel-30° Elbow



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

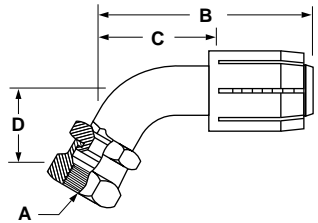
XT-3ES Hose Reusable Couplings

JIC 37° Female Swivel-45° Elbow



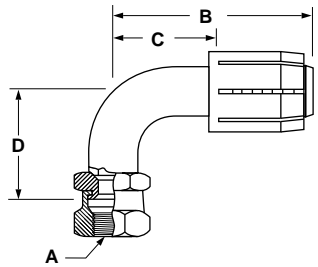
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
2P-1409	25.4-1.00	-16	TR	1 5/16-12	-16	140.0-5.51	90.1-3.55	42.0-1.65
155-2834	31.8-1.25	-20	TR	1 5/8-12	-20	178.0-7.01	117.8-4.64	43.0-1.69
155-2835	38.1-1.50	-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



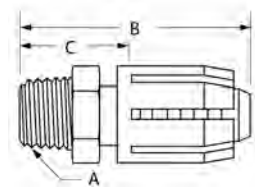
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
1P-9892	25.4-1.00	-16	TR	1 5/16-12	-16	135.0-5.31	84.6-3.33	57.0-2.24

JIC 37° Female Swivel-90° Elbow



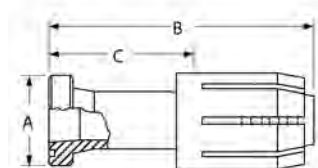
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
8K-5114	25.4-1.00	-16	TR	1 5/16-12	-16	120.0-4.72	69.6-2.74	66.5-2.62
1P-9589	25.4-1.00	-16	TR	1 5/16-12	-16	115.0-4.53	65.1-2.56	85.5-3.37
2P-1411	25.4-1.00	-16	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

NPTF 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)
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

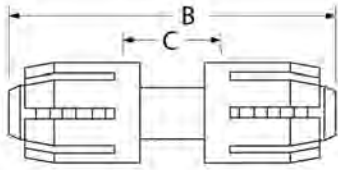
Cat Flange-Str



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)	O-RING SEAL
3E-6868	31.8-1.25	-20	TR	54.0-2.13	-20	147.0-5.79	86.8-3.42	1P-3704

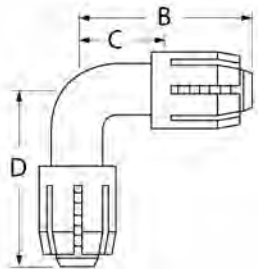
XT-3ES Hose Reusable Couplings

Double Collet-Str



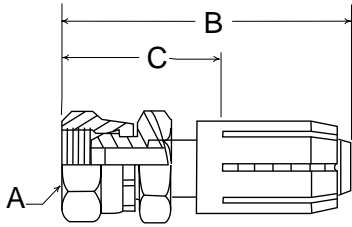
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
2P-2523	25.4-1.00	-16	TR	145.0-5.71	45.4-1.79
2P-1315	31.8-1.25	-20	TR	171.0-6.73	51.3-2.02
3P-0644	38.1-1.50	-24	TR	184.0-7.24	51.1-2.01
3P-0645	50.8-2.00	-32	TR	195.0-7.68	51.0-2.01

Double Collet-90° Elbow



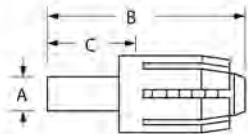
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
5P-4699	25.4-1.00	-16	TR	127.0-5.00	77.1-3.04	127.0-5.00
5P-4700	31.8-1.25	-20	TR	149.0-5.87	89.3-3.52	149.0-5.87
6V-2897	38.1-1.50	-24	TR	165.0-6.50	98.8-3.89	165.0-6.50
6V-0298	50.8-2.00	-32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

ISO 8434-6 BSPP Conical Seat-Female Swivel-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
9X-7574	25.4-1.00	-16	TR	1-11	-16	105.15-4.14	55.22-2.17	6V-0409

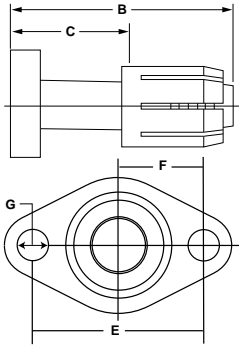
Braze On-Str



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

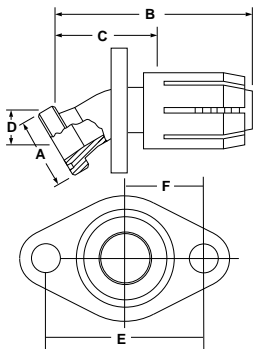
XT-3ES Hose Reusable Couplings

Captive Flange Code 61 (2 Hole)-Str



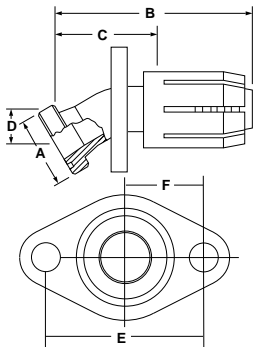
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	E FLANGE HOLE SPACING	F FLANGE HOLE SPACING	O-RING SEAL
439-0804	19.1-.75	-12	XN	38.1-1.50	-12	124.0-4.88	70.0-2.76	64.2-2.53	32.1-1.26	4J-5267
7S-0614	25.4-1.00	-16	TR	44.5-1.75	-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
8S-8869	38.1-1.50	-24	TR	60.3-2.37	-24	145.0-5.71	78.3-3.08	82.5-3.25	41.3-1.63	4J-0524

Captive Flange Code 61 (2 Bolt)-22 1/2° 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
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

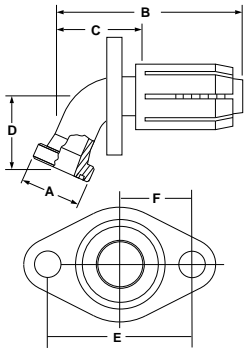
Captive Flange Code 61 (2 Bolt)-30° Elbow



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-4663	19.1-.75	-12	TR	38.1-1.50	-12	100.0-3.94	54.9-2.16	15.0-.59	64.3-2.53	32.1-1.26	4J-5267
7S-0685	25.4-1.00	-16	TR	44.5-1.75	-16	111.0-4.37	61.1-2.41	16.0-.63	64.3-2.53	32.1-1.26	4J-0520

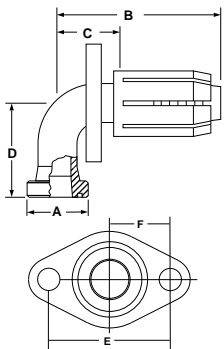
XT-3ES Hose Reusable Couplings

Captive Flange Code 61 (2 Bolt)-67 1/2° Elbow



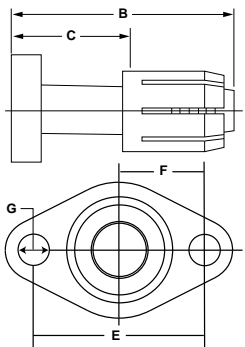
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	E FLANGE HOLE SPACING	F FLANGE HOLE SPACING	O-RING SEAL
6V-4674	19.1-.75	-12	TR	38.1-1.50	-12	104.0-4.09	58.4-2.30	40.5-1.59	64.3-2.53	32.1-1.26	4J-5267

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



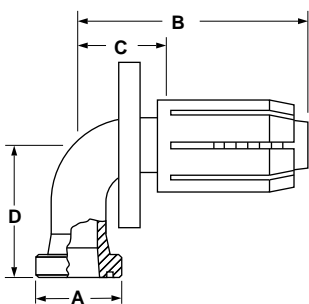
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	E FLANGE HOLE SPACING	F FLANGE HOLE SPACING	O-RING SEAL
6V-4683	19.1-.75	-12	TR	38.1-1.50	-12	100.0-3.94	54.9-2.16	54.0-2.13	64.3-2.53	32.1-1.26	4J-5267
5S-2108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

Captive Fixed Flange Code 61 (2 Bolt)-Str



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)	E FLANGE HOLE SPACING	F FLANGE HOLE SPACING	O-RING SEAL
7S-1150	25.4-1.00	-16	TR	44.5-1.75	-16	125.0-4.92	75.1-2.96	64.3-2.53	32.1-1.26	1P-3703
7S-1212	25.4-1.00	-16	TR	44.5-1.75	-16	125.0-4.92	75.1-2.96	70.8-2.79	38.7-1.52	3P-3703
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
7S-1851	31.8-1.25	-20	TR	44.5-1.75	-16	135.0-5.31	75.3-2.96	82.6-3.25	41.3-1.63	3P-3703

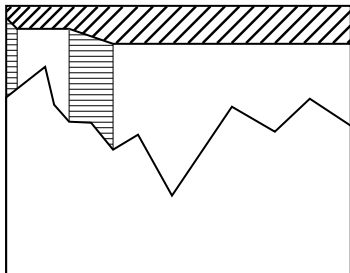
Captive Flange Code 61 (4 Bolt) - 90° Elbow



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-4684	19.1-.75	-12	TR	38.1-1.50	-12	100.0-3.94	54.9-2.16	54.0-2.13	.0-.00	.0-.00	4J-5267
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

XT-3ES Hose Reusable Couplings

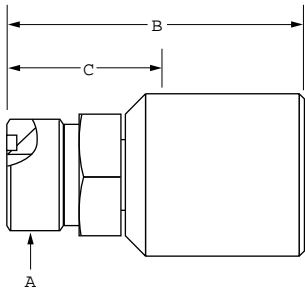
XT-3 ES Sleeve Information



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

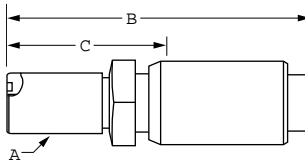
XT-3ES Hose Permanent Couplings

ORFS Male-Str



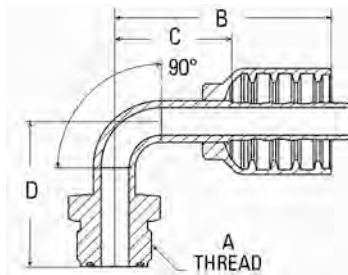
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6174	9.5-.37	-6	XN	11/16-16	-6	62.0-2.44	28.5-1.12	6V-8397
323-6175	9.5-.37	-6	XN	13/16-16	-8	65.0-2.56	31.1-1.22	6V-8398
323-6176	9.5-.37	-6	XN	1-14	-10	67.0-2.64	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
333-9956	12.7-.50	-8	XN	13/16-16	-8	83.0-3.27	49.2-1.94	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
397-1935	15.9-.63	-10	XN	1-14	-10	101.0-3.98	55.0-2.17	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
184-7201	25.4-1.00	-16	ESA	1 7/16-12	-16	101.0-3.98	54.0-2.13	5K-9090

ORFS Male Bulkhead-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
323-6177	9.5-.37	-6	XN	11/16-16	-6	81.0-3.19	47.3-1.86	6V-8397
333-9956	12.7-.50	-8	XN	13/16-16	-8	83.0-3.27	49.2-1.94	6V-8398

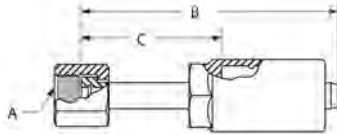
ORFS Male-90° Elbow



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

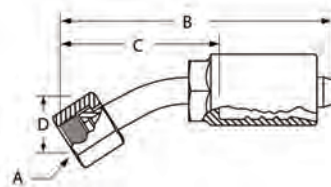
XT-3ES Hose Permanent Couplings

ORFS Female Swivel-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
323-6156	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
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	98.0-3.86	46.0-1.81	6V8-400
423-5099	38.1-1.50	-24	XN4	2-12	-24	120.0-4.72	63.0-2.48	8T-0315

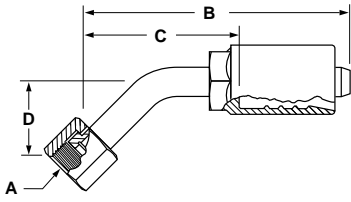
ORFS Female Swivel-30° Elbow



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
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

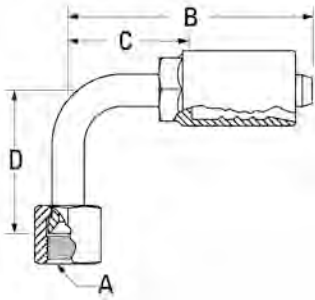
XT-3ES Hose Permanent Couplings

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
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
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	169.0-6.65	116.0-4.57	25.0-.98	6V8-400
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

ORFS Female Swivel-90° Elbow



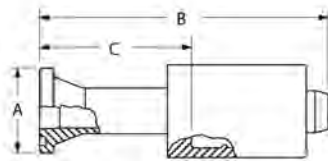
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
323-6164	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	22.9-.90	6V-8397
323-6167	9.5-.37	-6	XN	11/16-16	-6	68.0-2.68	34.1-1.34	35.1-1.38	6V-8397
323-6165	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	39.5-1.56	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
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

XT-3ES Hose 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
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	69.6-2.74	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
569-4975	31.8-1.25	-20	XN4	1 11/16-12	-20	167.0-6.57	115.0-4.53	64.0-2.52	6V8-400
569-4973	31.8-1.25	-20	XN4	1 11/16-12	-20	167.0-6.57	115.0-4.53	129.0-5.08	6V8-400
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

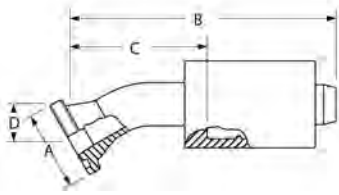
Code 61 Flange-Str



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)	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
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

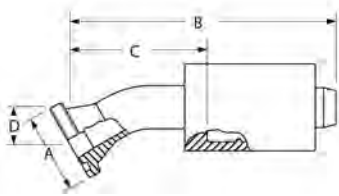
XT-3ES Hose Permanent Couplings

Code 61 Flange-22 1/2° Elbow



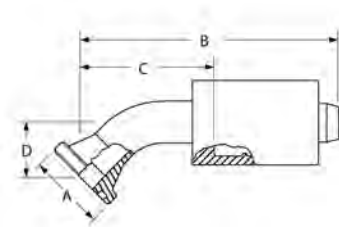
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9139	12.7-.50	-8	XN	30.2-1.19	-8	82.0-3.23	48.4-1.91	8.9-.35	4J-5140
328-9140	12.7-.50	-8	XN	38.1-1.50	-12	83.0-3.27	48.4-1.91	8.9-.35	4J-5267
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	131.0-5.16	66.0-2.60	11.0-.43	4J-0520
498-0776	25.4-1.00	-16	XN	50.8-2.00	-20	131.0-5.16	66.0-2.60	11.0-.43	4J-0522
567-0263	31.8-1.25	-20	XN4	50.8-2.00	-20	138.0-5.43	86.0-3.39	15.0-.59	4J0-522
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

Code 61 Flange-30° 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)	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
589-0042	31.8-1.25	-20	XN4	50.8-2.00	-20	126.7-4.99	68.8-2.71	18.5-.73	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
589-0040	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
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

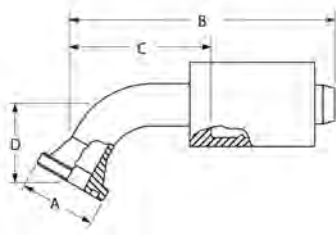
Code 61 Flange-45° Elbow



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)	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
583-1251	19.1-.75	-12	XN	44.5-1.75	-16	129.5-5.10	70.9-2.79	32.0-1.26	4J-0520
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
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

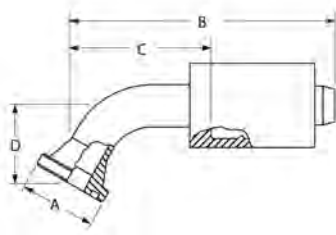
XT-3ES Hose Permanent Couplings

Code 61 Flange-60° 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)	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
583-1250	19.1-.75	-12	XN	44.5-1.75	-16	127.1-5.00	68.5-2.70	44.0-1.73	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
588-1166	31.8-1.25	-20	XN4	50.8-2.00	-20	165.0-6.50	107.9-4.25	51.5-5.03	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
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

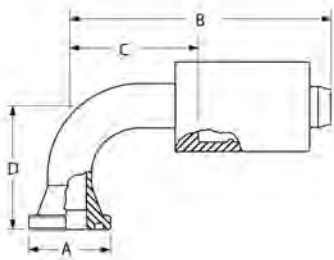
Code 61 Flange-67 1/2° Elbow



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)	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
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

XT-3ES Hose Permanent Couplings

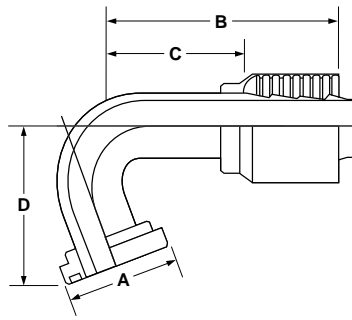
Code 61 Flange-90° Elbow



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)	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
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
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
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
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
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
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	50.8-2.00	-20	145.2-5.72	87.4-3.44	66.8-2.63	4J-0524
589-2616	31.8-1.25	-20	XN4	50.8-2.00	-20	130.2-5.13	70.6-2.78	79.0-3.11	4J-0524
589-2617	31.8-1.25	-20	XN4	50.8-2.00	-20	130.2-5.13	70.6-2.78	117.5-4.63	4J-0524
589-2618	31.8-1.25	-20	XN4	50.8-2.00	-20	130.2-5.13	70.6-2.78	130.0-5.12	4J-0524
589-2620	31.8-1.25	-20	XN4	50.8-2.00	-20	136.0-5.35	70.6-2.78	79.0-3.11	4J-0527
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
588-1584	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
423-5092	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
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
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

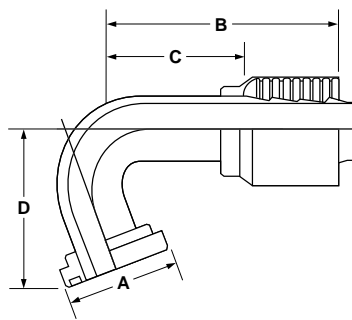
XT-3ES Hose Permanent Couplings

Code 61 Flange-110° Elbow



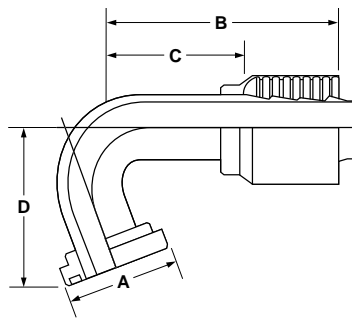
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9157	12.7-.50	-8	XN	38.1-1.50	-12	63.0-2.48	28.3-1.11	49.5-1.95	4J-5267
432-2080	19.1-.75	-12	XN	38.1-1.50	-12	95.0-3.74	41.0-1.61	64.0-2.52	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
588-1575	50.8-2.00	-32	S4G	60.3-2.37	-24	130.3-5.13	73.4-2.89	119.0-4.69	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

Code 61 Flange-125° 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)	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

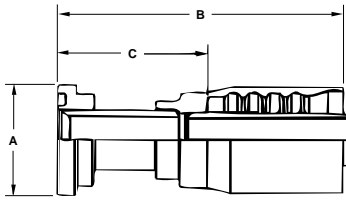
Code 61 Flange-135° Elbow



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)	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	113.0-4.45	48.0-1.89	70.0-2.76	4J-5267
497-8301	25.4-1.00	-16	XN	44.5-1.75	-16	101.0-3.98	36.0-1.42	88.0-3.46	4J-0520

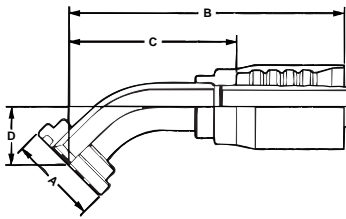
XT-3ES Hose Permanent Couplings

Code 62 Flange-Str



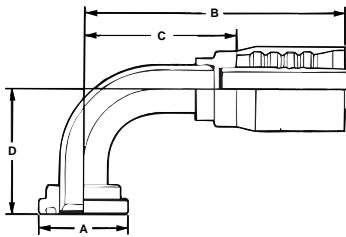
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6218	9.5-.37	-6	XN	31.8-1.25	-8	79.0-3.11	45.3-1.78	4J-5140
328-9161	12.7-.50	-8	XN	31.8-1.25	-8	87.0-3.43	52.8-2.08	4J-5140
328-9162	12.7-.50	-8	XN	41.3-1.63	-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	69.0-2.72	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

Code 62 Flange-45° 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)	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
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	4J5-267
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
498-8408	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	4J0-522

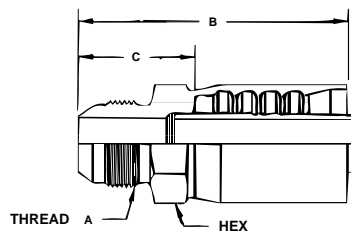
Code 62 Flange-90° Elbow



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)	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
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
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
498-8411	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	4J0-522

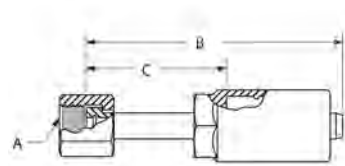
XT-3ES Hose Permanent Couplings

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)
221-0554	19.1-.75	-12	ESA	1 1/16-12	-12	79.0-3.11	38.0-1.50
432-2040	19.1-.75	-12	XN	1 1/16-12	-12	95.0-3.74	41.0-1.61
228-3005	19.1-.75	-12	S4G	1 5/16-12	-16	82.0-3.23	36.0-1.42
432-2041	19.1-.75	-12	XN	1 5/16-12	-16	101.0-3.98	47.0-1.85
221-0556	25.4-1.00	-16	ESA	1 5/16-12	-16	98.0-3.86	51.0-2.01
221-0557	31.8-1.25	-20	S4G	1 5/8-12	-20	95.0-3.74	46.0-1.81

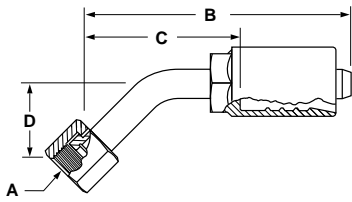
JIC 37° Female Swivel-Str



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)
323-6181	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
3E-6831	25.4-1.00	-16	TR	1 5/16-12	-16	102.0-4.02	51.6-2.03
221-0578	25.4-1.00	-16	ESA	1 5/8-12	-20	80.0-3.15	33.0-1.30
228-3010	25.4-1.00	-16	S4G	1 5/8-12	-20	82.0-3.23	33.0-1.30
221-0579	31.8-1.25	-20	S4G	1 5/8-12	-20	90.0-3.54	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

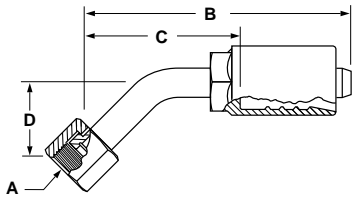
XT-3ES Hose Permanent Couplings

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)
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	44.2-1.74	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
328-9115	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

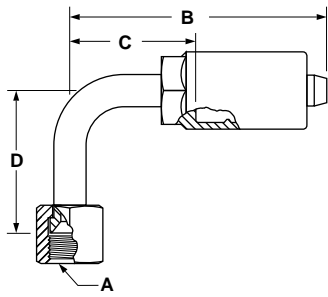
JIC 37° Female Swivel-60° Elbow



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

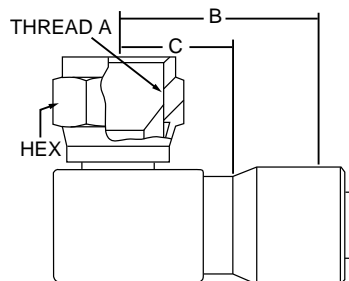
XT-3ES Hose Permanent Couplings

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)
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
323-6190	9.5-.37	-6	XN	9/16-18	-6	68.0-2.68	34.2-1.35	38.1-1.50
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
323-6195	9.5-.37	-6	XN	3/4-16	-8	68.0-2.68	34.2-1.35	27.7-1.09
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
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

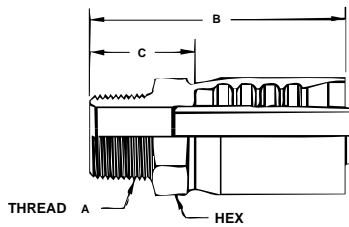
JIC 37° Female Swivel Block-90° Elbow



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)
323-6200	9.5-.37	-6	XN	9/16-18	-6	58.0-2.28	24.0-.94	20.7-.81

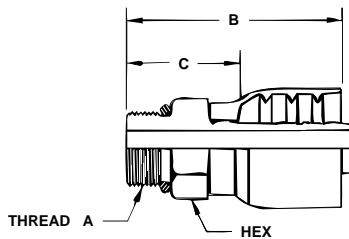
XT-3ES Hose Permanent Couplings

NPTF Male-Str



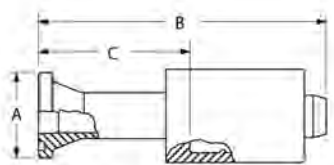
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
323-6208	9.5-.37	-6	XN	1/4-18	-4	64.0-2.52	30.8-1.21
323-6209	9.5-.37	-6	XN	3/8-18	-6	65.0-2.56	31.8-1.25
323-6210	9.5-.37	-6	XN	1/2-14	-8	70.0-2.76	36.4-1.43
328-9133	12.7-.50	-8	XN	3/8-18	-6	67.0-2.64	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	84.0-3.31	38.0-1.50
397-1948	15.9-.63	-10	XN	3/4-14	-12	87.0-3.43	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	107.0-4.21	42.0-1.65
499-1177	25.4-1.00	-16	XN	1-11 1/2	-16	115.0-4.53	49.0-1.93
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

STOR 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
323-6212	9.5-.37	-6	XN	9/16-18	-6	59.0-2.32	25.9-1.02	3J-1907
328-9136	12.7-.50	-8	XN	3/4-16	-8	65.0-2.56	30.9-1.22	3K-0360
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	107.0-4.21	42.0-1.65	7M-8485

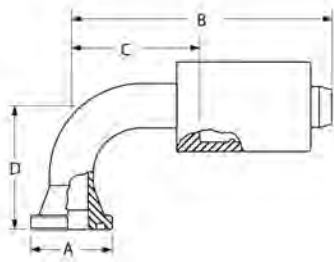
Cat Flange-Str



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)	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
569-4965	31.8-1.25	-20	XN4	54.0-2.13	-20	136.6-5.38	78.8-3.10	1P-3704

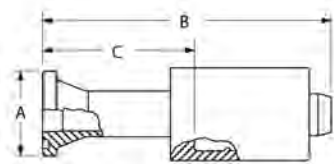
XT-3ES Hose Permanent Couplings

Cat Flange-90° Elbow



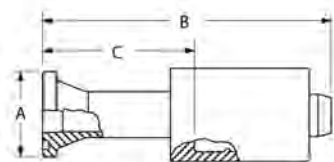
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9166	12.7-.50	-8	XN	41.3-1.63	-12	74.0-2.91	39.5-1.56	41.2-1.62	1P-3702
333-9959	12.7-.50	-8	XN	41.3-1.63	-12	74.0-2.91	39.5-1.56	55.1-2.17	1P-3702
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
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

Cat Flange-High Vibration Coupling-Str



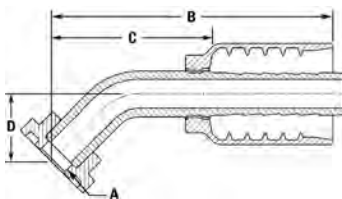
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
536-6438	25.4-1.00	-16	XN	54.0-2.13	-20	152.0-5.98	86.0-3.39	1P-3704
241-4318	31.8-1.25	-20	TR	54.0-2.13	-20	129.0-5.08	83.0-3.27	1P-3704

Komatsu Style Flange-Str



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)	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

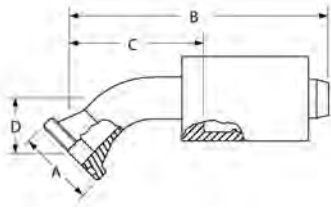
Komatsu Style Flange-45° Elbow



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
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

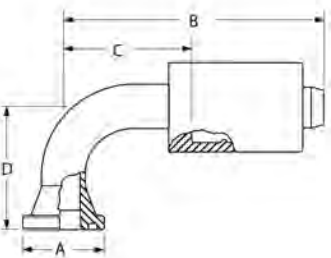
XT-3ES Hose Permanent Couplings

Komatsu Style Flange-60° Elbow



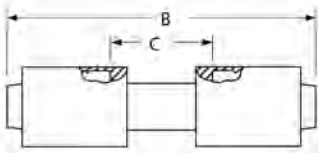
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD DASH SIZE	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9169	12.7-.50	-8	XN	-10	34.0-1.34	83.0-3.27	48.7-1.92	27.4-1.08	4J-8996

Komatsu Style Flange-90° Elbow



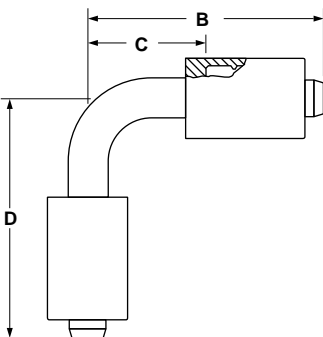
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD DASH SIZE	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
328-9170	12.7-.50	-8	XN	-10	34.0-1.34	74.0-2.91	39.5-1.56	41.4-1.63	4J-8996
397-1967	15.9-.63	-10	XN	-10	34.1-1.34	93.5-3.68	47.1-1.85	55.1-2.17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

Double Collet-Str



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

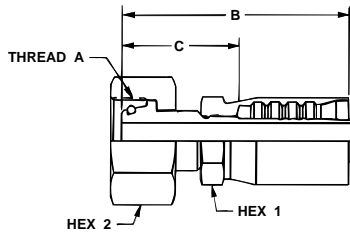
XT-3ES Hose Permanent Couplings

Metric Female Swivel 24° Taper w/O-Ring-45° Elbow (Light)

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
503-7988	9.5-.37	-6	XN	M18 x 1.5	12.0-0.47	78-3.07	45-1.77	19-0.75	8U-0598
503-4448	12.7-.50	-8	XN	M22 x 1.5	15.0-0.59	83-3.27	50-1.97	20-0.79	3E-4298

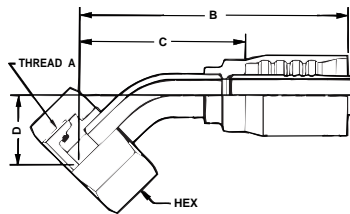
XT-3ES Hose Permanent Couplings

Metric Female Swivel 24° Taper w/O-Ring-Str (Heavy)



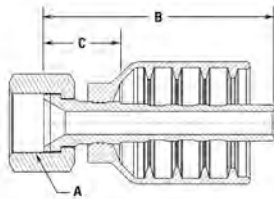
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
323-6232	9.5-.37	-6	XN	M20 x 1.5	12.0-0.47	64.0-2.52	30.9-1.22	3E-4297
323-6233	9.5-.37	-6	XN	M22 x 1.5	14.0-0.55	68.0-2.68	34.4-1.35	7T-0508
431-9023	9.5-.37	-6	XN	M18 - 1.5	12.0-0.47	71.0-2.80	31.0-1.22	3E-4296
328-9179	12.7-.50	-8	XN	M24 x 1.5	16.0-0.63	70.0-2.76	36.2-1.43	3E-4298
397-1962	15.9-.63	-10	XN	M30 x 2.0	20.0-0.79	99.0-3.90	53.0-2.09	3E-4299
432-2128	19.1-.75	-12	XN	M36 x 2.0	25.0-0.98	110.0-4.33	56.0-2.20	3E-6762
499-1171	25.4-1.00	-16	XN	M36 x 2.0	25-0.98	122.0-4.80	57.0-2.24	3E-6762
499-1172	25.4-1.00	-16	XN	M42 x 2.0	30-1.18	124.0-4.88	59.0-2.32	3E-6763
221-0518	31.8-1.25	-20	S4G	M52 x 2.0	38.0-1.50	105.0-4.13	56.0-2.20	3E-6764

Metric Female Swivel 24° Taper w/O-Ring-45° Elbow (Heavy)



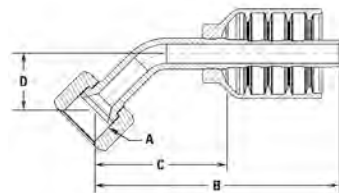
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
432-2129	19.1-.75	-12	XN	M36 x 2.0	25.0-0.98	122-4.80	69-2.72	30-1.18	3E-6762
499-1173	25.4-1.00	-16	XN	M42 x 2.0	30.0-1.18	150-5.91	85-3.35	38-1.50	3E-6733

JIS 30° Flare Female Swivel-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)
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
397-1956	15.9-.63	-10	XN	M24 x 1.5	-10	87-3.42	35-1.38
519-4009	19.1-.75	-12	XN	3/4-14	-12	91-3.58	38-1.50
423-5168	38.1-1.50	-24	XN4	M42 x 1.5	-24	114-4.49	57-2.24

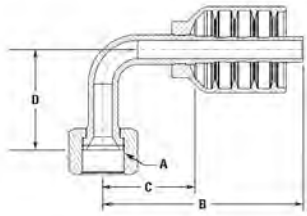
JIS 30° Flare Female Swivel-45° Elbow



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)
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

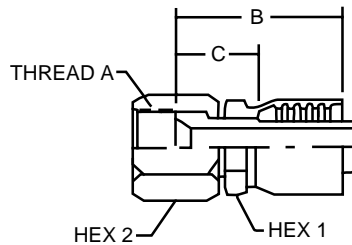
XT-3ES Hose Permanent Couplings

JIS 30° Flare Female Swivel-90° Elbow



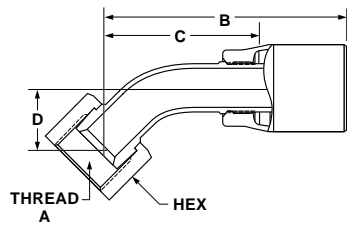
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
519-4718	9.5-.37	-6	XN	3/8-19	-6	67-2.64	34-1.34	37-1.46
519-3999	12.7-.50	-8	XN	1/2-14	-8	73-2.87	40-1.57	41-1.61
519-4011	19.1-.75	-12	XN	3/4-14	-12	106-4.17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

JIS Metric 30° Elbow Flare Female Swivel - Str (Komatsu Style)



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
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

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

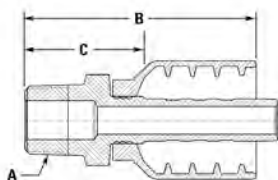


Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6229	9.5-.37	-6	XN	M18 x 1.5	82.0-3.23	48.3-1.90	21.6-.85
328-9176	12.7-.50	-8	XN	M22 x 1.5	94.0-3.70	59.8-2.35	29.5-1.16

JIS 60° 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)
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

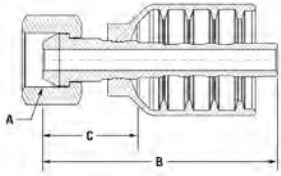
JIS Male Tapered Pipe-Str



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)
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

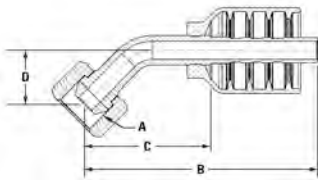
XT-3ES Hose Permanent Couplings

ISO 8434-6 BSPP Conical Seat-Female Swivel-Str



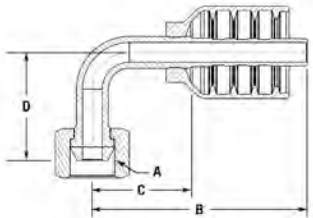
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
518-3997	9.5-.37	-6	XN	3/8-19	-6	67.0-2.64	27.2-1.07
518-0821	12.7-.50	-8	XN	1/2-14	-8	68.0-2.68	27.6-1.09
554-6965	15.9-.63	-10	XN	5/8-14	-10	87.5-3.44	36.0-1.42
554-6966	15.9-.63	-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

ISO 8434-6 BSPP Conical Seat-Female Swivel-45° Elbow



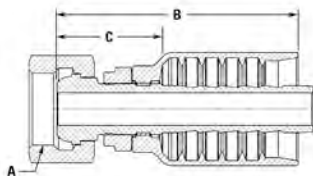
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
518-3998	9.5-.37	-6	XN	3/8-19	-6	86.6-3.41	46.8-1.84	20.0-0.79
518-0822	12.7-.50	-8	XN	1/2-14	-8	90.8-3.57	50.3-1.98	20.0-0.79
554-6967	15.9-.63	-10	XN	5/8-14	-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

ISO 8434-6 BSPP Conical 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)
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

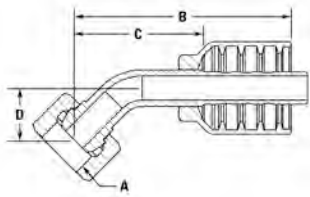
BSPP Spherical Seat-Female Swivel-Str



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)
323-6221	9.5-.37	-6	XN	3/8-19	-6	61.9-2.44	22.5-0.89
323-6223	9.5-.37	-6	XN	1/2-14	-8	56.6-2.23	23.1-0.91
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
221-0498	31.8-1.25	-20	S4G	1 1/4-11	-20	101.0-3.98	51.3-2.02

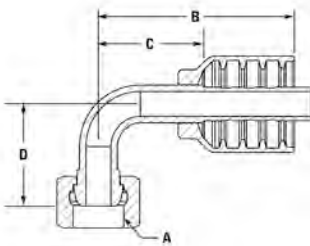
XT-3ES Hose Permanent Couplings

BSPP Spherical Seat-Female Swivel-45° Elbow



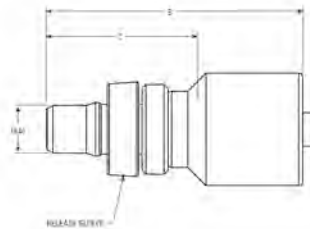
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6224	9.5-.37	-6	XN	3/8-19	-6	80.3-3.16	46.8-1.84	20.1-0.79
328-9172	12.7-.50	-8	XN	1/2-14	-8	84.5-3.33	50.4-1.98	20.1-0.79
416-2091	15.9-.63	-10	XN	5/8-14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

BSPP Spherical Seat-Female Swivel-90° Elbow



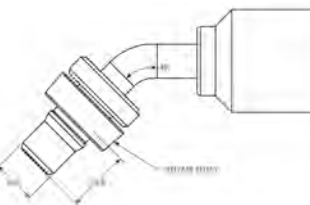
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
323-6225	9.5-.37	-6	XN	3/8-19	-6	67.7-2.67	34.2-1.35	37.1-1.46
328-9173	12.7-.50	-8	XN	1/2-14	-8	73.6-2.90	39.6-1.56	38.1-1.50
416-2093	15.9-.63	-10	XN	5/8-14	-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
221-0492	31.8-1.25	-20	S4G	1 1/4-11	-20	131.0-5.16	80.8-3.18	81.0-3.19

Snap To Connect-Str



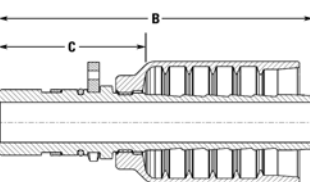
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
360-2602	9.5-.37	-6	XN		-6.0-.24	67.0-2.64	34.0-1.34
360-2603	12.7-.50	-8	XN		-8.0-.31	74.0-2.91	41.0-1.61
397-1968	15.9-.63	-10	XN		-10.0-.39	91.0-3.58	45.0-1.77
432-2131	19.1-.75	-12	XN		-12.0-.47	103.0-4.06	49.0-1.93
499-1186	25.4-1.00	-16	XN		.0-.00	119.0-4.69	48.2-1.90

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

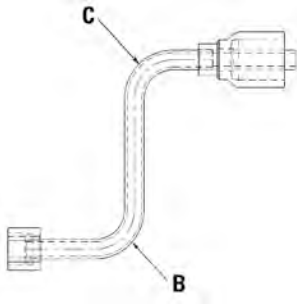
WEO Plug-In Coupling



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	-

XT-3ES Hose Permanent Couplings

ORFS HFL-Multibend (Used on Backhoe Loaders)



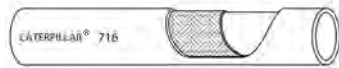
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	FLANGE DASH SIZE	O-RING SEAL	BEND (B & C)	WORKING PRESSURE (kPa)	MIN. BURST PRESSURE (kPa)
202-0998	12.7-.50	-8	XN	13/16-16	6V-8398	90.0°	31,000	93,276
202-1002	12.7-.50	-8	XN	13/16-16	6V-8398	44.3°	31,000	93,276
202-2377	12.7-.50	-8	XN	13/16-16	6V-8398	90.0°	31,000	93,276
202-1000	15.9-.63	-10	XN	1-14	7J9108	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

Cat Low and Medium Pressure Hose & Coupling Products

One-Wire Braid Hoses (716, 716TG, 4488).....	124
One-Wire Braid Hose (716)	124
One-Wire Braid Hose ToughGuard (716TG)	124
One-Wire Braid Compact 716 Hose (4488).....	125
Two-Wire Braid Hose (294)	126
Two-Wire Braid Hose (294)	126
Two-Wire Braid 294 ToughGuard Hose (4218)	126
Two-Wire Braid Compact 294 Hose (4198).....	127
Two-Wire Braid Compact 294 Hose ToughGuard (4198TG / 4252)	127
Two-Wire Braid High Temperature 294 Hose (4023).....	127
Two-Wire Braid Hose (4636).....	128
28 MPa Two-Wire Braid Hose (4636)	128
28 MPa Two-Wire Braid Hose ToughGuard (4639)	128
Hydraulic Suction Hose (844).....	129
Hydraulic Suction Hose (844)	129
Hydraulic Suction Hose (844C).....	129
High Temperature Coolant Hose (2786) and Couplings	130
High Temperature Coolant Hose (2786).....	130
High Temperature General Purpose Hose (4901).....	131
High Temperature General Purpose Hose (4901)	131
Fire Suppression Hose (5014).....	132
Cat Low and Medium Pressure Permanent Couplings.....	133
ORFS.....	133
Code 61 Flange.....	137
JIC 37°	142
NPTF.....	146
NPSM	147
STOR.....	147
SAE 45° Elbow	148
Komatsu Style Flange	150
Double Collet	151
Metric	151
JIS.....	155
ISO	157
BSPP	158
French Gaz.....	159
Captive Flange	160
Snap To Connect	160

One-Wire Braid Hoses (716, 716TG, 4488)

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

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.

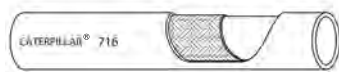
Temperature Range: -40° F to +275° F (-40° C to +135° C) for petroleum based hydraulic fluids. -40° F to +275° F (-40° C to +135° C) for petroleum based ISO hydraulic fluids. +185° F Max (+85° C Max) for air, water, or water-glycol. -40° to +158° F (-40° C to +70° C) for all other applications.

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 Hose ToughGuard (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

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 Hoses (716, 716TG, 4488)

One-Wire Braid Compact 716 Hose (4488)



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

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.

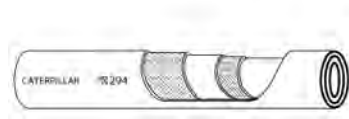
Temperature Range: -40° F to +212° F (-40° C to +100° C) for petroleum based fluids. +150° F Max (+66° C Max) for water based fluids and air.

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.

Two-Wire Braid Hose (294)

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

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.

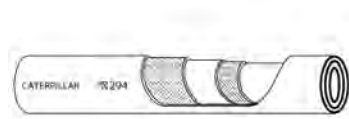
Application: High pressure service with petroleum base hydraulic fluids, water-glycol and water-oil fire resistant hydraulic fluids, hot oil, grease, lubricants, crude and fuel oils, air and water. MSHA approved cover. U.S. Coast Guard 46CFR56.60-25C approved.

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.

Two-Wire Braid 294 ToughGuard Hose (4218)



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

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.

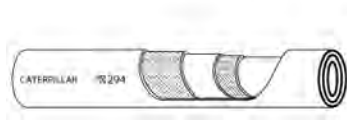
Temperature Range: -40° F to +190° F (-40° C to +88° C) for water-glycol and water-oil fire resistant hydraulic fluids, hot oil, grease, lubricants, crude and fuel oils. +150° F Max (+66° C Max) for air and water. -40° F to +212° F (-40° C to +100° C) for all other applications.

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

Two-Wire Braid Hose (294)

Two-Wire Braid Compact 294 Hose (4198)



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	14.5 - .57	-4	MN	160.0 - 23206	40.0 - 5802	50 - 1.97
541-7160	7.9 - 0.31	14.9 - 0.59	-5	MN	140.0 - 20305	35.0 - 5076	55 - 2.17
456-8452	9.5 - .37	18.8 - .74	-6	MN	140.0 - 20305	35.0 - 5076	65 - 2.56
456-8453	12.7 - .50	22.0 - .87	-8	MN	110.0 - 15954	27.5 - 3989	90 - 3.54
456-8454	15.9 - .63	28.2 - 1.11	-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

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.

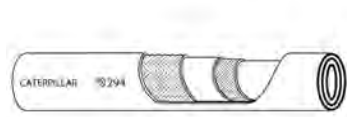
Application: High pressure service with petroleum base hydraulic fluids, water-glycol and water-oil fire resistant hydraulic fluids, hot oil, grease, lubricants, crude and fuel oils, air and water. MSHA approved cover. U.S. Coast Guard 46CFR56.60-25C approved.

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.

Two-Wire Braid Compact 294 Hose ToughGuard (4198TG / 4252)



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

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.

Two-Wire Braid High Temperature 294 Hose (4023)



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

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.

Two-Wire Braid Hose (4636)

28 MPa Two-Wire Braid 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

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.

28 MPa Two-Wire Braid Hose ToughGuard (4639)

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

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.

Hydraulic Suction Hose (844)

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)
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

Meets the requirements of SAE J517 and 100R4. Note: Sold by the centimeter.
Operating Temperature Range: -40°C to 135°C (-40°F to 275°F)

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

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.

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. Note: Sold by the inch.

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.

¹ Centerline of Hose

High Temperature Coolant Hose (2786) and Couplings

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

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.

High Temperature General Purpose Hose (4901)

High Temperature General Purpose Hose (4901)

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

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 petroleum-based lubricating oils, water-based fluids, gasoline, and petroleum-based diesel fuels.

Temperature Range: -40°C to +150°C. Use is also permitted with soy and rapeseed based biodiesel blends to 20% biodiesel (B20) within a temperature range of -22°C to +107°C continuously and up to +125°C intermittently (maximum 10% of duty cycle). Use with air is permitted up to 120°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.

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

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.

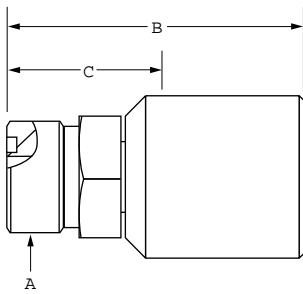
Temperature Range: 5014 hose is intended specifically for fire suppression systems operating within a temperature range of -40°C to 100°C. Exposure to temperatures above rated maximum and/or pressure impulses that exceed maximum working pressure will materially reduce hose life. The outer cover is oil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

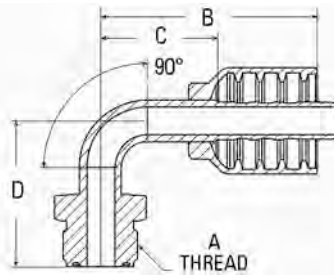
Cat Low and Medium Pressure Permanent Couplings

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
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
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
523-8941	15.9-.63	-10	BN	1-14	-10	68.05-2.68	34.60-1.36	7J-9108
235-3946	15.9-.63	-10	MN	1-14	-10	61-2.40	34-1.34	7J-9108
533-5188	15.9-.63	-10	BN	1 3/16-12	-12	69.5-2.74	36.03-1.42	6V-9746
302-5296	15.9-.63	-10	MN	1 3/16-12	-12	63.0-2.48	38.0-1.50	8T-0315
186-4134	19.1-.75	-12	MN	1 3/16-12	-12	65.0-2.56	33.9-1.33	6V-9746
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

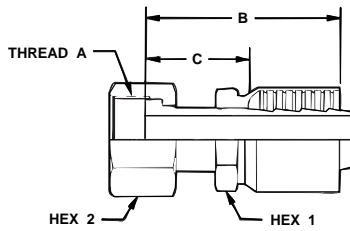
ORFS Male-90° Elbow



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	52-2.05	31-1.22	40-1.57	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

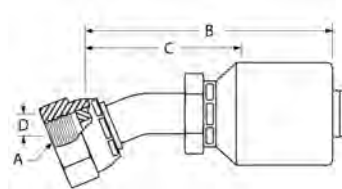
Cat Low and Medium Pressure Permanent Couplings

ORFS Female Swivel-Str



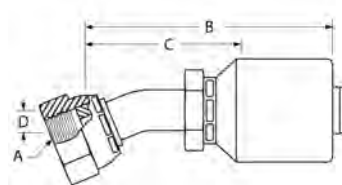
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
124-2111	6.4-.25	-4	MN	9/16-18	-4	47.0-1.85	25.4-1.00	4J-5477
124-2113	6.4-.25	-4	MN	11/16-16	-6	49.0-1.93	27.7-1.09	6V-8397
154-0095	6.4-.25	-4	MN	13/16-16	-8	53.0-2.09	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
252-0038	15.9-.63	-10	MN	13/16-16	-8	61.0-2.40	41.0-1.61	6V-8397
124-2119	15.9-.63	-10	MN	1-14	-10	69.0-2.72	44.0-1.73	7J-9108
384-0385	15.9-.63	-10	BN	1-14	-10	68.83-2.71	43.30-1.70	7J-9108
388-8897	15.9-.63	-10	BN	1 3/16-12	-12	68.83-2.71	43.30-1.70	6V-9746
124-2120	15.9-.63	-10	MN	1 3/16-12	-12	71.0-2.80	46.0-1.81	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 1/2° 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

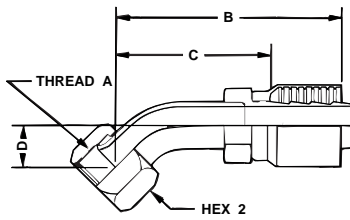
ORFS Female Swivel-30° Elbow



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

Cat Low and Medium Pressure Permanent Couplings

ORFS Female Swivel-45° Elbow



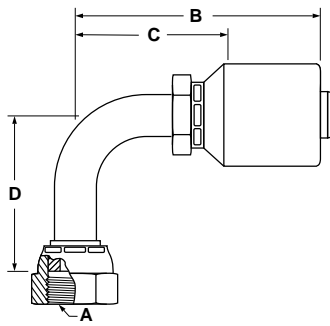
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
124-2128	6.4-.25	-4	MN	9/16-18	-4	51.0-2.01	30.0-1.18	10.4-.41	4J-5477
124-2129	6.4-.25	-4	MN	11/16-16	-6	52.0-2.05	30.5-1.20	10.9-.43	6V-8397
154-0099	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
147-1718	9.5-.37	-6	MN	11/16-16	-6	154.0-6.06	128.6-5.06	52.8-2.08	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
302-5288	19.1-.75	-6	MN	3/4-16	-8	85.0-3.35	54.0-2.13	17.0-.67	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
384-0389	15.9-.63	-10	BN	1-14	-10	77.72-3.06	52.10-2.05	16.51	7J-9108
124-2135	15.9-.63	-10	MN	1-14	-10	78.0-3.07	52.6-2.07	16.5-.65	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
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
526-7918	25.4-1.00	-16	MN	1 7/16-12	-16	110.25-4.34	67.72-2.67	14.2	5K-9090
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

Cat Low and Medium Pressure Permanent Couplings

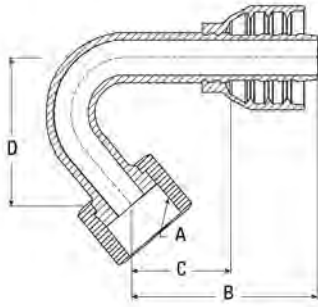
ORFS Female Swivel-90° Elbow



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
270-9321	6.4-.25	-4	MN	11/16-16		52 - 2.05	31 - 1.22	40 - 1.57	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
228-2987	6.4-.25	-4	MN	1 7/16-12	-16	46.0-1.81	25.0-.98	38.0-1.50	5K-9090
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
384-0386	15.9-.63	-10	BN	1-14	-10	72.39-2.85	46.74-1.84	70.1	7J-9108
384-0387	15.9-.63	-10	BN	1-14	-10	72.39-2.85	46.74-1.84	32.26	7J-9108
384-0388	15.9-.63	-10	BN	1-14	-10	72.39-2.85	46.74-1.84	46.99	7J-9108
462-4169	15.9-.63	-10	BN	1 3/16-12	-12	80.25-3.16	46.81-1.84	47.75	6V-9746
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
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
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
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
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

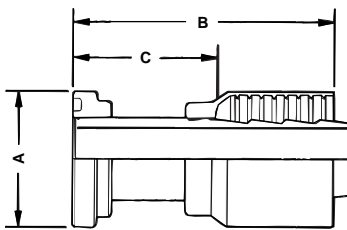
Cat Low and Medium Pressure Permanent Couplings

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

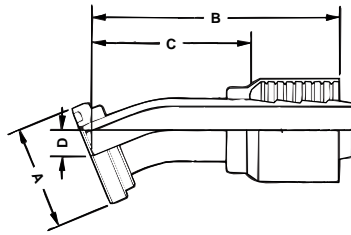
Code 61 Flange-Str



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)	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
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
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	70.0-2.76	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	136.0-5.35	71.0-2.80	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

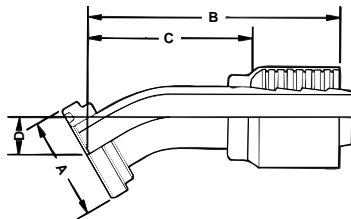
Cat Low and Medium Pressure Permanent Couplings

Code 61 Flange-22 1/2° 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)	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
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
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
254-3279	76.2-3.00	-48	SW	101.6-4.00	-48	223-8.78	150-5.91	27-1.06	117-1266

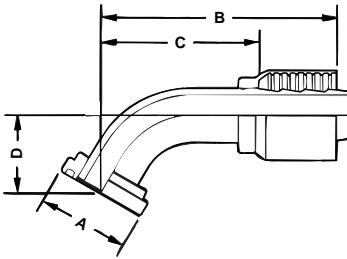
Code 61 Flange-30° Elbow



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)	O-RING SEAL
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	111.0-4.37	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
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
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

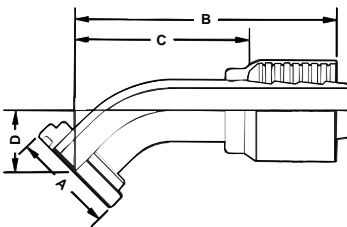
Cat Low and Medium Pressure Permanent Couplings

Code 61 Flange-45° 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)	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
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
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	220.0-8.66	73.0-2.87	3E-6703

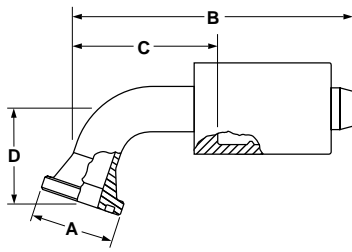
Code 61 Flange-60° Elbow



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)	O-RING SEAL
302-5234	50.8-2.00	-10	MN	84.1-3.31	-40	201.0-7.91	153.0-6.02	73.0-2.87	6J-2680
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	155.0-6.10	94.0-3.70	42.6-1.68	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
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
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

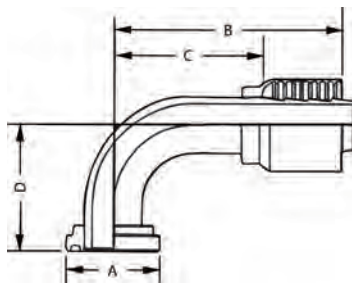
Cat Low and Medium Pressure Permanent Couplings

Code 61 Flange-67 1/2° 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)	O-RING SEAL
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
253-1374	76.2-3.00	-48	SW	101.6-4.00	-48	259-10.20	198-7.80	115-4.53	117-1266

Code 61 Flange-90° Elbow



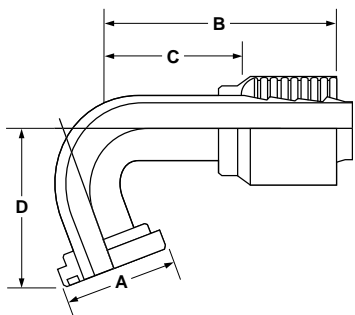
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
124-2098	12.7-.50	-8	MN	30.2-1.19	-8	71.0-2.80	45.4-1.79	41.4-1.63	4J-5140
124-2099	12.7-.50	-8	MN	38.1-1.50	-12	71.0-2.80	45.4-1.79	42.9-1.69	4J-5267
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
302-5237	31.8-1.25	-12	MN	71.4-2.81	-32	127.0-5.00	87.0-3.43	67.0-2.64	4J-0527
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
322-0113	25.4-1.00	-16	MN	44.5-1.75	-16	109.0-4.29	72.0-2.83	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
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
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
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
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
124-2106	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
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
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

Cat Low and Medium Pressure Permanent Couplings

Code 61 Flange-90° Elbow (Cont'd.)

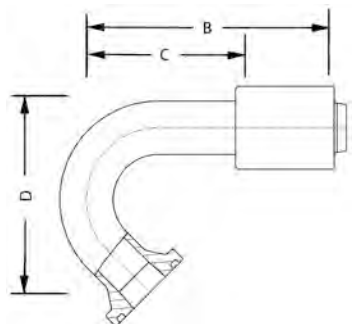
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
253-1354	63.5-2.50	-40	MN	84.1-3.31	-40	206.0-8.11	140.0-5.51	119.0-4.69	6J-2680
440-2679	63.5-2.50	-40	MN	84.1-3.31	-40	205.0-8.07	144.0-5.67	254.0-10.00	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	SW	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	SW	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	SW	101.6-4.00	-48	249.0-9.80	188.0-7.40	203.0-7.99	117-1266
454-6189	76.2-3.00	-48	MN	101.6-4.00	-48	253.0-9.96	188.0-7.40	218.0-8.58	117-1266
176-1550	76.2-3.00	-48	SW	114.3-4.50	-56	262.0-10.31	199.0-7.83	162.0-6.38	9X-4611
310-5249	88.9-3.50	-56	MN	114.3-4.50	-56	302.0-11.89	222.0-8.74	84.0-3.31	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

Code 61 Flange-110° 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)	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
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

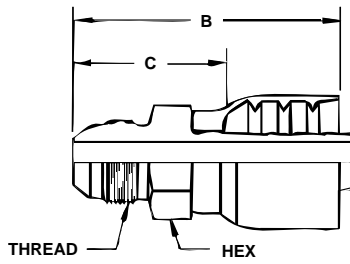
Code 61 Flange-135° Elbow



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)	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

Cat Low and Medium Pressure Permanent Couplings

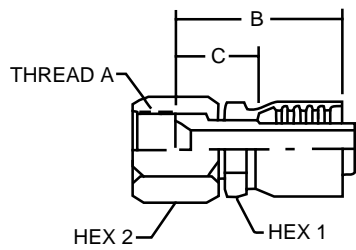
JIC 37° Male-Str



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)
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

Cat Low and Medium Pressure Permanent Couplings

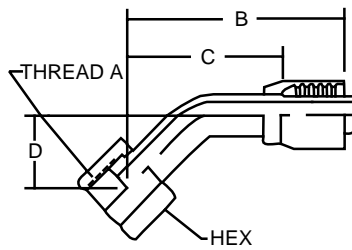
JIC 37° Female Swivel-Str



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)
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
316-3036	9.5-.37	-6	MN	9/16-18	-6	62.0-2.44	52.0-2.05
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	67.0-2.64

Cat Low and Medium Pressure Permanent Couplings

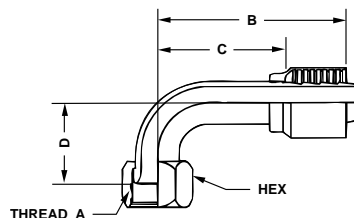
JIC 37° Female Swivel-45° Elbow



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
309-6969	50.8-2.00	-8	MN	9/16-18	-6	202.0-7.95	152.0-5.98	56.0-2.20
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
124-1998	25.4-1.00	-16	MN	1 5/16-12	-16	121.0-4.76	83.3-3.28	29.5-1.16
124-1987	25.4-1.00	-16	MN	1 5/16-12	-16	122.0-4.80	74.0-2.91	30.0-1.18
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

Cat Low and Medium Pressure Permanent Couplings

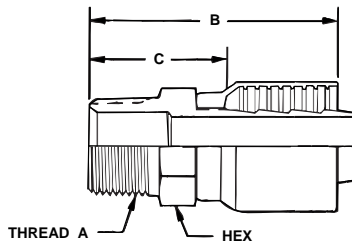
JIC 37° Female Swivel-90° Elbow



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
316-3035	9.5-.37	-6	MN	9/16-18	-6	75.0-2.95	65.0-2.56	32.0-1.26
6V-6222	9.5-.37	-6	MN	9/16-18	-6	68.0-2.68	35.0-1.38	55.5-2.19
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
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
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
309-6970	50.8-2.00	-32	MN	2 1/2-12	-32	187.0-7.36	136.0-5.35	118.0-4.65

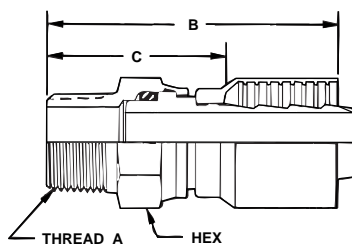
Cat Low and Medium Pressure Permanent Couplings

NPTF 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)
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
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	124.0-4.88	70.0-2.76

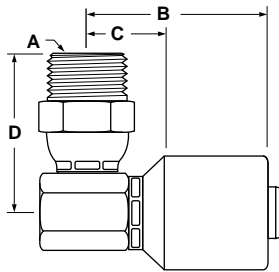
NPTF Male Swivel-Str



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)
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

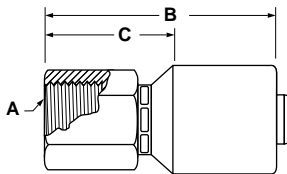
Cat Low and Medium Pressure Permanent Couplings

NPTF Male Swivel-90° Elbow



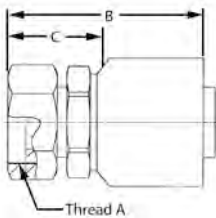
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
124-1923	6.4-.25	-4	MN	1/4-18	-4	40.0-1.57	19.1-.75	42.2-1.66
154-0052	9.5-.37	-6	MN	3/8-18	-6	47.0-1.85	21.6-.85	44.5-1.75
154-0054	12.7-.50	-8	MN	1/2-14	-8	51.0-2.01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

NPTF Female-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)
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
154-0059	19.1-.75	-12	MN	3/4-14	-12	66.0-2.60	34.8-1.37

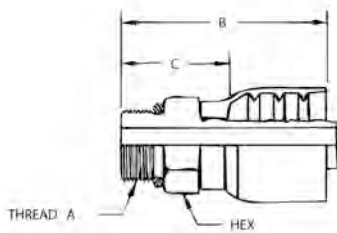
NPSM Female Swivel-Str



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)
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

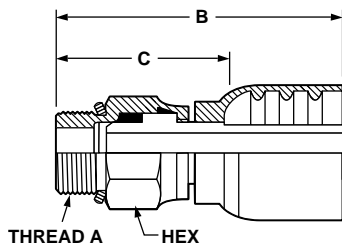
Cat Low and Medium Pressure Permanent Couplings

STOR Male-Str



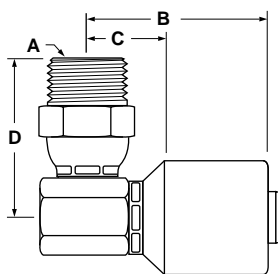
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
124-1928	6.4-.25	-4	MN	7/16-20	-4	42.0-1.65	20.6-.81	3J-7354
147-1719	6.4-.25	-4	MN	9/16-18	-6	43.0-1.69	22.4-.88	3J-1907
124-1929	9.5-.37	-6	MN	9/16-18	-6	49.0-1.93	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
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-Str



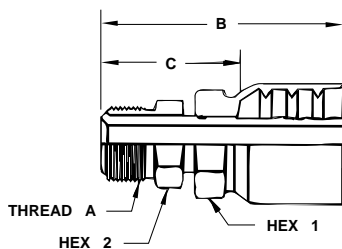
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
124-1934	9.5-.37	-6	MN	9/16-18	-6	67.0-2.64	42.0-1.65	3J-1907
147-1701	9.5-.37	-6	MN	3/4-16	-8	64.0-2.52	38.3-1.51	3K-0360
147-1702	12.7-.50	-8	MN	3/4-16	-8	65.0-2.56	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 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
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	4J-7533
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

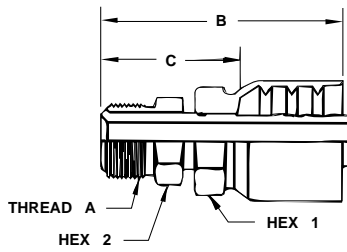
SAE 45° Male-Str



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)
154-0086	9.5-.37	-6	MN	5/8-18	-6	56.0-2.20	30.9-1.22

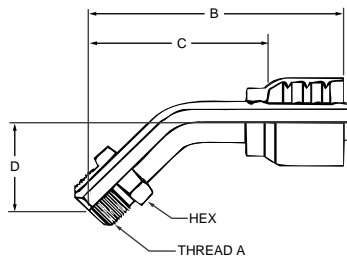
Cat Low and Medium Pressure Permanent Couplings

SAE 45° Inverted Flare Male Swivel-Str



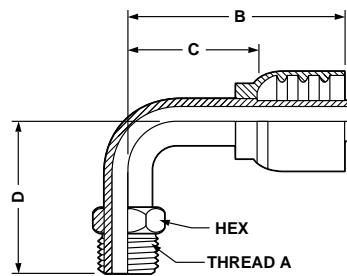
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
124-2041	6.4-.25	-4	MN	7/16-24	-4	49.0-1.93	27.4-1.08
124-2042	6.4-.25	-4	MN	1/2-20	-5	50.0-1.97	29.2-1.15
124-2043	9.5-.37	-6	MN	5/8-18	-6	56.0-2.20	31.0-1.22
154-0087	9.5-.37	-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



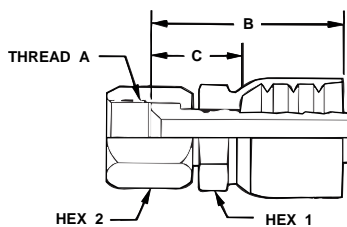
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
147-1710	6.4-.25	-4	MN	7/16-24	-4	61.0-2.40	40.4-1.59	20.8-.82
154-0088	9.5-.37	-6	MN	5/8-18	-6	74.0-2.91	49.0-1.93	23.9-.94
147-1711	12.7-.50	-8	MN	3/4-18	-8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

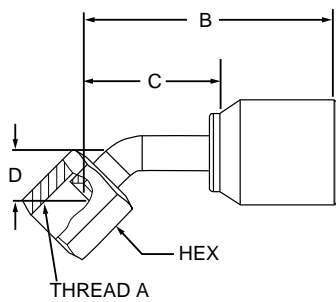
SAE 45° Female Swivel-Str



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)
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

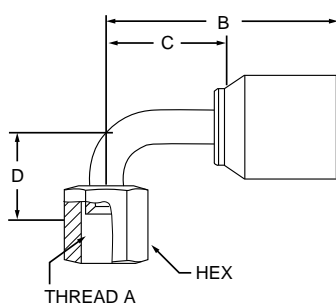
Cat Low and Medium Pressure Permanent Couplings

SAE 45° Female Swivel-45° Elbow



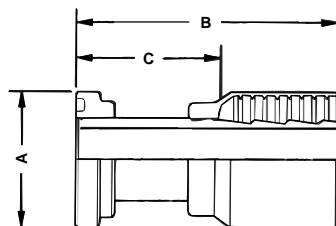
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
154-0072	6.4-.25	-4	MN	7/16-20	-4	49.0-1.93	27.9-1.10	8.4-.33
154-0074	9.5-.37	-6	MN	5/8-18	-6	60.0-2.36	35.1-1.38	9.9-.39
154-0077	12.7-.50	-8	MN	3/4-16	-8	69.0-2.72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

SAE 45° Female Swivel-90° Elbow



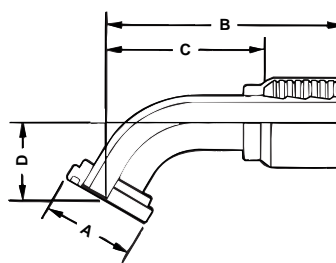
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
154-0080	6.4-.25	-4	MN	7/16-20	-4	46.0-1.81	25.1-.99	17.3-.68
154-0081	6.4-.25	-4	MN	1/2-20	-5	46.0-1.81	25.1-.99	19.6-.77
154-0082	9.5-.37	-6	MN	5/8-18	-6	58.0-2.28	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

Komatsu Style Flange-Str



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)	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

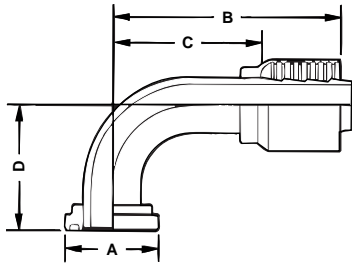
Komatsu Style Flange-45° Elbow



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
154-0093	15.9-.63	-10	MN	-10	34.1-1.34	88.0-3.46	63.2-2.49	25.9-1.02	4J-8996

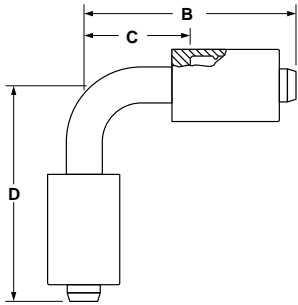
Cat Low and Medium Pressure Permanent Couplings

Komatsu Style Flange-90° Elbow



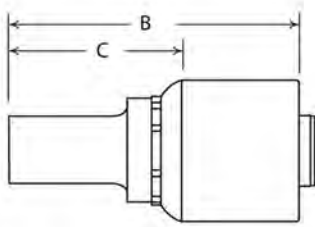
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD DASH SIZE	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
154-0094	15.9-.63	-10	MN	-10	34.1-1.34	75.0-2.95	50.3-1.98	55.1-2.17	4J-8996

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

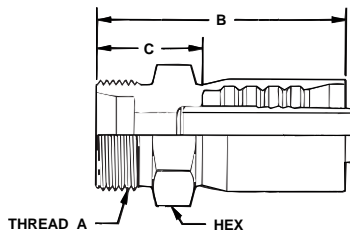
Metric Standpipe-Str



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)	O-RING SEAL
124-2189	6.4-.25	-4	MN	8-0.31	49.0-1.93	28.2-1.11	5W-1681
124-2188	6.4-.25	-4	MN	6-0.24	51.0-2.01	30.2-1.19	5W-1648
124-2190	7.9-.31	-5	MN	10-0.39	56.0-2.20	30.5-1.20	5W-1650
124-2193	9.5-.37	-6	MN	12-0.47	56.0-2.20	30.4-1.20	5W-1651
190-3754	9.5-.37	-6	MN	n/a	56.0-2.20	30.4-1.20	5W-1651
124-2192	9.5-.37	-6	MN	10-0.39	58.0-2.28	32.4-1.28	5W-1650
124-2194	12.7-.50	-8	MN	15-0.59	59.0-2.32	33.9-1.33	5W-1653
124-2195	15.9-.63	-10	MN	18-0.71	61.0-2.40	35.0-1.38	5W-1655
124-2196	19.1-.75	-12	MN	18-0.71	67.0-2.64	36.1-1.42	5W-1655
124-2197	19.1-.75	-12	MN	22-0.87	67.0-2.64	36.1-1.42	5W-1657
124-2198	25.4-1.00	-16	MN	n/a	79.0-3.11	40.6-1.60	5W-4779
124-2199	31.8-1.25	-20	MN	n/a	84.0-3.31	43.7-1.72	5W-1660

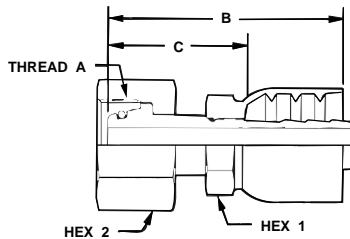
Cat Low and Medium Pressure Permanent Couplings

Metric Male 24° Taper-Str (Light)



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

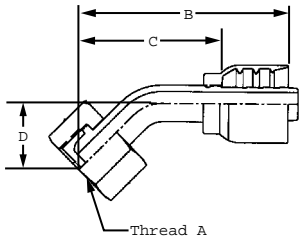
Metric Female Swivel 24° Taper w/O-Ring-Str (Light)



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
501-1381	6.4-.25	-4	MN	M16 x 1.5	10.0-0.39	47.0-1.85	26.0-1.02	192-7513
124-2230	6.4-.25	-4	MN	M12 x 1.5	6.0-0.24	49.0-1.93	27.7-1.09	3E-4288
124-2232	6.4-.25	-4	MN	M14 x 1.5	8.0-0.31	49.0-1.93	27.7-1.09	3E-4289
124-2233	7.9-.31	-5	MN	M16 x 1.5	10.0-0.39	56.0-2.20	30.0-1.18	3E-4296
256-3733	7.9-.31	-5	MN	M18 x 1.5	12.0-0.47	56.0-2.20	29.9-1.18	3E-4297
124-2234	9.5-.37	-6	MN	M16 x 1.5	12.0-0.47	52.0-2.05	27.0-1.06	3E-4296
124-2235	9.5-.37	-6	MN	M18 x 1.5	12.0-0.47	52.0-2.05	27.0-1.06	3E-4297
431-9025	9.5-.37	-6	MN	M22 - 1.5	15.0-0.59	69.0-2.72	40.0-1.57	7T-0508
124-2236	12.7-.50	-8	MN	M22 x 1.5	15.0-0.59	64.0-2.52	38.2-1.50	3E-4298
302-5243	12.7-.50	-8	MN	M26-1.5	18.0-0.71	66.0-2.60	40.0-1.57	7T-0506
124-2237	15.9-.63	-10	MN	M26 x 1.5	18.0-0.71	67.0-2.64	42.0-1.65	7T-0506
124-2238	19.1-.75	-12	MN	M26 x 1.5	18.0-0.71	69.0-2.72	37.8-1.49	7T-0506
124-2239	19.1-.75	-12	MN	M30 x 2.0	22.0-0.87	70.0-2.76	39.4-1.55	3E-6761
124-2240	25.4-1.00	-16	MN	M36 x 2.0	28.0-1.10	79.0-3.11	40.9-1.61	092-2304
124-2241	31.8-1.25	-20	MN	M45 x 2.0	35.0-1.38	85.0-3.35	44.0-1.73	9X-7447
256-3734	19.1-.75	-24	MN	M52 - 2.0	36.0-1.40	106.0-4.17	55.0-2.17	190-8676

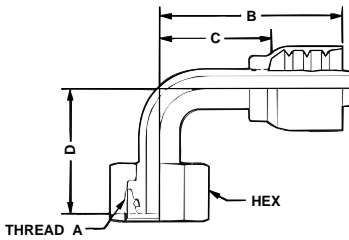
Cat Low and Medium Pressure Permanent Couplings

Metric Female Swivel 24° Taper w/O-Ring-45° Elbow (Light)



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 - 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 - 1.5	15.0-0.59	70.0-2.76	45.0-1.77	20.0-.79	3E-4298
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	3E-4298
503-7781	12.7-.50	-8	MN	M26 - 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	7T-0506
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	7T-0506
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

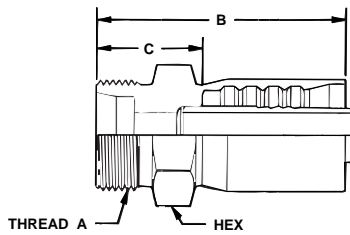
Metric Female Swivel 24° Taper w/O-Ring-90° Elbow (Light)



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
256-3722	6.4-.25	-4	MN	M12 x 1.5	6.0-0.24	46.0-1.81	25.2-.99	26.4-1.04	3E-4288
256-3723	6.4-.25	-4	MN	M14 x 1.5	8.0-0.31	42.0-1.65	21.2-.83	28.5-1.12	3E-4289
501-1383	6.4-.25	-4	MN	M16 - 1.5	10.0-0.39	46.0-1.81	25.0-.98	33.0-1.30	192-7513
501-9528	6.4-.25	-4	MN	M18 - 1.5	12.0-0.47	46.0-1.81	25.0-.98	36.0-1.42	8U-0598
256-3724	7.9-.31	-5	MN	M16 x 1.5	10.0-0.39	56.0-2.20	29.6-1.17	35.6-1.40	3E-4296
503-7992	9.5-.37	-6	MN	M18 - 1.5	12.0-0.47	58.0-2.28	33.0-1.30	36.0-1.42	8U-0598
221-0452	9.5-.37	-6	MN	M16 - 1.5	10.0-0.39	58.0-2.28	32.0-1.26	37.0-1.46	-
256-3726	9.5-.37	-6	MN	M18 x 1.5	12.0-0.47	59.0-2.32	34.0-1.34	36.6-1.44	3E-4297
431-9026	9.5-.37	-6	MN	M22 - 1.5	15.0-0.59	58.0-2.28	33.0-1.30	44.0-1.73	3E-4298
503-4446	12.7-.50	-8	MN	M22 x 1.5	15.0-0.59	62-2.44	38-1.50	41-1.61	3E-4298
228-2991	12.7-.50	-8	MN	M22 - 1.5	15.0-0.59	64.0-2.52	38.8-1.53	42.0-1.65	3E-4298
302-5244	12.7-.50	-8	MN	M26 - 1.5	18.0-0.71	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	18.0-0.71	72.0-2.83	47.1-1.85	50.8-2.00	7T-0506
256-3728	19.1-.75	-12	MN	M26 x 1.5	18.0-0.71	84.0-3.31	52.5-2.07	57.2-2.25	7T-0506
256-3729	19.1-.75	-12	MN	M30 x 2.0	22.0-0.87	84.0-3.31	52.5-2.07	53.1-2.09	3E-6761
256-3730	25.4-1.00	-16	MN	M36 x 2.0	28.0-1.10	109.0-4.29	71.1-2.80	71.1-2.80	092-2304
256-3731	31.8-1.25	-20	MN	M45 x 2.0	35.0-1.38	132.0-5.20	91.7-3.61	79.0-3.11	9X-7447

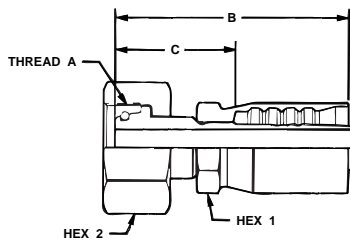
Cat Low and Medium Pressure Permanent Couplings

Metric Male 24° Taper-Str (Heavy)



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

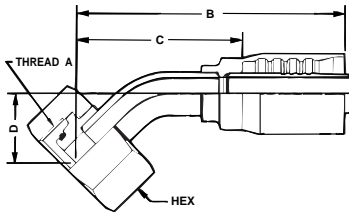
Metric Female Swivel 24° Taper w/O-Ring-Str (Heavy)



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	7T-0508
124-2258	12.7-.50	-8	MN	M24 x 1.5	16.0-0.63	68.0-2.68	42.2-1.66	3E-4298
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

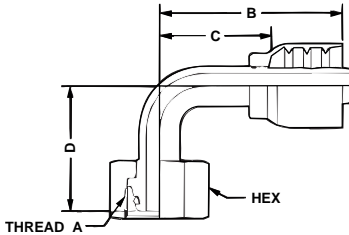
Cat Low and Medium Pressure Permanent Couplings

Metric Female Swivel 24° Taper w/O-Ring-45° Elbow (Heavy)



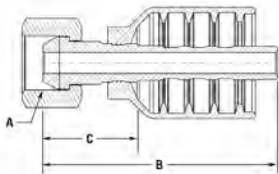
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
124-2264	6.4-.25	-4	MN	M16 x 1.5	8.0-0.31	58.0-2.28	36.8-1.45	17.0-.67	3E-4289
124-2265	6.4-.25	-4	MN	M18 x 1.5	10.0-0.39	59.0-2.32	37.6-1.48	18.0-.71	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	7T-0508
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 Female Swivel 24° Taper w/O-Ring-90° Elbow (Heavy)



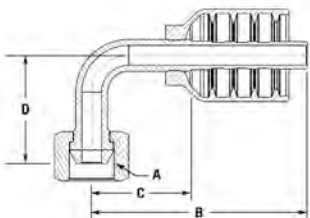
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
124-2275	6.4-.25	-4	MN	M16 x 1.5	8.0-0.31	46.0-1.81	25.1-.99	30.0-1.18	3E-4289
124-2276	6.4-.25	-4	MN	M18 x 1.5	10.0-0.39	46.0-1.81	25.1-.99	30.0-1.18	3E-4296
124-2277	7.9-.31	-5	MN	M20 x 1.5	12.0-0.47	56.0-2.20	29.7-1.17	37.6-1.48	3E-4297
256-3725	7.9-.31	-5	MN	M18 -1.5	12.0-0.47	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	12.0-0.47	58.0-2.28	32.5-1.28	37.6-1.48	3E-4297
124-2279	9.5-.37	-6	MN	M22 x 1.5	14.0-0.55	58.0-2.28	32.5-1.28	37.6-1.48	7T-0508
124-2280	12.7-.50	-8	MN	M24 x 1.5	16.0-0.63	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	20.0-0.79	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	20.0-0.79	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	25.0-0.98	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	30.0-1.18	109.0-4.29	71.1-2.80	76.2-3.00	3E-6764

JIS 30° Conical Seat-Female Swivel-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)
255-4883	19.1-.75	-12	MN	3/4-14	-12	63.5-2.5	32.51-1.28

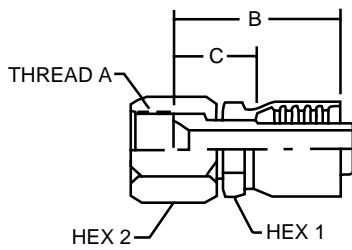
JIS 30° Conical Seat-Female Swivel-90° Elbow



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)
255-4884	19.1-.75	-12	MN	3/4-16	-8	83.57-3.29	52.58-2.07	50.04-1.97
255-4882	19.1-.75	-12	MN	3/4-14	-12	83.57-3.29	52.35-2.06	94.49-3.72

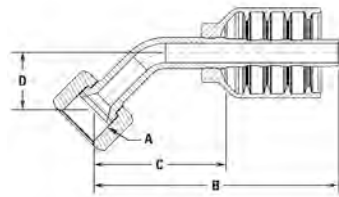
Cat Low and Medium Pressure Permanent Couplings

JIS 30° Flare Female Swivel-Str



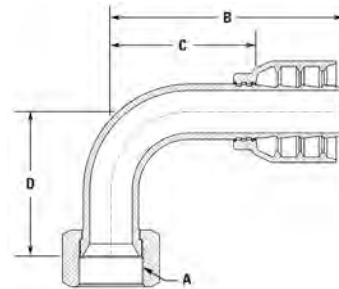
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
154-0102	6.4-.25	-4	MN	1/4-19	-4	44.0-1.73	22.6-.89
154-0103	9.5-.37	-6	MN	3/8-19	-6	46.0-1.81	20.0-.79
154-0104	12.7-.50	-8	MN	1/2-14	-8	53.0-2.09	28.0-1.10
519-4006	19.1-.75	-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

JIS 30° Flare Female Swivel-45° Elbow



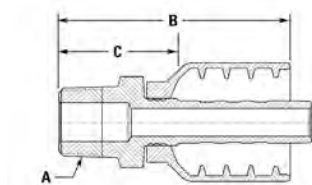
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
514-2645	9.5-.37	-6	MN	3/8-19	-6	68-2.68	43-1.69	18-0.71
519-3995	12.7-.50	-8	MN	1/2-14	-8	74-2.91	49-1.93	20-0.79
519-4007	19.1-.75	-12	MN	3/4-14	-12	98-3.86	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
580-4114	25.4-1.00	-16	XN	1-11	-16	160-6.30	89-3.50	35-1.38

JIS 30° Flare 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)
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
580-4115	25.4-1.00	-16	XN	1-11	-16	140-5.51	69-2.72	70-2.76

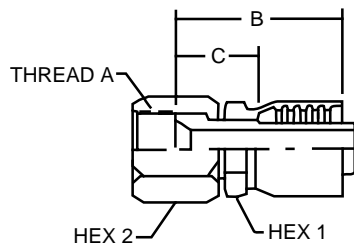
JIS Male Tapered Pipe-Str



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)
281-9339	6.4-.25	-4	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

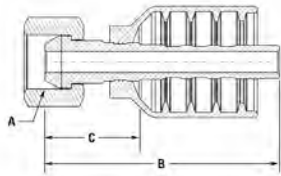
Cat Low and Medium Pressure Permanent Couplings

JIS Metric 30° Flare Female Swivel -Str (Komatsu Style)



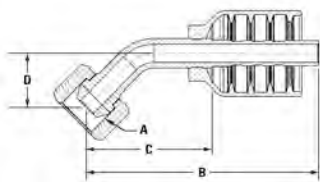
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
154-0106	6.4-.25	-4	MN	M14 x 1.5	41.0-1.61	19.8-.78
154-0108	6.4-.25	-4	MN	M18 x 1.5	43.0-1.69	22.1-.87
154-0107	9.5-.37	-6	MN	M14 x 1.5	45.0-1.77	20.0-.79
154-0109	9.5-.37	-6	MN	M18 x 1.5	48.0-1.89	22.0-.87
154-0110	12.7-.50	-8	MN	M22 x 1.5	54.0-2.13	28.2-1.11
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

ISO 8434-6 BSPP Conical Seat-Female Swivel-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)
556-2931	6.4-.25	-4	MN	1/4-19	-4	46.5-1.83	22.4-0.88
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
503-1517	12.7-.50	-8	MN	5/8-14	-10	55.0-2.17	25.4-1.00
518-0814	12.7-.50	-8	MN	1/2-14	-8	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
518-7796	25.4-1.00	-16	MN	1-11	-16	78.0-3.07	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	113.0-4.45	56.1-2.21
281-9333	50.8-2.00	-32	MN	2-11	-32	90.5-3.56	40.42-1.59

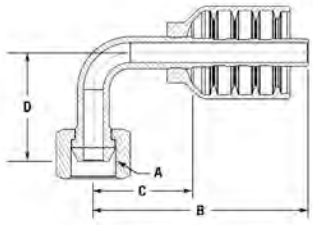
ISO 8434-6 BSPP Conical Seat-Female Swivel-45° Elbow



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)
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
503-1518	12.7-.50	-8	MN	5/8-14	-10	81.8-3.22	52.2-2.06	23.0-0.91
518-0815	12.7-.50	-8	MN	1/2-14	-8	78.8-3.10	49.2-1.94	20.0-0.79
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

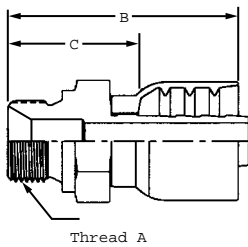
Cat Low and Medium Pressure Permanent Couplings

ISO 8434-6 BSPP Conical Seat-Female Swivel-90° Elbow



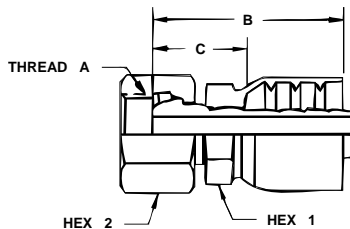
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
556-2937	6.4-.25	-4	MN	1/4-19	-4	49.3-1.94	25.3-1.00	30.2-1.19
556-2952	6.4-.25	-4	MN	3/8-19	-6	52.3-2.06	28.24-1.11	37.1-1.46
514-2633	9.5-.37	-6	MN	3/8-19	-6	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
255-4881	19.1-.75	-12	MN	3/4-14	-12	92.46-3.64	57.1-2.25	161.3-6.35
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

BSPP 60° Male-Str



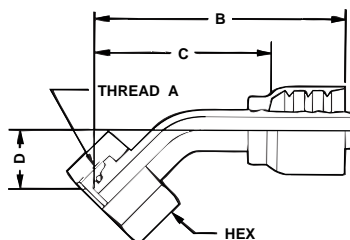
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
124-2172	6.4-.25	-4	MN	1/4-19	-4	48.0-1.89	26.7-1.05
124-2173	9.5-.37	-6	MN	3/8-19	-6	55.0-2.17	30.1-1.19
154-0111	9.5-.37	-6	MN	1/2-14	-8	59.0-2.32	33.7-1.33
124-2174	12.7-.50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

BSPP Spherical Seat-Female Swivel-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)
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
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
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



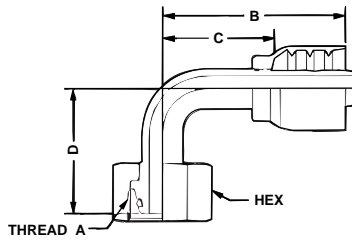
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
124-2296	6.4-.25	-4	MN	1/4-19	-4	58.0-2.28	37.1-1.46	17.5-.69
124-2297	9.5-.37	-6	MN	3/8-19	-6	71.0-2.80	45.3-1.78	20.1-.79
124-2298	12.7-.50	-8	MN	1/2-14	-8	75.0-2.95	49.5-1.95	20.1-.79

Cat Low and Medium Pressure Permanent Couplings

BSPP Spherical Seat-Female Swivel-45° Elbow (Cont'd.)

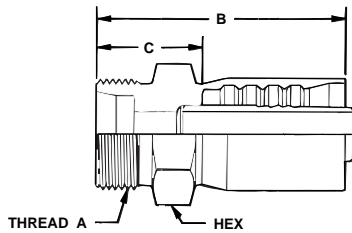
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
124-2299	19.1-.75	-12	MN	3/4-14	-12	96.0-3.78	65.0-2.56	27.0-1.06
124-2300	25.4-1.00	-16	MN	1-11	-16	121.0-4.76	83.0-3.27	30.0-1.18

BSPP Spherical Seat-Female Swivel-90° Elbow



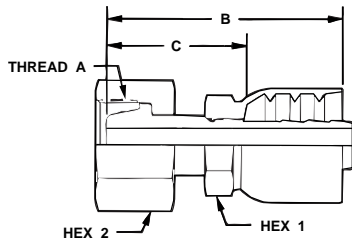
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
124-2301	6.4-.25	-4	MN	1/4-19	-4	46.2-1.82	25.3-1.00	30.2-1.19
302-5285	6.4-.25	-4	MN	3/8-19	-6	49.28-1.94	28.19-1.11	37.08-1.46
124-2302	9.5-.37	-6	MN	3/8-19	-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

French Gaz Male-Str



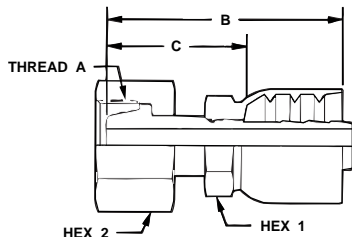
Part Number	HOSE I.D. (mm - in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm - in)	B LENGTH (mm - in)	C CUT-OFF FACTOR (mm - in)
124-2307	7.9 - 0.31	-5	MN	M20 x 1.5	13.0 - 0.51	54.0 - 2.13	27.7 - 1.09
124-2308	9.5 - 0.37	-6	MN	M20 x 1.5	13.0 - 0.51	57.0 - 2.24	31.4 - 1.24
124-2309	12.7 - 0.50	-8	MN	M24 x 1.5	17.0 - 0.67	56.0 - 2.20	30.6 - 1.20
124-2310	15.9 - 0.63	-10	MN	M30 x 1.5	21.0 - 0.83	58.0 - 2.28	32.5 - 1.28

French Gaz Metric-Str



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)
124-2313	7.9 - 0.31	-5	MN	M20 x 1.5	13.0 - 0.51	54.0 - 2.13	27.9 - 1.10
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
124-2316	15.9 - 0.63	-10	MN	M30 x 1.5	21.0 - 0.83	59.0 - 2.32	33.8 - 1.33
124-2317	19.1 - 0.75	-12	MN	M36 x 1.5	27.0 - 1.03	73.0 - 2.87	42.0 - 1.65
124-2318	25.4 - 1.00	-16	MN	M45 x 1.5	34.0 - 1.34	82.0 - 3.23	44.0 - 1.73

French Gaz Milli-metric-Str



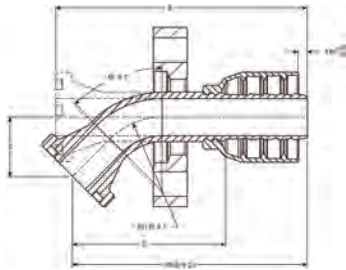
Part Number	HOSE I.D. (mm - in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A TUBE O.D. (mm - in)	B LENGTH (mm - in)	C CUT-OFF FACTOR (mm - in)
124-2319	6.4 - 0.25	-4	MN	M12 x 1.0	6.0 - 0.24	45.0 - 1.77	24.1 - 0.95
124-2324	9.5 - 0.37	-6	MN	M20 x 1.5	14.0 - 0.55	54.0 - 2.13	28.0 - 1.10
124-2326	19.1 - 0.75	-12	MN	M30 x 1.5	22.0 - 0.87	64.0 - 2.52	33.0 - 1.30
124-2327	25.4 - 1.00	-16	MN	M39 x 1.5	30.0 - 1.18	76.0 - 2.99	37.6 - 1.48

Cat Low and Medium Pressure Permanent Couplings

Captive Flange Code 61 (2 Hole)-Straight

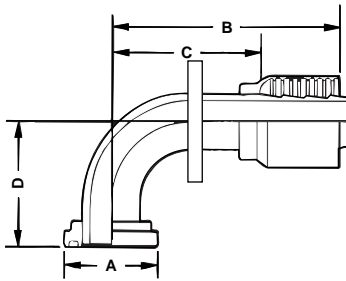
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
183-5181	6.4-.25	-4	MN	23.8-.94	48.0-1.89	26.9-1.06
255-4886	25.4-1.00	-16	MN	44.5-1.75	85.0-3.35	47.0-1.85

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



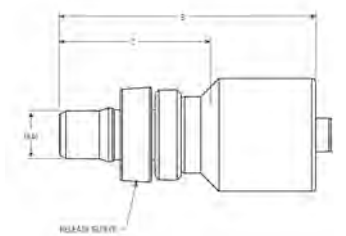
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD DASH SIZE	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
253-1350	19.1-.75	-12	MN	-12	38.1-1.50	97.0-3.82	65.0-2.56	25.0-.98	4J-5267
255-4877	25.4-1.00	-16	MN	-16	44.5-1.75	114.0-4.49	76.0-2.99	27.0-1.06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

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



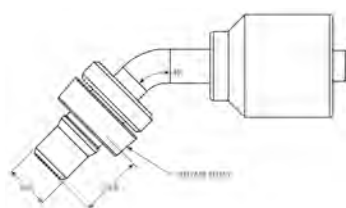
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
183-5180	6.4-.25	-4	MN	23.8-.94	49.0-1.93	29.3-1.15	31.8-1.25
322-0113	25.4-1.00	-16	MN	44.5-1.75	109-4.29	72-2.83	61-2.40

Snap To Connect-Str



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

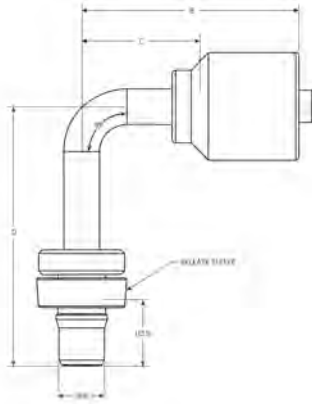
Snap To Connect-45° Elbow



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

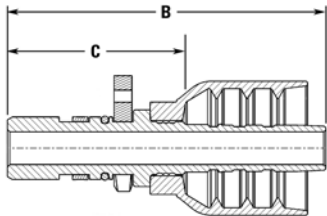
Cat Low and Medium Pressure Permanent Couplings

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
263-2659	9.5-.37	-6	MN	-6.0-.24	57.0-2.24	33.0-1.30	70.6-2.78
263-2646	12.7-.50	-8	MN	8.0-.31	64.0-2.52	38.1-1.50	53.0-2.09
263-2663	25.4-1.00	-16	MN	16.0-.63	109.0-4.29	70.9-2.79	148.0-5.83

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)	BEND ANGLE	DROP
505-4255	9.52 - 0.37	-6	MN	-6.0 - 0.24	66 - 2.60	37 - 1.50	-	-
506-8169	9.52 - 0.37	-6	MN	-8.0 - 0.31	66 - 2.60	37 - 1.50	-	-
537-8508	12.7 - 0.50	-8	MN	-6.0 - 0.24	68 - 2.68	39 - 1.54	-	-
505-4256	12.7 - 0.50	-8	MN	-8.0 - 0.31	68 - 2.68	39 - 1.54	-	-
536-8817	12.7 - 0.50	-8	MN	-8.0 - 0.31	73 - 2.87	43 - 1.69	90	58 - 2.28
523-2366	19.1 - 0.75	-12	MN	-12.0 - 0.47	86 - 3.39	51 - 2.00	-	-

Cat Special Application Hose & Coupling Products

Thermoplastic Hose (1028) and Couplings	165
Thermoplastic Hose (1028)	165
Permanent Couplings (1028)	166
ORFS	166
JIC 37°	166
NPTF	168
STOR	169
SAE 45°	169
Metric	169
BSPP	169
Reduced O.D. Thermoplastic Hose (2760) and Couplings	170
Reduced Outside Diameter Thermoplastic Hose (2760)	170
Permanent Couplings (2760)	171
ORFS	171
JIC 37°	173
NPTF	175
STOR	175
SAE 45°	176
ISO	176
BSPP	177
Snap To Connect	177
Engine and Air Brake Hose (556,1130) and Couplings	178
Engine and Air Brake Hose (556,1130) and Couplings	178
Reusable Couplings (556, 1130)	180
ORFS	180
Code 61 Flange	181
JIC 37°	181
NPTF	183
SAE 45°	183
Air Conditioning Hose (1543J) and Couplings	186
Air Conditioning Hose (1543J)	186
Permanent Couplings (1543J)	187
Double Collet	187
Male Inverted O-Ring Swivel	187
Tube O-Ring Female Swivel	188
Metric Tube O-Ring Female Swivel	189
Adapter to Self Sealing Fitting	191
Service Valve Fitting	192
Male Bulkhead O-Ring Connector	193
High Temperature Fuel Hose (743) and Couplings	194
High Temperature Fuel Hose (743)	194
Permanent Couplings (743)	195
ORFS	195
JIC 37°	196
NPTF	197
SAE 45°	198
JIS	198
ISO	198
BSPP	199
Medium Pressure High Temperature Teflon Lined Hose (2771A)	201
Medium Pressure High Temperature Teflon Lined Hose (2771A)	201
Permanent Couplings (2771A)	202
ORFS	202
JIC 37°	203
NPTF	206
STOR	206

Cat Special Application Hose & Coupling Products

SAE 45°	206
ISO	207
BSPP	208
Snap To Connect	208
Pilot Hose (2929) and Couplings	209
Pilot Hose (2929)	209
Pilot Hose ToughGuard (2929TG).....	209
Permanent Couplings (2929)	210
ORFS.....	210
JIC 37°	211
NPTF.....	212
SAE 45°	213
JIS.....	213
ISO	213
BSPP	214
Snap To Connect	214
Pre-filled Grease Hose	216
Pre-filled Grease Hose	216
NPTF Male-Str	216
Specialty Hose	217
Heater Hose - Standard (515A).....	217
Heater Hose- High Temperature (515B).....	217
Heater Hose- High Temperature (515E)	217
Radiator Hose (642C).....	217
Radiator Hose (642E).....	218
Hydraulic Return Hose (661)	218
Air Brake Hose (662)	219
Hydraulic Suction Hose (844)	219

Thermoplastic Hose (1028) and Couplings

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.

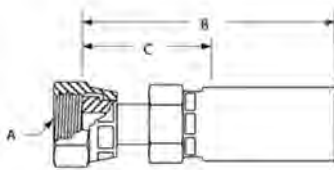
Required Cutting Tool: Cutting Tool (177-4271) and Blade (177-4272) is required for cutting hose. Do not use Hose Cutting Machine. Cut-off saw can cause heating distortion. See Miscellaneous Tools and Accessories section.

¹ Centerline of Hose

² Twin-line Hose

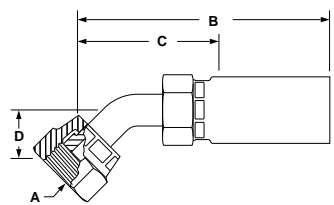
Permanent Couplings (1028)

ORFS Female Swivel-Str



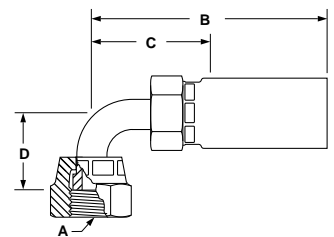
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
479-4180	6.4-.25	-4	56	9/16-18	-4	55.0-2.17	31.0-1.22	4J-5477
479-4181	6.4-.25	-4	56	11/16-16	-6	57.0-2.24	32.0-1.26	6V-8397
479-4182	7.9-.31	-5	56	11/16-16	-6	58.0-2.28	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

ORFS Female Swivel-45° Elbow



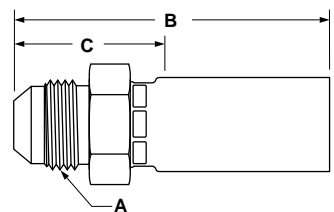
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
479-4173	6.4-.25	-4	56	9/16-18	-4	57.0-2.24	33.0-1.30	10.0-.39	4J-5477
479-4174	9.5-.37	-6	56	11/16-16	-6	60.0-2.36	35.0-1.38	11.0-.43	6V-8397
479-4175	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

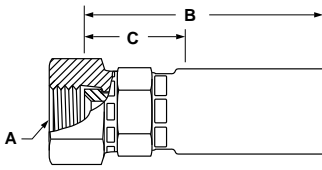
JIC 37° Male-Str



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)
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

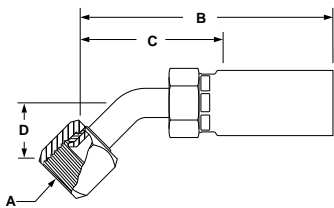
Permanent Couplings (1028)

JIC 37° Female Swivel-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)
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
480-9463	25.4-1.00	-16	56	1 5/16-12	-16	97.0-3.82	49.0-1.93

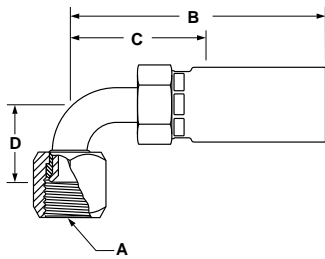
JIC 37° Female Swivel-45° Elbow



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
9X-3953	9.5-.37	-6	55	9/16-18	-6	83.0-3.27	48.0-1.89	15.0-.59
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

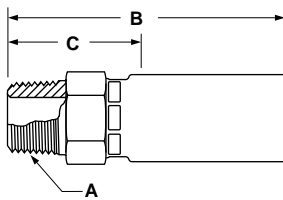
Permanent Couplings (1028)

JIC 37° Female Swivel-90° Elbow



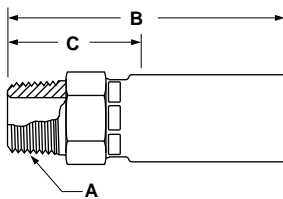
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
479-4186	4.8-.19	-3	56	7/16-20	-4	44.0-1.73	37.0-1.46	32.0-1.26
481-5750	4.8-.19	-3	56	7/16-20	-4	51.0-2.01	33.0-1.30	46.0-1.81
479-4192	6.4-.25	-4	56	7/16-20	-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

NPTF 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)
267-3846	4.8-.19	-3	JN	1/8-27	-2	39.0-1.54	20.7-.81
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
9X-3908	6.4-.25	-4	55	3/8-18	-6	61.0-2.40	33.0-1.30
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

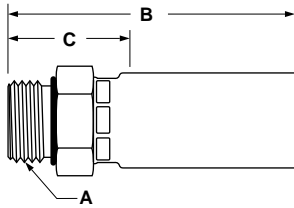
NPTF Male Swivel-Str



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)
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

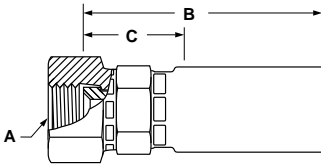
Permanent Couplings (1028)

STOR Male-Str



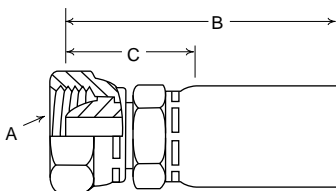
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
479-4149	4.8-.19	-3	56	7/16-20	-4	41.0-1.61	23.0-.91	3J-7354

SAE 45° Female Swivel-Str



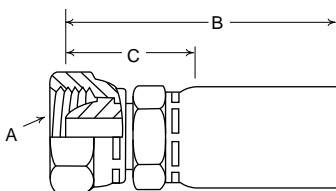
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
479-4158	9.5-.37	-6	56	5/8-18	-6	60.0-2.36	35.0-1.38

Metric Female Swivel 24° Taper-Str (Light)



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)
3E-4014	6.4 - 0.25	-4	55	M14 x 1.5	8.0 - 0.31	57.0 - 2.24	27.0 - 1.06
3E-4015	7.9 - 0.31	-5	55	M16 x 1.5	10.0 - 0.39	60.0 - 2.36	27.0 - 1.06
3E-4016	9.5 - 0.37	-6	55	M16 x 1.5	10.0 - 0.39	67.0 - 2.64	29.0 - 1.14
3E-4017	9.5 - 0.37	-6	55	M18 x 1.5	12.0 - 0.47	68.0 - 2.68	29.0 - 1.14
3E-4018	12.7 - 0.50	-8	55	M22 x 1.5	15.0 - 0.59	74.0 - 2.91	31.0 - 1.22

BSPP Spherical Seat-Female Swivel-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)
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
481-5740	12.7 - 0.50	-8	56	5/8-14	-10	49.0 - 1.93	18.0 - 0.71

Reduced O.D. Thermoplastic Hose (2760) and Couplings

Reduced Outside Diameter Thermoplastic 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).

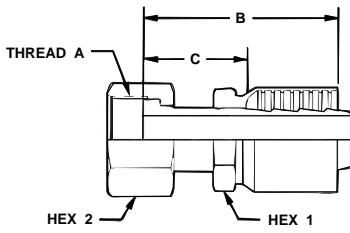
Couplings: Crimp-on permanent, non-skive type, JN Series coupling. See Permanent Couplings (2760) section. For related assembly equipment and tooling, see Tooling section. Note: Hose cover does not need to be removed before attaching couplings. Required Cutting.

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

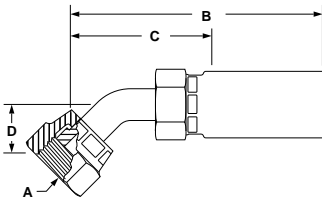
Permanent Couplings (2760)

ORFS Female Swivel-Str



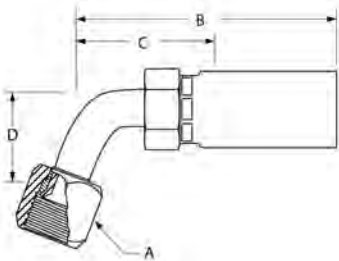
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
307-8256	4.8-.19	-3	JN	11/16-16	-6	46-1.81	28-1.10	6V-8397
273-1716	6.4-.25	-3	JN	9/16-18	-4	43.0-1.69	25.0-.98	4J-5477
146-3338	6.4-.25	-4	JN	9/16-18	-4	44.0-1.73	25.0-.98	4J-5477
146-3350	6.4-.25	-4	JN	11/16-16	-6	44.0-1.73	27.0-1.06	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	34.3-1.35	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	37.3-1.47	6V-9746
277-2091	19.1-.75	-12	JN	1 7/16-12	-16	62.0-2.44	38.0-1.50	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	31.2-1.23	10.4-.41	4J-5477
146-3343	6.4-.25	-4	JN	9/16-18	-4	50.0-1.97	31.0-1.22	10.0-.39	4J-5477
146-3446	6.4-.25	-4	JN	11/16-16	-6	48.0-1.89	30.8-1.21	10.4-.41	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
307-8266	15.9-.63	-10	JN	1-14	-10	72.0-2.83	51.1-2.01	16.5-.65	7J-9108
307-8267	15.9-.63	-10	JN	1 3/16-12	-12	77.0-3.03	55.6-2.19	21.1-.83	6V-9746
307-8268	19.1-.75	-12	JN	1 3/16-12	-12	80.0-3.15	56.0-2.20	21.1-.83	6V-9746

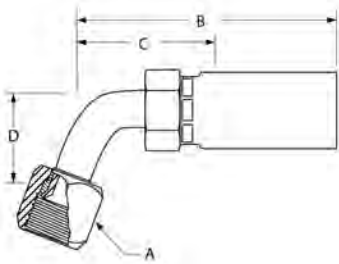
ORFS Female Swivel-65° Elbow



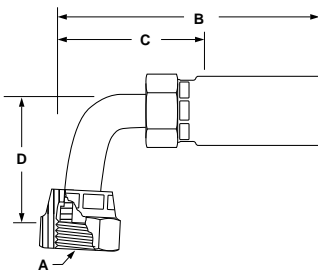
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
146-3348	9.5-.37	-6	JN	11/16-16	-6	83.0-3.27	56.0-2.20	61.0-2.40	6V-8397

Permanent Couplings (2760)

ORFS Female Swivel-65 1/2° Elbow

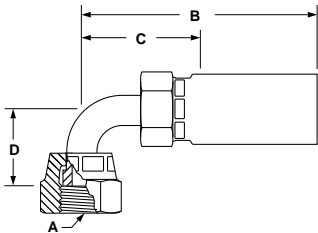


ORFS Female Swivel-80° Elbow



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

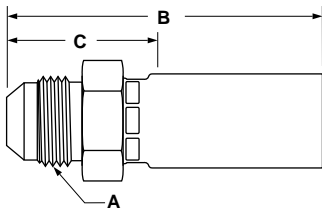
ORFS Female Swivel-90° Elbow



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	26.7-1.05	22.9-.90	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
307-8271	15.9-.63	-10	JN	1-14	-10	67-2.64	46-1.81	32-1.26	7J-9108
307-8272	15.9-.63	-10	JN	1 3/16-12	-12	67.0-2.64	45.7-1.80	32.3-1.27	6V-9746
307-8273	19.1-.75	-12	JN	1 3/16-12	-12	74.0-2.91	49.8-1.96	47.8-1.88	6V-9746
307-8274	19.1-.75	-12	JN	1 3/16-12	-12	74.0-2.91	49.8-1.96	96.0-3.78	6V-9746
293-2193	19.1-.75	-12	JN	1 7/16-12	-16	74.0-2.91	49.8-1.96	56.1-2.21	5K-9090

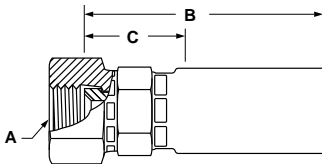
Permanent Couplings (2760)

JIC 37° Male-Str



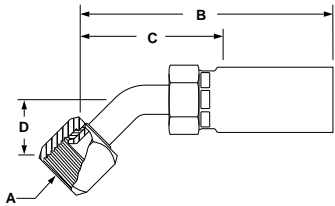
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3400	6.4-.25	-4	JN	7/16-20	-4	44.0-1.73	27.0-1.06
146-3402	9.5-.37	-6	JN	9/16-18	-6	56.0-2.20	29.0-1.14

JIC 37° Female Swivel-Str



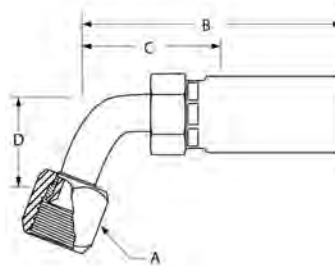
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3367	6.4-.25	-4	JN	7/16-20	-4	36.0-1.42	17.0-.67
253-1371	6.4-.25	-4	JN	9/16-18	-6	37.0-1.46	20.0-.79
146-3447	7.9-.31	-5	JN	9/16-18	-6	40.0-1.57	18.1-.71
146-3368	9.5-.37	-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	48.0-1.89	26.0-1.02
146-3449	12.7-.50	-8	JN	7/8-14	-10	49.0-1.93	28.0-1.10

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	28.8-1.13	8.4-.33
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	43.2-1.70	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	45.2-1.78	16.3-.64

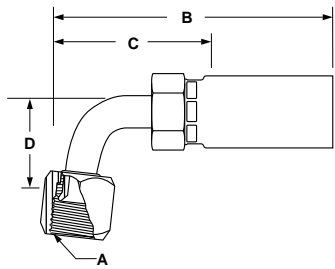
JIC 37° Female Swivel-65° Elbow



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

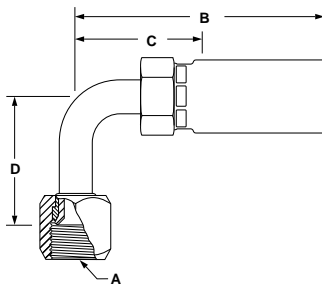
Permanent Couplings (2760)

JIC 37° Female Swivel-80° Elbow



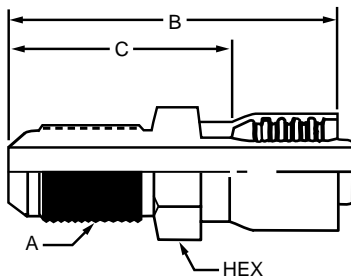
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3380	9.5-.37	-6	JN	9/16-18	-6	64.0-2.52	37.0-1.46	35.0-1.38
146-3381	9.5-.37	-6	JN	9/16-18	-6	68.0-2.68	41.0-1.61	59.0-2.32

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	27.0-1.06	18.0-.71
146-3379	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	27.0-1.06	27.0-1.06
146-3418	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	27.0-1.06	50.0-1.97
146-3392	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	27.0-1.06	63.0-2.48
146-3383	7.9-.31	-5	JN	9/16-18	-6	49.0-1.93	28.5-1.12	21.8-.86
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	38.4-1.51	35.1-1.38
146-3398	12.7-.50	-8	JN	3/4-16	-8	59.0-2.32	38.0-1.50	46.0-1.81
146-3395	12.7-.50	-8	JN	3/4-16	-8	59.0-2.32	38.0-1.50	64.0-2.52
146-3390	12.7-.50	-8	JN	7/8-14	-10	59.0-2.32	38.4-1.51	44.5-1.75
146-3396	12.7-.50	-8	JN	7/8-14	-10	59.0-2.32	38.4-1.51	77.7-3.06

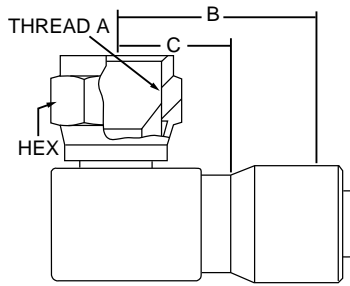
JIC 37° Male Bulkhead-Str



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)
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

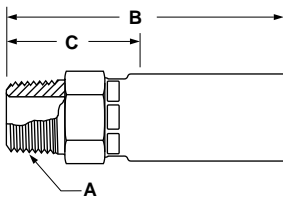
Permanent Couplings (2760)

JIC 37° Female Swivel Block-90° Elbow



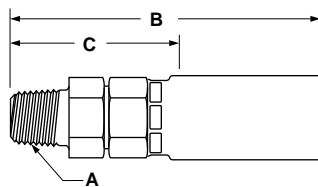
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3399	12.7-.50	-8	JN	3/4-16	-8	44.0-1.73	23.0-.91	22.0-.87

NPTF Male-Str



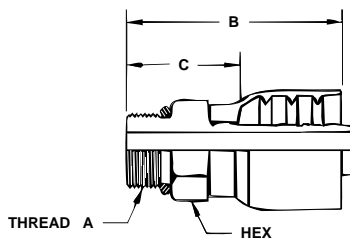
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
267-3846	4.8-.19	-3	JN	1/8-27	-2	39-1.54	21-0.83
267-4660	4.8-.19	-3	JN	3/8-18	-6	45-1.77	28-1.10
146-3404	6.4-.25	-4	JN	1/8-27	-2	38.0-1.50	22.0-.87
146-3405	6.4-.25	-4	JN	1/4-18	-4	45.0-1.77	29.0-1.14
146-3406	6.4-.25	-4	JN	3/8-18	-6	45.0-1.77	28.0-1.10
146-3408	9.5-.37	-6	JN	1/4-18	-4	56.0-2.20	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

NPTF Male Swivel-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)
267-4658	4.8-.19	-3	JN	1/8-27	-2	53.0-2.09	36.0 - 1.42
479-4159	4.8-.19	-3	56	1/4-18	-4	66.0-2.60	48.0-1.89
178-9166	6.4-.25	-4	JN	1/8-27	-2	53.0-2.09	36.2-1.43
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	41.0-1.61
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	49.0-1.93

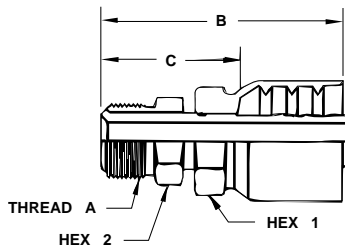
STOR Male-Str



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
146-3419	6.4-.25	-4	JN	7/16-20	-4	39.0-1.54	22.1-.87	3J-7354

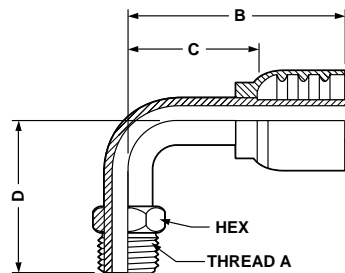
Permanent Couplings (2760)

SAE 45° Inverted Flare Male Swivel-Str



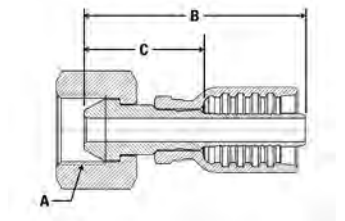
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3430	9.5-.37	-6	JN	5/8-18	-6	57.0-2.24	30.0-1.18
146-3431	12.7-.50	-8	JN	3/4-18	-8	58.0-2.28	37.0-1.46

SAE 45° Inverted Flare Male Swivel-90° Elbow



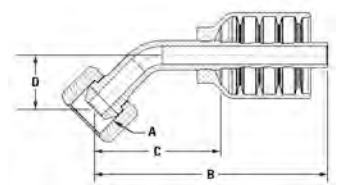
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3435	12.7-.50	-8	JN	3/4-18	-8	59.0-2.32	38.4-1.51	46.0-1.81

ISO 8434-6 BSPP Conical Seat-Female Swivel-Str



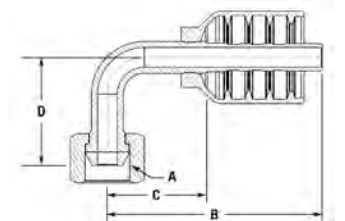
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
557-5997	6.4-.25	-4	JN	1/4-19	-4	41.2-1.62	22.3-0.88
557-5332	7.9-.31	-5	JN	3/8-19	-6	42.4-1.67	20.9-0.82
557-5334	9.5-.37	-6	JN	3/8-19	-6	52.6-2.07	23.4-0.92
557-9040	12.7-.50	-8	JN	1/2-14	-8	51.9-2.04	27.9-1.10

ISO 8434-6 BSPP Conical 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)
557-5999	6.4-.25	-4	JN	1/4-19	-4	56.38-2.22	37.6-1.48	17.5-0.69
557-9041	12.7-.50	-8	JN	1/4-19	-8	73.15-2.88	49.14-1.93	20.1-0.79

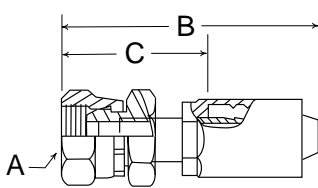
ISO 8434-6 BSPP Conical Seat-Female Swivel-90° Elbow



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)
557-6001	6.4-.25	-4	JN	1/4-19	-4	44.7-1.76	25.9-1.02	30.23-1.19
557-5336	9.5-.37	-6	JN	3/8-19	-6	61.7-2.43	32.3-1.27	37.08-1.46
557-9042	12.7-.50	-8	JN	1/2-14	-8	62.2-2.45	38.19-1.50	37.6-1.48

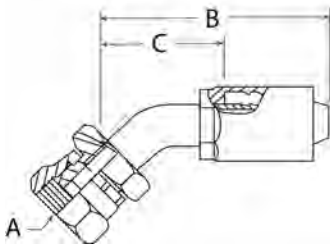
Permanent Couplings (2760)

BSPP Spherical Seat-Female Swivel-Str



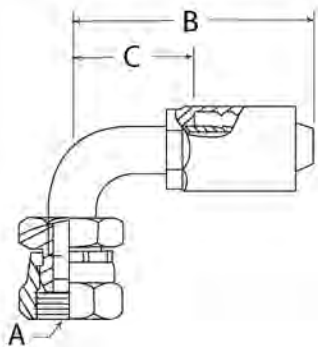
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3436	6.4-.25	-4	JN	1/4-19	-4	39.62-1.56	22.27-0.88
146-3437	7.9-.31	-5	JN	3/8-19	-6	40.9-1.61	21.0-0.83
146-3438	9.5-.37	-6	JN	3/8-19	-6	56.6-2.23	29.5-1.16
146-3439	12.7-.50	-8	JN	1/2-14	-8	48.8-1.92	27.9-1.10

BSPP Spherical Seat-Female Swivel-45° Elbow



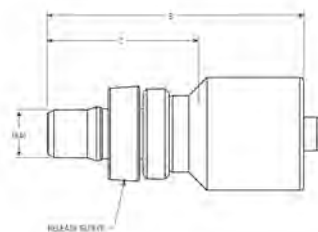
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3440	6.4-.25	-4	JN	1/4-19	-4	55.0-2.17	37.7-1.48	17.5-.69
146-3441	12.7-.50	-8	JN	1/2-14	-8	69.9-2.75	48.8-1.92	20.1-0.79

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	43.2-1.70	28.7-1.13	30.2-1.19
146-3443	12.7-.50	-8	JN	1/2-14	-8	38.1-1.5	38.1-1.5	37.6-1.48

Snap To Connect-Str



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

Engine and Air Brake Hose (556,1130) and Couplings

One-Wire Braid Hose - Fabric Covered (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.

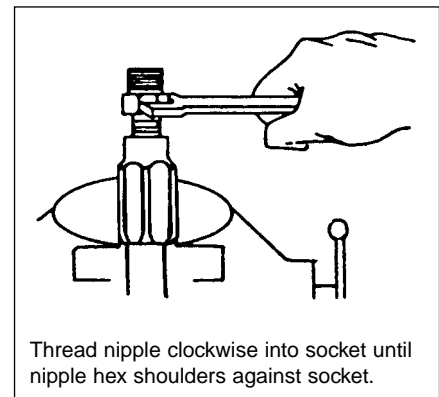
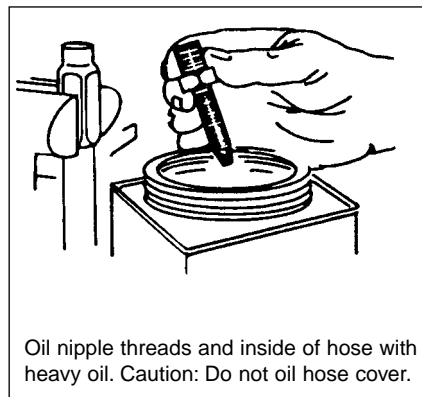
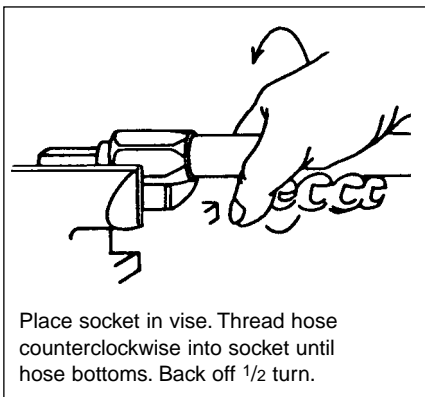
Couplings: Screw-type reusable, non-skive type, see Reusable Couplings (556, 1130) section. For related assembly equipment and tooling, see Tooling section.

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



Engine and Air Brake Hose (556,1130) and Couplings

Engine And Air Brake 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.

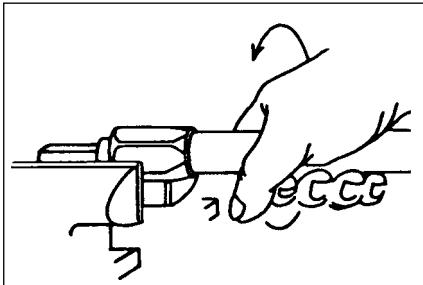
Couplings: Screw-type reusable, non-skive type, see Reusable Couplings (556, 1130) section. For related assembly equipment and tooling, see Tooling section.

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

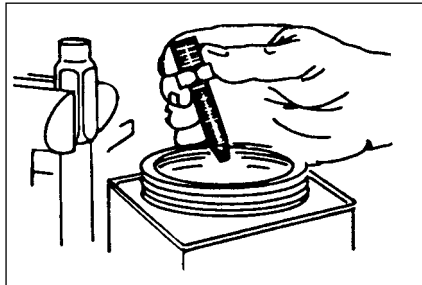
Note: 4901 hose type is a valid replacement for 1130 hose type where DOT approval is not required.

¹ Centerline of Hose

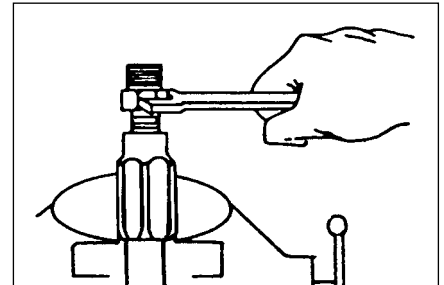
Assembly Instructions



Place socket in vise. Thread hose counterclockwise into socket until hose bottoms. Back off 1/2 turn.



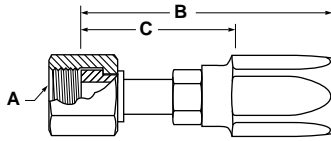
Oil nipple threads and inside of hose with heavy oil. Caution: Do not oil hose cover.



Thread nipple clockwise into socket until nipple hex shoulders against socket.

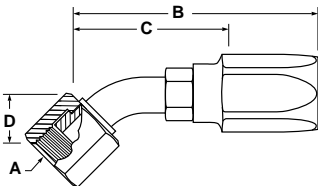
Reusable Couplings (556, 1130)

ORFS Female Swivel-Str



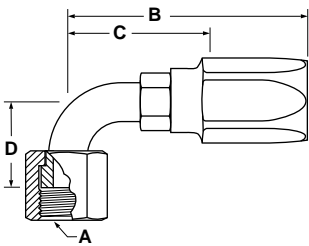
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
9X-3881	4.8-.19	-4	9/16-18	-4	54.0-2.13	36.0-1.42	4J-5477
7X-1463	7.9-.31	-6	11/16-16	-6	64.0-2.52	42.0-1.65	6V-8397
9X-3882	10.3-.41	-8	13/16-16	-8	78.0-3.07	51.0-2.01	6V-8398
9X-3883	12.7-.50	-10	1-14	-10	84.0-3.31	53.0-2.09	7J-9108
9X-3884	15.9-.63	-12	1 3/16-12	-12	95.0-3.74	57.0-2.24	6V-9746
9X-3885	22.2-.87	-16	1 7/16-12	-16	86.0-3.39	56.0-2.20	5K-9090
435-0432	28.6-1.13	-20	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	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	9/16-18	-4	54.0-2.13	39.0-1.54	10.0-.39	4J-5477
9X-3887	7.9-.31	-6	1 1/16-16	-6	64.0-2.52	43.0-1.69	11.0-.43	6V-8397
9X-3888	10.3-.41	-8	13/16-16	-8	81.0-3.19	53.0-2.09	15.0-.59	6V-8398
9X-3889	12.7-.50	-10	1-14	-10	88.0-3.46	57.0-2.24	17.0-.67	7J-9108
9X-3890	15.9-.63	-12	1 3/16-12	-12	98.0-3.86	59.0-2.32	21.0-.83	6V-9746
9X-3891	22.2-.87	-16	1 7/16-12	-16	102.0-4.02	72.0-2.83	24.0-.94	5K-9090

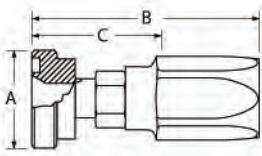
ORFS Female Swivel-90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	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	9/16-18	-4	50.0-1.97	39.0-1.54	20.0-.79	4J-5477
9X-3898	4.8-.19	-4	9/16-18	-4	50.0-1.97	44.0-1.73	46.0-1.81	4J-5477
9X-3893	7.9-.31	-6	11/16-16	-6	61.0-2.40	39.0-1.54	23.0-.91	6V-8397
9X-3899	7.9-.31	-6	11/16-16	-6	63.0-2.48	42.0-1.65	54.0-2.13	6V-8397
9X-3894	10.3-.41	-8	13/16-16	-8	74.0-2.91	46.0-1.81	29.0-1.14	6V-8398
9X-3900	10.3-.41	-8	13/16-16	-8	75.0-2.95	48.0-1.89	64.0-2.52	6V-8398
9X-3895	12.7-.50	-10	1-14	-10	80.0-3.15	49.0-1.93	32.0-1.26	7J-9108
9X-3901	12.7-.50	-10	1-14	-10	83.0-3.27	52.0-2.05	70.0-2.76	7J-9108
9X-3896	15.9-.63	-12	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	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	1 7/16-12	-16	101.0-3.98	70.0-2.76	56.0-2.20	5K-9090
9X-3903	22.2-.87	-16	1 7/16-12	-16	90.0-3.54	60.0-2.36	114.0-4.49	5K-9090

Reusable Couplings (556, 1130)

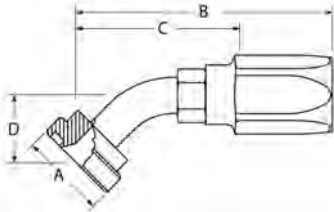
Code 61 Flange-Str



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	HEAD SIZE (mm-in)	FLANGE DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
9X-3840	15.9-.63	-12	38.1-1.50	-12	81.0-3.19	41.0-1.61	4J-5267
9X-3842	28.6-1.13	-20	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.

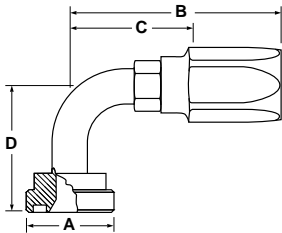
Code 61 Flange-45° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	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	50.8-2.00	-20	104.0-4.09	72.0-2.83	29.0-1.14	4J-0522

NOTE: Refer to the Seal Section of the Guide for a complete list of seals and applications.

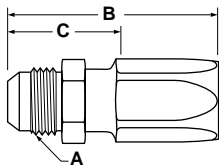
Code 61 Flange-90° Elbow



Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	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	44.5-1.75	-16	90.0-3.54	58.0-2.28	60.0-2.36	4J-0520
9X-3850	28.6-1.13	-20	50.8-2.00	-20	102.0-4.02	67.0-2.64	64.0-2.52	4J-0522

NOTE: Refer to the Seal Section of the Guide for a complete list of seals and applications.

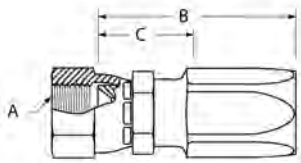
JIC 37° Male-Str



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)
068-0601	7.9-.31	-6	9/16-18	-6	54.0-2.13	31.0-1.22
068-0554	10.3-.41	-8	3/4-16	-8	66.0-2.60	36.0-1.42
030-7190	10.3-.41	-8	3/4-16	-8	70.0-2.76	.0-.00
9X-3947	22.2-.87	-16	1 5/16-12	-16	75.0-2.95	45.0-1.77

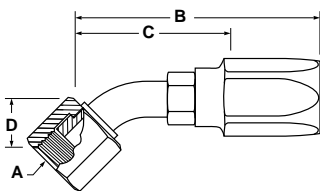
Reusable Couplings (556, 1130)

JIC 37° Female Swivel-Str



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)
001-6285	4.8-.19	-4	7/16-20	-4	50.0-1.97	31.0-1.22
9X-3821	6.4-.25	-5	7/16-20	-4	44.0-1.73	24.0-.94
053-2295	6.4-.25	-5	1/2-20	-5	54.0-2.13	35.0-1.38
5D-6116	6.4-.25	-5	1/2-20	-5	55.0-2.17	33.0-1.30
9X-3823	6.4-.25	-5	9/16-18	-6	47.0-1.85	28.0-1.10
001-6286	7.9-.31	-6	9/16-18	-6	59.0-2.32	37.0-1.46
030-7186	7.9-.31	-6	9/16-18	-6	59.0-2.32	37.0-1.46
001-6287	10.3-.41	-8	3/4-16	-8	71.0-2.80	41.0-1.61
9X-3826	12.7-.50	-10	3/4-16	-8	65.0-2.56	32.0-1.26
061-6746	12.7-.50	-10	7/8-14	-10	79.0-3.11	46.0-1.81
9X-3957	12.7-.50	-10	1 1/16-12	-12	65.0-2.56	34.0-1.34
5P-7759	15.9-.63	-12	7/8-14	-10	73.0-2.87	38.0-1.50
001-6289	15.9-.63	-12	1 1/16-12	-12	89.0-3.50	49.0-1.93
9X-3830	22.2-.87	-16	1 5/16-12	-16	66.0-2.60	34.0-1.34
3L-9762	28.6-1.13	-20	1 5/8-12	-20	74.0-2.91	40.0-1.57
9X-3832	34.9-1.37	-24	1 7/8-12	-24	81.0-3.19	44.0-1.73

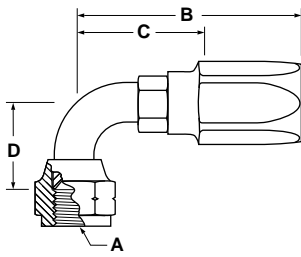
JIC 37° Female Swivel-45° Elbow



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)	D DROP (mm-in)
9X-3854	4.8-.19	-4	7/16-20	-4	47.0-1.85	28.0-1.10	8.0-.31
9X-3855	6.4-.25	-5	1/2-20	-5	53.0-2.09	33.0-1.30	9.0-.35
068-0599	7.9-.31	-6	9/16-18	-6	57.0-2.24	35.0-1.38	10.0-.39
9X-3857	7.9-.31	-6	3/4-16	-8	68.0-2.68	44.0-1.73	14.0-.55
068-2859	10.3-.41	-8	3/4-16	-8	76.0-2.99	48.0-1.89	14.0-.55
9X-3859	12.7-.50	-10	7/8-14	-10	85.0-3.35	54.0-2.13	16.0-.63
9X-3860	15.9-.63	-12	1 1/16-12	-12	96.0-3.78	62.0-2.44	20.0-.79
9X-3861	22.2-.87	-16	1 5/16-12	-16	94.0-3.70	64.0-2.52	23.0-.91

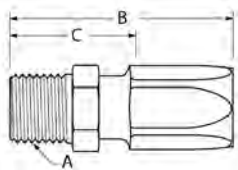
Reusable Couplings (556, 1130)

JIC 37° Female Swivel-90° Elbow



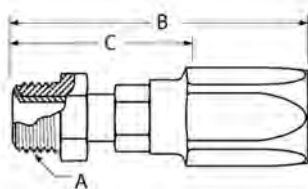
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
068-0589	4.8-19	-4	7/16-20	-4	44.0-1.73	25.0-.98	17.0-.67
9X-3870	4.8-19	-4	7/16-20	-4	44.0-1.73	25.0-.98	46.0-1.81
9X-3863	6.4-25	-5	1/2-20	-5	50.0-1.97	30.0-1.18	18.0-.71
068-0009	7.9-31	-6	9/16-18	-6	56.0-2.20	35.0-1.38	22.0-.87
032-4872	7.9-31	-6	9/16-18	-6	54.0-2.13	31.0-1.22	55.0-2.17
068-0556	10.3-41	-8	3/4-16	-8	74.0-2.91	45.0-1.77	28.0-1.10
111-7666	10.3-41	-8	3/4-16	-8	74.0-2.91	47.0-1.85	62.0-2.44
053-2141	12.7-50	-10	7/8-14	-10	81.0-3.19	50.0-1.97	31.0-1.22
9X-3874	12.7-50	-10	7/8-14	-10	83.0-3.27	52.0-2.05	65.0-2.56
9X-3867	15.9-63	-12	1 1/16-12	-12	99.0-3.90	61.0-2.40	46.0-1.81
9X-3875	15.9-63	-12	1 1/16-12	-12	96.0-3.78	58.0-2.28	95.0-3.74
9X-3868	22.2-87	-16	1 5/16-12	-16	94.0-3.70	64.0-2.52	54.0-2.13
9X-3876	22.2-87	-16	1 5/16-12	-16	90.0-3.54	60.0-2.36	110.0-4.33
9X-3869	28.6-1.13	-20	1 5/8-12	-20	102.0-4.02	67.0-2.64	60.0-2.36

NPTF Male-Str



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)
1L-3664	4.8-19	-4	1/8-27	-2	43.0-1.69	24.0-.94
1L-2287	4.8-19	-4	1/4-18	-4	47.0-1.85	28.0-1.10
9X-3807	6.4-25	-5	1/8-27	-2	45.0-1.77	25.0-.98
9X-3808	6.4-25	-5	1/4-18	-4	50.0-1.97	30.0-1.18
9X-3809	7.9-31	-6	1/4-18	-4	54.0-2.13	31.0-1.22
9X-3810	7.9-31	-6	3/8-18	-6	54.0-2.13	31.0-1.22
1L-1699	10.3-41	-8	3/8-18	-6	63.0-2.48	34.0-1.34
9X-3812	10.3-41	-8	1/2-14	-8	69.0-2.72	40.0-1.57
9X-3813	12.7-50	-10	1/2-14	-8	73.0-2.87	40.0-1.57
9X-3814	12.7-50	-10	3/4-14	-12	75.0-2.95	42.0-1.65
9X-3815	15.9-63	-12	3/4-14	-12	82.0-3.23	42.0-1.65
9X-3816	22.2-87	-16	3/4-14	-12	71.0-2.80	39.0-1.54
1L-1480	22.2-87	-16	1-11 1/2	-16	76.0-2.99	44.0-1.73
3L-3870	28.6-1.13	-20	1 1/4-11 1/2	-20	82.0-3.23	48.0-1.89
1L-0767	34.9-1.37	-24	1 1/2-11 1/2	-24	88.0-3.46	52.0-2.05

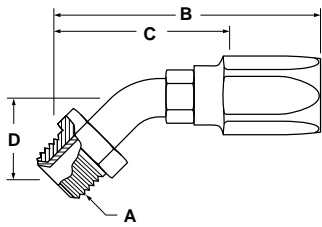
SAE 45° Inverted Flare Male Swivel-Str



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)
9X-3852	4.8-19	-4	7/16-24	-4	62.0-2.44	43.0-1.69
9X-3853	7.9-31	-6	5/8-18	-6	69.0-2.72	46.0-1.81
9X-3956	10.3-41	-8	3/4-18	-8	80.0-3.15	50.0-1.97

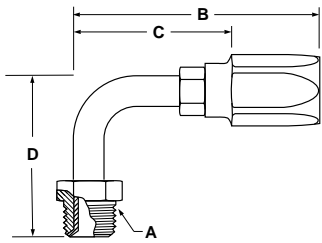
Reusable Couplings (556, 1130)

SAE 45° Inverted Flare Male Swivel-45° Elbow



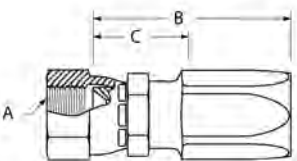
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
9X-3877	7.9-.31	-6	5/8-18	-6	76.0-2.99	53.0-2.09	24.0-.94

SAE 45° Inverted Flare Male Swivel-90° Elbow



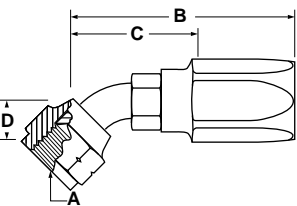
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
9X-3878	7.9-.31	-6	5/8-18	-6	67.0-2.64	44.0-1.73	43.0-1.69

SAE 45° Female Swivel-Str



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)
061-8863	7.9-.31	-6	5/8-18	-6	60.0-2.36	37.0-1.46
053-1788	15.9-.63	-12	1 1/16-14	-12	74.0-2.91	37.0-1.46

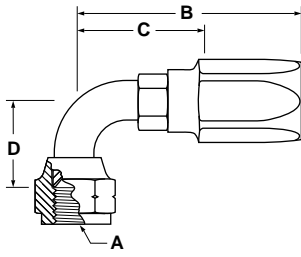
SAE 45° Female Swivel-45° Elbow



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)	D DROP (mm-in)
9X-3879	7.9-.31	-6	5/8-18	-6	57.0-2.24	35.0-1.38	10.0-.39

Reusable Couplings (556, 1130)

SAE 45° Female Swivel-90° Elbow



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)	D DROP (mm-in)
9X-3880	7.9-.31	-6	5/8-18	-6	56.0-2.20	35.0-1.38	22.0-.87

Air Conditioning Hose (1543J) and Couplings

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.

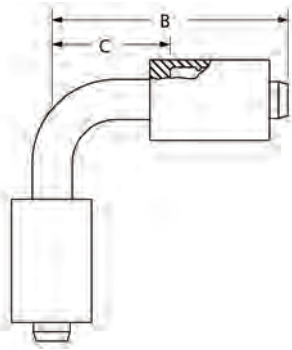
Required Cutting Tool: Cutting Tool (177-4271) and Blade (177-4272) is required for cutting hose. Do not use Hose Cutting Machine. Cut-off saw can cause heating distortion. See Miscellaneous Tools and Accessories section.

Reference: IRM HOS02-01

¹ Centerline of Hose

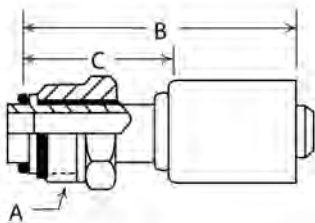
Permanent Couplings (1543J)

Double Collet-90° Elbow



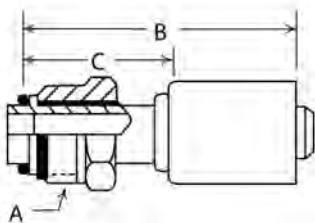
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
340-4857	10.3-.41	-8	A/C	117.0-4.61	82.0-3.23
320-1852	15.9-.63	-12	A/C	253.0-9.96	81.8-3.22

Male Inverted O-Ring-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
320-1781	7.9-.31	-6	A/C	5/8-18	-6	79.0-3.11	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
320-1780	15.9-.63	-12	A/C	7/8-14	-10	132.0-5.20	96.3-3.79	9X-7382

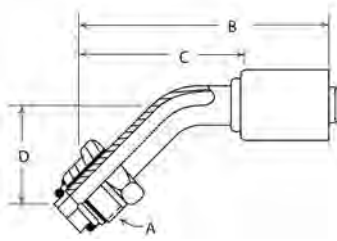
Male Inverted O-Ring Swivel-Str



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
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

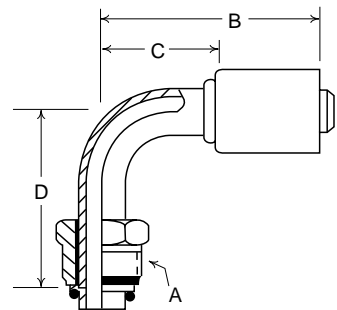
Permanent Couplings (1543J)

Male Inverted O-Ring Swivel-45° Elbow



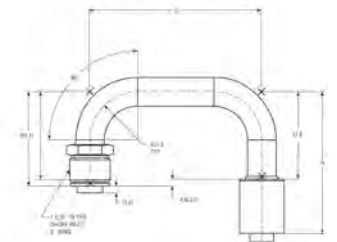
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1726	7.9-.31	-6	A/C	5/8-18	-6	79.0-3.11	43.0-1.69	22.0-.87	9X-7380
320-1785	10.3-.41	-8	A/C	3/4-18	-8	89.0-3.50	53.3-2.10	32.0-1.26	9X-7381
320-1727	15.9-.63	-12	A/C	7/8-14	-10	95.0-3.74	58.9-2.32	33.0-1.30	9X-7382
320-1787	15.9-.63	-12	A/C	1 1/16-16	-12	142.0-5.59	105.7-4.16	70.4-2.77	9X-7383
320-1826	19.1-.75	-14	A/C	1 1/16-16	-12	142.0-5.59	105.7-4.16	70.4-2.77	9X-7383

Male Inverted O-Ring Swivel-90° Elbow



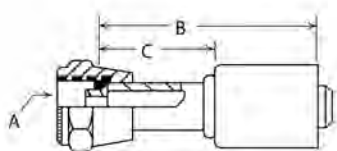
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1728	7.9-.31	-6	A/C	5/8-18	-6	63.0-2.48	27.0-1.06	41.0-1.61	9X-7380
320-1784	10.3-.41	-8	A/C	3/4-18	-8	67.0-2.64	31.5-1.24	57.0-2.24	9X-7381
320-1729	15.9-.63	-12	A/C	7/8-18	-10	81.0-3.19	45.0-1.77	68.2-2.69	9X-7382
320-1730	15.9-.63	-12	A/C	1 1/16-16	-12	93.0-3.66	56.6-2.23	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

Male Inverted O-Ring Swivel-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	58.0-2.28	114.0-4.49	9X-7383
320-1880	19.1-.75	-14	A/C	1 1/16-16	-12	92.0-3.62	29.0-1.14	114.0-4.49	9X-7383

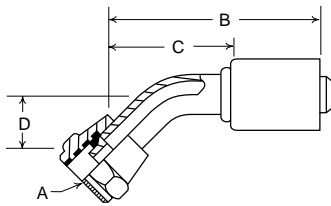
Tube O-Ring Female Swivel-Str



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
320-1761	7.9-.31	-6	A/C	5/8-18	-6	78.0-3.07	42.2-1.66	9X-7380
320-1720	7.9-.31	-6	A/C	3/4-16	-8	80.0-3.15	44.0-1.73	9X-7381
320-1985	7.9-.31	-6	A/C	3/4-16	-8	80.0-3.15	44.0-1.73	9X-7381
320-1760	10.3-.41	-8	A/C	3/4-16	-8	74.0-2.91	38.0-1.50	9X-7381
320-1762	12.7-.50	-10	A/C	7/8-14	-10	89.0-3.50	52.8-2.08	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

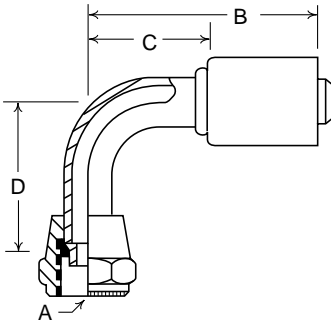
Permanent Couplings (1543J)

Tube 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
320-1750	7.9-.31	-6	A/C	5/8-18	-6	89.0-3.50	53.3-2.10	14.7-.58	9X-7380
320-1759	7.9-.31	-6	A/C	5/8-18	-6	89.0-3.50	53.3-2.10	18.0-.71	9X-7380
320-1749	7.9-.31	-6	A/C	3/4-16	-8	68.0-2.68	32.0-1.26	15.2-.60	9X-7381
320-1752	7.9-.31	-6	A/C	3/4-16	-8	94.0-3.70	58.1-2.29	28.9-1.14	9X-7381
320-1758	10.3-.41	-8	A/C	3/4-16	-8	84.0-3.31	48.3-1.90	22.0-.87	9X-7381
320-1757	10.3-.41	-8	A/C	3/4-16	-8	106.0-4.17	70.4-2.77	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
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	66.2-2.61	40.4-1.59	9X-7382
320-1753	19.1-.75	-14	A/C	1 1/16-14	-12	102.0-4.02	66.2-2.61	40.4-1.59	9X-7383

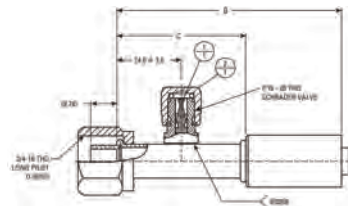
Tube O-Ring Female Swivel-90° Elbow



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
478-5446	7.9-.31	-5	A/C	5/8-18	-6	69.0-2.72	21.0-.83	30.0-1.18	9X-7380
320-1723	7.9-.31	-6	A/C	5/8-18	-6	63.0-2.48	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	26.7-1.05	44.0-1.73	9X-7380
320-1724	7.9-.31	-6	A/C	3/4-16	-8	74.0-2.91	38.4-1.51	50.8-2.00	9X-7381
364-1219	7.9-.31	-6	A/C	3/4-16	-8	74.0-2.91	38.4-1.51	93.3-3.67	9X-7381
320-1766	10.3-.41	-8	A/C	3/4-16	-8	106.0-4.17	69.9-2.75	38.1-1.50	9X-7381
320-1775	10.3-.41	-8	A/C	3/4-16	-8	67.0-2.64	31.2-1.23	47.8-1.88	9X-7381
320-1773	10.3-.41	-8	A/C	3/4-16	-8	68.0-2.68	31.8-1.25	51.0-2.01	9X-7381
320-1845	10.3-.41	-8	A/C	3/4-16	-8	68.0-2.68	31.8-1.25	73.3-2.89	9X-7381
320-1772	10.3-.41	-8	A/C	3/4-16	-8	67.0-2.64	31.2-1.23	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	47.8-1.88	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	64.8-2.55	9X-7382
320-1876	15.9-.63	-12	A/C	7/8-14	-10	77.0-3.03	40.6-1.60	80.0-3.15	9X-7382
320-1771	15.9-.63	-12	A/C	7/8-14	-10	77.0-3.03	41.0-1.61	122.0-4.80	9X-7382
320-1774	15.9-.63	-12	A/C	7/8-14	-10	78.0-3.07	41.7-1.64	150.0-5.91	9X-7382
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	9X-7383
320-1777	15.9-.63	-12	A/C	1 1/16-14	-12	74.0-2.91	38.1-1.50	51.0-2.01	9X-7383
478-7507	19.1-.75	-12	A/C	1 1/16-14	-12	102.0-4.02	64.0-2.52	64.0-2.52	9X-7383
364-1216	19.1-.75	-14	A/C	7/8-14	-10	80.0-3.15	44.4-1.75	50.0-1.97	9X-7382
320-1769	19.1-.75	-14	A/C	7/8-14	-10	80.0-3.15	44.4-1.75	75.6-2.98	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

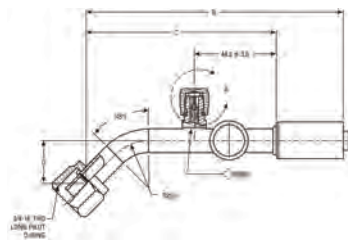
Permanent Couplings (1543J)

Tube O-Ring Female Swivel w/Port-Str



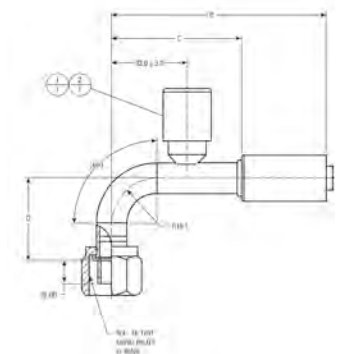
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1832	7.9-.31	-6	A/C	5/8-18	-6	84.0-3.31	48.0-1.89	9X-7380
320-1901	7.9-.31	-6	A/C	3/4-16	-8	186.0-7.32	50.0-1.97	9X-7381
320-1833	7.9-.31	-6	A/C	3/4-16	-8	201.0-7.91	165.4-6.51	9X-7381
320-1837	10.3-.41	-8	A/C	3/4-16	-8	84.0-3.31	48.0-1.89	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
320-1989	19.1-.75	-14	A/C	7/8-14	-10	94.0-3.70	58.0-2.28	9X-7382

Tube O-Ring Female Swivel w/Port-45° Elbow



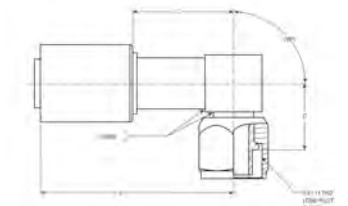
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
345-4555	15.9-.63	-12	A/C	7/8-14	-10	106.0-4.17	70.0-2.76	23.0-.91	9X-7382
320-1866	15.9-.63	-12	A/C	7/8-14	-10	89.0-3.50	53.3-2.10	27.5-1.08	9X-7382
368-8109	15.9-.63	-12	A/C	7/8-14	-10	123.0-4.84	87.2-3.43	49.5-1.95	9X-7382

Tube O-Ring Female Swivel w/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	113.0-4.45	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	69.9-2.75	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
320-1841	10.3-.41	-8	A/C	3/4-16	-8	81.0-3.19	45.0-1.77	76.5-3.01	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
320-1990	19.1-.75	-14	A/C	7/8-14	-10	84.0-3.31	48.0-1.89	75.7-2.98	9X-7382

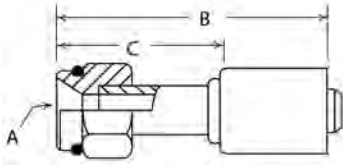
Tube O-Ring Female Swivel Block-90° Elbow



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)	O-RING SEAL
320-1890	10.3-.41	-8	A/C	3/4-16	-8	60.0-2.36	24.0-.94	9X-7381
320-1904	15.9-.63	-12	A/C	7/8-14	-10	82.0-3.23	39.4-1.55	9X-7382
320-1905	19.1-.75	-14	A/C	7/8-14	-10	75.0-2.95	39.4-1.55	9X-7382

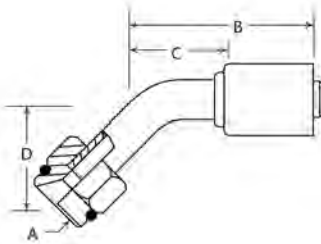
Permanent Couplings (1543J)

Adapter To Self Seal Fitting-Str



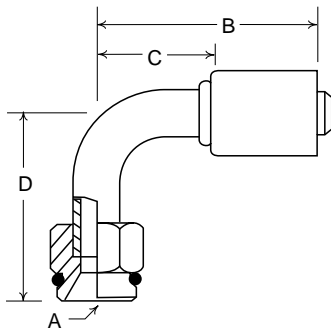
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1743	7.9-.31	-6	A/C	7/8-20	64.0-2.52	28.0-1.10	9X-7383
320-1744	10.3-.41	-8	A/C	7/8-20	81.0-3.19	44.6-1.76	9X-7383
320-1799	12.7-.50	-10	A/C	1 1/4-18	64.0-2.52	28.0-1.10	9X-7384
320-1804	12.7-.50	-10	A/C	7/8-20	64.0-2.52	28.0-1.10	9X-7383
320-1745	15.9-.63	-12	A/C	1 1/4-18	98.0-3.86	61.6-2.43	9X-7384
320-1796	19.1-.75	-14	A/C	1 1/4-18	64.0-2.52	28.0-1.10	9X-7384

Adapter To Self Seal Fitting-45° Elbow



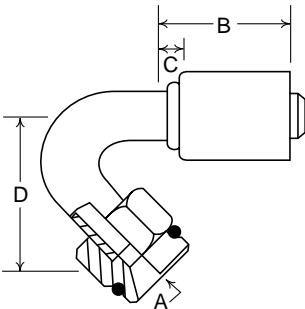
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
320-1795	10.3-.41	-8	A/C	7/8-20	107.0-4.21	70.6-2.78	31.8-1.25	9X-7383
320-1793	15.9-.63	-12	A/C	1 1/4-18	98.0-3.86	61.8-2.43	36.0-1.42	9X-7384
320-1897	19.1-.75	-14	A/C	1 1/4-18	133.0-5.24	96.8-3.81	57.0-2.24	9X-7384

Adapter To Self Seal Fitting-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
320-1816	7.9-.31	-6	A/C	7/8-20	70.0-2.76	34.3-1.35	34.8-1.37	9X-7383
320-1746	7.9-.31	-6	A/C	7/8-20	62.0-2.44	26.7-1.05	38.0-1.50	9X-7383
320-1790	7.9-.31	-6	A/C	7/8-20	62.0-2.44	26.7-1.05	65.0-2.56	9X-7383
320-1747	10.3-.41	-8	A/C	7/8-20	75.0-2.95	38.9-1.53	45.0-1.77	9X-7383
320-1800	12.7-.50	-10	A/C	1 1/4-18	96.0-3.78	60.1-2.37	62.0-2.44	9X-7384
320-1791	15.9-.63	-12	A/C	1 1/4-18	78.0-3.07	41.7-1.64	76.0-2.99	9X-7384
320-1794	15.9-.63	-12	A/C	1 1/4-18	78.0-3.07	41.7-1.64	100.0-3.94	9X-7384
320-1797	19.1-.75	-14	A/C	1 1/4-18	99.0-3.90	63.5-2.50	76.2-3.00	9X-7384

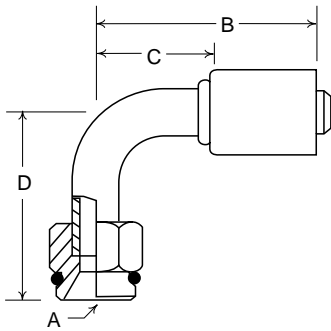
Adapter To Self Seal Fitting-135° Elbow



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
320-1792	15.9-.63	-12	A/C	1 1/4-18	55.0-2.17	19.0-.75	70.3-2.77	9X-7384

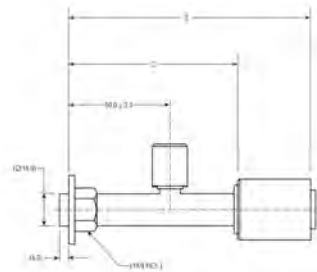
Permanent Couplings (1543J)

Adapter To Self Seal Fitting Block-90° Elbow



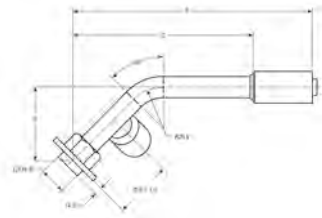
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
320-1748	15.9-.63	-12	A/C	1 1/4-18	78.0-3.07	41.7-1.64	9X-7384
320-1798	19.1-.75	-14	A/C	1 1/4-18	108.0-4.25	71.7-2.82	9X-7384

Compressor O-Ring w/Port-Str



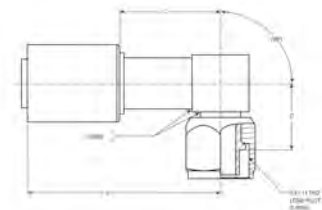
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
320-1879	10.3-.41	-8	A/C	119.0-4.69	83.5-3.29
320-1835	19.1-.75	-14	A/C	119.0-4.69	83.5-3.29

Compressor O-Ring w/Port-45° 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)
320-1895	10.3-.41	-8	A/C	124.0-4.88	87.6-3.45	42.8-1.69
320-1842	10.3-.41	-8	A/C	145.0-5.71	109.5-4.31	44.5-1.75
320-1856	15.9-.63	-12	A/C	130.0-5.12	95.0-3.74	44.5-1.75

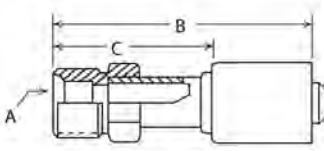
Compressor O-Ring w/Port-90° Elbow



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)
320-1910	10.3-.41	-8	A/C	81.0-3.19	45.0-1.77	53.0-2.09
320-1827	10.3-.41	-8	A/C	81.0-3.19	45.0-1.77	57.0-2.24
320-1836	10.3-.41	-8	A/C	116.0-4.57	80.4-3.17	74.3-2.93
320-1828	15.9-.63	-12	A/C	86.0-3.39	50.0-1.97	83.0-3.27

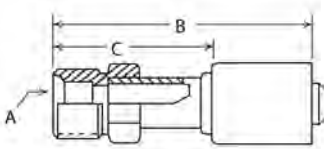
Permanent Couplings (1543J)

Male O-Ring Connector-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
320-1741	7.9-.31	-6	A/C	5/8-18	-6	73.0-2.87	37.0-1.46	9X-7380
320-1778	7.9-.31	-6	A/C	3/4-16	-8	73.0-2.87	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	79.0-3.11	43.0-1.69	9X-7382

Male O-Ring Bulkhead Connector-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
320-1814	7.9-.31	-6	A/C	5/8-18	-6	85.0-3.35	49.0-1.93	9X-7380
376-5361	7.9-.31	-6	A/C	5/8-18	-6	94.0-3.70	58.4-2.30	9X-7380
320-1813	10.3-.41	-8	A/C	3/4-16	-8	84.0-3.31	48.5-1.91	9X-7381
320-1867	15.9-.63	-12	A/C	7/8-14	-10	111.0-4.37	75.0-2.95	9X-7382

High Temperature Fuel Hose (743) and Couplings

High Temperature Fuel Hose (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.

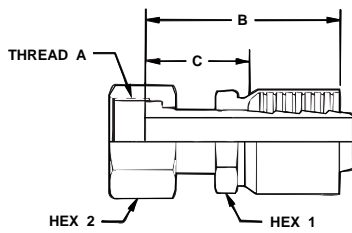
Temperature Range: of -40° F to +275° F (-40° C to +135° C), water based fluids to +185° F (+85° C), and air to +158° F (+70° C).

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.

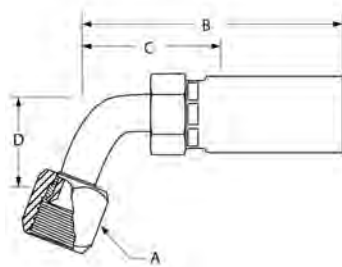
Permanent Couplings (743)

ORFS Female Swivel-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
307-8256	4.8-.19	-3	MH	11/16-16	-6	46.0-1.81	27.5-1.08	6V-8397
273-1716	6.4-.25	-4	JN	9/16-18	-4	43.0-1.69	25.0-.98	4J-5477
149-8471	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.4-1.00	4J-5477
149-8472	6.4-.25	-4	MH	11/16-16	-6	49.0-1.93	27.5-1.08	6V-8397
306-8016	6.4-.25	-4	MH	13/16-16	-8	53.0-2.09	31.6-1.24	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	65.0-2.56	39.1-1.54	6V-8398
149-8477	12.7-.50	-8	MH	1-14	-10	68.0-2.68	41.6-1.64	7J-9108
220-5332	12.7-.50	-8	MH	1 3/16-12	-12	73-2.87	44-1.73	6V-9746
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	80-3.15	49-1.93	5K-9090

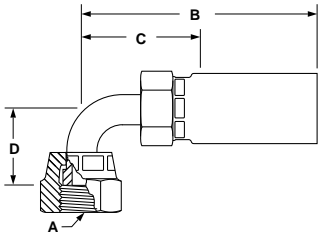
ORFS Female Swivel-45° Elbow



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	31.2-1.23	10.4-.41	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
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	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
220-5351	12.7-.50	-8	MH	1 3/16-12	-12	77-3.03	51-2.01	21-0.83	6V-9746
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	71.9-2.83	24.0-.94	5K-9090

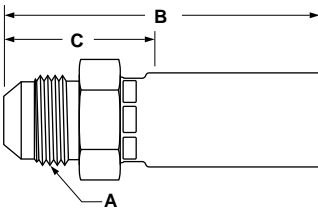
Permanent Couplings (743)

ORFS Female Swivel-90° Elbow



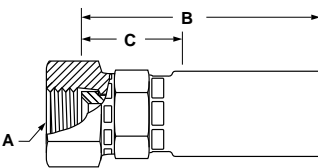
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
149-8489	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.2-.99	20.0-.79	4J-5477
149-8498	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.2-.99	32.0-1.26	4J-5477
149-8505	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.2-.99	46.0-1.81	4J-5477
149-8490	6.4-.25	-4	MH	11/16-16	-6	46.0-1.81	25.2-.99	23.0-.91	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	32.6-1.28	23.0-.91	6V-8397
149-8501	9.5-.37	-6	MH	11/16-16	-6	59.0-2.32	32.6-1.28	38.0-1.50	6V-8397
149-8507	9.5-.37	-6	MH	11/16-16	-6	59.0-2.32	32.6-1.28	54.0-2.13	6V-8397
149-8494	9.5-.37	-6	MH	13/16-16	-8	61.0-2.40	33.0-1.30	29.2-1.15	6V-8398
149-8495	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.1-1.54	29.0-1.14	6V-8398
149-8502	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.1-1.54	41.0-1.61	6V-8398
149-8510	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.1-1.54	64.0-2.52	6V-8398
149-8496	12.7-.50	-8	MH	1-14	-10	65.0-2.56	39.1-1.54	32.0-1.26	7J-9108
149-8511	12.7-.50	-8	MH	1-14	-10	65.0-2.56	39.1-1.54	70.0-2.76	7J-9108
220-5358	15.9-.63	-10	MH	1-14	-10	74.0-2.91	46.6-1.83	32.0-1.26	7J-9108
435-9922	19.1-.75	-12	MH	1-14	-10	80-3.15	49-1.93	32-1.26	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
220-5366	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

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)
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

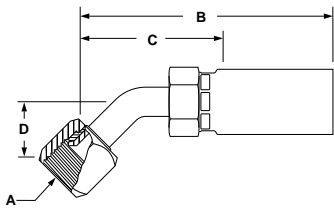
JIC 37° Female Swivel-Str



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)
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	23.8-.94
149-8521	9.5-.37	-6	MH	3/4-16	-8	50.0-1.97	24.3-.96
149-8522	12.7-.50	-8	MH	3/4-16	-8	55.0-2.17	28.6-1.13
149-8523	12.7-.50	-8	MH	7/8-14	-10	56.0-2.20	29.9-1.18
149-8524	12.7-.50	-8	MH	1 1/16-12	-12	56.0-2.20	29.5-1.16
220-5130	15.9-.63	-10	MH	3/4-16	-8	54.0-2.13	24.0-.94

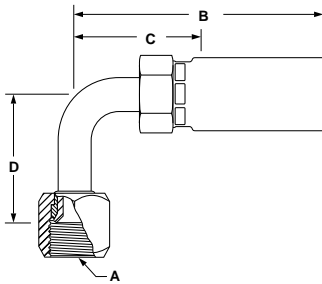
Permanent Couplings (743)

JIC 37° Female Swivel-45° Elbow



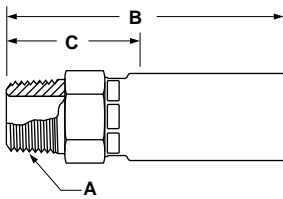
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
149-8528	6.4-.25	-4	MH	7/16-20	-4	52.0-2.05	28.0-1.10	8.0-.31
149-8533	12.7-.50	-8	MH	3/4-16	-8	70.0-2.76	43.5-1.71	14.0-.55
149-8538	12.7-.50	-8	MH	3/4-16	-8	73.0-2.87	46.6-1.83	18.0-.71

JIC 37° Female Swivel-90° Elbow



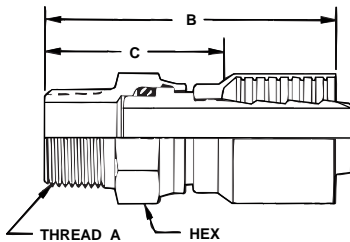
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
149-8541	6.4-.25	-4	MH	7/16-20	-4	46.0-1.81	26.0-1.02	18.0-.71
149-8591	9.5-.37	-6	MH	9/16-18	-6	77.0-3.03	51.0-2.01	22.0-.87
149-8544	9.5-.37	-6	MH	9/16-18	-6	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	39.1-1.54	35.0-1.38
149-8554	12.7-.50	-8	MH	3/4-16	-8	65.0-2.56	39.1-1.54	64.0-2.52

NPTF 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)
267-3846	4.8-.19	-3	JN	1/8-27	-2	39.0-1.54	20.7-.81
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	20.4-.80
149-8567	9.5-.37	-6	MH	1/4-18	-4	55.0-2.17	28.6-1.13
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	31.4-1.24

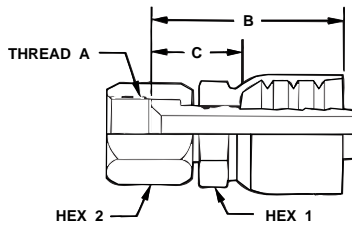
NPTF Male Swivel-Str



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)
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	39.1-1.54
220-5076	12.7-.50	-8	MH	1/2-14	-8	78.0-3.07	49.0-1.93

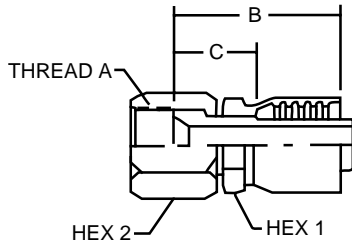
Permanent Couplings (743)

SAE 45° Female Swivel-Str



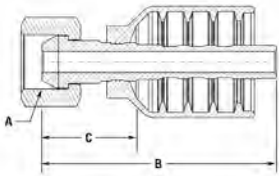
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
307-8246	4.8-.19	-3	JN	3/8-24	-3	34.0-1.34	17.0-.67
149-8576	9.5-.37	-6	MH	5/8-18	-6	46.0-1.81	20.0-.79

JIS 30° Flare Female Swivel-Str



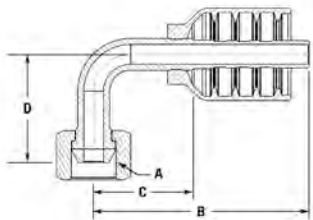
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
154-0102	6.4-.25	-4	MN	1/4-19	-4	44.0-1.73	22.6-.89
154-0103	9.5-.37	-6	MN	3/8-19	-6	46.0-1.81	20.0-.79
154-0104	12.7-.50	-8	MN	1/2-14	-8	53.0-2.09	28.0-1.10
519-4006	19.1-.75	-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

JIS 30° Conical Seat-Female Swivel-Str



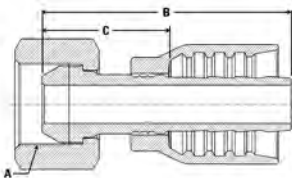
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
255-4879	19.1-.75	-12	MH	3/4-14	-12	60.96-2.4	29.97-1.18

JIS 30° Conical 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)
255-4880	19.1-.75	-12	MH	3/4-16	-8	83.57-3.29	52.35-2.06	50.04-1.97

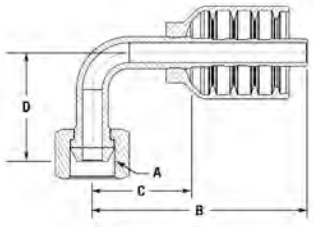
ISO 8434-6 BSPP Conical Seat-Female Swivel-Str



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)
555-5302	12.7-.50	-8	MH	1/2-14	-8	59.3-2.33	30.4-1.20
555-5304	19.1-.75	-12	MH	3/4-14	-12	70.4-2.77	34.9-1.37

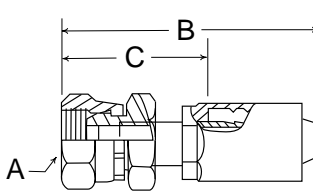
Permanent Couplings (743)

ISO 8434-6 BSPP Conical Seat-Female Swivel-90° Elbow



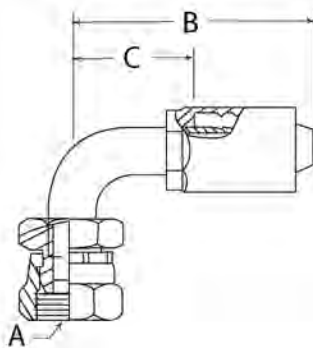
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
555-5303	12.7-.50	-8	MH	1/2-14	-8	68.1-2.68	39.1-1.54	37.6-1.48
555-5305	19.1-.75	-12	MH	3/4-14	-12	87.6-3.45	52.1-2.05	58.0-2.28

BSPP Spherical Seat-Female Swivel-Str



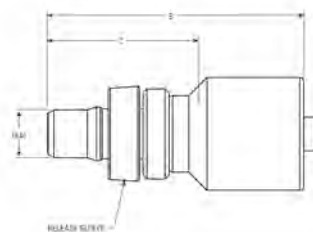
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
149-8581	12.7-.50	-8	MH	1/2-14	-8	56.29-2.22	30.35-1.19
149-8583	19.1-.75	-12	MH	3/4-14	-12	61.0-2.40	29.7-1.17

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)
220-5320	6.4-.25	-4	MH	1/4-19	-4	49.3-1.94	25.2-0.99	30.2-1.19
220-5321	9.5-.37	-6	MH	3/8-19	-6	61.7-2.43	32.7-1.29	37.1-1.46
220-5322	12.7-.50	-8	MH	1/2-14	-8	68.1-2.68	39.1-1.54	37.6-1.48
220-5323	19.1-.75	-12	MH	3/4-14	-12	87.6-3.45	52.3-2.06	58.9-2.32

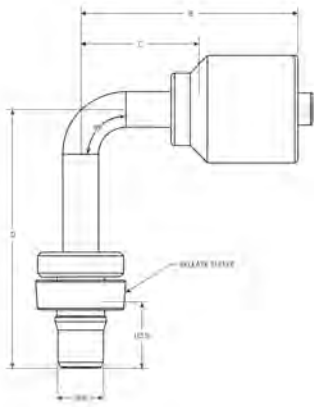
Snap To Connect-Str



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

Permanent Couplings (743)

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	25.2-.99	40.0-1.57
263-2685	6.4-.25	-4	MH	6.0-.24	46.0-1.81	25.2-.99	55.0-2.17

Medium Pressure High Temperature Teflon Lined Hose (2771A)

Medium Pressure High Temperature Teflon Lined 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

Construction: A general purpose, high temperature medium pressure hose with a PTFE inner tube and one braid of stainless steel wire reinforcement outer cover.

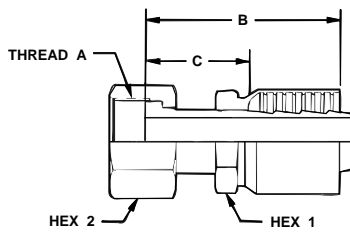
Temperature Range: -65 to +450° F (-54 to 232°C) continuously, and intermittently from -100 to 500° F (-73 to 260°C).

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

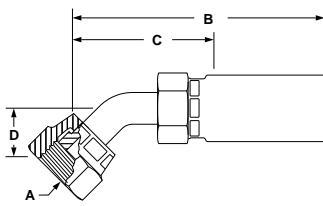
Permanent Couplings (2771A)

ORFS Female Swivel-Str



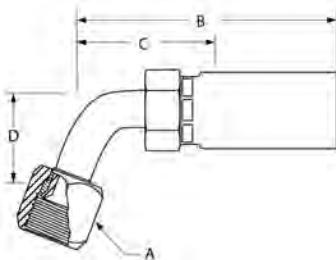
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	O-RING SEAL
273-1716	6.4-.25	-4	JN	9/16-18	-4	43.0-1.69	25.0-.98	4J-5477
146-3338	6.4-.25	-4	JN	9/16-18	-4	44.0-1.73	25.0-.98	4J-5477
146-3350	6.4-.25	-4	JN	11/16-16	-6	44.0-1.73	27.0-1.06	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	34.3-1.35	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	37.3-1.47	6V-9746
277-2091	19.1-.75	-12	JN	1 7/16-12	-16	62.0-2.44	38.0-1.50	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	31.2-1.23	10.4-.41	4J-5477
146-3343	6.4-.25	-4	JN	9/16-18	-4	50.0-1.97	31.0-1.22	10.0-.39	4J-5477
146-3446	6.4-.25	-4	JN	11/16-16	-6	48.0-1.89	30.8-1.21	10.4-.41	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
307-8266	15.9-.63	-10	JN	1-14	-10	72.0-2.83	51.1-2.01	16.5-.65	7J-9108
307-8267	15.9-.63	-10	JN	1 3/16-12	-12	77.0-3.03	55.6-2.19	21.1-.83	6V-9746
307-8268	19.1-.75	-12	JN	1 3/16-12	-12	80.0-3.15	56.0-2.20	21.1-.83	6V-9746

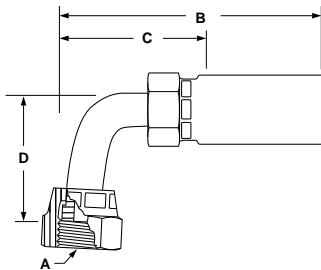
ORFS Female Swivel-65° Elbow



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

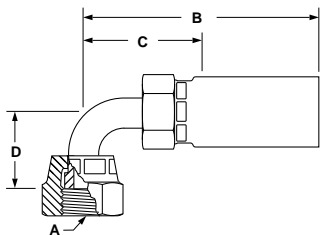
Permanent Couplings (2771A)

ORFS Female Swivel-80° Elbow



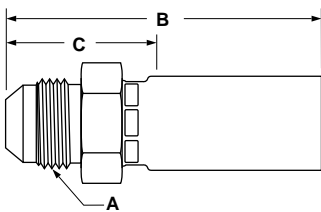
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
146-3351	9.5-.37	-6	JN	11/16-16	-6	64.0-2.52	37.0-1.46	35.0-1.38	6V-8397
146-3352	9.5-.37	-6	JN	11/16-16	-6	68.0-2.68	41.0-1.61	59.0-2.32	6V-8397

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	26.7-1.05	22.9-.90	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
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	45.7-1.80	32.3-1.27	6V-9746
307-8273	19.1-.75	-12	JN	1 3/16-12	-12	74.0-2.91	49.8-1.96	47.8-1.88	6V-9746
307-8274	19.1-.75	-12	JN	1 3/16-12	-12	74.0-2.91	49.8-1.96	96.0-3.78	6V-9746
293-2193	19.1-.75	-12	JN	1 7/16-12	-16	74.0-2.91	49.8-1.96	56.1-2.21	5K-9090

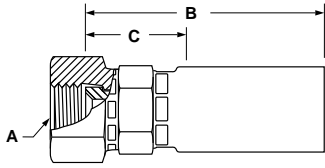
JIC 37° Male-Str



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)
146-3400	6.4-.25	-4	JN	7/16-20	-4	44.0-1.73	27.0-1.06
146-3402	9.5-.37	-6	JN	9/16-18	-6	56.0-2.20	29.0-1.14

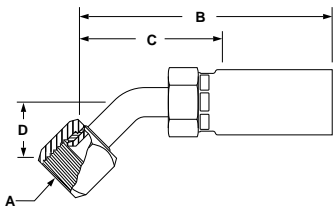
Permanent Couplings (2771A)

JIC 37° Female Swivel-Str



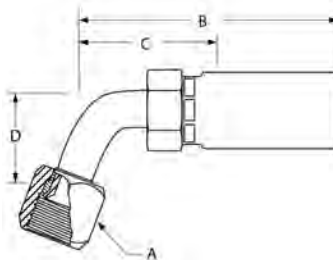
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3367	6.4-.25	-4	JN	7/16-20	-4	36.0-1.42	17.0-.67
253-1371	6.4-.25	-4	JN	9/16-18	-6	37.0-1.46	20.0-.79
146-3447	7.9-.31	-5	JN	9/16-18	-6	40.0-1.57	18.1-.71
146-3368	9.5-.37	-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	48.0-1.89	26.0-1.02
146-3449	12.7-.50	-8	JN	7/8-14	-10	49.0-1.93	28.0-1.10

JIC 37° Female Swivel-45° Elbow



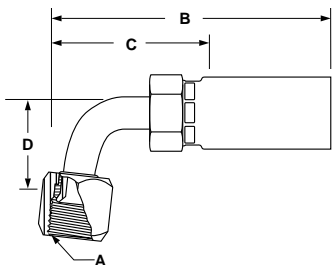
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3370	6.4-.25	-4	JN	7/16-20	-4	46.0-1.81	28.8-1.13	8.4-.33
146-3372	9.5-.37	-6	JN	9/16-18	-6	62.0-2.44	35.0-1.38	10.0-.39
146-3374	9.5-.37	-6	JN	9/16-18	-6	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	43.2-1.70	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	45.2-1.78	16.3-.64

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

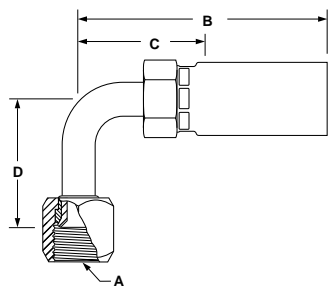
JIC 37° Female Swivel-80° Elbow



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

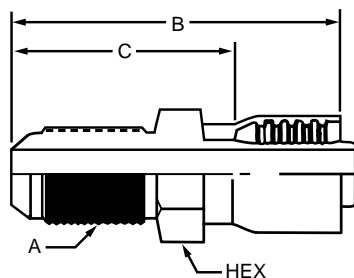
Permanent Couplings (2771A)

JIC 37° Female Swivel-90° Elbow



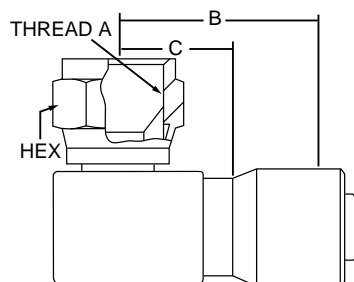
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3382	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	27.0-1.06	18.0-.71
146-3379	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	27.0-1.06	27.0-1.06
146-3418	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	27.0-1.06	50.0-1.97
146-3392	6.4-.25	-4	JN	7/16-20	-4	43.0-1.69	27.0-1.06	63.0-2.48
146-3383	7.9-.31	-5	JN	9/16-18	-6	49.0-1.93	28.5-1.12	21.8-.86
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	38.4-1.51	35.1-1.38
146-3398	12.7-.50	-8	JN	3/4-16	-8	59.0-2.32	38.0-1.50	46.0-1.81
146-3395	12.7-.50	-8	JN	3/4-16	-8	59.0-2.32	38.0-1.50	64.0-2.52
146-3390	12.7-.50	-8	JN	7/8-14	-10	59.0-2.32	38.4-1.51	44.5-1.75
146-3396	12.7-.50	-8	JN	7/8-14	-10	59.0-2.32	38.4-1.51	77.7-3.06

JIC 37° Male Bulkhead-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)
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

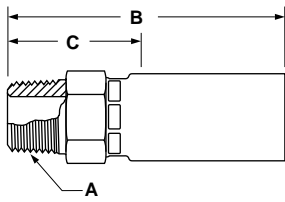
JIC 37° Female Swivel Block-90° Elbow



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

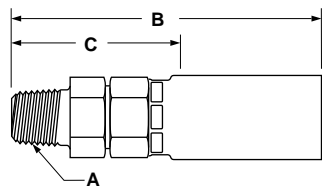
Permanent Couplings (2771A)

NPTF Male-Str



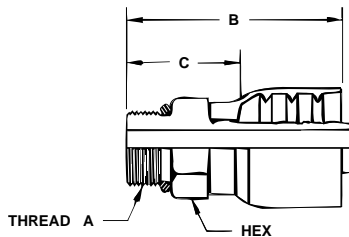
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
267-3846	4.8-.19	-3	JN	1/8-27	-2	39-1.54	21-0.83
267-4660	4.8-.19	-3	JN	3/8-18	-6	45-1.77	28-1.10
146-3404	6.4-.25	-4	JN	1/8-27	-2	38.0-1.50	22.0-.87
146-3405	6.4-.25	-4	JN	1/4-18	-4	45.0-1.77	29.0-1.14
146-3406	6.4-.25	-4	JN	3/8-18	-6	45.0-1.77	28.0-1.10
146-3408	9.5-.37	-6	JN	1/4-18	-4	56.0-2.20	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

NPTF Male Swivel-Str



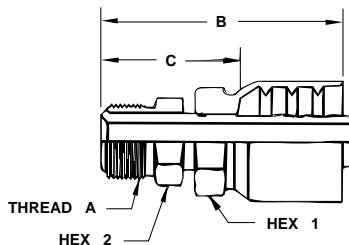
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
267-4658	4.8-.19	-3	JN	1/8-27	-2	53.0-2.09	36.0 - 1.42
479-4159	4.8-.19	-3	56	1/4-18	-4	66.0-2.60	48.0-1.89
178-9166	6.4-.25	-4	JN	1/8-27	-2	53.0-2.09	36.2-1.43
146-3412	6.4-.25	-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	41.0-1.61
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	49.0-1.93

STOR 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
146-3419	6.4-.25	-4	JN	7/16-20	-4	39.0-1.54	22.1-.87	3J-7354

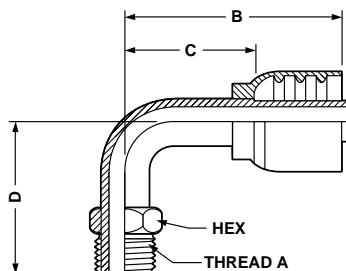
SAE 45° Inverted Flare Male Swivel-Str



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)
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

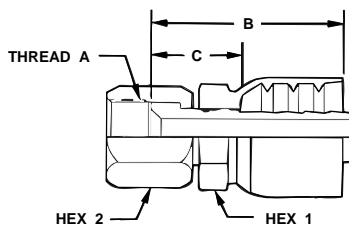
Permanent Couplings (2771A)

SAE 45° Inverted Flare Male Swivel-90° Elbow



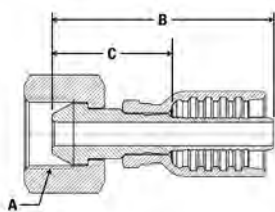
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3435	12.7-.50	-8	JN	3/4-18	-8	59.0-2.32	38.4-1.51	46.0-1.81

SAE 45° Female Swivel-Str



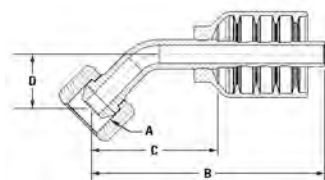
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
307-8246	4.8-.19	-3	JN	3/8-24	-3	34.0-1.34	17.0-.67

ISO 8434-6 BSPP Conical Seat-Female Swivel-Str



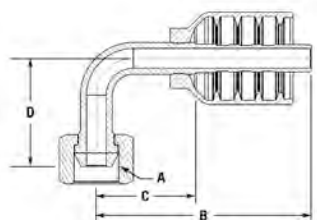
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
557-5997	6.4-.25	-4	JN	1/4-19	-4	41.2-1.62	22.3-0.88
557-5332	7.9-.31	-5	JN	3/8-19	-6	42.4-1.67	20.9-0.82
557-5334	9.5-.37	-6	JN	3/8-19	-6	52.6-2.07	23.4-0.92
557-9040	12.7-.50	-8	JN	1/2-14	-8	51.9-2.04	27.9-1.10

ISO 8434-6 BSPP Conical 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)
557-5999	6.4-.25	-4	JN	1/4-19	-4	56.38-2.22	37.6-1.48	17.5-0.69
557-9041	12.7-.50	-8	JN	1/4-19	-8	73.15-2.88	49.14-1.93	20.1-0.79

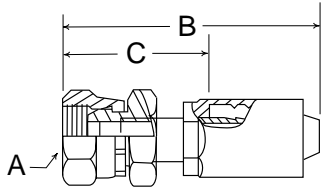
ISO 8434-6 BSPP Conical Seat-Female Swivel-90° Elbow



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)
557-6001	6.4-.25	-4	JN	1/4-19	-4	44.7-1.76	25.9-1.02	30.23-1.19
557-5336	9.5-.37	-6	JN	3/8-19	-6	61.7-2.43	32.3-1.27	37.08-1.46
557-9042	12.7-.50	-8	JN	1/2-14	-8	62.2-2.45	38.19-1.50	37.6-1.48

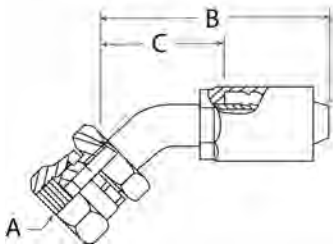
Permanent Couplings (2771A)

BSPP Spherical Seat-Female Swivel-Str



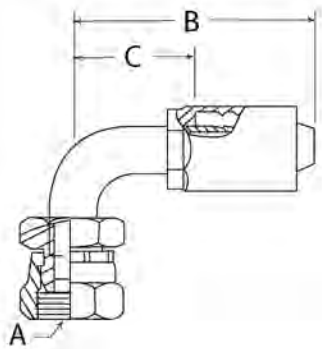
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
146-3436	6.4-.25	-4	JN	1/4-19	-4	39.62-1.56	22.27-0.88
146-3437	7.9-.31	-5	JN	3/8-19	-6	40.9-1.61	21.0-0.83
146-3438	9.5-.37	-6	JN	3/8-19	-6	56.6-2.23	29.5-1.16
146-3439	12.7-.50	-8	JN	1/2-14	-8	48.8-1.92	27.9-1.10

BSPP Spherical Seat-Female Swivel-45° Elbow



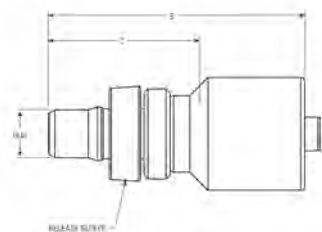
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
146-3440	6.4-.25	-4	JN	1/4-19	-4	55.0-2.17	37.7-1.48	17.5-.69
146-3441	12.7-.50	-8	JN	1/2-14	-8	69.9-2.75	48.8-1.92	20.1-0.79

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	43.2-1.70	28.7-1.13	30.2-1.19
146-3443	12.7-.50	-8	JN	1/2-14	-8	38.1-1.5	38.1-1.5	37.6-1.48

Snap To Connect-Str



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

Pilot Hose (2929) and Couplings

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 wire 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 Hose ToughGuard (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; steel wire reinforcement. Oil and weather resistant synthetic rubber cover with special outer high abrasion resistant ToughGuard film.

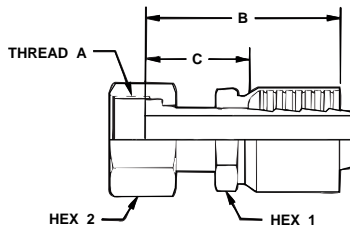
Application: Medium pressure service with petroleum based hydraulic fluids, lubricating oils, grease, water and water-glycol based fluids, and air. MSHA approved cover.

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.

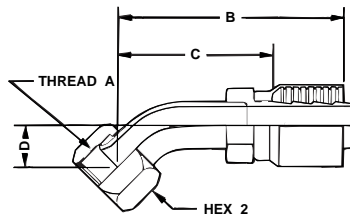
Permanent Couplings (2929)

ORFS Female Swivel-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
307-8256	4.8-.19	-3	MH	11/16-16	-6	46.0-1.81	27.5-1.08	6V-8397
273-1716	6.4-.25	-4	JN	9/16-18	-4	43.0-1.69	25.0-.98	4J-5477
149-8471	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.4-1.00	4J-5477
149-8472	6.4-.25	-4	MH	11/16-16	-6	49.0-1.93	27.5-1.08	6V-8397
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	65.0-2.56	39.1-1.54	6V-8398
149-8477	12.7-.50	-8	MH	1-14	-10	68.0-2.68	41.6-1.64	7J-9108
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

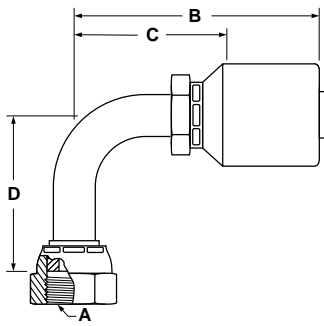
ORFS Female Swivel-45° Elbow



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
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
220-5351	12.7-.50	-8	MH	1 3/16-12	-12	77.0-3.03	51.0-2.01	21.0-.83	6V-9746
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	71.9-2.83	24.0-.94	5K-9090

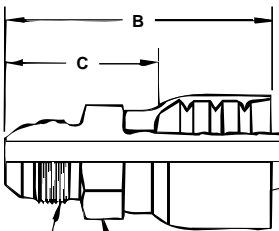
Permanent Couplings (2929)

ORFS Female Swivel-90° Elbow



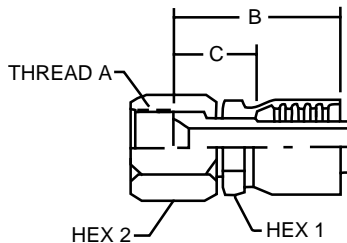
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)	O-RING SEAL
149-8489	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.2-.99	20.0-.79	4J-5477
149-8498	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.2-.99	32.0-1.26	4J-5477
149-8505	6.4-.25	-4	MH	9/16-18	-4	46.0-1.81	25.2-.99	46.0-1.81	4J-5477
149-8490	6.4-.25	-4	MH	11/16-16	-6	46.0-1.81	25.2-.99	23.0-.91	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	32.6-1.28	23.0-.91	6V-8397
149-8501	9.5-.37	-6	MH	11/16-16	-6	59.0-2.32	32.6-1.28	38.0-1.50	6V-8397
149-8507	9.5-.37	-6	MH	11/16-16	-6	59.0-2.32	32.6-1.28	54.0-2.13	6V-8397
149-8494	9.5-.37	-6	MH	13/16-16	-8	61.0-2.40	33.0-1.30	29.2-1.15	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	39.1-1.54	29.0-1.14	6V-8398
149-8502	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.1-1.54	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	44.9-1.77	6V-8398
149-8510	12.7-.50	-8	MH	13/16-16	-8	65.0-2.56	39.1-1.54	64.0-2.52	6V-8398
149-8496	12.7-.50	-8	MH	1-14	-10	65.0-2.56	39.1-1.54	32.0-1.26	7J-9108
149-8511	12.7-.50	-8	MH	1-14	-10	65.0-2.56	39.1-1.54	70.0-2.76	7J-9108
220-5358	15.9-.63	-10	MH	1-14	-10	74.0-2.91	46.6-1.83	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
220-5366	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

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)
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

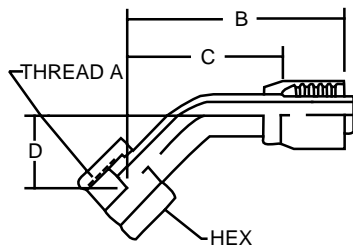
JIC 37° Female Swivel-Str



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)
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	23.8-.94
149-8521	9.5-.37	-6	MH	3/4-16	-8	50.0-1.97	24.3-.96
149-8522	12.7-.50	-8	MH	3/4-16	-8	55.0-2.17	28.6-1.13
149-8523	12.7-.50	-8	MH	7/8-14	-10	56.0-2.20	29.9-1.18
149-8524	12.7-.50	-8	MH	1 1/16-12	-12	56.0-2.20	29.5-1.16
220-5130	15.9-.63	-10	MH	3/4-16	-8	54.0-2.13	24.0-.94

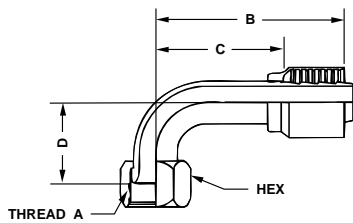
Permanent Couplings (2929)

JIC 37° Female Swivel-45° Elbow



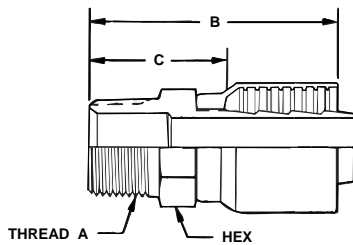
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
149-8528	6.4-.25	-4	MH	7/16-20	-4	52.0-2.05	28.0-1.10	8.0-.31
149-8533	12.7-.50	-8	MH	3/4-16	-8	70.0-2.76	43.5-1.71	14.0-.55
149-8538	12.7-.50	-8	MH	3/4-16	-8	73.0-2.87	46.6-1.83	18.0-.71

JIC 37° Female Swivel-90° Elbow



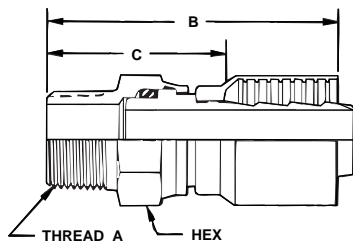
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
149-8541	6.4-.25	-4	MH	7/16-20	-4	46.0-1.81	26.0-1.02	18.0-.71
149-8591	9.5-.37	-6	MH	9/16-18	-6	77.0-3.03	51.0-2.01	22.0-.87
149-8544	9.5-.37	-6	MH	9/16-18	-6	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	39.1-1.54	35.0-1.38
149-8554	12.7-.50	-8	MH	3/4-16	-8	65.0-2.56	39.1-1.54	64.0-2.52

NPTF 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)
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	20.4-.80
149-8567	9.5-.37	-6	MH	1/4-18	-4	55.0-2.17	28.6-1.13
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	31.4-1.24

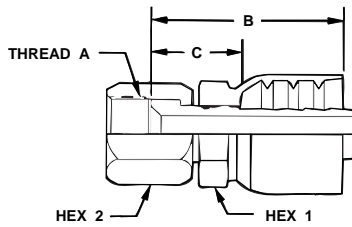
NPTF Male Swivel-Str



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)
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	39.1-1.54
220-5076	12.7-.50	-8	MH	1/2-14	-8	78.0-3.07	49.0-1.93

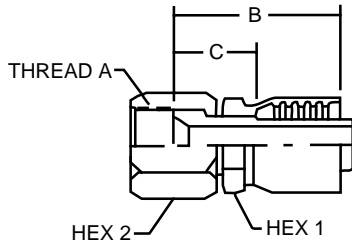
Permanent Couplings (2929)

SAE 45° Female Swivel-Str



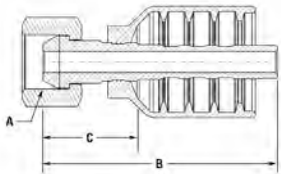
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
149-8576	9.5-.37	-6	MH	5/8-18	-6	46.0-1.81	20.0-.79

JIS 30° Flare Female Swivel-Str



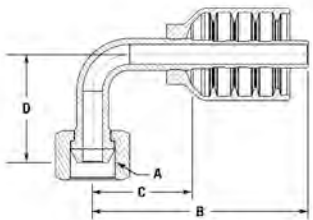
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
154-0102	6.4-.25	-4	MN	1/4-19	-4	44.0-1.73	22.6-.89
154-0103	9.5-.37	-6	MN	3/8-19	-6	46.0-1.81	20.0-.79
154-0104	12.7-.50	-8	MN	1/2-14	-8	53.0-2.09	28.0-1.10
519-4006	19.1-.75	-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

JIS 30° Conical Seat-Female Swivel-Str



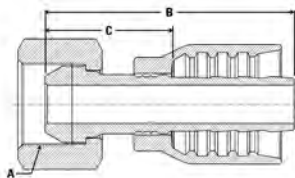
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
255-4879	19.1-.75	-12	MH	3/4-14	-12	60.96-2.4	29.97-1.18

JIS 30° Conical 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)
255-4880	19.1-.75	-12	MH	3/4-16	-8	83.57-3.29	52.35-2.06	50.04-1.97

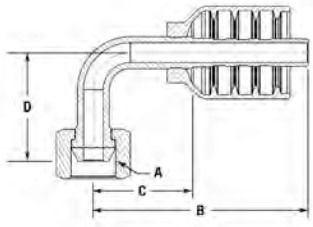
ISO 8434-6 BSPP Conical Seat-Female Swivel-Str



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)
555-5302	12.7-.50	-8	MH	1/2-14	-8	59.3-2.33	30.4-1.20
555-5304	19.1-.75	-12	MH	3/4-14	-12	70.4-2.77	34.9-1.37

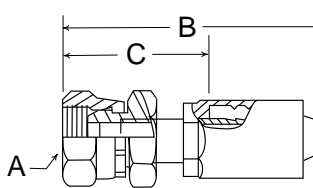
Permanent Couplings (2929)

ISO 8434-6 BSPP Conical Seat-Female Swivel-90° Elbow



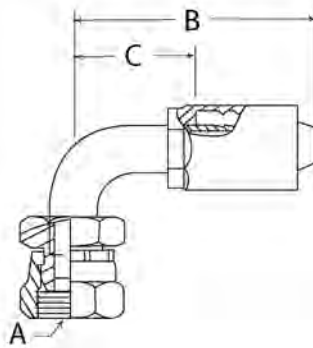
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
555-5303	12.7-.50	-8	MH	1/2-14	-8	68.1-2.68	39.1-1.54	37.6-1.48
555-5305	19.1-.75	-12	MH	3/4-14	-12	87.6-3.45	52.1-2.05	58.0-2.28

BSPP Spherical Seat-Female Swivel-Str



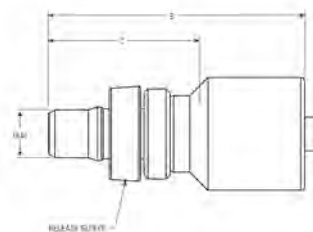
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	A THREAD SIZE	A THREAD DASH SIZE	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)
149-8581	12.7-.50	-8	MH	1/2-14	-8	56.29-2.22	30.35-1.19
149-8583	19.1-.75	-12	MH	3/4-14	-12	61.0-2.40	29.7-1.17

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)
220-5320	6.4-.25	-4	MH	1/4-19	-4	49.3-1.94	25.2-0.99	30.2-1.19
220-5321	9.5-.37	-6	MH	3/8-19	-6	61.7-2.43	32.7-1.29	37.1-1.46
220-5322	12.7-.50	-8	MH	1/2-14	-8	68.1-2.68	39.1-1.54	37.6-1.48
220-5323	19.1-.75	-12	MH	3/4-14	-12	87.6-3.45	52.3-2.06	58.9-2.32

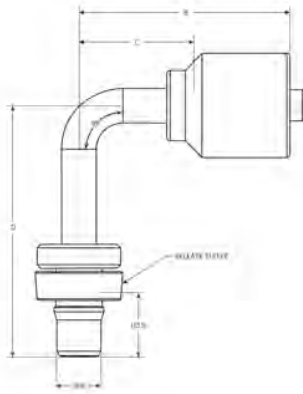
Snap To Connect-Str



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

Permanent Couplings (2929)

Snap To Connect-90° Elbow



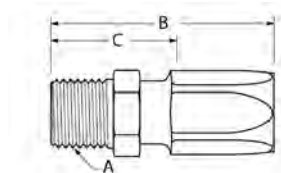
Part Number	HOSE I.D. (mm-in)	HOSE DASH SIZE	SERIES	HEAD SIZE (mm-in)	B LENGTH (mm-in)	C CUT-OFF FACTOR (mm-in)	D DROP (mm-in)
263-2678	6.4-.25	-4	MH	6.0-.24	46.0-1.81	25.2-.99	40.0-1.57
263-2685	6.4-.25	-4	MH	6.0-.24	46.0-1.81	25.2-.99	55.0-2.17

Pre-filled Grease Hose

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)
171-9629	3.1 - .12	.0 - .00	-2	0 - 0	0 - 0

Construction: Fiber reinforced thermoplastic, medium pressure hose pre-filled with grease. Application: For use in Auto Lube systems.

NPTF Male-Str



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

Heater Hose - Standard (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)



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)

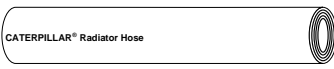
Heater Hose- High Temperature (515E)



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	1750 - 254	441 - 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)

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

Specialty Hose

Radiator Hose (642C) (Cont'd.)

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)
371-8952	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

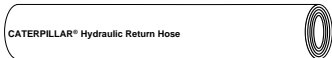
Meets the requirements of SAE J20R1. Note: Sold by the centimeter.
Operating Temperature Range: -40°C to 100°C (-40°F to 212°F)

Radiator Hose (642E)

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)

Hydraulic Return 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)

Air Brake 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.

Please refer to the -6 and -8 couplings starting on, page 133 and ending on, page 161

Operating Temperature Range: -40°C to 100°C (-40°F to 212°F)

Hydraulic Suction Hose (844)

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)
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

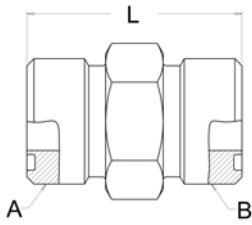
Meets the requirements of SAE J517 and 100R4. Note: Sold by the centimeter.

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

Straight Adapters.....	222
Elbow Adapters.....	283
Tee Adapters.....	318
Cross Adapters.....	364
Quick Disconnect Hose.....	368
Swivel and Bulkhead Nuts.....	371

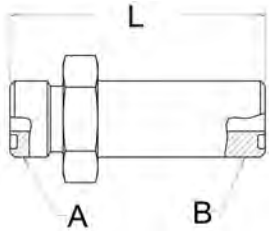
Straight Adapters

Male ORFS / Male ORFS



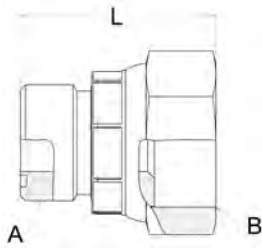
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
337-8781	9/16-18	9/16-18	15.88	27.5	SST
205-5120	13/16-16	9/16-18	22.23	37.5	SST
6V-8729	9/16-18	9/16-18	15.88	27.5	Steel
6V-8736	11/16-16	9/16-18	19.05	30	Steel
6V-8730	11/16-16	11/16-16	19.05	31	Steel
6V-8737	13/16-16	11/16-16	22.22	33.5	Steel
6V-8731	13/16-16	13/16-16	22.22	35.5	Steel
474-2631	13/16-16	13/16-16	22.22	35.5	Steel
8T-5082	13/16-16	1 3/16-12	31.75	43	Steel
6V-8738	1-14	13/16-16	26.99	40	Steel
6V-8732	1-14	1-14	26.99	42.5	Steel
6V-8739	1 3/16-12	1-14	31.75	45.5	Steel
6V-8733	1 3/16-12	1 3/16-12	31.75	47	Steel
6V-8740	1 7/16-12	1 3/16-12	38.1	49	Steel
6V-8734	1 7/16-12	1 7/16-12	38.1	49.5	Steel
6V-8741	1 11/16-12	1 7/16-12	44.45	51.5	Steel
109-5289	1 11/16-12	1 11/16-12	44.45	51.5	Steel
7X-0823	2-12	2-12	53.98	53	Steel

Male ORFS / Bulkhead Male ORFS



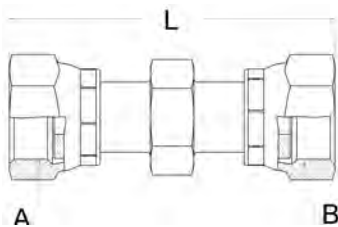
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
459-0769	11/16-16	11/16-16	25.4	53	SST
6V-8993	9/16-18	9/16-18	20.64	48	Steel
6V-8994	11/16-16	11/16-16	25.4	53	Steel
150-0128	11/16-16	11/16-16	25.4	61.2	Steel
8T-5890	11/16-16	11/16-16	25.4	90.5	Steel
8T-0129	11/16-16	13/16-16	28.58	56.6	Steel
8T-6445	11/16-16	13/16-16	28.58	51.7	Steel
6V-8995	13/16-16	13/16-16	28.58	58.5	Steel
208-2859	13/16-16	13/16-16	28.58	69	Steel
268-1547	13/16-16	1-14	33.34	63.9	Steel
6V-9353	1-14	13/16-16	28.58	62.5	Steel
6V-8996	1-14	1-14	33.34	66.5	Steel
7X-3156	1-14	1-14	-	75	Steel
163-9960	1 3/16-12	1-14	32	68.1	Steel
6V-8997	1 3/16-12	1 3/16-12	38.1	69	Steel
162-2896	1 3/16-12	1 3/16-12	38.1	75.2	Steel
323-5953	1 3/16-12	1 3/16-12	38.1	69	Steel
8C-8493	1 7/16-12	1 3/16-12	44.45	69.6	Steel
6V-8998	1 7/16-12	1 7/16-12	44.45	70	Steel
7X-2464	1 7/16-12	1 7/16-12	44.45	118	Steel
9X-2317	1 11/16-12	1 7/16-12	50.8	70.1	Steel
110-9160	1 11/16-12	1 11/16-12	50.8	70	Steel
451-0496	2-12	2-12	60.32	70	Steel

Male ORFS / Swivel Nut ORFS



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
459-0776	11/16-16	13/16-16	23.3	32.5	SST
6V-8934	9/16-18	11/16-16	20.64	27.8	Steel
489-4877	11/16-16	11/16-16	19.05	44.8	Steel
6V-8936	11/16-16	13/16-16	23.81	32.5	Steel
175-9489	11/16-16	1 3/16-12	34.92	27	Steel
304-7975	13/16-16	9/16-18	22.22	35	Steel
3E-7403	13/16-16	11/16-16	22.22	41	Steel
211-4040	13/16-16	13/16-16	23.81	65	Steel
214-3245	13/16-16	13/16-16	23.81	35	Steel
506-3309	13/16-16	13/16-16	–	28.45	Steel
175-9494	13/16-16	1 3/16-12	36	28	Steel
471-0103	13/16-16	1 3/16-12	35.1	27.9	Steel
426-4059	1-14	13/16-16	25.4	51	Steel
449-1438	1-14	13/16-16	26.99	45.97	Steel
6V-8943	1-14	1 3/16-12	34.92	43	Steel
6V-8945	1-14	1 7/16-12	–	32	Steel
288-9733	1 3/16-12	1-14	31.75	50.8	Steel
451-1784	1 3/16-12	1-14	31.75	50.55	Steel
396-0398	1 3/16-12	1 3/16-12	31.75	58	Steel
337-8772	1 3/16-12	1 3/16-12	31.75	125.6	Steel
364-3072	1 3/16-12	1 7/16-12	38.1	67.5	Steel
6V-8946	1 3/16-12	1 7/16-12	41.28	46.5	Steel
6V-8947	1 3/16-12	1 11/16-12	–	33.5	Steel
203-6688	1 7/16-12	1 3/16-12	38.1	54.86	Steel
371-7210	1 7/16-12	1 7/16-12	41.28	50	Steel
6V-8948	1 7/16-12	1 11/16-12	47.63	47.5	Steel
239-5032	1 11/16-12	1 7/16-12	44.45	57.9	Steel

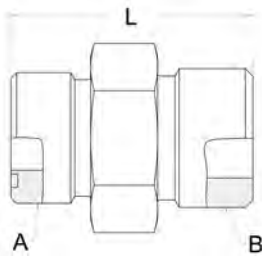
Swivel Nut ORFS / Swivel Nut ORFS



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
434-5516	11/16-16	11/16-16	9.52	44.96	Steel
377-9599	11/16-16	11/16-16	19.05	62	Steel
287-7332	13/16-16	13/16-16	22.22	53.85	Steel
395-8670	1 7/16-12	1 7/16-12	36.5	75	Steel

Straight Adapters

Male ORFS / Male STOR



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
426-4082	13/16-16	1 1/16-12	31.75	44.5	SST
369-6899	1 7/16-12	1 5/16-12	38.1	50	SST
081-5622	9/16-18	3/8-24	15.88	27	Steel
6V-8647	9/16-18	7/16-20	15.88	29	Steel
353-4662	9/16-18	7/16-20	15.88	28	Steel
468-1907	9/16-18	7/16-20	15.88	53	Steel
220-2073	9/16-18	7/16-20	15.88	61	Steel
301-2866	9/16-18	7/16-20	19.05	29	Steel
6V-9010	9/16-18	7/16-20	15.88	71.5	Steel
8T-6988	9/16-18	1/2-20	15.88	29.5	Steel
6V-8641	9/16-18	9/16-18	17.46	31	Steel
145-2237	9/16-18	9/16-18	17.46	47	Steel
156-8801	9/16-18	9/16-18	19.05	83.2	Steel
156-8845	9/16-18	9/16-18	19.05	57	Steel
267-4041	9/16-18	9/16-18	17.46	67	Steel
447-8023	9/16-18	9/16-18	16	29.2	Steel
087-0677	9/16-18	3/4-16	22.3	33	Steel
112-9783	9/16-18	3/4-16	22.23	33.5	Steel
6V-9872	11/16-16	7/16-20	19.05	34	Steel
8I-6347	11/16-16	7/16-20	19.05	34.2	Steel
321-4562	11/16-16	1/2-20	19	31	Steel
8T-5043	11/16-16	1/2-20	19.05	30.8	Steel
164-9836	11/16-16	1/2-20	19	40	Steel
281-5911	11/16-16	9/16-18	19.05	146	Steel
227-6469	11/16-16	9/16-18	19	32	Steel
345-3907	11/16-16	9/16-18	19.05	62	Steel
396-0385	11/16-16	9/16-18		28	Steel
8T-8887	11/16-16	9/16-18	19.05	83.2	Steel
237-6095	11/16-16	9/16-18	19.05	57.5	Steel
6V-8636	11/16-16	9/16-18	19.05	32	Steel
136-1901	11/16-16	9/16-18	19.05	77.4	Steel
166-3032	11/16-16	9/16-18	19.05	71	Steel
116-5435	11/16-16	9/16-18	19.05	29.83	Steel
8T-0075	11/16-16	9/16-18	19.05	50	Steel
8T-1779	11/16-16	9/16-18	19.05	45	Steel
8C-0597	11/16-16	9/16-18	19.05	90	Steel
9X-2297	11/16-16	9/16-18	19.05	62	Steel
092-3635	11/16-16	3/4-16	22.2	66	Steel
199-8495	11/16-16	3/4-16	22.22	54	Steel
315-5729	11/16-16	3/4-16	22.22	35	Steel
6V-8634	11/16-16	3/4-16	22.23	34.5	Steel
395-8602	11/16-16	3/4-16	22.2	35.1	Steel
8T-0076	11/16-16	3/4-16	22.22	54	Steel
439-1948	11/16-16	7/8-14	26.99	79.5	Steel
6V-8715	11/16-16	7/8-14	25.4	38.5	Steel
9X-6550	11/16-16	7/8-14	25.4	54.8	Steel
418-4430	11/16-16	1 1/16-12	38.1	37	Steel
418-4454	11/16-16	1 1/16-12	38.1	37	Steel
371-7193	11/16-16	1 1/16-12	31.75	42.5	Steel
156-6131	13/16-16	7/16-20	22.23	36.5	Steel
365-0600	13/16-16	9/16-18	20.64	49	Steel
6V-9873	13/16-16	9/16-18	22.23	37.5	Steel
237-6093	13/16-16	9/16-18	22.22	95	Steel
8T-5050	13/16-16	9/16-18	22.23	66	Steel

Straight Adapters

Male ORFS / Male STOR (Cont'd.)

Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
6V-8639	13/16-16	3/4-16	22.23	36.5	Steel
8T-0077	13/16-16	3/4-16	22.23	68	Steel
123-1904	13/16-16	3/4-16	22.22	76	Steel
244-5227	13/16-16	3/4-16	22.22	122	Steel
9X-2304	13/16-16	3/4-16	22.23	114	Steel
480-3010	13/16-16	7/8-14	25.4	40.5	Steel
104-9054	13/16-16	7/8-14	25.4	72	Steel
6V-8638	13/16-16	7/8-14	25.4	40.5	Steel
126-9745	13/16-16	7/8-14	26.99	117.5	Steel
126-9903	13/16-16	7/8-14	26.99	82.5	Steel
228-7372	13/16-16	7/8-14	25.4	117.6	Steel
5I-4370	13/16-16	7/8-14	22	51	Steel
4I-7745	13/16-16	1 1/16-12	31.75	163.5	Steel
081-5495	13/16-16	1 1/16-12	—	136	Steel
6V-8633	13/16-16	1 1/16-12	31.75	44.5	Steel
207-0650	13/16-16	1 1/16-12	31.75	99	Steel
9T-2136	13/16-16	1 3/16-12	34.92	44.4	Steel
9X-8408	13/16-16	1 5/16-12	38.1	45.5	Steel
8T-0405	1-14	1/2-20	26.99	40.8	Steel
8C-6758	1-14	9/16-18	26.99	41.5	Steel
6V-8632	1-14	3/4-16	27	45	Steel
137-9076	1-14	3/4-16	26.99	74.5	Steel
156-9791	1-14	3/4-16	26.99	75	Steel
172-0677	1-14	3/4-16	26.99	37	Steel
172-0679	1-14	3/4-16	26.99	54	Steel
297-6678	1-14	7/8-14	26.99	83	Steel
488-1844	1-14	7/8-14	26.99	43	Steel
6V-8642	1-14	7/8-14	26.99	43	Steel
8T-1576	1-14	7/8-14	26.99	79.5	Steel
168-9393	1-14	7/8-14	27	52.5	Steel
176-4694	1-14	7/8-14	26.99	148	Steel
117-7065	1-14	7/8-14	26.99	99.1	Steel
202-1673	1-14	7/8-14	26.99	116	Steel
187-5588	1-14	1 1/16-12	31.75	163	Steel
287-7268	1-14	1 1/16-12	31.75	70	Steel
109-5815	1-14	1 1/16-12	31.5	88.5	Steel
109-5822	1-14	1 1/16-12	31.5	188.5	Steel
6V-8713	1-14	1 1/16-12	31.75	47	Steel
260-9213	1-14	1 1/16-12	31.75	90	Steel
125-1915	1-14	1 5/16-12	38.1	45.09	Steel
138-7538	1-14	1 5/16-12	38.1	48	Steel
326-0306	1-14	1 5/16-12	38.1	45.5	Steel
450-1697	1 3/16-12	9/16-18	—	36.51	Steel
285-9615	1 3/16-12	3/4-16	32	130	Steel
6V-9874	1 3/16-12	3/4-16	31.75	48.5	Steel
268-1640	1 3/16-12	7/8-14	31.75	56.9	Steel
338-1295	1 3/16-12	7/8-14	31.75	78	Steel
6V-8640	1 3/16-12	7/8-14	31.75	50.5	Steel
132-8815	1 3/16-12	7/8-14	31.75	128.6	Steel
3E-7420	1 3/16-12	7/8-14	31.75	99.6	Steel
9X-6656	1 3/16-12	7/8-14	31.75	131	Steel
282-5642	1 3/16-12	1 1/16-12	31.75	135.5	Steel
4I-8979	1 3/16-12	1 1/16-12	31.75	48.6	Steel
7I-1096	1 3/16-12	1 1/16-12	31.5	88.5	Steel

Straight Adapters

Male ORFS / Male STOR (Cont'd.)

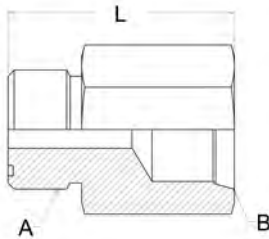
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
8T-9023	1 3/16-12	1 1/16-12	31.75	95.5	Steel
109-5823	1 3/16-12	1 1/16-12	31.5	88.5	Steel
6V-8637	1 3/16-12	1 1/16-12	31.75	48.5	Steel
8C-8417	1 3/16-12	1 1/16-12	31.75	95.5	Steel
110-5897	1 3/16-12	1 1/16-12	31.5	113.5	Steel
262-7035	1 3/16-12	1 1/16-12	31.75	113.5	Steel
8T-0078	1 3/16-12	1 1/16-12	31.75	73	Steel
6V-9162	1 3/16-12	1 1/16-12	31.75	83.5	Steel
8C-8498	1 3/16-12	1 1/16-12	31.75	60.5	Steel
277-4567	1 3/16-12	1 1/8-12	38.1	61.1	Steel
208-3786	1 3/16-12	1 3/16-12	34.92	180	Steel
242-6132	1 3/16-12	1 3/16-12	34.93	110	Steel
302-8832	1 3/16-12	1 3/16-12	34.92	163.5	Steel
2T-2991	1 3/16-12	1 3/16-12	34.92	48.6	Steel
7E-7264	1 3/16-12	1 3/16-12	34.93	133.5	Steel
125-7426	1 3/16-12	1 5/16-12	38.1	135.5	Steel
184-9330	1 3/16-12	1 5/16-12	38.1	98.5	Steel
286-6395	1 3/16-12	1 5/16-12	38.1	64.7	Steel
303-5457	1 3/16-12	1 5/16-12	38.1	83	Steel
4I-8977	1 3/16-12	1 5/16-12	38.1	49.8	Steel
7I-0048	1 3/16-12	1 5/16-12	38.1	75	Steel
109-5821	1 3/16-12	1 5/16-12	38.1	75	Steel
6V-8716	1 3/16-12	1 5/16-12	38.1	49.5	Steel
152-9254	1 3/16-12	1 5/16-12	38.1	123.5	Steel
278-6506	1 3/16-12	1 5/16-12	38.1	133.5	Steel
8T-0197	1 3/16-12	1 5/16-12	38.1	83.5	Steel
279-8312	1 3/16-12	1 5/8-12	47.63	52	Steel
8C-3370	1 7/16-12	3/4-16	38.1	50	Steel
8T-9386	1 7/16-12	7/8-14	38.1	52	Steel
8C-4000	1 7/16-12	7/8-14	38.1	92.8	Steel
298-6824	1 7/16-12	1 1/16-12	38.1	150	Steel
347-4425	1 7/16-12	1 1/16-12	38.1	54.3	Steel
397-9733	1 7/16-12	1 1/16-12	41	84.5	Steel
6V-8714	1 7/16-12	1 1/16-12	38.1	54.3	Steel
229-5431	1 7/16-12	1 1/8-12	38.1	61.5	Steel
206-4831	1 7/16-12	1 3/16-12	38.1	110	Steel
254-4100	1 7/16-12	1 3/16-12	27	95	Steel
8T-6453	1 7/16-12	1 3/16-12	38.1	49.5	Steel
176-5880	1 7/16-12	1 3/16-12	38.1	123.4	Steel
8C-8807	1 7/16-12	1 3/16-12	38.1	93.5	Steel
8T-8898	1 7/16-12	1 5/16-12	38.1	105	Steel
6V-8635	1 7/16-12	1 5/16-12	38.1	50	Steel
215-2432	1 7/16-12	1 5/16-12	38.1	136.5	Steel
238-7836	1 7/16-12	1 5/16-12	38.1	106.9	Steel
249-0073	1 7/16-12	1 5/16-12	–	71.1	Steel
307-4919	1 7/16-12	1 5/16-12	38.1	83.5	Steel
313-3486	1 7/16-12	1 5/16-12	38.1	46	Steel
4I-7756	1 7/16-12	1 5/16-12	38.1	50.3	Steel
8C-5723	1 7/16-12	1 5/16-12	38.1	68.5	Steel
8T-0198	1 7/16-12	1 5/16-12	38.1	83.5	Steel
8C-3443	1 7/16-12	1 5/16-12	38.1	118.5	Steel
307-5130	1 7/16-12	1 5/8-12	47.63	78.3	Steel
6V-9875	1 7/16-12	1 5/8-12	47.63	52.5	Steel
8C-3323	1 7/16-12	1 7/8-12	–	54	Steel

Straight Adapters

Male ORFS / Male STOR (Cont'd.)

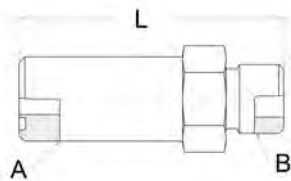
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
347-4407	1 11/16-12	1 1/16-12	44.45	56.3	Steel
480-3003	1 11/16-12	1 1/16-12	44.45	63	Steel
9X-8260	1 11/16-12	1 3/16-12	44.45	56.5	Steel
161-8021	1 11/16-12	1 5/16-12	44.45	121	Steel
8T-7927	1 11/16-12	1 5/16-12	44.45	52.3	Steel
8T-3611	1 11/16-12	1 5/8-12	47.63	52.5	Steel
220-5924	1 11/16-12	1 5/8-12	47.63	116	Steel
109-3657	1 11/16-12	1 7/8-12	53.98	54	Steel
268-1506	2-12	1 5/16-12	53.98	59.6	Steel
8T-8985	2-12	1 5/8-12	53.98	59.6	Steel
201-4160	2-12	1 7/8-12	53.98	133.5	Steel
8T-7926	2-12	1 7/8-12	53.98	54	Steel

Male ORFS / Port STOR



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
164-0193	11/16-16	9/16-18	22.23	33.7	Steel
8T-6663	11/16-16	9/16-18	19.05	36	Steel
6I-6851	13/16-16	9/16-18	23.81	36	Steel
310-5889	13/16-16	3/4-16	25.4	45	Steel
157-8510	1 3/16-12	1 1/16-12	41.28	46.25	Steel
9X-6643	1 3/16-12	1 5/16-12	38.1	47	Steel
109-7075	1 3/16-12	1 5/16-12	41	77	Steel
4I-0893	1 3/16-12	1 5/16-12	41	82	Steel
8T-7813	1 7/16-12	1 5/16-12	44.45	47.5	Steel

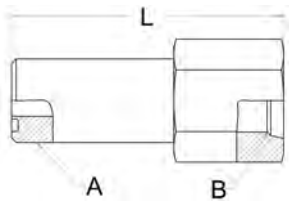
Bulkhead ORFS / Male STOR



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
329-5462	9/16-18	3/8-24	20.64	38.4	Brass
337-8783	9/16-18	3/8-24	20.64	38.4	SST
442-0493	9/16-18	7/16-20	20.6	55	Steel
089-7702	11/16-16	9/16-18	19.05	55	Steel
281-5878	11/16-16	3/4-16	22.22	57.8	Steel
267-4159	11/16-16	3/4-16	28.58	53	Steel
2U-6193	13/16-16	3/4-16	22.22	68.1	Steel
152-6942	13/16-16	3/4-16	28.58	59.7	Steel
163-7050	13/16-16	7/8-14	26.99	55	Steel
160-5083	1-14	3/4-16	33.34	70.6	Steel
163-9964	1-14	7/8-14	32	67.1	Steel
144-7767	1-14	7/8-14	33.34	58	Steel
268-1642	1-14	1 1/16-12	33.34	76.3	Steel
332-8545	1 3/16-12	7/8-14	38.1	71.9	Steel
235-3583	1 3/16-12	1 1/16-12	38.1	73.4	Steel
108-3872	1 3/16-12	1 5/16-12	44.45	74.5	Steel
229-8638	1 7/16-12	1 1/16-12	44.45	83.5	Steel
107-6709	1 7/16-12	1 5/16-12	44.45	75	Steel
386-6205	1 11/16-12	1 5/8-12	50.8	82.8	Steel

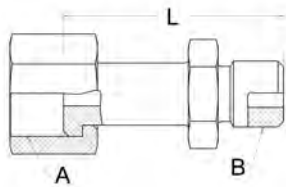
Straight Adapters

Bulkhead ORFS / STOR Port



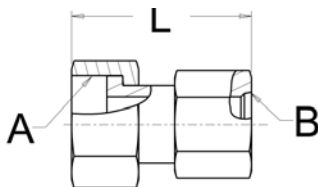
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
459-0671	11/16-16	9/16-18	22.22	57	SST
9X-2608	9/16-18	3/8-24	20.64	45	Steel
7X-7945	9/16-18	9/16-18	19.05	57	Steel
8T-9358	11/16-16	9/16-18	22.22	57	Steel
8C-8835	11/16-16	3/4-16	25.4	65	Steel
106-5074	1 3/16-12	3/4-16	38	72.5	Steel
421-6177	1 3/16-12	1 1/16-12	38.1	72	Steel

Swivel Nut ORFS / Male STOR



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
386-6207	9/16-18	7/16-20	15.88	37	Brass
7X-3162	9/16-18	7/16-20	15.88	37	Steel
107-6598	9/16-18	9/16-18	19	36	Steel
4I-6287	11/16-16	9/16-18	19.05	40	Steel
341-0076	11/16-16	9/16-18	19.05	40.2	Steel
9X-2847	13/16-16	9/16-18	23.81	62.8	Steel
7X-3164	13/16-16	3/4-16	22.22	49.5	Steel
395-8959	13/16-16	3/4-16	22.22	49.3	Steel
381-8327	1-14	3/4-16	30	65	Steel
7X-3165	1-14	7/8-14	26.99	54	Steel
381-8328	1-14	1 1/16-12	32	69	Steel
228-2022	1 3/16-12	7/8-14	27	99	Steel
7I-8310	1 3/16-12	1 1/16-12	31.75	59.5	Steel
395-8824	1 3/16-12	1 1/16-12	-	71.2	Steel
7R-0042	1 3/16-12	1 1/16-12	35.05	76.13	Steel
4I-6140	1 3/16-12	1 5/16-16	38.1	60.6	Steel
4I-6141	1 7/16-12	1 5/16-12	38.1	67.5	Steel
202-7000	1 7/16-12	1 5/16-12	41.28	55	Steel
395-8958	1 7/16-12	1 5/16-12	38.1	67.5	Steel
7X-3168	1 11/16-12	1 5/8-12	47.63	67.5	Steel
7X-3169	2-12	1 7/8-12	-	67.5	Steel

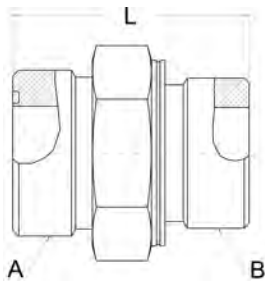
Swivel Nut ORFS / STOR Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
434-5513	11/16-16	7/16-20	19.05	31.75	Steel
132-2453	11/16-16	9/16-18	20.64	43.9	Steel
451-1764	13/16-16	7/16-20	22.22	39.88	Steel
241-6188	1 7/16-12	7/8-14	34.93	68.43	Steel

Straight Adapters

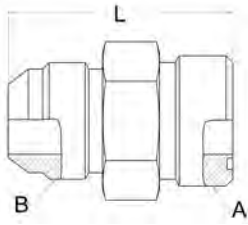
Male ORFS / Male Metric STOR



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
459-7074	11/16-16	M12x1.5	19	32	SST
459-2254	11/16-16	M16x1.5	22	33.5	SST
228-6047	9/16-18	M10x1	17	27	Steel
117-9983	9/16-18	M12x1.5	17.46	31.5	Steel
8T-7487	9/16-18	M12x1.5	17	28.5	Steel
126-0272	9/16-18	M12x1.5	17	28.5	Steel
238-3256	9/16-18	M14x1.5	23.81	39	Steel
241-6220	9/16-18	M14x1.5	19	29.5	Steel
236-5327	9/16-18	M16x1.5	23.81	39	Steel
119-6407	11/16-16	M10x1	19.05	28.6	Steel
304-7986	11/16-16	M12x1.5	19	32	Steel
123-7341	11/16-16	M12x1.5	19	61.2	Steel
8T-7489	11/16-16	M14x1.5	19	32	Steel
175-9456	11/16-16	M14x1.5		32	Steel
8T-6725	11/16-16	M16x1.5	22	33.5	Steel
171-8678	11/16-16	M16x1.5	22	31.9	Steel
439-1734	11/16-16	M16x1.5	24	33.5	Steel
268-1554	11/16-16	M18x1.5	24	36	Steel
341-0117	11/16-16	M20x1.5	27	36.5	Steel
7X-8506	11/16-16	M22x1.5	28.58	40.64	Steel
260-9141	11/16-16	M27x2	32	42.5	Steel
287-7281	11/16-16	M8x1	22	30.5	Steel
369-6819	13/16-16	M12x1.5	22	35	Steel
8U-6888	13/16-16	M14x1.5	22	35	Steel
8U-5923	13/16-16	M14x1.5	22	92.8	Steel
8T-7488	13/16-16	M16x1.5	22.22	36.5	Steel
238-3258	13/16-16	M18x1.5	25.4	40	Steel
8T-7490	13/16-16	M18x1.5	24	38	Steel
416-6415	13/16-16	M18x1.5	7.94	58.7	Steel
8T-7491	13/16-16	M22x1.5	27	39.5	Steel
281-5958	13/16-16	M22x1.5	26.99	39.5	Steel
238-3259	13/16-16	M22x1.5	28.58	44	Steel
7R-6370	13/16-16	M22x1.5	28.58	40	Steel
281-5883	13/16-16	M27x2	32	44.5	Steel
227-0062	1-14	M18x1.5	27	41	Steel
480-2991	1-14	M22x1.5	27	90	Steel
227-0064	1-14	M22x1.5	27	42	Steel
8T-7495	1-14	M27x2	32	47	Steel
459-0646	1 3/16-12	M22x1.5	32	120	Steel
484-8797	1 3/16-12	M22x1.5	32	105	Steel
8T-7492	1 3/16-12	M22x1.5	32	45	Steel
310-5888	1 3/16-12	M22x1.5	32	45	Steel
8T-7494	1 3/16-12	M27x2	32	48.5	Steel
307-9782	1 3/16-12	M33x2	41	51.5	Steel
238-3260	1 7/16-12	M22x1.5	41.28	51.5	Steel
281-5873	1 7/16-12	M22x1.5	41	48	Steel
238-3263	1 7/16-12	M33x2	41.28	55.5	Steel
342-8379	1 7/16-12	M33x2	38.1	110	Steel
8T-7496	1 7/16-12	M33x2	41	52	Steel
227-0065	1 7/16-12	M33x2	41	52	Steel
322-3504	1 7/16-12	M33x2		151.5	Steel
8T-7497	1 11/16-12	M33x2	44.45	52.3	Steel
227-0066	1 11/16-12	M42x2	50	54.5	Steel

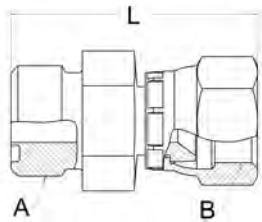
Straight Adapters

Male ORFS / Male JIC 37°



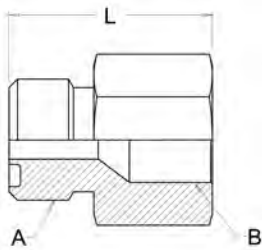
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
107-3877	11/16-16	9/16-18	19.05	34	Steel
8C-7306	13/16-16	3/4-16	22.22	39.3	Steel
8C-7307	1-14	7/8-14	26.99	46.4	Steel
6C-2293	1 3/16-12	1 1/16-12	31.75	52.1	Steel
8C-7308	1 3/16-12	1 1/16-12	31.75	52	Steel

Male ORFS / JIC 37° Swivel Nut



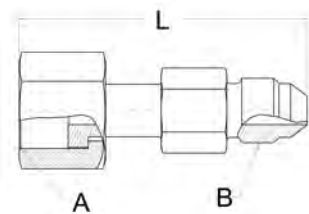
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
112-2564	11/16-16	9/16-18	19.05	29	Steel
112-2565	13/16-16	3/4-16	22.22	33.5	Steel
199-6702	1 3/16-12	1 1/16-12	31.75	41.4	Steel

Male ORFS / JIC 37° Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
8T-6701	9/16-18	7/16-20	17.46	24	Steel
146-7082	11/16-16	9/16-18	19.05	25	Steel

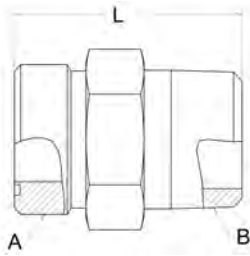
ORFS Swivel Nut / Male JIC 37°



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
8C-7309	9/16-18	7/16-20	17.46	41.6	Steel
8C-7310	11/16-16	9/16-18	19.05	40.8	Steel
8C-7311	13/16-16	3/4-16	23.81	49.5	Steel
8C-7312	1-14	7/8-14	28.58	57	Steel
8C-7313	1 3/16-12	1 1/16-12	31.75	63.5	Steel
8C-7334	1 7/16-12	1 5/16-12	34.92	69.9	Steel
8C-7335	1 11/16-12	1 5/8-12	47.63	71	Steel

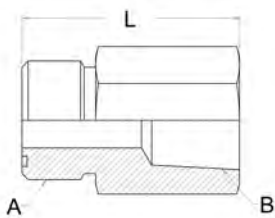
Straight Adapters

Male ORFS / Male NPTF



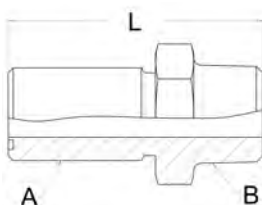
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
369-6893	1 7/16-12	1-11.5	38.1	53.9	SST
7X-5299	9/16-18	1/8-27	15.88	26	Steel
8C-6865	9/16-18	1/8-27	15.88	27.2	Steel
8C-6866	9/16-18	1/4-18	15.88	31.5	Steel
367-6013	9/16-18	3/8-18	19.05	36.5	Steel
8C-6867	9/16-18	3/8-18	19.05	31.5	Steel
101-0387	11/16-16	1/8-27	19.05	28.5	Steel
8C-6868	11/16-16	1/4-18	19.05	33	Steel
2T-2416	11/16-16	3/8-18	19	35.3	Steel
8C-6869	11/16-16	3/8-18	19.05	33	Steel
8C-6870	11/16-16	1/2-14	22.22	39.4	Steel
8C-6871	13/16-16	3/8-18	22.22	37.6	Steel
8C-6872	13/16-16	1/2-14	22.22	40.9	Steel
431-8071	13/16-16	3/4-14	28.58	42.93	Steel
211-5237	13/16-16	3/4-14	28.58	42.9	Steel
150-7158	1-14	3/8-18	26.99	39.86	Steel
8C-6873	1-14	1/2-14	27	43.7	Steel
249-2924	1-14	3/4-14	28.58	46.2	Steel
431-8064	1 3/16-12	1/2-14	31.75	46.74	Steel
365-0682	1 3/16-12	1/2-14	31.75	49	Steel
199-4673	1 3/16-12	1-11.5	36	57.7	Steel
315-9833	1 7/16-12	3/4-14	38.1	47.2	Steel
8C-6875	1 7/16-12	1-11.5	38.1	53.9	Steel
150-7159	1 11/16-12	1/2-14	44.45	54	Steel
117-3050	1 11/16-12	1-11.5	47.63	54	Steel
442-3310	1 11/16-12	1 1/4-11.5	47.63	58.42	Steel
201-5551	1 11/16-12	1 1/4-11.5	47.63	58.42	Steel
445-9765	2-12	1 1/2-11.5	53.98	57.4	Steel
296-5728	2-12	1 1/2-11.5	53.98	61	Steel

Male ORFS / NPTF Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
7B-9978	2-12	3/4-14	63.5	27	Iron
8T-4128	9/16-18	1/8-27	15.88	16.9	Steel
8T-6776	9/16-18	1/4-18	19.05	35	Steel
7X-7934	11/16-16	1/4-18	19.05	36.2	Steel
7X-2441	11/16-16	3/8-18	19.05	36.2	Steel
304-8047	13/16-16	3/8-18	22.22	37.8	Steel

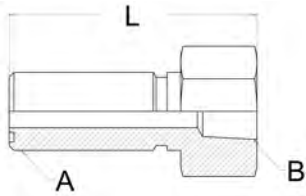
Bulkhead Male ORFS / Male NPTF



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
132-5091	11/16-16	3/8-18	25.4	58	Steel
304-8001	13/16-16	1/2-14	28.58	64.5	Steel
323-9993	1-14	3/4-14	33.34	70	Steel
347-4411	1 11/16-12	1/2-14	50.8	71.5	Steel

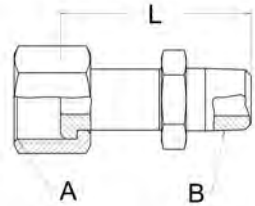
Straight Adapters

Bulkhead Male ORFS / NPTF Port



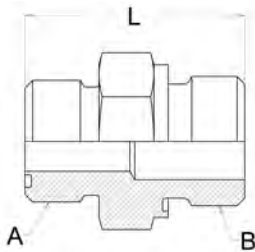
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
304-8043	9/16-18	1/8-27	20.64	45.5	Steel
8C-6915	11/16-16	1/8-27	25.4	48.2	Steel
156-6129	13/16-16	1/8-27	22.22	42	Steel
365-0588	13/16-16	1/4-18	28.58	50.5	Steel

Swivel Nut ORFS / Male NPTF



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
197-8947	9/16-18	1/4-18	15.88	41.6	Steel
371-7247	11/16-16	1/4-18	19.05	42.44	Steel
197-8948	13/16-16	1/2-14	22.22	55.5	Steel
197-8949	1 3/16-12	3/4-14	31.75	61.3	Steel
297-7947	1 7/16-12	1-11.5	38.1	72.9	Steel

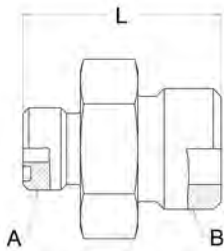
Male ORFS / Male Metric Flat Face-ISO 9974



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
386-6226	1-14	M27x2	32	46	SST
171-8728	9/16-18	M10x1	15.88	26	Steel
395-9487	9/16-18	M12x1.5	17	29.72	Steel
329-5549	9/16-18	M12x1.5	17.7	29.7	Steel
7R-6371	9/16-18	M14x1.5	19.05	32.1	Steel
426-4096	9/16-18	M16x1.5	22	32.5	Steel
171-8729	11/16-16	M10x1	19	28.3	Steel
147-0962	11/16-16	M10x1	19	29.9	Steel
398-5646	11/16-16	M12x1.5	19	35.3	Steel
169-1578	11/16-16	M14x1.5	19	32	Steel
244-0821	11/16-16	M14x1.5	22	39	Steel
451-0427	11/16-16	M16x1.5	22	32	Steel
417-7778	11/16-16	M16x1.5	22	33.5	Steel
474-2634	11/16-16	M18x1.5	24	33	Steel
448-9022	13/16-16	M16x1.5	22	32	Steel
8U-1378	13/16-16	M18x1.5	24	37.5	Steel
7X-8486	13/16-16	M18x1.5	23.81	38.1	Steel
230-4474	13/16-16	M18x1.5	24	35	Steel
258-8589	13/16-16	M22x1.5	27	44	Steel
7R-6968	13/16-16	M22x1.5	28.58	36.95	Steel
258-8591	13/16-16	M26x1.5	34.92	46	Steel
366-4664	1 3/16-12	M22x1.5	32	45	Steel
439-1870	1 3/16-12	M26x1.5	32	46	Steel
196-9015	1 3/16-12	M26x1.5	31.75	46	Steel
161-3189	1 7/16-12	M26x1.5	38.1	49.5	Steel
367-5998	1 7/16-12	M33x2	41	50	Steel

Straight Adapters

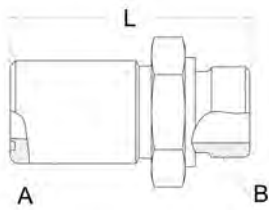
Male ORFS / Male BSPP Flat Face-ISO 1179



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
369-6895	1 7/16-12	1-11	41	49.8	SST
439-1951	9/16-18	1/8-28	17	26	Steel
293-1934	9/16-18	1/4-19	15.88	30	Steel
395-8699	9/16-18	1/4-19	19	30.5	Steel
377-9597	9/16-18	1/4-19	19	30.9	Steel
216-2367	9/16-18	3/8-19	24	31	Steel
377-9598	9/16-18	3/8-19	22	31.6	Steel
351-5225	9/16-18	1/2-14	27	34.5	Steel
513-8036	9/16-18	1/2-14	27	34.5	Steel
175-9457	11/16-16	1/4-19	19	31.5	Steel
334-5077	11/16-16	1/4-19	19	32	Steel
386-6212	11/16-16	1/4-19	19	32	Steel
395-8763	11/16-16	1/4-19	19	32	Steel
175-9461	11/16-16	3/8-19	24	32.5	Steel
279-8658	11/16-16	3/8-19	24	35	Steel
395-8726	11/16-16	3/8-19	22	33.7	Steel
396-0392	11/16-16	3/8-19	22	33.5	Steel
502-7079	11/16-16	3/8-19	22	33	Steel
8C-6781	11/16-16	3/8-19	22	32	Steel
293-5883	11/16-16	1/2-14	27	37	Steel
194-7601	11/16-16	1/2-14	27	36.8	Steel
175-9493	13/16-16	1/4-19	22	38	Steel
268-1557	13/16-16	1/4-19	22	37.5	Steel
136-4098	13/16-16	3/8-19	22	34.6	Steel
279-8487	13/16-16	1/2-14	27	47	Steel
368-1126	13/16-16	1/2-14	27	62	Steel
377-9591	13/16-16	1/2-14	27	38	Steel
178-2651	13/16-16	3/4-14	32	42.7	Steel
451-0357	13/16-16	3/4-14	32	41.9	Steel
279-8489	1-14	1/2-14	27	84.5	Steel
279-8657	1-14	1/2-14	32	43	Steel
448-5773	1-14	1/2-14	27	41	Steel
162-8711	1-14	1/2-14	27	40.1	Steel
161-2779	1-14	3/4-14	32	43	Steel
448-9003	1 3/16-12	1/2-14	32	48.5	Steel
279-8491	1 3/16-12	3/4-14	36	57	Steel
248-6013	1 3/16-12	3/4-14	36	45	Steel
377-9590	1 3/16-12	3/4-14	32	46.1	Steel
248-6018	1 7/16-12	1/4-19	50	51.5	Steel
426-4165	1 7/16-12	3/4-14	38.1	46	Steel
368-1202	1 7/16-12	3/4-14	38.1	69.5	Steel
451-0358	1 7/16-12	3/4-14	38	50.3	Steel
175-9453	1 7/16-12	1-11	41	48	Steel
377-9592	1 7/16-12	1-11	41	49.8	Steel

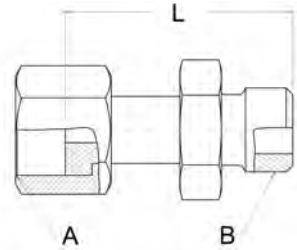
Straight Adapters

Bulkhead Male ORFS / Male BSPP Flat Face-ISO 1179



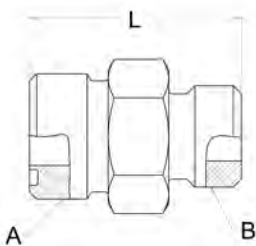
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
150-5430	1 3/16-12	3/4-14	38.1	70.2	Steel
351-5216	1 3/16-12	1-11	41	73.5	Steel

Swivel Nut ORFS / Male BSPP Flat Face-ISO 1179



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
351-5230	9/16-18	1/4-19	19	43.5	Steel
370-3474	11/16-16	3/8-19		50	Steel
451-0459	13/16-16	1/4-19	22	47	Steel
351-5232	13/16-16	1/2-14	27	59	Steel

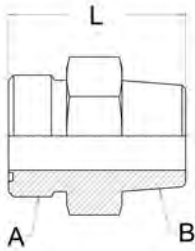
Male ORFS / Male BSPP STOR-JIS B2351



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
175-9481	9/16-18	1/4-19	19	30	Steel
176-8381	11/16-16	3/8-19	22	31.5	Steel
421-1679	11/16-16	3/8-19	22	31	Steel
248-6020	11/16-16	1/2-14	27	35	Steel
175-9587	13/16-16	3/8-19	24	33.5	Steel
474-2593	13/16-16	3/8-19	22	35	Steel
199-0542	13/16-16	1/2-14	27	37	Steel
165-1094	13/16-16	1/2-14	27	37	Steel
279-3825	13/16-16	1/2-14	27	36	Steel
279-8488	13/16-16	1/2-14	27	87	Steel
271-9881	13/16-16	1/2-14	27	135	Steel
271-9882	13/16-16	1/2-14	27	81	Steel
165-1059	13/16-16	3/4-14	32	40.3	Steel
297-3301	1-14	3/8-19		45	Steel
371-7207	1-14	1/2-14	27	39.5	Steel
099-6839	1-14	3/4-14	36	43.5	Steel
136-4097	1-14	3/4-14	36	43.1	Steel
150-5857	1-14	3/4-14	36	60.5	Steel
195-1643	1 3/16-12	1/2-14	32	43	Steel
160-8284	1 3/16-12	1/2-14	32	48.5	Steel
396-5275	1 3/16-12	1/2-14	38	44	Steel
086-2746	1 3/16-12	3/4-14	36	45	Steel
096-4919	1 3/16-12	3/4-14	36	45	Steel
125-0051	1 3/16-12	3/4-14	36	45	Steel
373-6668	1 3/16-12	1-11	41	47.5	Steel
096-6223	1 7/16-12	1-11	41	51.5	Steel
209-5888	1 7/16-12	1-11	41	51.5	Steel
162-6599	1 7/8-12	1-11	41	47.5	Steel

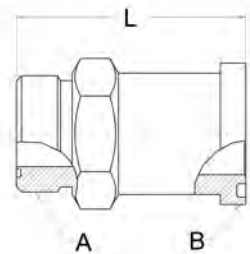
Straight Adapters

Male ORFS / Male BSPT-ISO 7-1



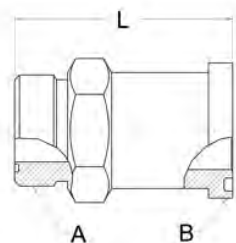
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
170-5535	9/16-18	1/8-28	15.88	27.8	Steel
8U-1341	11/16-16	1/4-19	18	33.9	Steel
252-6039	11/16-16	3/8-19	22	35	Steel
271-9806	11/16-16	3/8-19	22	34.2	Steel
271-9714	13/16-16	1/2-14	27	40.8	Steel
420-7641	13/16-16	1/2-14	27	45	Steel
451-0493	13/16-16	1/2-14	28.58	64.5	Steel
376-2093	1 3/16-12	1-11	34.93	52	Steel
339-0546	1 7/16-12	1-11	41	53.2	Steel
371-7195	1 11/16-12	1 1/4-11	47.63	58.4	Steel

Male ORFS / Code 61 Head Flange



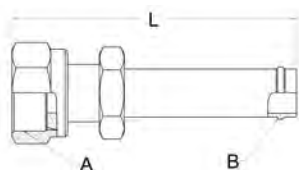
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
474-2586	1 3/16-12	Dash 12	32	70	Steel
262-5529	1 7/16-12	Dash 16	41	72	Steel
459-0662	1 11/16-12	Dash 20	47.63	77	Steel
474-2628	1 11/16-12	Dash 24	53.98	83.6	Steel

Male ORFS / Code 62 Head Flange



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
459-0666	13/16-16	Dash 8	28.58	65.6	Steel
228-3671	1 7/16-12	Dash 20		77.5	Steel
432-9983	1 11/16-12	Dash 20		77.47	Steel
442-9593	1 11/16-12	Dash 20		77.47	Steel
442-3356	1 11/16-12	Dash 24		88.9	Steel

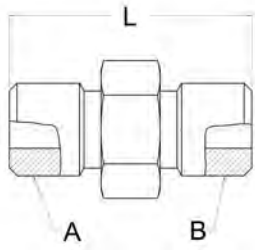
Swivel Nut ORFS / Hose Bead



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
269-6650	11/16-16	9.52	20.64	60	Steel
238-1766	1-14	15.88		62.48	Steel
484-4251	1 3/16-12	19.05	31.75	114	Steel

Straight Adapters

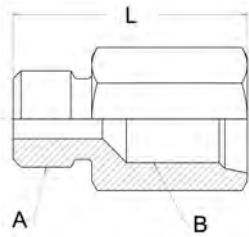
Male STOR / Male STOR



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
353-5120	9/16-18	9/16-18	17.46	35.8	SST
108-5678	7/16-20	7/16-20	14.29	34.74	Steel
9X-0262	7/16-20	7/16-20	14.29	25.3	Steel
145-8822	7/16-20	7/16-20	14.29	24.63	Steel
386-6204	7/16-20	7/16-20	14.29	29.1	Steel
190-1479	9/16-18	7/16-20	17.46	27.07	Steel
5P-4272	9/16-18	9/16-18	17.46	35.8	Steel
8T-1031	9/16-18	9/16-18	17.46	27.8	Steel
235-3595	3/4-16	7/16-20	22.22	38.6	Steel
134-6852	3/4-16	7/16-20	24	50	Steel
132-3726	3/4-16	9/16-18	22.22	35.8	Steel
6V-0467	3/4-16	3/4-16	25.4	35	Steel
6V-5320	3/4-16	3/4-16	22.22	41.66	Steel
149-9939	3/4-16	3/4-16	22.22	31.5	Steel
232-0494	3/4-16	3/4-16	25.4	35	Steel
8C-3178	3/4-16	3/4-16	22.22	60	Steel
5R-6952	3/4-16	3/4-16	22.22	95.8	Steel
3G-6927	13/16-16	3/4-16		33	Steel
342-3830	13/16-16	13/16-16		37	Steel
3E-5276	7/8-14	7/16-20	25.4	32	Steel
209-3558	7/8-14	7/8-14	25.4	46	Steel
321-0236	1 1/16-12	3/4-16	32	47	Steel
5P-9560	1 1/16-12	1 1/16-12	31.75	54	Steel
227-3951	1 1/16-12	1 5/16-12	38.1	42.1	Steel
4T-1862	1 3/16-12	1 1/16-12	34.93	42	Steel
5P-8924	1 5/16-12	1 5/16-12	38.1	61.9	Steel
8C-9029	1 5/16-12	1 5/16-12	38.1	49.8	Steel
113-4676	1 5/16-12	1 5/16-12	41.28	67.4	Steel
174-9708	1 5/16-12	1 1/2-16	41.28	49	Steel
8C-9026	1 5/16-12	1 7/8-12	53.98	60.6	Steel
9U-5228	1 5/16-12	1 7/8-12	53.98	48.77	Steel
377-9550	1 5/8-12	1 5/8-12	47.63	54.1	Steel
9U-5229	1 5/8-12	1 7/8-12	53.98	48.77	Steel
371-7221	1 7/8-12	1 7/8-12	54	55	Steel
442-3417	2 1/2-12	2 1/2-12	69.85	54.1	Steel

Straight Adapters

Male STOR / STOR Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
221-8234	9/16-18	7/8-14	25.4	39.14	Brass
164-3652	3/4-16	3/8-24	22.2	20.3	Brass
8T-2362	3/8-24	7/16-20	17.46	30	Steel
392-0786	3/8-24	7/16-20	17.46	30	Steel
6Z-2052	3/8-24	1/2-20	20.64	32	Steel
371-7226	7/16-20	7/16-20	14.29	27.1	Steel
164-7900	7/16-20	7/16-20	17.46	57.14	Steel
423-8180	7/16-20	7/16-20	17.46	45	Steel
8T-2353	7/16-20	9/16-18	22.22	29.5	Steel
246-9947	7/16-20	9/16-18	22.22	52.1	Steel
260-9211	7/16-20	9/16-18	22.22	50	Steel
488-1842	7/16-20	9/16-18	22.22	31.5	Steel
8C-7325	7/16-20	3/4-16	25.4	32	Steel
177-5852	1/2-20	7/16-20	17.46	40	Steel
4B-8993	1/2-20	1/2-20	17.56	24.9	Steel
136-0853	9/16-18	3/8-24	19.05	25	Steel
164-3651	9/16-18	3/8-24	19.05	18.5	Steel
108-7516	9/16-18	7/16-20	17.46	25	Steel
5P-9617	9/16-18	7/16-20	17.46	26.2	Steel
368-0370	9/16-18	7/16-20	19.05	62	Steel
2W-7672	9/16-18	7/16-20	17.46	32	Steel
4I-8812	9/16-18	7/16-20	19.05	25	Steel
9X-2650	9/16-18	7/16-20	17.46	96	Steel
205-3079	9/16-18	1/2-20	20.64	27.7	Steel
8T-0151	9/16-18	9/16-18	22.35	35	Steel
159-5988	9/16-18	9/16-18	22	33.5	Steel
203-3470	9/16-18	9/16-18	19.05	76.2	Steel
341-0083	9/16-18	9/16-18	19.05	32	Steel
7E-0156	9/16-18	9/16-18	22	61	Steel
7W-7381	9/16-18	9/16-18	22	33.5	Steel
239-1780	9/16-18	9/16-18	19.05	121.2	Steel
5P-8874	9/16-18	3/4-16	25.4	32.5	Steel
202-1723	9/16-18	3/4-16	25.4	40	Steel
8T-5906	9/16-18	3/4-16	26.99	50	Steel
7X-2477	9/16-18	3/4-16	26.99	35	Steel
222-2210	9/16-18	1 1/16-12	34.9	42.9	Steel
326-0308	3/4-16	3/8-24	22.23	16.1	Steel
367-5995	3/4-16	3/8-24	22.22	20.3	Steel
7U-9353	3/4-16	3/8-12	22	20.6	Steel
3P-1932	3/4-16	7/16-20	22.22	20.3	Steel
5P-4674	3/4-16	1/2-20	22.22	19.05	Steel
5P-6944	3/4-16	9/16-18	22.2	28.5	Steel
8W-2756	3/4-16	9/16-18	22.22	26.9	Steel
235-3612	3/4-16	5/8-18	22.22	27.5	Steel
8T-1715	3/4-16	3/4-16	27	45.2	Steel
190-7852	3/4-16	3/4-16		40.13	Steel
304-8027	3/4-16	3/4-16	27	70.57	Steel
439-1938	3/4-16	3/4-16	26.99	27	Steel
3E-2322	3/4-16	3/4-16	26.99	60	Steel
9X-2493	3/4-16	3/4-16	27	52.2	Steel

Straight Adapters

Male STOR / STOR Port (Cont'd.)

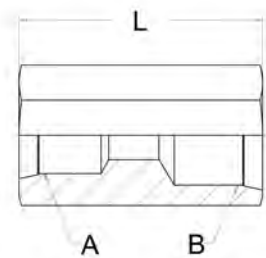
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
231-3914	3/4-16	7/8-14	28.58	39.6	Steel
281-5871	3/4-16	1 1/16-12	34.92	41.43	Steel
216-6202	7/8-14	3/8-24	25.4	20.1	Steel
8K-4739	7/8-14	7/16-20	25.4	23.6	Steel
9J-4807	7/8-14	1/2-20	25.4	23.62	Steel
108-3866	7/8-14	9/16-18	30	28.7	Steel
5P-1404	7/8-14	9/16-18	25.4	23.6	Steel
4T-9905	7/8-14	9/16-18	25.4	30	Steel
6V-2606	7/8-14	9/16-18	25.4	23.6	Steel
7Y-8419	7/8-14	9/16-18	29.83	38	Steel
245-7918	7/8-14	3/4-16	25.4	67.5	Steel
273-5156	7/8-14	3/4-16	25.4	60	Steel
6V-7420	7/8-14	3/4-16	25.4	33	Steel
219-8136	7/8-14	7/8-14	28.58	37.3	Steel
5P-1042	7/8-14	1 1/16-12	34.93	42.9	Steel
224-6316	1 1/16-12	3/8-24	31.75	21.5	Steel
5P-4499	1 1/16-12	7/16-20	31.75	27	Steel
6P-4975	1 1/16-12	7/16-20	31.75	27.7	Steel
2P-8421	1 1/16-12	9/16-18	31.75	27	Steel
211-9695	1 1/16-12	9/16-18	31.75	40	Steel
8C-6860	1 1/16-12	9/16-18	31.75	21	Steel
467-0030	1 1/16-12	9/16-18	30	158	Steel
6V-1722	1 1/16-12	3/4-16	31.75	26.4	Steel
360-8788	1 1/16-12	3/4-16	31.75	33	Steel
360-8789	1 1/16-12	3/4-16	31.75	28.3	Steel
360-8790	1 1/16-12	3/4-16	31.75	26.1	Steel
214-9060	1 1/16-12	3/4-16	31.75	25	Steel
214-9061	1 1/16-12	3/4-16	31.75	28.5	Steel
214-9063	1 1/16-12	3/4-16	31.75	23.5	Steel
324-6241	1 1/16-12	3/4-16	31.75	53.16	Steel
9T-0975	1 1/16-12	3/4-16	31.75	39	Steel
5P-2211	1 1/16-12	7/8-14	31.75	41.3	Steel
5P-1770	1 1/16-12	7/8-14	31.75	41.3	Steel
341-0103	1 1/16-12	1 1/16-12	35.05	45	Steel
3T-4965	1 1/16-12	1 1/16-12	31.75	55.09	Steel
448-9008	1 1/16-12	1 1/16-12	34.92	45	Steel
8X-7851	1 1/16-12	1 1/16-12	38.1	48.6	Steel
330-2175	1 1/16-12	1 1/16-12	34.92	100	Steel
6V-5258	1 1/16-12	1 5/16-12	41.28	47.8	Steel
326-0313	1 3/16-12	7/16-20	34.92	30.5	Steel
9J-0477	1 3/16-12	1/2-20	34.92	34	Steel
8J-3233	1 3/16-12	1/2-20	34.92	27.7	Steel
132-9877	1 3/16-12	9/16-18	34.92	62	Steel
6V-3510	1 3/16-12	9/16-18	34.92	27.7	Steel
9X-8405	1 3/16-12	9/16-18	34.93	27.7	Steel
107-1341	1 3/16-12	3/4-16	34.92	27.7	Steel
101-7198	1 3/16-12	1 1/16-12	38.1	52.5	Steel
8D-8428	1 5/16-12	7/16-20	38.1	28.4	Steel
8J-0426	1 5/16-12	9/16-18	38.1	28.4	Steel
8J-3830	1 5/16-12	9/16-18	38.1	42.2	Steel

Straight Adapters

Male STOR / STOR Port (Cont'd.)

Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
8J-8559	1 5/16-12	9/16-18	38.1	28.4	Steel
9T-5212	1 5/16-12	9/16-18	38.1	20.1	Steel
8E-3695	1 5/16-12	9/16-18	38.1	28.4	Steel
475-0808	1 5/16-12	3/4-16	38.1	25.5	Steel
5P-5777	1 5/16-12	3/4-16	38.1	25.5	Steel
268-1520	1 5/16-12	3/4-16	38.1	37	Steel
131-5681	1 5/16-12	7/8-14	38.1	37.09	Steel
6V-0301	1 5/16-12	1 1/16-12	38.1	44.5	Steel
8C-3051	1 5/16-12	1 5/16-12	41.28	65	Steel
451-0489	1 5/16-12	1 5/16-12	41.28	50	Steel
305-0588	1 3/8-16	1 5/16-12		66	Steel
451-0417	1 1/2-12	3/4-16	44.45	29.6	Steel
9T-6865	1 5/8-12	7/16-20	47.63	30.5	Steel
107-3585	1 5/8-12	9/16-18	47.63	52.5	Steel
123-2151	1 5/8-12	9/16-18	47.63	30.5	Steel
2T-2703	1 5/8-12	9/16-18	47.63	44.4	Steel
9J-8677	1 5/8-12	9/16-18	47.63	24	Steel
9J-9288	1 5/8-12	9/16-18	33.34	44.45	Steel
5P-8905	1 5/8-12	3/4-16	47.63	25.5	Steel
4S-6679	1 5/8-12	1 1/16-12	47.63	25.4	Steel
3T-9549	1 5/8-12	1 1/16-12	47.63	24.3	Steel
138-2549	1 5/8-12	1 3/16-12	47.63	67.2	Steel
7X-2470	1 5/8-12	1 5/16-12	47.63	25.4	Steel
250-1444	1 5/8-12	1 5/8-12	47.63	45	Steel
123-2564	1 7/8-12	9/16-18	53.98	32.3	Steel
5P-3903	1 7/8-12	3/4-16	53.98	32.5	Steel
1Z-9033	1 7/8-12	1 1/16-12	53.98	36	Steel
8V-7764	1 7/8-12	1 5/16-12	53.98	32.5	Steel
395-8644	1 7/8-12	1 5/8-12	53.98	44.5	Steel
480-2990	1 7/8-12	1 5/8-12	53.98	47.9	Steel
187-2730	2 1/2-12	5/16-18	69.85	39	Steel
5P-2231	2 1/2-12	1 1/16-12	69.85	36.3	Steel
3V-7750	2 1/2-12	1 7/8-12	69.85	36.3	Steel
395-9716	2 1/2-12	2 1/2-12		45.7	Steel

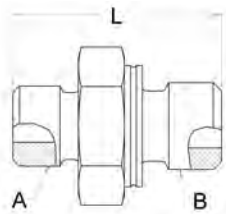
STOR Port / STOR Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
310-5898	7/16-20	9/16-18	17.46	35	Steel
8W-0222	9/16-18	9/16-18		34	Steel
6G-6917	3/4-16	9/16-18	25.4	35	Steel
309-5146	3/4-16	3/4-16	25.4	37	Steel
176-5868	1 1/16-12	1 1/16-12	38.1	50	Steel

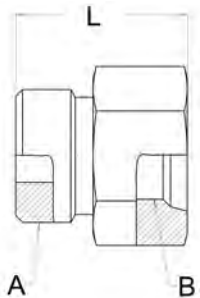
Straight Adapters

Male STOR / Male Metric STOR-ISO 6149



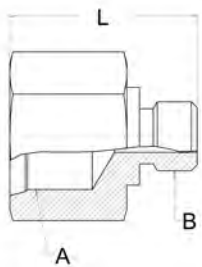
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
314-2490	7/16-20	M12x1.5	19	28	Steel
202-8250	9/16-18	M16x1.5	19	28	Steel
6C-6762	3/4-16	M22x1.5	27	36.8	Steel
319-6189	1 5/8-12	M42x2	50	51.8	Steel
347-4445	1 5/8-12	M42x2	50	69.5	Steel

Male STOR / Metric STOR-ISO 6149 Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
330-9739	7/16-20	M14x1.5	22.25	33	Steel
389-3683	1/2-20	M12x1.5	17	29	Steel
335-3999	9/16-18	M12x1.5	17	30	Steel
121-7656	9/16-18	M14x1.5	19	40	Steel
331-1137	9/16-18	M14x1.5	17.46	31	Steel
360-2358	3/4-16	M12x1.5	23.81	35	Steel
366-4683	3/4-16	M12x1.5	23.81	28	Steel
369-6812	3/4-16	M14x1.5	22.22	24.6	Steel
371-7199	7/8-14	M12x1.5	25.4	28	Steel
108-9418	7/8-14	M33x2	47.63	72	Steel
257-3471	1 1/16-12	M18x1.5	36	19	Steel
101-1340	1 5/16-12	M33x2	47.63	44	Steel

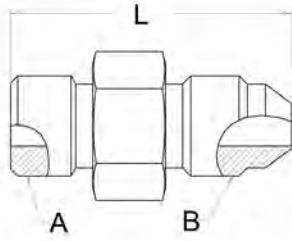
STOR Port / Male Metric STOR-ISO 6149



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
193-2695	1/4-18	M16x1.5	18.87	32.5	Steel
203-6798	3/8-24	M16x1.5	25	27	Steel
8T-7859	7/16-20	M10x1	17.46	34	Steel
8T-7860	7/16-20	M12x1.5	17.46	35.6	Steel
380-6685	1/2-20	M12x1.5	19	30	Steel
6V-8926	9/16-18	M10x1	22.22	29.77	Steel
426-4101	9/16-18	M12x1.5	22	43	Steel
243-0919	9/16-18	M14x1.5	22	36.4	Steel
8T-7861	9/16-18	M14x1.5	20.64	37.3	Steel
139-3344	9/16-18	M16x1.5	22.2	30.5	Steel
317-9664	9/16-18	M16x1.5	22.2	48	Steel
285-5729	9/16-18	M22x1.5	26	20	Steel
250-6142	5/8-18	M12x1.5	25.4	90	Steel
110-2555	5/8-18	M22x1.5	29	16	Steel
274-8062	3/4-16	M12x1.5	25.4	32.5	Steel
8T-7862	3/4-16	M16x1.5	25.4	40.9	Steel
283-6478	3/4-16	M18x1.5	38.1	35.1	Steel
8T-7863	3/4-16	M18x1.5	25.4	35.1	Steel
8T-7864	7/8-14	M20x1.5	28.58	46.5	Steel
8T-7865	7/8-14	M22x1.5	28.58	47.5	Steel
8T-7867	1 1/16-12	M27x2	34.92	55.1	Steel
8T-7868	1 5/16-12	M33x2	17.46	56.1	Steel

Straight Adapters

Male STOR / Male JIC 37°



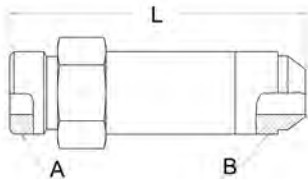
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
371-7217	7/16-20	7/16-20	14.29	31.2	SST
364-9621	1/2-20	7/16-20	15.88	31.2	SST
364-9629	3/4-16	7/16-20	22.2	34.8	SST
497-6356	1 1/16-12	3/4-16	31.75	44.7	SST
119-8096	5/16-24	7/16-20	14.29	32	Steel
6V-0394	5/16-24	7/16-20	14.29	29.7	Steel
3G-7409	3/8-24	7/16-20	12.7	29.7	Steel
137-9145	7/16-20	7/16-20	14.29	28.1	Steel
3J-7352	7/16-20	7/16-20	14.29	31.2	Steel
9K-5469	7/16-20	7/16-20	14.29	52.8	Steel
137-5614	7/16-20	1/2-20	14.29	75	Steel
030-3978	7/16-20	9/16-18	15.88	32.2	Steel
111-5562	7/16-20	9/16-18	17.48	70	Steel
030-6984	1/2-20	7/16-20	15.88	31.2	Steel
6K-9354	1/2-20	1/2-20	15.88	31.2	Steel
5P-2618	1/2-20	9/16-18	15.88	32.2	Steel
217-6416	1/2-20	7/8-14	25.4	41.9	Steel
2P-1314	9/16-18	7/16-20	17.5	32.7	Steel
7I-2022	9/16-18	7/16-20	17.46	55	Steel
5P-0419	9/16-18	1/2-20	17.46	32.7	Steel
274-6664	9/16-18	9/16-18	17.4		Steel
353-5118	9/16-18	9/16-18	20.64	104.8	Steel
2R-6806	9/16-18	9/16-18	17.5	33	Steel
030-7936	9/16-18	9/16-18	17.46	47.8	Steel
1P-1376	9/16-18	9/16-18	17.46	58.7	Steel
147-3396	9/16-18	9/16-18	17.46	58.7	Steel
171-3235	9/16-18	9/16-18	17.46	63	Steel
283-7206	9/16-18	9/16-18	17.46	29.5	Steel
6S-7744	9/16-18	9/16-18	17.4	42	Steel
8M-0506	9/16-18	3/4-16	20.64	36.6	Steel
6V-4362	9/16-18	7/8-14	25.4	40.4	Steel
030-8193	3/4-16	7/16-20	22.2	34.8	Steel
030-8188	3/4-16	9/16-18	22.2	35.1	Steel
369-6867	3/4-16	9/16-18	22.2	78	Steel
8M-0505	3/4-16	3/4-16	22.23	37.6	Steel
9D-2673	3/4-16	3/4-16	22.23	57.15	Steel
2P-7636	3/4-16	7/8-14	23.8	41.7	Steel
030-4285	3/4-16	7/8-14	25.4	71.4	Steel
5P-2574	3/4-16	1 1/16-12	28.58	49.2	Steel
030-8195	7/8-14	7/16-20	25.4	37.9	Steel
030-8194	7/8-14	9/16-18	25.4	38.1	Steel
033-5691	7/8-14	3/4-16	25.4	74.7	Steel
6K-3607	7/8-14	3/4-16	25.4	40.7	Steel
2P-1292	7/8-14	7/8-14	25.4	77.2	Steel
030-8196	7/8-14	1 1/16-12	28.58	47.7	Steel
8T-0195	7/8-14	1 3/16-12	31.75	51.3	Steel
031-4140	7/8-14	1 5/16-12	34.9	52.6	Steel
486-7970	1 1/16-12	7/16-20	31.75	42.1	Steel
488-3237	1 1/16-12	9/16-18	31.75	42.1	Steel

Straight Adapters

Male STOR / Male JIC 37° (Cont'd.)

Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
030-8189	1 1/16-12	3/4-16	31.75	44.7	Steel
030-8190	1 1/16-12	7/8-14	31.75	47.2	Steel
2R-6276	1 1/16-12	1 1/16-12	31.75	50	Steel
9D-0884	1 1/16-12	1 1/16-12	31.75	69.8	Steel
3R-6790	1 1/16-12	1 5/16-12	34.9	50.5	Steel
6V-1906	1 1/16-12	1 5/16-12	38.1	97.6	Steel
4U-7929	1 1/8-12	1 1/16-12	34.9	47	Steel
8K-0802	1 3/16-12	7/8-14	34.92	47.2	Steel
9K-1242	1 3/16-12	1 1/16-12	34.93	49.7	Steel
7E-1456	1 3/16-12	1 1/16-12	34.92	134.99	Steel
7J-7187	1 3/16-12	1 3/16-12	34.93	50.5	Steel
5P-3237	1 3/16-12	1 5/16-12	34.92	51.8	Steel
196-4647	1 3/16-12	1 5/8-12	47.63	126.89	Steel
6V-9035	1 5/16-12	9/16-18	38.1	42.7	Steel
2P-8430	1 5/16-12	3/4-16	38.1	45.4	Steel
068-6074	1 5/16-12	7/8-14	38.1	48	Steel
4S-6680	1 5/16-12	1 1/16-12	38.1	50.6	Steel
115-1708	1 5/16-12	1 5/16-12	38.1	152	Steel
5P-4248	1 5/16-12	1 5/16-12	38.1	101.1	Steel
030-7935	1 5/16-12	1 5/16-12	38.1	51.8	Steel
3P-0440	1 5/16-12	1 5/16-12	38.1	66.5	Steel
7D-5318	1 5/16-12	1 5/8-12	42.86	59.2	Steel
2P-2061	1 5/8-12	1 1/16-12	47.63	52.8	Steel
4S-6797	1 5/8-12	1 5/16-12	47.63	53.8	Steel
031-8759	1 5/8-12	1 5/8-12	47.63	55.1	Steel
315-3715	1 7/8-12	1 5/16-12	53.98	55.9	Steel
6K-3461	1 7/8-12	1 7/8-12	53.98	60.2	Steel
7X-7678	2 1/2-12	2 1/2-12	69.85	70.6	Steel

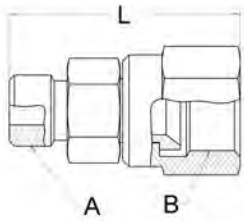
Male STOR / Bulkhead Male JIC 37°



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
030-8110	3/4-16	3/4-16	22.23	68.6	Steel
7G-4850	7/8-14	7/8-14	28.58	60.5	Steel

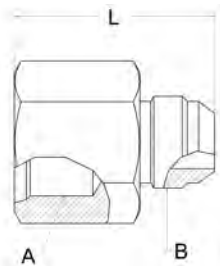
Straight Adapters

Male STOR / JIC 37° Swivel Nut



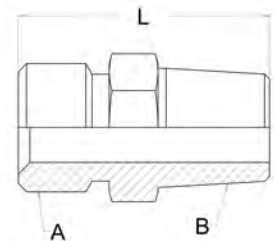
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
200-8459	7/16-20	9/16-18	14.29	36.32	Steel
108-7463	9/16-18	7/16-20	14.29	25	Steel
6V-8104	9/16-18	9/16-18	17.46	29	Steel
5I-3178	9/16-18	9/16-18	19.05	41.4	Steel
5P-4588	9/16-18	3/4-16	20.63	27	Steel
501-8727	3/4-16	3/4-16	22.23	40.9	Steel
5R-8100	3/4-16	3/4-16	22.2	41	Steel
146-7117	3/4-16	3/4-16	23.81	48	Steel
203-0416	3/4-16	3/4-16	22	40	Steel
5P-4269	1 1/16-12	1 1/16-12	31.75	33.78	Steel
194-4122	1 5/16-12	1 5/16-12	38.1	41.8	Steel
203-0433	1 5/16-12	1 5/16-12	38	56	Steel
111-8218	1 5/8-12	1 5/8-12	50.8	63.25	Steel

STOR Port / Male JIC 37°



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
1V-7443	3/8-24	7/16-20	17.46	52.58	Steel
469-0586	1 5/16-12	1 1/16-12	38.1	58.7	Steel

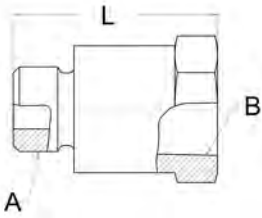
Male STOR / Male NPTF



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
225-6574	7/16-20	1/4-20	16	30	1E1541A
313-3487	7/16-24	1/8-27	11.11	21.84	Brass
184-2518	7/16-20	1/2-14	22.22	39.1	SST
3N-8278	7/16-20	1/2-14	23.1	40	SST
108-2197	7/16-20	1/8-27	14.29	26	Steel
1F-3278	7/16-20	1/8-27	14.29	23.02	Steel
9X-0263	7/16-20	1/8-27	14.29	26.7	Steel
141-5147	7/16-20	1/4-18	14.29	30.5	Steel
9X-0435	7/16-20	1/4-18	17.46	29.9	Steel
3N-7078	7/16-20	3/8-18	17.27	29.5	Steel
144-7687	9/16-18	1/4-18	30.2	76	Steel
235-3567	9/16-18	3/8-18	17.46	34.04	Steel
345-3921	3/4-16	3/8-18	22.22	33.9	Steel
3C-3793	3/4-16	3/8-18	22.2	34	Steel
311-8082	3/4-16	3/4-14	30	50	Steel
171-9423	3/4-16	3/4-14	—	124	Steel
320-5390	7/8-14	3/8-18	26.99	41.8	Steel
1W-6256	7/8-14	1/2-14	23.81	41.2	Steel
230-5944	1 1/16-12	3/4-14	31.75	45.7	Steel
9S-7336	1 1/16-12	3/4-14	31.75	43.68	Steel
281-7821	1 5/16-12	3/4-14	38.1	45.5	Steel
144-8618	1 5/16-12	1-11.5	38.1	51.7	Steel
434-5532	1 1/2-16	1 1/4-11.5	—	85.73	Steel
9U-6707	1 1/2-16	1 1/4-11.5	—	76.2	Steel
8C-3991	1 7/8-12	1 1/2-11.5	53.98	57	Steel

Straight Adapters

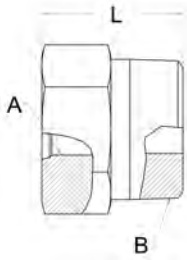
Male STOR / NPTF Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
5E-5200	3/4-16	3/8-18		52	Brass
183-6811	9/16-18	1/4-18	19.05	27.69	SST
198-5318	9/16-18	3/8-18	22.22	32.51	SST
5P-5528	7/16-20	1/8-27	14.29	24.6	Steel
395-7292	7/16-20	1/4-18	19.05	29.5	Steel
5P-2937	7/16-20	1/4-18	19.05	27	Steel
9J-3855	1/2-20	1/8-27	15.7	25.4	Steel
5P-4487	1/2-20	1/8-27	15.88	26	Steel
219-1644	1/2-20	1/4-18	19	35.3	Steel
139-7064	1/2-20	1/4-18	19.05	33	Steel
5P-4675	1/2-20	1/4-18	19.05	30.6	Steel
3Y-2888	9/16-18	1/8-27	17.46	19	Steel
395-5136	9/16-18	1/8-27	19.05	23.1	Steel
5P-3501	9/16-18	1/4-18	19.05	29.97	Steel
204-3716	9/16-18	3/8-18	19.05	36.2	Steel
104-4767	5/8-18	1/4-18	23.81	36.5	Steel
4W-8616	5/8-11	1/4-18	22.22	40	Steel
504-2753	3/4-16	1/8-27	22.23	20.3	Steel
9T-6635	3/4-16	1/8-27	22.22	20.3	Steel
8J-7844	3/4-16	1/4-18	22.22	27	Steel
4Y-6112	3/4-16	3/8-18	22	45	Steel
5P-1838	3/4-16	3/8-18	22.22	32	Steel
198-0961	3/4-16	1/2-14	28.58	38.1	Steel
9Y-2238	3/4-16	3/4-14	38.1	13	Steel
260-9197	7/8-14	1/8-27	25.4	20.5	Steel
6H-4746	7/8-14	1/8-27		23.02	Steel
297-7704	7/8-14	1/4-18	25.4	36.7	Steel
3P-0764	7/8-14	1/4-18	25.4	27.7	Steel
5P-4481	7/8-14	1/2-14	28.58	39	Steel
126-3230	1 1/16-12	1/8-27	31.75	27.7	Steel
7G-8478	1 1/16-12	1/4-18	31.75	27.7	Steel
5P-3415	1 1/16-12	1/4-18	31.75	27.69	Steel
9N-1595	1 1/16-12	3/8-18	31.75	19.05	Steel
6L-9952	1 1/16-12	1/2-14	31.75	35.8	Steel
6V-7483	1 1/16-12	3/4-14	34.93	43.7	Steel
3R-7117	1 1/8-12	3/4-14	38.1	48	Steel
6V-6760	1 3/16-12	1/2-14	34.92	27.7	Steel
3T-0811	1 5/16-12	1/4-18	38.1	28.4	Steel
119-0572	1 5/16-12	1/2-14	38.1	25.4	Steel
5P-0492	1 5/16-12	1-11.5	41.15	47.8	Steel
301-2748	1 5/16-12	1-11.5	41.1	47.8	Steel
7N-6511	1 1/2-12	3/4-14	50.8	28	Steel
167-9288	1 5/8-12	1 1/4-11.5	50.8	50	Steel

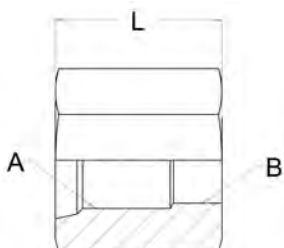
Straight Adapters

STOR Port / Male NPTF



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
164-3649	3/8-24	1/4-18	15.88	21.6	Brass
164-3648	3/8-24	1/2-14	22.2	19	Brass
141-7280	7/8-14	1-11.5	34.92	35.5	Brass
439-1959	3/4-16	1 1/2-11.5	50.8	49	SST
147-9351	3/8-24	1/2-14	22.2	27.9	Steel
6V-7529	7/16-20	1/8-27	17.5	27.7	Steel
8C-6427	7/16-20	1/4-18	17.46	32.4	Steel
7D-6865	7/16-20	3/8-18	17.48	23.9	Steel
5R-5304	7/16-20	1/2-14	22	24.6	Steel
362-1142	1/2-20	1/8-27	19.05	29	Steel
8F-4731	1/2-20	3/8-18	19.05	30.2	Steel
155-2078	9/16-18	1/8-27	19.05	30	Steel
6V-9601	9/16-18	1/4-18	22.22	34.5	Steel
8C-4985	9/16-18	3/8-18	22.22	34.9	Steel
305-8354	9/16-18	1/2-14	22.2	37.5	Steel
8T-3285	9/16-18	1/2-14	22.22	24.6	Steel
117-0291	9/16-18	1-11.5	41	28	Steel
130-2883	9/16-18	1 1/4-11.5	47.63	38	Steel
200-5724	5/8-18	3/8-18	22.2	25.4	Steel
113-9391	5/8-18	1/2-14	22.22	25	Steel
6H-6699	5/8-18	1/2-14	22.23	22.2	Steel
4T-3719	5/8-11	3/4-14	28	19	Steel
132-3873	3/4-16	1/4-18	25.4	44	Steel
4I-7483	3/4-16	3/8-18	25.4	50	Steel
8T-4238	3/4-16	3/8-18	25.4	36.8	Steel
170-3528	3/4-16	1/2-14	25.4	45	Steel
353-5440	3/4-16	1/2-14		35	Steel
500-4238	3/4-16	1/2-14	25.4	35	Steel
8C-6523	3/4-16	3/4-14	28.58	29.7	Steel
284-3468	3/4-16	1-11.5	34.9	34.9	Steel
8C-6524	3/4-16	1-11.5	34.92	46.5	Steel
315-9825	3/4-16	1 1/2-11.5	50.8	49	Steel
264-2487	3/4-16	2-11.5		57.5	Steel
8T-2227	7/8-14	1/2-14	31.75	45	Steel
6V-9157	7/8-20	3/4-14	31.75	46	Steel
4H-8985	7/8-14	1 1/4-12	44.45	46.04	Steel
131-9472	1 1/16-20	1/2-14	44.45	58	Steel
8C-5053	1 5/16-12	1-11.5	41.28	54.1	Steel
488-4816	1 5/16-12	1 1/2-11.5	50.8	56	Steel

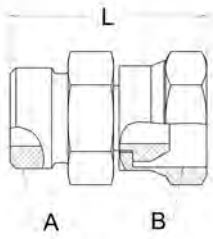
STOR Port / NPTF Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
3T-2167	1/2-20	1/8-27	19.05	20	Steel
231-0187	1/2-20	3/8-18	25.4	38.1	Steel
4C-5561	9/16-18	1/8-27	25.4	24	Steel
171-1879	9/16-18	1/4-18	28.58	37.1	Steel

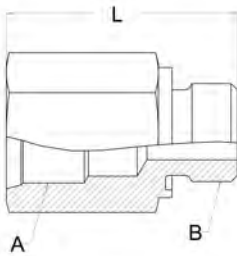
Straight Adapters

Male STOR / NPSM Swivel Nut



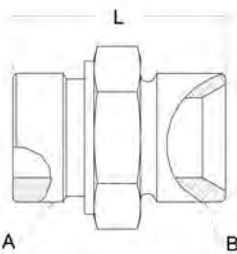
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
4D-6534	7/16-20	1/4-18	14.29	26.2	Steel
6D-4529	1/2-20	1/4-18	15.88	25.4	Steel
6D-1891	9/16-18	1/4-18	17.5	34.6	Steel
6D-4095	9/16-18	3/8-18	22.2	29	Steel
5P-0234	3/4-16	3/4-14	25.4	35.7	Steel
8J-3705	7/8-14	1/2-14	25.4	33.3	Steel
8D-7276	7/8-14	3/4-14	25.4	37.2	Steel
6D-4492	1 1/16-12	1/2-14	25.4	37.5	Steel
6D-6081	1 1/16-12	3/4-14	31.75	39.6	Steel
7L-7280	1 5/16-12	1-11.5	38.1	41.4	Steel

STOR Port / Male Metric Flat Face-ISO 9974



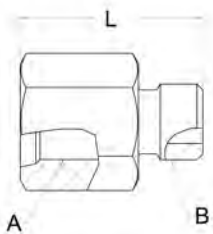
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
247-2237	7/16-20	M12x1.5	17	36	Steel
430-9586	7/16-20	M30x1.5		22	Steel
136-8482	9/16-18	M10x1	22.22	29.77	Steel
310-5897	3/4-16	M18x1.5	25.4	42.4	Steel
9Q-5446	7/8-14	M26x1.5	40.33	40	Steel
325-9779	1 1/16-12	M26x1.5	36	52	Steel
6E-4353	1 1/16-12	M26x1.5	36	75	Steel

Male STOR / Male BSPP Flat Face-ISO 1179



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
274-6660	7/16-20	1/4-19	18.9	27	Steel
395-8728	9/16-18	1/4-19	19	30.2	Steel
133-9740	7/8-14	3/4-14	33.34	44.7	Steel
8T-8897	1 1/16-12	3/4-14	31.75	47.1	Steel
7I-8331	1 1/16-12	3/4-14	36	50.5	Steel
5I-7408	1 5/16-12	1-11	41	55	Steel

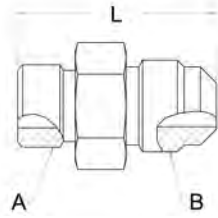
STOR Port / Male BSPP Flat Face-ISO 1179



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
395-8615	7/16-20	1/4-19	19.05	28.6	Steel
8T-7909	7/16-20	1/4-19	19.05	36.3	Steel
5I-8775	1/2-20	1/2-14	27	45	Steel
107-6585	9/16-18	1/4-19	22	86	Steel
507-8352	9/16-18	1/4-19	20.64	31.8	Steel
8T-7910	9/16-18	1/4-19	20.64	36.8	Steel
8T-7915	1 1/16-12	3/4-14	34.92	51.8	Steel
451-0505	1 5/16-12	1-11	44.45	48.8	Steel

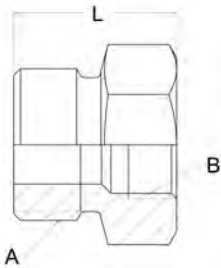
Straight Adapters

Male STOR / Male 45° Flare- SAE J512



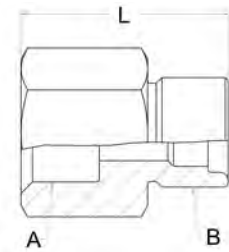
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
6V-3674	1/2-20	5/8-18	15.88	32	Brass
5P-5546	7/8-20	5/8-18	22.22	29.46	Brass
7X-0902	9/16-18	5/8-18	19.05	34.5	Steel
107-9343	9/16-18	3/4-16	19.05	37.7	Steel
155-5508	9/16-18	3/4-16	22.22	73.93	Steel
8C-3120	9/16-18	7/8-14	25.4	42.53	Steel
9X-6650	3/4-16	7/8-14	25.4	43.7	Steel

Male STOR / 45° Flare- SAE J512 Port



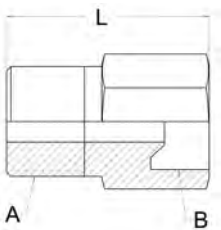
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
186-8196	5/8-18	5/8-18	20.64	32.5	Brass
6N-3898	7/8-14	5/8-18	25.4	23.9	Steel

STOR Port / Male 45° Flare- SAE J512



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
196-3261	7/16-20	7/16-20	27	34.6	Steel
077-8165	7/16-20	1/2-20	15.88	36.52	Steel
6D-5621	9/16-18	9/16-18	19.05	41.28	Steel
212-6067	3/4-16	3/4-16	13	36	Steel

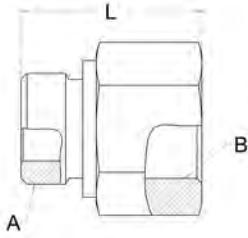
Male STOR / 45° Inverted Flare- SAE J512 Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
4V-6485	7/16-24	1/2-20	15.88	25.4	Brass
5P-7662	1/2-20	7/16-24	15.88	23.368	Brass

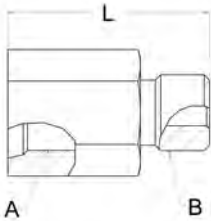
Straight Adapters

Male STOR / BSPP STOR-JIS B2351 Port



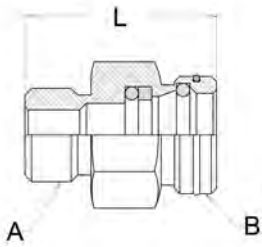
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
2U-8951	9/16-18	1/4-19	19.05	28	Steel
196-4196	1 1/16-12	3/4-14	36	49.5	Steel
237-7180	1 5/16-12	3/4-14	52	52.6	Steel

STOR Port / Male BSPP STOR-JIS B2351



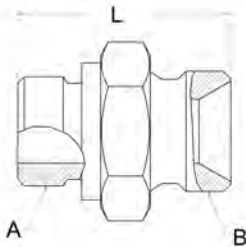
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
5I-8784	3/8-24	1/4-19	22	34	Steel
8T-7908	7/16-20	1/8-28	17.46	32.5	Steel
7X-2613	9/16-18	1/8-28	20.64	37.1	Steel
190-8529	9/16-18	1/4-19	19	35	Steel
392-4054	9/16-18	3/4-14	32	24	Steel

Male STOR / STC Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
179-7002	9/16-18	Dash 6	19	28.7	Steel
192-2969	7/8-14	Dash 10	27	38.8	Steel
269-4955	7/8-14	Dash 10	26.9	38	Steel
269-4954	7/8-14	Dash 8	26.9	35	Steel
269-4958	1 1/16-12	Dash 12	32	47	Steel

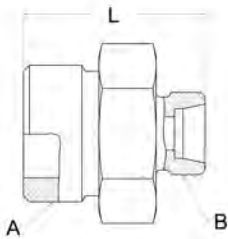
Male STOR / Male 60° Cone-BS5200



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
099-5927	9/16-18	1/4-19	19.05	30	Steel
262-0515	3/4-16	1/4-19	22	34.8	Steel
193-5101	3/4-16	3/8-19	30	36	Steel
262-0514	3/4-16	3/8-19	22	35.8	Steel
418-5064	3/4-16	3/8-19	22	32	Steel
459-0583	3/4-16	1/2-14	27	37	Steel

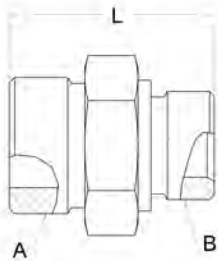
Straight Adapters

Male STOR / Male 24° Cone-ISO 8434-1



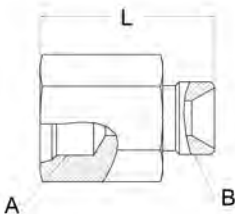
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
317-8509	9/16-18	M16x1.5	19	32	Steel
519-7630	9/16-18	M18x1.5	19	29.5	Steel
175-9498	1 5/16-12	M20x1.5	38	44.5	Steel

Male STOR / Male 30° Flare-JIS



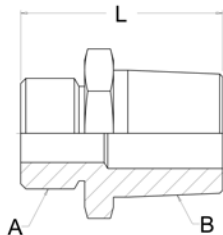
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
138-8342	7/16-20	3/8-19	18	25.5	Brass
173-8070	3/4-16	3/4-14	30	53.2	Steel
132-1730	1 5/16-12	3/4-14	38.1	57	Steel
7X-2432	1 5/16-12	3/4-14	38.1	50.2	Steel
4C-6494	1 5/16-12	1-11	41.28	52.32	Steel

STOR Port / Male 30° Flare-JIS



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
7X-2431	9/16-18	1/2-14	27	27.4	Steel
8T-7912	3/4-16	3/8-19	25.4	40.4	Steel
8T-7914	7/8-14	1/2-14	28.58	46	Steel
8T-7916	1 1/16-12	1-11	41.28	54.6	Steel
8T-7917	1 5/16-12	1-11	41.28	54.6	Steel

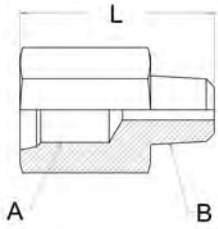
Male STOR / Male BSPT-ISO 7-1



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
309-0723	3/4-16	3/8-19	25.4	36	Steel
252-7238	3/4-16	1/2-14	25.4	35.13	Steel
7Q-6091	1 1/16-12	1/2-14	31.75	43	Steel

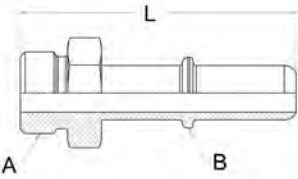
Straight Adapters

STOR Port / Male BSPT-ISO 7-1



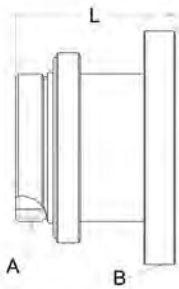
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
218-0919	7/16-20	1/8-28	17.46	29.2	Brass
135-2368	7/16-20	1/8-28	17	30.5	Steel
7X-2614	9/16-18	1/4-18	19.05	33.5	Steel
7X-2615	9/16-18	3/8-19	20.64	37.8	Steel

Male STOR / Male SAE J2044



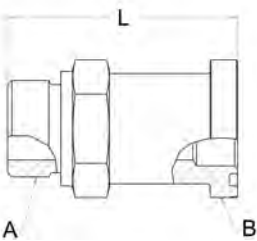
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
376-7350	3/4-16	12.70	22.22	64.5	SST
447-7149	3/4-16	7.94	14.29	45.4	SST
447-7148	3/4-16	9.52	14.29	45.4	SST
474-2603	9/16-18	15.88	23.81	74	Steel
422-7026	3/4-16	9.52	22.22	56.6	Steel

Male STOR / Code 61 Head Flange



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
9U-7440	1 5/16-12	25.40	44.45	143.76	Steel
9U-7443	1 5/16-12	Dash 12	41.28	127.51	Steel
9U-7445	1 5/16-12	Dash 20	44.45	134.11	Steel
442-3486	3-12	Dash 40		80.78	Steel
442-3488	3-12	Dash 40		82.6	Steel

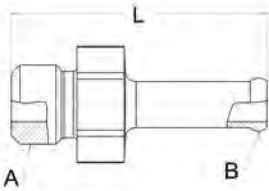
Male STOR / Code 62 Head Flange



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
7X-2430	1 5/16-12	Dash 16	41.28	79.8	Steel
7X-2608	1 5/16-12	Dash 20	44.45	94.5	Steel
473-9869	2 1/2-12	Dash 32		95	Steel

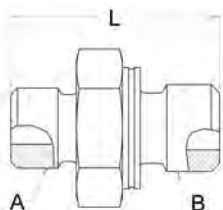
Straight Adapters

Male STOR / Hose Bead



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
245-1398	7/16-20	6.35	14.29	35.3	Brass
345-3923	3/4-16	12.70	22.22	57.8	Brass
439-1904	9/16-18	9.52	17.46	56	SST
337-8766	3/8-24	6.35	12.7	52.7	Steel
310-5893	7/16-20	6.35	14.29	54.2	Steel
092-6629	7/16-20	9.52	14.29	55.1	Steel
151-1975	1/2-20	7.94	17.46	37	Steel
297-7964	9/16-18	12.70	17.5	55.9	Steel
379-4369	9/16-18	14.29	17.46	54.4	Steel
426-4018	9/16-18	15.88	22.22	56.7	Steel
268-4045	9/16-18	6.35	17.46	56.6	Steel
157-1669	9/16-18	7.94	17.5	56.6	Steel
474-8989	9/16-18	9.52		35.6	Steel
5P-1046	9/16-18	9.52	17.46	56	Steel
034-3679	3/4-16	12.70	22.22	58.4	Steel
288-7466	3/4-16	15.88	22	50	Steel
168-8806	3/4-16	15.88	22.22	58.4	Steel
163-4300	3/4-16	19.05	22.2	57.8	Steel
377-9605	3/4-16	19.05	22.22	57.8	Steel
357-4579	3/4-16	25.40	31.75	65	Steel
515-4951	3/4-16	6.35	22.22	58.4	Steel
347-7623	3/4-16	8	22.22	46.6	Steel
149-8142	3/4-16	9.52	22.22	57.8	Steel
8T-4942	13/16-16	19.05	28.58	75	Steel
143-3158	7/8-14	12.70	25.4	61	Steel
131-2171	7/8-14	15.88	25.4	61.7	Steel
195-7930	7/8-14	19.05	25.4	61.7	Steel
208-7552	7/8-14	25.40	31.75	66.5	Steel
142-4881	7/8-14	9.52	25.4	61	Steel
033-6783	1 1/16-12	19.05	31.75	65.8	Steel
069-4269	1 1/16-12	25.40	31.75	65.8	Steel
247-4603	1 3/16-12	25.40	34.93	65.1	Steel
326-0296	1 5/16-12	19.05	38.1	65.1	Steel
5P-4362	1 5/16-12	25.40	38.1	66.5	Steel
9X-3962	1 5/16-12	31.75	38.1	66.5	Steel
471-1647	1 5/16-12	1 5/16-12		75	Steel
451-0470	1 5/8-12	38.10	47.63	68.6	Steel
5P-1947	1 7/8-12	38.10	53.98	65.8	Steel
341-0091	1 7/8-12	50	54	69.7	Steel

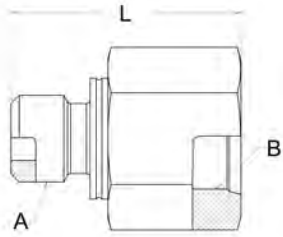
Male Metric STOR-ISO 6149 / Male Metric STOR-ISO 6149



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
276-0175	M22x1.5	M22x1.5	27	64	Steel

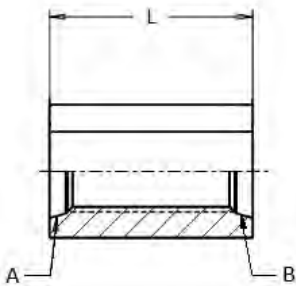
Straight Adapters

Male Metric STOR-ISO 6149 / Metric STOR-ISO 6149 Port



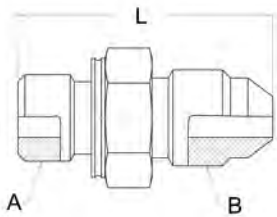
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
319-9224	M16x1.5	M16x1.5	22	30	Brass
242-2888	M10x1	M10x1	14	27	Steel
451-0503	M12x1.5	M14x1.5	22	32	Steel
287-7244	M14x1.5	M10x1	19	32	Steel
448-8999	M14x1.5	M10x1	19	32	Steel
250-1421	M14x1.5	M12x1.5	22	32	Steel
243-0206	M14x1.5	M12x1.5	19	27	Steel
5W-2848	M14x1.5	M16x1.5	19	39.5	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
306-9404	M22x1.5	M10x1	22	26.5	Steel
260-9229	M22x1.5	M12x1.5	27	34	Steel
253-7768	M22x1.5	M22x1.5	30	62	Steel
271-6284	M22x1.5	M22x1.5	30	62	Steel
447-7510	M22x1.5	M22x1.5	30	62	Steel
287-7242	M27x2	M27x2	32	47.5	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

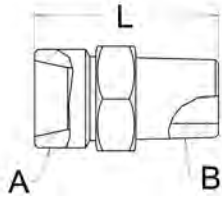
Male Metric STOR-ISO 6149 / Male 37° Flare-SAE J514



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
210-7672	M27x2	1 1/16-12	32	50	SST
439-1947	M10x1	7/16-20	14	29.5	Steel
9Y-7443	M10x1	7/16-20	12.7	32.3	Steel
3E-7437	M12x1.5	7/16-20	14	31	Steel
516-4481	M14x1.5	7/16-20	19	31.7	Steel
7U-7181	M16x1.5	3/4-16	22	36	Steel
493-0323	M16x1.5	7/8-14	27	46	Steel
493-0322	M22x1.5	7/8-14	27.7	46	Steel
9Y-7441	M8x1	7/16-20	12.7	56.42	Steel
9Y-7442	M8x1	7/16-20	12.7	32.42	Steel

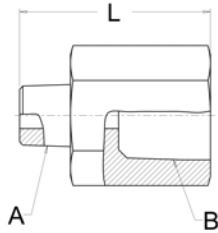
Straight Adapters

Male Metric STOR-ISO 6149 / Male NPTF



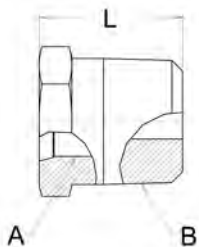
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
221-1582	M16x1.5	1/4-18	–	30	Brass

Male Metric STOR-ISO 6149 / NPTF Port



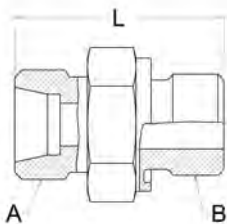
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
247-4438	M10x1	1/4-18	19.05	30	Brass
7V-5161	M14x1.5	1/4-18	19	29	Brass
7V-2839	M22x1.5	3/8-18	27	32	Brass
134-4123	M10x1	1/8-27	19	25	Steel
415-2241	M12x1.5	1/8-27	15.88	23.7	Steel
5C-7617	M14x1.5	1/4-18	19.05	33.3	Steel
159-3966	M14x1.5	3/8-18	22.22	35	Steel
291-2325	M16x1.5	3/8-18	25.4	98	Steel
146-2739	M18x1.5	1/8-27	–	406	Steel
268-1966	M18x1.5	1/4-18	24	15	Steel
419-5988	M22x1.5	1/2-14	–	42.67	Steel

Metric STOR-ISO 6149 Port / Male NPTF



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
250-1468	M12x1.5	1/2-14	24	36	Steel
355-9605	M12x1.5	1/2-14	22.22	24.6	Steel

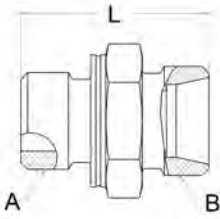
Male Metric STOR-ISO 6149 / Male BSPP STOR-JIS B2351



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
372-1092	M16x1.5	1/4-19	19	30.5	Brass
240-5901	M14x1.5	1/4-19	18	30	SST
440-0640	M14x1.5	3/8-19	14	24.5	Steel
159-2861	M18x1.5	3/8-19	22	34.5	Steel
440-0637	M18x1.5	3/8-19	19	31.8	Steel
381-2820	M18x1.5	3/8-19	22	36.8	Steel
445-2457	M18x1.5	3/8-19	22	47	Steel

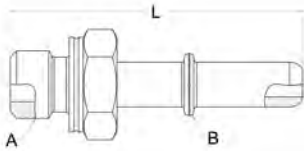
Straight Adapters

Male Metric STOR-ISO 6149 / Male 24° Cone-ISO 8434-1



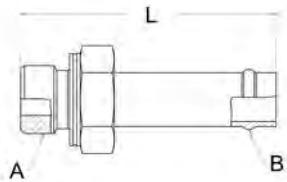
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
200-1555	M10x1	M16x1.5	17	29.5	Steel
355-7416	M12x1.5	M14x1.5	17	28	Steel
234-7196	M14x1.5	M16x1.5	19	30	Steel
385-5785	M16x1.5	M18x1.5	22	31	Steel
202-1919	M22x1.5	M22x1.5	27	37.5	Steel

Male Metric STOR-ISO 6149 / Male-SAE J2044



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
474-2619	M12x1.5	7.94	17	52.1	Steel
444-4991	M18x1.5	15.88	24	74	Steel
423-6878	M18x1.5	9.52	24	55.1	Steel

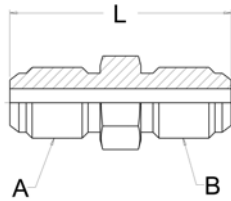
Male Metric STOR-ISO 6149 / Hose Bead



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
185-1047	M12x1.5	12.70	17.4	59.2	Brass
321-8626	M12x1.5	9.52	17	38.1	Brass
287-8089	M16x1.5	12.70	22	55	Brass
478-5155	M16x1.5	15.90	–	38.9	Brass
321-8627	M16x1.5	9.52	22	40.39	Brass
505-8510	M22x1.5	9.52	17.46	41.7	Brass
185-1044	M30x2	25.40	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	–	64.4	Steel
426-4124	M16x1.5	12.70	22	60	Steel
439-1816	M16x1.5	15.88	22	60	Steel
135-2221	M16x1.5	15.88	21	70	Steel
439-1984	M18x1.5	15.88	26.99	63.6	Steel

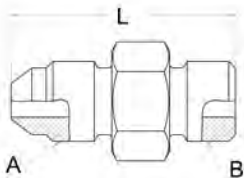
Straight Adapters

Male 37° JIC / Male 37° JIC



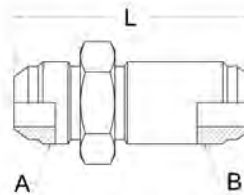
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
364-2513	9/16-18	9/16-18	20.64	55.4	SST
4R-8697	3/4-16	3/4-16	20.6	41.1	SST
3J-7355	7/16-20	7/16-20	12.7	34.8	Steel
281-5842	7/16-20	7/16-20	12.7	34.8	SST
030-7984	7/16-20	9/16-18	15.88	35.5	Steel
061-6740	7/16-20	3/4-16	25.4	38.3	Steel
7J-6418	1/2-20	1/2-20	19.05	34.8	Steel
7K-4129	9/16-18	9/16-18	15.88	35.8	Steel
053-3153	9/16-18	7/8-14	28.58	42.7	Steel
061-6737	3/4-16	9/16-18	25.4	38.6	Steel
090-6372	3/4-16	3/4-16	—	100	Steel
3R-2704	3/4-16	3/4-16	20.6	41.1	Steel
030-7982	3/4-16	7/8-14	23.82	45.3	Steel
061-8248	7/8-14	7/8-14	23.8	47.8	Steel
030-7983	7/8-14	1 1/16-12	34.92	52.2	Steel
3R-2705	1 1/16-12	3/4-16	28.58	49.6	Steel
9S-7739	1 1/16-12	1 1/16-12	28.58	54.9	Steel
2P-2206	1 3/16-12	1 3/16-12	—	56.1	Steel
061-9787	1 5/16-12	3/4-16	41.28	50.7	Steel
9S-7754	1 5/16-12	1 5/16-12	34.9	57.2	Steel
460-4091	1 5/16-12	1 5/16-12	34.9	200	Steel
061-6739	1 5/16-12	1 5/8-12	47.63	60.4	Steel
068-4152	1 5/8-12	1 5/8-12	42.86	61.7	Steel
7X-7904	1 7/8-12	1 7/8-12	50.8	69.8	Steel

Male 37° JIC / Male STOR



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
369-6873	7/16-20	7/16-20	14.29	31.2	SST

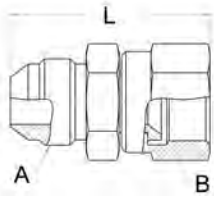
Male 37° JIC / Bulkhead Male 37° JIC



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
489-4871	1 1/16-12	1 1/16-12	34.93	78.5	SST
2P-1276	7/16-20	7/16-20	17.46	52.6	Steel
7J-6419	1/2-20	1/2-20	19.05	52.6	Steel
2P-1278	9/16-18	9/16-18	20.64	55.4	Steel
137-0868	9/16-18	9/16-18	20.6	63	Steel
2P-1281	3/4-16	3/4-16	25.4	62	Steel
2P-1282	7/8-14	7/8-14	28.58	69.6	Steel
2P-1283	1 1/16-12	1 1/16-12	34.92	78.5	Steel
506-2015	1 1/16-12	1 1/16-12	34.92	260.4	Steel
2P-1284	1 3/16-12	1 3/16-12	38.1	79.2	Steel
2P-1285	1 5/16-12	1 5/16-12	41.28	79.8	Steel
506-2014	1 5/16-12	1 5/16-12	34.93	260.4	Steel
439-1964	1 5/8-12	1 5/16-12	47.63	82.8	Steel
238-2579	1 5/8-12	1 5/8-12	47.2	84.1	Steel

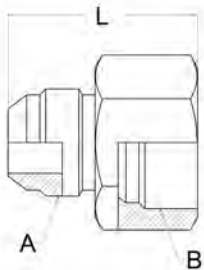
Straight Adapters

Male 37° JIC / 37° JIC Swivel Nut



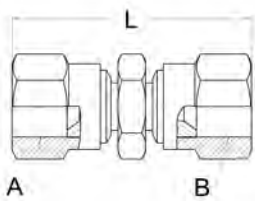
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
426-4163	9/16-18	3/4-16	22.23	25.4	Steel
367-6009	3/4-16	3/4-16		44	Steel
7X-7686	1 7/8-12	1 5/16-12	50.8	71.63	Steel

Male 37° JIC / 37° JIC Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
5P-5009	7/16-20	1/2-20	15.88	31	Steel
5P-5008	7/16-20	9/16-18	17.46	32.4	Steel
5P-5007	7/16-20	3/4-16	22.22	38	Steel
5P-5006	7/16-20	7/8-14	25.4	50.2	Steel
5P-5005	7/16-20	1 1/16-12	34.9	44.5	Steel
5P-5004	7/16-20	1 3/16-12	34.92	56.4	Steel
5P-5003	7/16-20	1 5/16-12	38.1	57.9	Steel
488-4813	9/16-18	7/16-20	15.88	29.5	Steel
469-7700	9/16-18	1 5/16-12	34.9	36.8	Steel
459-0732	3/4-16	9/16-18	20.64	101.6	Steel
090-2782	3/4-16	9/16-18	20.64	29.5	Steel
5P-8228	3/4-16	7/8-14	25.4	35.8	Steel
450-2063	3/4-16	1 5/16-12	38.1	49.3	Steel
6V-9012	7/8-14	3/4-16	28.58	46	Steel
8T-2270	7/8-14	7/8-14	25.4	90	Steel
8C-4434	7/8-14	7/8-14		33.7	Steel
5P-1945	7/8-14	1 1/16-12	31.75	45.7	Steel
5P-9789	1 1/16-12	3/4-16	28.58	40	Steel
494-1459	1 1/16-12	7/8-14	28.58	37.85	Steel
470-4025	1 1/16-12	1 5/16-12	34.9	54.6	Steel
6V-7484	1 3/16-12	1 5/16-12	41.28	48.5	Steel
439-1897	1 5/16-12	1 1/16-12	38.1	58.9	Steel
489-1532	1 5/16-12	1 7/8-12	57.2	53.3	Steel
8C-6713	1 5/8-12	1 5/16-12	42.86	43.4	Steel
5R-8782	1 5/8-12	1 7/8-12		64.77	Steel

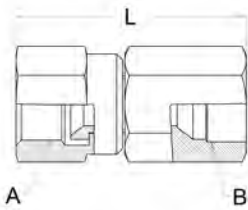
37° JIC Swivel Nut / 37° JIC Swivel Nut



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
207-1871	7/16-20	7/16-20	14.29	20.3	Steel

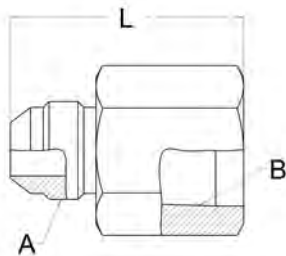
Straight Adapters

37° JIC Swivel Nut / 37° JIC Port



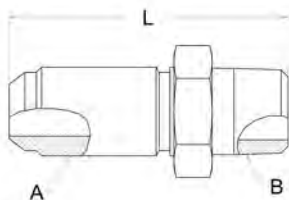
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
503-7460	9/16-18	9/16-18	17.46	40	Steel
8C-4065	1 5/16-12	1 5/16-12	38.1	80	Steel
8T-1486	1 5/8-12	1 5/8-12	50.8	80	Steel

Male 37° JIC / NPTF Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
222-2208	7/16-20	1/4-18	19.05	33.3	Brass
126-7331	9/16-18	1/4-18	19.05	35.6	Brass
194-3987	7/16-20	1/4-18	17.46	53.6	SST
480-3025	3/4-16	1/2-14	28.58	45.5	SST
196-3188	1 1/16-12	3/4-14	34.92	52.3	SST
281-5890	1 5/16-12	1-11.5	41.28	59.7	SST
5D-9231	7/16-20	1/8-27	14.29	30.2	Steel
4U-1697	7/16-20	1/8-27	–	50.5	Steel
464-3341	7/16-20	1/2-14	28.58	42.9	Steel
7K-3762	1/2-20	1/8-27	14.29	29.7	Steel
5P-8869	9/16-18	1/4-18	19.05	35.6	Steel
053-0088	9/16-18	3/8-18	22.22	37.1	Steel
061-9413	3/4-16	3/8-18	22.2	39.6	Steel
5U-8370	3/4-16	1/2-14	28.58	45.6	Steel
151-7683	7/8-14	3/8-18	25.4	28	Steel
6V-1846	7/8-14	1/2-14	28.58	48	Steel
061-8246	1 1/16-12	3/4-14	34.9	52.3	Steel
173-0880	1 1/16-12	1-11.5	41.28	58.4	Steel
432-2045	1 3/16-12	1/4-18	–	42.8	Steel
001-7041	1 3/16-12	3/4-14	34.9	52.3	Steel
061-8962	1 5/16-12	1-11.5	41.28	59.7	Steel
302-8133	1 5/8-12	1 1/4-11.5	50.8	63.2	Steel
7X-7905	1 7/8-12	1 1/2-11.5	60.32	66.5	Steel

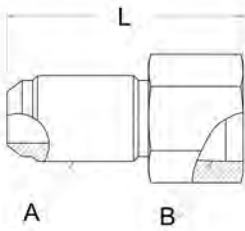
Bulkhead Male 37° JIC / Male NPTF



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
143-9199	7/16-20	1/4-18	17.46	52.6	Steel
338-1539	3/4-16	1/2-14	25.4	65	Steel
6V-2409	7/8-14	1/2-14	28.58	69.6	Steel
441-1832	1 1/16-12	3/4-14	34.93	74.17	Steel
441-2009	1 5/16-12	1-11.5	41.28	78.74	Steel

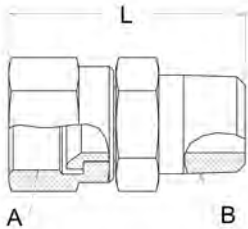
Straight Adapters

Bulkhead Male 37° JIC / NPTF Port



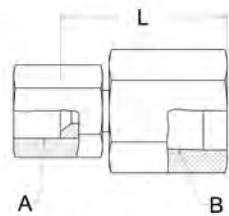
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
211-9682	1 7/8-12	1 1/2-11.5	60.32	88.9	SST
5P-6941	7/16-20	1/8-27	17.46	46.7	Steel
5P-4653	9/16-18	1/4-18	20.64	52.32	Steel
8T-3569	3/4-16	3/8-18	25.4	61.3	Steel
6V-2376	3/4-16	1/2-14	28.58	65.3	Steel
2U-0708	1 1/16-12	3/4-14	34.9	74.2	Steel
304-8014	1 5/16-12	1-11.5	41.28	71.9	Steel

37° JIC Swivel Nut / Male NPTF



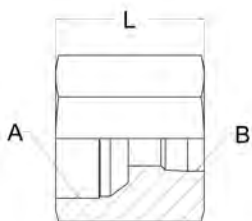
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
156-7530	7/16-20	1/4-18	14.29	37.1	SST
139-5872	7/16-20	1/4-18	14.29	37.1	Steel
140-9768	9/16-18	1/8-27	17.46	28	Steel
135-8279	9/16-18	3/8-18	19.05	40.4	Steel
6U-0464	3/4-16	3/8-18	22	47	Steel
340-2435	3/4-16	1/2-14	22.22	48.8	Steel
385-5788	7/8-14	1/2-14	25.4	52	Steel
148-0209	1 1/16-12	3/4-14	31.75	54.61	Steel
249-7676	1 5/8-12	1 1/4-11.5	50.8	70.1	Steel
213-3567	1 7/8-12	1 1/2-11.5		77	Steel

37° JIC Swivel Nut / NPTF Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
145-8833	7/16-20	1/4-18	19.05	27.4	Steel
9J-6190	9/16-18	3/8-18	22.22	41.15	Steel
5P-8018	3/4-16	3/8-18	22.22	42.2	Steel
6V-2481	3/4-16	1/2-14	28.58	48	Steel
8C-8552	7/8-14	1/2-14	25.4	37.3	Steel
5T-2119	1 1/16-12	1/2-14	26.99	37.85	Steel
8C-8553	1 1/16-12	3/4-14	34.92	52.1	Steel
5P-2244	1 5/16-12	1-11.5	38.1	67.3	Steel

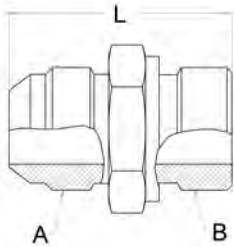
37° JIC Port / NPTF Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
7U-6220	9/16-18	1/8-27	17.46	25	Steel
8C-3999	1 5/16-12	3/4-14	38.1	58	Steel
8C-7533	1 5/8-12	1/2-14	47.63	49	Steel

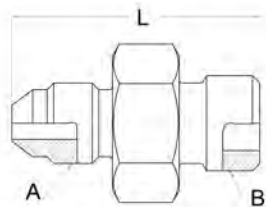
Straight Adapters

Male 37° JIC / Male Metric Flat Face-ISO 9974



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
6U-9892	7/16-20	M10x1	14	27.5	Steel
287-7272	7/16-20	M10x1	14	30	Steel
296-9364	7/16-20	M14x1.5	19	34	Steel
304-8042	7/16-20	M14x1.5	19	35.2	Steel
365-5036	9/16-18	M14x1.5	19	31	Steel
377-9635	3/4-16	M18x1.5	24	39	Steel
470-9971	3/4-16	M18x1.5		37.1	Steel
492-6784	7/8-14	M18x1.5	27	41.7	Steel
377-9637	1 1/16-12	M27x2	32	49	Steel

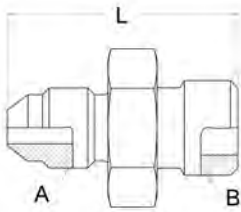
Male 37° JIC / Male BSPP Flat Face-ISO 1179



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
525-1725	7/16-20	1/4-19		32	Brass
468-7184	7/16-20	1/8-28	17	28	Steel
6V-3522	7/16-20	1/4-19	19.05	35	Steel
330-9736	7/16-20	1/4-19	19.05	31.4	Steel
451-0441	7/16-20	3/8-19	22	33.2	Steel
171-9653	9/16-18	1/4-19	19.05	35.05	Steel
6V-3523	9/16-18	3/8-19		36.5	Steel
426-4169	9/16-18	1/2-14	30	38.6	Steel
426-4171	9/16-18	3/4-14	36	40	Steel
6V-3524	3/4-16	1/2-14		41	Steel
188-1032	3/4-16	3/4-14	36	42.2	Steel
6V-3526	7/8-14	1/2-14		44	Steel
208-2448	1 1/16-12	1/2-14	30	46.7	Steel
224-1376	1 1/16-12	3/4-14	36	47.5	Steel
385-5781	1 1/16-12	1-11	46	53.4	Steel
386-6198	1 5/16-12	3/4-14	36	52.7	Steel
426-4173	1 5/16-12	1 1/4-11	50	55.1	Steel

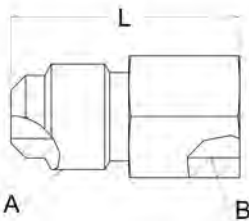
Straight Adapters

Male 37° JIC / Male BSPP STOR-JIS B2351



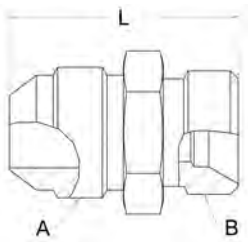
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
252-9332	1 1/16-12	3/4-14	31.75	51	1E2275
7C-3870	7/16-20	1/4-19	19.05	31.4	Brass
203-5563	7/16-20	1/4-19	19	32	SST
6V-3521	7/16-20	1/8-28		35	Steel
191-6504	7/16-20	1/2-14	30	38.6	Steel
281-5960	1/2-20	1/4-19	19	33	Steel
365-5040	9/16-18	1/4-19	19	32	Steel
6W-8220	9/16-18	3/8-19	22.2	33	Steel
9X-6642	3/4-16	1/4-19	19	36	Steel
6V-3525	3/4-16	3/8-19		39	Steel
174-0030	7/8-14	3/8-19		40.4	Steel
439-5446	7/8-14	3/4-14	32	44	Steel
6V-3528	7/8-14	3/4-14		47.5	Steel
6V-3527	1 1/16-12	3/4-14		50.5	Steel
6V-3529	1 5/16-12	1-11		53	Steel
252-9331	1 5/16-12	1 1/4-11	57	61	Steel

Male 37° JIC / BSPP STOR-JIS B2351 Port



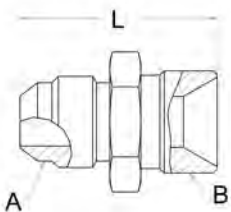
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
203-0436	7/16-20	1/8-28	13	24	Brass
186-3327	7/16-20	3/8-19	24	31.5	Brass

Male 37° JIC / Male 60° Cone JIS Metric Thread



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
6V-4388	3/4-16	M18x1.5	–	33.53	Steel
6V-4389	7/8-14	M22x1.5	–	38.61	Steel
6V-4391	1 5/16-12	M30x1.5	–	44.04	Steel

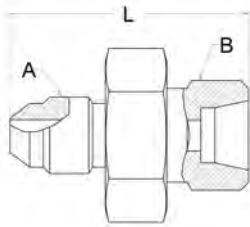
Male 37° JIC / Male 60° Cone-ISO 7631



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
6V-4387	9/16-18	M16x1.5	–	30.96	Steel
280-7182	9/16-18	M16x1.5	22	36.2	Steel
6V-4390	1 1/16-12	M26x1.5	–	41.28	Steel

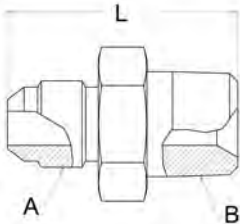
Straight Adapters

Male 37° JIC / Male 24° Cone-ISO 8434-1



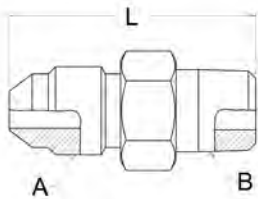
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
450-2058	7/16-20	M16x1.5	22	35	Steel
6V-0472	9/16-18	M14x1.5	19	31	Steel
6V-4373	3/4-16	M16x1.5	–	34.54	Steel
6V-4374	3/4-16	M18x1.5	–	34.54	Steel
6V-4375	7/8-14	M22x1.5	–	38.61	Steel
6V-4381	7/8-14	M22x1.5	–	40.64	Steel
6V-4376	1 1/16-12	M26x1.5	–	42.93	Steel
6V-4377	1 5/16-12	M30x2	–	46.04	Steel
6V-4383	1 5/16-12	M30x2	–	48.03	Steel
6V-4378	1 5/8-12	M36x2	–	47.62	Steel

Male 37° JIC / Male 30° Flare-JIS



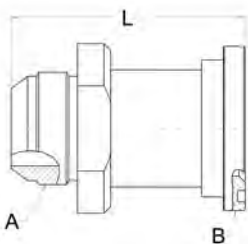
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
8T-2121	9/16-18	3/8-19	22	38	Steel
8T-2122	3/4-16	1/2-14	27	46	Steel
8T-2218	7/8-14	5/8-14	31.75	48.5	Steel
8T-2123	1 1/16-12	3/4-14	36	55	Steel
8T-2124	1 5/16-12	1-11	41	60	Steel

Male 37° JIC / Male BSPT-ISO 7-1



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
211-3352	9/16-18	3/8-19	19	37	1E2275
241-0384	3/8-24	3/4-14	34.92	43.8	Steel
474-2605	7/16-20	1/8-28	13	31	Steel
245-7692	7/16-20	1/4-19	19.05	32	Steel
343-4581	9/16-18	1/4-19	17	36.3	Steel
3Q-1249	3/4-16	1/2-14	22	45.5	Steel
241-0386	3/4-16	3/4-14	34.92	46.4	Steel
342-9073	7/8-14	3/4-14	27	49.5	Steel
241-0398	1 1/16-12	1-11	34.92	57.2	Steel

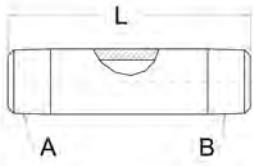
Male 37° JIC / Code 61 Head Flange



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
503-7462	1 5/8-12	Dash 24	53.98	85.7	Steel
107-2660	1 7/8-12	Dash 24	50.8	68.8	Steel

Straight Adapters

Male NPTF / Male NPTF



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
105-7204	1/8-27	1/8-27	-	660	Black Pipe
192-0087	1/8-27	1/8-27	-	80	Black Pipe
161-7443	1/8-27	1/8-27	-	75	Black Pipe
110-8796	1/8-27	1/8-27	-	87	Black Pipe
112-9271	1/8-27	1/8-27	-	140	Black Pipe
124-0368	1/8-27	1/8-27	-	310	Black Pipe
124-0369	1/8-27	1/8-27	-	186	Black Pipe
321-8664	1/8-27	1/8-27	-	51	Black Pipe
3B-7282	1/8-27	1/8-27	-	152.4	Black Pipe
3B-7283	1/8-27	1/8-27	-	69.85	Black Pipe
3B-7285	1/8-27	1/8-27	-	63	Black Pipe
3B-7733	1/8-27	1/8-27	-	38.1	Black Pipe
3B-7734	1/8-27	1/8-27	-	88.9	Black Pipe
3B-7736	1/8-27	1/8-27	-	127	Black Pipe
5H-7826	1/8-27	1/8-27	-	25.4	Black Pipe
451-1488	1/8-27	1/8-27	-	87	Black Pipe
4F-2861	1/8-27	1/8-27	-	92.075	Black Pipe
4J-2394	1/8-27	1/8-27	-	109.22	Black Pipe
9S-1812	1/8-27	1/8-27	-	102	Black Pipe
6V-1813	1/8-27	1/8-27	-	19	Black Pipe
8B-2283	1/8-27	1/8-27	-	32	Black Pipe
1V-2750	1/4-18	1/4-18	-	63.5	Black Pipe
3B-7261	1/4-18	1/4-18	-	57.15	Black Pipe
3B-7262	1/4-18	1/4-18	-	38.1	Black Pipe
3B-7273	1/4-18	1/4-18	-	101.6	Black Pipe
3B-7275	1/4-18	1/4-18	-	64	Black Pipe
3B-7738	1/4-18	1/4-18	-	22	Black Pipe
3B-7740	1/4-18	1/4-18	-	152.4	Black Pipe
5B-7442	1/4-18	1/4-18	-	120.65	Black Pipe
5H-7598	1/4-18	1/4-18	-	76.2	Black Pipe
5N-8396	1/4-18	1/4-18	-	83	Black Pipe
030-7765	3/8-18	3/8-18	-	51	Black Pipe
136-2954	3/8-18	3/8-18	-	200	Black Pipe
136-2955	3/8-18	3/8-18	-	90	Black Pipe
1L-1644	3/8-18	3/8-18	-	44	Black Pipe
393-8331	3/8-18	3/8-18	-	120	Black Pipe
3B-7741	3/8-18	3/8-18	-	25.4	Black Pipe
3B-7742	3/8-18	3/8-18	-	38.1	Black Pipe
3B-7743	3/8-18	3/8-18	-	139.7	Black Pipe
4F-0186	3/8-18	3/8-18	-	76.2	Black Pipe
6Z-2038	3/8-18	3/8-18	-	25.4	Black Pipe
105-1860	1/2-14	1/2-14	-	76	Black Pipe
105-1861	1/2-14	1/2-14	-	63.5	Black Pipe
130-7284	1/2-14	1/2-14	-	63	Black Pipe
130-7287	1/2-14	1/2-14	-	120	Black Pipe
1L-8432	1/2-14	1/2-14	-	70	Black Pipe
279-0825	1/2-14	1/2-14	-	482.6	Black Pipe
2B-3470	1/2-14	1/2-14	-	140	Black Pipe
2H-1880	1/2-14	1/2-14	-	152	Black Pipe
222-7370	1/2-14	1/2-14	-	1750	Black Pipe
222-7371	1/2-14	1/2-14	-	1826.7	Black Pipe

Straight Adapters

Male NPTF / Male NPTF (Cont'd.)

Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
222-9984	1/2-14	1/2-14	–	508	Black Pipe
222-9985	1/2-14	1/2-14	–	2991.3	Black Pipe
242-4310	1/2-14	1/2-14	–	178	Black Pipe
249-4312	1/2-14	1/2-14	–	50.8	Black Pipe
267-6785	1/2-14	1/2-14	–	142	Black Pipe
314-9603	1/2-14	1/2-14	–	125	Black Pipe
3B-7272	1/2-14	1/2-14	–	76.2	Black Pipe
3B-7284	1/2-14	1/2-14	–	38.1	Black Pipe
3B-7866	1/2-14	1/2-14	–	51	Black Pipe
3F-8431	1/2-14	1/2-14	–	228.6	Black Pipe
5B-7319	1/2-14	1/2-14	–	95.25	Black Pipe
9S-1339	1/2-14	1/2-14	–	33	Black Pipe
7B-4115	1/2-14	1/2-14	–	44.45	Black Pipe
8B-3308	1/2-14	1/2-14	–	28.575	Black Pipe
1F-6660	3/4-14	3/4-14	–	64	Black Pipe
143-2922	3/4-14	3/4-14	–	127	Black Pipe
171-9420	3/4-14	3/4-14	–	108	Black Pipe
180-4655	3/4-14	3/4-14	–	152	Black Pipe
276-3503	3/4-14	3/4-14	–	279.4	Black Pipe
279-0826	3/4-14	3/4-14	–	357.7	Black Pipe
279-0827	3/4-14	3/4-14	–	1700	Black Pipe
222-7368	3/4-14	3/4-14	–	1485	Black Pipe
222-7369	3/4-14	3/4-14	–	786.4	Black Pipe
3P-2021	3/4-14	3/4-14	–	101.6	Black Pipe
345-1321	3/4-14	3/4-14	–	381	Black Pipe
3B-7265	3/4-14	3/4-14	–	152.4	Black Pipe
3B-7267	3/4-14	3/4-14	–	76.2	Black Pipe
3B-7270	3/4-14	3/4-14	–	51	Black Pipe
3B-7745	3/4-14	3/4-14	–	35	Black Pipe
5B-9892	3/4-14	3/4-14	–	44	Black Pipe
4F-0440	3/4-14	3/4-14	–	57.15	Black Pipe
4I-7470	3/4-14	3/4-14	–	169.8625	Black Pipe
6L-5295	3/4-14	3/4-14	–	140	Black Pipe
7F-6654	3/4-14	3/4-14	–	50.8	Black Pipe
141-2370	1-11.5	1-11.5	–	1448	Black Pipe
170-1186	1-11.5	1-11.5	–	64	Black Pipe
184-3534	1-11.5	1-11.5	–	260	Black Pipe
12-3201	1-11.5	1-11.5	–	197	Black Pipe
278-1172	1-11.5	1-11.5	–	1568.8	Black Pipe
278-1173	1-11.5	1-11.5	–	2326	Black Pipe
278-1174	1-11.5	1-11.5	–	120	Black Pipe
278-1175	1-11.5	1-11.5	–	207.3	Black Pipe
278-1176	1-11.5	1-11.5	–	638.9	Black Pipe
278-1178	1-11.5	1-11.5	–	67.5	Black Pipe
279-0836	1-11.5	1-11.5	–	1514.4	Black Pipe
279-0837	1-11.5	1-11.5	–	1854.2	Black Pipe
279-0838	1-11.5	1-11.5	–	406.4	Black Pipe
279-1125	1-11.5	1-11.5	–	469.9	Black Pipe
229-5976	1-11.5	1-11.5	–	292	Black Pipe
3N-3894	1-11.5	1-11.5	–	97	Black Pipe
3B-7280	1-11.5	1-11.5	–	50.8	Black Pipe

Straight Adapters

Male NPTF / Male NPTF (Cont'd.)

Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
3B-7749	1-11.5	1-11.5	–	38	Black Pipe
2N-0853	1-11.5	1-11.5	–	108	Black Pipe
2S-9222	1-11.5	1-11.5	–	206.38	Black Pipe
6B-8128	1-11.5	1-11.5	–	63.5	Black Pipe
6B-8129	1-11.5	1-11.5	–	76.2	Black Pipe
6N-2430	1-11.5	1-11.5	–	139.7	Black Pipe
7B-7169	1-11.5	1-11.5	–	44	Black Pipe
7B-7908	1-11.5	1-11.5	–	114.3	Black Pipe
7B-9008	1-11.5	1-11.5	–	152.4	Black Pipe
7F-8622	1-11.5	1-11.5	–	130	Black Pipe
7F-8701	1-11.5	1-11.5	–	234.95	Black Pipe
131-4961	1 1/4-11.5	1 1/4-11.5	–	125	Black Pipe
145-1041	1 1/4-11.5	1 1/4-11.5	–	88	Black Pipe
110-6302	1 1/4-11.5	1 1/4-11.5	–	142	Black Pipe
3B-7750	1 1/4-11.5	1 1/4-11.5	–	41.275	Black Pipe
3D-2189	1 1/4-11.5	1 1/4-11.5	–	101.6	Black Pipe
2R-3538	1 1/4-11.5	1 1/4-11.5	–	136.525	Black Pipe
2W-8721	1 1/4-11.5	1 1/4-11.5	–	107.95	Black Pipe
5L-3785	1 1/4-11.5	1 1/4-11.5	–	50.8	Black Pipe
4B-4609	1 1/4-11.5	1 1/4-11.5	–	64	Black Pipe
4P-7891	1 1/4-11.5	1 1/4-11.5	–	85.725	Black Pipe
4P-7894	1 1/4-11.5	1 1/4-11.5	–	168.275	Black Pipe
105-0428	1 1/2-11.5	1 1/2-11.5	–	203.2	Black Pipe
126-4117	1 1/2-11.5	1 1/2-11.5	–	1708	Black Pipe
126-4118	1 1/2-11.5	1 1/2-11.5	–	88	Black Pipe
130-2550	1 1/2-11.5	1 1/2-11.5	–	343	Black Pipe
132-1430	1 1/2-11.5	1 1/2-11.5	–	420	Black Pipe
136-0546	1 1/2-11.5	1 1/2-11.5	–	215	Black Pipe
1L-2786	1 1/2-11.5	1 1/2-11.5	–	209.55	Black Pipe
1L-2893	1 1/2-11.5	1 1/2-11.5	–	70	Black Pipe
149-3995	1 1/2-11.5	1 1/2-11.5	–	165	Black Pipe
149-3996	1 1/2-11.5	1 1/2-11.5	–	225	Black Pipe
156-8160	1 1/2-11.5	1 1/2-11.5	–	133	Black Pipe
123-0214	1 1/2-11.5	1 1/2-11.5	–	548	Black Pipe
279-0843	1 1/2-11.5	1 1/2-11.5	–	756.5	Black Pipe
279-0844	1 1/2-11.5	1 1/2-11.5	–	402.4	Black Pipe
279-0846	1 1/2-11.5	1 1/2-11.5	–	761.7	Black Pipe
279-0847	1 1/2-11.5	1 1/2-11.5	–	326.5	Black Pipe
287-6901	1 1/2-11.5	1 1/2-11.5	–	343	Black Pipe
204-0241	1 1/2-11.5	1 1/2-11.5	–	254	Black Pipe
208-6594	1 1/2-11.5	1 1/2-11.5	–	267	Black Pipe
210-8819	1 1/2-11.5	1 1/2-11.5	–	495	Black Pipe
210-8820	1 1/2-11.5	1 1/2-11.5	–	305	Black Pipe
229-9325	1 1/2-11.5	1 1/2-11.5	–	69.85	Black Pipe
263-0874	1 1/2-11.5	1 1/2-11.5	–	122	Black Pipe
315-8412	1 1/2-11.5	1 1/2-11.5	–	475	Black Pipe
3L-8992	1 1/2-11.5	1 1/2-11.5	–	64	Black Pipe
3L-8993	1 1/2-11.5	1 1/2-11.5	–	50.8	Black Pipe
3N-9383	1 1/2-11.5	1 1/2-11.5	–	279	Black Pipe
3R-9595	1 1/2-11.5	1 1/2-11.5	–	260	Black Pipe
434-3694	1 1/2-11.5	1 1/2-11.5	–	50.8	Black Pipe

Straight Adapters

Male NPTF / Male NPTF (Cont'd.)

Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
2L-2811	1 1/2-11.5	1 1/2-11.5	–	180.975	Black Pipe
5B-7642	1 1/2-11.5	1 1/2-11.5	–	85.725	Black Pipe
5B-7643	1 1/2-11.5	1 1/2-11.5	–	114.3	Black Pipe
5B-7661	1 1/2-11.5	1 1/2-11.5	–	44.45	Black Pipe
4P-7892	1 1/2-11.5	1 1/2-11.5	–	463.55	Black Pipe
6F-6045	1 1/2-11.5	1 1/2-11.5	–	57.15	Black Pipe
6F-8857	1 1/2-11.5	1 1/2-11.5	–	76.2	Black Pipe
6F-8858	1 1/2-11.5	1 1/2-11.5	–	44.45	Black Pipe
6L-4489	1 1/2-11.5	1 1/2-11.5	–	330.2	Black Pipe
6L-5699	1 1/2-11.5	1 1/2-11.5	–	127	Black Pipe
7B-0497	1 1/2-11.5	1 1/2-11.5	–	228.6	Black Pipe
7E-2476	1 1/2-11.5	1 1/2-11.5	–	571	Black Pipe
9Y-6582	1 1/2-11.5	1 1/2-11.5	–	314	Black Pipe
278-5664	1 1/2-11.5	2-11.5	–	116.9	Black Pipe
128-5051	2-11.5	2-11.5	–	177	Black Pipe
292-3621	2-11.5	2-11.5	–	275	Black Pipe
292-3624	2-11.5	2-11.5	–	490	Black Pipe
222-2024	2-11.5	2-11.5	–	475	Black Pipe
246-1245	2-11.5	2-11.5	–	51	Black Pipe
272-2687	2-11.5	2-11.5	–	63.5	Black Pipe
426-4120	2-11.5	2-11.5	–	203.2	Black Pipe
3B-7286	2-11.5	2-11.5	–	76.2	Black Pipe
3B-7296	2-11.5	2-11.5	–	50.8	Black Pipe
5N-8778	2-11.5	2-11.5	–	355.6	Black Pipe
4D-5222	2-11.5	2-11.5	–	152.4	Black Pipe
4P-2603	2-11.5	2-11.5	–	193.675	Black Pipe
6N-4543	2-11.5	2-11.5	–	104.8	Black Pipe
8Q-9643	2-11.5	2-11.5	–	63.5	Black Pipe
8T-3510	2-11.5	2-11.5	–	280	Black Pipe
8W-9062	2-11.5	2-11.5	–	175	Black Pipe
8X-5627	2-11.5	2-11.5	–	410	Black Pipe
8I-1278	2-11.5	2-11.5	–	330	Black Pipe
140-5978	3-8	3-8	–	67	Black Pipe
149-4009	3-8	3-8	–	304.8	Black Pipe
162-7255	3-8	3-8	–	155	Black Pipe
292-3623	3-8	3-8	–	370	Black Pipe
315-8399	3-8	3-8	–	112	Black Pipe
3N-8667	3 1/2-8	3 1/2-8	–	495.3	Black Pipe
3N-8672	3 1/2-8	3 1/2-8	–	120.65	Black Pipe
3N-8673	3 1/2-8	3 1/2-8	–	158.75	Black Pipe
2N-2472	3 1/2-8	3 1/2-8	–	69.85	Black Pipe
5N-4476	3 1/2-8	3 1/2-8	–	222.25	Black Pipe
6V-8408	3 1/2-8	3 1/2-8	–	400	Black Pipe
6V-8410	3 1/2-8	3 1/2-8	–	908	Black Pipe
6V-8412	3 1/2-8	3 1/2-8	–	873	Black Pipe
6V-8424	3 1/2-8	3 1/2-8	–	83	Black Pipe
251-1593	4-8	4-8	–	440	Black Pipe
0A-2926	1/8-27	1/8-27	11.11	24.6	Brass
379-1119	1/8-27	1/8-27	17.526	49.27	Brass
6V-2610	1/8-27	1/8-27	–	19.05	Brass
6K-1019	1/4-18	1/8-27	15.88	31.75	Brass
3B-7767	1/4-18	1/4-18	–	22.225	Brass

Straight Adapters

Male NPTF / Male NPTF (Cont'd.)

Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
3B-7771	1/4-18	1/4-18	–	31.75	Brass
3B-7773	1/4-18	1/4-18	–	50.8	Brass
3B-7894	1/4-18	1/4-18	–	38.1	Brass
5K-2408	1/4-18	1/4-18	15.88	36.8	Brass
1H-7721	3/8-18	3/8-18	–	38.1	Brass
397-1099	1/2-14	3/8-18	22.22	41.15	Brass
3B-7770	1/2-14	1/2-14	–	28.575	Brass
3B-7881	1/2-14	1/2-14	–	38.1	Brass
2N-2012	1 1/4-11.5	1 1/4-11.5	–	127	Brass
6V-9029	1 1/4-11.5	1 1/4-11.5	–	63.5	Brass
3N-7600	2-11.5	2-11.5	–	101.6	Brass
5N-2918	2-11.5	2-11.5	–	50.8	Brass
5N-8001	2-11.5	2-11.5	–	612.7	Brass
3B-7274	1/4-18	1/4-18	–	89	Galv Pipe
3B-7276	1/4-18	1/4-18	–	50.8	Galv Pipe
3B-7739	1/4-18	1/4-18	–	32	Galv Pipe
6V-0678	3/8-18	3/8-18	–	127	Galv Pipe
3B-7271	1/2-14	1/2-14	–	101.6	Galv Pipe
421-6187	1-11.5	1-11.5	–	51	Galv Pipe
5V-6414	1-11.5	1-11.5	–	563	Galv Pipe
004-1309	1 1/4-11.5	1 1/4-11.5	–	41	Galv Pipe
173-4409	1/4-18	1/4-18	15.88	36.5125	SST
4C-5898	3/8-18	3/8-18	19.05	76.2	SST
168-3333	1/2-14	1/2-14	22.22	48	SST
168-3346	1/2-14	1/2-14	–	152	SST
297-8066	3/4-14	1/2-14	25.58	49.8	SST
201-0578	3/4-14	3/4-14	–	127	SST
173-4410	1-11.5	1-11.5	34.92	59.4	SST
175-3623	1-11.5	1-11.5	–	102	SST
194-4171	1-11.5	1 1/4-11.5	–	62.2	SST
1Y-3853	1 1/4-11.5	1 1/4-11.5	–	203.2	SST
1Y-3854	1 1/4-11.5	1 1/4-11.5	–	101.6	SST
491-5273	1 1/4-11.5	1 1/4-11.5	44.45	63	SST
439-1941	1 1/2-11.5	1 1/2-11.5	–	177.8	SST
439-1943	1 1/2-11.5	1 1/2-11.5	–	254	SST
439-1983	1 1/2-11.5	1 1/2-11.5	–	127	SST
8Q-9297	1 1/2-11.5	1 1/2-11.5	–	203	SST
8Q-9880	1 1/2-11.5	1 1/2-11.5	–	50.8	SST
197-7547	2-11.5	2-11.5	–	50.8	SST
209-9835	2-11.5	2-11.5	–	203.2	SST
209-9896	2-11.5	2-11.5	–	101.6	SST
439-1945	2-11.5	2-11.5	–	152.4	SST
386-6237	2-11.5	2-11.5	–	245	SST
450-0847	2 1/2-8	2 1/2-8	–	127	SST
493-1510	2 1/2-8	2 1/2-8	–	63.5	SST
100-7868	1/8-27	1/8-27	–	381	Steel
5K-5068	1/8-27	1/8-27	11.11	26.9	Steel
8C-7575	1/8-27	1/8-27	11.11	38.1	Steel
8C-7576	1/8-27	1/8-27	11.11	76.2	Steel
5P-3238	1/4-18	1/8-27	15.88	32	Steel
105-6431	1/4-18	1/4-18	19	35	Steel
5P-8998	1/4-18	1/4-18	15.88	36.8	Steel
134-0712	1/4-18	1/4-18	–	28	Steel
141-9504	1/4-18	1/4-18	–	285	Steel
141-9505	1/4-18	1/4-18	–	603	Steel

Straight Adapters

Male NPTF / Male NPTF (Cont'd.)

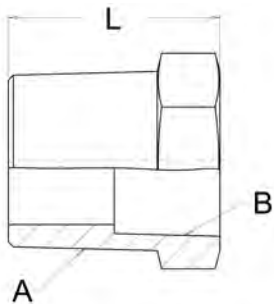
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
279-4495	1/4-18	1/4-18	–	51	Steel
8C-7574	1/4-18	1/4-18	15.88	152.4	Steel
114-3399	1/4-18	1/2-14	22.22	43.18	Steel
8X-3316	1/4-18	3/4-14	–	52.3875	Steel
5S-2403	3/8-18	1/4-18	19.05	37	Steel
4C-7153	3/8-18	1/4-18	19.05	45	Steel
004-6683	3/8-18	3/8-18	19.05	36.8	Steel
030-7764	3/8-18	3/8-18	–	38.1	Steel
7X-0495	3/8-18	1/2-14	22.22	43.2	Steel
087-0882	1/2-14	1/4-18	22.35	41.15	Steel
4C-7151	1/2-14	1/4-18	22.23	41	Steel
4C-7140	1/2-14	3/8-18	22.23	41	Steel
002-6454	1/2-14	1/2-14	22.22	48	Steel
443-2324	1/2-14	1/2-14	–	188.9	Steel
4C-7133	1/2-14	1/2-14	22.23	41	Steel
8C-6905	1/2-14	3/4-14	28.58	49.78	Steel
467-0748	3/4-14	3/8-18	28.58	47.7	Steel
326-9452	3/4-14	1/2-14	28.58	76.2	Steel
004-7270	3/4-14	3/4-14	28.58	49.8	Steel
144-2609	3/4-14	3/4-14	28.58	49.8	Steel
4C-7160	3/4-14	3/4-14	26.99	63	Steel
7E-5719	3/4-14	3/4-14	–	76.2	Steel
7E-8352	3/4-14	3/4-14	–	149.225	Steel
511-3228	1-11.5	1/2-14	34.11	54	Steel
4C-7134	1-11.5	3/4-14	34.93	56	Steel
5S-2392	1-11.5	3/4-14	34.92	54.5	Steel
005-8615	1-11.5	1-11.5	34.92	59.4	Steel
107-9149	1-11.5	1-11.5	–	38	Steel
152-7597	1-11.5	1-11.5	–	390	Steel
424-8759	1-11.5	1-11.5	–	225	Steel
389-3736	1-11.5	1-11.5	–	152	Steel
469-7760	1-11.5	1-11.5	–	89	Steel
1P-5597	1 1/4-11.5	1-11.5	–	60.25	Steel
1P-5598	1 1/4-11.5	1 1/4-11.5	44.45	62.99	Steel
104-4526	1 1/4-11.5	1 1/4-11.5	–	41.275	Steel
338-0618	1 1/4-11.5	1 1/4-11.5	–	380	Steel
268-1536	1 1/2-11.5	1-11.5	50.8	64.8	Steel
109-5605	1 1/2-11.5	1 1/2-11.5	50.8	66.3	Steel
1H-7722	1 1/2-11.5	1 1/2-11.5	–	361.95	Steel
3E-2315	1 1/2-11.5	2-11.5	63.5	68.9	Steel
279-4506	2-11.5	2-11.5	–	178	Steel
415-7244	2-11.5	2-11.5	–	152.4	Steel
434-5630	2-11.5	2-11.5	–	622.3	Steel
434-5631	2-11.5	2-11.5	–	120.65	Steel
8X-3473	2-11.5	2-11.5	–	220	Steel
140-8346	4-8	4-8	–	102	Steel
294-8226	4-8	4-8	–	152.4	Steel
427-0079	4-8	4-8	–	115	Steel
3B-7263	1/8-27	1/8-27	–	51	STL Pipe
003-4711	1/4-18	1/4-18	–	57.15	STL Pipe
3E-2303	1/4-18	1/4-18	–	51	STL Pipe
467-0875	1/4-18	1/4-18	–	140	STL Pipe
514-1031	3/8-18	3/8-18	–	76.2	STL Pipe
441-1658	3/8-18	3/8-18	–	38.1	STL Pipe
441-1680	3/8-18	3/8-18	–	228.6	STL Pipe

Straight Adapters

Male NPTF / Male NPTF (Cont'd.)

Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
470-4054	3/8-18	3/8-18	–	127	STL Pipe
470-4435	3/8-18	3/8-18	–	1676.4	STL Pipe
183-2779	1/2-14	1/2-14	–	115	STL Pipe
125-7407	3/4-14	3/4-14	–	76	STL Pipe
3B-7747	3/4-14	3/4-14	–	89	STL Pipe
469-7854	3/4-14	3/4-14	–	1219.2	STL Pipe
470-4436	3/4-14	3/4-14	–	3276.6	STL Pipe
468-1668	1-11.5	1-11.5	–	406.4	STL Pipe
469-7753	1-11.5	1-11.5	–	660	STL Pipe
469-7754	1-11.5	1-11.5	–	1422	STL Pipe
469-7755	1-11.5	1-11.5	–	2057.4	STL Pipe
469-7756	1-11.5	1-11.5	–	2781	STL Pipe
499-3416	1 1/4-11.5	1 1/4-11.5	–	762	STL Pipe
499-3417	1 1/4-11.5	1 1/4-11.5	–	203.2	STL Pipe
352-2775	1 1/2-11.5	1 1/2-11.5	–	250	STL Pipe
3L-1258	1 1/2-11.5	1 1/2-11.5	–	101.6	STL Pipe
499-0218	1 1/2-11.5	1 1/2-11.5	–	762	STL Pipe
499-0219	1 1/2-11.5	1 1/2-11.5	–	203.2	STL Pipe
434-5628	2-11.5	2-11.5	–	106.36	STL Pipe
434-5629	2-11.5	2-11.5	–	1436.69	STL Pipe
396-6376	2-11.5	2-11.5	–	240.7	STL Pipe
502-6693	2-11.5	2-11.5	–	762	STL Pipe
502-6694	2-11.5	2-11.5	–	203.2	STL Pipe
511-5614	2 1/2-8	2 1/2-8	–	152.4	STL Pipe
514-6651	2 1/2-8	2 1/2-8	–	355.6	STL Pipe
427-0090	4-8	4-8	–	89	STL Pipe
431-6073	6-8	6-8	–	228.6	STL Pipe

Male NPTF / NPTF Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
3B-7384	1/4-18	1/8-27	–	38.1	Black Pipe
327-8578	4-8	3-8	–	56	Black Pipe
002-0639	1/8-27	1/8-27	14.29	22.35	Brass
5H-8936	1/8-27	1/4-18	–	26.9	Brass
1A-5912	1/8-27	9/16-18	17.46	27	Brass
3B-6768	1/4-18	1/8-27	15.88	21.6	Brass
039-4966	1/4-18	1/4-18	19.05	25.4	Brass
2R-1576	1/4-18	1/4-18	19.05	25.4	Brass
8B-6021	1/4-18	3/8-18	22.23	31.8	Brass
332-8567	3/8-18	1/8-27	18.87	17.5	Brass
1H-7724	3/8-18	1/4-18	19.05	21.6	Brass
5K-6875	3/8-18	3/8-18	22.22	31.75	Brass
3B-7764	1/2-14	1/4-18	17.08	19.05	Brass
011-5224	3/4-14	3/8-18	34.92	21.6	Brass
012-8140	3/4-14	1/2-14	28.58	21.6	Brass
329-0667	1-11.5	1/2-14	34.93	33	Brass
011-7219	1-11.5	3/4-14	36.32	25.4	Brass
4L-1847	1 1/4-11.5	3/4-14	44.45	25.4	Brass
4B-7762	1 1/4-11.5	1-11.5	44.7	27.4	Brass
8T-1492	1 1/4-11.5	1 1/2-11.5	60.32	63.5	Brass

Straight Adapters

Male NPTF / NPTF Port (Cont'd.)

Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
4W-0066	1 1/2-11.5	2-11.5	18.03	90	Brass
5P-2201	2-11.5	1 1/2-11.5	62.99	31	Brass
061-7325	2 1/2-8	2-11.5	76.2	41.3	Brass
3N-8699	3-8	2-11.5	83.31	41.1	Brass
2F-3360	1/2-14	2-11.5	34.93	32.5	Iron
432-9956	3/4-14	1/2-14	–	16	Iron
4D-3967	1-11.5	1/8-27	28.58	26.67	Iron
3B-7724	1-11.5	1/4-18	28.58	26.67	Iron
3B-7254	1-11.5	3/8-18	28.58	26.59	Iron
2L-0042	1 1/4-11.5	1/2-14	33.34	30.2	Iron
6F-7732	1 1/2-11.5	3/4-14	50.8	33	Iron
8B-5774	1 1/2-11.5	1-11.5	50.8	28.6	Iron
1F-3605	1 1/2-11.5	1 1/4-11.5	50.8	28.6	Iron
7D-4754	2-11.5	1/2-14	34	32.76	Iron
2F-5277	2-11.5	1-11.5	50.8	32.5	Iron
8B-9580	2-11.5	1 1/4-11.5	63.5	31.8	Iron
5B-7660	2-11.5	1 1/2-11.5	62.99	31.8	Iron
7F-6923	2-11.5	1 1/2-11.5	–		Iron
3N-9409	2 1/2-8	2-11.5	76.2	41.28	Iron
140-9462	3-8	1 1/2-11.5	–	40.9	Iron
5L-6669	3-8	2-11.5	83.31	40.76	Iron
428-8455	4-8	2-11.5	84.6	48	Iron
419-4168	1/4-18	1/8-27	15.88	19	SST
123-8581	3/8-18	1/4-18	19.05	21.3	SST
303-9532	1/2-14	1/4-18	24	21	SST
432-9698	1/2-14	1/4-18	22.22	28.194	SST
124-3696	3/4-14	1/2-14	38.1	51	SST
162-6622	1-11.5	1/4-18	34.92	33.6	SST
173-4412	1 1/4-11.5	1-11.5	44.45	36.3	SST
8Q-9286	1 1/2-11.5	1/4-18	50.8	32	SST
198-8308	1 1/2-11.5	1 1/4-11.5	50.8	39.9	SST
439-1940	2-11.5	1/4-18	63.5	36.1	SST
191-0787	2-11.5	1-11.5	63.5	44.5	SST
454-2772	2-11.5	1-11.5	63.5	44.5	SST
493-1509	2-11.5	1 1/4-11.5	63.5	44.5	SST
281-5850	2-11.5	1 1/2-11.5	63.5	44.4	SST
489-4875	2 1/2-8	2 1/2-8	77	100	SST
6K-6967	1/8-27	1/8-27	15.88	26.4	Steel
126-2565	1/8-27	1/8-27	15.88	46.4	Steel
222-3487	1/8-27	1/8-27	15.88	76.2	Steel
4K-3026	1/8-27	1/8-27	12.7	19.1	Steel
7W-0629	1/8-27	1/8-27	–	22.9	Steel
151-0714	1/8-27	1/8-27	14	25	Steel
4H-0553	1/8-27	1/4-18	19.05	30.7	Steel
4M-5317	1/4-18	1/8-27	15.88	21.6	Steel
122-2901	1/4-18	1/8-27	17	29	Steel
309-0912	1/4-18	1/8-27	–	19	Steel
9L-0638	1/4-18	1/8-27	14.29	19.05	Steel
1P-3651	1/4-18	1/8-27	15.88	16.764	Steel
432-3697	1/4-18	1/8-27	–	14.73	Steel
3P-1823	1/4-18	1/4-18	19.05	35.3	Steel
432-2046	1/4-18	1/4-18	–	32	Steel
442-3539	1/4-18	1/4-18	14.29	32.51	Steel
030-8370	1/4-18	3/8-18	22.22	36.6	Steel

Straight Adapters

Male NPTF / NPTF Port (Cont'd.)

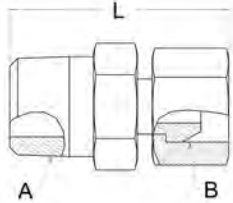
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
162-6207	1/4-18	3/8-18	22.2	54	Steel
4L-7412	1/4-18	1/2-14	28.58	40	Steel
445-9718	1/4-18	3/4-14	25.4	34.45	Steel
3B-7721	3/8-18	1/8-27	19.05	18.7	Steel
169-0454	3/8-18	1/8-27	19.05	21.6	Steel
3B-7722	3/8-18	1/4-18	19.05	21.6	Steel
203-7959	3/8-18	3/8-18	22.22	46	Steel
032-3506	3/8-18	1/2-14	28.58	42.7	Steel
030-7139	3/8-18	3/4-14	34.93	44.5	Steel
8B-1931	1/2-14	1/8-27	22.22	27.9	Steel
6B-5072	1/2-14	1/4-18	22.22	27.9	Steel
9S-9370	1/2-14	1/4-18	22.23	20.6	Steel
3B-7255	1/2-14	3/8-18	22.22	27.9	Steel
004-6557	1/2-14	3/8-18	22.22	38.1	Steel
210-6962	1/2-14	3/8-18	22.22	21	Steel
7D-4903	1/2-14	1/2-14	28.58	47.5	Steel
1L-5620	1/2-14	1/2-14	25.4	38.1	Steel
115-9167	1/2-14	1/2-14	29	73	Steel
007-0950	1/2-14	3/4-14	34.92	49	Steel
249-1243	1/2-14	1-11.5	41.28	55.6	Steel
7B-2176	3/4-14	1/8-27	26.924	23.11	Steel
9B-3523	3/4-14	1/4-18	28.58	29.7	Steel
6B-4661	3/4-14	3/8-18	28.58	29.72	Steel
8B-2664	3/4-14	1/2-14	28.58	29.7	Steel
281-5832	3/4-14	1/2-14	28.58	29.7	Steel
432-5415	3/4-14	1/2-14	—	44	Steel
202-1205	3/4-14	3/4-14	34.92	49	Steel
004-5703	3/4-14	1-11.5	41.28	55.4	Steel
131-9367	1-11.5	1/4-18	34.9	25.4	Steel
493-6746	1-11.5	1/4-18	34.93	34.5	Steel
6B-1628	1-11.5	3/8-18	34.92	34.5	Steel
061-9593	1-11.5	1/2-14	35	27	Steel
6B-9081	1-11.5	3/4-14	34.92	34.5	Steel
432-3802	1-11.5	3/4-14	—	20.5	Steel
434-5564	1 1/4-11.5	3/8-18	—	29.5	Steel
8F-8306	1 1/4-11.5	3/4-14	44.45	28.54	Steel
3B-7257	1 1/4-11.5	1-11.5	44.45	36.3	Steel
4P-9254	1 1/4-11.5	1-11.5	—	18.5	Steel
6B-7280	1 1/2-11.5	1/4-18	50.8	40	Steel
6V-4516	1 1/2-11.5	1/2-14	50.8	39.9	Steel
450-0868	1 1/2-11.5	3/4-14	—	18.3	Steel
489-1530	1 1/2-11.5	3/4-14	50.8	39.9	Steel
5R-7326	1 1/2-11.5	1-11.5	50.8	39.88	Steel
4T-1726	1 1/2-11.5	1-11.5	55	52	Steel
297-7935	1 1/2-11.5	1 1/4-11.5	50.8	39.9	Steel
485-8524	1 1/2-11.5	1 1/4-11.5	—	25.4	Steel
183-7257	1 1/2-11.5	2-11.5	73.02	66.8	Steel
470-4039	2-11.5	1/2-14	34	31.5	Steel
6F-7699	2-11.5	3/4-14	63.5	34.13	Steel
141-2502	2-11.5	1-11.5	63.5	31.8	Steel
489-1529	2-11.5	1 1/2-11.5	63.5	44.5	Steel
9D-9658	2-11.5	2-11.5	73.02	67.6	Steel
203-0694	2-11.5	2-11.5	—	100	Steel
1U-0655	2 1/2-8	1/4-18	—	27	Steel

Straight Adapters

Male NPTF / NPTF Port (Cont'd.)

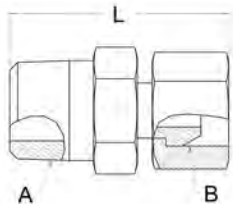
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
509-0786	2 1/2-8	2-11.5	64.5	45	Steel
287-7338	3-8	2-11.5	94.5	49	Steel
213-7961	3-8	2 1/2-8	89	43	Steel
509-0785	3-8	2 1/2-8	98	38.9	Steel
509-0784	4-8	3-8	120.7	62	Steel

Male NPTF / NPSM



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
336-6906	1/2-14	1/2-14	22.2	38	Brass
4L-8545	1/2-14	1/2-14		62.48	Steel

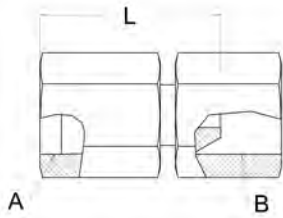
Male NPTF / NPSM Swivel Nut



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
332-8560	3/8-18	3/8-18	22.2	42.7	Brass
2N-2011	1 1/4-11.5	1 1/4-11.5	47.63	53.1	Brass
5P-2203	1 1/2-11.5	1 1/2-11.5	53.98	54.9	Brass
2R-1922	1/8-27	1/8-27	14.29	25.4	Steel
4D-2560	1/8-27	1/4-18	15.88	26.7	Steel
9J-7600	1/4-18	1/8-27	17.5	30	Steel
4H-6147	1/4-18	1/4-18	15.88	31.75	Steel
3L-7055	1/4-18	3/8-18	22.22	33.3	Steel
2D-0193	3/8-18	1/4-18	22.2	32.8	Steel
2L-3331	3/8-18	3/8-18	22.2	33.3	Steel
2D-0058	3/8-18	1/2-14	23.8	35.6	Steel
6D-6489	1/2-14	3/8-18	22.22	38.1	Steel
336-6905	1/2-14	1/2-14	25	49	Steel
2H-9091	1/2-14	1/2-14	25.4	40.4	Steel
7D-0702	1/2-14	3/4-14	28.58	43.7	Steel
3D-8911	3/4-14	1/2-14	31.75	40.4	Steel
5F-6371	3/4-14	3/4-14	31.75	43.7	Steel
2N-7308	3/4-14	1-11.5	38.1	45.2	Steel
113-7099	1-11.5	3/4-14	38.1	50.3	Steel
1L-5987	1-11.5	1-11.5	38.1	50	Steel
3L-3869	1 1/4-11.5	1 1/4-11.5	47.63	53.1	Steel
1L-1722	1 1/2-11.5	1 1/2-11.5	53.98	54.9	Steel
302-8496	2-11.5	2-11.5	66.68	71.12	Steel

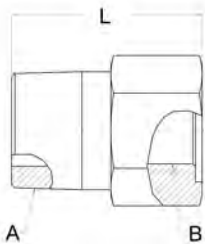
Straight Adapters

NPTF Port / NPSM Swivel Nut



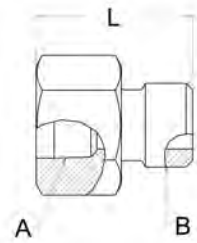
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
3D-9253	1/8-27	1/8-27	14.29	23.9	Steel
7D-0215	1/8-27	1/4-18	17.5	27.2	Steel
2J-4211	1/4-18	1/4-18	17.5	32.5	Steel
4D-0513	3/8-18	3/8-18	22.2	33.3	Steel
8M-0792	1/2-14	1/2-14	25.4	38.1	Steel
1L-2702	3/4-14	3/4-14	31.75	41.1	Steel
7F-7807	1-11.5	1-11.5	38.1	50	Steel

Male NPTF / BSPP Flat Face-ISO1179 Port



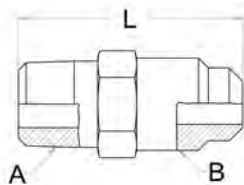
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
371-7159	3/8-18	1/8-28	19.05	28	Brass
208-3899	1/2-14	3/4-14	32	40	Steel

NPTF Port / Male BSPP Flat Face-ISO1179



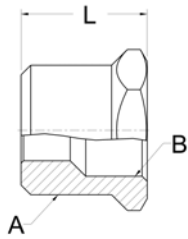
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
326-4140	1/4-18	1/4-19	17	22	Brass
459-0628	1/8-27	1/4-19	19	24.6	Steel
7X-2480	3/4-14	3/4-14	34.92	45	Steel

Male NPTF / Male 45° Flare-SAE J512



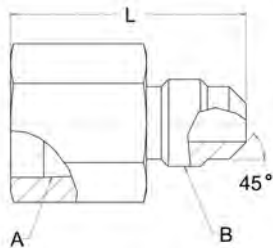
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
012-0703	1/8-27	3/8-24	11.11	25.4	Brass
164-5618	1/8-27	3/8-24	11.11	25.5	Brass
3B-9400	1/8-27	7/16-20	11.11	26.9	Brass
9L-9412	1/8-27	5/8-18	15.88	31.75	Brass
3B-9401	1/4-18	7/16-20	14.29	31.8	Brass
3B-9110	1/4-18	1/2-20	14.29	34	Brass
3B-9403	1/4-18	5/8-18	15.88	36.5	Brass
1L-2283	1/4-18	3/4-16	19.05	38.1	Brass
061-8644	3/8-18	5/8-18	22.22	45.97	Brass
3B-9404	3/8-18	3/4-16	19.05	41	Brass
061-7828	1/2-14	3/4-16	22.22	46.83	Brass
420-1548	1/2-14	7/8-14	22.22	50.8	Brass

Male NPTF / 45° Flare-SAE J512 Port



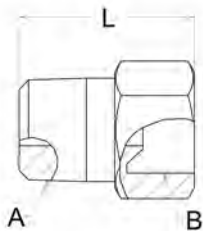
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
214-3613	1/2-14	5/8-18	21.89	19.81	Steel
214-3615	3/4-14	5/8-18	26.67	27.19	Steel

NPTF Port / Male 45° Flare-SAE J512



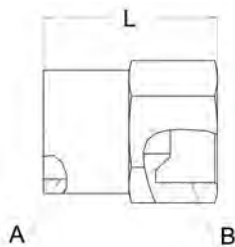
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
3D-2675	1/8-27	7/16-20	14.29	26.67	Brass
4D-4184	1/4-18	7/16-20	17.48	30	Brass
3S-8684	1/4-18	5/8-18	17.47	33.3	Brass
9L-3922	3/8-18	3/4-16	20.62	38.1	Brass

Male NPTF / 45° Inverted Flare-SAE J512 Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
9S-7580	1/8-27	5/16-28	10.32	15.7	Brass
9S-7581	1/8-27	3/8-24	11.91	17.5	Brass
1P-3458	1/8-27	1/2-20	15.09	19.8	Brass
7K-1457	1/8-27	5/8-18	19.05	22.4	Brass
5K-9239	1/4-18	7/16-24	14.29	22.4	Brass
4H-6141	1/4-18	1/2-20	15.09	24.6	Brass
5P-7039	1/4-18	3/4-18	23.02	26.9	Brass
5K-9248	3/8-18	5/8-18	19.05	26.2	Brass
5K-9238	3/8-18	3/4-18	23.02	26.9	Brass
170-1564	3/8-18	7/8-18	26.99	28.5	Brass
5K-9245	1/2-14	3/4-18	23.01	31.8	Brass
6K-8079	1/2-14	7/8-18	26.99	33.3	Brass

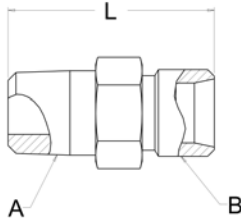
NPTF Port / 45° Inverted Flare-SAE J512 Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
9S-7691	1/8-27	3/8-24	12.7	19.1	Brass
5K-9979	1/8-27	7/16-24	13.49	19.1	Brass
9S-7692	1/8-27	1/2-20	15.09	19.8	Brass
6K-8076	1/4-18	5/8-18	19.05	26.2	Brass
5K-9894	3/8-18	3/4-18	23.02	27.7	Brass
6V-4361	1/2-14	3/4-18	26.99	33	Brass
9S-7694	1/2-14	7/8-18	26.99	33.3	Brass

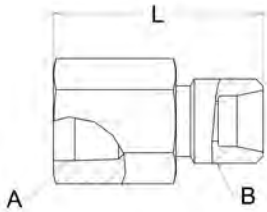
Straight Adapters

Male NPTF to Male 24° Flareless-SAE J514



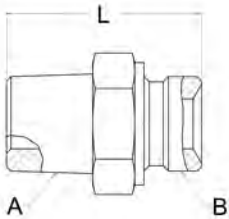
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
5P-7907	1/8-27	5/16-24	11.11	26.4	Steel
1P-3861	1/8-27	7/16-20	12.7	28.4	Steel
5P-5875	1/8-27	1/2-20	23.81	28.4	Steel
5P-4317	1/4-18	9/16-18	15.88	34	Steel
5P-5876	3/8-18	3/4-16	20.64	36.6	Steel
5P-5877	1/2-14	7/8-14	15.88	44.44	Steel
5P-6922	3/4-14	1 1/16-12	28.58	47.8	Steel
5P-5878	3/4-14	1 3/16-12	19.05	47.8	Steel

NPTF Port / Male 24° Flareless-SAE J514



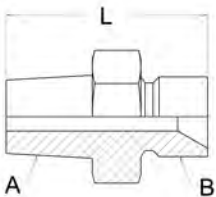
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
5P-6115	1/8-27	7/16-20	11.11	27.7	Steel
5P-5526	1/8-27	1/2-20	35.05	27.4	Steel

Male NPTF / Male BSPP STOR-JIS B2351



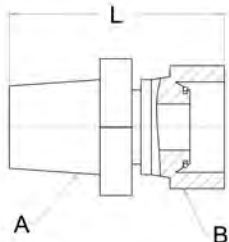
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
396-6382	1/2-14	3/8-14	22	40	Steel
196-7705	1/2-14	3/8-19	23.5	40.6	Steel
336-7548	1/2-14	1/2-14	27	43	Steel
396-6328	1/2-14	3/4-14	32	46	Steel

Male NPTF / Male 60° Cone BS5200



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
154-2930	1/4-18	1/4-19	19	33.2	Steel
262-0506	1/4-18	3/8-19	22	34.2	Steel
252-7242	1/2-14	1/2-14	27	43	Steel
289-2400	3/4-14	1-11	–	51	Steel

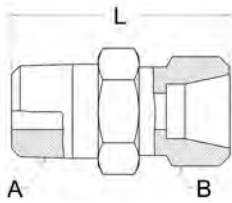
Male NPTF / 60° Cone BS5200 Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
424-1872	1/4-18	1/2-14	–	35	Steel
424-1873	1/2-14	1/2-14	–	42	Steel
348-8539	1/2-14	1/2-14	–	47.4	Steel

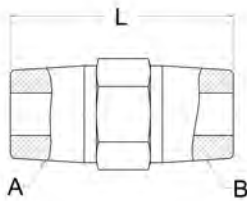
Straight Adapters

Male NPTF / Male 24° Cone-ISO 8434-1



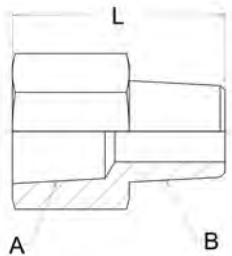
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
268-1623	1/8-27	M12x1.5	12	24	Steel

Male NPTF / Male BSPT-ISO 7-1



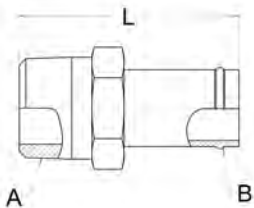
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
260-9254	1/4-18	1/4-19	15.88	36.8	Steel
193-5182	3/8-18	3/8-19	19	36.6	Steel
204-0394	1/2-14	3/8-19	22	41.5	Steel
237-7212	3/4-14	3/4-14	28.58	49.8	Steel
143-2786	1-11.5	3/4-14	35	70.6	Steel
100-3221	1-11.5	1-11	37.7	105	Steel
241-0397	1-11.5	1-11	34.92	49.8	Steel

NPTF Port / Male BSPT-ISO 7-1



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
332-8553	3/8-18	3/8-19	22.22	35.05	Brass
7X-0484	1 1/4-11.5	1-11	50.8	63	Brass
102-6496	1/8-27	1/8-28	17	29	Steel
150-5679	1/8-27	1/8-28	14	30	Steel
4Y-9423	1/8-27	1/8-28	7.94	26.4	Steel

Male NPTF / Hose Bead



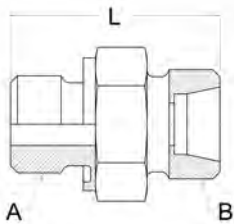
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
186-8138	1 1/4-11.5	38.10	—	89	1E1541A
1P-4001	1/16-27	4.76	7.87	25.4	Brass
8T-2173	1/8-27	7.94	11.11	39.1	Brass
006-7801	3/8-18	9.52	17.46	45.2	Brass
380-6163	1/2-14	19.05	22.22	50.3	Brass
053-2313	3/4-14	25.40	31.75	66.9	Brass
7X-1445	1 1/4-11.5	38.10	42.2	76.2	Brass
8C-5185	1 1/2-11.5	38.10	50.8	76.2	Brass
451-0398	3/8-18	9.52	19.05	59.7	SST
368-5219	1-11.5	31.75	40	70	SST
425-2047	1/8-27	9.52	12	33	Steel
262-0511	1/4-18	15.88	19.05	59.7	Steel
352-6508	1/4-18	7.94	14.29	59.7	Steel
5P-7175	1/4-18	9.52	15.88	59.7	Steel
176-0569	3/8-18	12.70	19.05	59.7	Steel
337-6501	3/8-18	15.88	22.2	56.69	Steel
347-4416	3/8-18	9.52	19.05	58.7	Steel

Straight Adapters

Male NPTF / Hose Bead (Cont'd.)

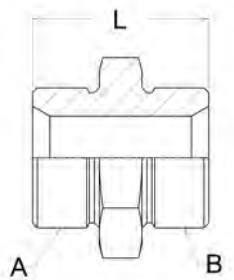
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
474-1553	1/2-14	15.88	23.81	54.8	Steel
2V-9121	1/2-14	15.88	23.81	66	Steel
352-6507	1/2-14	19.05	25.4	66	Steel
135-9944	3/4-14	19.05	28.58	67.8	Steel
005-7898	3/4-14	19.05	28.58	53.4	Steel
263-4798	3/4-14	25	–	40	Steel
345-9879	3/4-14	25.40	28.58	67.8	Steel
6V-2492	3/4-14	25.40	31.75	67.8	Steel
210-7567	3/4-14	6	–	40	Steel
033-3096	1-11.5	19.05	34.93	72.6	Steel
347-4444	1-11.5	25.40	34.93	72.6	Steel
432-7499	1 1/2-11.5	38.10	50.8	118.11	Steel
8T-5354	2-11.5	50.80	66.68	82.55	Steel

Male Metric Flat Face-ISO 9974 / Male 24° Cone-ISO 8434-1



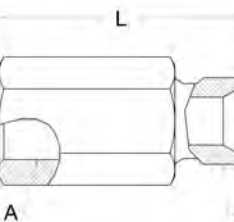
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
487-3433	M16x1.5	M18x1.5	22	34.5	Steel
499-8646	M16x1.5	M18x1.5	22	34.5	Steel
492-9117	M16x1.5	M18x1.5	22	34.5	Steel
227-1099	M18x1.5	M18x1.5	24	38	Steel
487-3171	M18x1.5	M20x1.5	24	36.5	Steel
202-5373	M22x1.5	M30x2	32	38	Steel
202-6305	M26x1.5	M30x2	32	40	Steel
487-4923	M48x2	M52x2	55	64	Steel

Male BSPP Flat Face-ISO 1179 / Male BSPP Flat Face-ISO 1179



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
2U-4299	3/4-24	3/4-24	26	30	Brass
274-6663	1/4-19	1/4-19	–	30	Steel
147-8508	1 1/4-11.5	1 1/4-11.5	52	52.8	Steel

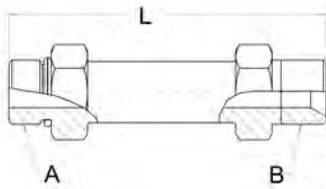
BSPP Flat Face-ISO 1179 Port / Male 60° Cone-BS5200



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
305-3383	1/4-19	1/4-19	19	47	Steel
234-7437	1/2-14	1/2-14	27	60	Steel

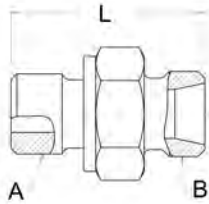
Straight Adapters

Male BSPP Flat Face-ISO 1179 / Male 60° Cone-JIS B8363



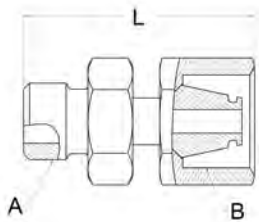
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
146-0359	1/2-14	3/8-19	27	70	Steel
143-0555	1/2-14	1/2-14	27	105	Steel

Male BSPP Flat Face-ISO 1179 / Male 24° Cone-ISO 8434-1



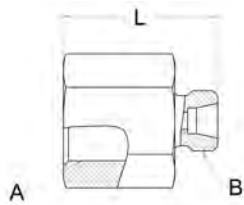
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
382-6279	1/4-19	M14x1.5	19	32	Steel
373-1776	1/4-19	M16x1.5		30.5	Steel
501-8720	1/4-19	M16x1.5	19	34	Steel
216-2309	1/4-19	M16x1.5	19	30	Steel
317-8510	1/4-19	M16x1.5	19	34	Steel
382-6296	3/8-19	M12x1.5	22	30.5	Steel
221-8496	3/8-19	M20x1.5	22	36	Steel
234-7440	1/2-14	M16x1.5	27	34	Steel
373-5753	1/2-14	M18x1.5	27	59	Steel
386-0623	1/2-14	M18x1.5	27	34	Steel
471-3729	1/2-14	M22x1.5	27	35	Steel
234-7438	1/2-14	M22x1.5	27	41	Steel
234-7423	1/2-14	M36x2	38	47	Steel
367-5980	3/4-14	M22x1.5	36	38.5	Steel
499-8642	3/4-14	M30x2	32	40	Steel

Male BSPP Flat Face-ISO 1179 / 24° Cone-ISO 8434-1 Swivel Nut



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
234-7419	1/4-19	M16x1.5	19	40	Steel
234-7421	1/2-14	M24x1.5	27	49.5	Steel

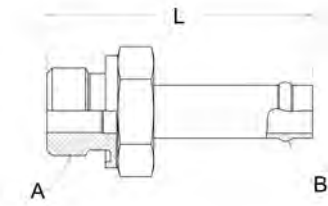
BSPP Flat Face-ISO 1179 Port / Male 24° Cone-ISO 8434-1



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
482-1480	1/2-14	M14x1.5	27	36	Steel
397-2600	3/4-14	M14x1.5	36	52.3	Steel

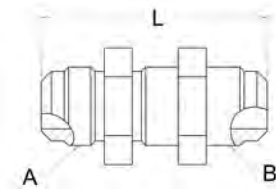
Straight Adapters

Male BSPP Flat Face-ISO 1179 / Hose Bead



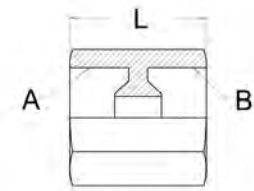
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
233-7888	3/8-19	12.70	22.2	58.7	Brass
504-5535	3/8-19	10.32	22	42	Steel
426-4129	1/2-14	12.70	27	63.6	Steel
267-1621	1/2-14	15	27	49	Steel

Male 45° Flare-SAE J512 / Male 45° Flare-SAE J512



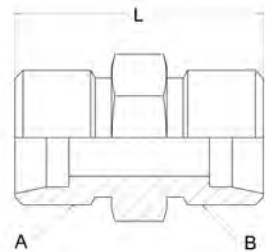
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
1U-9886	7/16-20	7/16-20	11.11	30	Brass
3B-9395	7/16-20	7/16-20	11.11	30.16	Brass
253-0412	1 1/16-12	1 1/16-12	34.9	78.5	Brass
7T-6083	5/8-18	5/8-18	22.23	51	Steel

45° Inverted Flare-SAE J512 Port / 45° Inverted Flare-SAE J512



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
9S-7584	5/16-28	5/16-28	10.32	15	Brass
5K-9242	7/16-24	7/16-24	13.49	15.7	Brass
4H-6142	1/2-20	1/2-20	15.09	17.8	Brass
7K-1456	5/8-18	5/8-18	19.05	20.3	Brass
6K-8077	3/4-18	3/4-18	23	23.1	Brass
5K-9249	7/8-18	7/8-18	26.99	24.6	Brass

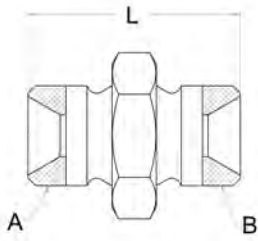
Male 24° Flareless-SAE J514 / Male 24° Flareless-SAE J514



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
5P-6312	5/16-24	5/16-24	12.7	25.9	Steel
5P-5843	7/8-14	7/8-14	23.81	40.9	Steel

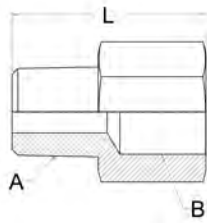
Straight Adapters

Male BSPP STOR-JIS B2351 / Male BSPP STOR-JIS B2351



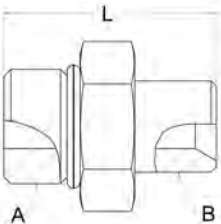
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
081-4340	3/8-19	3/8-19	–	28	Brass
147-2440	3/4-14	1/2-14	27	39	Brass
147-2443	3/4-14	3/4-14	27	42.5	Brass
249-8712	1/4-19	1/4-19	14	34	Steel
268-6154	1/4-19	1/4-19	19	28	Steel
268-6156	3/8-19	1/4-19	22	34.5	Steel
268-6155	3/8-19	3/8-19	22	34	Steel
384-2374	3/8-19	M16x1.5	22	49	Steel
259-8856	1/2-14	1/2-14	22	28	Steel
287-7440	1/2-14	3/4-14	–	–	Steel
344-3894	3/4-14	1/2-14	–	–	Steel
8U-6275	3/4-14	3/4-14	32	40	Steel
344-3893	1-11	3/4-14	–	–	Steel

Male BSPP STOR-JIS B2351 / BSPP STOR-JIS B2351 Port



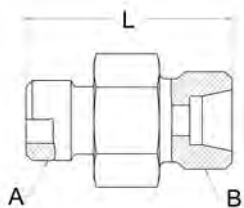
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
177-3466	1/8-28	1/8-28	14	80	Brass
177-3475	1/8-28	1/8-28	14	22.5	Brass
168-4043	1/4-19	1/4-19	19	77	Brass
258-5153	1/4-19	1/8-28	17	13	Steel
384-2368	3/8-19	3/8-19	–	32	Steel
379-5245	3/8-19	3/8-19	22	32	Steel
159-5805	1/2-14	3/8-19	27	36	Steel
216-2365	3/4-14	3/4-14	36	48	Steel

Male BSPP STOR-JIS B2351 / Male 60° Cone-BS5200



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
140-4799	3/8-19	3/8-19	22	34	Steel
140-4802	1/2-14	3/8-19	27	39	Steel

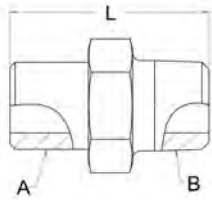
Male BSPP STOR-JIS B2351 / Male 24° Cone-ISO 8434-1



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
175-9514	1/4-19	M16x1.5	19	34	Steel
415-4641	3/8-19	M18x1.5	22	49	Steel
234-7381	3/8-19	M18x1.5	24	32	Steel
175-9506	3/8-19	M20x1.5	24	36.5	Steel
144-1055	1/2-14	M20x1.5	27	39	Steel
175-9585	3/4-14	M30x2	38	46.5	Steel
234-7382	3/4-14	M30x2	36	40.5	Steel
234-7400	1 1/2-11	M52x2	60	64	Steel

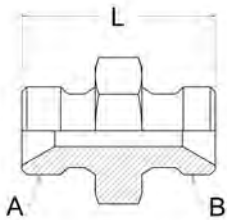
Straight Adapters

Male BSPP STOR-JIS B2351 / Male BSPT-ISO 7-1



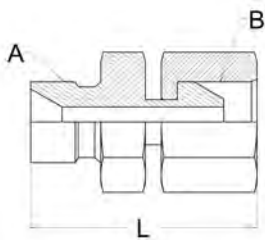
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
196-0285	3/8-19	3/8-19	–		Steel
326-4139	3/4-14	1/2-14	27.5	48.5	Steel

Male 60° Cone-BS5200 / Male 60° Cone-BS5200



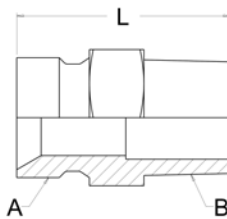
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
223-1751	1/4-19	1/4-19	18	31	Steel
262-0503	1/4-19	1/4-19	19	29	Steel
194-7229	3/8-19	3/8-19	23.81	32	Steel
234-7383	3/8-19	3/8-19	22	31	Steel
465-9014	1/2-14	1/4-19	27	33	Steel
151-9227	1/2-14	1/2-14	27	36	Steel
511-5620	1/2-14	1/2-14	27	42	Steel
329-5463	1 1/2-11	1 1/4-11	55	54	Steel
234-7395	1 1/2-11	1 1/2-11	55	55	Steel

Male 60° Cone-BS5200 / 60° Cone-BS5200 Swivel Nut



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
287-1876	1/4-19	1/4-19	19	35.5	Steel
463-4908	1/4-19	1/4-19	19	35	Steel
467-6124	1/2-14	1/2-14	27	48	Steel

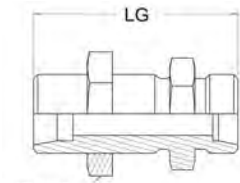
Male 60° Cone-BS5200 / Male BSPT-ISO 7-1



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
213-7483	1/4-19	1/4-19	–	34.5	Steel
262-0502	1/4-19	1/4-19	19	32.2	Steel
317-7214	1/2-14	1/4-18	25.4	37.8	Steel
362-1436	1/2-14	1/4-19	25	51.8	Steel
379-2201	1/2-14	3/8-19	27	64	Steel
379-2202	1/2-14	3/4-14	27	45	Steel
143-6955	3/4-14	3/4-14	30	47	Steel
143-6957	3/4-14	1-11	36	51.9	Steel

Straight Adapters

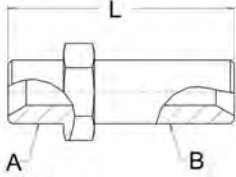
Male 24° Cone-ISO 8434-1 / Male 24° Cone-ISO 8434-1



HEX 30

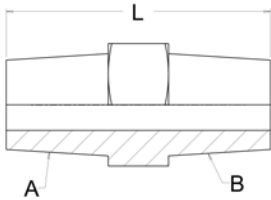
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
375-7722	M14x1.5	M14x1.5	19	63	Steel
230-0822	M22x1.5	M22x1.5	30	57	Steel

Male 30° Flare-JIS / Bulkhead Male 30° Flare-JIS



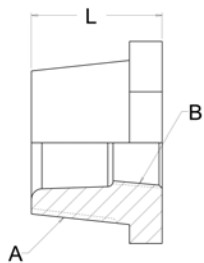
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
139-6517	1/4-19	1/4-19	19	51	Steel
139-6516	3/8-19	3/8-19	22	59	Steel

Male BSPT-ISO 7-1 / Male BSPT-ISO 7-1



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
271-9625	3/8-19	3/8-19	—	100	Black Pipe
211-4529	3/8-19	3/8-19	17	30	Brass
203-0432	1/2-14	3/8-19	26	36	Brass
243-0116	1/2-14	1/2-14	22	40	Brass
211-3349	1/4-19	1/4-19	14	34	Steel
262-0526	1/4-19	1/4-19	17	36.8	Steel
262-0524	3/8-19	1/4-19	19	36.8	Steel
126-4709	3/8-19	3/8-19	19	36	Steel
271-9813	3/8-19	3/8-19	19	68	Steel
271-9902	3/8-19	3/8-19	21	36	Steel
260-9249	1/2-14	1/4-19	24	43.2	Steel
252-7243	1/2-14	1/2-14	24	48	Steel
271-9903	1/2-14	1/2-14	26	43	Steel
271-5882	3/4-14	3/4-14	30	48	Steel
154-2925	3/4-14	1-11	42	53.2	Steel
219-1090	1-11	3/4-14	35.5	54	Steel
143-4449	1-11	1-11	36	59.4	Steel
166-4994	1-11	1-11	34.9	59.4	Steel

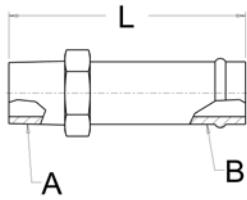
Male BSPT-ISO 7-1 / BSPT-ISO 7-1 Port



Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
237-8314	1/4-19	1/4-19	19.05	90	Brass
238-0746	3/4-14	3/8-19	32	24	Iron

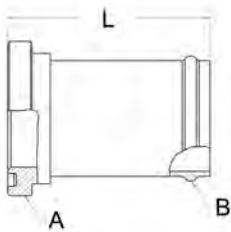
Straight Adapters

Male BSPT-ISO 7-1 / Hose Bead



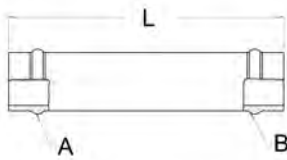
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
230-5123	1/8-28	25	27	41	Steel
462-4090	1/4-19	15.88	19.05	59.7	Steel
140-4233	3/8-19	12.70	19	45	Steel
268-1589	3/8-19	15.88	19	60	Steel
469-8861	3/8-19	16	19	47	Steel
462-4089	1/2-14	15.88	23.8	65.1	Steel
455-4746	3/4-14	16	27	44	Steel
313-2868	3/4-14	31.75	34.93	71	Steel

Code 61 Flange Head / Hose Bead



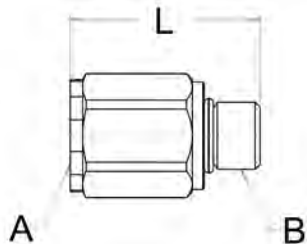
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
193-8308	Dash 20	38.10	-	66.7	Steel
142-9242	Dash 24	38.10	-	60.33	Steel

Hose Bead / Hose Bead



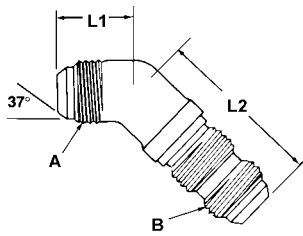
Part Number	Thread Size (A)	Thread Size (B)	HEX Size	Length (L)	Material
393-7327	4.76	7.94	-	38	Brass
397-1010	9.52	11.1	12.7	62.23	Brass
421-6178	9.52	12.70	19.05	82.4	Brass
379-0633	9.52	5.56	-	34	Brass
396-0409	12.70	12.70	-	60.5	Steel
145-7125	15.88	15.88	-	50.8	Steel
5E-6102	15.88	15.88	-	60	Steel
6P-8855	15.88	15.88	-	76.2	Steel
254-3859	15.88	9.52	-	78.7	Steel
232-0493	25.40	15.88	-	104	Steel
20-0392	38.10	25.40	-	102.5	Steel
260-9239	50.80	50.80	-	127	Steel
369-6865	6.35	12.70	17.5	86.4	Steel
421-6188	9.52	9.52	-	60	Steel

WEO Plug-In STOR



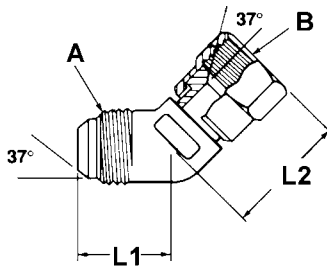
Part Number	Adapter Port Size	Thread Size	HEX Size	Length (L)	Material	STOR Class
500-8848	-6	9/16 - 18	24	41	Steel	Heavy Duty
500-8849	-8	3/4 - 16	28	43	Steel	Heavy Duty
500-8850	-12	1-1/16 - 12	36	55	Steel	Light Duty
529-7517	-12	1-1/16 - 12	41	59	Steel	Heavy Duty

37° Flare Bulkhead 45° Elbow



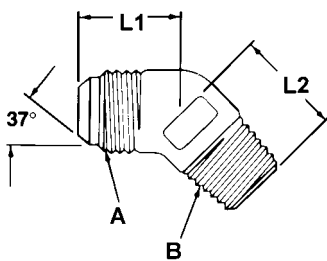
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
7K-6462	7/16 - 20	-4	7/16 - 20	-4	18.3	38.9	Steel
2P-1325	3/4 - 16	-8	3/4 - 16	-8	24.9	49.3	Steel
5P-8113	7/8 - 14	-10	7/8 - 14	-10	28.2	55.1	Steel
5P-4968	1 1/16 - 12	-12	1 1/16 - 12	-12	32.5	62	Steel
434-5512	1 5/16 - 12	-16	1 5/16 - 12	-16	37.8	65	Steel

37° Flare 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

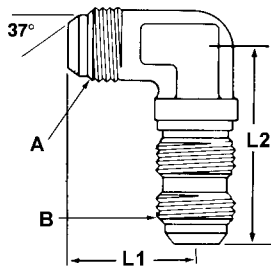
37° Flare Male / NPTF Male 45° Elbow



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
4W-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
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	1E1541A
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

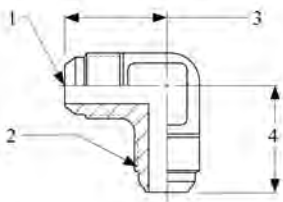
Elbow Adapters

37° Flare Bulkhead 90° Elbow



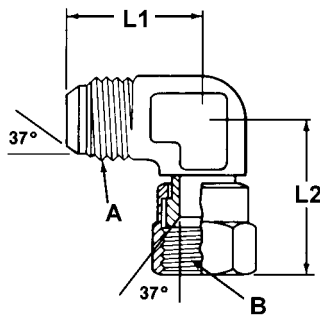
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
2P-7216	7/16 - 20	-4	7/16 - 20	-4	24.6	40.4	Steel
268-1524	7/16 - 20	-4	7/16 - 20	-4	24.6	52.4	Steel
5P-2647	1/2 - 20	-5	1/2 - 20	-5	26.9	43.7	Steel
2P-7215	9/16 - 18	-6	9/16 - 18	-6	27.7	46	Steel
2P-2204	3/4 - 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
6V-1547	1 5/16 - 12	-16	1 5/8 - 12	-20	49.3	105	Steel
8T-0575	1 5/8 - 12	-20	1 5/8 - 12	-20	55.1	79.2	Steel

37° Flare Male 90° Elbow



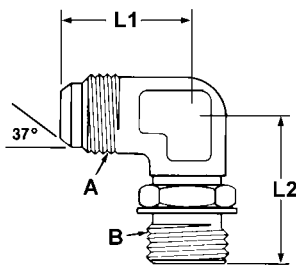
Part Number	End 1		End 2		Length 3	Length 4	Material
	Thread	Dash Size	Thread	Dash Size			
067-6495	7/16 - 20	-4	7/16 - 20	-4	22.6	22.6	Steel
196-8173	7/16 - 20	-4	9/16 - 18	-6	51.8	26.9	Steel
061-8257	9/16 - 18	-6	9/16 - 18	-6	26.9	26.9	Steel
493-6745	3/4 - 16	-8	7/16 - 20	-4	31.8	28.5	Steel
5P-6399	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

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
371-7160	9/16 - 18	-6	9/16 - 18	-6	26.9	31.8	SST
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-8781	1 5/8 - 12	-20	1 5/8 - 12	-20	52.32	39.37	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

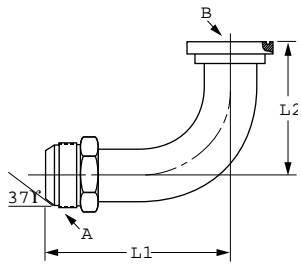
37° Flare Male / ISO 1179 BSPP Flat Face Male 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
217-6172	7/16 - 20	-4	1/8 - 28		22.6	26.2	Steel
2U-0943	7/16 - 20	-4	1/8 - 28		22.6	26	Steel
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
276-5542	1 5/8 - 12	-20	1 - 11		55	58	Steel

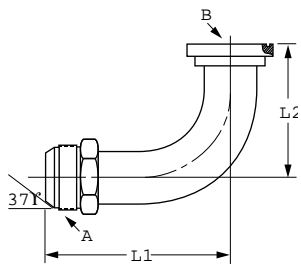
Elbow Adapters

37° Flare Male / SAE Code 61 Flange Head 90° Elbow



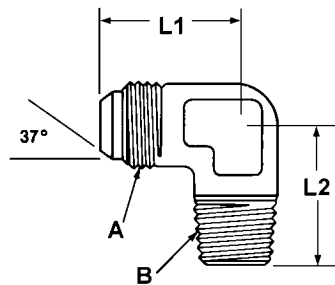
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
145-5504	1 5/16 - 12	-16	-16	-16	71	60	Steel
077-4460	1 5/16 - 12	-16	-16	-16	86.64	60.33	Steel
213-7430	1 5/8 - 12	-20	-20	-20	52.3	66.5	Steel
508-5806	1 5/8 - 12	-20	-24	-24	101.1	79	Steel
108-4371	1 7/8 - 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
465-5420	2 1/2 - 12	-32	-32	-32	147.1	122.9	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	Thread	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 90° Elbow



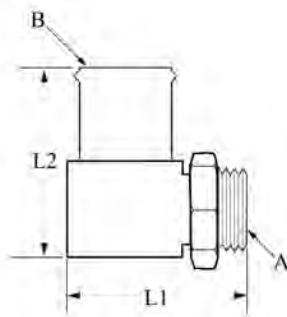
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
7K-3030	3/8 - 24	-3	1/8 - 27	-2	21.1	18.3	Steel
281-5863	7/16 - 20	-4	1/8 - 27	-2	22.6	19.8	SST
2N-1287	7/16 - 20	-4	1/8 - 27	-2	22.6	19.8	Steel
2U-4132	7/16 - 20	-4	1/8 - 27	-2	22.5	39.48	Steel
5P-4479	7/16 - 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
225-2693	9/16 - 18	-6	1/4 - 18	-4	26.4	42.06	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

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			
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
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	75.7	Steel
140-2319	3 - 12	-40	2 1/2 - 8	-40	86.1	90.7	Steel

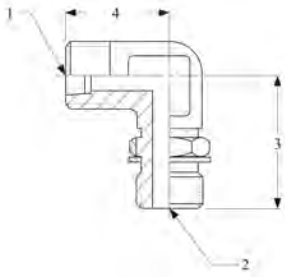
ISO 6149 Metric STOR Male / Hose Bead 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Hose ID (mm)	Dash Size				
300-9707	M14 x 1.5	12.7	-8		31.5	47.5	Steel
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
313-3493	M16 x 1.5	15.88	-10		40	40	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

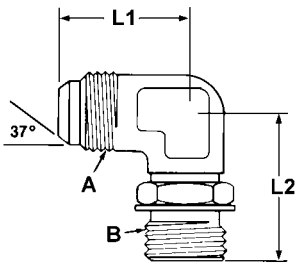
Elbow Adapters

ISO 6149 Metric STOR Male / ISO 8434-1 24° Cone Male 90° Elbow



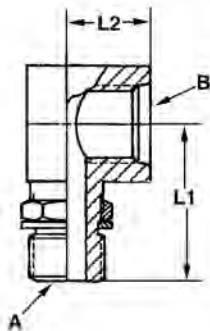
Part Number	End 1		End 2		Length 3	Length 4	Material
	Thread	Tube Dia. (mm)	Thread				
234-7198	M18 x 1.5	12	M14 x 1.5		37	24	Steel
234-7391	M30 x 2	22	M26 x 1.5		55	35	Steel

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				
472-4348	7/16 - 20	-4	M10 x 1		22.61	25.4	Steel
221-0175	7/16 - 20	-4	M12 x 1.5		24	31.6	Steel
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

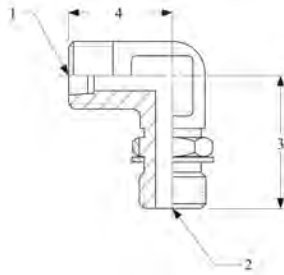
ISO 6149 Metric STOR Male / Port 90° Elbow



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
315-9831	M18 x 1.5		M18 x 1.5		44.2	26	Steel

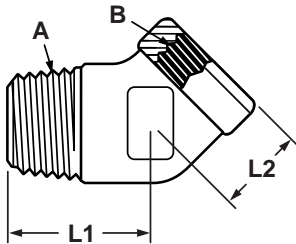
Elbow Adapters

ISO 8434-1 24° Cone Male / ISO 1179 BSPP Flat Face Male 90° Elbow



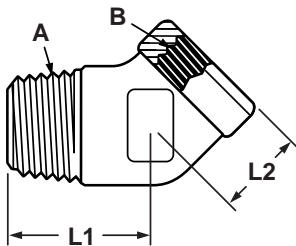
Series	Part Number	End 1		End 2		Length 3	Length 4	Material
		Thread	Tube Dia. (mm)	Thread				
L - Series (Light Duty)	395-1239	M14 x 1.5	8	1/4 - 19		32	23	Steel
	373-5665	M14 x 1.5	8	1/4 - 19		32	23	Steel
	373-5666	M16 x 1.5	10	1/4 - 19		27	22.5	Steel
	216-2310	M16 x 1.5	10	1/4 - 19		37	23.5	Steel
	384-2416	M18 x 1.5	12	3/8 - 19		28	19	Steel
	175-9586	M18 x 1.5	12	3/8 - 19		37	24.5	Steel
	175-9522	M22 x 1.5	15	1/4 - 19		37	28	Steel
	234-7431	M22 x 1.5	15	3/8 - 19		43	30	Steel
	234-7436	M22 x 1.5	15	3/8 - 19		84	30	Steel
	175-9509	M26 x 1.5	18	1/4 - 19		49	31	Steel
S - Series (Heavy Duty)	175-9519	M16 x 1.5	8	1/4 - 19		37	24	Steel
	175-9563	M20 x 1.5	12	3/8 - 19		40.5	29	Steel
	234-7416	M24 x 1.5	16	1/4 - 19		44	33	Steel
	234-7422	M24 x 1.5	16	1/2 - 14		50	33	Steel
	231-9828	M30 x 2	20	3/4 - 14		39.7	36.5	Steel
	175-9518	M42 x 2	30	1 - 11		59.5	49	Steel

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

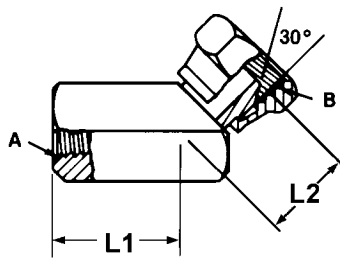
SAE NPTF Male / Port 45° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
7D-2746	1/8 - 27	-2	1/8 - 27	-2	12.7	9.6	Brass
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

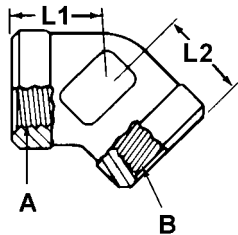
Elbow Adapters

NPTF Port / NPSM Swivel 45° Elbow



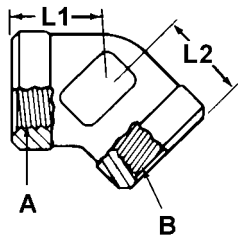
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
4D-6585	1/4 - 18	-4	1/4 - 18	-4	23.1	18.3	Steel
4D-2016	3/8 - 18	-6	3/8 - 18	-6	26.2	20.8	Steel
2H-3938	3/4 - 14	-12	3/4 - 14	-12	31.8	25.4	Steel

SAE NPTF Port / NPTF Port 45° Elbow



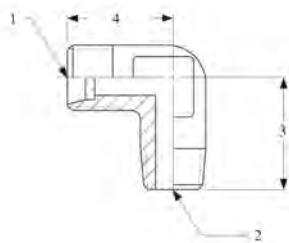
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
3B-6493	1/8 - 27	-2	1/8 - 27	-2	12.7	12.7	Steel
5P-4818	1/4 - 18	-4	1/4 - 18	-4	17.5	17.5	Steel
5P-8934	3/8 - 18	-6	3/8 - 18	-6	19	19	Steel
211-8759	3/4 - 14	-12	3/4 - 14	-12	25.4	25.4	SST
341-0082	1 - 11.5	-16	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

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

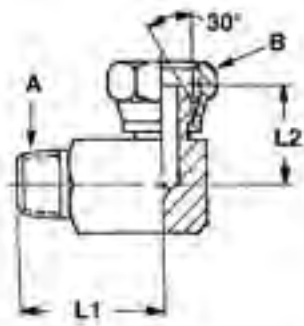
NPTF Male / SAE J514 24° Flareless Male 90° Elbow



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-6072	9/16 - 18	-6	1/4 - 18	-4	27.7	26.7	Steel
3J-7706	3/4 - 16	-8	1/4 - 18	-4	31	31.8	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

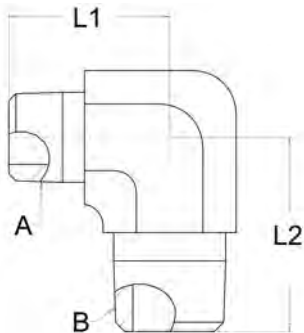
Elbow Adapters

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

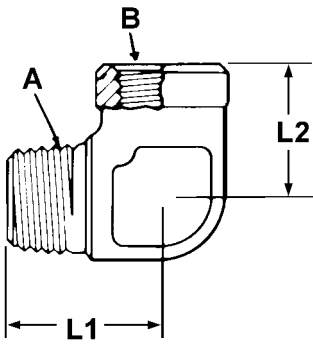
SAE NPTF Male / Male 90° Elbow



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
2U-4291	3/8 - 18	-6	3/8 - 18	-6	27.7	27.7	Brass
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

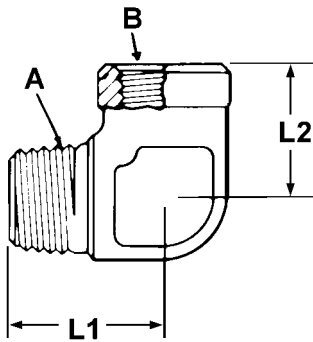
ASME NPTF Male / Port 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
454-6793	1/8 - 27	-2	1/8 - 27	-2	14.5	8.6	Brass
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
205-0667	1/2 - 14	-8	1/2 - 14	-8	45	28	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
9F-2535	2 1/2 - 8	-40	2 1/2 - 8	-40	96.8	42.8	Iron
192-1264	4 - 8	-64	4 - 8	-64	144	97	Iron

Elbow Adapters

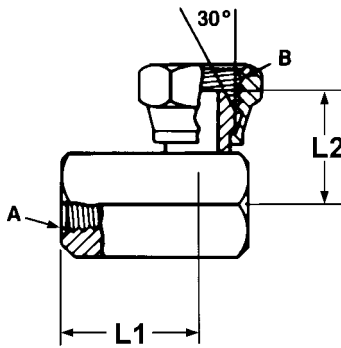
SAE NPTF Male / Port 90° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
0A-2833	1/8 - 27	-2	1/8 - 27	-2	16.76	12.19	Brass
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
6L-5075	1/4 - 18	-4	1/4 - 18	-4	26.9	11.18	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
345-9880	3/4 - 14	-12	3/4 - 14	-12	40.39	34.54	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
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

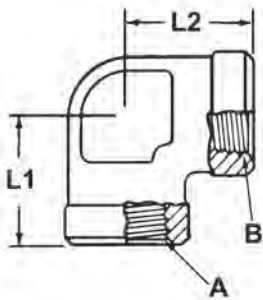
Elbow Adapters

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

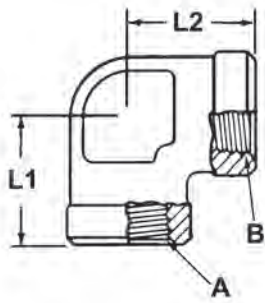
ASME NPTF Port / Port 90° Elbow



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
287-7286	2 1/2 - 8	-40	2 1/2 - 8	-40	68.6	68.6	SST
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
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

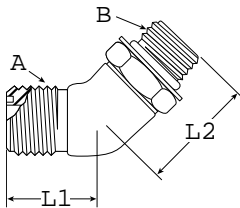
Elbow Adapters

SAE NPTF Port / Port 90° Elbow



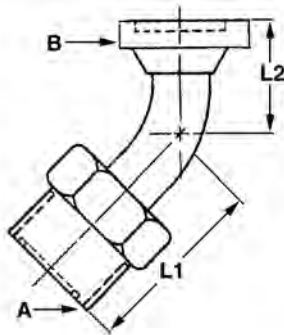
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
3B-6769	1/8 - 27	-2	1/8 - 27	-2	13.97	13.97	Brass
8B-4884	1/8 - 27	-2	1/8 - 27	-2	16.8	16.8	Steel
3B-6767	1/4 - 18	-4	1/4 - 18	-4	19.81	19.81	Brass
003-8747	1/4 - 18	-4	1/4 - 18	-4	22.4	22.4	Steel
008-2649	3/8 - 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

SAE J1453 ORFS Male / ISO 1179 BSPP Flat End Male 45° Elbow



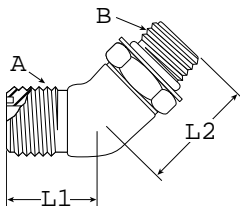
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
225-8629	13/16 - 16	-8	3/4 - 14		25	44	Steel
459-0585	1 7/16 - 12	-16	3/4 - 14		30	51	Steel

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	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

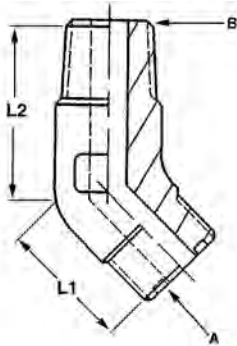
SAE J1453 ORFS Male / ISO 6149 Metric STOR Male 45° Elbow



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

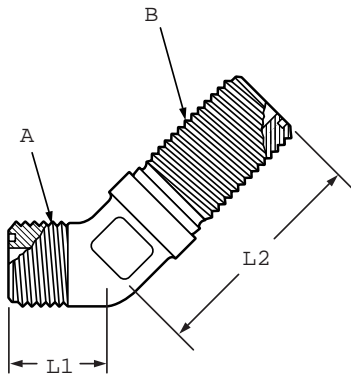
Elbow Adapters

SAE J1453 ORFS Male / NPTF Male 45° Elbow



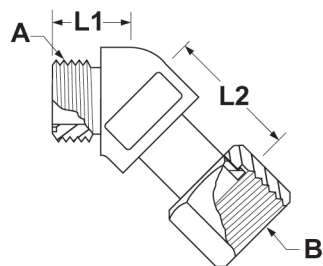
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
184-6893	9/16 - 18	-4	1/8 - 27	-2	16	18.28	Steel
511-7746	11/16 - 16	-6	1/4 - 18	-4	18.8	21.8	Steel
7R-6774	11/16 - 16	-6	1/4 - 18	-4	18.8	23.62	Steel
103-7268	11/16 - 16	-6	3/8 - 18	-6	19	26.4	Steel
103-7268	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
106-7650	1 3/16 - 12	-12	3/4 - 14	-12	25.9	31.2	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 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
442-3311	1 7/16 - 12	-16	1 7/16 - 12	-16	30	65.3	Steel
442-3312	1 11/16 - 12	-20	1 11/16 - 12	-20	32	67	Steel

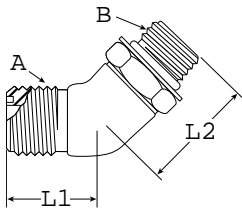
SAE J1453 ORFS Male / Swivel 45° Elbow



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

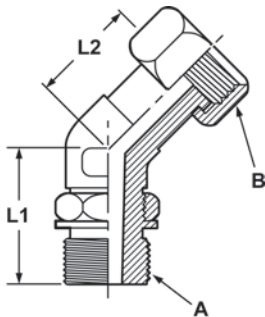
Elbow Adapters

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
195-0106	1 3/16 - 12	-12	1 5/16 - 12	-16	25.9	97	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
464-4938	1 7/16 - 12	-16	1 5/8 - 12	-20	53.6	32	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

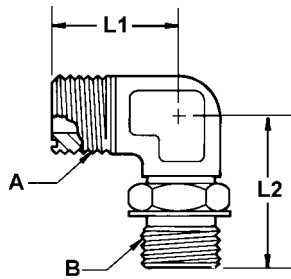
SAE J1453 ORFS Swivel / SAE J1926 STOR Male 45° Elbow



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

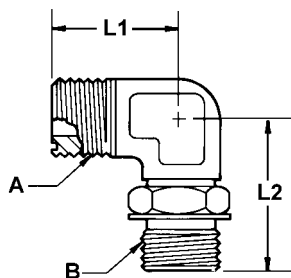
Elbow Adapters

SAE J1453 ORFS Male / ISO 1179 BSPP Flat Face Male 90° Elbow



Part Number	End A		End B	L1 Length	L2 Length	Material
	Thread	Dash Size	Thread			
207-7224	9/16 - 18	-4	1/8 - 28	21.5	30	Steel
304-8033	9/16 - 18	-4	1/8 - 28	21.5	30	Steel
313-3479	9/16 - 18	-4	1/4 - 19	23.5	35	Steel
463-9932	9/16 - 18	-4	3/8 - 19	24.5	38	Steel
196-6538	11/16 - 16	-6	1/8 - 28	25	35	Steel
451-0472	11/16 - 16	-6	1/4 - 19	25	36	Steel
351-5235	11/16 - 16	-6	3/8 - 19	27	67	Steel
175-9483	11/16 - 16	-6	3/8 - 19	26.5	38	Steel
207-7225	11/16 - 16	-6	3/8 - 19	26.5	38	Steel
421-6176	11/16 - 16	-6	3/8 - 19	26.5	38	Steel
504-5534	11/16 - 16	-6	3/8 - 19	27	38	Steel
293-5203	11/16 - 16	-6	1/2 - 14	29.5	48	Steel
293-5204	11/16 - 16	-6	1/2 - 14	25	48.5	Steel
175-9479	13/16 - 16	-8	1/4 - 19	28	35	Steel
293-7312	13/16 - 16	-8	3/8 - 19	28	40.6	Steel
373-6667	13/16 - 16	-8	1/2 - 14	31	48	Steel
323-4809	13/16 - 16	-8	1/2 - 14	31	82	Steel
207-7226	1 - 14	-10	3/8 - 19	33.5	40.5	Steel
207-7223	1 - 14	-10	1/2 - 14	33.5	48.5	Steel
345-3914	1 - 14	-10	1/2 - 14	33.5	50	Steel
211-9537	1 - 14	-10	3/4 - 14	33.5	51.5	Steel
351-5211	1 3/16 - 12	-12	1/2 - 14	37.5	49	Steel
216-2203	1 3/16 - 12	-12	1/2 - 14	37.3	49.5	Steel
216-9409	1 3/16 - 12	-12	3/4 - 14	37.3	51.4	Steel
293-0789	1 3/16 - 12	-12	3/4 - 14	37.3	46.7	Steel
293-0789	1 3/16 - 12	-12	3/4 - 14	37.5	51.5	Steel
304-8040	1 3/16 - 12	-12	1 - 11	41.5	58	Steel
215-8849	1 7/16 - 12	-16	3/4 - 14	38	58	Steel
175-9477	1 7/16 - 12	-16	1 - 11	42	58	Steel
304-7194	1 7/16 - 12	-16	1 - 11	41.7	58	Steel
293-5833	1 7/16 - 12	-16	1 1/4 - 11	45	60.5	Steel
293-2252	1 11/16 - 12	-20	1 1/4 - 11	45	60	Steel
451-0449	1 11/16 - 12	-20	1 1/2 - 11	49	64.5	Steel
487-5070	2 - 12	-24	1 1/2 - 11	49	64.5	Steel

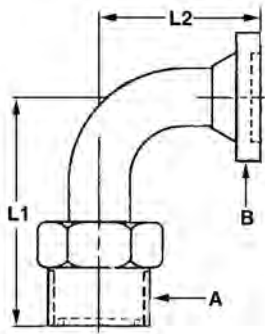
SAE J1453 ORFS Male / JIS B2351 BSPP STOR Male 90° Elbow



Part Number	End A		End B	L1 Length	L2 Length	Material
	Thread	Dash Size	Thread			
175-9480	9/16 - 18	-4	1/4 - 19	23.5	35	Steel
183-9044	9/16 - 18	-4	1/4 - 19	21	26	Steel
200-4635	9/16 - 18	-4	1/4 - 19	26	37	Steel
175-4792	13/16 - 16	-8	1/2 - 14	35.5	35.5	Steel
199-0543	13/16 - 16	-8	1/2 - 14	28	46	Steel
199-0546	13/16 - 16	-8	1/2 - 14	28	64	Steel
099-7551	1 - 14	-10	3/4 - 14	37	35	Steel
096-4920	1 3/16 - 12	-12	3/4 - 14	37	55	Steel

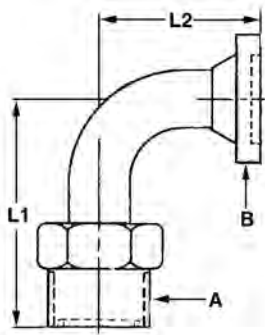
Elbow Adapters

SAE J1453 ORFS Male / SAE J518 Code 61 Flange Head 90° Elbow



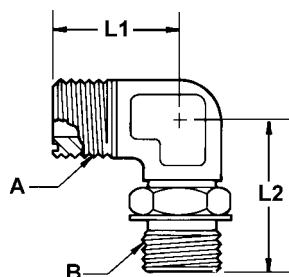
Part Number	End A		End B	L1 Length	L2 Length	Material
	Thread	Dash Size	Dash Size			
351-5238	13/16 - 16	-8	-8	49	54	Steel
151-8866	1 3/16 - 12	-12	-12	50	25	Steel
397-9744	1 3/16 - 12	-12	-12	43	42	Steel
287-7339	1 3/16 - 12	-12	-12	49.5	46	Steel
347-4415	1 3/16 - 12	-12	-12	67.3	54	Steel
480-2998	1 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
113-3353	2 - 12	-24	-24	48.8	79.2	Steel
395-5439	2 - 12	-24	-24	59.18	80.81	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
127-7055	1 3/16 - 12	-12	-12	65.2	54.1	Steel
351-5239	1 3/16 - 12	-12	-12	59	54	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
244-6348	1 7/16 - 12	-16	-16	71	71	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
371-7239	1 7/16 - 12	-16	-20	128	89.9	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

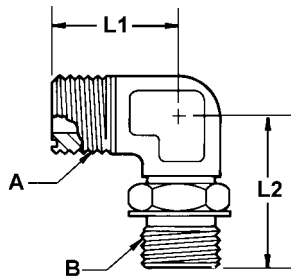
SAE J1453 ORFS Male / ISO 9974 Metric Flat Face Male 90° Elbow



Part Number	End A		End B	L1 Length	L2 Length	Material
	Thread	Dash Size	Thread			
123-8829	9/16 - 18	-4	M10 x 1	21.5	31.4	Steel
351-5217	9/16 - 18	-4	M14 x 1.5	23.5	37	Steel
502-3076	11/16 - 16	-6	M12 x 1.5	35.5	25	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
175-9454	13/16 - 16	-8	M18 x 1.5	28	40.5	Steel

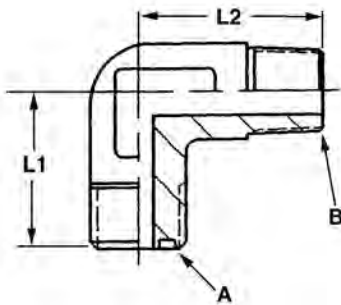
Elbow Adapters

SAE J1453 ORFS Male / ISO 6149 Metric STOR Male 90° Elbow



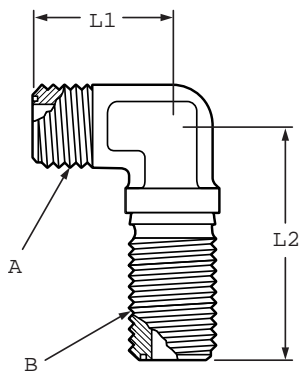
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
228-6049	9/16 - 18	-4	M10 x 1		21.5	29.5	Steel
295-4107	9/16 - 18	-4	M12 x 1.5		21.5	33	Steel
227-5714	11/16 - 16	-6	M12 x 1.5		25	35.5	Steel
457-2130	11/16 - 16	-6	M16 x 1.5		25	37.5	SST
459-0782	11/16 - 16	-6	M16 x 1.5		25	37.5	SST
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
384-9230	13/16 - 16	-8	M27 x 2		34	55.5	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
125-9717	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 / NPTF Male 90° Elbow



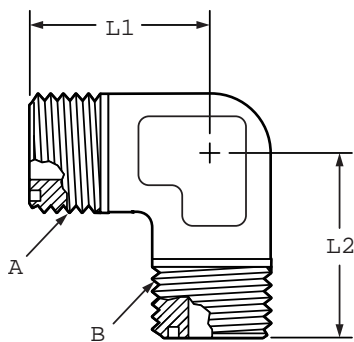
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
377-9577	9/16 - 18	-4	1/8 - 27	-2	21.5	19.8	Brass
7X-0492	9/16 - 18	-4	1/8 - 27	-2	21.5	19.8	Steel
377-9563	9/16 - 18	-4	1/4 - 18	-4	23.3	27.4	Brass
7X-5331	9/16 - 18	-4	1/4 - 18	-4	23.3	27.4	Steel
2T-2305	11/16 - 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
086-8503	1 3/16 - 12	-12	3/4 - 14	-12	37.33	41.91	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 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
358-3490	9/16 - 18	-4	9/16 - 18	-4	22.6	47	Steel
221-4733	11/16 - 16	-6	11/16 - 16	-6	26	52	SST
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
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

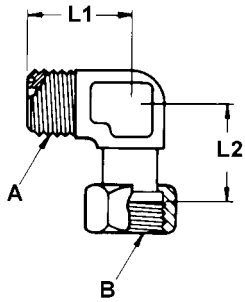
SAE J1453 ORFS Male / Male 90° Elbow



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
223-7882	13/16 - 16	-8	13/16 - 16	-8	28	28	SST
6V-9808	13/16 - 16	-8	13/16 - 16	-8	28	28	Steel
229-5193	1 - 14	-10	1 - 14	-10	33.5	33.5	SST
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

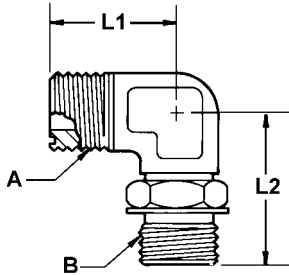
Elbow Adapters

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
223-7881	13/16 - 16	-8	13/16 - 16	-8	28	37.9	SST
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 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
177-8450	9/16 - 18	-4	3/4 - 16	-8	23.7	40.6	Steel
6V-9200	11/16 - 16	-6	7/16 - 20	-4	25	35	Steel
169-1229	11/16 - 16	-6	7/16 - 20	-4	25	55	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
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
187-6009	13/16 - 16	-8	3/4 - 16	-8	28	50.6	Steel

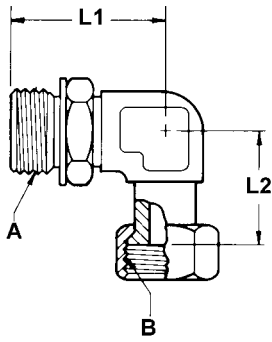
Elbow Adapters

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			
8T-1686	13/16 - 16	-8	3/4 - 16	-8	28	65.5	Steel
449-1449	13/16 - 16	-8	3/4 - 16	-8	27.9	74.9	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
289-7249	13/16 - 16	-8	7/8 - 14	-10	30.8	146.1	Steel
426-4083	13/16 - 16	-8	1 1/16 - 12	-12	34	55	SST
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
485-1325	1 - 14	-10	7/8 - 14	-10	33.27	89.15	Steel
194-9866	1 - 14	-10	7/8 - 14	-10	33.3	196.5	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
286-6469	1 3/16 - 12	-12	1 5/16 - 12	-16	37.3	111	Steel
321-8661	1 3/16 - 12	-12	1 5/16 - 12	-16	37.3	100	Steel
5I-4198	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
338-6237	1 7/16 - 12	-16	7/8 - 14	-10	41.7	144.9	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
464-2018	1 11/16 - 12	-20	1 5/8 - 12	-20	62.23	44.7	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
271-5304	2 - 12	-24	1 5/8 - 12	-20	49	139	Steel
8T-1682	2 - 12	-24	1 7/8 - 12	-24	49	66	Steel

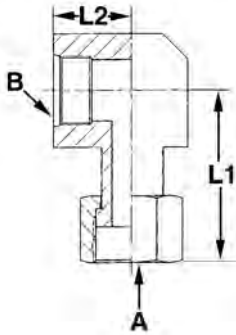
Elbow Adapters

SAE J1453 ORFS Swivel / SAE J1926 STOR Male 90° Elbow



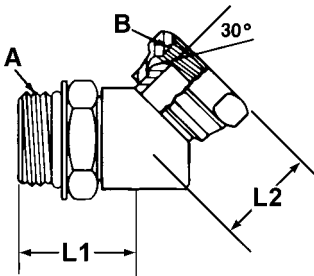
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
249-0008	7/16 - 20	-4	11/16 - 16	-6	36.8	29.3	Steel
8T-0788	9/16 - 18	-6	11/16 - 16	-6	37	29	Steel
9X-2091	3/4 - 16	-8	11/16 - 16	-6	40.5	35	Steel
424-8479	3/4 - 16	-8	13/16 - 16	-8	40.6	34	Steel
8T-0249	3/4 - 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



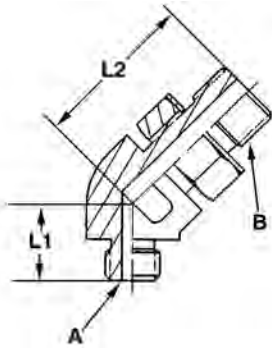
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
213-3745	9/16 - 18	-4	9/16 - 18	-6	31.5	28	Steel
396-0400	1 3/16 - 12	-12	1 1/16 - 12	-12	53	30.7	Steel
9X-2538	1 3/16 - 12	-12	1 1/16 - 12	-12	53.3	30.7	Steel

SAE J1926 STOR Male / NPSM Swivel 45° Elbow



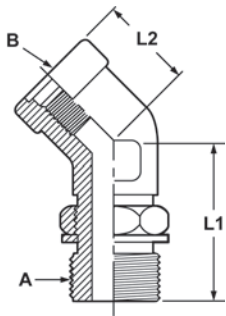
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
5P-7915	7/16 - 20	-4	1/4 - 18	-4	25.4	18.3	Steel
5P-7916	9/16 - 18	-6	1/4 - 18	-4	27	17.5	Steel
5P-7917	9/16 - 18	-6	3/8 - 18	-6	26.9	20.8	Steel
6V-0468	3/4 - 16	-8	3/8 - 18	-6	28.4	19	Steel
5P-7918	3/4 - 16	-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 / 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
168-2300	1 7/8 - 12	-24	1 7/8 - 12	-24	40	53.6	Steel

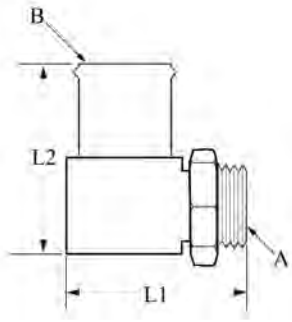
SAE J1926 STOR Male / Port 45° Elbow



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

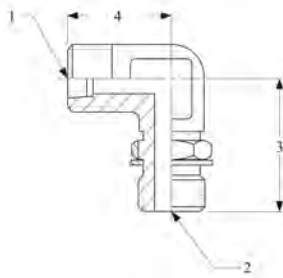
Elbow Adapters

SAE J1926 STOR Male / Hose Bead 90° Elbow



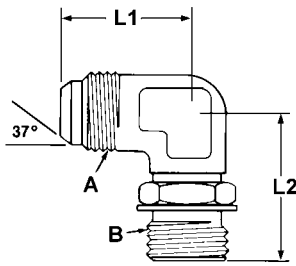
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Hose ID (mm)	Dash Size			
341-0098	3/8 - 24	-3	6.35	-4	23.7	43.66	Steel
6V-1355	7/16 - 20	-4	6.35	-4	26.2	44.5	Steel
3E-4091	7/16 - 20	-4	9.52	-6	26.2	44.5	Steel
337-8788	7/16 - 20	-4	12.7	-8	26.2	44.5	Steel
335-4003	9/16 - 18	-6	6.35	-4	31.8	46	Steel
448-8976	9/16 - 18	-6	9.52	-6	31.8	46	SST
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
9U-6997	7/8 - 14	-10	25.4	-16	40.89	44.96	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
214-5136	1 5/16 - 12	-16	31.75	-20	52	54	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
297-7916	1 5/8 - 12	-20	38.1	-24	56.9	59.5	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

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 Male / 37° Flare Male 90° Elbow



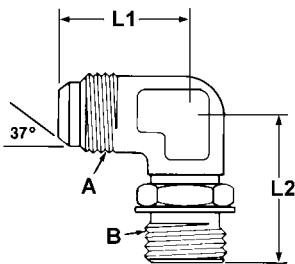
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
205-1581	7/16 - 20	-4	3/8 - 24	-3	22.6	23.4	Steel
171-6469	7/16 - 20	-4	7/16 - 20	-4	22.6	26.2	SST
183-6803	7/16 - 20	-4	7/16 - 20	-4	25.4	43.94	SST
030-7946	7/16 - 20	-4	7/16 - 20	-4	22.6	26.2	Steel
5P-3426	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
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
250-1497	7/8 - 14	-10	7/8 - 14	-10	36.8	43.2	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

Elbow Adapters

SAE J1926 STOR Male / 37° Flare Male 90° Elbow (Cont'd.)

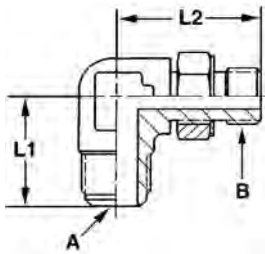
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
005-0658	7/8 - 14	-10	1 1/16 - 12	-12	39.2	49.3	Steel
030-7950	1 1/16 - 12	-12	1 1/16 - 12	-12	42.2	49.3	Steel
034-2136	1 1/16 - 12	-12	1 1/16 - 12	-12	41.7	64	Steel
5P-3411	1 1/16 - 12	-12	1 1/16 - 12	-12	42.16	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
516-5234	2 1/2 - 12	-32	2 1/2 - 12	-32	71.3	73.4	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
128-7472	9/16 - 18	-6	9/16 - 18	-6	26.9	31.8	Steel
122-5273	3/4 - 16	-8	3/4 - 16	-8	31.8	36.8	Steel

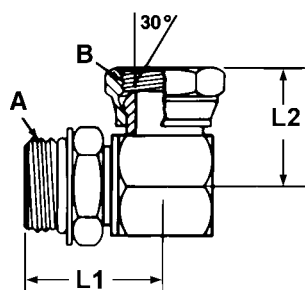
SAE J1926 STOR Male / SAE J512 45° Flare Male 90° Elbow



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

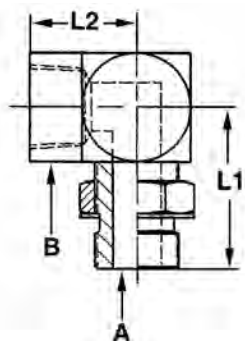
Elbow Adapters

SAE J1926 STOR Male / NPSM Swivel 90° Elbow



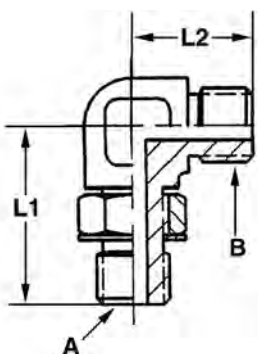
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
5P-7981	7/16 - 20	-4	1/4 - 18	-4	28.2	19.8	Steel
5P-7982	9/16 - 18	-6	1/4 - 18	-4	33	22.9	Steel
030-6817	9/16 - 18	-6	3/8 - 18	-6	31.8	22.9	Steel
030-6818	3/4 - 16	-8	3/8 - 18	-6	38.1	23.9	Steel
6V-8549	3/4 - 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° Elbo



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
194-3481	3/4 - 16	-8	3/8 - 18	-6	37.3	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

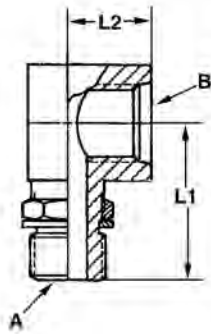
SAE J1926 STOR Male / Male 90° Elbow



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

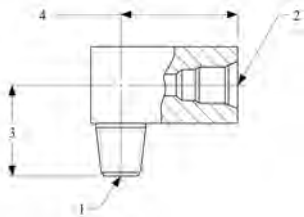
Elbow Adapters

SAE J1926 STOR Male / Port 90° Elbow



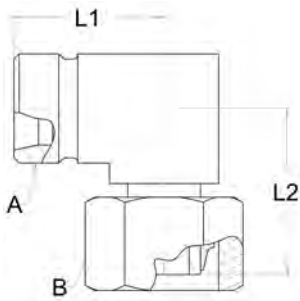
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
124-0396	3/8 - 24	-3	3/8 - 24	-3	26.2	16.5	Steel
151-5145	7/16 - 20	-4	7/16 - 20	-4	31.8	21	Steel
253-5327	7/16 - 20	-4	7/16 - 20	-4	50	23.1	Steel
135-9941	7/16 - 20	-4	9/16 - 18	-6	29	21	Steel
6V-3305	1/2 - 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
2U-6317	9/16 - 18	-6	9/16 - 18	-6	36	30	Steel
445-8760	9/16 - 18	-6	9/16 - 18	-6	40	28	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
8T-3491	1 1/16 - 12	-12	1 1/16 - 12	-12	50.8	33	Steel
277-1144	1 1/16 - 12	-12	1 1/16 - 12	-12	55	27	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 Port / NPTF Male 90° Elbow



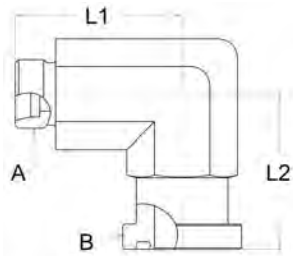
Part Number	End 1		End 2		Length 3	Length 4	Material
	Thread	Dash Size	Thread	Dash Size			
6V-9330	1/8 - 27	-2	9/16 - 18	-6	22.2	25	Steel
250-2573	3/8 - 18	-6	9/16 - 18	-6	31	25.9	Steel

ISO 8434-1 24° Cone Male / Swivel 90° Elbow



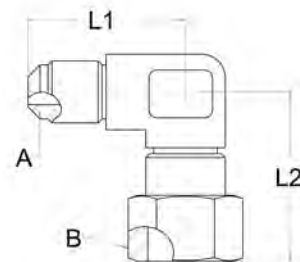
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Tube Dia. (mm)	Thread	Tube Dia. (mm)			
330-2610	M16 x 1.5	10	M16 x 1.5	10	26	22.5	Steel
468-7743	M16 x 1.5	10	M16 x 1.5	10	22	29	Steel
487-4394	M18 x 1.5	12	M18 x 1.5	12	24	29.5	Steel
474-9218	M18 x 1.5	12	M18 x 1.5	12	24	29.5	Steel
327-4383	M20 x 1.5	12	M20 x 1.5	12	28	32.4	Steel
487-5651	M24 x 1.5	16	M24 x 1.5	16	33	37.5	Steel
248-6002	M24 x 1.5	16	M24 x 1.5	16	33	37.5	Steel
145-6284	M24 x 1.5	16	M24 x 1.5	16	33	33	Steel
487-3162	M26 x 1.5	18	M26 x 1.5	18	31	35.5	Steel

ISO 8434-1 24° Cone Male / SAE Code 62 Flange Head 90° Elbow



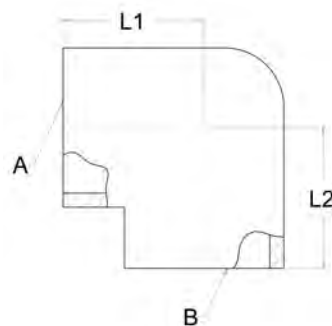
Part Number	End A		End B	L1 Length	L2 Length	Material
	Thread	Tube Dia. (mm)	Dash Size			
234-7413	M24 x 1.5	16	-12	58	54	Steel
234-7412	M36 x 2	25	-12	62	54	Steel
175-9510	M42 x 2	30	-16	73	70	Steel

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

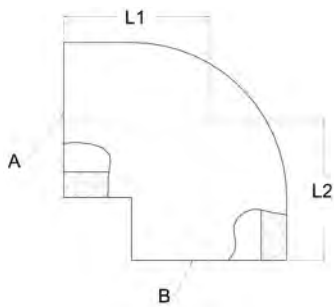
SAE J512 45° Inverted Flare Port / Port 90° Elbow



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
4H-6138	1/2 - 20	-5	1/2 - 20	-5	14.3	14.3	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

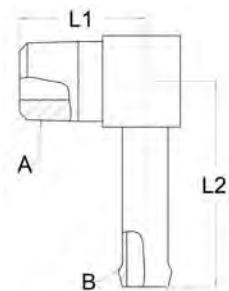
Elbow Adapters

ISO 1179 BSPP Flat Face Male / Port 90° Elbow



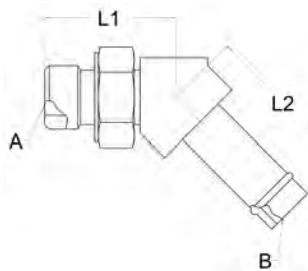
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Thread	Thread	Thread			
387-2727	1/4 - 19	1/4 - 19	1/4 - 19	1/4 - 19	36.5	30.5	Steel
417-2760	1/4 - 19	1/4 - 19	1/4 - 19	1/4 - 19	36	30	Steel
147-2444	3/4 - 14	3/4 - 14	3/4 - 14	3/4 - 14	30	29	Brass

BSPT Male / Hose Bead 90° Elbow



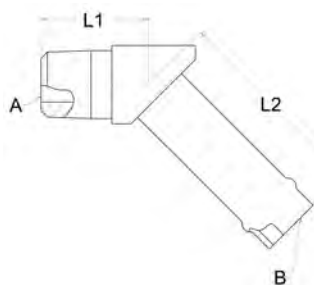
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Thread	Hose ID (mm)	Hose ID (mm)			
269-0986	1/4 - 19	1/4 - 19	7.94	7.94	21.8	35.6	Brass
217-5469	3/8 - 19	3/8 - 19	15	15	25	33	Steel

ISO 6149 Metric STOR Male / Hose Bead 45° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Thread	Hose ID (mm)	Dash Size			
332-8546	M16 x 1.5	M16 x 1.5	12.7	-8	33	40.5	Steel
315-9856	M16 x 1.5	M16 x 1.5	15.88	-10	40	41.1	Steel
459-0698	M18 x 1.5	M18 x 1.5	15.88	-10	33	51.9	Steel

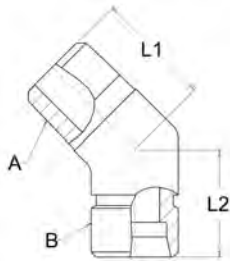
NPTF Male / Hose Bead 45° Elbow



Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Hose ID (mm)	Dash Size			
6V-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

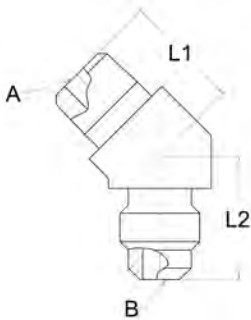
Elbow Adapters

NPTF Male / SAE J514 24° Flareless Male 45° Elbow



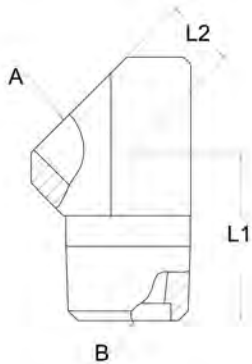
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
5P-6087	1/4 - 18	-4	9/16 - 18	-6	21.8	21.1	Steel
5P-6086	3/8 - 18	-6	3/4 - 16	-8	24.1	24.9	Steel
5P-6085	1/2 - 14	-8	7/8 - 14	-10	29.7	27.4	Steel

NPTF Male / SAE J512 45° Flare Male 45° Elbow



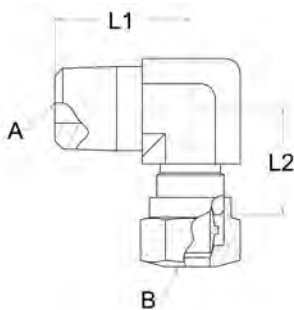
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
3K-3982	1/8 - 27	-2	7/16 - 20	-4	16.3	17	Brass
5P-2517	1/4 - 18	-4	1/2 - 20	-5	20.57	19.05	Brass

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-7719	1/8 - 27	-2	3/8 - 24	-3	14	6.4	Brass
9S-7720	1/8 - 27	-2	7/16 - 24	-4	14.7	6.9	Brass
9S-7721	1/8 - 27	-2	1/2 - 20	-5	14.2	8.6	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

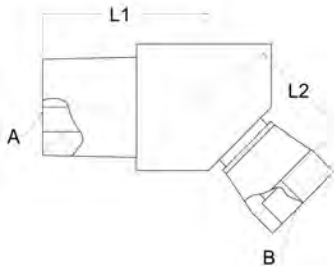
NPTF Male / SAE J246 Compression Swivel 90° Elbow



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

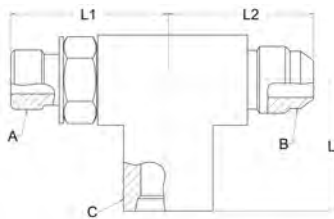
Elbow Adapters

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
004-4977	1 1/4 - 11.5	-20	1 1/4 - 11.5	-20	44.4	31.2	Steel
6L-5955	1 1/2 - 11.5	-24	1 1/2 - 11.5	-24	49.3	33.8	Steel

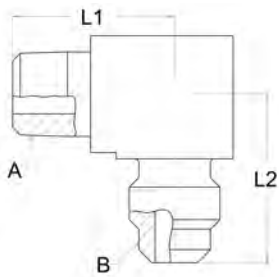
NPTF Male / Hose Bead 90° Elbow



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
379-4368	3/8 - 18	-6	14.29	N/A	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
068-3255	1/2 - 14	-8	19.05	-12	39.7	52.4	Steel
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
008-7245	3/4 - 14	-12	19.05	-12	36.3	39.7	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

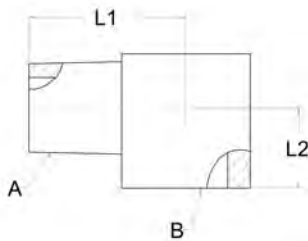
Elbow Adapters

NPTF Male / SAE J512 45° Flare Male 90° Elbow



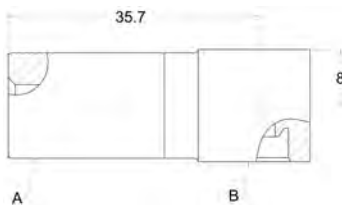
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Thread	Dash Size			
3B-9406	1/8 - 27	-2	7/16 - 20	-4	19.8	20.6	Brass
472-8953	1/8 - 27	-2	7/16 - 20	-4	20.5	20	Steel
3B-9111	1/8 - 27	-2	1/2 - 20	-5	20	23	Brass
3K-3415	1/4 - 18	-4	7/16 - 20	-4	23.9	23.1	Brass
472-8962	1/4 - 18	-4	7/16 - 20	-4	23.9	22.4	Steel
3B-9407	1/4 - 18	-4	1/2 - 20	-5	24	24	Brass
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
212-7297	1/2 - 14	-8	5/8 - 18	-6	32.26	29.21	Brass
7S-7369	1/2 - 14	-8	7/8 - 14	-10	35.05	35.81	Brass

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
2Y-9121	1/2 - 14	-8	3/4 - 18	-8	28.5	16.8	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
1N-5925	1/2 - 14	-8	1 1/16 - 16	-12	35	19	Brass

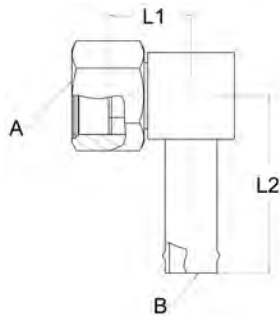
NPTF Port / SAE J512 45° Inverted Flare Port 90° Elbow



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

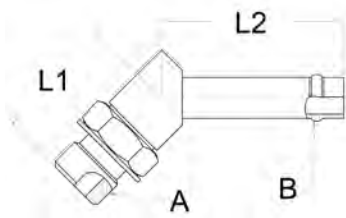
Elbow Adapters

SAE J1453 ORFS Swivel / Hose Bead 90° Elbow



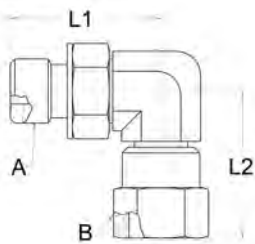
Part Number	End A		End B		L1 Length	L2 Length	Material
	Thread	Dash Size	Hose ID (mm)	Dash Size			
287-7257	11/16 - 16	-6	12.7	-8	29.3	40.5	Steel
451-0388	1 - 14	-10	19.05	-12	41	54.7	Steel
268-1650	1 3/16 - 12	-12	19.05	-12	37.7	65	Steel
451-0356	1 3/16 - 12	-12	19.05	-12	30.2	65	Steel

SAE 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

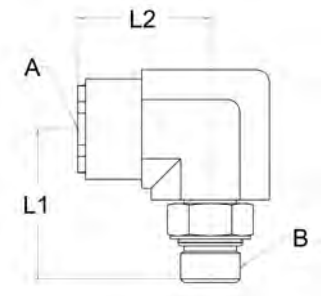
SAE J1926 STOR Male / 37° Flare Swivel 90° Elbow



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

Elbow Adapters

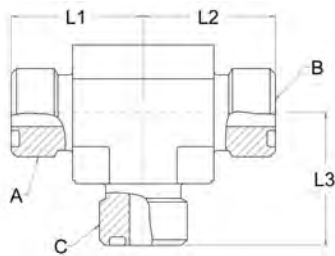
WEO Plug-In STOR Adjustable 90° Elbow



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

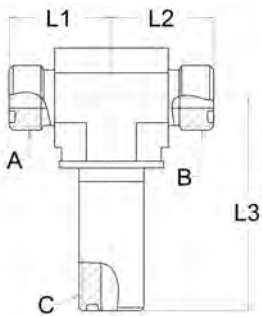
Tee Adapters

Male ORFS / Male ORFS / Male ORFS - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
6V-8787	9/16-18	21.5	9/16-18	21.5	9/16-18	21.5	Steel
8T-8983	9/16-18	23.5	9/16-18	23.5	11/16-16	25	Steel
6V-8788	11/16-16	25	11/16-16	25	11/16-16	25	Steel
8T-3444	11/16-16	26.5	11/16-16	26.5	13/16-16	28	Steel
8T-2363	13/16-16	28	11/16-16	26.5	13/16-16	28	Steel
6V-9158	13/16-16	31.2	13/16-16	31.2	1-14	33.3	Steel
6V-9043	13/16-16	31.2	1-14	33.3	1-14	33.3	Steel
6V-9272	1-14	33.3	13/16-16	31.2	13/16-16	31.2	Steel
6V-9031	1-14	33.3	1-14	33.3	13/16-16	31.2	Steel
6V-8790	1-14	33.5	1-14	33.5	1-14	33.5	Steel
361-4991	1-14	34.5	1-14	34.5	1-14	63	Steel
7X-7703	1-14	35.8	1-14	35.8	1 3/16-12	37.3	Steel
313-3476	1-14	39.7	1-14	39.7	1 7/16-12	41.7	Steel
8T-0248	1 3/16-12	37.3	13/16-16	34.2	13/16-16	34.2	Steel
121-7697	1 3/16-12	37	1 3/16-12	37	13/16-16	46	Steel
8T-1012	1 3/16-12	41.2	1 3/16-12	41.2	1 7/16-12	41.7	Steel
8T-6755	1 3/16-12	41.2	1 7/16-12	41.7	1-14	39.7	Steel
158-4307	1 7/16-12	41.7	1 3/16-12	37.3	1 3/16-12	37.3	Steel
326-0302	1 7/16-12	41.7	1 7/16-12	41.7	13/16-16	37.4	Steel
6V-8792	1 7/16-12	41.5	1 7/16-12	41.5	1 7/16-12	41.5	Steel
502-5673	1 11/16-12	44.5	1 7/16-12	44.5	1 7/16-12	44.5	Steel
8T-5907	1 11/16-12	44.7	1 11/16-12	44.7	1 7/16-12	44.7	Steel

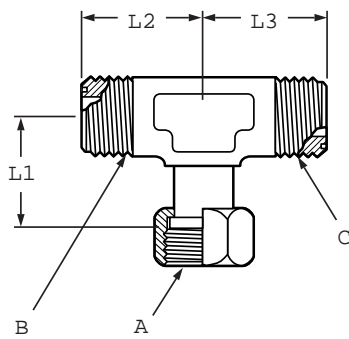
Male ORFS / Male ORFS / Bulkhead Male ORFS - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
8T-9027	9/16-18	22.5	9/16-18	22.5	9/16-18	47	Steel
8T-0379	11/16-16	26	11/16-16	26	11/16-16	52	Steel
426-4094	11/16-16	27.5	11/16-16	27.5	13/16-16	55.5	Steel
7X-7715	13/16-16	29	13/16-16	29	13/16-16	55.5	Steel
229-5830	13/16-16	31.2	1-14	33.3	1-14	63	Steel
132-5152	1 3/16-12	38.5	1 3/16-12	38.5	1 3/16-12	67	Steel
241-6196	1 7/16-12	42.5	1 7/16-12	42.5	1 7/16-12	71	Steel
451-0413	1 7/8-12	38.5	1 7/8-12	38.5	1 7/8-12	60.59	Steel

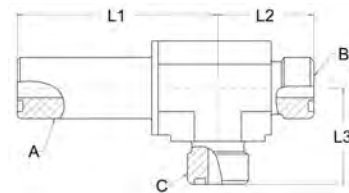
Tee Adapters

Male ORFS / Male ORFS / ORFS Swivel Nut - Tee



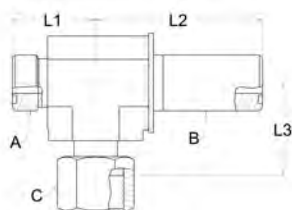
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
6V-9842	9/16-18	26.5	9/16-18	21.5	9/16-18	21.5	Steel
6V-9843	11/16-16	29	11/16-16	25	11/16-16	25	Steel
422-8812	11/16-16	29	11/16-16	25	11/16-16	25	Steel
287-7326	13/16-16	38	13/16-16	28	11/16-16	26.5	Steel
260-9242	13/16-16	38	13/16-16	28	13/16-16	28	Steel
6V-9844	13/16-16	38	13/16-16	28	13/16-16	28	Steel
268-1573	1-14	41.2	13/16-16	30.8	13/16-16	30.8	Steel
371-7228	1-14	41	13/16-16	28	1-14	33.5	Steel
287-7308	6.35	38.7	1-14	33.3	1-14	33.3	Steel
6V-9845	1-14	41	1-14	33.5	1-14	33.5	Steel
420-7645	1 7/16-12	53.5	1-14	39.5	1 3/16-12	41	Steel
6V-9846	1 3/16-12	46.5	1 3/16-12	37.5	1 3/16-12	37.5	Steel
3E-7407	1 3/16-12	52.5	1 7/16-12	41.5	1 7/16-12	41.5	Steel
6V-9847	1 7/16-12	53.5	1 7/16-12	41.5	1 7/16-12	41.5	Steel
9X-6653	1 11/16-12	58	1 11/16-12	44.5	1 11/16-12	44.5	Steel

Male ORFS / Bulkhead Male ORFS / Male ORFS - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
8C-6444	9/16-18	22.5	9/16-18	47	9/16-18	22.5	Steel
7X-0820	11/16-16	26	11/16-16	52	11/16-16	26	Steel
439-1820	11/16-16	27.5	13/16-16	55.5	11/16-16	27.5	Steel
8T-6895	13/16-16	29	13/16-16	55.5	13/16-16	29	Steel
148-6757	13/16-16	34.5	13/16-16	59	1-14	34.5	Steel
110-4628	13/16-16	34.8	13/16-16	62	1 3/16-12	59.9	Steel
241-6225	13/16-16	34.7	1-14	65.7	1 3/16-12	38.5	Steel
6V-9352	1-14	34.5	13/16-16	59	1-14	34.5	Steel
268-1610	1-14	34.5	1-14	63.1	9/16-18	28.9	Steel
6V-9350	1-14	34.5	1-14	63	1-14	34.5	Steel
319-6190	1-14	37	1-14	63.1	1 3/16-12	38.5	Steel
8T-1809	1 3/16-12	38.5	13/16-16	62	1-14	37.5	Steel
379-6986	1 3/16-12	38.5	1-14	65.5	1-14	37	Steel
3E-7443	1 3/16-12	42	1 3/16-12	71.2	1 7/16-12	42.5	Steel
138-1916	1 7/16-12	41.7	1 3/16-12	67.2	1 3/16-12	41.2	Steel
154-7159	1 7/16-12	42.5	1 7/16-12	71	1 7/16-12	42.5	Steel
516-4484	2-12	49.5	2-12	79.5	1 7/16-12	49.5	Steel
451-0477	2-12	49.5	2-12	79.5	2-12	49.5	Steel

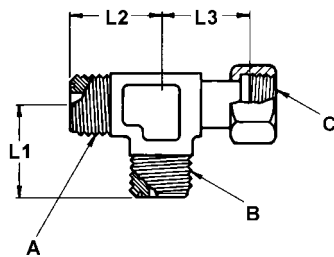
Male ORFS / Bulkhead Male ORFS / ORFS Swivel Nut - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
371-7248	11/16-16	26	11/16-16	52	11/16-16	29	SST

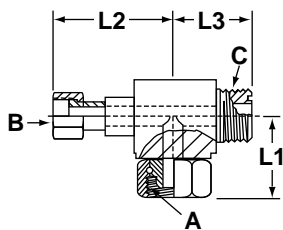
Tee Adapters

Male ORFS / ORFS Swivel Nut / Male ORFS - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L2 Length	Thread Size	L1 Length	Thread Size	L3 Length	
6V-9835	9/16-18	21.5	9/16-18	21.5	9/16-18	26.5	Steel
317-2446	9/16-18	25	11/16-16	25	11/16-16	29.3	Steel
214-4252	9/16-18	24.7	13/16-16	28	13/16-16	37.9	Steel
6V-9836	11/16-16	25	11/16-16	25	11/16-16	29	Steel
144-8070	11/16-16	25	11/16-16	25	11/16-16	29	Steel
214-0900	11/16-16	25	13/16-16	25	11/16-16	29.3	Steel
222-6967	11/16-16	26.5	11/16-16	25	13/16-16	38	Steel
101-0052	13/16-16	28	13/16-16	28	11/16-16	35	Steel
214-4254	13/16-16	28	9/16-18	25	13/16-16	38	Steel
206-5122	13/16-16	28	11/16-16	26.5	13/16-16	37.9	Steel
6V-9837	13/16-16	28	13/16-16	28	13/16-16	38	Steel
216-2364	13/16-16	28	13/16-16	28	13/16-16	49	Steel
287-7261	13/16-16	30.7	1-14	33.3	1-14	41.2	Steel
296-5724	13/16-16	33.5	13/16-16	33.5	1 3/16-12	46.3	Steel
490-5452	13/16-16	37.5	1 3/16-12	41	1 7/16-12	53.5	SST
377-9624	1-14	33.5	1-14	33.5	13/16-16	37	Steel
308-3959	1-14	33.3	13/16-16	33.5	1-14	41.2	Steel
6V-9838	1-14	33.5	1-14	33.5	1-14	41	Steel
281-5970	1 3/16-12	37.5	1 3/16-12	37.5	1-14	44	Steel
480-3040	1 3/16-12	37.5	1 3/16-12	37.5	1 3/16-12	46.5	Steel
6V-9839	1 3/16-12	37.5	1 3/16-12	37.5	1 3/16-12	46.5	Steel
420-7644	1 3/16-12	41	1-14	39.5	1 7/16-12	53.5	Steel
298-0890	1 3/16-12	41.2	1 7/16-12	41.7	1 7/16-12	53.4	Steel
294-4209	1 3/16-12	44.7	1 11/16-12	44.7	1 11/16-12	58.2	Steel
139-1802	1 7/16-12	41.7	1 3/16-12	41.7	1 7/16-12	100	Steel
341-0119	1 7/16-12	41.5	1 3/16-12	41	1 7/16-12	53.5	Steel
6V-9840	1 7/16-12	41.5	1 7/16-12	41.5	1 7/16-12	53.5	Steel
7X-2429	1 11/16-12	44.5	1 11/16-12	44.5	1 11/16-12	58	Steel
244-2776	2-12	49	2-12	49	2-12	61	Steel

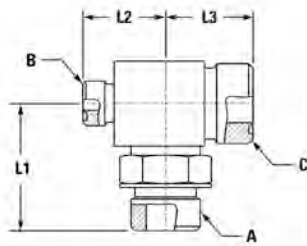
Male ORFS / ORFS Swivel Nut / ORFS Swivel Nut - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
8T-6454	1 11/16-12	57.4	1 7/16-12	57.4	1 7/16-12	44.7	Steel

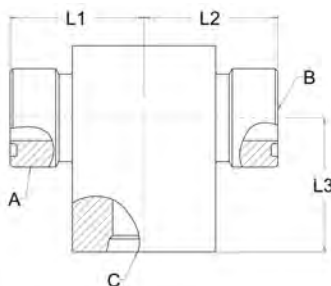
Tee Adapters

Male ORFS / Male ORFS / Male STOR - Tee



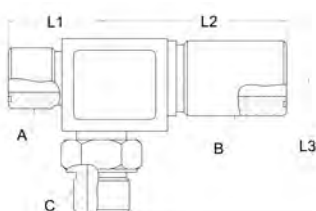
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
6V-8773	7/16-20	33	9/16-18	21.5	9/16-18	21.5	Steel
268-1504	9/16-18	37	9/16-18	23.5	9/16-18	23.5	Steel
371-7164	7/8-14	40.6	9/16-18	26.5	1-14	28	Steel
239-6860	7/16-20	32.7	11/16-16	25	11/16-16	25	SST
7X-0838	7/16-20	35	11/16-16	25	11/16-16	25	Steel
6V-8774	9/16-18	37	11/16-16	25	11/16-16	25	Steel
238-4986	9/16-18	36.8	11/16-16	25	11/16-16	25	Steel
098-5687	3/4-16	40.5	11/16-16	26.5	11/16-16	26.5	Steel
297-7929	9/16-18	41.6	11/16-16	25	13/16-16	30.6	Steel
8T-6696	3/4-16	40.6	11/16-16	26.5	13/16-16	28	Steel
287-7251	9/16-18	35.9	13/16-16	28	13/16-16	28	Steel
6V-8775	3/4-16	40.5	13/16-16	28	13/16-16	28	Steel
302-3210	3/4-16	46.7	13/16-16	33.5	1 3/16-12	37.3	Steel
250-1470	9/16-18	41.6	1-14	33.3	13/16-16	30.6	Steel
109-5811	3/4-16	46	1-14	28	1-14	28	Steel
6V-8776	7/8-14	50	1-14	33.5	1-14	33.5	Steel
8T-8984	7/8-14	51	1 3/16-12	37.5	1 3/16-12	37.5	Steel
6V-8777	1 1/16-12	55	1 3/16-12	37.5	1 3/16-12	37.5	Steel
102-1384	1 5/16-12	59.5	1 3/16-12	41	1 3/16-12	41	Steel
305-6926	1 5/16-12	55	1 3/16-12	43.2	1 3/16-12	43.2	Steel
8T-1120	1 5/8-12	62.2	1 3/16-12	44.2	1 7/16-12	44.7	Steel
134-6954	1 1/16-12	60	1 7/16-12	41.7	1-14	39.7	Steel
108-7005	1 1/16-12	59	1 7/16-12	41.7	1 3/16-12	37.3	Steel
439-1857	1 1/16-12	58.5	1 7/16-12	41.5	1 7/16-12	41.5	Steel
304-7960	1 5/16-12	62	1 11/16-12	44.5	11/16-16	37	Steel
165-3938	1 5/8-12	62	1 11/16-12	44.5	1 11/16-12	44.5	Steel
212-4991	1 7/8-12	66	2-12	49	2-12	49	Steel

Male ORFS / Male ORFS / STOR Port - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
469-2134	13/16-16	33.02	13/16-16	23.38	7/16-20		Steel
8T-0082	13/16-16	28	13/16-16	28	9/16-18	28	Steel
423-3131	1-14	40	1 7/16-12	42	1 5/16-12	42	Steel

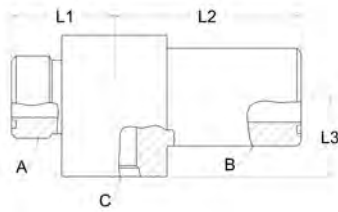
Male ORFS / Bulkhead Male ORFS / Male STOR - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
268-1648	13/16-16	31.8	1-14	63.1	3/4-16	45.7	Steel

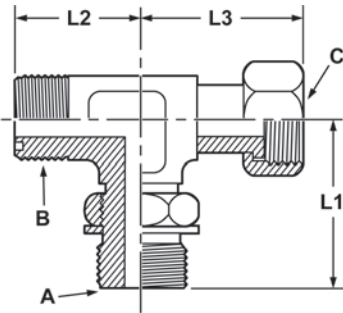
Tee Adapters

Male ORFS / Bulkhead Male ORFS / STOR Port - Tee



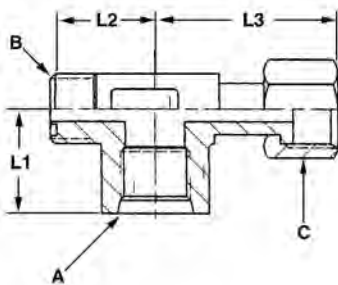
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
451-0431	1-14	32	1 3/16-12	57.5	9/16-18	24.5	Steel

Male ORFS / ORFS Swivel Nut / Male STOR - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
268-1638	9/16-18	36.8	11/16-16	25	11/16-16	29.3	Steel
267-4043	7/8-14	50	11/16-16	27	1 3/16-12	46.3	Steel
297-6716	1 5/8-12	62.2	13/16-16	44.7	1 11/16-12	58.2	Steel
8C-6798	1 5/16-12	59.7	1 7/16-12	41.7	1 7/16-12	53.4	Steel
321-8622	1 5/16-12	59.7	1 11/16-12	44.7	11/16-16	29.3	Steel

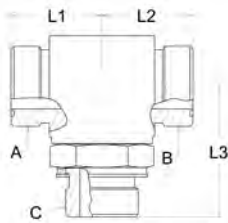
Male ORFS / ORFS Swivel Nut / STOR Port - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
469-2133	7/16-20	–	9/16-18	23.7	9/16-18	37.1	Steel
234-0391	7/16-20	18	9/16-18	21.5	9/16-18	26.5	Steel
7X-2444	9/16-18	21.5	9/16-18	21.5	9/16-18	28.2	Steel
143-7681	9/16-18	–	11/16-16	0	11/16-16	0	Steel
8T-8902	9/16-18	25	11/16-16	25	11/16-16	29	Steel
127-3026	3/8-24	28	13/16-16	28	13/16-16	37.9	Steel
459-0661	7/16-20	13.5	13/16-16	23.1	13/16-16	32.3	Steel
7X-0871	9/16-18	28	13/16-16	28	13/16-16	38	Steel
110-2218	3/4-16	45	13/16-16	30	13/16-16	40	Steel
154-8150	3/4-16	28	13/16-16	30	13/16-16	37.9	Steel
520-1370	7/16-20	33.5	1-14	33.5	1-14	41	Steel
7X-0872	9/16-18	33.3	1-14	33.3	1-14	41.2	Steel
127-2141	3/4-16	33.3	1-14	33.3	1-14	41.2	Steel
319-6203	7/8-14	33.3	1-14	33.3	1-14	41.2	Steel
426-4098	7/16-20	22.4	1 3/16-12	37.3	1 3/16-12	46.3	Steel
7X-0873	9/16-18	37.3	1 3/16-12	37.5	1 3/16-12	46.5	Steel
238-5919	3/4-16	22.3	1 3/16-12	37.3	1 3/16-12	41.8	Steel
315-9838	3/4-16	43	1 3/16-12	37.5	1 3/16-12	46.5	Steel
281-5876	1 5/16-12	44.7	1 11/16-12	44.7	1 11/16-12	58.2	Steel
492-9115	7/16-20	25	1 7/16-12	36.2	1 7/16-12	36.2	Steel

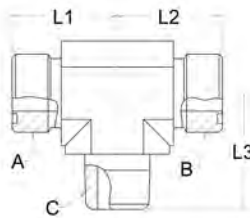
Tee Adapters

Male ORFS / Male ORFS / Male Metric STOR - Tee



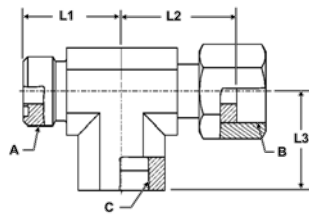
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
175-9478	13/16-16	28	13/16-16	28	M18x1.50	41	Steel
448-8995	1 7/16-12	41.5	1 7/16-12	41.5	M33x2.00	59.5	Steel

Male ORFS / Male ORFS / Male NPTF - Tee



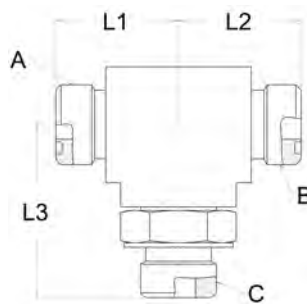
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
7R-9570	13/16-16	27.9	13/16-16	27.9	3/8-18	30.7	Steel
106-5151	1 3/16-12	37.3	1 3/16-12	37.3	3/4-14	41.9	Steel

Male ORFS / ORFS Swivel Nut / NPTF Port - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
162-6817	9/16-18	21.5	9/16-18	26.5	1/8-27	21.5	Steel
8T-2352	11/16-16	25	11/16-16	29.3	1/4-18	25	Steel

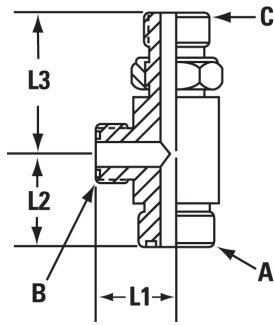
Male ORFS / Male ORFS / Male BSPP Flat Face-ISO 1179 - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
448-9010	11/16-16	27	11/16-16	27	3/8-19	38	Steel
293-7209	1 7/16-12	42	1 7/16-12	42	1-11	58	Steel

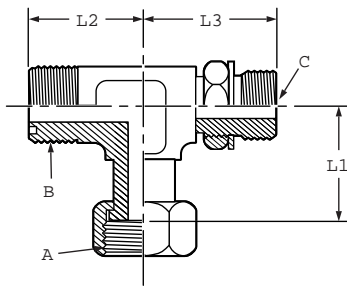
Tee Adapters

Male ORFS / Male STOR / Male ORFS - Tee



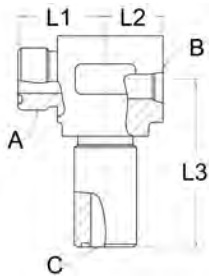
Part Number	End A		End B		End C		Material
	Thread Size	L2 Length	Thread Size	L1 Length	Thread Size	L3 Length	
6V-8780	9/16-18	21.5	9/16-18	21.5	7/16-20	33	Steel
086-9035	9/16-18	23.5	9/16-18	23.5	9/16-18	37	Steel
268-1625	9/16-18	23.5	11/16-16	25	9/16-18	36.8	Steel
515-8378	9/16-18	28	1-14	33.5	7/8-14	50	Steel
6V-8781	11/16-16	25	11/16-16	25	9/16-18	37	Steel
129-7520	11/16-16	25	11/16-16	25	9/16-18	36.8	Steel
287-7324	11/16-16	26.5	13/16-16	28	3/4-16	40.5	Steel
307-5098	11/16-16	27	13/16-16	31.2	7/8-14	50	Steel
8T-2883	11/16-16	32.5	1 3/16-12	37.5	1 1/16-12	55	Steel
153-6270	13/16-16	28	13/16-16	28	9/16-18	36.5	Steel
267-4049	13/16-16	31	13/16-16	51	9/16-18	40	Steel
6V-8782	13/16-16	28	13/16-16	28	3/4-16	40.5	Steel
239-1995	13/16-16	33.5	1 3/16-12	37.3	3/4-16	46.7	Steel
115-8634	13/16-16	31.5	13/16-16	31.5	7/8-14	50	Steel
119-6346	13/16-16	34	9/16-18	30.5	1 1/16-12	55	Steel
215-3448	13/16-16	33.5	1 3/16-12	37.3	1 1/16-12	55.1	Steel
297-7936	13/16-16	37.3	1 3/16-12	37.3	1 1/16-12	55.1	Steel
134-6953	13/16-16	33	1 7/16-12	41.7	1 1/16-12	60	Steel
307-3344	1-14	33.5	13/16-16	31.5	3/4-16	45.5	Steel
268-6052	1-14	33.5	1-14	33.5	3/4-16	46	Steel
113-2378	1-14	33	13/16-16	28	7/8-14	50	Steel
6V-8783	1-14	33.5	1-14	33.5	7/8-14	50	Steel
6V-9032	1-14	36	1 3/16-12	37.5	7/8-14	51	Steel
332-8571	1-14	36	9/16-18	30.5	1 1/16-12	55	Steel
118-4569	1-14	36	1 3/16-12	37.5	1 1/16-12	55	Steel
8T-1684	1-14	39.7	1-14	39.7	1 5/16-12	59.7	Steel
41-7651	1 3/16-12	37.3	13/16-16	32	3/4-16	40.6	Steel
319-6198	1 3/16-12	37.3	1-14	35.8	3/4-16	46.7	Steel
310-5902	1 3/16-12	37.3	1 3/16-12	37.3	3/4-16	46.7	Steel
319-6200	1 3/16-12	37.3	1 3/16-12	37.3	3/4-16	46.7	Steel
122-9088	1 3/16-12	37.5	1 3/16-12	37.5	7/8-14	51	Steel
214-4506	1 3/16-12	37.5	13/16-16	34	1 1/16-12	55	Steel
102-0773	1 3/16-12	35	1-14	37	1 1/16-12	50	Steel
6V-9175	1 3/16-12	37.3	1-14	36.3	1 1/16-12	55.1	Steel
6V-8784	1 3/16-12	37.5	1 3/16-12	37.5	1 1/16-12	55	Steel
278-2946	1 3/16-12	37.3	1 3/16-12	37.3	1 1/16-12	55.1	Steel
128-7625	1 3/16-12	37.3	1 7/16-12	41.7	1 1/16-12	59.7	Steel
315-9847	1 3/16-12	44.2	1 11/16-12	44.7	1 1/16-12	61.5	Steel
213-4591	1 3/16-12	41	1 3/16-12	41	1 3/16-12	59.5	Steel
109-5819	1 3/16-12	35	1-14	37	1 5/16-12	50	Steel
8T-1685	1 3/16-12	41	1 3/16-12	41	1 5/16-12	59.5	Steel
356-9220	1 3/16-12	91.2	1 3/16-12	41	1 5/16-12	59.5	Steel
441-4276	1 3/16-12	41.2	1 3/16-12	41.2	1 5/16-12	59.7	Steel
287-7264	1 3/16-12	44.2	1 11/16-12	44.7	1 5/8-12	62.2	Steel
211-3468	1 7/16-12	41.5	1 3/16-12	74.7	1 5/16-12	103.5	Steel
369-6897	1 7/16-12	41.5	1 7/16-12	41.5	1 5/16-12	59.5	SST
194-2080	1 7/16-12	42.9	1 7/16-12	90	1 5/16-12	59.9	Steel
126-3902	1 11/16-12	44.5	1 3/16-12	44	1 1/16-12	61.2	Steel
6V-8786	1 11/16-12	44.5	1 11/16-12	44.5	1 5/8-12	62	Steel

Male ORFS / Male STOR / ORFS Swivel Nut - Tee



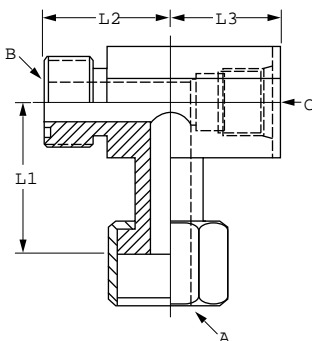
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
8T-2556	11/16-16	29.3	11/16-16	25	9/16-18	36.8	Steel
268-6051	13/16-16	37.9	13/16-16	28	3/4-16	40.6	Steel
307-9062	1 11/16-12	58.2	13/16-16	35.3	1 5/8-12	62.2	Steel

Male ORFS / STOR Port / Bulkhead Male ORFS - Tee



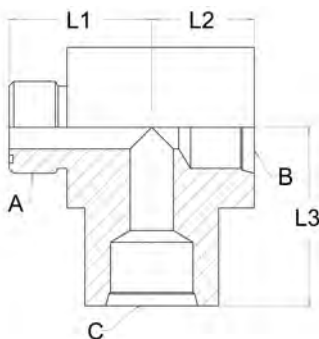
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
194-2554	13/16-16	28.9	9/16-18	19	13/16-16	55.4	Steel

Male ORFS / STOR Port / ORFS Swivel Nut - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
149-4289	9/16-18	27.9	9/16-18	22.6	7/16-20	19.6	Steel
294-8409	9/16-18	26.5	9/16-18	21.5	7/16-20	17	Steel
298-4919	9/16-18	26.5	9/16-18	21.5	9/16-18	22	Steel
123-2169	11/16-16	30	11/16-16	26	9/16-18	18.4	Steel
135-5985	1-14	41	1-14	33.5	3/4-16	31.2	Steel
297-7972	1 7/16-12	53.4	1 3/16-12	41.2	9/16-18	37.3	Steel

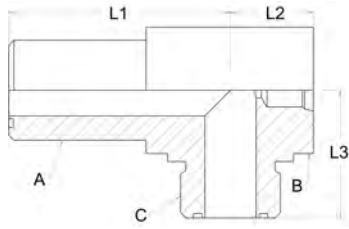
Male ORFS / STOR Port / STOR Port - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
122-1852	13/16-16	32	3/4-16	23	3/4-16	40	Steel

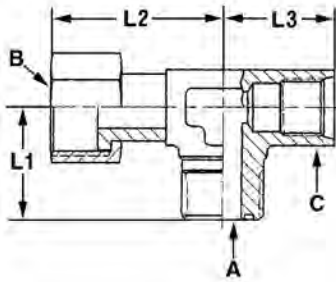
Tee Adapters

Bulkhead Male ORFS / STOR Port / Male ORFS - Tee



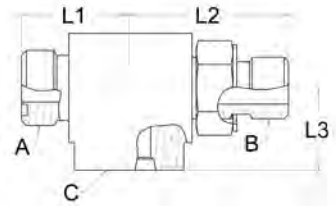
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
451-0396	1 3/16-0	67	7/16-20	25	1 3/16-12	38.5	Steel

ORFS Swivel Nut / STOR Port / Male ORFS - Tee



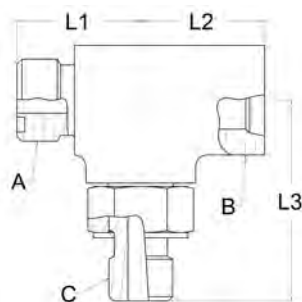
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
081-5645	13/16-16	28	13/16-16	38	9/16-18	28	Steel
304-8025	1 3/16-12	37.6	1 3/16-12	46.5	7/16-20	23.4	Steel

Male ORFS / Male STOR / STOR Port - Tee



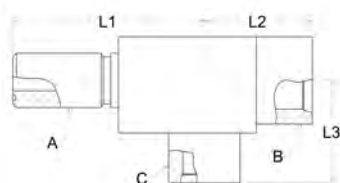
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
081-5648	9/16-18	25	9/16-18	37	9/16-18	25	Steel
3E-2310	11/16-16	25	9/16-18	34.8	9/16-18	25	Steel
499-4232	11/16-16	25	9/16-18	37	7/16-20	19.1	Steel
8T-6338	13/16-16	28	3/4-16	40.5	9/16-18	28	Steel
8C-7514	13/16-16	30.5	7/8-14	50	7/8-14	33.3	Steel
337-8768	1-14	28	7/8-14	50	9/16-18	26	Steel
278-6425	1-14	33.3	1 1/16-12	55.1	9/16-18	33.3	Steel
8C-0569	1 3/16-12	37.3	1 1/16-12	55.1	9/16-18	26	Steel
8T-8900	1 3/16-12	43.7	1 1/16-12	61.5	1 1/16-12	37.3	Steel
267-4039	1 3/16-12	26.5	1 3/16-12	43.3	7/16-20	22	Steel
346-8791	1 3/16-12	27.5	1 3/16-12	44.3	9/16-18	22	Steel
109-6511	1 3/16-12	41	1 5/16-12	59.7	9/16-18	41.7	Steel
250-1441	1 3/16-12	41.2	1 5/16-12	59.7	1 1/16-12	41.2	Steel
117-7734	1 3/16-12	41.2	1 5/16-12	59.7	1 5/16-12	36.6	Steel
371-7230	1 3/16-12	42.2	1 5/8-12	62.2	1 5/16-12	33.8	Steel
313-3483	1 7/16-12	41.7	1 1/16-12	55.1	7/16-20	22.23	Steel
268-5353	1 7/16-12	41.7	1 3/16-12	59	9/16-18	41.7	Steel
239-1834	1 7/16-12	45	1 5/16-12	75	1 5/16-12	49	Steel
268-1515	1 11/16-12	44.7	1 5/16-12	62.2	3/4-16	44.7	Steel

Male ORFS / STOR Port / Male STOR - Tee



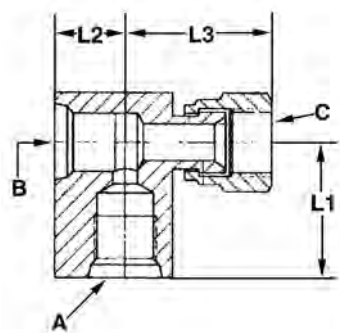
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
458-2356	9/16-18	21.5	7/16-20	21.5	7/16-20	34.8	Steel
308-9568	9/16-18	21.5	9/16-18	22	7/16-20	33	Steel
8T-3311	9/16-18	23.5	9/16-18	24.5	9/16-18	40.8	Steel
459-0700	11/16-16	25	9/16-18	25	7/16-20	35	Steel
213-8386	11/16-18	25	9/16-18	25	9/16-18	36.8	Steel
7X-2459	11/16-16	25	9/16-18	25	9/16-18	37	Steel
8C-3415	11/16-16	26.5	9/16-18	24.5	3/4-16	40.8	Steel
126-8306	13/16-16	28	9/16-18	28	3/4-16	40.6	Steel
171-0714	13/16-16	28	9/16-18	24.5	7/8-14	50	Steel
9X-2541	1 3/16-12	41.2	9/16-18	24.7	7/8-14	51	Steel
3E-2345	1 3/16-12	41.2	9/16-18	24.7	1 1/16-12	55.1	Steel
8T-3312	1 3/16-12	41.2	9/16-18	24.7	1 5/16-12	59.7	Steel
338-5995	1 3/16-12	37.3	1 5/16-12	49	1 5/16-12	59.7	Steel
315-9822	1 7/16-12	41.7	7/16-20	23.4	1 1/16-12	59	Steel
8C-4082	1 7/16-12	41.7	9/16-18	41.7	1 1/16-12	59.7	Steel
8C-6515	1 7/16-12	41.5	9/16-18	41.5	1 5/16-12	59.5	Steel
351-0284	1 7/16-12	41.5	1 5/16-12	41.5	1 1/16-12	58.5	Steel
297-7920	1 11/16-12	44.7	7/16-20	30	1 5/16-12	62.2	Steel

Bulkhead Male ORFS / STOR Port / STOR Port - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
304-7983	11/16-16	61.6	3/4-16	34.7	9/16-18	32.9	Steel
273-4210	13/16-16	55.5	3/4-16	23	3/4-16	38.5	Steel

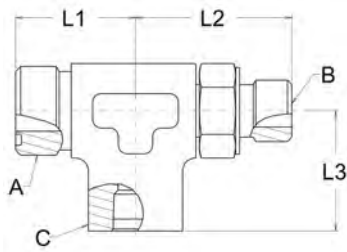
ORFS Swivel Nut / STOR Port / STOR Port - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
5I-4376	9/16-18	28	9/16-18	15	11/16-16	23.9	Steel
196-9858	1 1/16-12	41.2	3/4-16	37.4	1 3/16-12	51.6	Steel

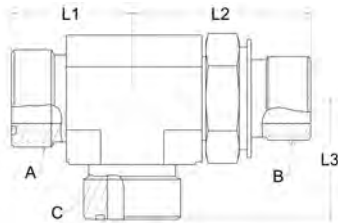
Tee Adapters

Male ORFS / Male STOR / NPTF Port - Tee



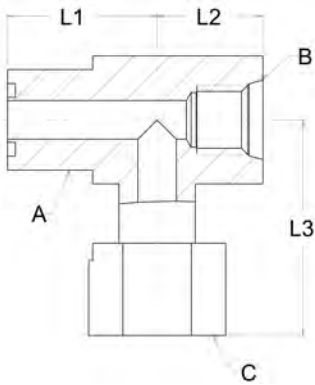
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
8C-3322	13/16-16	28	9/16-18	36.5	1/8-27	28	Steel

Male ORFS / Male Metric STOR / Male ORFS - Tee



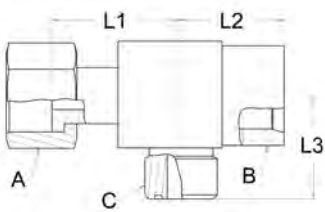
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
321-8621	1 3/16-12	37.5	M27x2	55.5	1 3/16-12	37.5	Steel
315-9830	1 3/16-12	44.7	M42x2	63	1 11/16-12	44.7	Steel
297-7951	1 7/16-12	41.7	M33x2	59.7	1 7/16-12	41.7	Steel

Male ORFS / Metric STOR Port / ORFS Swivel Nut - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
422-8808	11/16-16	26	M12x1.5	18.4	11/16-16	30	Steel

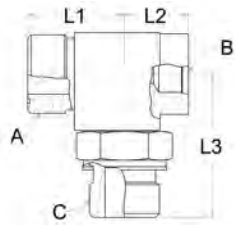
ORFS Swivel Nut / Metric STOR Port / Male ORFS - Tee



Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
304-7980	11/16-16	31.2	M16x1.5	24.9	11/16-16	24.9	Steel

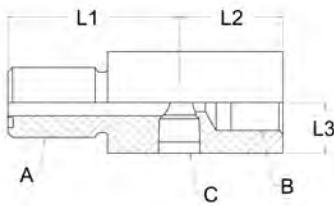
Tee Adapters

Male ORFS / Metric STOR Port / Male Metric STOR - Tee



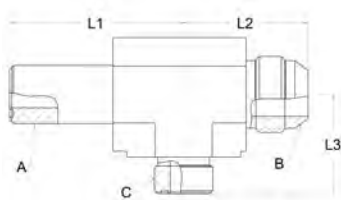
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
360-3659	1 3/16-12	37.5	M12x1.5	37.5	M22x1.50	49	Steel
321-8611	1 3/16-12	37.3	M14x1.5	24.7	M27x2.00	55.1	Steel

Bulkhead Male ORFS / Metric STOR Port / NPTF Port - Tee



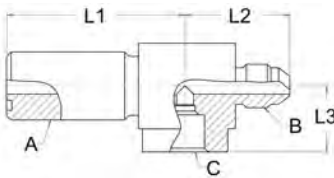
Part Number	End A		End B		End C		Material
	Thread Size	L1 Length	Thread Size	L2 Length	Thread Size	L3 Length	
122-9060	11/16-16	34.5	M14x1.5	34.5	1/8-27	12.5	Steel

Bulkhead Male ORFS / Male 37° Flare-SAE J514 / Male ORFS - Tee



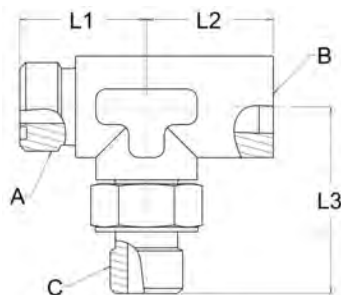
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
217-7065	13/16-16	61.5	1 1/16-12	44	13/16-16	35.2	Steel

Bulkhead Male ORFS / Male 37° Flare-SAE J514 / STOR Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
155-7621	11/16-16	46	7/16-20	27	7/16-20	17	Steel

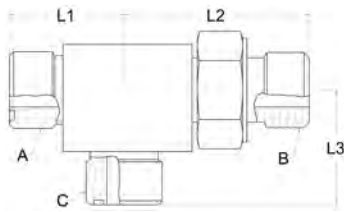
Male ORFS / NPTF Port / Male STOR - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
149-4125	11/16-16	25	1/8-27	25	9/16-18	36.8	Steel
146-9571	11/16-16	25	1/4-18	25	9/16-18	36.8	Steel
180-1725	1 7/16-12	41.7	1/8-27	0	1 5/16-12	59.7	Steel

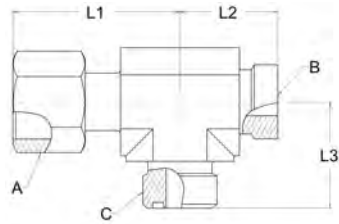
Tee Adapters

Male ORFS / Male Metric Flat Face-ISO 9974 / Male ORFS - Tee



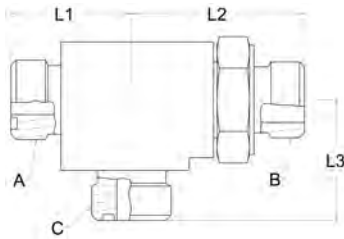
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
293-8491	9/16-18	21.5	M14x1.5	34.75	9/16-18	21.5	Steel

ORFS Swivel Nut / Metric Flat Face-ISO 9974 Port / Male ORFS - Tee



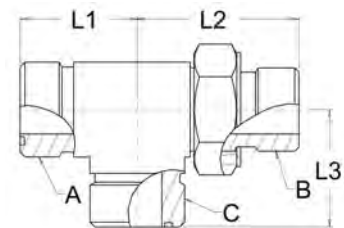
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
125-4085	11/16-16	29	M12x1.5	23	11/16-16	25	Steel

Male ORFS / Male BSPP Flat Face-ISO 1179 / Male ORFS - Tee



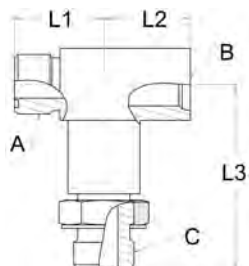
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
175-9460	11/16-16	26.5	3/8-19	38	11/16-16	26.5	Steel
304-7193	11/16-16	25	M14x1.5	32	11/16-16	25	Steel
351-5226	13/16-16	31	1/2-14	48	13/16-16	31	Steel
293-5851	1 7/16-12	42	1-11	58	1 7/16-12	42	Steel

Male ORFS / Male BSPP STOR-JIS B2351 / Male ORFS - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
216-6200	1 3/16-12	37.3	3/4-14	51.4	1 3/16-12	37.3	Steel

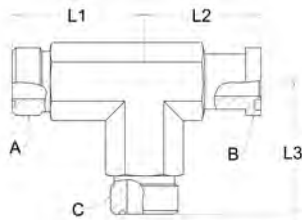
Male ORFS / BSPP STOR-JIS B2351 Port / Male BSPP STOR-JIS B2351 - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
199-0541	13/16-16	31	3/8-19	30	1/2-14	64	Steel

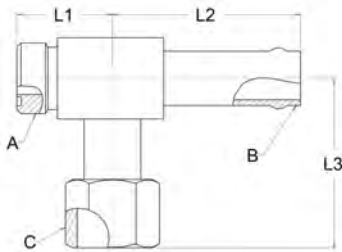
Tee Adapters

Male ORFS / Flange Head Code 61 Flange / Male ORFS - Tee



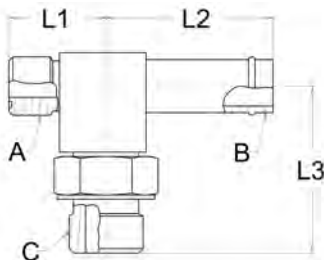
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
370-3480	11/16-16	46	12.70	42	11/16-16	46	Steel
351-5237	1 3/16-12	59	12.70	52	1 3/16-12	59	Steel

Male ORFS / Hose Bead / ORFS Swivel Nut - Tee



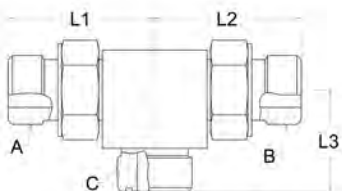
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
226-3355	13/16-16	28	15.88	55	13/16-16	37.9	Steel

Male ORFS / Hose Bead / Male STOR - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
251-9304	11/16-16	27.9	12.70	50.1	7/8-14	42.49	Steel
319-6182	11/16-16	29.2	15.88	50.1	7/8-14	50	Steel
251-9303	1 3/16-12	37.3	12.70	52.1	7/8-14	47.24	Steel
319-6184	1 7/16-12	41.7	15.88	52.1	1 1/16-12	59	Steel

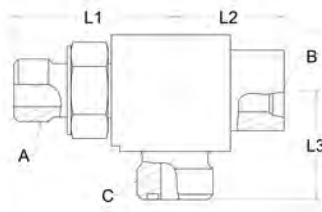
Male STOR / Male STOR / Male ORFS - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
304-6749	3/4-16	40.6	3/4-16	40.6	13/16-16	28	Steel

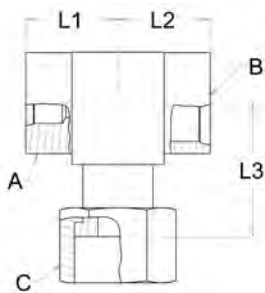
Tee Adapters

Male STOR / STOR Port / Male ORFS - Tee



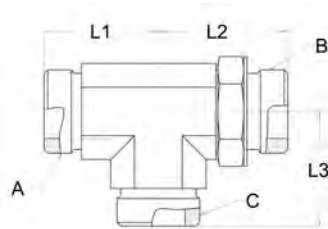
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
8T-3313	7/16-20	32.7	9/16-18	21.5	9/16-18	26.5	Steel
128-5890	7/16-20	34.79	9/16-18	23.62	11/16-16	25.91	Steel
201-9170	9/16-18	36.8	7/16-20	17	9/16-18	23.7	Steel
503-6541	9/16-18	37	7/16-20	25	11/16-16	25	Steel
8C-3309	9/16-18	36.8	9/16-18	21.5	9/16-18	23.5	Steel
126-6872	9/16-18	37	9/16-18	25	11/16-16	25	Steel
9X-2492	9/16-18	28	3/4-16	40.6	13/16-16	28	Steel
213-7731	3/4-16	43	9/16-18	24.5	11/16-16	26.5	Steel
268-1599	3/4-16	45.7	3/4-16	33.3	11/16-16	29.2	Steel
156-8835	7/8-14	50	9/16-18	33	13/16-16	34	Steel
260-9216	7/8-14	50	9/16-18	29.2	1-14	33.3	Steel
313-3500	1 1/16-12	55.1	7/16-20	23.4	1 7/16-12	41.7	Steel
278-6493	1 1/16-12	55.1	9/16-18	37.3	1-14	36.3	Steel
8T-8901	1 1/16-12	61.5	1 1/16-12	37.3	1 3/16-12	43.7	Steel
250-1457	1 5/16-12	59.5	9/16-18	35.6	1 7/16-12	41.5	Steel
213-3455	1 5/16-12	59.7	7/8-14	41.7	1 7/16-12	41.7	Steel
369-6890	1 5/16-12	59.7	1 1/16-12	57.2	1 7/16-12	41.7	Steel
239-1833	1 5/16-12	79.7	1 5/16-12	54	1 7/16-12	41.7	Steel
296-6939	1 5/16-12	59.5	1 5/16-12	105.3	1 7/16-12	41.5	Steel

STOR Port / STOR Port / ORFS Swivel Nut - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
313-3473	9/16-18	32	1 1/16-12	32	1 3/16-12	46.3	Steel

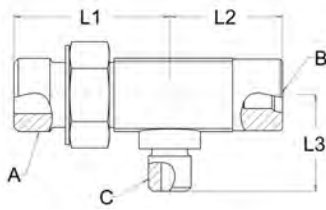
Male STOR / Male STOR / Male STOR - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
113-3655	3/4-16	23.81	3/4-16	23.81	3/4-16	64.77	Steel
369-6833	1 5/16-12	46	1 5/16-12	52.1	1 5/16-12	46	SST

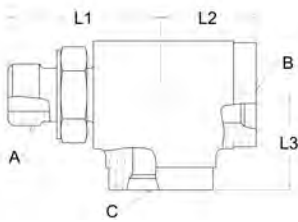
Tee Adapters

Male STOR / STOR Port / Male STOR - Tee



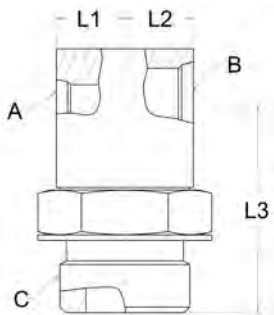
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
320-5415	3/4-16	40.6	5/16-24	29.4	7/16-20	25	Steel

Male STOR / STOR Port / STOR Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
186-4045	7/16-20	34.8	7/16-20	17	7/16-20	17	Steel
241-6160	7/16-20	31.2	7/16-20	18.8	7/16-20	18.8	Steel
395-7291	7/16-20	31.2	7/16-20	18.8	7/16-20	18.8	Steel
369-6869	7/16-20	40.6	9/16-18	28	9/16-18	28	Steel
4I-0900	9/16-18	39	7/16-20	20	9/16-18	17	Steel
4I-1694	9/16-18	41	9/16-18	25	9/16-18	19	Steel
304-8022	9/16-18	35.1	9/16-18	21.8	9/16-18	21.8	Steel
313-3471	9/16-18	39.8	9/16-18	24.5	9/16-18	24.5	Steel
3E-7410	9/16-18	34.8	9/16-18	25	9/16-18	25	Steel
210-2768	9/16-18	39.4	3/4-16	28	9/16-18	19	Steel
105-7704	3/4-16	40.6	9/16-18	28	9/16-18	28	Steel
268-6133	3/4-16	40.6	3/4-16	23.7	3/8-24	29	Steel
118-0911	3/4-16	40.6	3/4-16	33.3	3/4-16	33.3	Steel
396-0420	7/8-14	50	7/16-20	24.5	7/8-14	26.2	Steel
288-7467	7/8-14	88	3/4-16	22	3/4-16	33	Steel
309-5126	7/8-14	46	7/8-14	30	7/8-14	30	Steel
380-7362	1 1/16-12	55.1	7/16-20	28	9/16-18	28	Steel
208-0616	1 1/16-12	58.8	3/4-16	20	3/8-24	29	Steel
287-7342	1 1/16-12	55.1	1 1/16-12	38.1	1 1/16-12	38.1	Steel
1U-8302	1 5/16-12	47.37	1 5/16-12	47.63	9/16-18	28.58	Steel

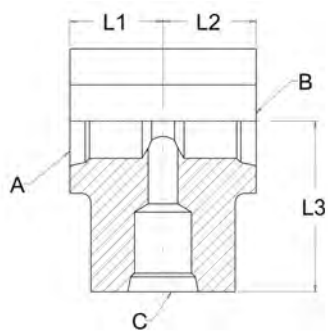
STOR Port / STOR Port / Male STOR - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
451-0425	7/16-20	15.875	3/4-16	15.875	1 3/16-12	47.8	Steel
216-1302	9/16-18	28	9/16-18	28	7/16-20	34.5	Steel
8C-8431	9/16-18	24.5	9/16-18	24.5	9/16-18	40.8	Steel
6V-1625	9/16-18	21	3/4-16	21	9/16-18	35	Steel
142-7620	9/16-18	36.5	3/4-16	23.5	7/8-14	51	Steel
310-5909	9/16-18	32	1 1/16-12	32	7/8-14	51.3	Steel
168-3332	3/4-16	22.4	3/4-16	22.4	3/4-16	40.4	Steel
268-1562	7/8-14	24	7/16-20	24	7/8-14	49.3	Steel
1U-8303	1 5/16-12	42.2	9/16-18	34.25	1 5/16-12	48.01	Steel
448-9011	1 5/16-12	33.8	1 5/16-12	33.8	1 5/16-12	57.15	Steel
174-4360	1 5/8-12	48.77	9/16-18	31.43	1 5/8-12	54.24	Steel

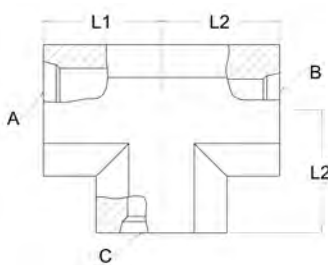
Tee Adapters

STOR Port / STOR Port / STOR Port - Tee



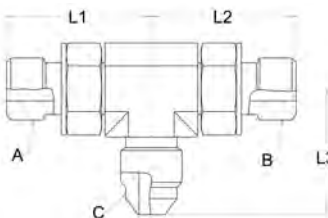
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
196-8722	9/16-18	16.4	9/16-18	16.4	7/16-20	30	Steel
450-0487	1 5/16-12	38.5	1 5/16-12	38.5	1 5/16-12	38.5	Steel

STOR Port / STOR Port / Metric STOR Port - Tee



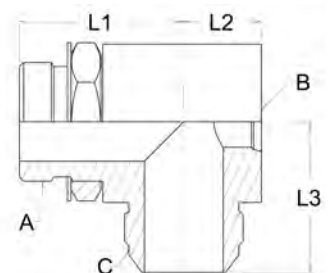
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
390-2263	3/4-16	25	9/16-18	25	M16x1.50	25.9	Steel

Male STOR / Male STOR / Male 37° Flare-SAE J514 - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
168-9984	7/16-20	26.2	7/16-20	26.2	7/16-20	22.6	Steel
168-3357	7/16-20	30.3	9/16-18	31.8	9/16-18	26.9	Steel

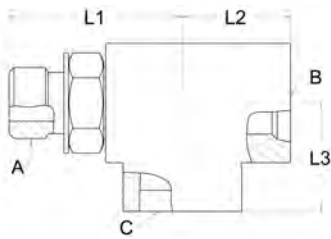
Male STOR / STOR Port / Male 37° Flare-SAE J514 - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
203-1854	1 5/16-12	57.2	3/4-16	22.5	1 5/8-12	52.3	Steel
448-9018	1 5/8-12	57.2	3/4-16	27	1 5/8-12	52.3	Steel

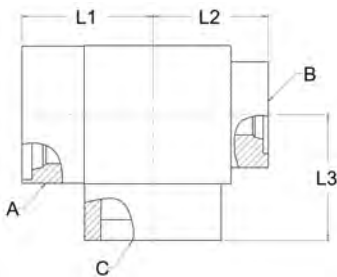
Tee Adapters

Male STOR / STOR Port / NPTF Port - Tee



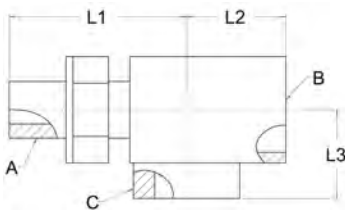
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
9X-2296	7/16-20	35	7/16-20	22	1/4-18	22	Steel
233-4462	9/16-18	35.1	9/16-18	21.8	3/8-18	21.8	Steel

STOR Port / STOR Port / NPTF Port - Tee



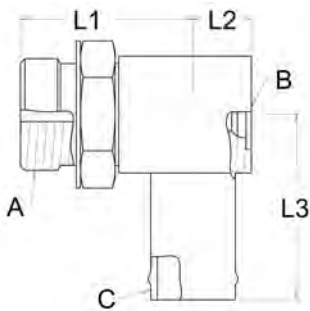
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
1U-8301	1 5/16-12	42.2	9/16-18	37.18	1-11.5	40.39	Steel

Male STOR / STOR Port / BSPP STOR-JIS B2351 Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
229-8728	3/8-24	25	7/16-20	14	1/8-28	12.5	Steel

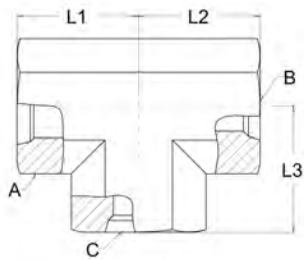
Male STOR / STOR Port / Hose Bead - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
115-4184	9/16-18	34.93	9/16-18	24.79	9.52	49.28	Steel
288-7848	3/4-16	46	9/16-18	27	31.75	60	Steel
9Y-9168	7/8-14	44	7/16-20	21	19.05	50	Steel
324-9781	1 1/16-12	49.3	3/4-16	33	25.40	45	Steel
341-0105	1 5/16-12	51.8	7/16-20	17.5	25.40	55.6	Steel

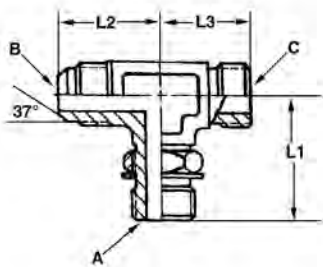
Tee Adapters

STOR Port / Metric STOR Port / Metric STOR Port - Tee



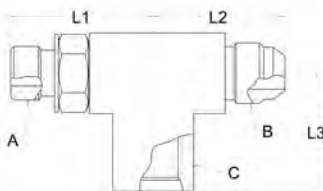
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
387-2637	9/16-18	25	M12x1.5	25	M12x1.50	25.9	Steel

Male STOR / Male 37° Flare-SAE J514 / Male STOR - Tee



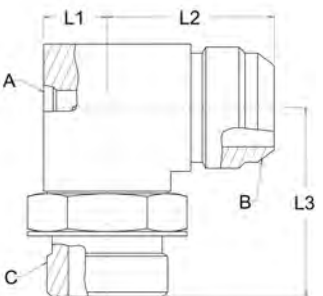
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
8T-2543	1/2-20	27.7	1/2-20	24.1	1/2-20	19.6	Steel

Male STOR / Male 37° Flare-SAE J514 / STOR Port - Tee



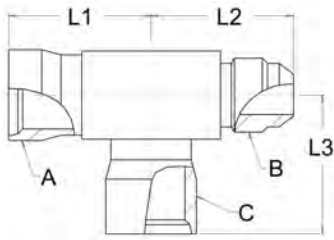
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
6V-6967	1/2-20	33.5	9/16-18	31	1/2-20	27.8	Steel
8C-2948	9/16-18	35.8	9/16-18	31	9/16-18	22.9	Steel
5P-0220	1 5/16-12	52.07	1 5/16-12	45.97	1 1/16-12	38.1	Steel

STOR Port / Male 37° Flare-SAE J514 / Male STOR - Tee



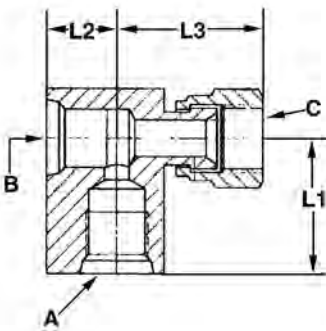
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
144-6650	7/16-20	17.5	1 5/16-12	46	1 5/16-12	52	Steel
392-0660	7/16-20	30	1 5/8-12	52.3	1 5/16-12	57.2	Steel
226-2946	9/16-18	17	1 1/16-12	42.2	1 5/16-12	52.1	Steel
120-9127	3/4-16	31.2	3/4-16	36.1	3/4-16	41.1	Steel
154-3291	3/4-16	31.2	3/4-16	36.1	1 1/16-12	47	Steel
351-1372	1 1/16-12	19.1	1 1/16-12	48.4	1 5/16-12	55.1	Steel

STOR Port / Male 37° Flare- SAE J514 / STOR Port - Tee



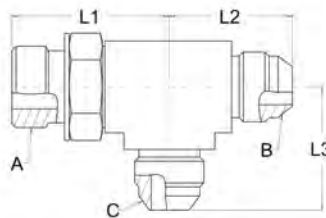
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
274-6661	9/16-18	27.5	9/16-18	27.5	9/16-18	42.64	Steel

STOR Port / 37° Flare- SAE J514 Swivel Nut / STOR Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
5I-4075	7/16-20	17	7/16-20	15	7/16-20	29.8	Steel
102-7240	9/16-18	22	7/16-20	15	7/16-20	29.8	Steel
5I-4015	7/16-20	20	9/16-18	15	9/16-18	31	Steel
5I-3190	9/16-18	28	9/16-18	15	9/16-18	31	Steel
237-2849	7/8-14	30	7/8-14	19.8	7/8-14	30.5	Steel

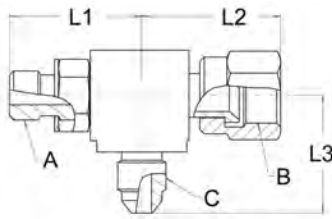
Male STOR / Male 37° Flare- SAE J514 / Male 37° Flare- SAE J514 - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
030-7957	7/16-20	26.2	7/16-20	22.6	7/16-20	22.6	Steel
104-9200	7/16-20	60	7/16-20	22.6	7/16-20	22.6	Steel
2P-8098	7/16-20	30.3	9/16-18	26.9	9/16-18	26.9	Steel
031-6281	1/2-20	28.7	1/2-20	24.1	1/2-20	24.1	Steel
6M-6853	9/16-18	31.8	9/16-18	26.9	9/16-18	26.9	Steel
115-8730	3/4-16	36.8	9/16-18	29.2	3/4-16	31.8	Steel
5P-2191	3/4-16	36.8	3/4-16	31.8	7/16-20	25.4	Steel
030-7959	3/4-16	36.8	3/4-16	31.8	3/4-16	31.8	Steel
126-9746	7/8-14	38	7/16-20	23	9/16-18	27	Steel
119-2604	7/8-14	43.2	3/4-16	33.8	3/4-16	33.8	Steel
521-5508	7/8-14	43.2	3/4-16	33.8	3/4-16	33.8	Steel
031-4136	7/8-14	43.2	7/8-14	36.8	7/8-14	36.8	Steel
2P-7211	1 1/16-12	49.3	1 1/16-12	42.2	1 1/16-12	42.2	Steel
121-9267	1 3/16-12	52.1	1 1/16-12	42.2	1 5/16-12	46	Steel
281-5893	1 5/16-12	52.1	1 5/16-12	46	1 5/16-12	46	SST
030-7960	1 5/16-12	52.1	1 5/16-12	46	1 5/16-12	46	Steel

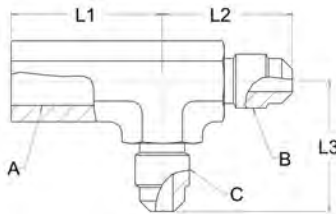
Tee Adapters

Male STOR / 37° Flare-SAE J514 Swivel Nut / Male 37° Flare-SAE J514 - Tee



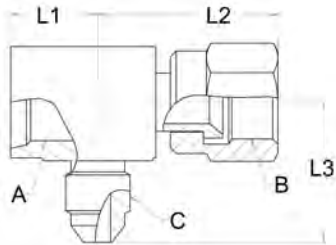
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
210-2015	7/16-20	30.3	9/16-18	31.8	9/16-18	26.9	Steel

STOR Port / Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 - Tee



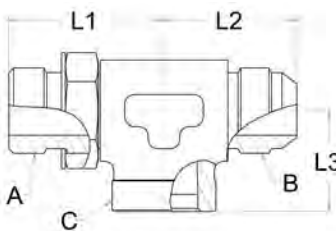
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
5P-1272	7/16-20	31	7/16-20	26.7	7/16-20	26.7	Steel

STOR Port / 37° Flare-SAE J514 Swivel Nut / Male 37° Flare-SAE J514 - Tee



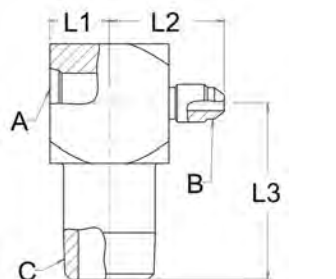
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
104-9113	9/16-18	15	9/16-18	31	7/16-20	24	Steel

Male STOR / Male 37° Flare-SAE J514 / NPTF Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
6V-9039	1 1/16-12	49.3	1 1/16-12	42.2	1/2-14	32	Steel

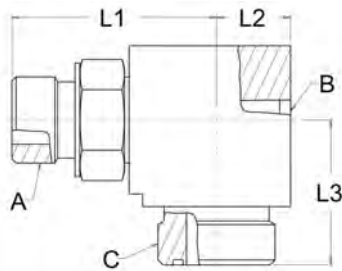
STOR Port / Male 37° Flare-SAE J514 / Male NPTF - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
5P-1271	7/16-20	31	7/16-20	26.7	1/8-27	22.2	Steel
451-0421	3/4-16	17.5	7/16-20	33.7	3/4-14	51.7	Steel

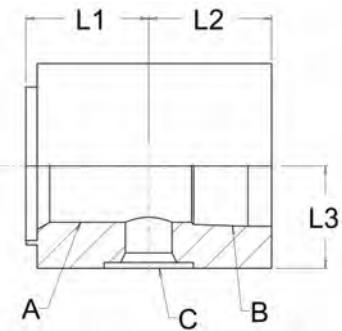
Tee Adapters

Male STOR / NPTF Port / Male ORFS - Tee



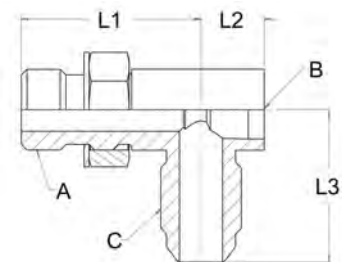
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
141-4735	7/8-14	52.7	1/8-27	18.64	1 3/16-12	37.3	Steel

STOR Port / NPTF Port / STOR Port - Tee



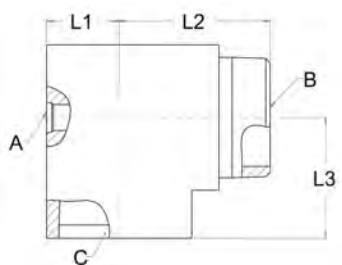
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
1U-8300	1 5/16-12	34.4	1-11.5	34.4	9/16-18	28.58	Steel

Male STOR / NPTF Port / Male 37° Flare- SAE J514 - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
5P-4375	9/16-18	31.8	1/8-27	11.2	9/16-18	26.9	Steel
5P-4854	3/4-16	36.83	1/8-27	0	9/16-18	29.46	Steel

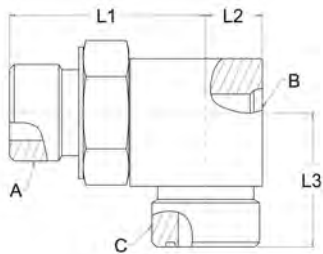
STOR Port / Male NPTF / NPTF Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
516-8704	9/16-18	36.6	2-11.5	76.2	2-11.5	60.7	Steel

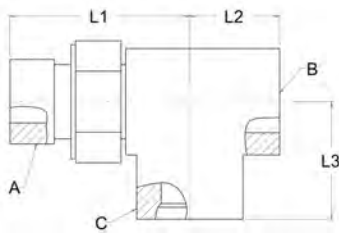
Tee Adapters

Male STOR / Metric Flat Face-ISO 9974 Port / Male ORFS - Tee



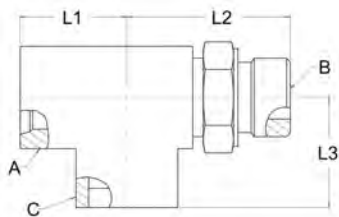
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
369-6887	1 1/16-12	55	M12x1.5	15.9	1 3/16-12	37.5	Steel

Male STOR / Metric Flat Face-ISO 9974 Port / STOR Port - Tee



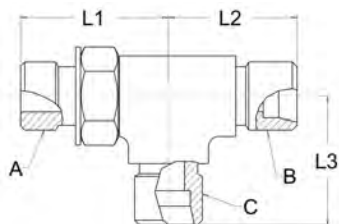
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
498-3803	3/4-16	40.6	M14x1.5	20.3	9/16-18	25	Steel

STOR Port / Male Metric Flat Face-ISO 9974 / BSPT-ISO 7-1 Port - Tee



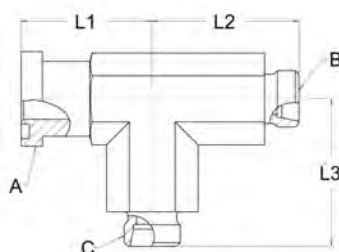
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
474-2625	3/4-16	30	M22x1.5	46	1/2-14	31	Steel

Male STOR / Male 24° Flareless-SAE J514 / Male 24° Flareless-SAE J514 - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
1P-0270	1/2-20	27.7	1/2-20	24.1	1/2-20	24.1	Steel

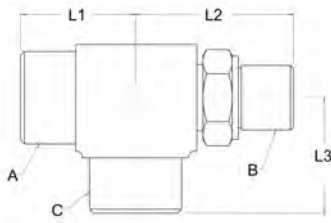
Flange Head Code 61 Flange / Male 24° Cone-ISO 8434-1 / Male 24° Cone-ISO 8434-1 - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
234-7411	1/2-20	42	M18x1.5	47	M18x1.50	47	Steel

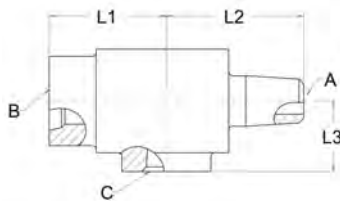
Tee Adapters

Male STOR / Male BSPT-ISO 7-1 / Male STOR - Tee



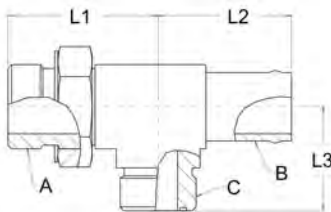
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
351-5212	1 3/16-12	37.5	1/2-14	51.5	1 3/16-12	37.5	Steel

STOR Port / Male BSPT-ISO 7-1 / BSPT-ISO 7-1 Port - Tee



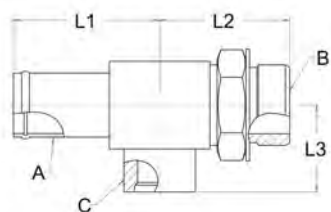
Part Number	End A		End B		End C		Material
	Thread size	L2 Length	Thread size	L1 Length	Thread size	L3 Length	
242-8717	1/8-28	29.3	7/16-20	25	1/8-28	15	Steel

Male STOR / Hose Bead / Male ORFS - Tee



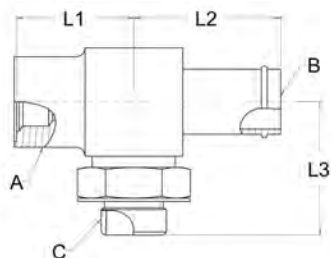
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
211-3522	1 5/16-12	59.7	28.58	53	1 3/16-12	41.2	Steel

Male STOR / Hose Bead / STOR Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
310-4012	25.40	58	1 5/16-12	59.69	3/4-16	34.5	Steel

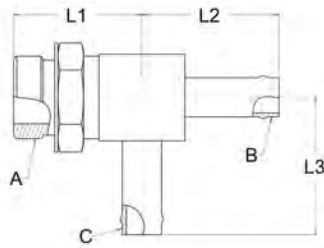
STOR Port / Hose Bead / Male STOR - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
283-9579	3/4-16	45.6	25.40	57.2	1 5/16-12	51.8	Steel

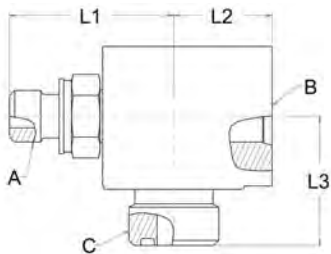
Tee Adapters

Male STOR / Hose Bead / Hose Bead - Tee



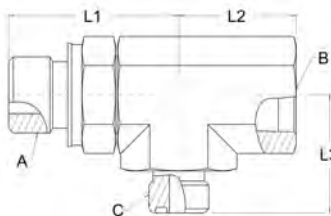
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
230-3045	1 1/16-12	49.3	19.05	52.3	19.05	52.3	Steel
451-0349	1 5/16-12	52.1	15.88	55.6	15.88	55.6	Steel
369-6826	1 5/16-12	48.3	19.05	55.6	15.88	55.6	Steel
177-9567	1 5/8-12	57.2	31.75	60.3	25.40	60.3	Steel

Male Metric STOR / Metric STOR Port / Male ORFS - Tee



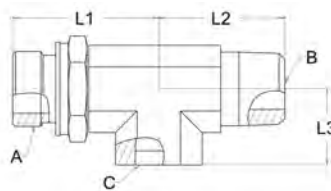
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
451-0469	M10x1	31.8	M10x1	19	11/16-16	25	Steel
304-8007	M12x1.5	31.87	M12x1.5	16	9/16-18	21.5	Brass
337-8782	M12x1.5	31.87	M12x1.5	16	9/16-18	21.5	Steel
459-0663	M22x1.5	49	M12x1.5	21.6	1 3/16-12	37.5	Steel
282-0913	M22x1.5	49.5	M12x1.5	21.6	1 3/16-12	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	L2 Length	Thread size	L3 Length	
367-6015	M18x1.5	40.6	3/8-18	28	9/16-18	28	Steel

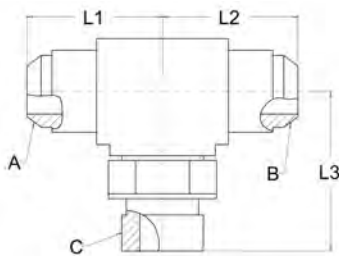
Male Metric STOR / Male NPTF / NPTF Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
115-9791	M22x1.5	43.2	1/2-14	37.3	1/4-18	22.4	Steel

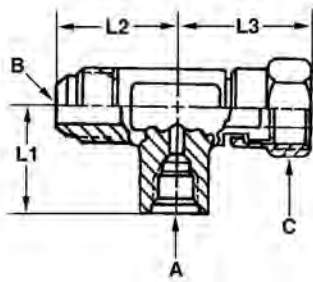
Tee Adapters

Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 / Male STOR - Tee



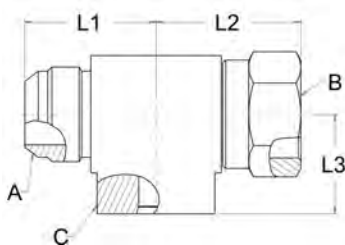
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
4S-4857	7/16-20	22.6	7/16-20	22.6	7/16-20	26.2	Steel
005-9129	7/16-20	22.6	7/16-20	22.6	9/16-18	31.8	Steel
235-3566	7/16-20	23.6	7/16-20	23.6	3/4-16	29.46	Steel
031-5894	1/2-20	24.1	1/2-20	24.1	1/2-20	28.7	Steel
5P-7150	1/2-20	24.1	1/2-20	24.1	1/2-20	27.7	Steel
030-7955	9/16-18	26.9	9/16-18	26.9	9/16-18	31.8	Steel
031-2582	9/16-18	29	9/16-18	29	3/4-16	36.8	Steel
4S-4869	3/4-16	31.8	3/4-16	31.8	3/4-16	36.8	Steel
155-0490	1 1/16-12	41.2	1 1/16-12	41.2	3/4-16	45.4	Steel
2P-1297	1 1/16-12	42.2	1 1/16-12	42.2	1 1/16-12	49.3	Steel
8K-3520	1 1/16-12	44.7	1 1/16-12	44.7	1 5/16-12	52.1	Steel
2P-1298	1 3/16-12	43.9	1 3/16-12	43.9	1 3/16-12	50.8	Steel
067-9921	1 5/16-12	46	1 5/16-12	46	1 5/16-12	52.1	Steel
300-8844	1 5/16-12	46	1 5/16-12	46	1 5/16-12	52.1	Steel
6V-7485	1 5/8-12	52.3	1 5/8-12	52.3	1 5/8-12	57.2	Steel

Male 37° Flare-SAE J514 / 37° Flare-SAE J514 Swivel Nut / STOR Port



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
111-6690	7/16-20	18	7/16-20	27	7/16-20	27	Steel
5G-2740	3/4-16	37.1	1 1/16-12	42.2	1 1/16-12	44.45	Steel
474-2604	9/16-18	28	1 5/16-12	46	1 5/16-12	50.8	SST

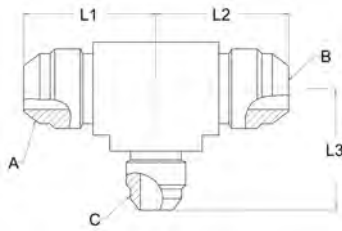
Male 37° Flare-SAE J514 / 37° Flare-SAE J514 Swivel Nut / Metric STOR Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
486-8608	1 5/16-12	46	1 5/16-12	50.8	M12x1.50	35	Steel

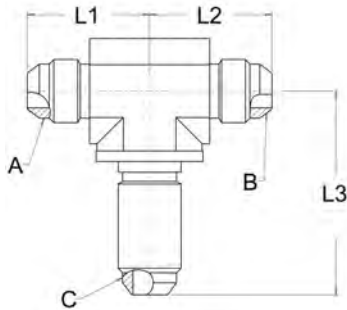
Tee Adapters

Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 - Tee



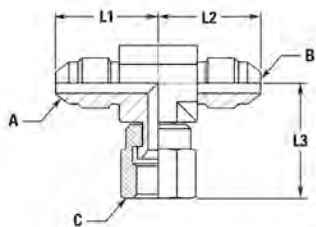
Part Number	End A			End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length		
211-4494	7/16-20	22.6	7/16-20	22.6	7/16-20	22.6	Brass	
281-5849	7/16-20	22.6	7/16-20	22.6	7/16-20	22.6	SST	
005-5421	7/16-20	22.6	7/16-20	22.6	7/16-20	22.6	Steel	
2P-8447	7/16-20	26.9	7/16-20	26.9	9/16-18	26.9	Steel	
2P-1291	1/2-20	24.1	1/2-20	24.1	1/2-20	24.1	Steel	
4S-3652	9/16-18	26.9	9/16-18	26.9	9/16-18	26.9	Steel	
450-2050	3/4-16	31.8	3/4-16	31.8	9/16-18	29	Steel	
032-1270	3/4-16	31.8	3/4-16	31.8	3/4-16	31.8	Steel	
003-8581	7/8-14	36.8	7/8-14	36.8	7/8-14	36.8	Steel	
4S-3572	1 1/16-12	42.2	1 1/16-12	42.2	9/16-18	33.8	Steel	
005-9702	1 1/16-12	42.2	1 1/16-12	42.2	1 1/16-12	42.2	Steel	
6S-2899	1 3/16-12	45.7	1 3/16-12	45.7	1 3/16-12	45.7	Steel	
6K-4235	1 5/16-12	46	1 5/16-12	46	1 5/16-12	46	Steel	
6K-3448	1 5/8-12	52.3	1 5/8-12	52.3	1 5/8-12	52.3	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	L1 Length	Thread size	L2 Length	Thread size	L3 Length		
0A-3732	7/16-20	24.6	7/16-20	24.6	7/16-20	40.4	Steel	
2P-9376	9/16-18	27.7	9/16-18	27.7	9/16-18	46	Steel	
2P-7213	9/16-18	31.8	9/16-18	31.8	3/4-16	53.6	Steel	
061-8408	3/4-16	34.5	3/4-16	34.5	3/4-16	53.6	Steel	
061-7738	7/8-14	39.6	7/8-14	39.6	7/8-14	60.7	Steel	
061-8827	1 1/16-12	45.2	1 1/16-12	45.2	1 1/16-12	67.8	Steel	
053-2928	1 5/16-12	49.3	1 5/16-12	49.3	1 5/16-12	71.1	Steel	

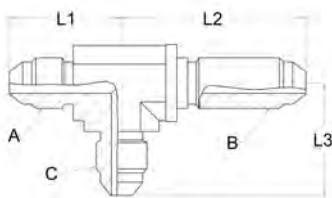
Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 / 37° Flare-SAE J514 Swivel Nut - Tee



Part Number	End A			End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length		
2N-8142	7/16-20	22.6	7/16-20	22.6	7/16-20	25.4	Steel	
053-0700	9/16-18	26.9	9/16-18	26.9	9/16-18	31.8	Steel	
5P-3166	3/4-16	31.8	3/4-16	31.8	3/4-16	35.1	Steel	
061-8284	7/8-14	36.8	7/8-14	36.8	7/8-14	41.1	Steel	
5P-3165	1 1/16-12	42.2	1 1/16-12	42.2	1 1/16-12	44.4	Steel	
5P-0788	1 3/16-12	45.7	1 3/16-12	45.7	1 3/16-12	45.2	Steel	
459-0602	1 5/16-12	46	1 5/16-12	46	1 5/16-12	50.8	SST	
5P-4494	1 5/16-12	46	1 5/16-12	46	1 5/16-12	50.8	Steel	
177-2112	1 7/8-12	59.2	1 7/8-12	59.2	1 7/8-12	65.8	Steel	

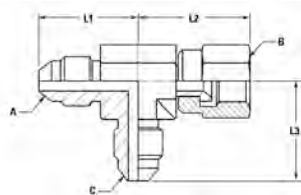
Tee Adapters

Male 37° Flare-SAE J514 / Bulkhead Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 - Tee



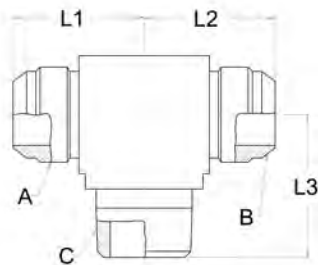
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
8T-3300	7/16-20	24.6	7/16-20	40.4	7/16-20	24.6	Steel
6V-5535	9/16-18	27.7	9/16-18	46	9/16-18	27.7	Steel
2P-8130	3/4-16	34.5	3/4-16	53.6	3/4-16	34.5	Steel
5P-7154	1 1/16-12	45.2	1 1/16-12	67.8	1 1/16-12	45.2	Steel
236-1429	1 5/16-12	49.3	1 5/16-12	71.1	1 5/16-12	49.3	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	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
052-0572	7/16-20	22.6	7/16-20	25.4	7/16-20	22.6	Steel
5P-4982	1/2-20	24.1	1/2-20	26.9	1/2-20	24.1	Steel
061-9258	9/16-18	26.9	9/16-18	31.8	9/16-18	26.9	Steel
391-4604	3/4-16	31.8	3/4-16	31.8	7/16-20	26.9	Steel
113-2934	3/4-16	31.8	3/4-16	33	9/16-18	30	Steel
6S-5693	3/4-16	31.8	3/4-16	35.1	3/4-16	31.8	Steel
9S-0176	7/8-14	36.8	7/8-14	41.1	7/8-14	36.8	Steel
7D-0978	1 1/16-12	42.2	1 1/16-12	44.4	1 1/16-12	42.2	Steel
5P-4984	1 3/16-12	45.7	1 3/16-12	45.2	1 3/16-12	45.7	Steel
281-5894	1 5/16-12	46	1 5/16-12	50.8	1 5/16-12	46	SST
5P-2242	1 5/16-12	46	1 5/16-12	50.8	1 5/16-12	46	Steel
5P-4983	1 5/8-12	52.3	1 5/8-12	58.7	1 5/8-12	52.3	Steel

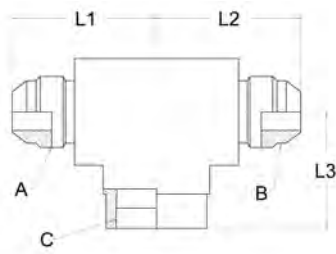
Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 / Male NPTF - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
8D-0071	7/16-20	22.6	7/16-20	22.6	1/8-27	19.8	Steel
183-6689	7/16-20	22.6	7/16-20	22.6	1/8-27	19.8	Steel
194-4423	7/16-20	26.6	7/16-20	26.6	1/4-18	27.7	Steel
7K-4128	9/16-18	26.9	9/16-18	26.9	1/4-18	27.7	Steel
469-7843	9/16-18	26.7	9/16-18	26.7	3/8-18	31	Steel
8J-1040	3/4-16	31.8	3/4-16	31.8	3/8-18	31	Steel
001-6300	3/4-16	33.8	3/4-16	33.8	1/2-14	37.3	Steel
061-8260	7/8-14	36.8	7/8-14	36.8	1/2-14	37.3	Steel
061-8261	1 1/16-12	42.2	1 1/16-12	42.2	3/4-14	40.4	Steel
508-5799	1 5/16-12	46	1 5/16-12	46	3/4-14	45.2	Steel
494-2084	1 5/16-12	46	1 5/16-12	46	1-11.5	50	SST
6K-3449	1 5/16-12	46	1 5/16-12	46	1-11.5	50	Steel
225-6690	1 7/8-12	59.2	1 7/8-12	59.2	1 1/2-11.5	67.1	Steel

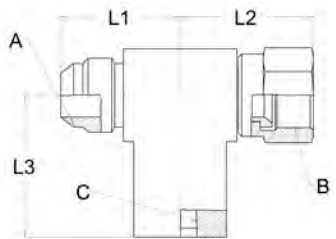
Tee Adapters

Male 37° Flare-SAE J514 / Male 37° Flare-SAE J514 / NPTF Port - Tee



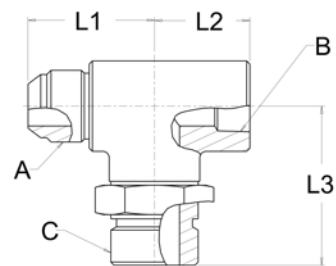
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
211-4527	1/2-20	30	1/2-20	30	1/4-18	12.5	Brass
498-1846	3/4-16	38.7	3/4-16	38.7	1/2-14	31.2	SST

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	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
480-3000	7/8-14	36.8	7/8-14	41.1	1/8-27	43.8	Brass

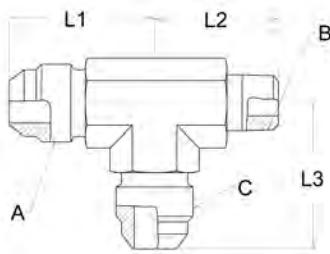
Male 37° Flare-SAE J514 / NPTF Port / Male STOR - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
120-8401	3/4-16	36.1	1/2-14	31.2	3/4-16	41.1	Steel
149-5207	7/8-14	39.1	3/8-18	29.5	1 1/16-12	49.3	Steel

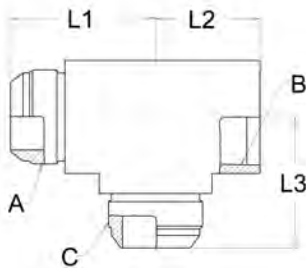
Tee Adapters

Male 37° Flare-SAE J514 / Male NPTF / Male 37° Flare-SAE J514 - Tee



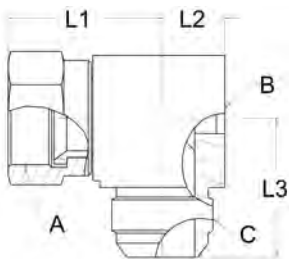
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
9S-7695	7/16-20	22.6	1/8-27	19.8	7/16-20	22.6	Steel
164-5637	7/16-20	26.6	1/4-18	27.7	7/16-20	26.6	SST
176-1305	7/16-20	26.6	1/4-18	27.7	7/16-20	26.6	Steel
204-5341	9/16-18	26.9	1/8-27	22.9	9/16-18	26.9	Steel
6S-2289	9/16-18	26.9	1/4-18	27.7	9/16-18	26.9	Steel
9X-2623	9/16-18	29	3/8-18	31	9/16-18	29	Steel
5P-4495	3/4-16	31.8	3/8-18	31	3/4-16	31.8	Steel
001-6842	3/4-16	33.8	1/2-14	37.3	3/4-16	33.8	Steel
8T-2864	7/8-14	36.8	1/2-14	37.3	7/8-14	36.8	Steel
006-0315	1 1/16-12	42.2	3/4-14	40.4	1 1/16-12	42.2	Steel
6K-8748	1 5/16-12	46	1-11.5	50	1 5/16-12	46	Steel

Male 37° Flare-SAE J514 / NPTF Port / Male 37° Flare-SAE J514 - Tee



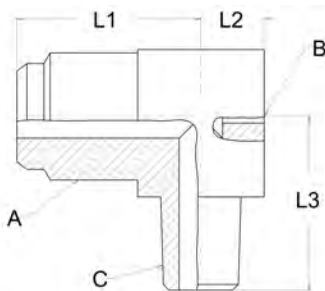
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
151-6584	9/16-18	0	1/4-18	0	9/16-18	27	Steel
6S-2365	9/16-18	31.2	1/4-18	22.4	9/16-18	31.2	Steel
5R-8895	1 7/8-12	73.41	1 1/2-11.5	52.8	1 7/8-12	66.3	Steel

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	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
6V-0434	1 5/16-12	50.8	1/8-27	16.66	1 5/16-12	45.97	Steel

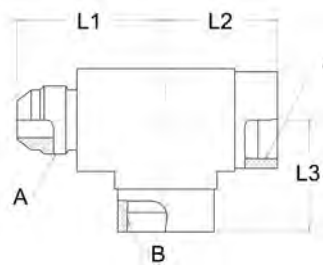
Male 37° Flare-SAE J514 / NPTF Port / Male NPTF - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
002-5393	1 3/16-12	43.66	1/8-27	15.88	3/4-14	41.28	Steel

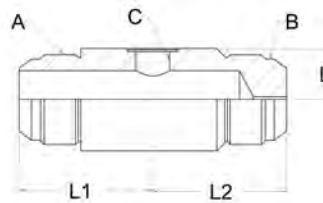
Tee Adapters

Male 37° Flare-SAE J514 / NPTF Port / NPTF Port - Tee



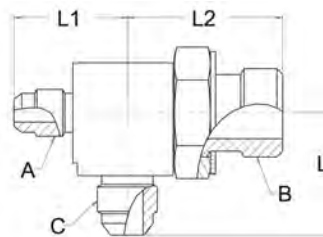
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L3 Length	Thread size	L2 Length	
513-9662	3/4-16	41.7	1/2-14	31.2	1/2-14	31.2	Steel

Male 37° Flare-SAE J514 / Male 45° Flare-SAE J512 / Metric STOR Port - Tee



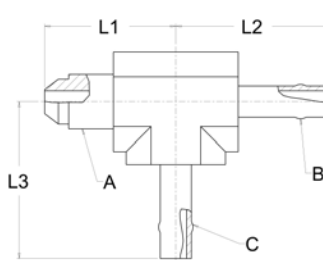
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
492-2726	1 5/16-12	50	1 5/16-12	50	M14x1.50	19.05	Steel

Male 37° Flare-SAE J514 / Male BSPP STOR-JIS B2351 / Male 37° Flare-SAE J514 - Tee



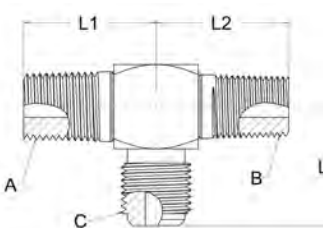
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
136-0343	7/16-20	27	1/2-14	37	9/16-18	29	Steel

Male 37° Flare-SAE J514 / Hose Bead / Hose Bead - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
227-5922	7/16-20	26.7	6.35	31.8	6.35	31.8	Steel

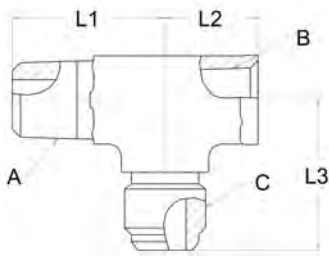
Male NPTF / Male NPTF / Male 37° Flare-SAE J514 - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
442-3414	1/2-14	37.38	1/2-14	37.3	3/4-16	33.53	Steel

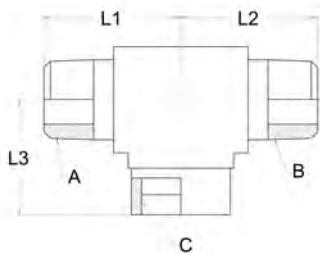
Tee Adapters

Male NPTF / NPTF Port / Male 37° Flare-SAE J514 - Tee



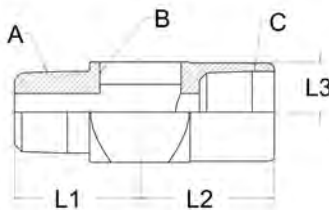
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
341-3168	1/4-18	27.4	1/4-18	16.7	9/16-18	26.9	Steel

Male NPTF / Male NPTF / NPTF Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
5P-9385	1/8-27	19.8	1/8-27	19.8	1/8-27	16.8	Steel
511-3223	1/2-14	37.3	1/2-14	37.3	1/2-14	31.2	Steel

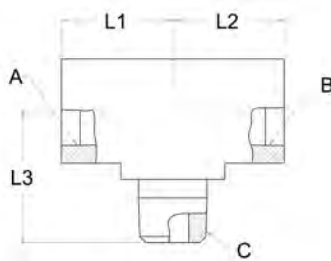
Male NPTF / NPTF Port / NPTF Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L3 Length	Thread size	L2 Length	
030-9208	1/8-27	16.8	1/8-27	13.89	1/8-27	14	Brass
319-9173	1/8-27	18.5	1/8-27	6	1/8-27	14.5	Brass
5P-3422	1/8-27	19.8	1/8-27	16.8	1/8-27	16.8	Steel
514-1950	1/8-27	16	1/8-27	6.4	1/8-27	17	Steel
3L-6521	1/4-18	27	1/4-18	20.6	1/4-18	20.6	Iron
2D-7325	1/4-18	27.7	1/4-18	22.4	1/4-18	22.4	Steel
7J-6740	3/8-18	26.16	3/8-18	21.34	3/8-18	21.34	Brass
6B-7639	3/8-18	36.51	3/8-18	23.81	3/8-18	23.81	Iron
281-5830	3/8-18	31	3/8-18	25.9	3/8-18	25.9	SST
8L-6005	3/8-18	31	3/8-18	25.9	3/8-18	25.9	Steel
474-2623	1/2-14	37.3	1/2-14	31.2	1/2-14	31.2	Brass
6A-3591	1/2-14	31.8	1/2-14	27.18	1/2-14	27.18	Brass
5L-5502	1/2-14	37.3	1/2-14	31.2	1/2-14	31.2	Steel
4K-2430	3/4-14	40.4	1/2-14	34.5	1/2-14	30.2	Steel
1N-8559	3/4-14	47.6	3/4-14	33.3	3/4-14	33.3	Iron
052-0726	3/4-14	40.4	3/4-14	34.5	3/4-14	34.5	Steel
1L-4031	1-11.5	53.98	1-11.5	38.1	1-11.5	38.1	Iron
4L-1848	1 1/4-11.5	61.91	1 1/4-11.5	44.45	1 1/4-11.5	44.45	Brass
6V-6939	1 1/4-11.5	60.5	1 1/4-11.5	43.2	1 1/4-11.5	43.2	Steel

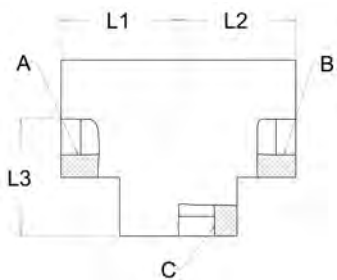
Tee Adapters

NPTF Port / NPTF Port / Male NPTF - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
6V-1240	1/8-27	16.8	1/8-27	16.8	1/8-27	19.8	Steel
270-6959	1/8-27	9.55	1/8-27	9.55	1/8-27	31.7	Steel
004-5933	1/4-18	22.4	1/4-18	22.4	1/4-18	27.7	Steel
316-8399	1/4-18	25	1/4-18	25	1/4-18	24	Steel
6V-3530	3/8-18	21.3	3/8-18	21.3	3/8-18	24.6	Brass
002-5299	3/8-18	25.9	3/8-18	25.9	3/8-18	31	Steel
033-2177	1/2-14	31.2	1/2-14	31.2	1/2-14	37.3	Steel
5P-8753	3/4-14	34.5	3/4-14	34.5	3/4-14	40.4	Steel
2P-1306	1-11.5	41.1	1-11.5	41.1	1-11.5	50	Steel

NPTF Port / NPTF Port / NPTF Port - Tee



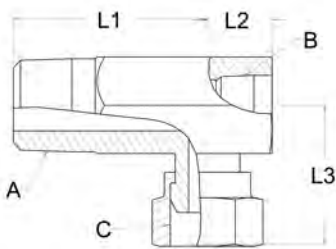
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
3B-7900	1/8-27	13.7	1/8-27	13.7	1/8-27	13.7	Brass
1Y-7551	1/8-27	17.5	1/8-27	17.5	1/8-27	17.5	Iron
5P-3741	1/8-27	16.8	1/8-27	16.8	1/8-27	16.8	Steel
9B-1964	1/8-27	19.8	1/8-27	19.8	1/4-18	19.8	Brass
9U-6389	1/4-18	18.25	1/4-18	18.25	1/8-27	15.88	Brass
3B-7762	1/4-18	17.5	1/4-18	17.5	1/4-18	17.5	Brass
8B-1261	1/4-18	20.6	1/4-18	20.6	1/4-18	20.6	Iron
006-0210	1/4-18	22.4	1/4-18	22.4	1/4-18	22.4	Steel
6V-1739	3/8-18	24	3/8-18	24	1/4-18	24	Steel
6B-2982	3/8-18	23.8	3/8-18	23.8	3/8-18	23.8	Iron
003-8470	3/8-18	25.9	3/8-18	25.9	3/8-18	25.9	Steel
242-5361	3/8-18	21.7	3/8-18	21.7	3/8-18	21.7	Steel
2L-3623	1/2-14	28.6	1/4-18	28.6	1/2-14	28.6	Iron
3H-2891	1/2-14	27	3/8-18	23.81	3/8-18	27	Iron
2L-0332	1/2-14	27	1/2-14	27	3/8-18	27	Iron
8F-0884	1/2-14	25.7	1/2-14	25.7	1/2-14	25.7	Brass
5B-8979	1/2-14	28.6	1/2-14	28.6	1/2-14	28.6	Iron
1Y-0413	1/2-14	31.2	1/2-14	31.2	1/2-14	31.2	Steel
3L-3358	1/2-14	28.4	1/2-14	28.4	3/4-14	33.3	Iron
8C-3346	1/2-14	42.9	1 1/2-11.5	49.3	1 1/2-11.5	49.3	Steel
473-6155	3/4-14	33.3	1/4-18	33.3	3/4-14	33.3	Iron
5L-3993	3/4-14	30.2	1/2-14	28.5	1/2-14	31.8	Iron
7L-7308	3/4-14	36.6	1/2-14	35.1	3/4-14	36.6	Steel
473-6154	3/4-14	33.3	3/4-14	33.3	1/4-18	33.3	Iron
004-2378	3/4-14	34.5	3/4-14	34.5	3/4-14	34.5	Brass
415-7243	3/4-14	29.46	3/4-14	29.46	3/4-14	29.46	Brass
1L-8444	3/4-14	33.3	3/4-14	33.3	3/4-14	33.3	Iron
6F-0496	3/4-14	33.3	3/4-14	33.3	1-11.5	38.1	Iron
2N-3599	1-11.5	35.1	1-11.5	35.1	3/4-14	38.4	Steel
149-5210	1-11.5	38.1	1-11.5	38.1	1-11.5	38.1	Iron
4B-7770	1-11.5	38.1	1-11.5	38.1	1-11.5	38.1	Steel
520-8518	1-11.5	51	1-11.5	51	1-11.5	51	Steel
278-4528	1-11.5	51.3	2-11.5	57.2	2-11.5	57.2	Iron
278-4529	1-11.5	69.6	3-8	78.2	3-8	78.2	Iron
1Y-7453	1 1/4-11.5	38.1	1 1/4-11.5	38.1	3/4-14	41.28	Iron

Tee Adapters

NPTF Port / NPTF Port / NPTF Port - Tee (Cont'd.)

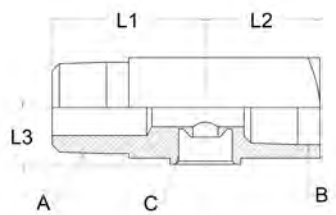
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
6V-6940	1 1/4-11.5	43.2	1 1/4-11.5	43.2	1 1/4-11.5	43.2	Brass
8B-9579	1 1/4-11.5	44.45	1 1/4-11.5	44.45	1 1/4-11.5	44.45	Iron
491-5272	1 1/4-11.5	43.2	1 1/4-11.5	43.2	1 1/4-11.5	43.2	SST
6V-6941	1 1/4-11.5	43.2	1 1/4-11.5	43.2	1 1/4-11.5	43.2	Steel
5L-8289	1 1/2-11.5	41.1	1-11.5	36.6	1-11.5	44.5	Iron
371-7168	1 1/2-11.5	52.8	1 1/2-11.5	52.8	1-11.5	67.1	Steel
1L-2782	1 1/2-11.5	49.2	1 1/2-11.5	49.2	1 1/2-11.5	49.2	Iron
6F-7701	1 1/2-11.5	54.1	1 1/2-11.5	54.1	1 1/2-11.5	54.1	Iron
281-5860	1 1/2-11.5	52.8	1 1/2-11.5	52.8	1 1/2-11.5	52.8	SST
439-1877	1 1/2-11.5	49.3	1 1/2-11.5	49.3	1 1/2-11.5	49.3	SST
6V-8251	1 1/2-11.5	51	1 1/2-11.5	51	1 1/2-11.5	51	Steel
328-7438	2-11.5	63.5	2-11.5	63.5	2-11.5	63.5	Iron
385-5789	2-11.5	57.2	2-11.5	57.2	2-11.5	57.2	Iron
6L-7322	2-11.5	57	2-11.5	57	2-11.5	57	Iron
421-6203	2-11.5	57.2	2-11.5	57.2	2-11.5	57.2	SST
287-7287	2 1/2-8	68.6	2 1/2-8	68.6	2 1/2-8	68.6	SST
140-5980	3-8	78.23	3-8	78.23	3-8	78.23	Iron
319-6196	3-8	85.9	3-8	85.9	3-8	85.9	Iron

Male NPTF / NPTF Port / NPSM Swivel Nut - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
9D-3351	1/2-14	45.2	1/4-18	0	3/8-18	24.9	Steel

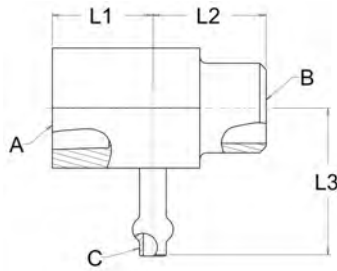
Male NPTF / NPTF Port / 45° Inverted Flare-SAE J512 Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
6V-5513	3/8-18	29.2	1/4-18	21.8	7/16-24	10.7	Brass

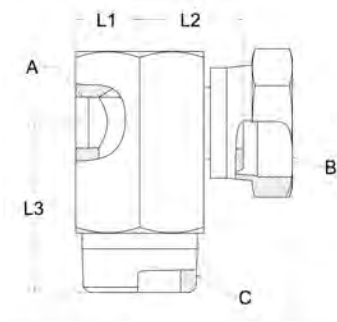
Tee Adapters

Male NPTF / NPTF Port / Hose Bead - Tee



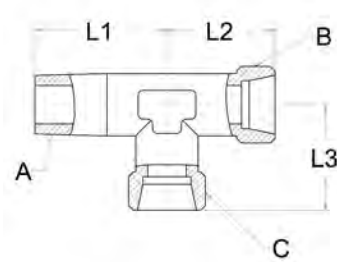
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
6N-3802	1/2-14	24	1/2-14	27	6.35	35	Steel

NPTF Port / NPSM Swivel Nut / Male NPTF - Tee



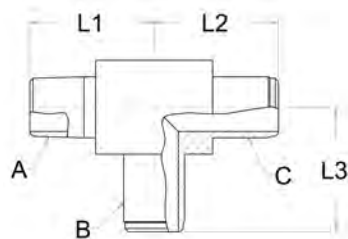
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
8X-6293	1/2-14	27	1 1/2-11.5	43.7	1 1/2-11.5	71.4	Steel

Male NPTF / Male Metric Flat Face-ISO 9974 / 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	
221-1584	1/4-19	25	M16x1.5	25	M16x1.50	22	Brass

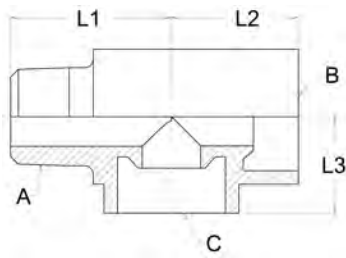
Male NPTF / Male 45° Flare-SAE J512 / Male 45° Flare-SAE J512 - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L3 Length	Thread size	L2 Length	
5P-3932	1/4-18	26.6	5/8-18	26.6	5/8-18	26.6	Brass
1Y-8083	3/8-18	28.4	3/4-16	31	3/4-16	31	Brass

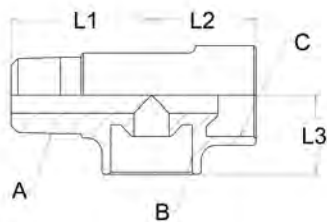
Tee Adapters

Male NPTF / 45° Inverted Flare-SAE J512 Port / 45° Flare-SAE J512 Port - Tee



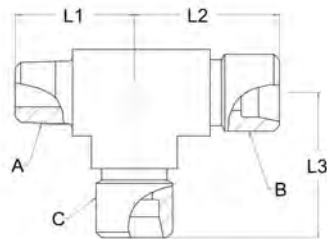
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
6K-8214	3/8-18	28.4	3/4-18	22.4	3/4-18	17	Brass

Male NPTF / 45° Inverted Flare-SAE J512 Port / 45° Inverted Flare-SAE J512 Port - Tee



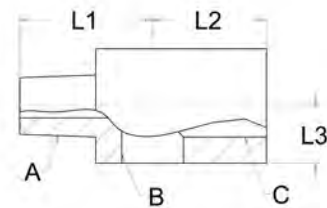
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L3 Length	Thread size	L2 Length	
9L-9045	1/8-27	19.1	7/16-24	10.7	7/16-24	14.2	Brass
9S-7752	1/8-27	21.6	1/2-20	11.4	1/2-20	15.7	Brass
6K-8498	1/4-18	27.5	5/8-18	14.2	5/8-18	19	Brass
6K-8080	1/2-14	35.9	7/8-18	19	7/8-18	24.6	Brass

Male NPTF / Male 24° Flareless-SAE J514 / Male 24° Flareless-SAE J514 - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
5P-5525	1/8-27	19.8	1/2-20	24.1	1/2-20	24.1	Steel
5P-6044	1/4-18	27.7	9/16-18	26.7	9/16-18	26.7	Steel

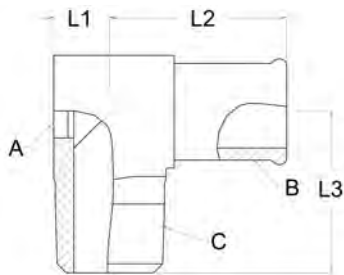
Male NPTF / BSPP STOR-JIS B2351 Port / BSPP STOR-JIS B2351 Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
291-4211	1/4-28	12	1/8-28	14	1/8-28	14	Steel

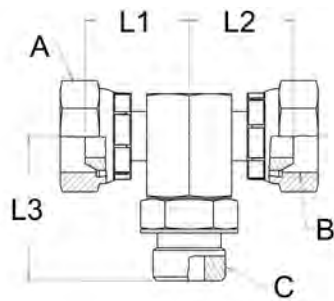
Tee Adapters

NPTF Port / Hose Bead / Male NPTF - Tee



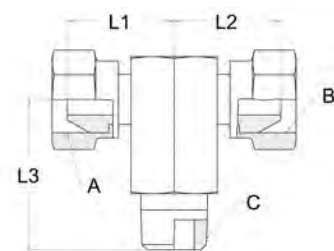
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
6V-0676	1/8-27	0	19.05	34.92	1/2-14	31.75	Brass

NPSM Swivel Nut / NPSM Swivel Nut / Male STOR - Tee



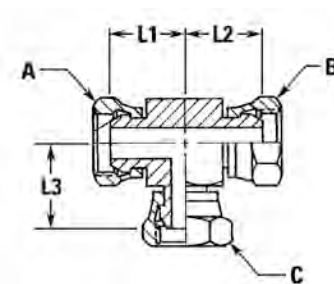
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
5P-7929	1/4-18	21.85	1/4-18	21.85	9/16-18	33	Steel
5P-7930	1/2-14	27.5	1/2-14	27.5	3/4-16	38.1	Steel

NPSM Swivel Nut / NPSM Swivel Nut / Male NPTF - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
3S-6115	1/4-18	21	1/4-18	21	1/4-18	31	Steel
003-6997	1/4-18	23.35	1/4-18	23.35	1/2-14	45.2	Steel
7J-5996	3/8-18	27.7	3/8-18	27.7	3/8-18	38.9	Steel
4D-4917	1/2-14	25	1/2-14	25	1/2-14	45.9	Steel
4D-0583	1/2-14	27.55	1/2-14	27.55	3/4-14	50.8	Steel

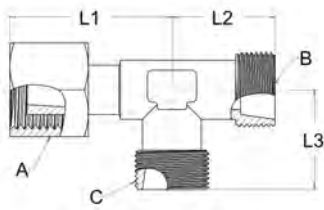
NPSM Swivel Nut / NPSM Swivel Nut / NPSM Swivel Nut - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
4D-9976	1/4-18	21	1/4-18	21	1/4-18	19.8	Steel

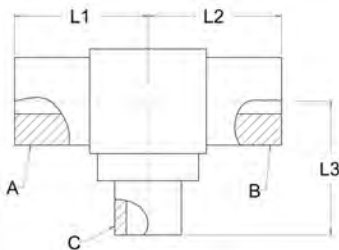
Tee Adapters

Male Metric Flat Face-ISO 9974 / Metric Flat Face-ISO 9974 Swivel Nut / Male Metric Flat Face-ISO 9974 - Tee



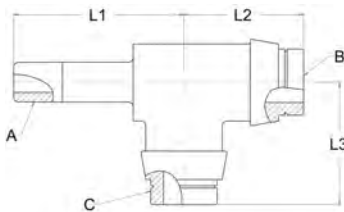
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
330-2595	M16x1.5	33	M16x1.5	21	M16x1.50	20	Steel

BSPP Flat Face-ISO 1179 Port / BSPP Flat Face-ISO 1179 Port / NPTF Port - Tee



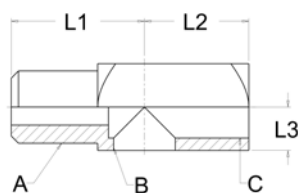
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
492-3329	3/8-19	32	3/8-19	32	3/8-18	32	Steel

Bulkhead Male BSPP Flat Face-ISO 1179 / BSPP Flat Face-ISO 1179 Port / BSPP Flat Face-ISO 1179 Port - Tee



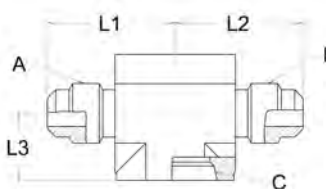
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
420-1549	1/4-19	27.43	1/4-19	19.3	1/4-19	19.81	Steel

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	L1 Length	Thread size	L3 Length	Thread size	L2 Length	
250-0241	1/8-28	18.5	1/8-28	6	1/8-28	14.5	Brass

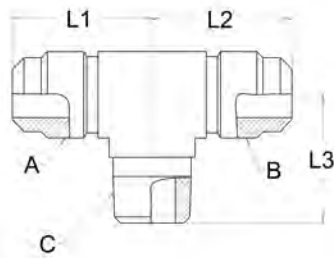
Male 45° Flare-SAE J512 / Male 45° Flare-SAE J512 / STOR Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
211-4499	7/16-20	24	7/16-20	24	9/16-18	12.5	Brass

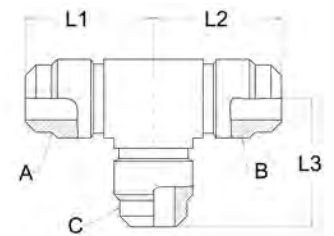
Tee Adapters

Male 45° Flare-SAE J512 / Male 45° Flare-SAE J512 / Male NPTF - Tee



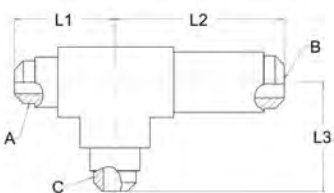
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
3B-9397	7/16-20	21	7/16-20	21	1/8-27	19	Brass
474-2601	3/4-16	31	3/4-16	31	3/8-18	28.4	Brass

Male 45° Flare-SAE J512 / Male 45° Flare-SAE J512 / Male 45° Flare-SAE J512 - Tee



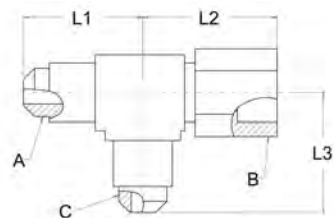
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
133-9660	3/8-24	19	3/8-24	19	3/8-24	19	Brass
474-2609	3/4-16	31	3/4-16	31	3/4-16	31	Brass
476-9410	7/8-14	35.8	7/8-14	35.8	7/8-14	35.8	Brass

Male 45° Flare-SAE J512 / Bulkhead Male 45° Flare-SAE J512 / Male 45° Flare-SAE J512 - Tee



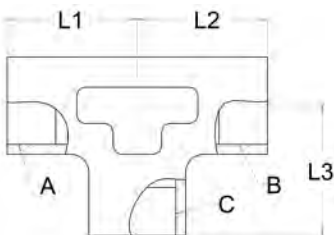
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
507-6903	5/8-18	42.7	3/4-16	42.7	5/8-18	35	Steel

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	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
507-6910	7/16-20	23	7/16-20	25	7/16-20	23	Steel

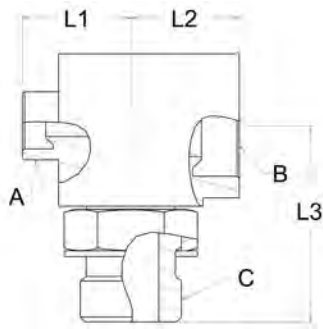
45° Flare-SAE J512 Port / 45° Flare-SAE J512 Port / 45° Flare-SAE J512 Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
6R-9166	1/2-20	21.5	1/2-20	21.5	1/2-20	21.5	Brass

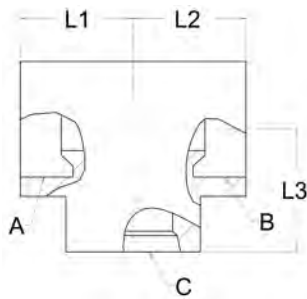
Tee Adapters

Male 45° Inverted Flare-SAE J512 / 45° Inverted Flare-SAE J512 Port / Male STOR - Tee



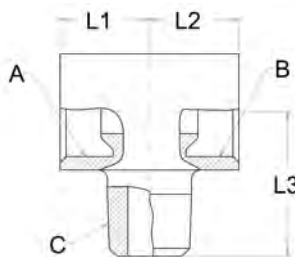
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
5P-7603	7/16-24	23.9	7/8-18	23.9	7/8-14	43.2	Steel

45° Inverted Flare-SAE J512 Port / 45° Inverted Flare-SAE J512 Port / STOR Port - Tee



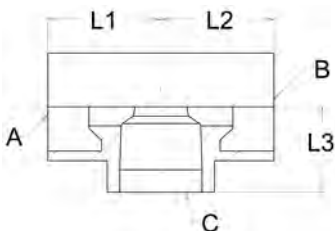
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
9X-2525	5/8-18	18.65	5/8-18	18.65	9/16-18	20.3	Brass
9X-2527	3/4-18	22.2	3/4-18	22.2	9/16-18	23.6	Brass

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	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
9L-8496	7/16-24	10.7	7/16-24	10.7	1/8-27	16.4	Brass
9S-7728	1/2-20	11.95	1/2-20	11.95	1/8-27	17.1	Brass
5K-9989	5/8-18	14.75	5/8-18	14.75	1/4-18	23.7	Brass
9S-7730	3/4-18	17.55	3/4-18	17.55	3/8-18	25.8	Brass
9S-7731	7/8-18	19.8	7/8-18	19.8	1/2-14	32.6	Brass

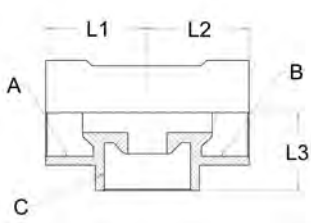
45° Inverted Flare-SAE J512 Port / 45° Inverted Flare-SAE J512 Port / NPTF Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
9S-7742	7/16-24	14.2	7/16-24	14.2	1/8-27	10.7	Brass
9S-7744	5/8-18	18.65	5/8-18	18.65	1/4-18	14.2	Brass
6K-8078	3/4-18	22.2	3/4-18	22.2	3/8-18	17	Brass
9S-7747	7/8-18	24.65	7/8-18	24.65	1/2-14	19	Brass

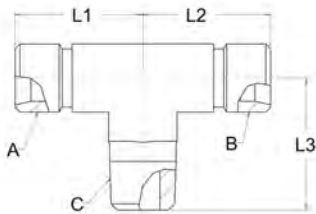
Tee Adapters

45° Inverted Flare-SAE J512 Port / 45° Inverted Flare-SAE J512 Port / 45° Inverted Flare-SAE J512 Port - Tee



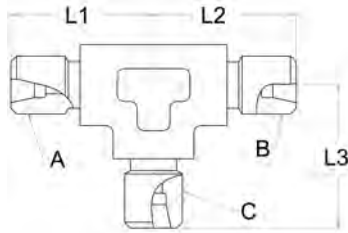
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
7R-6708	3/8-24	13.9	3/8-24	13.9	3/8-24	10.1	Brass
9L-8557	7/16-24	14.2	7/16-24	14.2	7/16-24	10.7	Brass
4D-6956	7/16-24	14.22	7/16-24	14.22	1/2-20	11.68	Brass
4D-8122	7/16-24	12.7	1/2-20	12.7	7/16-24	20.6	Brass
5K-9988	5/8-18	18.65	5/8-18	18.65	5/8-18	14.2	Brass
7K-2543	3/4-18	22.2	3/4-18	22.2	3/4-18	17	Brass

Male 24° Flareless-SAE J514 / Male 24° Flareless-SAE J514 / Male NPTF - Tee



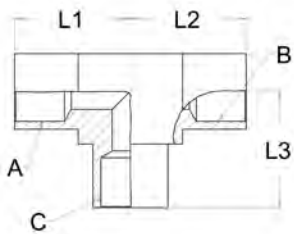
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
5P-7247	9/16-18	26.7	9/16-18	26.7	1/4-18	27.7	Steel

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	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
8C-9006	5/16-24	19.6	5/16-24	19.6	5/16-24	19.6	Steel
5P-4252	1/2-20	24.1	1/2-20	24.1	1/2-20	24.1	Steel
5P-6985	7/8-14	36.1	7/8-14	36.1	7/8-14	36.1	Steel

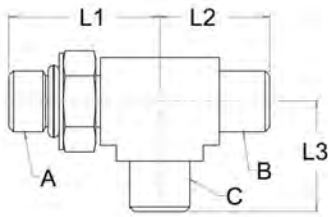
BSPP STOR-JIS B2351 Port / BSPP STOR-JIS B2351 Port / BSPP STOR-JIS B2351 Port - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
314-5071	1/4-19	31	1/4-19	31	1/4-19	31	Steel
203-0374	3/8-19	22	3/8-19	22	3/8-19	22	Brass
147-2441	3/4-14	30.5	3/4-14	30.5	3/4-14	24	Brass

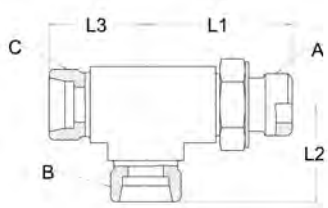
Tee Adapters

Male BSPP STOR-JIS B2351 / Male 60° Cone-BS5200 / Male 60° Cone-BS5200 - Tee



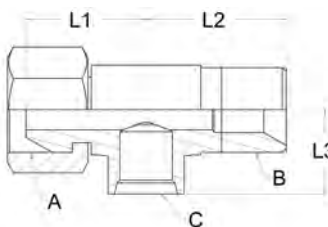
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
121-3738	1/4-19	33	1/4-19	24	1/4-19	24	Steel
140-5113	1/4-19	28	1/4-19	26	1/4-19	26	Steel
121-3737	1/2-14	47	1/2-14	37	1/2-14	37	Steel

Male BSPP STOR-JIS B2351 / Male 24° Cone-ISO 8434-1 / Male 24° Cone-ISO 8434-1 - Tee



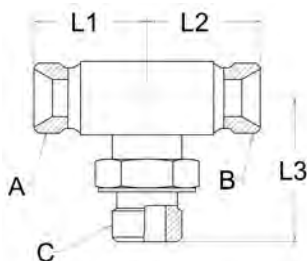
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
175-9565	3/8-19	40.5	M20x1.5	29	M20x1.50	29	Steel
384-2496	1/2-14	50	M18x1.5	26	M18x1.50	26	Steel
234-7415	1/2-14	50	M24x1.5	33	M24x1.50	33	Steel

BSPP STOR-JIS B2351 Swivel Nut / Male 30° Flare-JIS / STOR Port - Tee



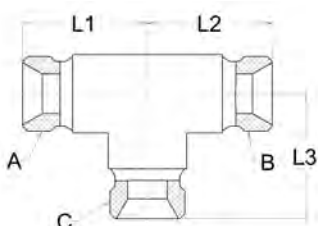
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
7X-2434	1/4-19	27	1/4-19	26.4	9/16-18	16.3	Steel
7X-2435	3/8-19	28.7	3/8-19	30.99	9/16-18	17.5	Steel
7X-2433	1/2-14	30	1/2-14	35	9/16-18	20.83	Steel

Male 60° Cone-BS5200 / Male 60° Cone-BS5200 / 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	L3 Length	
295-1698	1/2-14	34	1/2-14	34	1/2-14	43	Steel

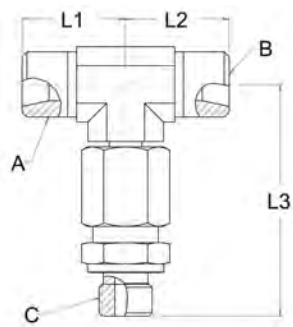
Male 60° Cone-BS5200 / Male 60° Cone-BS5200 / Male 60° Cone-BS5200 - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
465-9012	1/2-14	35	1/2-14	35	1/2-14	35	Steel

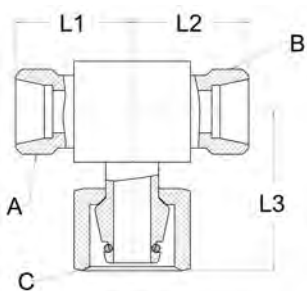
Tee Adapters

Male 24° Cone-ISO 8434-1 / Male 24° Cone-ISO 8434-1 / Male BSPP Flat Face-ISO 1179 - Tee



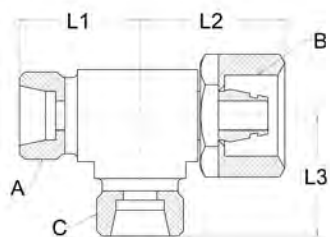
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
453-9926	M12x1.5	19	M12x1.5	19	1/8-18	42.5	Steel

Male 24° Cone-ISO 8434-1 / Male 24° Cone-ISO 8434-1 / 24° Cone-ISO 8434-1 Swivel Nut - Tee



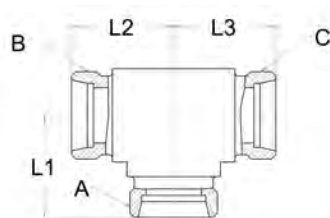
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
468-7741	M16x1.5	22	M16x1.5	22	M16x1.50	29	Steel
373-5676	M16x1.5	22	M16x1.5	22	M16x1.50	29	Steel

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
498-1845	M18x1.5	25	M18x1.5	30	M18x1.50	25	Steel
460-9845	M22x1.5	36.5	M22x1.5	32.5	M22x1.50	36	Steel

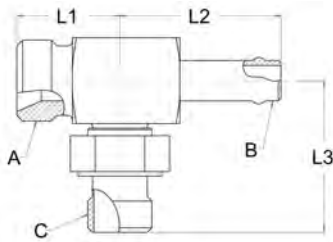
Male 24° Cone-ISO 8434-1 / Male 24° Cone-ISO 8434-1 / Male 24° Cone-ISO 8434-1 - Tee



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
487-7919	28	47	28	46.5	28	46.5	Steel
501-7451	28	38	28	41.5	28	38	Steel
487-7921	8	29	8	32	8	32	Steel
515-6283	10	22	10	22	10	29	Steel
511-6054	12	29.35	12	31	12	29	Steel
511-8645	18	31	18	31	18	31	Steel
513-9663	M30x2.00	35	M30x2	35	M30x2	38.5	Steel
508-5814	22	35	22	35	22	35	Steel

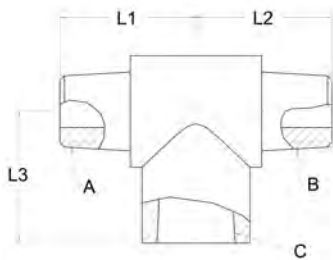
Tee Adapters

Male 24° Cone-ISO 8434-1 / Hose Bead / 37° Flare-SAE J514 Swivel Nut - Tee



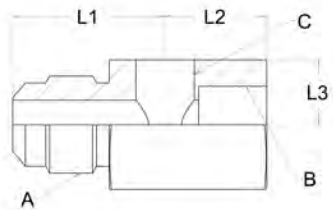
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
386-0825	M16x1.5	20.4	7.94	31.9	1/2-20	30	Steel

Male BSPT-ISO 7-1 / Male BSPT-ISO 7-1 / BSPT-ISO 7-1 Port - Tee



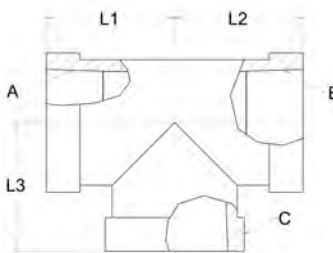
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
212-0095	3/8-19	29	3/8-19	29	3/8-19	28	Steel

Male BSPT-ISO 7-1 / BSPT-ISO 7-1 Port / BSPT-ISO 7-1 Port - Tee



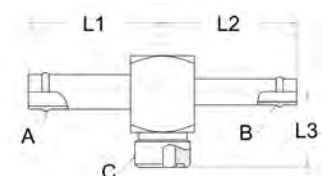
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
203-0394	3/4-16	25	3/8-19	25	1/4-19		Brass

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	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
211-3338	1/4-19	22.5	1/4-19	22.5	1/4-19	22.5	Steel
126-4715	3/8-18	25.5	3/8-18	25.5	3/8-18	25.5	Steel
271-9904	3/8-19	26.5	3/8-18	26.5	3/8-19	26.5	Steel
203-0373	1/2-14	26.5	1/2-14	26.5	1/2-14	26.5	Brass
166-4998	1-11	38.1	1-11	38.1	1-11	38.1	Steel

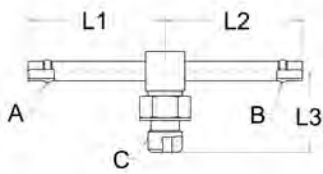
Hose Bead / Hose Bead / Male ORFS - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
352-6489	12.70	50	9.52	50	13/16-16	28	Steel

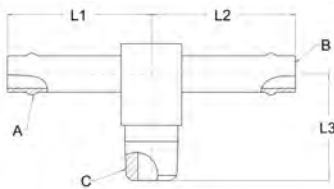
Tee Adapters

Hose Bead / Hose Bead / Male STOR - Tee



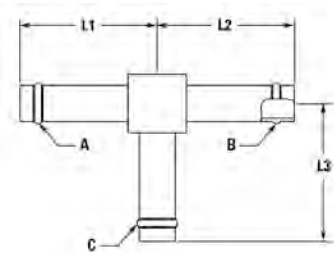
Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
334-1017	6.35	44.5	6.35	44.5	7/16-20	26.2	Steel
274-7407	9.52	45.97	9.52	45.97	9/16-18	31.75	Steel
321-8625	9.52	46.1	9.52	46.1	9/16-18	31.8	Steel
309-5140	12.70	48.51	12.70	48.51	3/4-16	36.83	Steel
122-1113	12.70	50.04	12.70	50.04	7/8-14	43.18	Steel
351-0287	12.70	50	15.88	50	7/8-14	43.2	Steel
326-0300	12.70	40	25.40	45	1 1/16-12	55.1	Steel
297-7932	9.52	75.8	25.40	82.6	1 3/16-12	50.8	Steel
420-7636	38.10	59.5	31.75	59.5	1 5/8-12	82.5	Steel

Hose Bead / Hose Bead / Male NPTF - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
302-4255	9.52	37.64	9.52	37.64	1/4-18	27.74	Steel

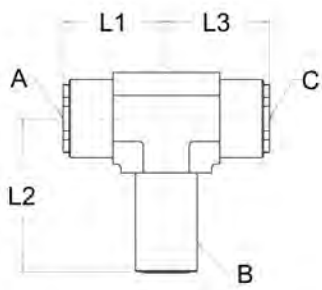
Hose Bead / Hose Bead / Hose Bead - Tee



Part Number	End A		End B		End C		Material
	Thread size	L1 Length	Thread size	L2 Length	Thread size	L3 Length	
287-7250	12.70	48.4	12.70	48.4	12.70	48.4	Steel
9X-3965	12.70	45	12.70	45	12.70	45	Steel
478-5154	12.70	31.8	12.70	31.8	4.76	31.8	Brass
7C-0754	15.88	41	15.88	41	15.88	40	Steel
393-5940	15.88	48.4	15.88	48.4	9.52	48.4	Steel
208-5455	19.05	45.7	19.05	45.7	19.05	45.7	Steel
232-0252	19.05	55.3	25.40	55.3	25.40	55.3	Steel
247-7279	25.40	54	19.05	51	19.05	51	Steel
212-3863	25.40	54	25.40	54	12.70	53	Steel
142-8320	25.40	55.3	25.40	55.3	19.05	55.3	Steel
271-0109	25.40	66	25.40	66	25.40	66	SST
319-6188	25.40	46	25.40	46	9.52	46.7	Steel
459-0734	31.75	58.7	25.40	58.7	25.40	58.7	Steel
399-9673	31.75	58.75	31.75	58.75	19.05	58.75	Steel
271-0110	31.75	66	31.75	66	25.40	66	SST
331-6108	44.44	70	44.44	70	25.40	80	SST
278-1541	6.35	49.9	19.05	49.9	25.40	49.9	Steel
192-5425	6.35	31.5	6.35	31.5	6.35	31.5	Steel
451-0479	9.52	48.5	12.70	48.5	9.52	48.5	SST
439-1955	9.52	48.5	9.52	48.5	12.70	48.5	SST
275-0151	9.52	48.4	9.52	48.4	12.70	38.1	Steel
287-7302	9.52	41.9	9.52	41.9	6.35	41.9	Steel
419-5087	9.52	45	9.52	45	9.52	45	SST

Tee Adapters

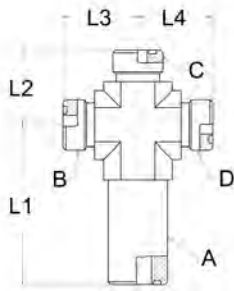
WEO Plug-In ORFS - Tee



Part Number	End A		End B	End C		Material	
	Dash Size	L1 Length	Thread size	L2 Length	Dash Size		L3 Length
529-7515	-8	42.5	1 - 14	63	-8	42.5	Steel

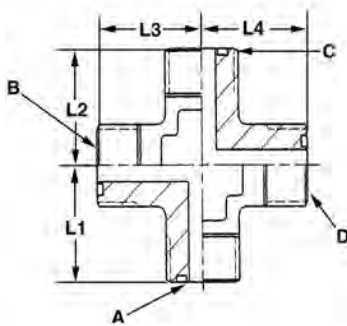
Cross Adapters

ORFS Bulkhead / Male / Male / Male-Cross



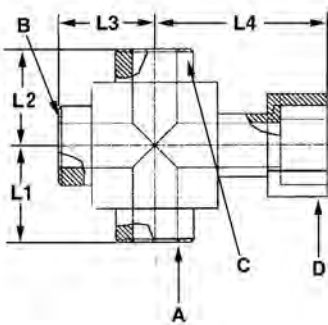
Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size					
398-5617	13/16 - 16	-8	11/16 - 16	-6	11/16 - 16	-6	11/16 - 16	-6	55.5	26	26	26	Steel
287-7336	13/16 - 16	-8	13/16 - 16	-8	13/16 - 16	-8	13/16 - 16	-8	55.5	28	28	28	Steel
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 / 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
241-6194	13/16 - 16	-8	1 - 14	-10	13/16 - 16	-8	11/16 - 16	-6	30.8	33.3	30.8	29.2	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

ORFS Male / Male / Male / Swivel-Nut Cross



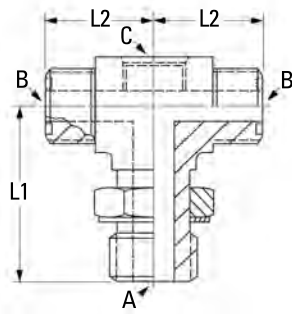
Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size					
386-6209	9/16 - 18	-4	9/16 - 18	-4	9/16 - 18	-4	9/16 - 18	-4	21.5	21.5	21.5	26.5	Brass
267-4035	9/16 - 18	-4	9/16 - 18	-4	9/16 - 18	-4	9/16 - 18	-4	21.5	21.5	21.5	26.5	Steel
237-7026	13/16 - 16	-8	9/16 - 18	-4	13/16 - 16	-8	13/16 - 16	-8	28	27.6	28	38	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

STOR Male / ORFS Male / ORFS Male / ORFS Male-Cross



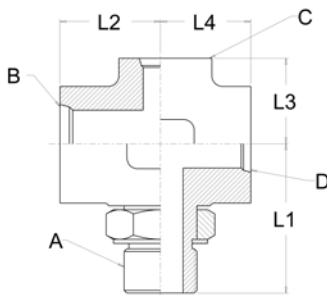
Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size					
214-4508	9/16 - 18	-6	11/16 - 16	-6	11/16 - 16	-6	11/16 - 16	-6	37	25	25	25	Steel
197-9460	9/16 - 18	-6	13/16 - 16	-8	11/16 - 16	-6	13/16 - 16	-8	36.5	28	26.5	28	Steel
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

STOR Male / ORFS Male / STOR Port / ORFS Male-Cross



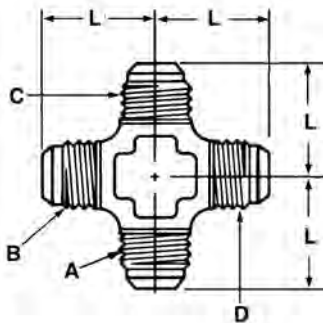
Part Number	End A		End B		End C		L1	L2	L3	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size				
163-6018	3/4 - 16	-8	11/16 - 16	-6	9/16 - 18	-6	40.6	25	11.1	Steel
081-5604	3/4 - 16	-8	11/16 - 16	-6	9/16 - 18	-6	39	25	28.5	Steel

STOR Male / Port / Port / Port-Cross



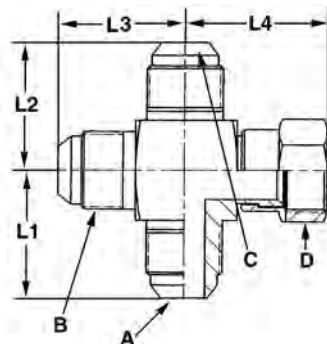
Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size					
125-2589	3/8 - 24	-3	3/8 - 24	-3	3/8 - 24	-3	7/16 - 20	-4	33.27	11.18	20.57	11.05	Steel
260-9176	1 1/16 - 12	-12	1 1/16 - 12	-12	9/16 - 18	-6	3/4 - 16	-8	55.1	37.3	31.7	33.5	Steel

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		
6V-0426	7/16 - 20	-4	7/16 - 20	-4	7/16 - 20	-4	7/16 - 20	-4	22.6	Steel
6S-2231	9/16 - 18	-6	9/16 - 18	-6	9/16 - 18	-6	9/16 - 18	-6	26.9	Steel
7J-6742	3/4 - 16	-8	3/4 - 16	-8	3/4 - 16	-8	3/4 - 16	-8	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	42.2	Steel
459-0608	1 5/16 - 12	-16	1 5/16 - 12	-16	1 5/16 - 12	-16	1 5/16 - 12	-16	46	SST
8C-4066	1 5/16 - 12	-16	1 5/16 - 12	-16	1 5/16 - 12	-16	1 5/16 - 12	-16	46	Steel

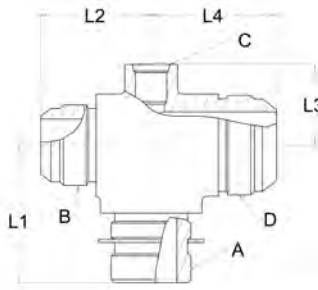
37° JIC Male / Male / Male / Swivel Nut-Cross



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
201-9897	1 1/16 - 12	-12	1 1/16 - 12	-12	1 1/16 - 12	-12	1 1/16 - 12	-12	42.2	42.2	42.2	44.4	Steel

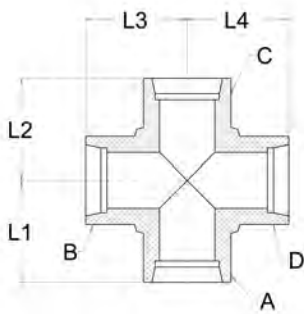
Cross Adapters

STOR Male / 37° JIC Male / STOR Port / 37° JIC Male-Cross



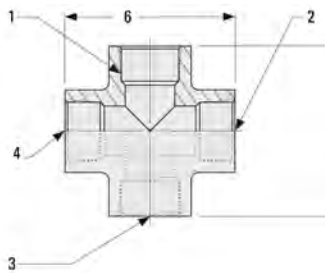
Part Number	End A		End B		End C		End D		L1	L2	L3	L4	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size					
8C-6516	1 5/16 - 12	-16	1 5/16 - 12	-16	9/16 - 18	-6	1 5/8 - 12	-20	57.2	46	33.5	52.3	Steel
8T-7009	1 5/8 - 12	-20	1 5/8 - 12	-20	9/16 - 18	-6	1 5/8 - 12	-20	57.2	52.3	20.64	52.3	Steel

24° Cone ISO 8434-1 Male / Male / Male / Male-Cross



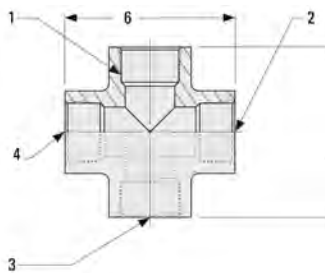
Part Number	End A		End B		End C		End D		L	Material
	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size	Thread	Dash Size		
422-3520	M12 x 1	8	M12 x 1	8	M12 x 1	8	M12 x 1	8	11.35	SST
488-0371	M30 x 2	22	M30 x 2	22	M30 x 2	22	M30 x 2	22	27.5	Steel

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
387-4391	1 - 11 1/2	-16	1 - 11 1/2	-16	1 - 11 1/2	-16	1 - 11 1/2	-16	83	83	Steel
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

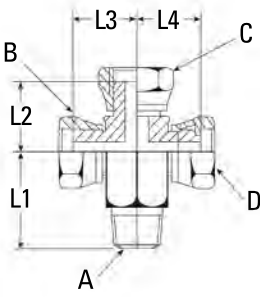
ASME NPT Pipe Port / Port / Port / Port-Cross



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
434-3695	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	98.6	98.6	Iron
385-5790	2 - 11 1/2	-32	2 - 11 1/2	-32	2 - 11 1/2	-32	2 - 11 1/2	-32	114.4	114.4	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

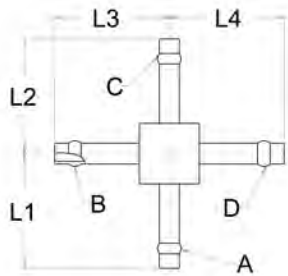
Cross Adapters

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					
6D-6018	1/4 - 18	-4	1/4 - 18	-4	1/4 - 18	-4	1/4 - 18	-4	31	19.8	21	21	Steel
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

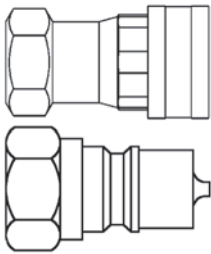
Hose Bead Male / Male / Male / Male-Cross



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					
248-4268	6.35	-4	6.35	-4	6.35	-4	6.35	-4	36	36	36	36	Steel
247-0067	15.88	-10	19.05	-12	19.05	-12	6.35	-4	44	46	46	43	Steel

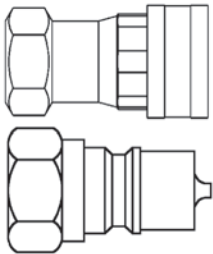
Quick Disconnect Hose

ISO 7241 Series A Quick Disconnects



Part Number	Coupler Size mm - in	Coupler End Form	Threaded Connection Type	Thread Form	Thread Size	Body Material	Internal Seal Material	Maximum Working Pressure MPa
5R-5674	10 - 0.375	Female	NPTF-SAE J476/J514	Port	3/8-18	Steel	NBR	31.5
5R-5675	10 - 0.375	Male	NPTF-SAE J476/J514	Port	3/8-18	Steel	NBR	31.5
5R-6868	10 - 0.375	Female	SAE STOR-SAE J1926	Port	9/16-18	Steel	NBR	31.5
5R-6867	10 - 0.375	Male	SAE STOR-SAE J1926	Port	9/16-18	Steel	NBR	31.5
287-7278	12.5 - 0.5	Male	SAE STOR-SAE J1926	Port	3/4-16	Steel	NBR	25
5R-6307	16 - 0.625	Female	SAE STOR-SAE J1926	Port	3/4-16	Steel	NBR	25
5R-6306	16 - 0.625	Male	SAE STOR-SAE J1926	Port	3/4-16	Steel	NBR	25
5R-5700	20 - 0.75	Female	NPTF-SAE J476/J514	Port	3/4-14	Steel	NBR	25
5R-5701	20 - 0.75	Male	NPTF-SAE J476/J514	Port	3/4-14	Steel	NBR	25
5R-6304	20 - 0.75	Female	SAE STOR-SAE J1926	Port	1-1/16-12	Steel	NBR	25
5R-6305	20 - 0.75	Male	SAE STOR-SAE J1926	Port	1-1/16-12	Steel	NBR	25
173-7639	25 - 1.00	Female	SAE STOR-SAE J1926	Port	1-5/16-12	Steel	NBR	20
173-7638	25 - 1.00	Male	SAE STOR-SAE J1926	Port	1-5/16-12	Steel	NBR	20

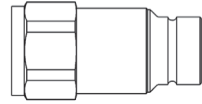
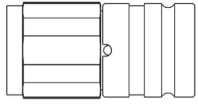
ISO 7241 Series B Quick Disconnects



Part Number	Coupler Size mm - in	Coupler End Form	Threaded Connection Type	Thread Form	Thread Size	Body Material	Internal Seal Material	Maximum Working Pressure MPa
5R-6303	6.3 - 0.25	Female	NPTF-SAE J476/J514	Port	1/4-18	Brass	NBR	6.8
5R-6398	6.3 - 0.25	Male	NPTF-SAE J476/J514	Port	1/4-18	Brass	NBR	6.8
5R-5560	6.3 - 0.25	Female	NPTF-SAE J476/J514	Port	1/4-18	Steel	NBR	25
5R-5561	6.3 - 0.25	Male	NPTF-SAE J476/J514	Port	1/4-18	Steel	NBR	25
5R-5724	10 - 0.375	Female	NPTF-SAE J476/J514	Port	3/8-18	Brass	NBR	6.8
5R-5725	10 - 0.375	Male	NPTF-SAE J476/J514	Port	3/8-18	Brass	NBR	6.8
5V-8610	12.5 - 0.5	Female	NPTF-SAE J476/J514	Port	1/2-14	Brass	NBR	6.8
6V-7301	25 - 1.0	Male	NPTF-SAE J476/J514	Port	1-11.5	Steel	FKM	10

Quick Disconnect Hose

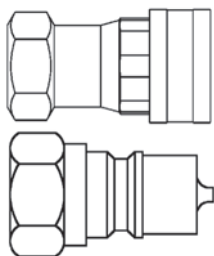
ISO 16028 Quick Disconnects



Part Number	Coupler Size mm - in	Coupler End Form	Threaded Connection Type	Thread Form	Thread Size	Body Material	Internal Seal Material	Maximum Working Pressure MPa
204-5098	6.3 - 0.25	Female	SAE STOR-SAE J1926	Port	9/16-18	Steel	NBR	31.5
152-8181	6.3 - 0.25	Male	SAE STOR-SAE J1926	Port	9/16-18	Steel	NBR	31.5
426-4049	6.3 - 0.25	Female	ORFS-SAE J1453	Bulkhead Male	11/16-16	Steel	NBR	31.5
426-4048	6.3 - 0.25	Male	ORFS-SAE J1453	Bulkhead Male	11/16-16	Steel	NBR	31.5
153-2997	10 - 0.375	Female	SAE STOR-SAE J1926	Port	3/4-16	Steel	NBR	25
421-6169	10 - 0.375	Male	SAE STOR-SAE J1926	Port	3/4-16	Steel	NBR	25
156-3600	10 - 0.375	Female	SAE STOR-SAE J1926	Male (Stud)	3/4-16	Steel	NBR	25
156-3631	10 - 0.375	Male	SAE STOR-SAE J1926	Male (Stud)	3/4-16	Steel	NBR	25
426-4050	10 - 0.375	Male	ORFS-SAE J1453	Bulkhead Male	13/16-16	Steel	NBR	25
426-4046	12.5 - 0.5	Female	SAE STOR-SAE J1926	Male (Stud)	3/4-16	Steel	NBR	25
426-4044	12.5 - 0.5	Male	SAE STOR-SAE J1926	Male (Stud)	3/4-16	Steel	NBR	25
153-2994	12.5 - 0.5	Female	SAE STOR-SAE J1926	Port	7/8-14	Steel	NBR	25
421-6171	12.5 - 0.5	Male	SAE STOR-SAE J1926	Port	7/8-14	Steel	NBR	25
193-8335	12.5 - 0.5	Female	ORFS-SAE J1453	Bulkhead Male	1-14	Steel	NBR	25
193-8334	12.5 - 0.5	Male	ORFS-SAE J1453	Bulkhead Male	1-14	Steel	NBR	25
195-6525	12.5 - 0.5	Female	SAE STOR-SAE J1926	Port	1-1/16-12	Steel	NBR	25
421-6170	12.5 - 0.5	Male	SAE STOR-SAE J1926	Port	1-1/16-12	Steel	NBR	25
241-6190	12.5 - 0.5	Female	ORFS-SAE J1453	Bulkhead Male	1-7/16-12	Steel	NBR	25
241-6189	12.5 - 0.5	Male	ORFS-SAE J1453	Bulkhead Male	1-7/16-12	Steel	NBR	25
426-4047	16 - 0.625	Female	SAE STOR-SAE J1926	Male (Stud)	7/8-14	Steel	NBR	25
426-4045	16 - 0.625	Male	SAE STOR-SAE J1926	Male (Stud)	7/8-14	Steel	NBR	25
142-8949	16 - 0.625	Female	SAE STOR-SAE J1926	Port	1-1/16-12	Steel	NBR	25
142-8948	16 - 0.625	Male	SAE STOR-SAE J1926	Port	1-1/16-12	Steel	NBR	25
426-4042	19 - 0.75	Female	SAE STOR-SAE J1926	Port	1-1/16-12	Steel	NBR	25
426-4043	19 - 0.75	Male	SAE STOR-SAE J1926	Port	1-1/16-12	Steel	NBR	25
106-0401	19 - 0.75	Female	SAE STOR-SAE J1926	Port	1-5/16-12	Steel	NBR	25
106-0406	19 - 0.75	Male	SAE STOR-SAE J1926	Port	1-5/16-12	Steel	NBR	25
426-4017	25 - 1.00	Female	SAE STOR-SAE J1926	Port	1-5/8-12	Steel	NBR	20
426-4016	25 - 1.00	Male	SAE STOR-SAE J1926	Port	1-5/8-12	Steel	NBR	20

Quick Disconnect Hose

ISO 5675 Quick Disconnects

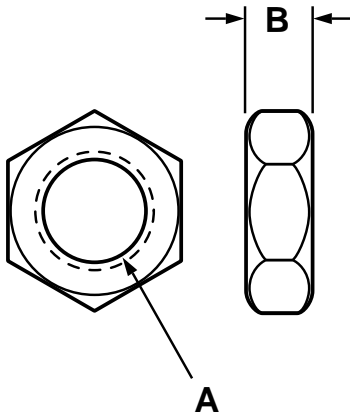


Part Number	Coupler Size mm - in	Coupler End Form	Threaded Connection Type	Thread Form	Thread Size	Body Material	Internal Seal Material	Maximum Working Pressure MPa
149-2847	10 - 0.375	Male	SAE STOR-SAE J1926	Port	9/16-18	Steel	NBR	31.5
9X-2018	12.5 - 0.5	Male	NPTF-SAE J476/J514	Port	1/2-14	Steel	NBR	25
6V-0398	12.5 - 0.5	Female	SAE STOR-SAE J1926	Port	7/8-14	Steel	NBR	25
8R-3303*	12.5 - 0.5	Female	SAE STOR-SAE J1926	Port	7/8-14	Steel	NBR	25
8R-3304*	12.5 - 0.5	Female	SAE STOR-SAE J1926	Port	7/8-14	Steel	NBR	25
159-5898	12.5 - 0.5	Male	SAE STOR-SAE J1926	Port	7/8-14	Steel	NBR	25
005-6985	12.5 - 0.5	Male	SAE STOR-SAE J1926	Port	3/4-16	Steel	NBR	25

* Part contains a manually operated ball valve.

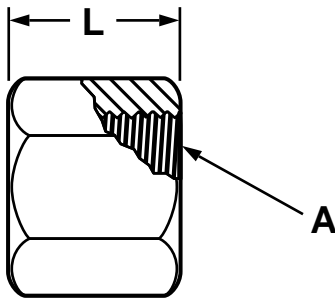
Swivel and Bulkhead Nuts

JIC 37° Bulkhead Nuts



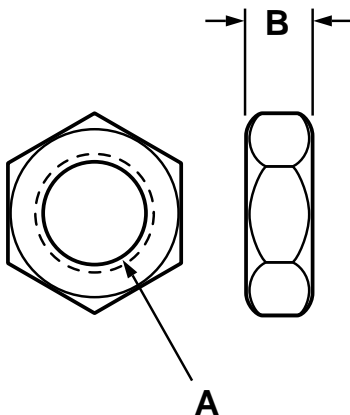
Part Number	THREAD DASH SIZE	THREAD SIZE	NUT THICKNESS (mm - in)
5B-3254	-4	7/16-20	6 - .24
2P-1280	-5	1/2-20	6 - .24
2P-1279	-6	9/16-18	7 - .28
7F-2050	-8	3/4-16	8 - .31
7F-2060	-10	7/8-14	9 - .35
6K-8420	-12	1 1/16-12	10 - .39
2P-1286	-16	1 5/16-12	10 - .39
2V-2043	-20	1 5/8-12	10 - .39

JIC 37° Swivel Nuts



Part Number	THREAD DASH SIZE	THREAD SIZE	NUT THICKNESS (mm - in)
2P-1308	-3	3/8-24	15 - .59
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
5P-2454	-24	1 7/8-12	36 - 1.42

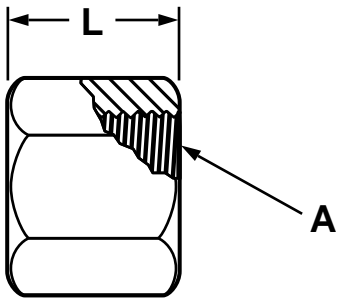
ORFS Bulkhead



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

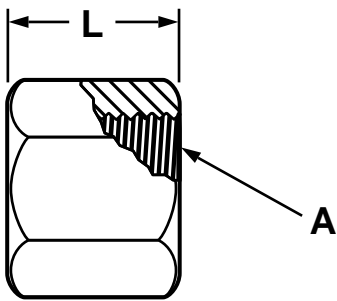
Swivel and Bulkhead Nuts

ORFS Swivel Nuts Non-Plated



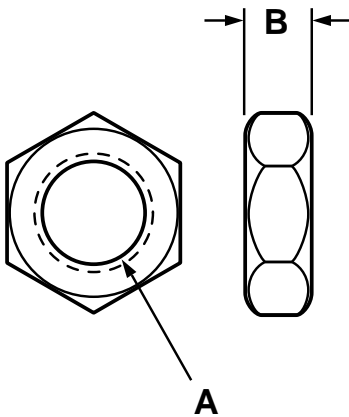
Part Number	THREAD DASH SIZE	THREAD SIZE	NUT THICKNESS (mm - in)
6V-8552	-4	9/16-18	15 - .59
6V-8553	-6	11/16-16	17 - .67
6V-8554	-8	13/16-16	21 - .83
6V-8555	-10	1-14	24 - .94
6V-8556	-12	1 3/16-12	26 - 1.02
6V-8557	-16	1 7/16-12	28 - 1.10
6V-8558	-20	1 11/16-12	28 - 1.10
8T-1681	-24	2-12	28 - 1.10

ORFS Swivel Nuts Plated



Part Number	THREAD DASH SIZE	THREAD SIZE	NUT THICKNESS (mm - in)
125-2474	-4	9/16-18	15 - .59
9X-6583	-6	11/16-16	17 - .67
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
9X-6394	-12	1 1/16-12	13 - .51

Protective Caps and Plugs 374
Metal Caps and Plugs 385

Protective Caps and Plugs

Thread Dash Size	NPTF Male Pipe	NPTF Female Pipe	NP-SM 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

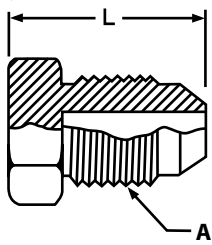
Thread Dash Size	Metric Standpipe	Metric 24° Cone Male-Heavy Duty	Metric 24° Cone Male-Light Duty	Metric Female Swivel-Spherical Seat - Heavy Duty	Metric Female Swivel-Spherical Seat - Light Duty	Metric Female Swivel-Spherical Seat W/ O-Ring - Heavy Duty	Metric Female Swivel-Spherical Seat W/ O-Ring - Light Duty	JIS 60° Cone Male	BSPP 60° Cone Male	JIS-BSP 60° Female Swivel	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-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

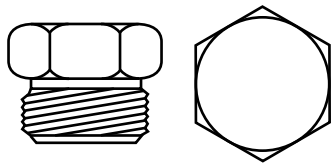
JIC 37° Plugs



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

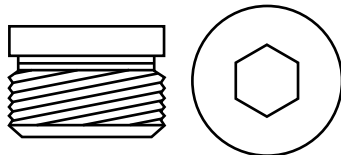
Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

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

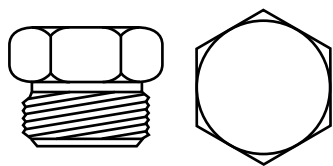
Heavy Duty Straight Thread O-Ring - Allen Drive Plugs



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

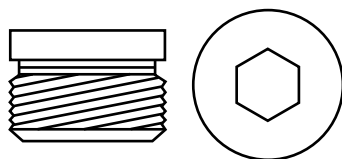
Straight Thread O-Ring - Hex Head Plugs



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

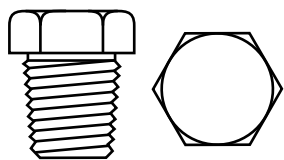
Straight Thread O-Ring - Allen Drive Plugs



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

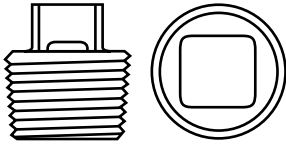


Part Number	Thread Size (in - TPI)
090-9019	1 - 11 1/2
2S-7905	1/16 - 27
3M-7045	3/4 - 14
4J-4382	1/2 - 14
5M-6214	1/8 - 27
3J-5390	3/8 - 18
5M-6213	1/4 - 18

Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

Protective Caps and Plugs

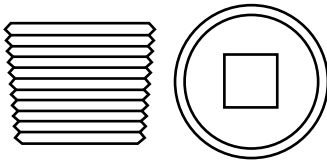
Pipe - Square Head Plugs



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

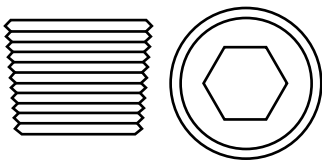
Pipe - Square Drive Plugs



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

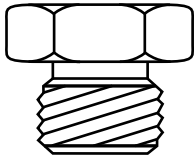


Part Number	Thread Size (in - TPI)
2R-5657	1 - 11 1/2
7H-3171	1/4 - 18
7M-7410	3/8 - 18
9F-2247	1/8 - 27
4D-0514	1/16 - 27
3L-1850	1/2 - 14

Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

Protective Caps and Plugs

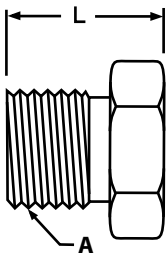
JIS - BSPP Shipping Plugs



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

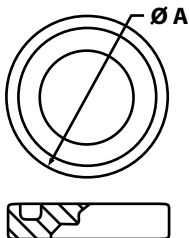
Metric Plugs



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

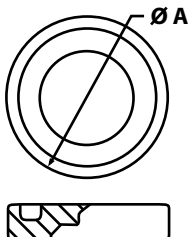
SAE Code 61 Flange Port Cover



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

Used to help protect against damage, dirt and moisture contamination, and corrosion during shipping and storage

Cat Flange Port Cover

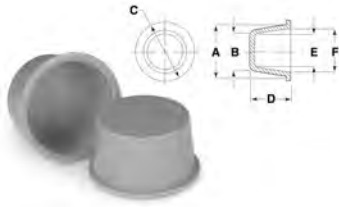


Part Number	Head Size (A) (in)	Flange (mm)
5P-0045	1.25	31.8
5P-0046	1.63	41.3
5P-0047	1.88	47.6
5P-0048	2.12	54.0
5P-0049	2.50	63.5
5P-0050	3.13	79.4

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)	(in)
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

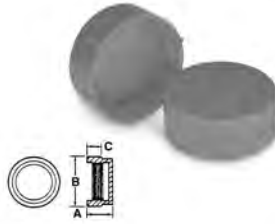


Part Number	Package Quantity	Material*	Diameter (A) (in)	Length (B)	
				(in)	(mm)
9U-7166	250	1	0.13	0.63	16
9U-7167	250	1	0.25	0.88	22
9U-7168	250	1	0.30	0.88	22
9U-7170	250	1	0.44	0.88	22
9U-7171	250	1	0.50	0.88	22
9U-7174	100	1	0.69	0.88	22
9U-7175	100	1	0.75	0.88	22
9U-7176	100	1	0.81	0.88	22
9U-7177	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

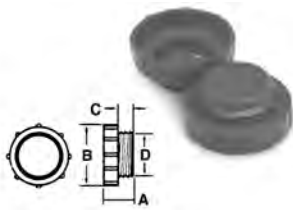


Part Number	Package Quantity	Material*	Thread Size (in - TPI)	Length (A)		Length (B)	
				(in)	(mm)	(in)	(mm)
9U-7098	250	3	1/8 - 27	0.28	7	0.38	10
9U-7099	250	3	1/4 - 18	0.38	10	0.44	11
9U-7101	250	3	1/2 - 14	0.56	14	0.56	14
9U-7100	250	3	3/8 - 18	0.44	11	0.50	13
9U-7102	100	3	3/4 - 14	0.69	17	0.63	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

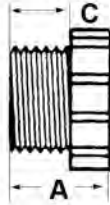
Part Number	Head Dash Size	Material
576-6123	-6	Steel
576-6124	-8	Steel
576-6125	-12	Steel

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

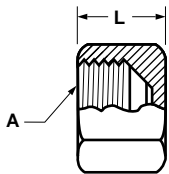
British Thread - BSP-GAS Plug Protectors



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

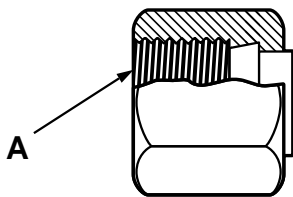
JIC 37° Cap



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



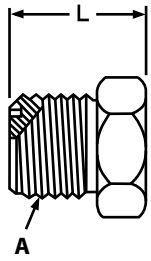
Part Number	Thread Dash Size	Thread Size
6V-9828	-4	9/16 - 18
6V-9829	-6	11/16 - 16
6V-9830	-8	13/16 - 16
6V-9831	-10	1 - 14
6V-9832	-12	1 3/16 - 12
6V-9833	-16	1 7/16 - 12
6V-9834	-20	1 11/16 - 12

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

Seal Application Chart	388
Seals.....	389
Seal Kits.....	393

Seal Application Chart

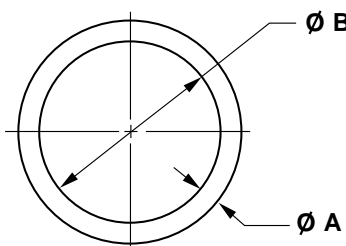
Application Chart

Material Type	Typical Duro A Hardness ⁽¹⁾	Operating Temperature Range ⁽²⁾	Air	Engine Oils	Diesel Fuel	Coolant	Hydraulic Oil / Automatic Transmission Fluid	Biodiesel
Nitrile (NBR)	75, 90	-40°C to 100°C (-40°F to 212°F)	✓	✓	✓	✓	✓	
HNBR	78, 90	-40°C to 115°C (-40°F to 239°F)	✓	✓	✓	✓ ⁽³⁾	✓	✓
EPDM	70	-55°C to 121°C (-67°F to 250°F)	✓			✓		
Silicone	70	-55°C to 150°C (-67°F to 302°F)	✓	✓				
Fluoroelastomer (FKM)	75, 90	-40°C to 175°C (-40°F to 347°F)	✓	✓	✓		✓	✓

Nitrile	<p>This material has good abrasion and cut resistance.</p> <p>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</p> <p>Not Compatible With: brake fluids, high levels of ozone, biodiesel fuel</p>
HNBR	<p>HNBR provides excellent abrasion and cut resistance. It works well with Air, Engine Oil, Diesel Fuel, Hydraulic Oil and Automatic Transmission Fluid applications.</p> <p>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⁾</p> <p>Not Compatible With: brake fluids, chlorinated hydrocarbons</p>
EPDM	<p>This material has good abrasion and cut resistance.</p> <p>Compatible With: water, water based coolants, urea, alcohols, silicone fluids, steam (200°C max), air, ozone</p> <p>Not Compatible With: petroleum based fluids (e.g. engine oil, hydraulic oil), hydrocarbons (e.g. diesel fuel, biodiesel fuel), transmission fluids, brake fluids</p>
Silicone	<p>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.</p> <p>Compatible With: air, ethylene glycol, high aniline point oil⁽³⁾, ozone</p> <p>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</p>
FKM	<p>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.</p> <p>Compatible With: petroleum based fluids (e.g. engine oil, hydraulic oil), hydrocarbons (e.g. diesel fuel, biodiesel fuel), silicone fluids, air</p> <p>Not Compatible With: amines, brake fluids, water based coolants, fire resistant fluids, steam, water</p>

- 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.

SAE Straight Thread O-Ring Boss O-Ring Seals

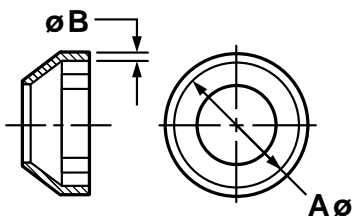


Dash Size	Thread Size	NITRILE	FKM	EPDM	Seal Thickness	Seal Inside Diameter
-2	5/16 - 24	4J-7533	238-5078	8T-9587	0.06 in, 1.63 mm	0.24 in, 6.07 mm
-3	3/8 - 24	7J-0204	238-5079	8K-0001	0.06 in, 1.63 mm	0.30 in, 7.65 mm
-4	7/16 - 20	3J-7354	214-7566	6V-9027	0.07 in, 1.83 mm	0.35 in, 8.92 mm
-5	1/2 - 20	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

Metric Straight Thread O-ring Seals (Stor)

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

JIC 37° Copper Seals

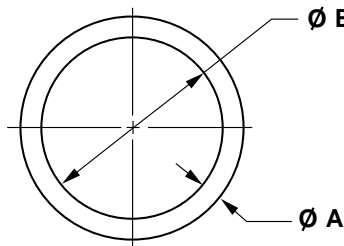


Part Number	Thread Size	Thread Dash Size	Seal O.D.	Seal Thickness
6V-7333	9/16 - 18	-6	0.48 in, 12.2 mm	0.01 in, 0.13 mm
6V-7332	3/4 - 16	-8	0.65 in, 16.5 mm	0.01 in, 0.25 mm
6V-7331	7/8 - 14	-10	0.78 in, 19.8 mm	0.01 in, 0.25 mm
6V-7330	1 1/16 - 12	-12	0.94 in, 23.9 mm	0.01 in, 0.25 mm
6V-7329	1 5/16 - 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.

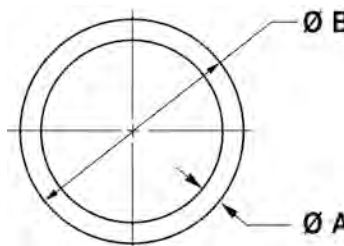
Seals

Code 61 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

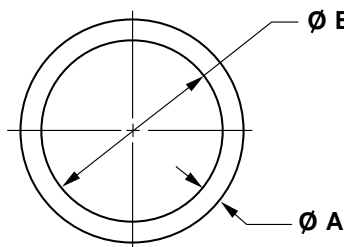
Cat Flange D-Ring Seals



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

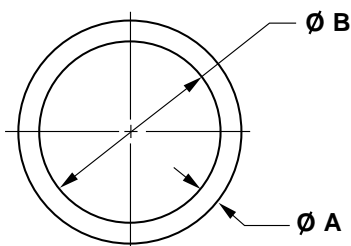
NOTE: For use with Cat Flange Head Couplings only.

O-Ring Face Seal (ORFS)



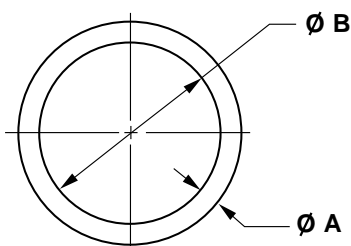
Thread Size	NITRILE	FKM	EPDM	Seal Thickness	Seal Outside Diameter
9/16 – 18	4J-5477	228-7088	121-4345	0.07 in, 1.78 mm	0.44 in, 11.23 mm
11/16 – 16	6V-8397	228-7089	6D-7128	0.07 in, 1.78 mm	0.51 in, 12.83 mm
13/16 – 16	6V-8398	228-7090	180-8424	0.07 in, 1.78 mm	0.63 in, 16.03 mm
1 – 14	7J-9108	228-7091	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

O-Rings for ISO Metric - Light Series



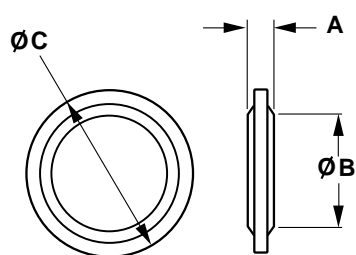
Thread Size	Part Number	Seal Thickness	Seal Inside Diameter
M12 x 1.5	3E-4288	0.06 in, 1.5 mm	0.18 in, 4.5 mm
M14 x 1.5	3E-4289	0.06 in, 1.5 mm	0.26 in, 6.5 mm
M16 x 1.5	-	-	-
M18 x 1.5	8U-0599	0.06 in, 1.5 mm	0.41 in, 10.5 mm
M22 x 1.5	-	-	-
M26 x 1.5	490-8643	0.08 in, 2.0 mm	0.63 in, 16.0 mm
M30 x 2	3E-6761	0.08 in, 2.0 mm	0.79 in, 20.0 mm
M36 x 2	092-2304	0.08 in, 2.0 mm	1.02 in, 26.0 mm
M45 x 2	9X-7447	0.10 in, 2.5 mm	1.26 in, 32.0 mm
M52 x 2	-	-	-

O-Rings for ISO Metric - Heavy Series



Thread Size	Part Number	Seal Thickness	Seal Inside Diameter
M14 x 1.5	3E-4288	0.06 in, 1.5 mm	0.18 in, 4.5 mm
M16 x 1.5	3E-4289	0.06 in, 1.5 mm	0.26 in, 6.5 mm
M18 x 1.5	-	-	-
M20 x 1.5	8U-0599	0.06 in, 1.5 mm	0.41 in, 10.5 mm
M22 x 1.5	3E-4298	0.08 in, 2.0 mm	0.47 in, 12.0 mm
M24 x 1.5	5W-1749	0.08 in, 2.0 mm	0.55 in, 14.0 mm
M30 x 2	484-7653	0.10 in, 2.5 mm	0.67 in, 17.0 mm
M36 X 2	-	-	-
M42 x 2	490-8667	0.10 in, 2.5 mm	1.06 in, 27.0 mm
M52 x 2	-	-	-

British Standard Pipe Parallel (BSPP) Dowty Port Seals

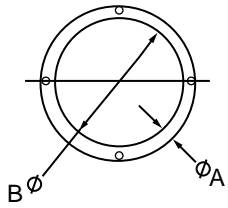


Part Number	Thread Size	Thread Dash Size	Seal Thickness	Seal I.D.	Seal O.D.
6V-0404	1/8 - 28	-2	0.11 in, 2.8 mm	0.41 in, 10.3 mm	0.63 in, 15.9 mm
6V-0405	1/4 - 19	-4	0.11 in, 2.8 mm	0.54 in, 13.7 mm	0.81 in, 20.6 mm
6V-0406	3/8 - 19	-6	0.11 in, 2.8 mm	0.68 in, 17.3 mm	0.94 in, 23.9 mm
6V-0407	1/2 - 14	-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.

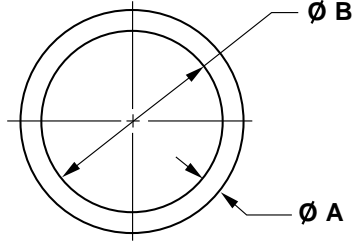
Seals

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

WEO 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

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

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

O-Ring Seal Kit 270-1528



- 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
20	1J-9671	Seal-O-Ring	90A NBR
20	2M-9780	Seal-O-Ring-Stor	90A NBR
20	2S-4078	Seal-O-Ring	90A NBR
20	3D-2824	Seal-O-Ring-Stor	90A NBR
20	3J-1907	Seal-O-Ring-Stor	90A NBR
20	3J-7354	Seal-O-Ring-Stor	90A NBR
20	3K-0360	Seal-O-Ring-Stor	90A NBR
15	4J-0519	Seal-O-Ring	90A NBR
15	4J-0520	Seal-O-Ring	90A NBR
15	4J-0521	Seal-O-Ring	90A NBR
15	4J-0522	Seal-O-Ring	90A NBR
15	4J-0523	Seal-O-Ring	90A NBR
15	4J-0524	Seal-O-Ring	90A NBR
10	4J-0525	Seal-O-Ring	90A NBR
10	4J-0526	Seal-O-Ring	90A NBR
10	4J-0527	Seal-O-Ring	90A NBR
20	4J-5140	Seal-O-Ring	90A NBR

Quantity	O-ring Part Number	Name	Material
20	4J-5267	Seal-O-Ring	90A NBR
20	4J-5477	Seal-O-Ring-ORFS	90A NBR
20	4J-7533	Seal-O-Ring-Stor	90A NBR
20	4K-1388	Seal-O-Ring-Stor	90A NBR
20	5K-9090	Seal-O-Ring-ORFS	90A NBR
20	6K-6307	Seal-O-Ring	90A NBR
20	6V-8397	Seal-O-Ring-ORFS	90A NBR
20	6V-8398	Seal-O-Ring-ORFS	90A NBR
20	6V-8400	Seal-O-Ring-ORFS	90A NBR
20	6V-9746	Seal-O-Ring-ORFS	90A NBR
20	7J-0204	Seal-O-Ring	90A NBR
20	7J-9108	Seal-O-Ring-ORFS	90A NBR
20	7M-8485	Seal-O-Ring-Stor	90A NBR
20	8T-0315	Seal-O-Ring-ORFS	90A NBR
10	030-4606	Seal-O-Ring	90A NBR
1	276-9576	Box-Utility	-

¹ (Part of 8S-9967) Recommended spare parts

Seal Kits

O-Ring Seal Kit 270-1533



- 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
5	1S-0004	Seal-O-Ring	70A VMQ
5	2S-2251	Seal-O-Ring	70A VMQ
3	6L-1651	Seal-O-Ring	70A VMQ
5	8M-4389	Seal-O Ring	70A VMQ
3	8M-4390	Seal-O-Ring	70A VMQ
5	8M-4432	Seal-O-Ring	70A VMQ
5	8M-4435	Seal-O-Ring	70A VMQ
3	8M-4436	Seal-O-Ring	70A VMQ
10	8M-4437	Seal-O-Ring	70A VMQ
5	8M-4438	Seal-O Ring	70A VMQ
3	8M-4443	Seal-O-Ring	70A VMQ
5	8M-4445	Seal-O Ring	70A VMQ
5	8M-4446	Seal-O Ring	70A VMQ
10	8M-4986	Seal-O-Ring	70A VMQ
10	8M-4987	Seal-O-Ring	70A VMQ
5	8M-4988	Seal-O Ring	70A VMQ
3	8M-4990	Seal-O-Ring	70A VMQ

Quantity	O-ring Part Number	Name	Material
3	8M-4991	Seal-O-Ring	70A VMQ
3	8M-4992	Seal-O Ring	70A VMQ
3	8M-5010	Seal-O Ring	70A VMQ
5	8M-5248	Seal-O-Ring	70A VMQ
5	8M-5249	Seal-O-Ring	70A VMQ
3	8M-5252	Seal-O Ring	70A VMQ
5	8M-5254	Seal-O-Ring	70A VMQ
3	8M-5661	Seal-O-Ring	70A VMQ
5	8M-8157	Seal-O-Ring	70A VMQ
3	8M-8283	Seal-O Ring	70A VMQ
5	8M-8515	Seal-O Ring	70A VMQ
5	9H-6067	Seal-O-Ring	70A VMQ
5	9M-4849	Seal-O-Ring	70A VMQ
3	9M-7002	Seal-O-Ring	70A VMQ
3	9M-9647	Seal-O-Ring	70A VMQ
1	276-9576	Box-Utility	-

O-Ring Seal Kit 270-1535



- 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
10	1P-3700	Seal-Rectangular	90A NBR
10	1P-3702	Seal-Rectangular	90A NBR
10	1P-3703	Seal-Rectangular	90A NBR
10	1P-3704	Seal-Rectangular	90A NBR
10	1P-3705	Seal-Rectangular	90A NBR

Quantity	O-ring Part Number	Name	Material
10	1P-3706	Seal-Rectangular	90A NBR
10	1P-3707	Seal-Rectangular	90A NBR
5	1P-3708	Seal-Rectangular	90A NBR
5	1P-3709	Seal-Rectangular	90A NBR
1	276-9578	Box-Utility	-

¹ Not available for individual sale

O-Ring Seal Kit 270-1537



- 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
15	6V-6560	Seal-O-Ring	90A NBR
10	6V-7970	Seal-O-Ring	90A NBR
15	6V-9028	Seal-O-Ring	90A NBR
15	8T-6850	Seal-O-Ring	90A NBR
15	8T-7524	Seal-O-Ring-Stor	90A NBR
10	8T-7525	Seal-O-Ring	90A NBR

Quantity	O-ring Part Number	Name	Material
5	8T-7526	Seal-O-Ring	90A NBR
15	8T-7876	Seal-O-Ring	90A NBR
15	8T-7877	Seal-O-Ring	90A NBR
10	8T-787	Seal-O Ring	90A NBR
1	276-9578	Box-Utility	-

¹ Not available for individual sale

Seal Kits

O-Ring Seal Kit 270-1539



- 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
20	4J-5477	Seal-O-Ring-ORFS	90A NBR
10	5K-9090	Seal-O-Ring-ORFS	90A NBR
20	6V-8397	Seal-O-Ring-ORFS	90A NBR
20	6V-8398	Seal-O-Ring-ORFS	90A NBR
10	6V-8400	Seal-O-Ring-ORFS	90A NBR

Quantity	O-ring Part Number	Name	Material
10	6V-9746	Seal-O-Ring-ORFS	90A NBR
20	7J-9108	Seal-O-Ring-ORFS	90A NBR
10	8T-0315	Seal-O-Ring-ORFS	90A NBR
1	276-9578	Box-Utility	-

¹ Part of 9U-6253 Removal Shaft Assembly and part of 9U-6254 Installation Shaft Assembly (both assemblies are part of 9U-6250 Pump Tool)

² Not available for individual sale

O-Ring Seal Kit 270-1540



- 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
15	9X-7378	Seal-O-Ring	78A HNBR
15	9X-7379	Seal-O-Ring	78A HNBR
15	9X-7380	Seal-O-Ring	78A HNBR
15	9X-7381	Seal-O-Ring	78A HNBR
15	9X-7382	Seal-O-Ring	78A HNBR
10	9X-7383	Seal-O-Ring	78A HNBR
10	9X-7384	Seal-O-Ring	78A HNBR

Quantity	O-ring Part Number	Name	Material
15	9X-7385	Seal-O-Ring	78A HNBR
10	121-7136	Seal-O-Ring	80A NBR
10	121-7137	Seal-O-Ring	78A HNBR
10	121-7138	Seal-O-Ring	No Info
10	229-4896	Seal-O-Ring	78A HNBR
1	276-9578	Box-Utility	-

¹ Not available for individual sale

O-Ring Seal Kit 270-1545



- 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
10	4J-0520	Seal-O-Ring	90A NBR
10	4J-0522	Seal-O-Ring	90A NBR
10	4J-0524	Seal-O-Ring	90A NBR
10	4J-0527	Seal-O-Ring	90A NBR

Quantity	O-ring Part Number	Name	Material
10	4J-5140	Seal-O-Ring	90A NBR
10	4J-5267	Seal-O-Ring	90A NBR
1	276-9578	Box-Utility	-

¹ Not available for individual sale

O-Ring Seal Kit 271-0459



- 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
5	228-7088	Seal-O-Ring-ORFS	90A FKM
5	228-7089	Seal-O-Ring-ORFS	90A FKM
5	228-7090	Seal-O-Ring-ORFS	90A FKM
5	228-7091	Seal-O-Ring-ORFS	90A FKM
5	228-7092	Seal-O-Ring-ORFS	90A FKM

Quantity	O-ring Part Number	Name	Material
5	228-7093	Seal-O-Ring-ORFS	90A FKM
5	228-7094	Seal-O-Ring-ORFS	90A FKM
5	228-7095	Seal-O-Ring-ORFS	90A FKM
1	276-9578	Box-Utility	-

¹ Not available for individual sale

Seal Kits

O-Ring Seal Kit 271-0460



- 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
5	214-7566	Seal-O-Ring-Stor	90A FKM
5	214-7567	Seal-O-Ring-Stor	90A FKM
5	214-7568	Seal-O-Ring-Stor	90A FKM
5	228-7096	Seal-O-Ring-Stor	90A FKM
5	228-7097	Seal-O-Ring-Stor	90A FKM
5	238-5078	Seal-O-Ring-Stor	90A FKM
5	238-5079	Seal-O-Ring-Stor	90A FKM

Quantity	O-ring Part Number	Name	Material
5	238-5080	Seal-O-Ring-Stor	90A FKM
5	238-5081	Seal-O-Ring-Stor	90A FKM
5	238-5082	Seal-O-Ring-Stor	90A FKM
5	238-5083	Seal-O-Ring-Stor	90A FKM
5	238-5084	Seal-O-Ring-Stor	90A FKM
5	238-5086	Seal-O-Ring-Stor	90A FKM
1	276-9578	Box-Utility	-

¹ Not available for individual sale

Flanges - Hardware

Split Flanges and Hardware	400
Pre-Install Flanges	405
Thick Flanges	406

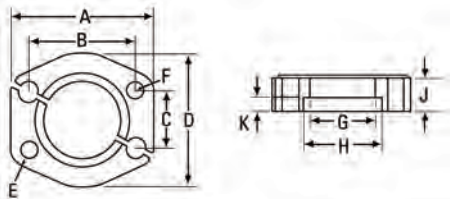
Split Flanges and Hardware

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	-	-	-	-
1.34 in, 34.0 mm	-10	1P-4575	-	-	-	-
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	-	-	-	-
2.81 in, 71.4 mm	-32	1P-4582	-	-	-	-
3.31 in, 84.1 mm	-40	1P-4584	-	-	-	-
4.00 in, 101.6 mm	-48	1P-4585	-	-	-	-
4.50 in, 114.3 mm	-56	1P-7016	-	-	-	-
5.00 in, 127 mm	-64	1P-7017	-	-	-	-

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

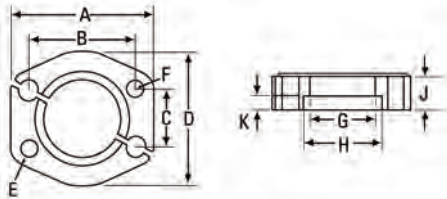
Code 61 Split Flanges & Hardware (for Metric Bolts)

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

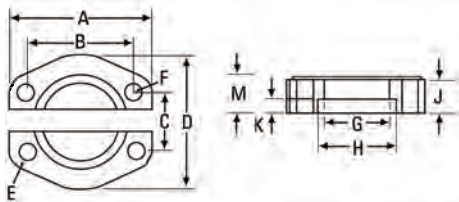
Split Flanges and Hardware

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 0.79	
1.63 in, 41.3 mm	-12	124-4287	4L-9337	3/8 - 16 x 1.50	8T-4896	.728 x .402 x 0.98	
1.87 in, 47.6 mm	-16	124-4288	8C-6877	7/16 - 14 x 1.75	8T-5360	.886 x .472 x 0.98	
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
124-4287	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	0.53 in, 13.5 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

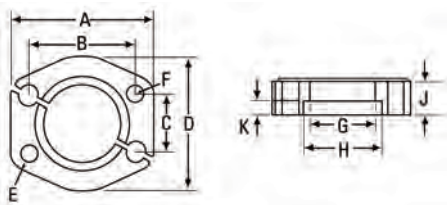
Cat Flange Split Flanges & Hardware (for Inch Bolts)

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

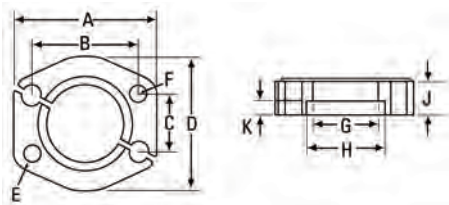
Cat Flange Split Flanges & Hardware (for Metric Bolts)

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

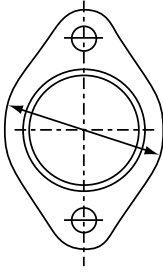
¹ E = Hole Diameter

² F = Radius

³ * = Not diagonally split for HMS

2 Hole Flange (Pre-install)

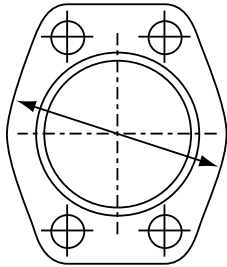
Must be installed on the coupling prior to assembly



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)

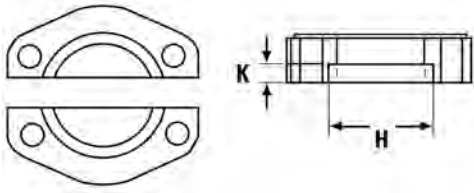
Must be installed on the coupling prior to assembly



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



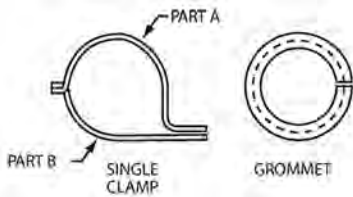
Part Number	Flange Dash Size	Flange Head Size (H) (mm)	Continuous Bore Depth (K) (mm)	Flat Hard Washer
451-0454	12	41.3	13.5	8T-4121
451-0455	16	47.6	13.5	8T-4223
451-0457	20	54.0	13.5	7X-0510
451-0456	24	63.5	13.5	8T-4122
451-0458	32	79.4	13.5	8T-4123

Hose Accessories

Hose Clamps Clips and Screw Types.....	408
Armor Guard	411
Whip Checks.....	418

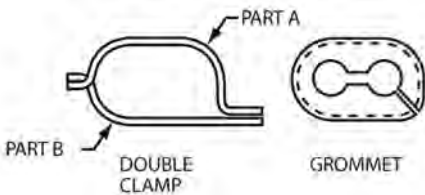
Hose Clamps Clips and Screw Types

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						
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				

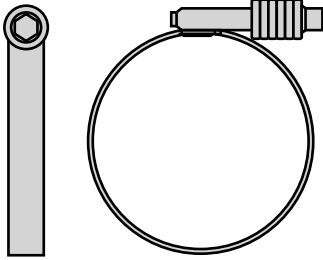
Double Line Hose Clamps



Grommet I.D.	Part Number	Clamp Part A Number	Clamp Part B Number	XT-6 ES	XT-6	XT-5	XT-3 ES	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-3413				-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

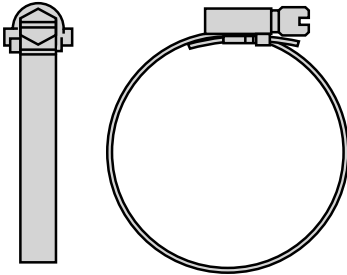
Hose Clamps Clips and Screw Types

Screw-Type Hose Clamps - Uniform Load



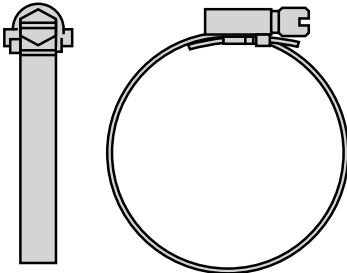
Part Number	MIN. - MAX. (in)	MIN. - MAX. (mm)	Band Thickness (mm)
8T-4983	1 1/4 - 2 1/8	32-54	12.5
8T-6703	1 3/4 - 2 5/8	45-67	12.5
8T-4984	2 1/4 - 3 1/8	57-79	12.5
8T-6675	2 3/4 - 3 5/8	70-92	12.5
8T-4985	3 1/4 - 4 1/8	83-105	12.5
8T-4986	4 1/4 - 5 1/8	108-130	12.5
8T-4987	5 1/4 - 6 1/8	133-156	12.5
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

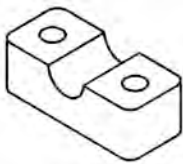
¹ NOTE: Heavy Duty Screw-Type Hose Clamps are made of stainless steel.

Hose Clamps Clips and Screw Types

Stauff Clamps

Hose Type	716			294			4198		
Hose ID	Clamp ID	Clamp or Clamp/Insert Part Number		Clamp ID	Clamp or Clamp/Insert Part Number		Clamp ID	Clamp or Clamp/Insert Part Number	
-4	12.7	491-8031	491-8032	15.0	438-6498		12.7	491-8031	491-8032
-6	16.0	468-9694		17.2	491-8031	468-9702	16.0	468-9694	
-8	19.0	491-8031	520-3708	20.0	468-9679	471-6343	19.0	491-8031	520-3708
-10	24.0	468-9679	471-6342	24.0	468-9679	471-6342	24.0	468-9679	471-6342
-12	26.9	468-9673		26.9	468-9673		26.9	468-9673	
-16	32.0	468-9679	487-0854	35.0	478-0930	468-9710	35.0	478-0930	468-9710
-20	40.0	478-0930	487-0855	45.5	478-0930	503-3024	N/A	N/A	N/A
-24	48.0	478-0930	487-1760	51.0	478-0930	468-9685	N/A	N/A	N/A
-32	60.0	499-6550	468-9686	63.5	499-6550	498-9651	N/A	N/A	N/A

Hose Type	XT3			XT5			XT6		
Hose ID	Clamp ID	Clamp or Clamp/Insert Part Number		Clamp ID	Clamp or Clamp/Insert Part Number		Clamp ID	Clamp or Clamp/Insert Part Number	
-4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-6	19.0	491-8031	520-3708	N/A	N/A	N/A	19.0	491-8031	520-3708
-8	24.0	468-9679	471-6342	N/A	N/A	N/A	24.0	468-9679	471-6342
-10	25.0	468-9679	468-9682	N/A	N/A	N/A	25.0	468-9679	468-9682
-12	28.0	468-9679	491-1363	30.0	468-9679	468-9681	28.0	468-9679	491-1363
-16	35.0	478-0930	468-9710	35.0	478-0930	468-9710	35.0	478-0930	468-9710
-20	45.5	478-0930	503-3024	45.5	478-0930	503-3024	45.5	478-0930	503-3024
-24	51.0	478-0930	468-9685	53.4	478-0930	487-0853	53.4	478-0930	487-0853
-32	63.5	499-6550	498-9651	68.0	499-6550	486-3340	68.0	499-6550	486-3340



Smooth Clamp

Ribbed Clamp

Ribbed Clamp Insert

Bulk Metal Armor Guard



Part Number	Guard I.D.	XT-6 ES	XT-6	XT-5 ES	XT-3 ES	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				-20			-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



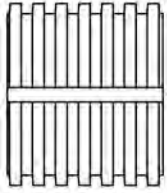
Part Number	Min	Max
3E-4070	1.50 in, 38.1 mm	2.00 in, 50.8 mm
3E-4071	0.37 in, 9.5 mm	1.00 in, 25.4 mm
3E-4062	1.25 in, 31.8 mm	1.50 in, 38.1 mm

Parts for Improved Spring Guard Retention

Part Number	Description
384-0397	Saddle clamp
385-1393	Band
385-1392	Band

Armor Guard

Bulk Air Conditioning (1543J)



CONTINUOUS SLIT

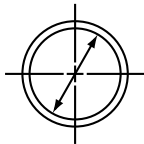
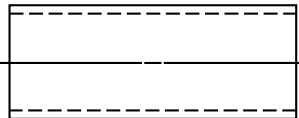
Part Number	Guard I.D.	Hose Dash Size
8C-5063	0.56 in, 14.2 mm	-5
8C-5064	0.70 in, 17.8 mm	-6
7X-7702	0.92 in, 23.4 mm	-10

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									Polyethylene
541-7088	1.00 in, 25.4 mm						-4 -6	-4 -5 -6		Polyethylene
541-7089	1.13 in, 28.7 mm					-6				Polyethylene
541-7090	1.25 in, 31.8 mm	-6			-6					Polyethylene
541-7091	1.59 in, 40.4 mm	-8			-8	-8 -10	-8 -10	-8 -10		Polyethylene
541-7092	1.75 in, 44.5 mm	-12	-12	-12	-10 -12	-12	-12	-12	-12	Polyethylene
541-7093	2.07 in, 52.6 mm					-16	-16	-16	-16	Polyethylene
541-7094	2.38 in, 60.5 mm	-16	-16	-16	-16		-20	-20	-20	Polyethylene
541-7095	2.54 in, 64.5 mm					-24	-24	-24	-24	Polyethylene
541-7096	2.86 in, 72.6 mm	-20 -24	-20 -24	-20 -24	-20 -24		-32	-32	-32	Polyethylene
541-7097	3.34 in, 84.8 mm			-32	-32	-32				Polyethylene

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)

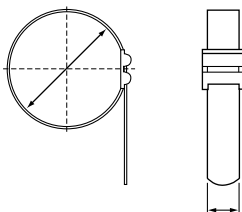
Installation Method: Attachment of metallic clamps installed over the sleeve at the shell portion of the coupling

Part Number	Size
462-8844	30.7
462-8845	35.8
462-8846	41.1
462-8847	46.0
462-8848	53.3

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

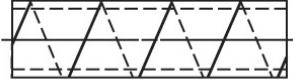


Part Number	Guard I.D.	Wall Thickness	XT-6 ES	XT-6	XT-3 ES	1956	716	294	844
7I-1024	0.79 in, 20.0 mm	0.09 in, 2.3 mm	-6 -8	-6	-6 -8	-6 -8	-8 -10	-8	
7I-7439	0.51 in, 13.0 mm	0.07 in, 1.8 mm					-4 -6	-4 -5 -6	
7Y-5074	0.98 in, 25.0 mm	0.11 in, 2.8 mm	-12	-8	-10 -12	-10	-12	-10 -12	-12

Note: Sold by the centimeter.

Armor Guard

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

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

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 metallic clamps installed over the sleeve at the shell portion of the coupling

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	294CPT	-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
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	294CPT	-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

Armor Guard

Thermal Protection Guard* (Cont'd.)

Armor Guard Part Number	Guard I.D. (MM)	Hose I. D. (MM)	Hose Type	Hose Dash Size
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	294CPT	-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	294CPT	-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
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

Thermal Protection Guard* (Cont'd.)

Armor Guard Part Number	Guard I.D. (MM)	Hose I. D. (MM)	Hose Type	Hose Dash Size
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	—	—

* Color: Red

Cable Tie Mounts and Straps



Part Number	Description
200-6345	Swivel Mount. Used for hose-to-hose abrasion contact points (pictured)
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

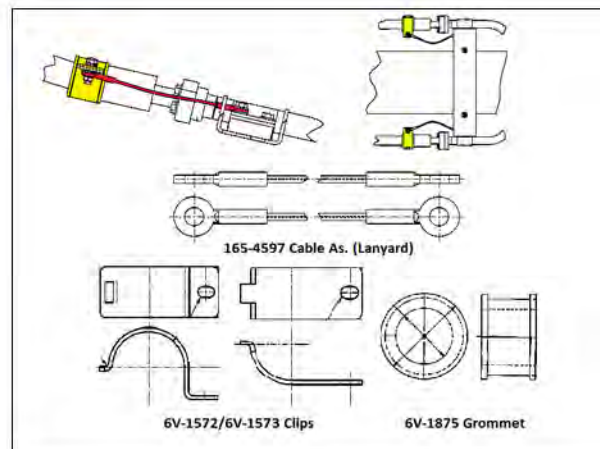
Two piece clamp with a grommet and lanyard anchored to random bolt or mounting spot on the machine.

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					-24	-24
6V-1867 6V-1868	80	6V-1869	80/65	-32	-32	-32

Lanyards

Lanyard Part Number	All dimensions in mm				Minimum 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



Hose Assembly Tools

Technical Support, Warranty and Service.....	422
Crimputer (Used on 325 and S6).....	422
Crimputer Software.....	422
Crimputer V (528-5353).....	423
325 Radial Hose Machine Group.....	424
S6 Radial Hose Machine Group.....	428
S6 Radial Hose Machine Group Capability.....	431
M6 Hose Crimper.....	432
S2 Hose Crimper.....	435
Hose-Cutting Machines.....	436
EM115 Hose Saw.....	436
EM6-P Hose Saw.....	436
EM6-E Hose Saw.....	437
EM6-M Hose Saw.....	437
EM3-E Hose Saw.....	437
EM3-DC Hose Saw.....	438
Saw Repair Parts.....	438
Repair Parts Reference Guide.....	438
Fume Exhausters.....	441
Pressure Test Equipment.....	442
Skiver Machine 584-5208 (Not Available Until 2nd Quarter 2020).....	443
XT Reusable Press.....	444
XT Hose Machine (Pending Discontinuation).....	445
XT Hose Machine.....	446
Variable Crimp Die Bowl (Serving Legacy Machines).....	446
XT-ES General Kit.....	447
Hose Assembly Accessory Group.....	450
Thermal Transfer Bar Code Printer (Low Volume), Thermal Transfer Bar Code Printer (High Volume).....	454
Clean Seal Production Heat Shrink Machine, Clean Seal Hand-Held Heat Shrink Tool.....	456
Clean Seal Capsules.....	457
Hose Cleaning Group (Economy).....	458
Hose Cleaner Group.....	459
Hose Cleaner Group.....	460
Hose Cleaning Group.....	461
Application Charts for Hose Cleaner Groups.....	462
Projectiles for Hose Cleaner Groups.....	465
Thread Measurement Kit.....	466
Snap-to-Connect Coupling Wrenches.....	466
Thermoplastic and Air Conditioning Hose Cutter.....	466
Nylon Abrasion Sleeve Band Tool.....	467
Chain Wrench.....	467
Skiving Vise.....	467
Large-Bore Protractor.....	468
Containerized Hose Shops.....	468

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

International: 1-309-266-4421

Electronic Requests: Send via Product Support Customer Relationship Management (MSCRM)

For Access and Tutorial visit: <https://gdsn.cat.com/mscrm>

Please provide a basic explanation of the problem, part number, serial number, table values and HMI revisions (found during boot-up on Crimputer.)

Crimputer (Used on 325 and S6)

The Crimputer 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 Crimputer software as new hoses are released and made available to dealers. The table below shows which crimping machines use the Crimputer. Updates are available on the HIS website: (<https://his.cat.com/his/servlet/cat.Id.ma.his.controller.UserIdentificationControllerServlet>) Updates are downloaded to a flash drive from the website and then uploaded to the Crimputer via a USB port. Updates are quick and easy. 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 Crimputer is booting up.

The Crimputer package is available on previous and current versions of the 325 and S6. The software has been enhanced such that one software version is able to be used on all controllers to provide the updates as new hoses are released.

The older-style CLC290 is no longer supported but the software remains available on the website.

Crimputer Software

The latest software updates are available here: <https://dealer.cat.com/en/ps/service-tools/c/crimputer-software.html>

	<p>325: 423-4361</p>
	<p>S6: 533-1146, 533-1147, 533-1148 (Also 358-4532, 457-6037 and 457-6038)</p>
	<p>C3-290 : Crimper no longer available. Some repair parts still available - See Repair Parts section.</p>
	<p>CLC 290: Crimper no longer available. Some repair parts still available - See Repair Parts section.</p>

Crimputer V (528-5353)

Model Usage: All

Warranty: Manufacturer's One Year:

[See, page 422 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)
- Multiple platform software (updatable via USB port)
- 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

Overall Dimensions

- Length: 250 mm (9.84 in)
- Width: 200 mm (7.87 in)
- Thickness: 50 mm (1.97 in)

Part Number	Description
528-5353	Crimputer V

Integration with Pressure Test Bench

Not compatible with CLC290 Crimper

Hose Assembly Tools

325 Radial Hose Machine Group

Model Usage: All
 Warranty: Manufacturer's One Year
 See, page 422 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

- Uses Crimputer V (C5) controller with easy to follow color menus
- Touch screen controller stores values required to crimp a full range of hoses
- Compatible with new XT no-skive hose couplings (XN couplings)
- Compatible with new AC Flat Crimp Couplings
- Lube-less low maintenance radial head design
- Die range 12-121 mm (0.47-4.76 in)
- Shipped without hydraulic oil

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 (423-4367)

Crimputer V (C5) Controller

- Siemens touch screen
- Adjustable viewing position for operator ergonomics
- Easy to use, full color display (menus have imbedded help screens)
- Multiple platform software (updatable via USB port)
- 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

Reference

- NEHS1099 Operating Manual

Specifications		Crimping Capabilities
Dimensions	1600 x 600 x 1600 mm	2.0" XT-3 ES 2.0" XT-5 ES 2.0" XT-6 ES 4.0" LMP
Weight	750 kg (1650 lb)	
Oil Capacity	100 l (26.5 gal)	
Opening with dies	215 mm (8.5 in)	
Electrical Requirements	220 - 480 V, 3 Phase 50/60 Hz (motor 4 kW)	
Die Range	12 - 121 mm (0.47 - 4.76 in)	

Part Number	Description
423-4361	Radial Hose Machine Group
526-5494	Die Group

325 Radial Hose Machine Group (Continued)

526-5494 Die Group (Includes the following items)

Part number	Diameter	Retention Pin
239L Die Set Series (requires 423-4367 Adapter)		
526-5529	12 mm (.47 in)	330-3951 ⁽¹⁾
526-5530	14 mm (.55 in)	330-3951 ⁽¹⁾
526-5531	17 mm (.67 in)	330-3951 ⁽¹⁾
526-5532	20 mm (.79 in)	330-3951 ⁽¹⁾
526-5533	22 mm (.87 in)	330-3951 ⁽¹⁾
526-5534	24 mm (.94 in)	330-3951 ⁽¹⁾
526-5535	26 mm (1.02 in)	330-3951 ⁽¹⁾
526-5536	28 mm (1.10 in)	330-3951 ⁽¹⁾
526-5537	30 mm (1.18 in)	330-3951 ⁽¹⁾
526-5538	32 mm (1.26 in)	330-3951 ⁽¹⁾
526-5539	36 mm (1.42 in)	330-3951 ⁽¹⁾
526-5540	40 mm (1.57 in)	330-3951 ⁽¹⁾
526-5541	44 mm (1.73 in)	—
358-4560	47 mm (1.85 in)	330-3951 ⁽¹⁾
358-4561	50 mm (1.97 in)	330-3951 ⁽¹⁾
358-4562	54 mm (2.13 in)	330-3951 ⁽¹⁾
358-4563	57 mm (2.24 in)	330-3951 ⁽¹⁾
358-4564	62 mm (2.44 in)	330-3951 ⁽¹⁾
237L Die Set Series		
423-4365	67 mm (2.64 in)	233-8077 ⁽²⁾
423-4366	71.0 mm (2.80 in)	233-8077 ⁽²⁾
521-4296	78 mm (3.07 in)	233-8077 ⁽²⁾
424-1400	84.0 mm (3.31 in)	233-8077 ⁽²⁾
424-1401	96.0 mm (3.78 in)	233-8077 ⁽²⁾
424-1402	103.0 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.
 2 Sold and Serviced Individually

Hose Assembly Tools

325 Radial Hose Machine Group (Continued)

CPC325 (Repair Parts)	
Part Number	Description
233-8046	Die Changer Tool for use with 239L Dies
233-8047	Die Release Tool
233-8077	Steel Die Pin (232L/266L/237L Series Large Die and Adapters)
330-3951	Pin - Die Kit 239-L Smaller Dies (8 pieces)
358-4536	Caliper Electronic 3" or Smaller Couplings
358-4537	Cable - Caliper
358-4538	Pedal Foot Switch
358-4539	Crimputer Bracket As. Lever for C3 and C5
358-4544	Double Pedal Foot Switch
421-2654	Screw - Detent
423-4364	Calibration Mandrel for 325
423-4367	Adapter Die for 325
423-4373	Caliper Electronic 8" or Smaller Couplings
457-6033	Pressure Sensor
458-2920	Oil Filter Element 1 (45 X 85 mm (1.8 X 3.3 in)
458-2921	Oil Filter Element 2 (45 X 88 mm (1.8 X 3.5 in)
482-4417	Tool Gp - (Plunger - Master Die)
550-9143	Springs Kit (24 pieces)
561-2025	Bearing Plate Kit Complete
561-2026	Springs Kit (24 pieces)
566-7502	Path Sensor (Potentiometer)
566-7503	Shim Kit - Used to improve roundness or concentricity of die closure, goes under bearing plate.
566-7504	Die As. - Master Complete Master Die Group
566-7505	Plastic Pins For 239 and 239L Series Dies (8 pieces)
578-6149	Screw - Detent Kit (8 pieces)



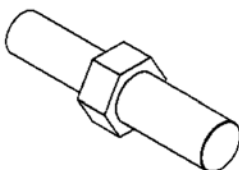
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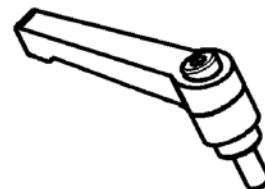
482-4417



233-8047



423-4364



358-4539

325 Radial Hose Machine Group (Continued)

CPC325 Radial Hose Machine Capability		
Hose Type	Coupling Type	Dash Size (Hose machine will crimp these coupling sizes)
294	MN	-4, -5, -6, -8, -10, -12, -16, -20, -24, -32, -40, -48
294TG	MN	-4, -6, -8, -10, -12, -16
294CPT	MN	-4, -6, -8, -10, -12, -16
294CPTG	MN	-4, -6
294HT	MN	-32, -40
716	MN	-4, -6, -8, -10, -12, -16, -20, -24, -32
716TG	MN	-4, -6, -8, -10, -12, -16
716CPT	MN	-4, -6, -8, -10, -12, -16
844	MN	-12, -16, -20, -24, -32, -40, -56
	SW	-48
844HP	MN	-40, -56
	SW	-48, -64 ⁽³⁾
XT-3ES	TR	-6, -8, -10, -12, -16
	ESA	-10, -12, -16
	S4G	-6, -8, -16, -20, -24, -32
	XN	-6, -8, -10, -12, -16
	XN4	-20 ⁽³⁾ , -24
XT-3ESTG	TR	-6, -8, -10, -12, -16
	ESA	-10, -12, -16
	S4G	-6, -8, -16, -20, -24, -32
	XN	-6, -8, -10, -12, -16
	XN4	-20 ⁽³⁾ , -24
XT-5ES	PL	-12, -16
	MCSH	-12, -16, -20, -24, -32
	MCSX	-12, -16, -20, -24
	XN	-10, -12
	XN6	-20, -24
	XS6	-32
XT-5ESTG	PL	-12, -16
	MCSH	-12, -16, -20, -24, -32
	MCSX	-12, -16, -20, -24

CPC325 Radial Hose Machine Capability		
Hose Type	Coupling Type	Dash Size (Hose machine will crimp these coupling sizes)
	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
1028	56	-3, -4, -5, -6, -8, -12
CATACFC	A/C	-6, -8, -10, -12, -14
PARKERAC	A/C	
2760	JN	-4, -5, -6, -8
2786	MN	-4, -6, -8, -10, -12, -16
2929	MH	-4, -5, -6, -8
2929TG	MH	-4, -6
743	MH	-4, -5, -6, -8, -10, -12, -16
	JN	-3
945	MH	-4, -6, -8, -12
	JN	-3
662	MN	-6, -8
2771A	JN	-4, -5, -6, -8, 10, -12
4336	MN	-8, -12 ⁽³⁾
	BN	-10, -16 ⁽³⁾
4639	MN	-8, -12 ⁽³⁾
	BN	-10, -16 ⁽³⁾
4901	MN	-4, -6, -8, 10, -12, -16, -20, -24, -32, -40, -48
5014	MN	-4, -8, -12
5065	DS4	-4, -6

Hose Assembly Tools

S6 Radial Hose Machine Group

Warranty: *Manufacturer's One Year*
[See, page 422 Technical Support Section](#)

European Union compliant, CE marked

- Used to crimp permanent couplings on Cat low, medium, and high-pressure hose
- Crimps field serviced couplings onto hoses ranging from 1/4 to 3 inch I.D.
- Compatible with new XT no-skive hose couplings (XN series couplings)
- Compatible with new AC Flat Crimp Couplings
- Includes adapter die 421-2653



Hose Machine

- CE, CSA, and UL compliant
- Uses Crimper V (C5) controller with easy to follow color menus
- Touch screen controller stores values required to crimp a full range of hoses
- Die range 12 through 92 mm
- 533-1148 requires 3-Phase, 220 to 480V, 50-60 Hz, electrical supply for 4kW motor (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.)
- 533-1146 requires a single-phase 230V, 50 Hz electrical supply
- 533-1147 requires a single-phase 230V, 60 Hz electrical supply.
- Designed with lubeless, low-maintenance radial crimp head
- Can be bench mounted or used with optional 358-4545 Universal Table Assembly
- Shipped without hydraulic oil

- Includes radial hose machine, Crimper V (C5) controller, 8 inch digital calipers with caliper cable, Die changing tool, Die extraction tool, Calibration mandrel, Single foot switch (for use with C5 controller), Open/close foot switch to operate hose machine and adapter die

- Die group sold separately

528-5353 Crimper V (C5) Controller Features

- CE, CSA, and UL compliant
- Siemens touch screen
- Adjustable viewing position for operator ergonomics
- Full-color display with embedded help screens
- Multiple platform software (updatable via USB port)
- Track and store multiple crimp data values
- Password protected for multiple operators
- Die change STOP and OPEN feature included
- Support for multiple languages

References

- NEHS1098, Tool Operating Manual
- NEHS1099, Tool Operating Manual

Note: Both machine group and die group part numbers must be ordered to crimp hoses.

Part No.	Description
533-1146	Single Phase 230V, 50Hz, Radial Hose Machine
533-1147	Single Phase 230V, 60Hz, Radial Hose Machine
533-1148	3-Phase Radial Hose Machine Group
358-4545	Universal Table Assembly
526-5493	Die Group

Specifications		Crimping Capabilities
Dimensions	1000 x 600 x 700 mm	1.5 in XT-6ES / XT-5ES 2 in XT-3ES 3 in LMP
Weight	260 kg (575 lbs)	
Oil Capacity	50 L (53 qt)	
Opening without Dies	147 mm (5.8 in)	
Die Range	12 to 92 mm	

S6 Radial Hose Machine Group (Continued)

526-5493 Die Group (Includes the Following Items)

Part Number	Diameter	Retention Pin
239L Die Set Series (requires 421-2653 Adapter)		
526-5529	12 mm (.47 in)	330-3951 ⁽⁴⁾
526-5530	14 mm (.55 in)	330-3951 ⁽⁴⁾
526-5531	17 mm (.67 in)	330-3951 ⁽⁴⁾
526-5532	20 mm (.79 in)	330-3951 ⁽⁴⁾
526-5533	22 mm (0.86 in)	330-3951 ⁽⁴⁾
526-5534	24 mm (.94 in)	330-3951 ⁽⁴⁾
526-5535	26 mm (1.02 in)	330-3951 ⁽⁴⁾
526-5536	28 mm (1.10 in)	330-3951 ⁽⁴⁾
526-5537	30 mm (3.07 in)	330-3951 ⁽⁴⁾
526-5538	32 mm (1.26 in)	330-3951 ⁽⁴⁾
526-5539	36 mm (1.42 in)	330-3951 ⁽⁴⁾
526-5540	40 mm (1.57 in)	330-3951 ⁽⁴⁾
526-5541	44 mm (1.73 in)	330-3951 ⁽⁴⁾
358-4560	47 mm (1.85 in)	330-3951 ⁽⁴⁾
358-4561	50 mm (1.97 in)	330-3951 ⁽⁴⁾
358-4562	54 mm (2.13 in)	330-3951 ⁽⁴⁾
358-4563	57 mm (2.24 in)	330-3951 ⁽⁴⁾
358-4564	62 mm (2.44 in)	330-3951 ⁽⁴⁾
266L Die Set Series		
358-4565	67 mm (2.64 in)	233-8077 ⁽⁵⁾
358-4566	71 mm (2.80 in)	233-8077 ⁽⁵⁾
526-5542	78 mm (3.07 in)	233-8077 ⁽⁵⁾
358-4567	84 mm (3.31 in)	233-8077 ⁽⁵⁾
358-4568	92 mm (3.62 in)	233-8077 ⁽⁵⁾

4 Retention pins should be replaced when they are damaged. Package quantity is eight per package
 5 Sold and Serviced Individually

Hose Assembly Tools

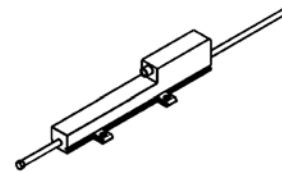
S6 Radial Hose Machine Group (Continued)

S6 Hose Crimper (Repair Parts)

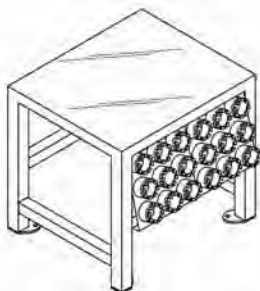
Part No.	Description
233-8045	Calibration Mandrel for S6
233-8046	Die Changer Tool for use with 239L Dies
233-8047	Tool - Die Release
233-8077	Steel Die Pin (232L/266L/237L Series Large Die and Adapters)
330-3951	Pin - Die Kit 239-L Smaller Dies (8 pieces)
358-4536	Caliper Electronic 3" or Smaller Couplings
358-4537	Cable - Caliper
358-4538	Pedal Foot Switch
358-4539	Crimputer Bracket As. Lever for C3 and C5
358-4544	Double Pedal Foot Switch
358-4545	Table with Die Holder Rack
416-6391	Kit - Slide Bearing (Rear) under Master Dies (8 pieces)
416-6395	Master Die Extraction/Capture Tool
416-6396	Kit - Plunger (Master Die)
416-6401	Rear Retainer Ring Slide Bearings
416-6402	Kit - Bolt for Master Dies (8 pieces)
416-6403	Die As. - Master Single Master Die
421-2653	Adapter Die for S6
421-2654	Screw - Detent
423-4373	Caliper Electronic 8" or Smaller Couplings
425-2389	Kit - Slide Bearing (Inside Front Plate) (2 pieces)
457-6033	Pressure Sensor
462-5664	Capacitor (Only for Single Phase Machines)
550-9143	Springs Kit (24 pieces)
566-7502	Path Sensor (Potentiometer)
566-7503	Shim Kit - Used to improve roundness or concentricity of die closure, goes under bearing plate.
566-7505	Plastic Pins for 239 and 239L Series Dies (8 pieces)
578-6149	Screw - Detent Kit (8 pieces)



462-5664



566-7502



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

S6 Radial Hose Machine Group Capability

Hose Type	Coupling Type	Dash Size (Hose machine will crimp these coupling sizes)
294	MN	-4, -5, -6, -8, -10, -12, -16, -20, -24, -32, -40, 48
294TG	MN	-4, -6, -8, -10, -12, -16
294CPT	MN	-4, -6, -8, -10, -12, -16
	BN	-10
294CPTG	MN	-4, -6
294HT	MN	-32, -40
716	MN	-4, -6, -8, -10, -12, -16, -20, -24, -32
716TG	MN	-4, -6, -8, -10, -12, -16
716CPT	MN	-4, -6, -8, -10, -12, -16
844	MN	-12, -16, -20, -24, -32, -40
	SW	-48
844HP	MN	-40
	SW	-48
XT-3ES	TR	-6, -8, -10, -12, -16
	ESA	-10, -12, -16
	S4G	-6, -8, -16, -20, -24, -32
	XN	-6, -8, -10, -12
	XN4	-20 ⁽⁶⁾ , 24
XT-3ESTG	TR	-6, -8, -10, -12, -16
	ESA	-10, -12, -16
	S4G	-6, -8, -16, -20, -24, -32
	XN	-6, -8, -10, -12, -16
	XN4	-20 ⁽⁶⁾ , 24
XT-5ES	PL	-12, -16
	MCSH	-12, -16, -20, -24, -32
	MCSX	-12, -16, -20, -24
	XN	-12, -16
	XN6	-20, -24
XT-5ESTG	PL	-12, -16
	MCSH	-12, -16, -20, -24
	MCSX	-12, -16, -20, -24

Hose Type	Coupling Type	Dash Size (Hose machine will crimp these coupling sizes)
	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
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
1028	56	-3, -4, -5, -6, -8, -12
CAT A/C FC	A/C	-6, -8, -10, -12, -14
2760	JN	-4, -5, -6, -8
2786	MN	-4, -6, -8, -10, -12, -16
2929	MH	-4, -5, -6, -8
2929TG	MH	-4, -6
	MHT	-4
743	MH	-4, -5, -6, -8, -10, -12, -16
	JN	-3
945	MH	-4, -6, -8, -12
	JN	-3
662	MN	-6, -8
2771A	JN	-4, -5, -6, -8, 10, -12
4636	MN	-8, -12
	BN	-10, -16
4639	MN	-8, -12
	BN	-10, -16
4901	MN	-4, -6, -8, 10, -12, -16, -20, -24, -32, -40, -48
5014	Mn	-4, -8, -12
5065	DS4	-4, -6

Hose Assembly Tools

M6 Hose Crimper

Warranty: Manufacturer's One Year
See, page 422 Technical Support Section



European Union Compliant, CE marked

- Target Application: advanced do-it-yourself customers, service trucks, hose vans and hose workshops
- Micrometer-controlled crimp dimensions
- Required die kit 526-5493 (order separately)

Reference

- AEXQ2130 Crimp Chart

Click here for crimp chart for S2 and M6 and Crimper software for S6 and 325: <https://dealer.cat.com/en/ps/service-tools/c/crimper-software.html>

Specifications

- Dimensions: 508 x 432 x 533 mm (20 x 17 x 21 in)
- Weight: 172 kg (380lb)

NOTE:

Individual die sets may also be purchased separately.

Part No.	Power	Max. Crimping Capability
508-7865	12V DC; 150A	1.5 in XT-6ES / XT-5ES 2 in XT-3ES 3 in LMP
508-7866	24V DC; 83A	
508-7867	1PH; 230V; 50/60 Hz, 7.8A at 50 Hz and 5.4A at 60 Hz	
508-7868	1PH; 115V; 50/60 Hz; 15.5A at 50 Hz and 10.8A at 60 Hz	

Serviceable Parts

Part No.	Description
526-5493	Die Kit (Must Order Separately)
330-3951	Retention Die Pin for 12-62 mm Die Sets
233-8077	Retention Die Pin for 67-121 mm and the Adapter Die Sets
421-2653	Adapter Die Set (Provided with Machine Assembly)

M6 Die Kit Group Parts List

526-5493 Die Group (Includes the Following Items)

Part No.	Diameter	Retention Pin
239L Die Set Series (requires 421-2653 Adapter)		
526-5529	12 mm (.47 in)	330-3951 ⁽⁷⁾
526-5530	14 mm (.55 in)	330-3951 ⁽⁷⁾
526-5531	17 mm (.67 in)	330-3951 ⁽⁷⁾
526-5532	20 mm (.79 in)	330-3951 ⁽⁷⁾
526-5533	22 mm (.86 in)	330-3951 ⁽⁷⁾
526-5534	24 mm (.94 in)	330-3951 ⁽⁷⁾
526-5535	26 mm (1.02 in)	330-3951 ⁽⁷⁾
526-5536	28 mm (1.10 in)	330-3951 ⁽⁷⁾
526-5537	30 mm (3.07 in)	330-3951 ⁽⁷⁾
526-5538	32 mm (1.26 in)	330-3951 ⁽⁷⁾
526-5539	36 mm (1.42 in)	330-3951 ⁽⁷⁾
526-5540	40 mm (1.57 in)	330-3951 ⁽⁷⁾
526-5541	44 mm (1.73 in)	330-3951 ⁽⁷⁾
358-4560	47 mm (1.85 in)	330-3951 ⁽⁷⁾
358-4561	50 mm (1.97 in)	330-3951 ⁽⁷⁾
358-4562	54 mm (2.13 in)	330-3951 ⁽⁷⁾

7 Retention pins should be replaced when they are damaged. Package quantity is eight per package

M6 Hose Crimper (Continued)

M6 Die Kit Group Parts List					
526–5493 Die Group (Includes the Following Items)					
Part No.	Diameter	Retention Pin			
239L Die Set Series (requires 421-2653 Adapter)					
358-4563	57 mm (2.24 in)	330-3951 ⁽⁸⁾			
358-4564	62 mm (2.44 in)	330-3951 ⁽⁸⁾			
266L Die Set Series					
358-4565	67 mm (2.64 in)	233-8077 ⁽⁹⁾			
358-4566	71 mm (2.80 in)	233-8077 ⁽⁹⁾			
526-5542	78 mm (3.07 in)	233-8077 ⁽⁹⁾			
358-4567	84 mm (3.31 in)	233-8077 ⁽⁹⁾			
358-4568	92 mm (3.62 in)	233-8077 ⁽⁹⁾			
Additional Dies Necessary for Specific Hose and Coupling Types					
Part No.	Diameter	Retention Pin	Hose	Coupling Type	Dash Size
239L Die Set Series (requires 423-4367 Adapter)					
591-1614	39 mm (1.54 in)	330-3951 ⁽⁸⁾	4901	MN	-16
591-1615	48 mm (1.89 in)	330-3951 ⁽⁸⁾	4901	MN	-20
591-1616	55 mm (2.17 in)	330-3951 ⁽⁸⁾	4901	MN	-24
			XT5-ES, XT5-ESTG, XT6-ES, XT6-ESTG	XN6	-20
591-1618	64 mm (2.52 in)	330-3951 ⁽⁸⁾	XT5-ES, XT5-ESTG, XT6-ES, XT6-ESTG	XN6	-24
237L Die Set Series					
591-1619	69 mm (2.72 in)	233-8077 ⁽⁹⁾	4901	MN	-32
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.					

8 Retention pins should be replaced when they are damaged. Package quantity is eight per package
 9 Sold and Serviced Individually

Hose Assembly Tools

M6 Hose Crimper (Continued)

M6 Hose Crimper (Repair Parts)	
Part No.	Description
233-8046	Die Changer Tool for use with 239L Dies
233-8047	Tool - Die Release
233-8077	Steel Die Pin (232L/266L/237L Series Large Die and Adapters)
330-3951	Pin - Die Kit 239-L Smaller Dies (8 pieces)
358-4545	Table with Die Holder Rack
416-6396	Kit - Plunger (Master Die)
421-2653	Adapter Die for M6
421-2654	Screw - Detent
550-9143	Springs Kit (24 pieces)
550-9145	8 T Nut; 16 M6 Bolt; 16 Washer
566-7503	Shim Kit - Used to improve roundness or concentricity of die closure, goes under bearing plate.
566-7505	Plastic Pins For 239 and 239L Series Dies (8 pieces)
578-6149	Screw - Detent Kit (8 pieces)
598-1908	Kit - Slide Bearing (Front & Rear) under Master Dies (16 pieces)

S2 Hose Crimper

Warranty: Manufacturer's One Year
See, page 422 Technical Support
Section



European Union Compliant, CE marked

- Target Application: market entry-level, do-it-yourself customers, service trucks and hose vans
- Micrometer-controlled crimp dimensions
- Required die kit 508-7873 (order separately)

Reference

- AEXQ 2131 Crimp Chart

Click here for crimp chart for S2 and M6 and Crimputer software for S6 and 325:
<https://dealer.cat.com/en/ps/service-tools/c/crimputer-software.html>

Specifications

- Dimensions: 450 x 450 x 450 mm (18 x 18 x 18 in)
- Weight: 41 kg (90lb)

NOTE: Individual die sets may also be purchased separately.

Part No.	Description	Max. Crimping Capability
508-7870	1PH; 110V; 60 Hz; 8A	1 in XT-6ES / XT-5ES 1.25 in XT-3ES 1.25 in LMP
508-7871	12V DC; 15.8A	
508-7872	1PH; 230V; 50/60 Hz; 4A	

Serviceable Parts	
Part No.	Description
508-7873	Die Kit (Must Order Separately)

S2 Die Kit Group Parts List		
508-7873 Die Group (Includes the Following Items)		
Part No.	Diameter	Retention Pin
524-4076	14 mm (.55 in)	517-3483
517-2548	17 mm (.67 in)	517-3483
517-2549	20 mm (.79 in)	517-3483
517-2550	24 mm (.94 in)	517-3483
517-3480	28 mm (1.10 in)	517-3483
517-3481	32 mm (1.26 in)	517-3483
517-3482	40 mm (1.57 in)	517-3483
524-4077	47 mm (1.85 in)	517-3483
517-3484	Box-STOR	517-3483

S2 Hose Crimper (Repair Parts)	
Part No.	Description
561-1991	Bearing Plates
561-1992	Front Bearing Plate
561-1993	Master Die Springs (16 pieces)
561-1994	Seal Kit
561-1995	Pressure Pad (8 pieces)
561-1996	Die Pins Kit (8 pieces)
561-1997	Retract Spring (8 pieces)
561-1998	Guide Pin (2 pieces)

Hose Assembly Tools

Hose-Cutting Machines

- A fume extraction device including a spark arrester is recommended (533-1184).
- 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).
- All saws except EM115 are designed for on/off use and not designed to run continuously. The EM115 can cut the full Cat® hose product line.

EM115 Hose Saw

Warranty: Manufacturer's One Year [See, page 422](#) Technical Support Section



European Union Compliant, CE marked

- Target application: large mining machines, high-volume production
- Best match with 325

Specifications

- Dimensions: 1210 x 650 x 1650 mm (48 x 26 x 65 in)
- Weight: 245 kg (540 lb)

Part No.	Description	Max. Cutting Capability
444-5974	3 PH Multivoltage: 230/380-420V at 50 Hz/26A and 230/380-480V at 60 Hz/15A	2 in XT-5ES / XT-6ES / XT-3ES 3 in LMP

Serviceable Parts	
Part No.	Description
533-1165	TM G Blade
533-1167	TM C Blade

EM6-P Hose Saw

Warranty: Manufacturer's One Year [See, page 422](#) Technical Support Section



- Pneumatic operation requires minimum 90 psi/ 621 kPa with adequate flow.
- Target Application: advanced do-it-yourself customers, standard hose workshops
- Best match with M6 and/or S6 hose crimpers
- Spark Arrester 583-3538 (recommended)

Specifications

- Dimensions: 785 x 760 x 710mm (31 x 30 x 28 in)
- Weight: 110 kg (242 lb)

Part No.	Description	Max. Cutting Capability
517-2540	3PH, 400V; 50 Hz; 9.5A	1.5 in XT-5ES / XT-6ES 2 in XT-3ES 3 in LMP
516-9370	3PH, 220V; 50/60 Hz; 15A	

Serviceable Parts	
Part No.	Description
517-2537	TM G Blade
517-2538	TM C Blade

EM6-E Hose Saw

Warranty: Manufacturer's One Year
See, page 422 Technical Support Section



- Target Application: advanced do-it-yourself customers, standard hose workshops
- Best match with M6 hose crimper

Specifications

- Dimensions: 510 x 700 x 720 mm (20 x 28 x 28 in)
- Weight: 45 kg (99 lb)

Part No.	Description	Max. Cutting Capability
508-7861	1 PH; 110-120V; 50/60 Hz; 15A	1.5 in XT-5ES / XT-6ES 2 in XT-3ES 2 in LMP
508-7862	1 PH; 220-240V; 50/60 Hz; 9.6A	

Serviceable Parts	
Part No.	Description
517-2541	TM G Blade
517-2542	TM C Blade

EM6-M Hose Saw

Warranty: Manufacturer's One Year
See, page 422 Technical Support Section



- Target Application: advanced do-it-yourself customers, standard hose workshops
- Best match with M6 and/or S6 hose crimpers
- Spark Arrestor 583-3538 (recommended)

Specifications

- Dimensions: 700 x 745 x 430 mm (28 x 29 x 17 in)
- Weight: 75 kg (165 lb)

Part No.	Description	Max. Cutting Capability
517-2539	3PH, 400V; 50 Hz; 9.5A	1.5 in XT-5ES / XT-6ES 2 in XT-3ES 3 in LMP
516-9369	3PH, 220V; 50/60 Hz; 15A	

Serviceable Parts	
Part No.	Description
517-2537	TM G Blade
517-2538	TM C Blade

EM3-E Hose Saw

Warranty: Manufacturer's One Year
See, page 422 Technical Support Section



- Target Application: market entry level, do-it-yourself customers, service trucks and hose vans
- Best match with S2 hose crimper

Specifications

- Dimensions: 400 x 510 x 540 mm (16 x 20 x 21 in)
- Weight: 20 kg (44 lb)

Part No.	Description	Max. Cutting Capability
516-9368	1 PH; 230V; 50/60 Hz; 8A	1 in XT-6ES / XT-5ES 1.25 in XT-3ES 1.25 in LMP

Serviceable Parts	
Part No.	Description
517-2535	TM G Blade
517-2536	TM C Blade

Hose Assembly Tools

EM3-DC Hose Saw

Warranty: Manufacturer's One Year
See, page 422 Technical Support Section



- Target Application: market entry level, do-it-yourself customers, service trucks and hose vans
- Best match with S2 hose crimper
- Specifications
 - Dimensions: 470 x 567 x 365 mm (19 x 22 x 14 in)
 - Weight: 29 kg (64 lb)

Part No.	Description	Max. Cutting Capability
517-2531	12V DC; 200A	1 in XT-6ES / XT-5ES
517-2534	24V DC; 115A	1.25 in XT-3ES 1.25 in LMP

Serviceable Parts	
Part No.	Description
517-2532	TM G Blade
517-2533	TM C Blade

Saw Repair Parts

Model Usage: All
Warranty: Caterpillar Six Months

Part No.	Description
561-2027	Motor Shaft Break Away Coupling, Support EM3-DC only
561-2028	Hose Bending Pin Kit, Support EM3-DC only
561-2029	Hose Bending Pins, Support EM6-E, EM6-M and EM6-P
576-6137	Stand-Table
583-3538	Spark Arrestor, Support EM6-M and EM6-P
533-1184	Spark Arrestor, Support EM115

Repair Parts Reference Guide

Crimpers Repair Parts

Part No.	Alternate Description
CLC 290 Hose Crimper	
233-8077	Steel Die Pin (232L/266L/237L Series Large Die and Adapters)
233-8082	Die Kit - Adapter
233-8085	Path Sensor (Potentiometer)
330-3951	Pin - Die Kit 239-L Smaller Dies (8 pieces)
358-4536	Caliper Electronic 3" or Smaller Couplings
358-4537	Cable - Caliper
358-4538	Pedal Foot Switch
423-4373	Caliper Electronic 8" or Smaller Couplings
457-6033	Pressure Sensor
466-0748	Pad - Deflector (DIRT)
466-0750	Tool Gp - (Lube Ring)
566-7505	Plastic Pins For 239 and 239L 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

Repair Parts Reference Guide (Continued)

Part No.	Alternate Description
566-7501	Internal USB Connector/Cable Support C5 Panel
566-7502	Path Sensor (Potentiometer) Support C3 and C5
325 Hose Crimper	
233-8046	Die Changer Tool for use with 239L Dies
233-8047	Die Release Tool
233-8077	Steel Die Pin (232L/266L/237L Series Large Die and Adapters)
330-3951	Pin - Die Kit 239-L Smaller Dies (8 pieces)
358-4536	Caliper Electronic 3" or Smaller Couplings
358-4537	Cable - Caliper
358-4538	Pedal Foot Switch
358-4539	Crimputer Bracket As. Lever for C3 and C5
358-4544	Double Pedal Foot Switch
421-2654	Screw - Detent
423-4364	Calibration Mandrel for 325
423-4367	Adapter Die for 325
423-4373	Caliper Electronic 8" or Smaller Couplings
457-6033	Pressure Sensor
458-2920	Oil Filter Element 1 (45 X 85 mm (1.8 X 3.3 in)
458-2921	Oil Filter Element 2 (45 X 88 mm (1.8 X 3.5 in)
482-4417	Tool Gp - (Plunger - Master Die)
550-9143	Springs Kit (24 pieces)
561-2025	Bearing Plate Kit Complete
561-2026	Springs Kit (24 pieces)
566-7502	Path Sensor (Potentiometer)
566-7503	Shim Kit - Used to improve roundness or concentricity of die closure, goes under bearing plate.
566-7504	Die As. - Master Complete Master Die Group
566-7505	Plastic Pins For 239 and 239L Series Dies (8 pieces)
578-6149	Screw - Detent Kit (8 pieces)
S6 Hose Crimper	
233-8045	Calibration Mandrel for S6
233-8046	Die Changer Tool for use with 239L Dies
233-8047	Tool - Die Release
233-8077	Steel Die Pin (232L/266L/237L Series Large Die and Adapters)
330-3951	Pin - Die Kit 239-L Smaller Dies (8 pieces)
358-4536	Caliper Electronic 3" or Smaller Couplings
358-4537	Cable - Caliper
358-4538	Pedal Foot switch
358-4539	Crimputer Bracket As. Lever for C3 and C5
358-4544	Double Pedal Foot Switch
358-4545	Table with Die Holder Rack
416-6391	Kit - Slid Bearing (Rear) under Master Dies (8 pieces)
416-6395	Master Die Extraction/Capture Tool
416-6396	Kit - Plunger (Master Die)
416-6401	Rear Retainer Ring Slide Bearings
416-6402	Kit - Bolt for Master Dies (8 pieces)
416-6403	Die As. - Master Single Master Die

Hose Assembly Tools

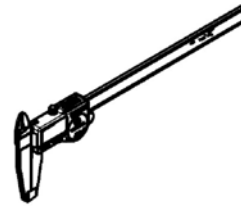
Repair Parts Reference Guide (Continued)

Part No.	Alternate Description
421-2653	Adapter Die for S6
421-2654	Screw - Detent
423-4373	Caliper Electronic 8" or Smaller Couplings
425-2389	Kit - Slid Bearing (Inside Front plate) (2 pieces)
457-6033	Pressure Sensor
462-5664	Capacitor (Only for single phase machines)
550-9143	Springs Kit (24 pieces)
566-7502	Path Sensor (Potentiometer)
566-7503	Shim Kit - Used to improve roundness or concentricity of die closure, goes under bearing plate.
566-7505	Plastic Pins for 239 and 239L Series Dies (8 pieces)
578-6149	Screw - Detent Kit (8 pieces)
M6 Hose Crimper	
233-8046	Die Changer Tool for use with 239L Dies
233-8047	Tool - Die Release
233-8077	Steel Die Pin (232L/266L/237L Series Large Die and Adapters)
330-3951	Pin - Die Kit 239-L Smaller Dies (8 pieces)
358-4545	Table with Die Holder Rack
416-6396	Kit - Plunger (Master Die)
421-2653	Adapter Die for M6
421-2654	Screw - Detent
550-9143	Springs Kit (24 pieces)
550-9145	8 T Nut; 16 M6 Bolt; 16 Washer
566-7503	Shim Kit - Used to improve roundness or concentricity of die closure, goes under bearing plate.
566-7505	Plastic Pins For 239 and 239L Series Dies (8 pieces)
578-6149	Screw - Detent Kit (8 pieces)
S2 Hose Crimper	
561-1991	Bearing Plates
561-1992	Front Bearing Plate
561-1993	Master Die Springs (16 pieces)
561-1994	Seal Kit
561-1995	Pressure Pad (8 pieces)
561-1996	Die Pins KIT (8 pieces)
561-1997	Retract Spring (8 pieces)
561-1998	Guide Pin (2 pieces)
Hose Saws Repair Parts	
561-2027	Motor Shaft Break Away Coupling, Support EM3-DC only
561-2028	Hose Bending Pin Kit, Support EM3-DC only
561-2029	Hose Bending Pins, Support EM6-E, EM6-M and EM6-P
576-6137	Stand-Table
583-3538	Spark Arrestor, Support EM6-M and EM6-P
533-1184	Spark Arrestor, Support EM115

Repair Parts Reference Guide (Continued)



457-6033



423-4373

Fume Exhausters

Model Usage: All
Warranty:
Caterpillar Six Months



- Optional accessory
- Exhausts fumes and draws dust and debris into cabinet base where it is trapped for later collection
- For best results, use 127 mm (5 in) diameter ducting with a maximum length of 6 m (20 ft)
- 900 CFM capacity

NOTE: These machines are not European Union compliant.

NOTE: Not for use with cut off saws 9U-7319 & 9U-7320. Single Phase fume exhauster is available via special order. Contact Dealer Service Tools sale representative.

NOTE: Ducting not included

Part No.	Description
250-6808	Installed and wired to 250-6807 Hose Cutting Machine, Wired for 460 V, 60 Hz, 3 Phase 900 CFM capacity
251-1207	Installed and wired to 6V-6015 Hose Cutting Machine, Wired for 230 V, 60 Hz, 3 Phase 900 CFM capacity

Hose Assembly Tools

Pressure Test Equipment

Warranty: Manufacturer's One Year



528-5347 P160 Cabinet



528-5349 P160 Cabinet with Extension



528-5351 Test Bench Control Stand



528-5350 P350 Cabinet

- The Cat Hose Assembly Pressure Test Equipment is designed to ensure a safe, reliable hose has been built and is ready for installation. The Cat Hose Pressure Test Equipment was designed to comply with the most strict safety standards available, such as MDG 41 Mine Site Guidelines.
- Cat Hose Assembly Pressure Test Equipment can operate as a stand-alone machine and it can also be integrated with the Cat Hose Crimper and Label Printer to maintain hose build and pressure test data for historical records and improved hose business management.
- 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 Crimputer or Test Bench datalog can be downloaded at anytime via USB and then uploaded for safe, accurate record keeping
- Standard solution requires manual download of data memory for complete record keeping and hose business management. A networked integration set-up option is also available.
- This solution is ideal for hose shops with multiple hose crimpers and is available upon request. Please contact your local ASR or ASC for more information.

System features include:

- User identification through login and password
- User-guiding software for improved operation

NOTE: Please refer to Dealer Service Tools Catalog PERJ1017 for detailed technical information.

Part No.	Description	Weight	Overall Dimensions
528-5351	Test Bench Control Stand	210 kg	850 x 1390 x 810 mm
528-5347	P160 Cabinet	200 kg	2210 x 950 x 1325 mm
528-5349	P160 Cabinet with Extension	390 kg	4100 x 950 x 1325 mm
528-5350	P350 Cabinet	650 kg	2100 x 2170 x 2650 mm
528-5354	Adapter Kit	85 kg	800 x 600 x 670 mm
528-5353	CV Crimputer. Required for implementation of Integration Software	4 kg	250 x 200 x 50 mm
528-5352	Barcode Scanner. Recommended for use with Integration Software	-	-

Packages

Part No.	Description
528-5359	P160 Test Bench (includes P160 cabinet, control stand, adapter kit)
528-5360	P160 Test Bench w/ Extension Cabinet (includes P160 cabinet with extension, control stand, adapter kit)
528-5361	P350 Test Bench (includes P350 cabinet, control stand, adapter kit)

Note: The test fluid needs to be changed regularly every three months, even if the machine is not being utilized with the following Cat Fluid part numbers:

- 351-9431: 3.79 Liter (Concentrate - Must be diluted 92.5% water to 7.5% concentration)
- 351-9432: 20 Liter (Concentrate - Must be diluted 92.5% water to 7.5% concentration)

Skiver Machine 584-5208 (Not Available Until 2nd Quarter 2020)

The New Skiving Machine

Multiple arbors allow user to set diameter to minimize change-over time. Higher productivity due to low change-over times and user friendly operation for optimum results.

Specifications	Description
Model	CPS10 S
External Skiving	1.00" - 2"
Tool Revolution	110 rpm
Drive	0.37 kw (3 phase)
L x W x H (mm)	40 x 440 x 545
Weight	35 Kg

The skiver will come with 11 external arbors (4 arbors for XT-3ES serving Hoses from -16 up to -24) plus 3 arbors for XT-5ES serving Hoses from -16 up to -32) plus 3 arbors for XT-6ES serving Hoses from -16 up to -24 and 1 arbor for -32 XT-5ES/XT-6ES -32)

The skiver will come with 11 External Arbors Part Number 584-5552, that service XT-3ES, XT-5ES and XT-6ES

External Arbor DN 25; ID 1" (3 Arbors)

External Arbor DN 31; ID 1 1/4" (3 Arbors)

External Arbor DN 38; ID 1 1/2" (3 Arbors)

External Arbor DN 51; ID 2" (2 Arbors) since XT-5ES, and XT-6ES will be the same

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*

*Since XT-5ES and XT-6ES will be the same

The rack part number 584-5210

The standard table part number 576-6137



584-5208



584-5552



584-5210

Hose Assembly Tools

XT Reusable Press

Model Usage: All

Warranty: *Manufacturer's One Year*
[See, page 422 Technical Support Section](#)



CE Compliant

- The XT Reusable Press is used to reclaim the couplings from hose assemblies using reusable couplings. All legacy tooling in the following sections used for reclaiming -6 through -32 size reusable couplings can be used with the new XT Reusable Press. New tooling will be released for the XT Reusable Press which will only support sizes for -16 and larger as the reusable couplings for -12 and smaller series have been discontinued. The XT Reusable Press does not function as a hose crimper similar to the legacy models.
- XT Tooling is required to service reusable couplings
- Each unit comes with pump, motor, press, foot pedal. Tooling purchased separately.

- Available in either 115V or 230V, Single Phase
- Integrated stand securely holds equipment and press
- Tooling kit part numbers are currently being developed to support the new XT Reusable Press for -16 sizes and larger. Existing tooling shown in the legacy press section of this catalog can be used with the new press. Please consult your local Hose Pro and the legacy XT Hose Machine section of this catalog for additional guidance on tooling selection.

Reference

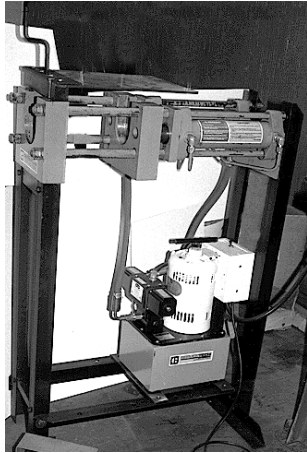
- M0090635 – Assembling Reusable Couplings

Part No.		Description
508-7863	115V, Single Phase	28,000 kPa (1280 bar)1080 x 1200 x 520 mm 60 Tons Pushing Force, 45 Tons Pulling Force
540-1208	230V, Single Phase	

NOTE: Tooling for reusable press is purchased separately.

XT Hose Machine (Pending Discontinuation)

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.	Description
150-2568 ⁽¹⁰⁾	XT Hose Machine

Cat 150-2568/173-9805 XT Hose Machine		
Hose Type	Coupling Type	Dash Size
294	MN	-4, -5, -6, -8, -10, -12, -16, -20
294TG	MN	-4, -6, -8, -10, -12, -16
294CP	MN	-4, -6, -8, -10, -12, -16, -20
294CPTG	MN	-4, -6
716	MN	-4, -6, -8, -10, -12, -16, -20
716TG	MN	-4, -6, -8, -10, -12, -16
716CP	MN	-4, -6, -8, -10, -12, -16
844	MN	-12, -16, -20
XT3ES	TR	-6, -8, -10, -12, -16
	ESA	-6, -8, -10, -12, -16
	S4G	-6, -8, -10, -12, -16
	XN	-6, -8
	XN4	-24
XT3ESTG	TR	-6, -8, -10, -12, -16
	ESA	-6, -8, -10, -12, -16
	S4G	-6, -8, -10, -12, -16
	XN	-6, -8
	XN4	-24
XT5ES	PL	-12
	MCSH	-12
	MCSX	-12
	XN	-10, -12
XT5ESTG	PL	-12
	MCSH	-12

Cat 150-2568/173-9805 XT Hose Machine		
Hose Type	Coupling Type	Dash Size
	MCSX	-12
	XN	-10, -12
XT6ES	IN	-6, -8, -10
	MCSM	-6
	XN	-6, -8
	XT6ESTG	IN	-6, -8, -10
MCSM		-6
XN		-6, -8
1028	55	-3, -4, -5, -6, -8, -12
CATACFC	A/C	-6, -8, -10, -12, -14
PARKEAC	A/C	-6, -8, -10, -12, -14
2760	JN	-4, -5, -6, -8
2786	MN	-4, -6, -8, -10, -12, -16
2929	MH	-4, -5, -6, -8
2929TG	MH	-6
	MHT	-4
743	MH	-5, -6, -8, -10, -12, -16
	MHT	-4
	JN	-3
945	MH	-6, -8, -12
	MHT	-4
	JN	-3
662	MN	-6, -8
2771A	JN	-4, -5, -6, -8, -10, -12

¹⁰ The 150-2568 XT Hose Presses have been replaced by part numbers in the previous section. These two part numbers are no longer supported. Tooling designed for these machines will work in the new machines.

Hose Assembly Tools

XT Hose Machine

To Order:

If 150-2568 (Pending Discontinuation) (non-European Union Compliant) is ordered, choose the correct power and order the parts to Connect the power supply to the hose assembly machine.

1 Horsepower Pump Assembly Single phase, 50/60 HZ	
Part No.	Description
439-5247	115V
439-5248	230V

Additional Parts Necessary to Connect the Power Supply to 150-2568 XT Hose Assembly Machine

Qty.	Part No.	Description
2	8F-0024	Hose
2	135-2535	Fitting
1	136-2060	Fitting
1	136-2061	Fitting
2	136-2068	Fitting
2	1P-2375	Coupler
2	1P-2376	Coupler

Variable Crimp Die Bowl (Serving Legacy Machines)

Model Usage: All
Caterpillar Six Months



European Union Compliant, CE marked

- Precision internal threads and external barrel scale
- Similar to a micrometer, bowl provides nearly infinite adjustment for the smooth-bore dies
- Easy to adjust thickness by twisting the bowl

- Eliminates the need for spacer rings used with stepped dies
- Fewer smooth-bore dies needed to service the same range of hose and coupling sizes in comparison with stepped dies

Part Number	Description
242-3567 ⁽¹¹⁾	Variable Crimp Die Bowl

Crimping Bowl Assembly (required)

Part Number	Description
133-7362 ⁽¹¹⁾	Die Rest
135-4561 ⁽¹¹⁾	Die Separator
140-9360 ⁽¹¹⁾	Separator Ring
4C-4375 ⁽¹¹⁾	Spring
4C-4376 ⁽¹¹⁾	Snap Ring

¹¹ The parts in this section support legacy machines 150-2568 and 173-9805 will not work with new XT Press.

XT-ES General Kit

Model Usage: All
Warranty:
Caterpillar Six Months

- Used with XT Hose Assembly Machines as well as the Combination Hose Assembly Machine

Reference
M0090635 Comprehensive Tooling List for Assembling and Disassembling Reusable Couplings

Kit Introduction Table & Information (Not Available Until 2nd Quarter 2020)

This section provides helpful reusable coupling tooling group information for Assembling and Disassembling Reusable Couplings.

Kit Number	Kit Part Number	Description	Number of Part No.
1	585-4436	General Kit (That can fit all XT-ES Hoses)	46 individual Parts
2	585-4437	Serve XT3-ES Hoses	14 individual Parts
3	585-4438	Serve XT5-ES Hoses	14 individual Parts
4	585-4439	Common for XT3-ES and XT5-ES	6 individual Parts
5	585-4441	Serve XT6-ES Hoses	28 individual Parts

For customers interested in servicing Reusable couplings for the first time, or for those interested in expanding the coverage of their existing Reusable coupling business, 5 tooling groups have been created based on the XT product that will be serviced.

Note: For those interested in replacing lost or broken pieces, all part numbers in each group can be purchased individually.

Here are the Reusable tooling groups offered:

General Tool Group (Kit #1) – This group contains tooling that is common between XT-3ES, XT-5ES, and XT-6ES. Anyone in the Reusable business will need the General Tool Group (Kit #1).

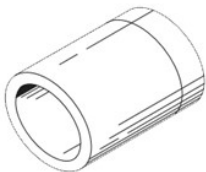
XT-3ES – For anyone interested in servicing XT-3ES hose assemblies, in addition to the General Group, they will also need the XT-3ES kit (Kit #2) and the XT-3ES/XT-5ES common kit (Kit #4).

XT-5ES – For anyone interested in servicing XT-5ES, in addition to the General Group (Kit #1), they will also need the XT-3ES/XT-5ES common kit (Kit#4) and the XT-5ES kit (Kit #3).

XT-6ES – For anyone interested in servicing XT-6ES, in addition to the General Group (Kit #1), they will also need the XT-6ES kit (Kit #5).

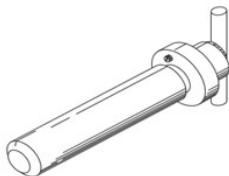
To service all XT products together (XT-3ES, XT-5ES, and XT-6ES), all 5 kits are required. If servicing both XT-3ES and XT-5ES, the XT-3ES/XT-5ES common kit (Kit #4) only needs to be purchased once.

General Kit 585-4436 (Not Available Until 2nd Quarter 2020)



Skive Guide

Hose Gauge Kit (Skive Guide)		
Part No.	Description and Used on	
226-7145	Black	Fit all XT-ES -16, 1 in (25.4 mm)
226-7146	White	Fit all XT-ES -20, 1 1/4 in (31.75 mm)
226-7147	Red	Fit all XT-ES -24, 1 1/2 in (38.1mm)
226-7148	Green	Fit all XT-ES -32, 2 in (50.8 mm)
226-7149	Depth Gauge	

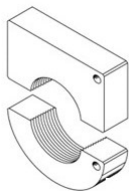


Typical One-Piece Squareness Gauge and Skiving Arbor

Typical One-Piece Squareness Gauge and Skiving Arbor			
Part No.	Description and Used on		
202-3278	Black	1.524+/-0.025 mm	Fit all XT-ES -16
202-3279	White	2.032+/-0.025 mm	Fit all XT-ES -20
202-3280	Red	2.540+/-0.025 mm	Fit all XT-ES -24
202-3281	Green	3.175+/-0.025 mm	Fit all XT-ES -32

Hose Assembly Tools

XT-ES General Kit (Continued)



Typical Gripper Collet

Upper and Bottom Gripper Collets:	
Part No.	Description and Used on
1U-9675	1 in (25.4 mm) - 16 XT-ES & 1 1/4 in (31.75 mm) -20 XT-ES
1U-9676	
1U-9677	1 1/2 in (38.1mm) -24 XT-ES
1U-9678	
1U-9679	2 in (50.8 mm) -32 XT-ES
1U-9680	



Depth Gauge

Pusher Assembly ⁽¹²⁾	
Part No.	Description and Used on
6V-4964	1 in (25.4 mm) -16 XT-ES
8T-3059	1 1/4 in (31.75 mm) -20 XT-ES
8T-3061	1 1/2 in (38.1mm) -24 XT-ES

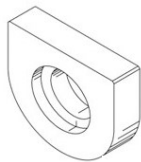
Stem Pusher for all XT-ES	
Part No.	Description and Used on
5S-2834	1 in (25.4 mm) -16 XT-ES
5S-2840	1 1/4 in (31.75 mm) -20 XT-ES
5S-2846	1 1/2 in (38.1mm) -24 XT-ES



Finger Expander

Pusher Plate	
Part No.	Description and Used on
6V-4912	Fit all XT-ES

Finger Expander	
Part No.	Description and Used on
5P-0973	1 in (25.4 mm) -16 XT-ES
5S-2837	1 1/4 in (31.75 mm) -20 XT-ES



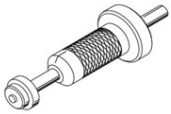
One Piece Collet

Rear one Piece Collet ⁽¹³⁾	
Part No.	Description and Used on
4C-5890	1 in (25.4 mm) -16 XT-ES
4C-5891	1 1/4 in (31.75 mm) -20 XT-ES
4C-5892	1 1/2 in (38.1 mm) -24 XT-ES
4C-5893	2 in (50.8 mm) -32 XT-ES

¹² Used with Mandrel in General Category

¹³ Using for Spreading Coupling Finger

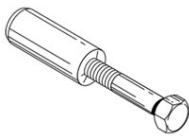
XT-ES General Kit (Continued)



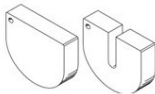
Mandrel and Stem Pusher



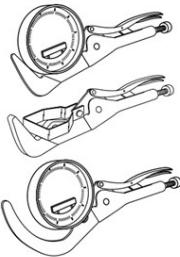
Beveled Horseshoe Collet



Stem Expander



Solid and Slotted Pusher Plate



Protractor & Skiving Groups

XT Reclamation Tooling Group	
Part No.	Description and Used on
127-9928	1 in (25.4 mm) -16 XT-ES
127-9929	
127-9930	1 1/4 in (31.75 mm) -20 XT-ES
127-9931	
127-9933	1 1/2 in (38.1mm) -24 XT-ES
127-9934	
127-9936	2 in (50.8 mm) -32 XT-ES
127-9937	
8C-3996 ⁽¹⁴⁾	Setscrew

Hose Mandral ⁽¹⁵⁾	
Part No.	Description and Used on
6V-4963	1 in (25.4 mm) -16 XT-ES
8T-3058	1 1/4 in (31.75 mm) -20 XT-ES
8T-3060	1 1/2 in (38.1mm) -24 XT-ES
136-3603	2 in (50.8 mm) -32 XT-ES

Beveled Horseshoe Collet	
Part No.	Description and Used on
4C-6188 ⁽¹⁶⁾⁽¹⁷⁾	31 mm Collet Inner Diameter

Stem Expander	
Part No.	Description and Used on
5P-5234	Fit all -20 XT-ES

Slotted Pusher plate	
Part No.	Description and Used on
6V-4913	Fit all XT-ES

Protractor and Skiving Tools		
Part No.	Description and Used on	
7S-1125	Protractor Group	Used to set the angle of orientation on all hose type up to -36
7S-1126	Skiving Tool	Skives ISO Fit all XT-ES

14 Three required per collet for XT Hose Reclamation

15 Use with pusher assembly for Coupling removal

16 Stem Collet for integrated hex coupling.

17 These collets are used on bent-stem with short neck or large-head hose coupling to eliminate clearance problem, where interference normally occurs.

Hose Assembly Tools

Hose Assembly Accessory Group

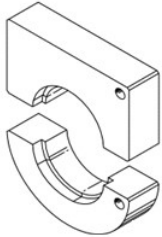
Model Usage: All

Warranty: Caterpillar Six Months

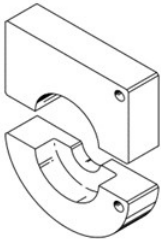
Reference

M0090635 "Comprehensive Tooling List for Assembling and Disassembling Reusable Couplings"

XT-3ES Kit 585-4437 (Not Available Until 2nd Quarter 2020)



Typical Sleeve Collet



Typical Stem Collet

Stem & Sleeve Removal Collets - XT-3ES			
Part No. ⁽¹⁸⁾	Description		Used On
9U-6743	Red	Top Collet	1 in (25.4 mm), -16 XT-3ES Stem
9U-6744	Red	Bottom Collet	
6V-4897	Orange	Top Collet	1 1/2 in (38.1 mm), -24 XT-3ES Sleeve
6V-4898		Bottom Collet	
6V-4899	White	Top Collet	2 in (50.8 mm), -32 XT-3 ES Sleeve
6V-4901		Bottom Collet	
6V-4893	Silver	Top Collet	1 in (25.4 mm), -16 XT-3ES Sleeve & 1 1/2 in (38.1mm), -24 XT-3ES Stem
6V-4894	Silver	Bottom Collet	
6V-9069	Yellow	Top Collet	2 in (50.8 mm), -32 XT-3ES Steem & 1 1/4 in (31.75 mm), -20 XT-3ES Sleeve
6V-9070		Bottom Collet	
6V-4891 ⁽¹⁹⁾	Blue	Top Collet	1 1/4 in (31.75 mm) , -20 XT-3ES Stem
6V-4892 ⁽¹⁹⁾	Blue	Bottom Collet	

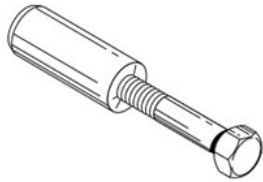
Stem Expander for all XT-3ES	
Part No.	Description & Used on
5P-5236	2 in (50.8 mm), -32 XT-3ES

Stem Pusher for all XT-3ES	
Part No.	Description & Used on
5S-2852	2 in (50.8 mm), -32 XT-3ES

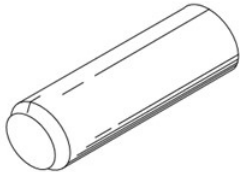
18 Note: May be ordered as individual parts
 19 Common with XT-6ES

Hose Assembly Accessory Group (Continued)

XT-5ES Kit 585-4438 (Not Available Until 2nd Quarter 2020)



Stem Expander



Stem Pusher XT-5ES

Stem & Sleeve Collets - XT5ES		
Part No. ⁽²⁰⁾	Description	Used on
8T-0815	Top Collet	1 in (25.4 mm), - 16 XT-5ES Sleeve & 1 1/2 in (38.1 mm), - 24 XT-5ES Stem
8T-0816	Bottom Collet	
6V-4917	Top Collet	1 in (25.4 mm), -16 XT-5ES Stem
6V-4918	Bottom Collet	
122-7321	Top Collet	1 1/4 in (31.75 mm), -20 XT-5ES Stem
122-7322	Bottom Collet	
4C-9433 ⁽²¹⁾	Top Collet	1 1/4 in (31.75 mm), - 20 XT-5ES sleeve
4C-9474 ⁽²¹⁾	Bottom Collet	
6V-4924	Top Collet	1 1/2 in (38.1 mm), -24 XT-5ES Sleeve & -32 XT-5ES Stem
6V-4925	Bottom Collet	
442-9651	Top Collet	2 in (50.8 mm), -32 XT-5ES Sleeve
442-9652	Bottom Collet	

Stem Expander XT-5ES	
Part No.	Description & Used on
6V-4972	2 in (50.8 mm), -32 XT-5ES

Stem Pusher for all XT-5ES	
Part No.	Description & Used on
126-1023	2 in (50.8 mm), -32 XT-5ES

²⁰ May be ordered as individual parts

²¹ They are in both XT-5ES and XT-6ES (Stem & Sleeve)

Hose Assembly Tools

Hose Assembly Accessory Group (Continued)

Common XT-3ES and XT-5ES Kit 585-4439 (Not Available Until 2nd Quarter 2020)

Stem Expander	
Part No. ⁽²²⁾	Used on
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 ⁽²³⁾	
Part No. ⁽²²⁾	Used on
136-3604	2 in (50.8 mm), -32 XT-3ES, XT-5ES

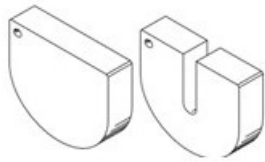
Rear one Piece Collet ⁽²⁴⁾	
Part No. ⁽²²⁾	Used on
4C-5893	2 in (50.8 mm), - 32 XT-3ES, XT-5ES

Finger Expander		
Part No. ⁽²²⁾	Description and used on	
5S-2843	Orange	1 1/2 in (38.1mm), -24 XT-3EX, XT-5ES
5S-2849	White	2 in (50.8 mm), -32 XT-3ES, XT-5ES

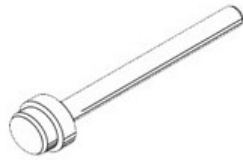
22 May be ordered as individual parts
 23 Used with Mandrel in General Category
 24 Using for Spreading Coupling Finger

Hose Assembly Accessory Group (Continued)

XT-6ES Kit 585-4441 (Not Available Until 2nd Quarter 2020)



Solid and Slotted Pusher Plate



Stem Pusher XT-6ES Kit



Finger Expander

Stem & Sleeve Collets - XT-6ES		
Part No. ⁽²⁵⁾	Description	Used On
6V-4922 ⁽²⁶⁾	Top Collet	1 in (25.4 mm), - 16 XT-6ES Sleeve
6V-4923 ⁽²⁶⁾	Bottom Collet	
6V-4891 ⁽²⁷⁾	Top Collet	1 in (25.4 mm), -16 XT-6ES Stem
6V-4892 ⁽²⁷⁾	Bottom Collet	
4C-9422	Top Collet	1 1/4 in (31.75 mm), -20 XT-6ES Stem
4C-9423	Bottom Collet	
4C-9433 ⁽²⁸⁾	Top Collet	1 1/4 in (31.75 mm), -20 XT-6ES Sleeve
4C-9474 ⁽²⁸⁾	Bottom Collet	
188-1590	Top Collet	1 1/2 in (38.1mm), -24 XT-6ES Sleeve
188-1591	Bottom Collet	
188-1592	Top Collet	1 1/2 in (38.1mm), -24 XT-6ES Stem
188-1593	Bottom Collet	
265-5809	Top Collet	2 in (50.8 mm), -32 XT-6ES Sleeve
265-5810	Bottom Collet	
265-5811	Top Collet	2 in (50.8 mm), -32 XT-6ES Stem
265-5812	Bottom Collet	

Stem Expander XT-6ES	
Part No.	Used on
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	
Part No.	Used on
265-5814	2 in (50.8 mm) -32 XT-6ES

Stem Pusher for all XT-6ES	
Part No.	Used on
197-5394 ⁽²⁹⁾	1 in (25.4 mm) -16 XT-6ES
265-5813	2 in (50.8 mm) -32 XT-6ES

- 25 May be ordered as individual parts
 26 Use for non integral Hex Reusable Coupling
 27 Stem & Sleeve Removal for non integral Hex Reusable Coupling, and also Common Part with XT-3ES
 28 They are in both XT-5ES and XT-6ES (Stem & Sleeve)
 29 Non integral Hex Reusable Coupling

Hose Assembly Tools

Hose Assembly Accessory Group (Continued)

Finger Expander	
Part No.	Used on
188-1595	1 1/2 in (38.1 mm) -24 XT-6ES
265-5816	2 in (50.8 mm) -32 XT-6ES

Pusher Assembly (Used with Mandrel)	
Part No.	Used on
197-5395 ⁽³⁰⁾	1 in (25.4 mm) -16 XT-6ES
265-5815 ⁽³¹⁾	2 in (50.8 mm) -32 XT-6ES Stem

Thermal Transfer Bar Code Printer (Low Volume), Thermal Transfer Bar Code Printer (High Volume)

Manufacturer's One Year
See, page 422 Technical Support
Section



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 code)
- 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 50-60hz which connects to a standard PC adapter cable (US PC adapter cable included)
- Optional plug adapters are available to support regional electrical standards

442-0077 Features:

- 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 Serial and USB 2.0 connectivity, Ethernet optional
- Supports standard industry emulations including Eltron® and Zebra® language support

442-0078 Features:

- Heavy duty die-cast aluminum design
- Delivers high-speed performance
- Supports Ethernet, USB 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
- 8MB Flash and 32MB SDRAM memory
- Uses TSPL-EZ™ firmware for plug-n-play

NOTE:

The latest software updates can be found at:
<https://dealer.cat.com/en/ps/service-tools/c/crimputer-software.html>.

30 Non integral Hex reusable Coupling(Used with 6V-4963 Mandrel)
31 Used with 136-3603 Mandrel

Hose Assembly Tools

Thermal Transfer Bar Code Printer (Low Volume), Thermal Transfer Bar Code Printer (High Volume) (Continued)

Part Number	442-0077 (Low Volume Printer)		442-0078 (High Volume Printer)	
Voltage	100-240 VAC, 1.8A, 50/60 Hz Universal Power Supply		100-240 VAC, 2A, 50/60 Hz Universal Power Supply	
Display	Single Line LCD		Multiple Line LCD	
Label Feed	Continuous Print (for multiple labels)		Continuous Print with Single Step Present and label backing rewind option (for multiple labels)	
Label Stock Options with Protective Cover	-3 to -16 (S) 490 Labels per roll	-20 to -56 (L) 175 Labels per roll	-3 to -16 (S) 900 Labels per roll	-20 to -d56 (L) 400 Labels per roll
Ribbon	Maximum 90 meters long		Maximum 600 meters long	
Interface	USB cable provided Standalone with USB Keyboard (not incl.)		USB cable provided Standalone with USB Keyboard (not incl.)	
Dimensions	140 mm (W) X 177 mm (H) X 241 mm (D) (5.51 in X 6.97 in X 9.49 in)		270 mm (W) X 308 mm (H) X 505 mm (D) (10.63 in X 12.13 in X 19.88 in)	
Weight	2.5 kg (5.5 lb)		15 kg (33 lb)	

Consumables

Starter Kit	442-0073	1 Roll 490 Labels (S) 1 Roll 175 Labels (L) 1 Roll 74m Ribbon	442-0069	1 Roll 900 Labels (S) 1 Roll 400 Labels (L) 1 Roll 450m Ribbon
Label Stock	442-0074	3 Rolls of 490 Labels (S)	442-0070	3 Rolls of 900 Labels (S)
	442-0075	3 Rolls of 175 Labels (L)	442-0071	3 Rolls of 400 Labels (L)
Ribbon Stock	442-0076	6 Rolls of 74m Ribbons	442-0072	6 Rolls of 450m Ribbons

Service Parts

Print Head	445-9430	Single Replacement	445-9432	Single Replacement
Platen Assembly	445-9431	Single Replacement	445-9433	Single Replacement

Optional Accessories

European Style Plug Adapter	Australian Style Plug Adapter	UK Style Plug Adapter
270-0578	270-0580	447-8886

Hose Assembly Tools

Clean Seal Production Heat Shrink Machine, Clean Seal Hand-Held Heat Shrink Tool

Model Usage: All
 Manufacturer's One Year
[See, page 422](#) Technical Support
 Section



546-5746



546-5747



Seal Easy.

Heat Shrink 3-Step Process

546-5746 Clean Seal Production Heat Shrink Machine (New) European Union Compliant, CE marked

- European plug only
- Used to apply clean seal capsules in place of plastic plugs and caps to keep contamination out of hose assemblies
- Applies heated air to set capsule on fitting end in under two seconds
- Even heat distribution for a perfect capsule shrink-fit
- Accepts clean seal capsules from 20 mm (1 in) — 80 mm (3 in) ID
- Clean seal capsules help protect fitting threads and seals from damage
- Hex sizes from 12 mm (1/2 in) — 78 mm (3 in)
- Oversized shrink tunnel opening allows multiple assembly ends at once
- Heating unit is thermocouple protected against overheating
- Brushless DC blower motor for trouble free operation
- On/Off timer enables hot air heater to always turn off automatically
- Heater timer can be set in one minute increments up to sixty minutes
- Locking 3-wire grounding power main plug NEMA L6-15 for safe 230VAC connection
- White light indicator lets you know when heater is active
- Green light power on/off rocker switch lets you know when power is on
- Shrink tunnel is insulated to help keep heat in
- System is 100% duty cycle rated for 24/7 continuous operation
- Cool air in vent helps keep heating air clean
- Cap seals used in place of plastic plugs and caps to keep contamination out of hose assemblies

546-5747 Clean Seal Hand-Held Heat Shrink Tool

- Includes heat gun with case, flex vacuum pump stand and 95 mm diffuser for 1.5" connection (Case, stand and diffuser not serviced separately)

Part No.	Description	Dimensions	Weight
546-5746	Clean Seal System Heat Shrink Machine (230V, 50/60Hz, Single Phase)	520.7 x 241.3 x 180 mm (20.5 x 9.5 x 7 in)	11.8 kg (26 lbs)
546-5747	Hand-Held Clean Seal System (120V, 60Hz, Single Phase)	342.9 x 330.2 x 127 mm (13.5 x 13 x 5 in)	3.1 kg (6.9 lb)

Clean Seal Capsules

Consumables (Capsules must be purchased separately)			Hex Size	Pkg Qty
486-7587	Clean Seal Capsules	20 X 30 mm (0.8 x1.2 in)	12 to 18	1300
486-7588	Clean Seal Capsules	25 x 40 mm (1.0 x 1.6 in)	12 to 22	1050
486-7589	Clean Seal Capsules	28 x 40 mm (1.1 x 1.6 in)	22 to 24	684
486-7590	Clean Seal Capsules	31 x 40 mm (1.2 X 1.6 in)	24 to 27	850
486-7591	Clean Seal Capsules	34 X 40 mm (1.3 x 1.6 in)	27 to 30	560
486-7592	Clean Seal Capsules	38 x 40 mm (1.5 x 1.6 in)	30 to 32	756
486-7593	Clean Seal Capsules	46 x 50 mm (1.8 x 2.0 in)	32 to 41	540
486-7594	Clean Seal Capsules	52 x 60 mm (2.1 x 2.4 in)	41 to 50	520
486-7595	Clean Seal Capsules	58 x 60 mm (2.3 x 2.4 in)	49 to 56	585
486-7596	Clean Seal Capsules	67 x 60 mm (2.6 x 2.4 in)	55 to 65	400
486-7597	Clean Seal Capsules	80 x 60 mm (3.2 x 2.4 in)	64 to 78	434

Hose Assembly Tools

Hose Cleaning Group (Economy)

Model Usage: All
 Warranty: Caterpillar Six Months



European Union Compliant, CE marked

- 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)
- Used with pressurized air or nitrogen gas, existing Caterpillar projectiles and NEEG2955 Projectile Sizing Chart
- Works on 4 mm (0.16 in) through 32 mm (1-1/4 in) or -03 through -20 hoses
- Less expensive alternative to other Caterpillar hose cleaning groups (this group has limited size capabilities, making it less expensive)
- Durable plastic handle with quick-acting threads and internal brass parts
- Clean hydraulic systems (tubes, lines, and hoses) will reduce risk of component failure, increase service life of filters, reduce equipment maintenance costs (less wear), and increase productivity (more time on the job)

- Includes carrying case with foam inserts
- 308-8524 Hose Cleaning Projectile Launcher can also be purchased separately

NOTE: The operating pressure is 550 to 760 kPa (80 to 110 PSI) and should be used with a 13mm (1/2") inside diameter air hose. An in-line air filter and regulator are also recommended.

References

- NEHS0643 "Using the 233-7191, 233-7192, 233-7193 and 265-4959 Hose Cleaning Groups"
- NEHS0634 "Operation Safety Video"
- NEHS0768 "General Information for Hose Assembly"
- NEEG2955 "Projectile Sizing Chart"

Step 1: Order the 233-7191 Hose Cleaner Group

Part No.	Description
233-7191	Hose Cleaning Group (Economy)

233-7191 Hose Cleaner Group Consists Of:

Part No.	Description
215-4585	Nozzle 4 mm (.16 in)
130-6069	Nozzle 6 mm (.24 in)
130-6070	Nozzle 8 mm (.31 in)
130-6071	Nozzle 10 mm (.40 in)
130-6072	Nozzle 13 mm (.51 in)
130-6073	Nozzle 16 mm (.63 in)
130-6074	Nozzle 19 mm (.75 in)
130-6075	Nozzle 25 mm (.98 in)
130-6076	Nozzle 33 mm (1.3 in)
308-8524	Hose Cleaning Projectile Launcher
130-6068	Air Hose Quick Disconnect (1/2 in male hose barb)

Step 2: Order the projectiles for cleaning hose and hose assemblies from the list "Projectile Application Information for Hose Cleaner Groups"

Hose Cleaner Group

Model Usage: All

Warranty: Caterpillar Six Months



European Union Compliant, CE marked

- 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)
- Used with pressurized air or nitrogen gas, existing Caterpillar projectiles and NEEG2955 Projectile Sizing Chart
- Works on 4 mm (0.16 in) through 32 mm (1-1/4 in) or -03 through -20 hoses
- Optional nozzles available for use to 50 mm (2 in) or -32 hoses
- 233-7192 Hose Cleaner Group quickly and effectively cleans hose, complete hose assemblies, or other hydraulic lines in order to reduce hydraulic system contamination
- Designed specifically for service vehicle or mobile applications
- Includes a large carrying case with foam inserts

- Fewer nozzles to simplify nozzle and projectile selection
- 233-7190 Hose Cleaning Projectile Launcher can also be purchased separately

NOTE: The operating pressure is 550 to 760 kPa (80 to 110 PSI) and should be used with a 13mm (1/2") inside diameter air hose. An in-line air filter and regulator are also recommended. **References**

- NEHS0643 "Using the 233-7191, 233-7192, 233-7193 and 265-4959 Hose Cleaning Groups"
- NEHS0634 "Operation Safety Video"
- NEHS0768 "General Information for Hose Assembly"
- NEEG2955 "Projectile Sizing Chart"

Step 1: Order the 233-7192 Hose Cleaner Group

Part No.	Description
233-7192	Hose Cleaning Group

233-7192 Hose Cleaner Group Consists Of:

Part Number	Description	Part Number	Description
215-4585	Nozzle 4 mm (.16 in)	130-6084	Nozzle 8 mm (.31 in)
130-6069	Nozzle 6 mm (.24 in)	130-6085	Nozzle 10 mm (.40 in)
130-6070	Nozzle 8 mm (.31 in)	130-6086	Nozzle 13 mm (.51 in)
130-6071	Nozzle 10 mm (.40 in)	130-6087	Nozzle 16 mm (.63 in)
130-6072	Nozzle 13 mm (.51 in)	130-6088	Nozzle 19 mm (.75 in)
130-6073	Nozzle 16 mm (.63 in)	130-6089	Nozzle 25/22 mm
130-6074	Nozzle 19 mm (.75 in)	130-6090	Nozzle 32/25 mm
130-6075	Nozzle 25 mm (.98 in)	233-7190	Hose Cleaning Projectile Launcher
130-6076	Nozzle 32 mm (1.26 in)	130-6062	Ring-Adapter
130-6083	Nozzle 6 mm (.24 in)	130-6068	Coupling Assembly

Step 2: Order the projectiles for cleaning hose and hose assemblies from the list "Projectile Application Information for Hose Cleaner Groups"

Hose Assembly Tools

Hose Cleaner Group

Model Usage: All

Warranty: Caterpillar Six Months



European Union compliant

- Used to remove waste and contaminants from internal surfaces of tubes, lines, hose & couplings
- Designed specifically for the dealer hose assembly area
- Used with pressurized air or nitrogen gas, existing Caterpillar projectiles and NEEG2955 Projectile Sizing Chart
- Works on 4 mm (0.16 in) through 50 mm (2 in) or -03 through -32 hoses
- Clean hydraulic systems (tubes, lines, and hoses) will reduce risk of component failure, increase service life of filters, reduce equipment maintenance costs (less wear), and increase productivity (more time on the job)
- Includes stand for projectile launcher (Hose Cleaning Projectile Launcher) and nozzle rack

- Does not include carrying case
- 233-7190 Hose Cleaning Projectile Launcher can also be purchased separately

NOTE: The operating pressure is 550 to 760 kPa (80 to 110 PSI) and should be used with a 13 mm (1/2") inside diameter air hose. An in-line air filter and regulator are also recommended.

References

- NEHS0643 "Using the 233-7191, 233-7192, 233-7193 and 265-4959 Hose Cleaning Groups"
- NEHS0634 "Operation Safety Video"
- NEHS0768 "General Information for Hose Assembly"
- NEEG2955 "Projectile Sizing Chart"

Step 1: Order the 233-7193 Hose Cleaner Group

Part No.	Description
233-7193	Hose Cleaner Group

233-7193 Hose Cleaner Group Consists Of:

Part No.	Description	Part No.	Description
215-4585	Nozzle 4 mm (.16 in)	130-6091	Nozzle 38 mm (1.50 in)
130-6069	Nozzle 6 mm (.24 in)	130-6092	Nozzle 50 mm (2 in)
130-6070	Nozzle 8 mm (.31 in)	130-6097	Nozzle 38 mm (1.50 in)
130-6071	Nozzle 10 mm (.40 in)	130-6062	Ring-Adapter
130-6072	Nozzle 13 mm (.51 in)	130-6068	Coupling Assembly
130-6073	Nozzle 16 mm (.63 in)	156-0050	Stand-Launcher
130-6074	Nozzle 19 mm (.75 in)	156-0055	Rack-Nozzle Organizer
130-6075	Nozzle 25 mm (.98 in)	233-7190	Hose Cleaning Projectile Launcher
130-6076	Nozzle 32 mm (1.26 in)	—	—

Step 2: Order the projectiles for cleaning hose and hose assemblies from the list "Projectile Application Information for Hose Cleaner Groups".

Hose Cleaning Group

Model Usage: All
 Warranty: Caterpillar Six months



European Union compliant, CE Marked

- Used to remove waste and contaminants from large bore hose and couplings
- Designed specifically for the dealer hose assembly area
- Used with pressurized air or nitrogen gas, existing Caterpillar projectiles and NEEG2955 Projectile Sizing Chart
- Works on 55 mm (2.13 in) through 90 mm (3.5 in) or -40, -48, and -56 hoses
- Clean hydraulic systems will reduce risk of component failure, increase service life of filters, reduce equipment maintenance costs (less wear), and increase productivity (more time on the job)
- Includes stand for projectile launcher (Hose Cleaning Projectile Launcher) and nozzle rack

- Does not include carrying case
- 265-4958 Launcher can also be purchased separately

NOTE: The operating pressure is 550 to 760 kPa (80 to 110 PSI) and should be used with a 13 mm (1/2") inside diameter air hose. An in-line air filter and regulator are also recommended.

References

- NEHS0643 "Using the 233-7191, 233-7192, 233-7193 and 265-4959 Hose Cleaning Groups"
- NEHS0634 "Operation Safety Video"
- NEHS0768 "General Information for Hose Assembly"
- NEEG2955 "Projectile Sizing Chart"

Step 1: Order the 265-4959 Hose Cleaner Group

Part No.	Description
265-4959	Hose Cleaning Group

265-4959 Hose Cleaner Group Consists Of:

Part No.	Description
267-1527	Nozzle
130-6062	Adapter
—	Adapter
130-6068	Coupling As (8 mm) Airline Disconnect
156-0055	Stand (not shown)
265-4958	Launcher

Step 2: Order the projectiles for cleaning hose and hose assemblies from the list "Projectile Application Information for Hose Cleaner Groups."

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 Dash Size	Nominal Inch	DM-mm	Cat Nozzle No.	Cat Projectile No.	Hose Cleaner/Projectile Usage			
					233-7193	233-7192	233-7191	265-4959 ⁽³²⁾
-3	3/16"	5	130-6069	215-4565	•	•	•	
-4	1/4"	6	130-6069	215-4568	•	•	•	
-5	5/16"	8	130-6070	215-4569	•	•	•	
-6	3/8"	10	130-6071	215-4570	•	•	•	
-8	1/2"	13	130-6072	215-4572	•	•	•	
-10	5/8"	16	130-6073	215-4574	•	•	•	
-12	3/4"	19	130-6074	215-4575	•	•	•	
-16	1"	25	130-6075	215-4578	•	•	•	
-20	1-1/4"	32	130-6076	215-4580	•	•	•	
-24	1-1/2"	38	130-6091	215-4582	•	•		
-32	2"	50	130-6092	215-4584	•	•		
-40	2-1/2"	63	267-1527	265-4953				•
-48	3"	76	267-1527	265-4955				•
-56	3-1/2"	90	267-1527	265-4957				•

JIC/Pipe Couplings

Coupling Dash Size	Decimal	Cat Nozzle No.	Cat Projectile No.	Hose Cleaner/Projectile Usage			
				233-7193	233-7192	233-7191	265-4959 ⁽³²⁾
-4	0.250	130-6083	215-4566	•	•	•	
-5	0.312	130-6084	215-4567	•	•	•	
-6	0.375	130-6085	215-4568	•	•	•	
-8	0.500	130-6086	215-4570	•	•	•	
-10	0.625	130-6087	215-4573	•	•	•	
-12	0.750	130-6088	215-4575	•	•	•	
-16	1.000	130-6089	215-4577	•	•	•	
-20	1.250	130-6090	215-4579	•	•	•	
-24	1.500	130-6097	215-4581	•	•		
-32	2.000	130-6098	215-4583	•	•		
-40	2.500	267-1527	265-4952				•
-48	3.000	267-1527	265-4954				•
-56	3.500	267-1527	265-4956				•

32 265-4959 Hose Cleaner Group can clean all sizes if additional nozzles are purchased.

Application Charts for Hose Cleaner Groups (Continued)

Coupling Dash Size	Decimal	Cat Nozzle No.	Cat Projectile No.	Hose Cleaner/Projectile Usage			
				233-7193	233-7192	233-7191	265-4959 ⁽³³⁾
-4	0.250	215-4585	215-4565	•	•	•	
-6	0.375	130-6069	215-4568	•	•	•	
-8	0.500	130-6071	215-4570	•	•	•	
-10	0.625	130-6072	215-4573	•	•	•	
-12	0.750	130-6073	215-4575	•	•	•	
-16	1.000	130-6074	215-4577	•	•	•	
-20	1.250	130-6075	215-4579	•	•	•	

Code 61, 62, & Cat Flange Couplings

Coupling Dash Size	Decimal	Cat Nozzle No.	Cat Projectile No.	Hose Cleaner/Projectile Usage			
				233-7193	233-7192	233-7191	265-4959 ⁽³⁴⁾
-8	0.500	130-6071	215-4570	•	•	•	
-10	0.625	130-6072	215-4573	•	•	•	
-12	0.750	130-6073	215-4575	•	•	•	
-16	1.000	130-6074	215-4577	•	•	•	
-20	1.250	130-6075	215-4579	•	•	•	
-24	1.500	130-6076	215-4581	•	•	•	
-32	2.000	130-6091	215-4583	•	•	•	
-40	2.500	267-1527	265-4952				•
-48	3.000	267-1527	265-4954				•
-56	3.500	267-1527	265-4956				•

Hydraulic Tubing

OD x Wall	Cat Nozzle No.	Cat Projectile No.	Hose Cleaner/Projectile Usage			
			233-7193	233-7192	233-7191	265-4959 ⁽³⁴⁾
¼ x 0.035 in (6.35 x .889 mm)	130-6084	215-4567	•	•	•	
¼" x .049 in (6.35 x 1.24 mm)	130-6084	—	•	•	•	
¼" x .065" (6.35 x 1.65 mm)	130-6084	215-4566	•	•	•	
5/16 x 0.035 in (7.9 x .889 mm)	130-6084	215-4568	•	•	•	
3/8 x 0.035 in (9.53 x .889 mm)	130-6095	215-4569	•	•	•	
3/8 x 0.049 (9.53 x 1.24 mm)	130-6095	215-4569	•	•	•	
3/8" x .065 in (9.53 x 1.65 mm)	130-6095	215-4568	•	•	•	
½ x 0.035 in (12.7 x .889 mm)	130-6086	215-4570	•	•	•	
½ x 0.049 in (12.7 x 1.24 mm)	130-6086	215-4570	•	•	•	
½ x 0.065 in (12.7 x 1.65 mm)	130-6086	215-4570	•	•	•	
½" x .083 in (12.7 x 2.10 mm)	130-6086	215-4569	•	•	•	
5/8 x 0.049 in (15.8 x 1.24 mm)	130-6087	215-4573	•	•	•	
5/8 x 0.065 in (15.8 x 1.65 mm)	130-6087	215-4572	•	•	•	
5/8 x 0.083 in (15.8 x 2.10 mm)	130-6087	215-4572	•	•	•	
¾ x 0.049 in (19.05 x 1.24 mm)	130-6088	215-4575	•	•	•	
¾ x 0.065 in (19.05 x 1.65 mm)	130-6088	215-4575	•	•	•	

33 265-4959 Hose Cleaner Group can clean all sizes if additional nozzles are purchased.

34 Cleans all sizes with optional nozzles

Hose Assembly Tools

Application Charts for Hose Cleaner Groups (Continued)

OD x Wall	Cat Nozzle No.	Cat Projectile No.	Hose Cleaner/Projectile Usage			
			233-7193	233-7192	233-7191	265-4959 ⁽³⁵⁾
¾ x 0.095 in (19.05 x 2.41 mm)	130-6088	215-4573	•	•	•	
7/8 x 0.049 in (22.2 x 1.24 mm)	130-6089	215-4577	•	•	•	
7/8 x 0.065 in (22.2 x 1.65 mm)	130-6089	215-4576	•	•	•	
7/8 x 0.095 in (22.2 x 2.41 mm)	130-6073	—	•	•	•	
1 x 0.065 in (25.4 x 1.65 mm)	130-6090	215-4577	•	•	•	
1" x .083 in (25.4 x 2.10 mm)	130-6090	215-4577	•	•	•	
1 x 0.095 in (25.4 x 2.41 mm)	130-6090	215-4577	•	•	•	
1 x 0.120 in (25.4 x 3.0 mm)	130-6090	215-4576	•	•	•	
1-¼ x 0.065 in (31.75 x 1.65 mm)	130-6096	215-4579	•	•	•	
1-¼ x .083 in (31.75 x 2.10 mm)	130-6096	215-4579	•	•	•	
1-¼ x 0.095 in (31.75 x 2.41 mm)	130-6096	215-4579	•	•	•	
1-¼ x .109 in (31.75 x 2.77 mm)	130-6096	215-4578	•	•	•	
1-¼ x 0.120 in (31.75 x 3.0 mm)	130-6096	215-4578	•	•	•	
1-½ x 0.065 in (38.1 x 1.65 mm)	130-6097	215-4581	•	•		
1-½ x .083 in (38.1 x .10 mm)	130-6097	215-4581	•	•		
1-½ x 0.095 in (38.1 x 2.41 mm)	130-6097	215-4581	•	•		
1-½ x 0.120 in (38.1 x 3.04 mm)	130-6097	215-4581	•	•		
1-½ x .134 in (38.1 x 3.40 mm)	130-6097	215-4580	•	•		
1-½ x .148 in (38.1 x 3.76 mm)	130-6097	215-4580	•	•		
2 x 0.065 in (50.8 x 1.65 mm)	130-6098	215-4583	•	•		
2 x 0.095 in (50.8 x 2.41 mm)	130-6098	215-4583	•	•		
2 x .109 in (50.8 x 2.77 mm)	130-6098	215-4583	•	•		
2 x 0.120 in (50.8 x 3.04 mm)	130-6098	215-4583	•	•		
2 x 0.134 in (50.8 x 3.40 mm)	130-6098	215-4582	•	•		
2 x .180 in (50.8 x 4.57 mm)	130-6098	215-4582	•	•		
2 x .188 in (50.8 x 4.78 mm)	130-6098	215-4582	•	•		
SCH40						
¼ in (6.35 mm)	130-6070	215-4569	•	•	•	
3/8 in (9.53 mm)	130-6072	215-4571	•	•	•	
½ in (12.7 mm)	130-6073	215-4572	•	•	•	
¾ in (19.05 mm)	130-6074	215-4576	•	•	•	
1 in (25.4 mm)	130-6075	215-4578	•	•	•	
1-¼ in (31.75 mm)	130-6076	215-4580	•	•	•	
1-½ in (38.1 mm)	130-6091	215-4582	•	•	•	
2 in (50.8 mm)	130-6092	215-4584		•	•	
2-½ in (63.5 mm)	267-1527	265-4952		•	•	
3 in (76.2 mm)	267-1527	265-4954		•	•	
3-½ in (88.9 mm)	267-1527	265-4957		•	•	
SCH 80						
¼ in (6.35 mm)	130-6069	215-4568	•	•	•	
3/8 in (9.53 mm)	130-6071	215-4570	•	•	•	
½ in (12.7 mm)	130-6072	215-4573	•	•	•	

35 Cleans all sizes with optional nozzles

Application Charts for Hose Cleaner Groups (Continued)

OD x Wall	Cat Nozzle No.	Cat Projectile No.	Hose Cleaner/Projectile Usage			
			233-7193	233-7192	233-7191	265-4959 ⁽³⁶⁾
¾ in (19.05 mm)	130-6073	215-4576	•	•	•	
1 in (25.4 mm)	130-6075	215-4578	•	•	•	
1-¼ in (31.75 mm)	130-6076	215-4580	•	•	•	
1-½ in (38.1 mm)	130-6091	215-4581	•	•	•	
2 in (50.8 mm)	130-6091	215-4583	•	•	•	
2-½ in (63.5 mm)	130-6092	–	•	•	•	
3 in (76.2 mm)	267-1527	265-4954	•	•	•	
3-½ in (88.9 mm)	267-1527	265-4957	•	•	•	
SCH160						
½ in (12.7 mm)	130-6071	215-4570	•	•	•	
¾ in (19.05 mm)	130-6073	215-4572	•	•	•	
1 in (25.4 mm)	130-6074	215-4576	•	•	•	
1-¼ in (31.75 mm)	130-6075	215-4578	•	•	•	
1-½ in (38.1 mm)	130-6076	215-4580	•	•	•	
2 in (50.8 mm)	130-6091	215-4582	•	•		
2-½ in (63.5 mm)	130-6092	215-4584	•	•		
3 in (76.2 mm)	267-1527	265-4952	•	•		

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.

Projectiles for Hose Cleaner Groups

Reference

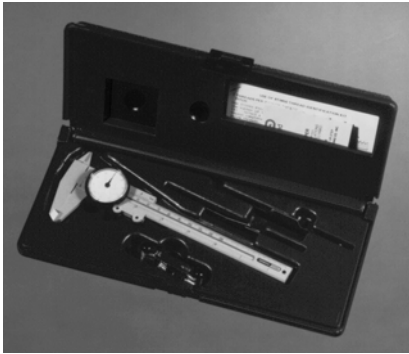
NEEG2955, Hose Cleaning Projectile Sizing Chart

Part No.	Dimensions (Diameter x Length)	Pkg. Qty	Part No.	Dimensions (Diameter x Length)	Pkg. Qty
215-4565	6 x 11 mm (0.24 x 0.43 in)	100	215-4575	26 x 33 mm (1.02 x 1.30 in)	50
215-4566	7 x 12 mm (0.28 x 0.47 in)	100	215-4576	30 x 36 mm (1.18 x 1.42 in)	40
215-4567	10 x 14 mm (0.39 x 0.55 in)	100	215-4577	33 x 40 mm (1.30 x 1.57 in)	40
215-4568	12 x 16 mm (0.47 x 0.63 in)	100	215-4578	36 x 45 mm (1.42 x 1.77 in)	30
215-4569	14 x 18 mm (0.55 x 0.71 in)	100	215-4579	40 x 50 mm (1.57 x 1.97 in)	30
215-4570	16 x 20 mm (0.63 x 0.79 in)	100	215-4580	45 x 55 mm (1.77 x 2.16 in)	20
215-4571	18 x 22 mm (0.71 x 0.87 in)	100	215-4581	50 x 60 mm (1.97 x 2.36 in)	20
215-4572	20 x 25 mm (0.79 x 0.98 in)	100	215-4582	55 x 65 mm (2.16 x 2.56 in)	15
215-4573	22 x 25 mm (0.87 x 0.98 in)	100	215-4583	60 x 70 mm (2.36 x 2.75 in)	15
215-4574	24 x 30 mm (0.94 x 1.18 in)	100	215-4584	65 x 80 mm (2.56 x 3.15 in)	15

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

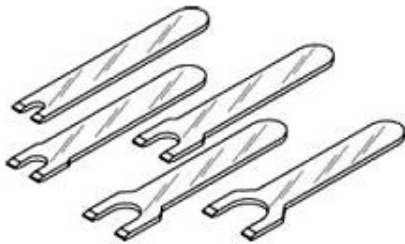
- Includes PEGP2007-01 Coupling Identification Guide
- Recommended for all dealer hose assembly areas

8T-0450 Thread Measurement Kit

Part No.	Description
8T-0447	Dial Caliper
8T-0448	Pitch Gauge
8T-0449	Seal Angle Gauge (45° and 37°)
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

Part Number	Description
279-1218	Wrench (-6)
279-1219	Wrench (-8)
279-1220	Wrench (-10)
279-1221	Wrench (-12)
279-1222	Wrench (-16)

Thermoplastic and Air Conditioning Hose Cutter

Model Usage: All
 Warranty: Caterpillar Six Months

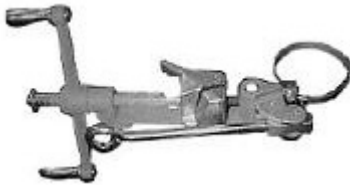


- Used for cutting Thermoplastic Hose (1028), Reduced O.D. Thermoplastic Hose (2760), and Air Conditioning Hose (1543)

Part Number	Description
177-4271	Cutter
177-4272	Blade

Nylon Abrasion Sleeve Band Tool

Model Usage: All
Warranty: Caterpillar Six Months



- 166-5853 Band-It Tool is used to secure protective covers to hydraulic hose using the following bands

Part Number	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.
384-4129	76.2 mm (2.99 in) I.D.
460-3311	101.6 mm (3.99 in) I.D.

Chain Wrench

Model Usage: All
Warranty: Caterpillar Six Months



- European Union Compliant, CE marked
- Used during the disassembly of XT hose reusable couplings to break the bond between the hose and coupling
 - Can be used for other applications (Example: fuel and oil filters) for diameters from 19.05 mm (3/4 in) through 82.55 mm (3 1/4 in)

Part Number	Description
1U-8760	Wrench-Chain

Skiving Vise

Model Usage: All
Warranty: Caterpillar Six Months



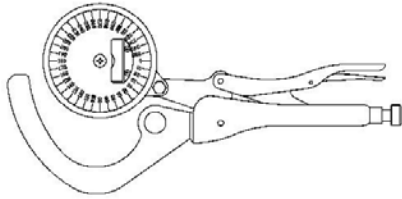
- Allows for easy skiving of hose
- Blocks have rubber pads to prevent damage to hose

Part Number	Description
127-1909	Vise
127-1910	Block Group

Hose Assembly Tools

Large-Bore Protractor

Model Usage: All
 Warranty: Caterpillar Six Months



- Provides a field tool for the technician to set the angle of orientation for large-bore hose 63.5 to 78.9 mm (2-1/2 to 3-1/2 in)

Part Number	Description
266-7533	Large-Bore Protractor

Containerized Hose Shops

Product Family:
 Global Mining Products
 Model Usage: All
 Warranty: Manufacturer's

- Available in Single Wide and Double wide configurations
- A highly advanced onsite 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 MOBILE WORKSHOP available at this link.](#)

Dimensions	Weight	Description
6.5 x 2.3 x 2.3m (20' L x 8'W x 9'-6"H)	10550 lbs (4785 kg)	6.5m (20') Single Wide
13 x 2.3 x 2.3m (40'L x 8'W x 9'-6"H)	18460 lbs (8373 kg)	13m (40') Single Wide
13 x 4.6 x 2.3m (40'L x 16'W x 9'-6"H)	41220 lbs (18697 kg)	13m (40') Double Wide



Single



Double

Hose Shop Container design guidelines and endorsed supplier list by region are available. Please contact your Hydraulic ASC for further details.

Information Systems

Hydraulic Information System	Web Based
Hydraulic Information System-CD ROM Version	JERC2281
Hose & Coupling Information System	JERC2282

Training Materials

Hose and Coupling Workbook	PEGT6025
Quick Reference – Cat Hose and Coupling	PEGJ0001
Coupling Identification Guide	PEGP2007
Parts Pro-Hydraulic Parts A (Online Dealer Performance Center)	20087

Hose Work Area Posters / Charts

Counter Mat - Hose Service for All Equipment Needs (Download)	PEWJ0166
Proper Hose Cleaning Procedures	PEPJ0084
Coupling Identification	PEWP4128
XT Hose Assembly and Coupling Recovery	PEWP3013
Skive Length Chart	NEEG2956
Hose Cleaning Projectile Chart	NEEG2955
Crimp Diameters	NEEG2746
Coupling Crimp Chart	NEEG2973
Hose, Die Group, Spacer Ring Selection Chart-XT Machine And Combo Machine	NEEG2737
Hose, Die Group, Spacer Ring Selection Chart- Non-Current Machines	NEEG2736
Hose, Die Group, Spacer Ring Selection Chart- Bench Model	NEEG2883
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
M6 Machine Crimp Chart	AEXQ2130
S2 Machine Crimp Chart	AEXQ2131
CMC 290 Legacy Machine Crimp Chart	AEXQ2129

Reference Material

Information Release Memos (IRM's)

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	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 (0.625inch, 15.9mm) No-Skive Couplings for Hose	PELJ1436
Acrylic Hose Label and Hose Label Printer	PELJ1607
Introduction of Dash 24 No-Skive Couplings for XT-3 Hose	PELJ1643
Introduction of Dash 12 No-Skive Couplings for XT-3, XT-5 and XT-6 Hose	PELJ1665
Pressure Rating Increase for 294 Dash 40 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 Bulk Hose and Armor Guard Transition to Metric Unit of Measure Part II	PELJ2260
Cat Hose & Coupling Tooling Products Update	PELJ2259

Videos

Cat Hose & Couplings: The Preferred Connection	Channel One Website
Fluid Contamination-The Silent Thief	Channel One Website
Hose and Coupling Training Package PERV3808 XT Machine Use and Assembly	Channel One Website
Recovery and Assembly of XT Hose Reusable Couplings	Channel One Website
Identifying Hose Rubs on your Cat Equipment	Channel One Website
Performing a Daily Cat Machine Walk-Around	Channel One Website
Hose Rub Identification on your Cat Machine	Channel One Website
1. How to Cut a Cat Hose	Channel One Website
2. How to Clean a Cat Hose	Channel One Website
3. How to Skive a Cat Hose	Channel One Website
4. How to Crimp a Cat Hose	Channel One Website
5. How to set Angle of Orientation on Cat Hose	Channel One Website
6. How to Cut Caterpillar's 2771A Hose	Channel One Website

Promotion

The Cat Hose & Coupling Value Story Brochure	AEXQ1395
Cat Hydraulic Hose Solutions for Mining Brochure	AEXQ1465
Cat Hose & Coupling Solutions Brochure	PEDJ0292
Cat Hose Assembly Tooling Brochure	PEDJ0351
Cat XT Reusable Couplings Value Story Brochure	PEDJ0289
Dealer Service Tools Hose Tooling Announcement	PEDP9135
Cat Hose Assembly Mobile Workshop	PEHJ0415
Bin Labels-XT Hose Couplings	PEEP1003
Bin Labels-Low/Medium Pressure Hose Couplings	PEEP1004
Bin Labels- Special Application Hose Couplings	PEEP6044
Bin Labels- 2760 Hose Couplings	PEXP8025
Reusable Coupling Sticker (Large)	PEEP7210
Cat ToughGuard Hose	PEHJ0077
ToughGuard Hose Display	PEWP9739

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Technical Information

Reusable Couplings for Caterpillar XT-3, XT-5, and XT-6	SEBF8176
Crimping Caterpillar 294, 716, 844 Hose and Couplings	NEHS0664
Cleaning Fluid-Carrying Hose and Tube Assemblies in Shop and Field Applications	SEBF8485
Preparation and Use of 6V-6015 Hose Cutoff Machine	SMHS8316
Assembling Reusable Couplings in the 139-5439, 145-3381, and 152-3910 Combination Hose Machines	NEHS0746
Setup and Operation of the 145-7042 and 146-5861 Crimputer Groups	NEHS0754
General Information for Hose Assembly	NEHS0768
Assembling Reusable Couplings in the 4C-9900, 150-2568, and 173-9805 Hydraulic Hose Machines	NEHS0745
Crimping 1028 Thermoplastic and 1543 Air Conditioning Hose	NEHS0749
Crimping Permanent Couplings using the 136-3642 Crimp Tool Group in the Combination and XT Hose Machine	NEHS0748
Comprehensive Tooling List for Assembling and Disassembling Reusable Couplings	NEHS0750
Repair of 139-5459 and 145-3381 Combination Hose Machines	NEHS0752
Setup and Basic Operation of the 145-5161 Floor Model Hose Machine	NEHS0695
150-3622 Bench Model Hose Machine Operating Instructions	NEHS0715
Setup and Basic Operation of the 139-5439 Combination Hose Machine	NEHS0686
Use of the 9U-5792, 4C-5052, 4C-5054, 4C-3670 and 4C-3680 Hydraulic Hose Machines	NEHS0744
Using the 164-2691 Printer Group	NEHS0725
Using the 130-6061 and 156-0058 Hose Cleaner Groups	NEHS0643
Hose Cutting Guide	NEHS6601
358-4530, 358-4532, and 358-4533 Hose Machine Group Set-Up and Operation	NEHS1098
Crimputer 3 Setup and Operation	NEHS1099
423-4361 Radial Hose Machine	NEHS1153
Acrylic Hose Label and Hose Label Printer	Use Manufacturer CD

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
000-7244	289	006-0315	347	030-7976	304	033-0442	287
000-7246	289	006-2325	287	030-7977	309	033-0820	314
001-5262	314	006-5707	293	030-7978	309	033-2177	350
001-6285	182	006-7801	275	030-7979	309	033-3096	276
001-6286	182	007-0950	270	030-7982	255	033-3168	312
001-6287	182	008-2649	295	030-7983	255	033-5691	241
001-6289	182	008-6325	308	030-7984	255	033-6783	251
001-6300	345	008-6817	316	030-8027	307	033-8129	316
001-6301	287	008-7245	314	030-8110	242	033-8734	283
001-6304	283	008-8381	308	030-8188	241	034-2136	308
001-6498	283	009-1068	315	030-8189	242	034-3679	251
001-6842	347	009-9696	287	030-8190	242	034-4202	306
001-6936	287	011-5224	268	030-8193	241	034-4679	306
001-7014	371	011-7219	268	030-8194	241	037-4685	291
001-7039	287	012-0703	272	030-8195	241	039-4966	268
001-7041	257	012-8140	268	030-8196	241	052-0572	345
001-7042	283	018-6477	294	030-8196	241	052-0726	349
001-7043	283	030-0701	308	030-8276	307	052-0741	287
002-0639	268	030-0702	287	030-8316	314	053-0088	257
002-5299	350	030-0709	312	030-8324	293	053-0700	344
002-5393	347	030-0709	312	030-8370	269	053-1788	184
002-5743	289	030-3978	241	030-9208	349	053-2141	183
002-6454	267	030-4285	241	031-0782	287	053-2295	182
003-0633	287	030-4606	376-377, 389, 393	031-0919	316	053-2313	275
003-2143	293	030-6816	307	031-1358	287	053-2928	344
003-4711	267	030-6817	309	031-1864	283	053-3153	255
003-6997	354	030-6818	309	031-2582	343	061-6717	287
003-7030	291	030-6818	309	031-2716	316	061-6737	255
003-8470	350	030-6819	309	031-4136	337	061-6739	255
003-8581	344	030-6984	241	031-4140	241	061-6739	255
003-8747	295	030-7139	270	031-4629	283	061-6740	255
003-9014	295	030-7186	182	031-5744	285	061-6746	182
003-9163	293	030-7190	181	031-5894	343	061-7325	269
004-1309	266	030-7764	267	031-6281	337	061-7738	344
004-2378	350	030-7765	262	031-6303	283	061-7828	272
004-3935	291	030-7935	242	031-6742	287	061-8246	257
004-4659	293	030-7936	241	031-7600	308	061-8248	255
004-4977	314	030-7946	307	031-8759	242	061-8257	284
004-5703	270	030-7947	307	031-9746	293	061-8260	345
004-5933	350	030-7950	308	032-1268	286	061-8261	345
004-6557	270	030-7951	308	032-1269	287	061-8284	344
004-6683	267	030-7953	308	032-1270	344	061-8408	344
004-6810	314	030-7955	343	032-1339	312	061-8644	272
004-7270	267	030-7957	337	032-1357	287	061-8827	344
005-0658	308	030-7959	337	032-1416	283	061-8863	184
005-4173	307	030-7960	337	032-1523	287	061-8962	257
005-5421	344	030-7961	283	032-2154	314	061-9258	345
005-6985	370	030-7962	283	032-3506	270	061-9413	257
005-7541	293	030-7963	283	032-3631	314	061-9593	270
005-7898	276	030-7964	283	032-4036	312	061-9787	255
005-8615	267	030-7965	283	032-4872	183	067-2935	314
005-9129	343	030-7966	283	032-8414	307	067-6495	284
005-9702	344	030-7967	283	032-8487	306	067-9921	343
006-0210	350	030-7972	285	032-8707	314	068-0009	183
		030-7975	285	033-0414	287	068-0554	181

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
068-0556	183	100-7868	266	109-5289	222	117-7065	225
068-0589	183	101-0052	320	109-5605	267	117-7734	326
068-0599	182	101-0387	231	109-5811	321	117-9983	229
068-0601	181	101-1340	240	109-5815	225	118-0911	333
068-0710	378	101-7198	238	109-5819	324	118-4569	324
068-2859	182	102-0773	324	109-5821	226	118-4728	307
068-3251	312	102-1384	321	109-5822	225	119-0572	244
068-3255	314	102-3437	302	109-5823	226	119-2604	337
068-4152	255	102-6496	275	109-5824	302	119-6220	303
068-4174	307	102-7240	337	109-5825	302	119-6346	324
068-6074	242	103-1328	302	109-6511	326	119-6407	229
069-3256	307	103-1746	312	109-7075	227	119-8096	241
069-4269	251	103-2544	218	110-2218	322	120-7391	293
077-4460	286	103-4675	308	110-2555	240	120-8401	346
077-8165	247	103-7268	296	110-4628	319	120-9127	336
081-4340	279	104-4526	267	110-5897	226	121-3737	359
081-5495	225	104-4767	244	110-6302	264	121-3738	359
081-5604	365	104-7992	312	110-8796	262	121-4345	390
081-5622	224	104-9054	225	110-9160	222	121-5729	283
081-5645	326	104-9113	338	111-5562	241	121-7136	396
081-5648	326	104-9200	337	111-6690	343	121-7137	396
085-7356	310	105-0428	264	111-7660	72	121-7138	396
086-2746	234	105-1860	262	111-7661	73	121-7656	240
086-8503	300	105-1861	262	111-7662	73	121-7697	318
086-9035	324	105-6431	266	111-7666	183	121-9267	337
087-0677	224	105-7204	262	111-8218	243	122-1113	362
087-0882	267	105-7704	333	111-8815	288	122-1852	325
087-4588	303	106-0401	369	112-2564	230	122-2901	269
089-7702	227	106-0406	369	112-2565	230	122-5273	308
090-0744	306	106-2105	309	112-4387	285	122-6867	vii
090-2782	256	106-3378	283	112-9271	262	122-6869	vii
090-3000	283	106-5074	228	112-9783	224	122-6870	vii
090-5725	306	106-5151	323	113-2378	324	122-6871	vii
090-6372	255	106-7650	296	113-2934	345	122-6872	vii
090-9019	377	107-1341	238	113-3353	299	122-6873	vii
092-2304	391	107-2660	261	113-3655	332	122-6874	vii
092-3635	224	107-3585	239	113-4676	236	122-6875	vii
092-6629	251	107-3877	230	113-7099	271	122-6876	vii
093-1321	379	107-6585	246	113-9391	245	122-6887	vii
093-1322	379	107-6598	228	114-3399	267	122-6888	vii
093-1323	379	107-6709	227	115-1708	242	122-6889	vii
096-3829	379	107-9149	267	115-4184	335	122-6890	vii
096-4919	234	107-9343	247	115-5411	310	122-6891	vii
096-4920	298	108-2197	243	115-8215	141	122-6892	vii
096-6073	379	108-3866	238	115-8634	324	122-6893	vii
096-6223	234	108-3872	227	115-8730	337	122-6894	vii
098-5687	321	108-4371	286	115-9167	270	122-6895	vii
099-0169	402	108-5678	236	115-9791	342	122-6905	viii
099-5927	248	108-7005	321	116-5435	224	122-6906	viii
099-6839	234	108-7463	243	117-0067	309	122-6907	viii
099-7551	298	108-7516	237	117-0291	245	122-6908	viii
0A-2833	293	108-9418	240	117-1266	390	122-6909	viii
0A-2926	265	109-0070	286	117-3033	300	122-6910	viii
0A-3732	344	109-3205	390	117-3034	296	122-6911	viii
100-3221	275	109-3657	227	117-3050	231	122-6912	viii
100-7603	302	109-5169	308	117-5208	364	122-8905	300

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
122-9060	329	124-1932	148	124-1988	144	124-2044	149
122-9088	324	124-1933	148	124-1989	144	124-2045	149
123-0214	264	124-1934	148	124-1990	144	124-2046	149
123-1904	225	124-1935	148	124-1991	144	124-2047	149
123-2151	239	124-1936	142	124-1992	144	124-2048	149
123-2169	325	124-1937	142	124-1993	144	124-2049	149
123-2564	239	124-1938	142	124-1994	144	124-2050	137
123-7341	229	124-1939	142	124-1995	144	124-2051	137
123-8580	286	124-1940	142	124-1996	144	124-2052	137
123-8581	269	124-1941	142	124-1997	144	124-2053	137
123-8829	299	124-1942	142	124-1998	144	124-2054	137
123-8835	308	124-1943	142	124-1999	144	124-2055	137
124-0195	296	124-1944	142	124-2000	145	124-2056	137
124-0368	262	124-1945	142	124-2001	145	124-2057	137
124-0369	262	124-1946	142	124-2002	145	124-2058	137
124-0396	310	124-1947	142	124-2003	145	124-2059	137
124-1890	146	124-1948	142	124-2004	145	124-2060	137
124-1891	146	124-1949	142	124-2005	145	124-2061	137
124-1892	146	124-1950	143	124-2006	145	124-2062	138
124-1894	146	124-1951	143	124-2007	145	124-2063	138
124-1895	146	124-1952	143	124-2008	145	124-2064	138
124-1896	146	124-1953	143	124-2009	145	124-2065	138
124-1897	146	124-1954	143	124-2010	145	124-2066	138
124-1898	146	124-1955	143	124-2011	145	124-2067	138
124-1899	146	124-1956	143	124-2012	145	124-2068	138
124-1900	146	124-1957	143	124-2013	145	124-2069	138
124-1901	146	124-1958	147	124-2014	145	124-2070	138
124-1902	146	124-1959	143	124-2015	145	124-2071	138
124-1903	146	124-1960	143	124-2016	145	124-2072	138
124-1904	146	124-1961	143	124-2017	145	124-2073	138
124-1905	146	124-1962	143	124-2018	145	124-2074	138
124-1906	146	124-1963	143	124-2019	145	124-2075	139
124-1907	146	124-1964	143	124-2020	145	124-2076	139
124-1908	146	124-1965	143	124-2021	145	124-2077	139
124-1909	146	124-1966	143	124-2022	145	124-2078	139
124-1910	146	124-1967	143	124-2023	145	124-2079	139
124-1911	146	124-1968	143	124-2024	145	124-2080	139
124-1912	146	124-1969	143	124-2025	145	124-2081	139
124-1913	146	124-1970	143	124-2026	145	124-2082	139
124-1914	146	124-1971	143	124-2027	145	124-2083	139
124-1915	146	124-1972	143	124-2028	145	124-2084	139
124-1916	146	124-1973	143	124-2029	145	124-2085	139
124-1917	146	124-1974	143	124-2030	145	124-2086	139
124-1918	146	124-1975	143	124-2031	145	124-2087	139
124-1919	146	124-1976	143	124-2032	145	124-2088	139
124-1920	146	124-1977	143	124-2033	145	124-2089	139
124-1921	146	124-1978	144	124-2034	145	124-2090	139
124-1922	146	124-1979	144	124-2035	145	124-2091	140
124-1923	147	124-1980	144	124-2036	145	124-2092	140
124-1924	147	124-1981	144	124-2037	149	124-2093	140
124-1925	147	124-1982	144	124-2038	149	124-2094	140
124-1926	147	124-1983	144	124-2039	149	124-2095	140
124-1928	148	124-1984	144	124-2040	149	124-2096	140
124-1929	148	124-1985	144	124-2041	149	124-2097	140
124-1930	148	124-1986	144	124-2042	149	124-2098	140
124-1931	148	124-1987	144	124-2043	149	124-2099	140

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
124-2100	140	124-2159	136	124-2249	154	124-2313	159
124-2101	140	124-2160	136	124-2250	154	124-2314	159
124-2102	140	124-2161	136	124-2251	154	124-2315	159
124-2103	140	124-2162	136	124-2252	154	124-2316	159
124-2104	140	124-2163	136	124-2253	154	124-2317	159
124-2105	140	124-2164	136	124-2254	154	124-2318	159
124-2106	140	124-2165	136	124-2255	154	124-2319	159
124-2107	140	124-2166	136	124-2256	154	124-2320	134
124-2108	140	124-2167	136	124-2257	154	124-2321	158
124-2109	140	124-2168	136	124-2258	154	124-2322	136
124-2110	140	124-2170	141	124-2259	154	124-2323	136
124-2111	134	124-2171	145	124-2260	154	124-2324	159
124-2113	134	124-2172	158	124-2261	154	124-2325	136
124-2114	134	124-2173	158	124-2262	154	124-2326	159
124-2116	134	124-2174	158	124-2263	154	124-2327	159
124-2117	134	124-2175	158	124-2264	155	124-2330	158
124-2118	134	124-2176	152	124-2265	155	124-2336	142
124-2119	134	124-2177	152	124-2266	155	124-2337	158
124-2120	134	124-2178	152	124-2267	155	124-3045	308
124-2121	134	124-2180	152	124-2268	155	124-3109	299
124-2122	134	124-2181	152	124-2269	155	124-3696	269
124-2123	134	124-2182	152	124-2270	155	124-4286	402
124-2124	134	124-2183	152	124-2271	155	124-4287	402
124-2125	134	124-2184	152	124-2272	155	124-4288	402
124-2127	134	124-2185	152	124-2273	155	124-4289	402
124-2128	135	124-2186	152	124-2274	155	124-7115	vii
124-2129	135	124-2187	152	124-2275	155	124-8333	304
124-2130	135	124-2188	151	124-2276	155	125-0051	234
124-2131	135	124-2189	151	124-2277	155	125-1915	225
124-2132	135	124-2190	151	124-2278	155	125-2474	372
124-2133	135	124-2192	151	124-2279	155	125-2589	365
124-2134	135	124-2193	151	124-2280	155	125-4085	330
124-2135	135	124-2194	151	124-2281	155	125-7407	268
124-2136	135	124-2195	151	124-2282	155	125-7426	226
124-2137	135	124-2196	151	124-2283	155	125-9717	300
124-2138	135	124-2197	151	124-2284	155	126-0272	229
124-2139	135	124-2198	151	124-2291	158	126-1023	451
124-2140	136	124-2199	151	124-2292	158	126-2565	269
124-2141	136	124-2230	152	124-2293	158	126-3230	244
124-2142	136	124-2232	152	124-2294	158	126-3902	324
124-2143	136	124-2233	152	124-2295	158	126-4117	264
124-2144	136	124-2234	152	124-2296	158	126-4118	264
124-2145	136	124-2235	152	124-2297	158	126-4709	281
124-2146	136	124-2236	152	124-2298	158	126-4715	361
124-2147	136	124-2237	152	124-2299	159	126-6872	332
124-2148	136	124-2238	152	124-2300	159	126-7331	257
124-2149	136	124-2239	152	124-2301	159	126-8306	327
124-2150	136	124-2240	152	124-2302	159	126-9745	225
124-2151	136	124-2241	152	124-2303	159	126-9746	337
124-2152	136	124-2242	154	124-2304	159	126-9903	225
124-2153	136	124-2243	154	124-2305	159	127-1647	297
124-2154	136	124-2244	154	124-2306	159	127-1909	467
124-2155	136	124-2245	154	124-2307	159	127-1910	467
124-2156	136	124-2246	154	124-2308	159	127-2141	322
124-2157	136	124-2247	154	124-2309	159	127-3026	322
124-2158	136	124-2248	154	124-2310	159	127-7055	299

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
127-7056	295	130-6096	464	136-8482	246	143-7681	322
127-9928	449	130-6097	460, 462, 464	137-0868	255	143-9199	257
127-9929	449	130-6098	462, 464	137-5614	241	143-9307	287
127-9930	449	130-7284	262	137-9076	225	143-9665	301
127-9931	449	130-7287	262	137-9145	241	143-4449	281
127-9933	449	131-2171	251	138-1916	319	144-1055	279
127-9934	449	131-3025	402	138-2549	239	144-2609	267
127-9936	449	131-4863	300	138-5049	307	144-6650	336
127-9937	449	131-4961	264	138-7538	225	144-7687	243
128-3976	252	131-5681	239	138-7796	295	144-7767	227
128-5051	265	131-9366	294	138-8342	249	144-8070	320
128-5890	332	131-9367	270	139-1802	320	144-8618	243
128-6841	303	131-9472	245	139-3344	240	145-1041	264
128-7472	308	132-1430	264	139-5439	472	145-2237	224
128-7625	324	132-1730	249	139-5872	258	145-5161	472
129-2327	310	132-2453	228	139-6516	281	145-5504	286
129-7420	137	132-3726	236	139-6517	281	145-6284	311
129-7472	137	132-3873	245	139-7064	244	145-7125	282
129-7474	139	132-5091	231	140-2319	287	145-8822	236
129-7475	139	132-5152	318	140-4233	282	145-8833	258
129-7487	141	132-8815	225	140-4799	279	146-0359	277
129-7520	324	132-9877	238	140-4802	279	146-2739	253
130-2550	264	133-7362	446	140-5113	359	146-3338	171, 202
130-2883	245	133-9660	356	140-5978	265	146-3339	171, 202
130-5977	366	133-9740	246	140-5979	294	146-3340	171, 202
130-6061	472	134-0712	266	140-5980	351	146-3341	171, 202
130-6062	460	134-4123	253	140-7300	294	146-3342	171, 202
130-6068	458, 460	134-6852	236	140-8346	267	146-3343	171, 202
130-6069	458, 460, 462-464	134-6953	324	140-9360	446	146-3344	171, 202
130-6070	458, 460, 462, 464	134-6954	321	140-9461	290	146-3345	171, 202
130-6071	458, 460, 462-465	135-2221	254	140-9462	269	146-3346	171, 202
130-6072	458, 460, 462-464	135-2368	250	140-9768	258	146-3347	171, 202
130-6073	458, 460, 462-465	135-2535	446	141-1246	294	146-3348	171, 202
130-6074	458, 460, 462-465	135-4561	446	141-2370	263	146-3350	171, 202
130-6075	458, 460, 462-465	135-5985	325	141-2502	270	146-3351	172, 203
130-6076	458, 460, 462-465	135-7853	viii	141-4735	339	146-3352	172, 203
130-6083	462	135-7854	viii	141-5147	243	146-3353	172, 203
130-6084	462-463	135-7855	viii	141-7280	245	146-3354	172, 203
130-6085	462	135-7856	viii	141-9504	266	146-3355	172, 203
130-6086	462-463	135-8279	258	141-9505	266	146-3356	172, 203
130-6087	462-463	135-9279	258	142-0038	296	146-3357	172, 203
130-6088	462-464	135-9941	310	142-4881	251	146-3358	172, 203
130-6089	462, 464	135-9944	276	142-5137	92	146-3359	172, 203
130-6090	462, 464	136-0343	348	142-7620	333	146-3360	172, 203
130-6091	460, 462-465	136-0546	264	142-8320	362	146-3361	172, 203
130-6092	460, 462, 464-465	136-0853	237	142-8948	369	146-3362	172, 203
130-6095	463	136-1901	224	142-8949	369	146-3363	172, 203
		136-1953	ix	142-9242	282	146-3364	172, 203
		136-2060	446	143-0555	277	146-3365	172, 203
		136-2061	446	143-2786	275	146-3366	172, 203
		136-2068	446	143-2922	263	146-3367	173, 204
		136-2954	262	143-3158	251	146-3368	173, 204
		136-2955	262	143-4262	304	146-3369	173, 204
		136-3603	449	143-4281	297	146-3370	173, 204
		136-3604	452	143-6955	280	146-3372	173, 204
		136-4097	234	143-6957	280	146-3373	173, 204
		136-4098	233				

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
146-3374	173, 204	146-3450	173, 204	149-8474	195, 210	149-9939	236
146-3376	173, 204	146-7082	230	149-8475	195, 210	150-0128	222
146-3377	173, 204	146-7117	243	149-8476	195, 210	150-2568	445
146-3378	173, 204	146-8875	294	149-8477	195, 210	150-3622	472
146-3379	174, 205	146-9571	329	149-8478	195, 210	150-5430	234
146-3380	174, 204	147-0962	232	149-8480	195, 210	150-5679	275
146-3381	174, 204	147-1694	136	149-8481	195, 210	150-5857	234
146-3382	174, 205	147-1695	136	149-8483	195, 210	150-7158	231
146-3383	174, 205	147-1696	135	149-8484	195, 210	150-7159	231
146-3384	174, 205	147-1698	148	149-8485	195, 210	151-0714	269
146-3385	174, 205	147-1699	148	149-8486	195, 210	151-1975	251
146-3387	174, 205	147-1700	148	149-8487	195, 210	151-5145	310
146-3388	174, 205	147-1701	148	149-8489	196, 211	151-6584	347
146-3389	174, 205	147-1702	148	149-8490	196, 211	151-7683	257
146-3390	174, 205	147-1703	148	149-8492	196, 211	151-8866	299
146-3392	174, 205	147-1705	144	149-8493	196, 211	151-9227	280
146-3393	174, 205	147-1706	145	149-8494	196, 211	152-3406	299
146-3394	174, 205	147-1707	145	149-8495	196, 211	152-3411	302
146-3395	174, 205	147-1708	145	149-8496	196, 211	152-6942	227
146-3396	174, 205	147-1710	149	149-8497	196, 211	152-7597	267
146-3397	171, 202	147-1711	149	149-8498	196, 211	152-8181	369
146-3398	174, 205	147-1712	149	149-8501	196, 211	152-9254	226
146-3399	175, 205	147-1713	149	149-8502	196, 211	152-9840	297
146-3400	173, 203	147-1714	138	149-8503	211	152-9842	295
146-3402	173, 203	147-1715	139	149-8504	196, 211	152-9843	295
146-3404	175, 206	147-1716	134	149-8505	196, 211	153-0835	41
146-3405	175, 206	147-1717	138	149-8507	196, 211	153-0837	41
146-3406	175, 206	147-1718	135	149-8510	196, 211	153-0839	41
146-3408	175, 206	147-1719	148	149-8511	196, 211	153-0842	42
146-3409	175, 206	147-1720	148	149-8512	196, 211	153-0844	42
146-3410	175, 206	147-2027	90	149-8515	196, 211	153-0845	42
146-3411	175, 206	147-2440	279	149-8520	196, 211	153-0847	43
146-3412	175, 206	147-2441	358	149-8521	196, 211	153-0849	43
146-3413	175, 206	147-2443	279	149-8522	196, 211	153-0851	41
146-3414	175, 206	147-2444	312	149-8523	196, 211	153-0852	41
146-3415	175, 206	147-3396	241	149-8524	196, 211	153-0853	41
146-3416	175, 206	147-8508	276	149-8528	197, 212	153-0855	42
146-3417	175, 206	147-9351	245	149-8533	197, 212	153-0856	42
146-3418	174, 205	148-0207	286	149-8538	197, 212	153-0857	42
146-3419	175, 206	148-0209	258	149-8541	197, 212	153-0859	43
146-3430	176, 206	148-1740	285	149-8544	197, 212	153-0860	43
146-3431	176, 206	148-6757	319	149-8546	197, 212	153-0861	43
146-3435	176, 207	149-0027	285	149-8554	197, 212	153-0866	40
146-3436	177, 208	149-2847	370	149-8556	196, 211	153-0868	40
146-3437	177, 208	149-3995	264	149-8557	196, 211	153-0870	41
146-3438	177, 208	149-3996	264	149-8562	197, 212	153-0872	41
146-3439	177, 208	149-4009	265	149-8567	197, 212	153-0873	41
146-3440	177, 208	149-4125	329	149-8568	197, 212	153-0874	41
146-3441	177, 208	149-4230	307	149-8569	197, 212	153-0875	41
146-3442	177, 208	149-4289	325	149-8571	197, 212	153-0876	42
146-3443	177, 208	149-5207	346	149-8574	197, 212	153-0877	42
146-3444	174, 205	149-5210	350	149-8576	198, 213	153-0878	42
146-3445	174, 205	149-5211	294	149-8581	199, 214	153-0879	43
146-3446	171, 202	149-8142	251	149-8583	199, 214	153-0880	43
146-3447	173, 204	149-8471	195, 210	149-8591	197, 212	153-0881	43
146-3449	173, 204	149-8472	195, 210	149-8592	197, 212	153-0882	41

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
153-0883	41	154-0095	134	155-2887	70	162-6207	270
153-0884	41	154-0096	134	155-2888	70	162-6599	234
153-0885	42	154-0097	134	155-2889	70	162-6615	366
153-0886	42	154-0098	134	155-5471	71	162-6622	269
153-0887	42	154-0099	135	155-5508	247	162-6803	307
153-0888	43	154-0100	135	155-7621	329	162-6817	323
153-0889	43	154-0102	156, 198, 213	156-0050	460	162-7255	265
153-0890	43	154-0103	156, 198, 213	156-0055	460	162-8711	233
153-0891	43	154-0104	156, 198, 213	156-0058	472	163-3098	299
153-0895	43	154-0105	156, 198, 213	156-3600	369	163-4300	251
153-1950	x	154-0106	157	156-3631	369	163-6018	365
153-1951	x	154-0107	157	156-6129	232	163-7050	227
153-1952	x	154-0108	157	156-6131	224	163-9960	222
153-2994	369	154-0109	157	156-7530	258	163-9964	227
153-2997	369	154-0110	157	156-8160	264	164-0193	227
153-5522	x	154-0111	158	156-8801	224	164-0228	293
153-6229	304	154-0112	158	156-8835	332	164-2691	472
153-6267	302	154-0113	158	156-8845	224	164-3648	245
153-6269	290	154-0114	158	156-9791	225	164-3649	245
153-6270	324	154-0115	136	157-1669	251	164-3651	237
153-7487	283	154-2925	281	157-8510	227	164-3652	237
154-0052	147	154-2930	274	158-4307	318	164-5618	272
154-0054	147	154-3291	336	158-7594	303	164-5637	347
154-0055	147	154-7159	319	159-1691	291	164-6865	307
154-0057	147	154-8150	322	159-2861	253	164-7900	237
154-0058	147	155-0490	343	159-3966	253	164-9836	224
154-0059	147	155-2078	245	159-5805	279	165-0016	x
154-0060	147	155-2834	96	159-5898	370	165-0017	x
154-0061	147	155-2835	96	159-5988	237	165-0018	x
154-0062	147	155-2836	96	160-2242	x	165-0020	x
154-0063	147	155-2838	96	160-2243	x	165-0021	x
154-0064	147	155-2839	96	160-2244	x	165-0023	x
154-0066	147	155-2840	96	160-2245	x	165-0024	x
154-0067	148	155-2857	89	160-2246	x	165-0025	x
154-0068	148	155-2858	89	160-2247	x	165-1059	234
154-0069	142	155-2860	90	160-2248	x	165-1094	234
154-0070	142	155-2861	90	160-2249	x	165-2016	302
154-0071	142	155-2863	90	160-2250	x	165-3938	321
154-0072	150	155-2864	90	160-2251	x	165-4597	419
154-0074	150	155-2866	69	160-2252	x	166-1757	316
154-0077	150	155-2867	69	160-4876	310	166-3032	224
154-0080	150	155-2869	69	160-5083	227	166-4994	281
154-0081	150	155-2870	69	160-7086	290	166-4998	361
154-0082	150	155-2871	69	160-8284	234	166-5853	467
154-0083	150	155-2872	70	161-1833	x	166-6137	viii
154-0084	150	155-2873	70	161-1834	x	166-6138	viii
154-0085	149	155-2874	70	161-1835	x	166-6139	viii
154-0086	148	155-2876	69	161-1836	x	166-6140	viii
154-0087	149	155-2877	70	161-1837	xi	166-6141	viii
154-0088	149	155-2878	70	161-1838	xi	166-6142	viii
154-0089	149	155-2879	70	161-2779	233	166-6143	viii
154-0090	149	155-2881	70	161-3189	232	167-9288	244
154-0091	150	155-2882	70	161-7443	262	168-2300	305
154-0092	137	155-2883	70	161-8021	227	168-3332	333
154-0093	150	155-2884	70	162-2896	222	168-3333	266
154-0094	151	155-2886	70	162-3122	303	168-3346	266

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
168-3357	334	175-9461	233	180-8424	390	190-8529	248
168-4043	279	175-9477	298	183-2779	268	191-0786	283
168-6453	310	175-9478	323	183-5180	160	191-0787	269
168-8806	251	175-9479	298	183-5181	160	191-1716	291
168-9393	225	175-9480	298	183-6683	286	191-6504	260
168-9984	334	175-9481	234	183-6684	287	192-0087	262
169-0454	270	175-9483	298	183-6686	283	192-1264	292
169-1229	302	175-9489	223	183-6689	345	192-2969	248
169-1578	232	175-9493	233	183-6803	307	192-5425	362
169-3678	366	175-9494	223	183-6805	307	193-1047	71
169-4278	287	175-9498	249	183-6807	308	193-1551	139
170-1186	263	175-9506	279	183-6811	244	193-2695	240
170-1564	273	175-9509	289	183-7257	270	193-3973	417
170-3528	245	175-9510	311	183-9044	298	193-5101	248
170-5535	235	175-9514	279	184-2518	243	193-5182	275
170-5689	452	175-9518	289	184-3489	133	193-6910	415
170-5715	390	175-9519	289	184-3534	263	193-6911	416
170-6541	304	175-9522	289	184-4910	141	193-8308	282
171-0714	327	175-9563	289	184-6892	301	193-8334	369
171-1879	245	175-9565	359	184-6893	296	193-8335	369
171-2356	287	175-9585	279	184-7201	101	194-1958	303
171-2532	x	175-9586	289	184-7202	89	194-2080	324
171-3235	241	175-9587	234	184-7415	301	194-2554	325
171-3442	285	176-0569	275	184-9114	306	194-3481	309
171-6469	307	176-1305	347	184-9330	226	194-3987	257
171-8678	229	176-1308	293	185-1044	254	194-4122	243
171-8728	232	176-1550	141	185-1047	254	194-4171	266
171-8729	232	176-2483	151	185-1899	314	194-4423	345
171-9420	263	176-4694	225	186-3327	260	194-4769	93
171-9423	243	176-5868	239	186-4045	333	194-4864	316
171-9629	216	176-5880	226	186-4133	133	194-4940	366
171-9653	259	176-8199	140	186-4134	133	194-7229	280
172-0677	225	176-8381	234	186-4135	133	194-7601	233
172-0679	225	177-2112	344	186-4136	133	194-9040	303
173-0064	310	177-2215	417	186-8138	275	194-9041	303
173-0880	257	177-3466	279	186-8196	247	194-9866	303
173-3323	306	177-3475	279	186-8899	286	195-0036	303
173-4409	266	177-3477	289	187-2730	239	195-0037	297
173-4410	266	177-4271	165, 170, 186,	187-5588	225	195-0106	297
173-4412	269		466	187-6009	302	195-1643	234
173-4415	291	177-4272	165, 170, 186,	188-1032	259	195-6525	369
173-4416	291		466	188-1590	453	195-7930	251
173-7638	368	177-5852	237	188-1591	453	196-0285	280
173-7639	368	177-8450	302	188-1592	453	196-1811	138
173-8070	249	177-9567	342	188-1593	453	196-3187	283
174-0030	260	178-2651	233	188-1594	453	196-3188	257
174-4360	333	178-3620	417	188-1595	454	196-3261	247
174-5811	302	178-5425	287	189-0193	390	196-4196	248
174-9708	236	178-5883	310	189-0700	138	196-4647	242
175-3623	266	178-9166	175, 206	189-3434	310	196-5597	139
175-4792	298	179-2229	419	189-4399	286	196-6538	298
175-9453	233	179-7002	248	189-4401	293	196-6833	291
175-9454	299	180-1548	316	190-1479	236	196-7705	274
175-9456	229	180-1725	329	190-3754	151	196-7776	95
175-9457	233	180-4655	263	190-7673	390	196-8173	284
175-9460	330	180-4712	140	190-7852	237	196-8235	251

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
196-8722	334	1L-3664	183	1P-7931	90	202-1723	237
196-9015	232	1L-4031	349	1P-8457	97	202-1919	254
196-9858	327	1L-4762	294	1P-8458	97	202-2377	66, 84, 121
197-1332	139	1L-5620	270	1P-9589	96	202-3278	447
197-5394	453	1L-5987	271	1P-9892	96	202-3279	447
197-5395	454	1L-6939	315	1S-0004	394	202-3280	447
197-5396	453	1L-8432	262	1S-0401	291	202-3281	447
197-5817	195, 210	1L-8444	350	1U-0655	270	202-5373	276
197-7547	266	1N-5925	315	1U-8300	339	202-6305	276
197-8505	140	1N-5998	377	1U-8301	335	202-6663	301
197-8947	232	1N-5999	377	1U-8302	333	202-7000	228
197-8948	232	1N-8559	349	1U-8303	333	202-8250	240
197-8949	232	1P-0043	371	1U-8760	467	203-0373	361
197-9460	364	1P-0269	307	1U-9675	448	203-0374	358
198-0961	244	1P-0270	340	1U-9676	448	203-0393	286
198-5318	244	1P-1219	90	1U-9677	448	203-0394	361
198-7655	316	1P-1238	90	1U-9678	448	203-0414	286
198-8308	269	1P-1376	241	1U-9679	448	203-0416	243
199-0541	330	1P-1441	371	1U-9680	448	203-0432	281
199-0542	234	1P-1708	91	1U-9886	278	203-0433	243
199-0543	298	1P-2375	446	1V-2750	262	203-0436	260
199-0546	298	1P-2376	446	1V-7443	243	203-0694	270
199-1773	303	1P-3458	273	1W-6256	243	203-1854	334
199-4673	231	1P-3651	269	1W-7534	309	203-3470	237
199-6702	230	1P-3700	390, 395	1Y-0412	295	203-4695	66, 84, 121
199-8211	419	1P-3702	390, 395	1Y-0413	350	203-5563	260
199-8495	224	1P-3703	390, 395	1Y-3604	293	203-6688	223
199-9751	389	1P-3704	390, 395	1Y-3853	266	203-6798	240
1A-5912	268	1P-3705	390, 395	1Y-3854	266	203-7959	270
1B-5170	378	1P-3706	395	1Y-7446	366	204-0241	264
1B-5174	378	1P-3707	395	1Y-7453	350	204-0394	275
1F-3278	243	1P-3708	395	1Y-7551	350	204-3716	244
1F-3605	269	1P-3709	390, 395	1Y-8083	352	204-5098	369
1F-4502	315	1P-3861	274	1Z-9033	239	204-5341	347
1F-6660	263	1P-3862	290	200-1555	254	204-9378	297
1H-1363	295	1P-4001	275	200-4635	298	205-0667	292
1H-7721	266	1P-4278	409	200-5724	245	205-1581	307
1H-7722	267	1P-4574	400-401	200-6345	417	205-3079	237
1H-7724	268	1P-4575	400-401	200-8459	243	205-4135	302
1J-9671	376-377, 389, 393	1P-4576	400	201-0578	266	205-5120	222
1K-6937	295	1P-4577	400	201-0967	139	205-9883	289
1L-0254	294	1P-4578	400	201-0968	141	206-2722	414
1L-0766	291	1P-4579	400-401	201-4160	227	206-2723	414
1L-0767	183	1P-4582	400-401	201-5551	231	206-2724	414
1L-1480	183	1P-4584	400	201-7376	134	206-2725	414
1L-1644	262	1P-4585	400	201-9170	332	206-2726	414
1L-1699	183	1P-4948	91	201-9897	365	206-2727	414
1L-1722	271	1P-5597	267	202-0998	66, 84, 121	206-2728	414
1L-2279	289	1P-5598	267	202-1000	66, 84, 121	206-2729	414
1L-2283	272	1P-5765	403	202-1002	66, 84, 121	206-2730	414
1L-2287	183	1P-5766	403	202-1004	66, 84, 121	206-2731	414
1L-2702	272	1P-5767	403-404	202-1006	66, 84, 121	206-2732	414
1L-2782	351	1P-7016	400	202-1138	291	206-2733	414
1L-2786	264	1P-7017	400	202-1205	270	206-2734	414
1L-2893	264	1P-7625	307	202-1673	225	206-2735	414
		1P-7929	90	202-1713	303	206-2736	414

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
206-2737	414	211-4529	281	215-4567	462-463, 465	219-8136	238
206-2738	414	211-5237	231	215-4568	462-465	220-2073	224
206-2739	414	211-6257	303	215-4569	462-465	220-5070	197, 212
206-2740	414	211-8759	290	215-4570	462-465	220-5076	197, 212
206-2741	414	211-9537	298	215-4571	464-465	220-5130	196, 211
206-4831	226	211-9682	258	215-4572	462-465	220-5320	199, 214
206-5122	320	211-9695	238	215-4573	462-465	220-5321	199, 214
207-0650	225	212-0095	361	215-4574	462, 465	220-5322	199, 214
207-1871	256	212-3863	362	215-4575	462-463, 465	220-5323	199, 214
207-2159	314	212-4991	321	215-4576	464-465	220-5332	195
207-2484	364	212-6067	247	215-4577	462-465	220-5333	195, 210
207-4168	254	212-7297	315	215-4578	462, 464-465	220-5336	195
207-7223	298	213-3123	285	215-4579	462-465	220-5351	195, 210
207-7224	298	213-3455	332	215-4580	462, 464-465	220-5352	195, 210
207-7225	298	213-3567	258	215-4581	462-465	220-5354	195, 210
207-7226	298	213-3745	304	215-4582	462, 464-465	220-5356	211
208-0616	333	213-4591	324	215-4583	462-465	220-5358	196, 211
208-2448	259	213-7430	286	215-4584	462, 464-465	220-5366	196, 211
208-2859	222	213-7483	280	215-4585	458, 460, 463	220-5924	227
208-3786	226	213-7731	332	215-4639	389	221-0175	288
208-3899	272	213-7961	271	215-8849	298	221-0452	153
208-5148	297	213-8386	327	215-9090	300	221-0457	157
208-5455	362	213-8687	ix	216-1302	333	221-0458	157
208-6594	264	213-8688	ix	216-2203	298	221-0459	157
208-7552	251	213-8689	ix	216-2309	277	221-0492	120
209-3231	141	213-8690	ix	216-2310	289	221-0498	119
209-3558	236	213-8702	ix	216-2364	320	221-0502	104
209-5798	389	213-8703	x	216-2365	279	221-0518	117
209-5888	234	213-8704	x	216-2367	233	221-0554	110
209-9835	266	213-8705	x	216-4596	288	221-0556	110
209-9896	266	213-8706	x	216-6200	330	221-0557	110
210-0066	305	213-8707	x	216-6202	238	221-0573	113
210-2015	338	213-8720	43	216-7485	389	221-0578	110
210-2768	333	214-0900	320	216-7951	288	221-0579	110
210-6962	270	214-3245	223	216-8578	389	221-0581	110
210-7567	276	214-3613	273	216-8579	389	221-0603	105
210-7672	252	214-3615	273	216-8580	389	221-0604	105
210-8819	264	214-4252	320	216-9409	298	221-0605	106
210-8820	264	214-4254	320	216-9642	389	221-0609	107
211-2652	41	214-4506	324	217-1591	382	221-0610	109
211-2653	41	214-4508	364	217-5469	312	221-1582	253
211-2654	41	214-4636	419	217-6158	285	221-1584	352
211-2655	42	214-5136	306	217-6159	285	221-4733	301
211-2656	42	214-7566	389, 398	217-6168	285	221-6951	140
211-2657	42	214-7567	389, 398	217-6172	285	221-8234	237
211-2658	43	214-7568	389, 398	217-6416	241	221-8496	277
211-2659	43	214-9060	238	217-7065	329	222-2024	265
211-3338	361	214-9061	238	218-0919	250	222-2208	257
211-3349	281	214-9063	238	218-1755	300	222-2210	237
211-3352	261	215-1952	148	218-6645	287	222-3487	269
211-3468	324	215-2432	226	219-0669	389	222-4844	xi
211-3522	341	215-3226	301	219-0953	139	222-6967	320
211-4040	223	215-3448	324	219-1090	281	222-7368	263
211-4494	344	215-3665	300	219-1644	244	222-7369	263
211-4499	355	215-4565	462-463, 465	219-1883	297	222-7370	262
211-4527	346	215-4566	462-463, 465	219-4328	293	222-7371	262

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
222-9073	43	228-7088	390, 397	233-8047	426, 430, 434, 439-440	237-7212	275
222-9984	263	228-7089	390, 397			237-8314	281
222-9985	263	228-7090	390, 397	233-8077	425-426, 429- 430, 432-434, 438- 440	238-0746	281
223-1624	309	228-7091	390, 397			238-1766	235
223-1751	280	228-7092	390, 397	233-8082	438	238-2579	255
223-6396	286	228-7093	390, 397	233-8085	438	238-3256	229
223-7881	302	228-7094	390, 397	234-0391	322	238-3258	229
223-7882	301	228-7095	390, 397	234-3544	390	238-3259	229
224-0682	283	228-7096	389, 398	234-7196	254	238-3260	229
224-1376	259	228-7097	389, 398	234-7198	288	238-3263	229
224-2684	364	228-7099	389	234-7198	288	238-4986	321
224-6265	133	228-7100	389	234-7381	279	238-5078	389, 398
224-6266	133	228-7101	389	234-7382	279	238-5079	389, 398
224-6316	238	228-7102	389	234-7383	280	238-5080	389, 398
224-7696	ix	228-7103	389	234-7391	288	238-5081	389, 398
224-7697	ix	228-7104	389	234-7395	280	238-5082	389, 398
224-7698	ix	228-7105	389	234-7400	279	238-5083	389, 398
224-7700	ix	228-7106	389	234-7411	340	238-5084	389, 398
224-7701	ix	228-7108	389	234-7412	311	238-5086	389, 398
225-2693	286	228-7372	225	234-7413	311	238-5919	322
225-6574	243	229-1444	296	234-7415	359	238-7836	226
225-6690	345	229-4896	396	234-7416	289	238-8337	x
225-8629	295	229-5193	301	234-7419	277	238-8339	x
226-2946	336	229-5431	226	234-7421	277	238-8340	x
226-3355	331	229-5830	318	234-7422	289	238-8341	x
226-7145	447	229-5976	263	234-7423	277	238-8342	x
226-7146	447	229-8638	227	234-7431	289	238-8343	xi
226-7147	447	229-8728	335	234-7436	289	238-8344	xi
226-7148	447	229-9325	264	234-7437	276	238-8345	xi
226-7149	447	230-0822	281	234-7438	277	238-8346	xi
227-0056	300	230-3045	342	234-7440	277	238-8347	xi
227-0057	300	230-4474	232	235-2472	390	239-1780	237
227-0059	300	230-5123	282	235-2473	390	239-1833	332
227-0060	300	230-5944	243	235-2474	390	239-1834	326
227-0061	300	230-9999	43	235-2475	390	239-1995	324
227-0062	229	231-0187	245	235-2476	390	239-5032	223
227-0064	229	231-3914	238	235-2480	390	239-5983	283
227-0065	229	231-3942	386	235-3566	343	239-6860	321
227-0066	229	231-9828	289	235-3567	243	240-5901	253
227-1099	276	232-0252	362	235-3570	404	241-0384	261
227-3951	236	232-0493	282	235-3572	364	241-0386	261
227-5714	300	232-0494	236	235-3583	227	241-0397	275
227-5922	348	232-4869	295	235-3595	236	241-0398	261
227-6469	224	233-2300	364	235-3601	302	241-2451	303
228-2022	228	233-4462	335	235-3611	303	241-4318	114
228-2986	145	233-7190	460	235-3612	237	241-6154	311
228-2987	136	233-7191	458-460, 462- 465	235-3946	133	241-6160	333
228-2989	136			235-9830	415	241-6188	228
228-2990	136	233-7192	458-460, 462- 465	236-1429	345	241-6189	369
228-2991	153			236-5327	229	241-6190	369
228-3005	110	233-7193	458-460, 462- 465	236-7638	138	241-6194	364
228-3010	110			237-2849	337	241-6196	318
228-3671	235	233-7888	278	237-6093	224	241-6220	229
228-5326	137	233-8045	430, 439	237-6095	224	241-6225	319
228-6047	229	233-8046	426, 430, 434, 439-440	237-7026	364	242-2888	252
228-6049	300			237-7180	248	242-3567	446

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
242-3724	285	250-1421	252	253-1387	141	260-9136	364
242-4310	263	250-1425	304	253-1388	137	260-9141	229
242-5361	350	250-1435	293	253-1391	139	260-9176	365
242-6132	226	250-1441	326	253-5327	310	260-9197	244
242-8717	341	250-1444	239	253-7768	252	260-9211	237
242-9532	133	250-1457	332	253-9770	419	260-9213	225
243-0116	281	250-1460	300	254-3279	138	260-9216	332
243-0206	252	250-1463	316	254-3859	282	260-9229	252
243-0919	240	250-1468	253	254-4100	226	260-9239	282
243-1914	41	250-1470	321	255-2024	303	260-9242	319
243-1915	42	250-1494	300	255-4877	160	260-9244	316
243-1916	42	250-1496	284	255-4878	140	260-9249	281
243-1917	42	250-1497	307	255-4879	198, 213	260-9254	275
243-1918	42	250-2573	310	255-4880	198, 213	261-7957	364
243-1920	43	250-6142	240	255-4882	155	262-0502	280
243-1925	43	250-6829	133	255-4883	155	262-0503	280
243-1930	43	251-1593	265	255-4884	155	262-0506	274
243-1931	43	251-9303	331	255-4886	160	262-0511	275
244-0821	232	251-9304	331	256-1388	vii	262-0514	248
244-2776	320	252-0038	134	256-1390	x	262-0515	248
244-5227	225	252-6039	235	256-2464	210	262-0524	281
244-6348	299	252-7238	249	256-2465	210	262-0526	281
245-1398	251	252-7242	274	256-3709	153	262-5492	299
245-1399	316	252-7243	281	256-3710	153	262-5529	235
245-1400	316	252-9331	260	256-3711	153	262-6747	140
245-1401	306	252-9332	260	256-3713	153	262-7035	226
245-1412	xi	253-0412	278	256-3714	153	262-9990	389
245-1413	xi	253-1348	137	256-3715	153	263-0874	264
245-1420	x	253-1349	138	256-3716	153	263-2605	177, 208
245-1421	x	253-1350	160	256-3717	153	263-2629	160
245-7692	261	253-1351	139	256-3718	153	263-2631	160
245-7918	238	253-1352	139	256-3719	153	263-2632	160
246-1245	265	253-1353	140	256-3721	153	263-2633	160
246-1470	294	253-1354	141	256-3722	153	263-2634	160
246-9947	237	253-1356	137	256-3723	153	263-2635	160
247-0067	367	253-1357	138	256-3724	153	263-2636	160
247-2237	246	253-1358	138	256-3725	155	263-2638	160
247-4438	253	253-1359	139	256-3726	153	263-2639	160
247-4602	306	253-1360	139	256-3727	153	263-2643	161
247-4603	251	253-1361	140	256-3728	153	263-2645	161
247-7279	362	253-1362	141	256-3729	153	263-2646	161
248-4268	367	253-1363	137	256-3730	153	263-2650	161
248-6002	311	253-1364	137	256-3731	153	263-2652	161
248-6013	233	253-1367	139	256-3733	152	263-2657	161
248-6018	233	253-1368	137	256-3734	152	263-2659	161
248-6020	234	253-1371	173, 204	256-3735	140	263-2663	161
249-0008	304	253-1373	139	256-4553	140	263-2664	199, 214
249-0073	226	253-1374	140	257-0374	140	263-2678	200, 215
249-1243	270	253-1375	141	257-2723	139	263-2685	200, 215
249-2924	231	253-1378	139	257-3471	240	263-4798	276
249-4312	263	253-1380	140	257-9359	42	264-2487	245
249-6673	306	253-1381	141	258-5153	279	265-4952	462-465
249-7676	258	253-1382	210	258-8589	232	265-4953	462
249-7697	291	253-1383	312	258-8591	232	265-4954	462-465
249-8712	279	253-1384	144	259-8856	279	265-4955	462
250-0241	355	253-1385	141	260-4057	289	265-4956	462-463

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
265-4957	..... 462, 464–465	268-1645	..... 364	273-4210	..... 327	278-2946	..... 324
265-4959	..... 458–460, 462–465	268-1648	..... 321	273-4881	..... 307	278-4528	..... 350
265-5809	..... 453	268-1650	..... 316	273-5156	..... 238	278-4529	..... 350
265-5810	..... 453	268-1966	..... 253	274-2220	..... 78	278-5664	..... 265
265-5811	..... 453	268-4045	..... 251	274-2246	..... 76	278-6425	..... 326
265-5812	..... 453	268-5353	..... 326	274-2247	..... 76	278-6493	..... 332
265-5813	..... 453	268-5969	..... 41	274-5919	..... 312	278-6506	..... 226
265-5814	..... 453	268-5970	..... 41	274-6660	..... 246	278-8507	..... ix
265-5815	..... 454	268-5971	..... 42	274-6661	..... 337	279-0825	..... 262
265-5816	..... 454	268-5972	..... 42	274-6663	..... 276	279-0826	..... 263
265-5817	..... 453	268-5973	..... 43	274-6664	..... 241	279-0827	..... 263
266-7533	..... 468	268-6051	..... 325	274-7407	..... 362	279-0836	..... 263
267-1527	..... 462–465	268-6052	..... 324	274-8062	..... 240	279-0837	..... 263
267-1621	..... 278	268-6133	..... 333	275-0151	..... 362	279-0838	..... 263
267-3846	..... 168, 175, 197, 206	268-6154	..... 279	275-4918	..... 306	279-0843	..... 264
267-4035	..... 364	268-6155	..... 279	276-0175	..... 251	279-0844	..... 264
267-4039	..... 326	268-6156	..... 279	276-0731	..... 380	279-0846	..... 264
267-4041	..... 224	269-0986	..... 312	276-0740	..... 380	279-0847	..... 264
267-4043	..... 322	269-4954	..... 248	276-0741	..... 380	279-1125	..... 263
267-4045	..... 302	269-4955	..... 248	276-0742	..... 380	279-1218	..... 466
267-4047	..... 302	269-4958	..... 248	276-0743	..... 380	279-1219	..... 466
267-4049	..... 324	269-6650	..... 235	276-0744	..... 380	279-1220	..... 466
267-4159	..... 227	270-0013	..... 303	276-0745	..... 381	279-1221	..... 466
267-4658	..... 175, 197, 206	270-0015	..... 303	276-0746	..... 381	279-1222	..... 466
267-4660	..... 175, 197, 206, 212	270-0344	..... 299	276-0747	..... 381	279-3825	..... 234
267-6785	..... 263	270-0578	..... 455	276-0748	..... 380	279-4495	..... 267
267-8909	..... 140	270-0580	..... 455	276-0749	..... 380	279-4506	..... 267
268-1504	..... 321	270-1528	..... 393	276-0750	..... 380	279-5671	..... 148
268-1506	..... 227	270-1533	..... 394	276-0751	..... 380	279-8312	..... 226
268-1515	..... 326	270-1535	..... 395	276-0752	..... 380	279-8487	..... 233
268-1520	..... 239	270-1537	..... 395	276-0753	..... 380	279-8488	..... 234
268-1524	..... 284	270-1539	..... 396	276-0754	..... 380	279-8489	..... 233
268-1526	..... 299	270-1540	..... 396	276-0755	..... 380	279-8491	..... 233
268-1530	..... 310	270-1545	..... 397	276-0756	..... 380	279-8657	..... 233
268-1536	..... 267	270-6767	..... 140	276-0757	..... 380	279-8658	..... 233
268-1547	..... 222	270-6959	..... 350	276-0758	..... 381	280-7182	..... 260
268-1549	..... 252	270-9321	..... 133, 136	276-0759	..... 381	281-5830	..... 349
268-1550	..... 309	271-0109	..... 362	276-0760	..... 381	281-5832	..... 270
268-1552	..... 300	271-0110	..... 362	276-0761	..... 381	281-5837	..... 285
268-1554	..... 229	271-0459	..... 397	276-0762	..... 381	281-5838	..... 283
268-1557	..... 233	271-0460	..... 398	276-3503	..... 263	281-5842	..... 255
268-1562	..... 333	271-5304	..... 303	276-5542	..... 285	281-5849	..... 344
268-1565	..... 311	271-5882	..... 281	276-9576	..... 393–394	281-5850	..... 269
268-1573	..... 319	271-6284	..... 252	276-9578	..... 395–398	281-5860	..... 351
268-1589	..... 282	271-9625	..... 281	277-1144	..... 310	281-5863	..... 286
268-1591	..... 307	271-9714	..... 235	277-2051	..... 160	281-5871	..... 238
268-1599	..... 332	271-9806	..... 235	277-2091	..... 171, 202	281-5873	..... 229
268-1610	..... 319	271-9813	..... 281	277-2093	..... 134	281-5876	..... 322
268-1623	..... 275	271-9881	..... 234	277-4567	..... 226	281-5878	..... 227
268-1625	..... 324	271-9882	..... 234	278-1172	..... 263	281-5883	..... 229
268-1625	..... 324	271-9902	..... 281	278-1173	..... 263	281-5890	..... 257
268-1625	..... 324	271-9903	..... 281	278-1174	..... 263	281-5892	..... 285
268-1638	..... 322	271-9904	..... 361	278-1175	..... 263	281-5893	..... 337
268-1640	..... 225	272-2687	..... 265	278-1176	..... 263	281-5894	..... 345
268-1642	..... 227	273-1716	..... 171, 195, 202, 210	278-1178	..... 263	281-5911	..... 224
				278-1541	..... 362	281-5916	..... 307

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
281-5958	229	289-2400	274	297-7941	305	2N-3599	350
281-5960	260	289-7249	303	297-7947	232	2N-7308	271
281-5970	320	291-2325	253	297-7951	328	2N-8037	286
281-7821	243	291-4211	353	297-7960	287	2N-8142	344
281-9332	157	291-8144	389	297-7964	251	2P-0922	96
281-9333	157	291-8145	389	297-7972	325	2P-0924	96
281-9339	156	291-8174	389	297-7987	316	2P-0988	95
281-9340	156	291-8177	389	297-8066	266	2P-0991	95
281-9341	156	291-8178	389	298-0890	320	2P-0995	95
281-9342	156	292-3621	265	298-4919	325	2P-1276	255
282-0913	342	292-3623	265	298-6824	226	2P-1278	255
282-5642	225	292-3624	265	2B-0858	378	2P-1279	371
282-7858	294	292-4393	140	2B-3470	262	2P-1280	371
283-6478	240	292-7430	302	2B-7408	378	2P-1281	255
283-7206	241	293-0789	298	2B-7409	378	2P-1282	255
283-9579	341	293-1934	233	2B-7457	378	2P-1283	255
284-3468	245	293-2193	172, 203	2D-0058	271	2P-1284	255
285-2664	310	293-2252	298	2D-0193	271	2P-1285	255
285-5729	240	293-4616	x	2D-1683	293	2P-1286	371
285-9615	225	293-4617	x	2D-4080	289	2P-1291	344
286-5030	288	293-4618	x	2D-7325	349	2P-1292	241
286-6395	226	293-4619	x	2D-8910	291	2P-1297	343
286-6469	303	293-5203	298	2D-8912	294	2P-1298	343
287-1876	280	293-5204	298	2F-3360	269	2P-1306	350
287-6901	264	293-5833	298	2F-5277	269	2P-1308	371
287-7242	252	293-5851	330	2H-1880	262	2P-1311	283
287-7244	252	293-5883	233	2H-3938	290	2P-1312	283
287-7250	362	293-7209	323	2H-3939	291	2P-1313	90
287-7251	321	293-7312	298	2H-3940	291	2P-1314	241
287-7257	316	293-8491	330	2H-9091	271	2P-1315	97
287-7261	320	294-4209	320	2J-2668	379	2P-1325	283
287-7264	324	294-4821	302	2J-4211	272	2P-1326	284
287-7268	225	294-8226	267	2J-5608	379	2P-1409	96
287-7272	259	294-8409	325	2L-0042	269	2P-1411	96
287-7278	368	294-9065	389	2L-0332	350	2P-1415	71
287-7281	229	294-9072	390	2L-2811	265	2P-1416	71
287-7286	294	294-9075	390	2L-2813	290	2P-1418	73
287-7287	351	295-1698	359	2L-3331	271	2P-1420	73
287-7302	362	295-4101	296	2L-3622	294	2P-1422	72
287-7308	319	295-4107	300	2L-3623	350	2P-1424	71
287-7324	324	296-5724	320	2L-6094	309	2P-1801	90
287-7326	319	296-5728	231	2L-7070	291	2P-2061	242
287-7328	303	296-6939	332	2L-8228	291	2P-2204	284
287-7330	303	296-9364	259	2M-5762	405	2P-2206	255
287-7332	223	297-2798	ix	2M-9780	376-377, 389, 393	2P-2523	97
287-7336	364	297-3301	234			2P-2675	93
287-7338	271	297-4690	307	2N-0853	264	2P-4813	92
287-7339	299	297-6678	225	2N-1287	286	2P-6704	93
287-7342	333	297-6716	322	2N-1288	283	2P-6728	71
287-7440	279	297-7704	244	2N-1931	289	2P-6729	71
287-8089	254	297-7916	306	2N-2011	271	2P-6730	72
288-0267	302	297-7920	327	2N-2012	266	2P-6731	73
288-7466	251	297-7929	321	2N-2472	265	2P-6732	73
288-7467	333	297-7932	362	2N-3378	287	2P-6733	71
288-7848	335	297-7935	270	2N-3542	290	2P-7211	337
288-9733	223	297-7936	324	2N-3543	289	2P-7213	344

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
2P-7214.....	307	2Y-6461.....	379	304-7986.....	229	310-5249.....	141
2P-7215.....	284	2Y-6462.....	379	304-8001.....	231	310-5888.....	229
2P-7216.....	284	2Y-9121.....	315	304-8007.....	342	310-5889.....	227
2P-7636.....	241	2Y-9402.....	314	304-8014.....	258	310-5893.....	251
2P-8098.....	337	300-8844.....	343	304-8022.....	333	310-5897.....	246
2P-8130.....	345	300-9696.....	306	304-8025.....	326	310-5898.....	239
2P-8148.....	371	300-9707.....	287	304-8027.....	237	310-5899.....	297
2P-8355.....	93	301-1638.....	139	304-8033.....	298	310-5902.....	324
2P-8421.....	238	301-2748.....	244	304-8040.....	298	310-5904.....	310
2P-8430.....	242	301-2866.....	224	304-8042.....	259	310-5909.....	333
2P-8447.....	344	302-3210.....	321	304-8043.....	232	310-6636.....	ix
2P-8511.....	287	302-4255.....	362	304-8047.....	231	310-6637.....	ix
2P-9376.....	344	302-5217.....	137	305-0588.....	239	310-6638.....	ix
2P-9697.....	376	302-5219.....	137	305-0837.....	285	310-6639.....	ix
2P-9921.....	99	302-5220.....	137	305-2221.....	310	310-6640.....	ix
2P-9923.....	93	302-5221.....	137	305-3383.....	276	310-6641.....	ix
2Q-0392.....	282	302-5222.....	141	305-6926.....	321	311-8082.....	243
2Q-0584.....	x	302-5224.....	141	305-6991.....	305	312-6065.....	419
2Q-0604.....	x	302-5227.....	138	305-8354.....	245	313-1681.....	293
2Q-2153.....	x	302-5233.....	139	306-2741.....	136	313-2868.....	282
2R-1576.....	268	302-5234.....	139	306-8016.....	195	313-3471.....	333
2R-1922.....	271	302-5237.....	140	306-9190.....	295	313-3473.....	332
2R-3538.....	264	302-5238.....	140	306-9404.....	252	313-3476.....	318
2R-5657.....	378	302-5239.....	140	307-3344.....	324	313-3479.....	298
2R-6276.....	242	302-5240.....	146	307-4919.....	226	313-3483.....	326
2R-6806.....	241	302-5243.....	152	307-5098.....	324	313-3486.....	226
2S-2251.....	394	302-5244.....	153	307-5130.....	226	313-3487.....	243
2S-4078.....	376-377, 389, 393	302-5250.....	144	307-8246.....	198, 207	313-3493.....	287
		302-5260.....	143	307-8256.....	171, 195, 210	313-3497.....	309
2S-7905.....	377	302-5285.....	159	307-8260.....	171, 202	313-3500.....	332
2S-9222.....	264	302-5286.....	134	307-8261.....	171, 202	314-2490.....	240
2T-1922.....	300	302-5287.....	134	307-8262.....	171, 202	314-5071.....	358
2T-1925.....	300	302-5288.....	135	307-8263.....	171, 195, 202	314-9603.....	263
2T-2169.....	293	302-5289.....	135	307-8264.....	171, 202	315-3715.....	242
2T-2171.....	296	302-5290.....	135	307-8266.....	171, 202	315-5729.....	224
2T-2305.....	300	302-5292.....	136	307-8267.....	171, 202	315-8399.....	265
2T-2396.....	300	302-5293.....	136	307-8268.....	171, 202	315-8412.....	264
2T-2416.....	231	302-5294.....	136	307-8271.....	172, 203	315-9822.....	327
2T-2475.....	309	302-5295.....	133	307-8272.....	172, 203	315-9825.....	245
2T-2703.....	239	302-5296.....	133	307-8273.....	172, 203	315-9830.....	328
2T-2991.....	226	302-5298.....	135	307-8274.....	172, 203	315-9831.....	288
2T-3000.....	402	302-8133.....	257	307-9062.....	325	315-9833.....	231
2T-3001.....	402	302-8496.....	271	307-9782.....	229	315-9838.....	322
2U-0708.....	258	302-8832.....	226	308-3959.....	320	315-9847.....	324
2U-0943.....	285	303-3092.....	ix	308-7530.....	ix	315-9856.....	312
2U-4132.....	286	303-3093.....	ix	308-7531.....	ix	315-9863.....	316
2U-4291.....	291	303-5020.....	297	308-8524.....	458	315-9865.....	306
2U-4299.....	276	303-5457.....	226	308-9568.....	327	316-2517.....	390
2U-6193.....	227	303-9532.....	269	309-0723.....	249	316-3035.....	145
2U-6317.....	310	304-6749.....	331	309-0912.....	269	316-3036.....	143
2U-8951.....	248	304-7193.....	330	309-5126.....	333	316-8399.....	350
2V-2043.....	371	304-7194.....	298	309-5140.....	362	317-2446.....	320
2V-9121.....	276	304-7960.....	321	309-5146.....	239	317-7214.....	280
2W-7672.....	237	304-7975.....	223	309-6969.....	144	317-8509.....	249
2W-8721.....	264	304-7980.....	328	309-6970.....	145	317-8510.....	277
2Y-5841.....	379	304-7983.....	327	310-4012.....	341	317-9664.....	240

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
319-6182	331	320-1776	189	320-1898	190	323-6184	53, 111
319-6184	331	320-1777	189	320-1899	190	323-6185	53, 111
319-6188	362	320-1778	193	320-1901	190	323-6187	53, 111
319-6189	240	320-1779	193	320-1903	190	323-6188	53, 111
319-6190	319	320-1780	187	320-1904	190	323-6189	54, 112
319-6192	366	320-1781	187	320-1905	190	323-6190	112
319-6193	294	320-1782	187	320-1910	192	323-6191	54, 112
319-6195	294	320-1783	187	320-1985	188	323-6192	112
319-6196	351	320-1784	188	320-1989	190	323-6193	54, 112
319-6198	324	320-1785	188	320-1990	190	323-6194	54, 112
319-6200	324	320-1786	187	320-5390	243	323-6195	112
319-6203	322	320-1787	188	320-5415	333	323-6196	54
319-9173	349	320-1788	187	321-0236	236	323-6197	112
319-9224	252	320-1789	188	321-4562	224	323-6198	54, 112
320-1720	188	320-1790	191	321-6388	139	323-6199	54, 112
320-1721	188	320-1791	191	321-8611	329	323-6200	54, 112
320-1722	189	320-1792	191	321-8621	328	323-6208	55, 113
320-1723	189	320-1793	191	321-8622	322	323-6209	55, 113
320-1724	189	320-1794	191	321-8625	362	323-6210	55, 113
320-1725	189	320-1795	191	321-8626	254	323-6212	63, 113
320-1726	188	320-1796	191	321-8627	254	323-6214	48, 104
320-1727	188	320-1797	191	321-8628	287	323-6215	49, 105
320-1728	188	320-1798	192	321-8661	303	323-6216	50, 107
320-1729	188	320-1799	191	321-8664	262	323-6217	50, 107
320-1730	188	320-1800	191	322-0113	140, 160	323-6218	51, 109
320-1741	193	320-1804	191	322-3504	229	323-6220	52, 109
320-1742	193	320-1806	189	323-1343	286	323-6221	65, 85, 119
320-1743	191	320-1812	189	323-2203	308	323-6223	65, 85, 119
320-1744	191	320-1813	193	323-4809	298	323-6224	65, 85, 120
320-1745	191	320-1814	193	323-5953	222	323-6225	65, 86, 120
320-1746	191	320-1816	191	323-6156	45, 102	323-6228	118
320-1747	191	320-1824	188	323-6157	45, 102	323-6229	118
320-1748	192	320-1826	188	323-6158	45, 102	323-6232	61, 117
320-1749	189	320-1827	192	323-6159	45, 102	323-6233	61, 117
320-1750	189	320-1828	192	323-6160	46, 103	323-6236	62
320-1751	189	320-1832	190	323-6161	46, 103	323-6237	62
320-1752	189	320-1833	190	323-6162	46, 103	323-9993	231
320-1753	189	320-1834	189	323-6163	46, 103	324-6241	238
320-1754	188	320-1835	192	323-6164	47, 103	324-9702	415
320-1755	188	320-1836	192	323-6165	47, 103	324-9703	415
320-1756	189	320-1837	190	323-6166	47, 103	324-9704	415
320-1757	189	320-1841	190	323-6167	47, 103	324-9706	416
320-1758	189	320-1842	192	323-6168	47, 103	324-9707	x
320-1759	189	320-1845	189	323-6169	47, 103	324-9708	x, 417
320-1760	188	320-1847	190	323-6170	47, 103	324-9781	335
320-1761	188	320-1852	187	323-6171	47, 103	325-5733	140
320-1762	188	320-1856	192	323-6172	47, 103	325-9779	246
320-1765	189	320-1866	190	323-6173	45, 102	326-0296	251
320-1766	189	320-1867	193	323-6174	44, 101	326-0300	362
320-1768	188	320-1876	189	323-6175	44, 101	326-0302	318
320-1769	189	320-1879	192	323-6176	44, 101	326-0306	225
320-1771	189	320-1880	188	323-6177	44, 101	326-0308	237
320-1772	189	320-1886	190	323-6180	52	326-0313	238
320-1773	189	320-1890	190	323-6181	52, 110	326-3563	417
320-1774	189	320-1895	192	323-6182	52, 110	326-3565	415
320-1775	189	320-1897	191	323-6183	53, 111	326-3566	415-416

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
326-3567	416	328-9130	53, 111	330-2175	238	341-0076	228
326-3568	416-417	328-9133	55, 113	330-2595	355	341-0082	290
326-3569	417	328-9134	55, 113	330-2610	311	341-0083	237
326-3570	417	328-9135	55, 113	330-3951	425-426, 429-430, 432-434, 438-440	341-0091	251
326-4139	280	328-9136	63, 113	330-9591	304	341-0098	306
326-4140	272	328-9137	48, 104	330-9736	259	341-0101	302
326-9452	267	328-9138	48, 104	330-9739	240	341-0103	238
327-4383	311	328-9139	48, 76, 105	331-1137	240	341-0105	335
327-8578	268	328-9140	48, 76, 105	331-3273	44, 101	341-0107	310
328-2915	ix	328-9141	48, 105	331-3274	44, 101	341-0112	295
328-2916	ix	328-9142	48, 105	331-6108	362	341-0117	229
328-2917	ix	328-9143	49, 105	332-1650	60, 115	341-0119	320
328-2918	ix	328-9144	49, 105	332-8545	227	341-3168	349
328-2919	ix	328-9145	49, 105	332-8546	312	342-3830	236
328-2920	ix	328-9146	49, 105	332-8553	275	342-8379	229
328-2921	ix	328-9147	49, 106	332-8560	271	342-9073	261
328-2922	ix	328-9148	49, 106	332-8563	314	343-4581	261
328-7438	351	328-9149	49, 106	332-8564	293	344-2353	134
328-9089	45, 102	328-9150	49, 106	332-8565	291	344-3893	279
328-9090	45, 102	328-9151	49, 106	332-8566	291	344-3894	279
328-9091	45, 102	328-9152	50, 107	332-8567	268	345-1321	263
328-9092	45, 102	328-9153	50, 107	332-8571	324	345-3907	224
328-9093	46, 103	328-9154	50, 107	333-9956	44, 101	345-3909	316
328-9094	46, 103	328-9155	50, 107	333-9957	52, 110	345-3911	303
328-9095	46, 103	328-9156	50, 107	333-9958	54, 112	345-3914	298
328-9096	46, 103	328-9157	50, 108	333-9959	58, 114	345-3921	243
328-9097	47, 103	328-9158	51, 108	334-1017	362	345-3923	251
328-9098	47, 103	328-9161	51, 109	334-1455	140	345-4554	190
328-9099	47, 103	328-9162	51, 109	334-3786	140	345-4555	190
328-9100	47, 103	328-9163	51, 109	334-5077	233	345-9879	276
328-9101	47, 103	328-9164	52, 109	335-3999	240	345-9880	293
328-9102	47, 103	328-9165	55, 113	335-4003	306	346-8791	326
328-9103	47, 103	328-9166	58, 114	335-4006	306	347-4401	295
328-9104	47, 103	328-9167	60, 114	336-6905	271	347-4403	307
328-9105	47, 103	328-9169	60, 115	336-6906	271	347-4407	227
328-9106	47, 103	328-9170	61, 115	336-7548	274	347-4411	231
328-9107	45, 102	328-9171	65, 119	337-1177	303	347-4415	299
328-9108	44, 101	328-9172	65, 120	337-6501	275	347-4416	275
328-9109	52, 110	328-9173	65, 120	337-8766	251	347-4425	226
328-9110	52	328-9175	118	337-8768	326	347-4434	316
328-9111	52, 110	328-9176	118	337-8772	223	347-4436	316
328-9112	52, 110	328-9179	61, 117	337-8776	310	347-4440	251
328-9113	53, 111	328-9181	62	337-8781	222	347-4444	276
328-9115	53, 111	328-9183	60, 115	337-8782	342	347-4445	240
328-9117	53, 111	328-9184	60, 115	337-8783	227	347-7623	251
328-9118	53, 111	328-9185	60, 115	337-8788	306	347-9724	57
328-9119	54, 112	329-0667	268	338-0618	267	347-9725	59
328-9120	54, 112	329-5462	227	338-1295	225	348-4996	303
328-9121	54, 112	329-5463	280	338-1539	257	348-8539	274
328-9122	54, 112	329-5549	232	338-5995	327	349-0734	366
328-9123	54, 112	329-7308	173, 204	338-6237	303	349-6234	ix
328-9124	54, 112	329-9930	ix	339-0546	235	351-0284	327
328-9125	54, 112	329-9931	ix	340-2435	258	351-0287	362
328-9126	112	329-9932	ix	340-4857	187	351-1372	336
328-9128	54, 112	329-9933	ix			351-5211	298
328-9129	54, 112	329-9934	ix			351-5212	341

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
351-5216	234	360-3677	376	367-5980	277	371-8096	217
351-5217	299	360-3678	376	367-5995	237	371-8113	217
351-5225	233	360-3679	376	367-5998	232	371-8115	217
351-5226	330	360-3680	376	367-6009	256	371-8119	217
351-5230	234	360-3681	376	367-6013	231	371-8121	217
351-5232	234	360-3682	376	367-6015	342	371-8122	217
351-5235	298	360-3683	376	367-6024	288	371-8124	217
351-5237	331	360-3684	376	368-0370	237	371-8125	217
351-5238	299	360-3685	376	368-1126	233	371-8946	217
351-5239	299	360-3686	376	368-1202	233	371-8947	217
352-2775	268	360-3687	376	368-5219	275	371-8948	217
352-6489	361	360-3688	376	368-8109	190	371-8949	217
352-6507	276	360-3689	376	369-6812	240	371-8950	217
352-6508	275	360-3690	376	369-6819	229	371-8951	217
353-4662	224	360-3691	376	369-6822	299	371-8952	218
353-5118	241	360-3692	376	369-6826	342	371-8953	218
353-5120	236	360-3693	376	369-6831	303	371-8954	218
353-5440	245	360-3694	376	369-6833	332	371-8955	218
353-5488	134	360-3695	376	369-6865	282	372-1092	253
355-7416	254	360-3696	376	369-6867	241	373-1776	277
355-9605	253	360-3697	376	369-6869	333	373-5665	289
356-9220	324	360-3698	376	369-6870	297	373-5666	289
357-4579	251	360-3699	376	369-6873	255	373-5676	360
358-3490	301	360-3700	376	369-6887	340	373-5753	277
358-4530	472	360-8788	238	369-6890	332	373-6667	298
358-4532	472	360-8789	238	369-6893	231	373-6668	234
358-4533	472	360-8790	238	369-6895	233	375-7722	281
358-4536	426, 430, 438-439	361-4991	318	369-6897	324	376-2093	235
		361-4992	300	369-6899	224	376-5361	193
358-4537	426, 430, 438-439	362-1142	245	370-3474	234	376-7314	310
		362-1436	280	370-3480	331	376-7350	250
358-4538	426, 430, 438-439	364-1216	189	371-1253	219	377-9550	236
		364-1219	189	371-1254	219	377-9563	300
358-4539	426, 430, 438-439	364-2513	255	371-7155	303	377-9577	300
		364-3072	223	371-7159	272	377-9582	293
358-4544	426, 430, 439	364-7708	364	371-7160	285	377-9590	233
358-4545	428, 430, 434, 439-440	364-9621	241	371-7164	321	377-9591	233
		364-9625	307	371-7166	316	377-9592	233
358-4560	425, 429, 432	364-9627	307	371-7168	351	377-9597	233
358-4561	425, 429, 432	364-9629	241	371-7193	224	377-9598	233
358-4562	425, 429, 432	364-9631	307	371-7195	235	377-9599	223
358-4563	425, 429, 433	365-0588	232	371-7199	240	377-9605	251
358-4564	425, 429, 433	365-0593	306	371-7205	295	377-9624	320
358-4565	429, 433	365-0600	224	371-7207	234	377-9635	259
358-4566	429, 433	365-0682	231	371-7210	223	377-9637	259
358-4567	429, 433	365-5036	259	371-7217	241	379-0633	282
358-4568	429, 433	365-5040	260	371-7221	236	379-1119	265
358-9008	190	366-4664	232	371-7226	237	379-2201	280
360-2358	240	366-4683	240	371-7228	319	379-2202	280
360-2602	120	366-4690	314	371-7230	326	379-4368	314
360-2603	120	366-6521	ix	371-7232	285	379-4369	251
360-2605	120	366-6522	ix	371-7239	299	379-4370	306
360-2606	120	366-6523	ix	371-7242	310	379-4371	306
360-3659	329	366-6524	ix	371-7247	232	379-4372	300
360-3675	376	366-6525	ix	371-7248	319	379-4412	306
360-3676	376	366-6526	ix	371-8094	217	379-5245	279

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
379-6986	319	392-4054	248	397-1948	.55, 113	3B-7280	263
380-6163	275	393-5940	362	397-1949	.51, 109	3B-7282	262
380-6685	240	393-7327	282	397-1951	.52	3B-7283	262
380-7362	333	393-8331	262	397-1952	.51, 109	3B-7284	263
381-2820	253	395-1239	289	397-1953	.51, 109	3B-7285	262
381-8327	228	395-5136	244	397-1954	.52	3B-7286	265
381-8328	228	395-5438	299	397-1955	.58, 114	3B-7296	265
382-6279	277	395-5439	299	397-1960	65, 85, 119	3B-7384	268
382-6296	277	395-7291	333	397-1961	.65, 119	3B-7721	270
383-5686	306	395-7292	244	397-1962	.61, 117	3B-7722	270
384-0385	134	395-8602	224	397-1964	.62	3B-7724	269
384-0386	136	395-8615	246	397-1965	.61	3B-7728	290
384-0387	136	395-8644	239	397-1968	120	3B-7729	294
384-0388	136	395-8670	223	397-2476	292	3B-7730	289
384-0389	135	395-8699	233	397-2600	277	3B-7731	289
384-0397	411	395-8726	233	397-9733	226	3B-7733	262
384-2368	279	395-8728	246	397-9744	299	3B-7734	262
384-2374	279	395-8763	233	397-1966	.60, 114	3B-7736	262
384-2416	289	395-8824	228	397-1967	61, 63, 115,	3B-7738	262
384-2496	359	395-8958	228		117	3B-7739	266
384-4127	413, 467	395-8959	228	398-5617	364	3B-7740	262
384-4128	413, 467	395-9487	232	398-5630	299	3B-7741	262
384-4129	413, 467	395-9716	239	398-5646	232	3B-7742	262
384-9230	300	396-0385	224	399-9673	362	3B-7743	262
385-0183	287	396-0392	233	3B-0551	378	3B-7745	263
385-1392	411	396-0398	223	3B-6493	290	3B-7747	268
385-1393	411	396-0400	304	3B-6494	294	3B-7749	264
385-5269	189	396-0409	282	3B-6495	294	3B-7750	264
385-5781	259	396-0420	333	3B-6496	294	3B-7762	350
385-5785	254	396-5275	234	3B-6497	290	3B-7764	268
385-5788	258	396-6328	274	3B-6498	295	3B-7767	265
385-5789	351	396-6376	268	3B-6499	294	3B-7770	266
385-5790	366	396-6382	274	3B-6552	293	3B-7771	266
386-0623	277	397-0822	308	3B-6553	292	3B-7773	266
386-0825	361	397-1010	282	3B-6554	292	3B-7866	263
386-6194	306	397-1099	266	3B-6555	292	3B-7881	266
386-6198	259	397-1924	45, 102	3B-6556	292	3B-7894	266
386-6202	314	397-1926	45, 102	3B-6767	295	3B-7900	350
386-6204	236	397-1927	46, 103	3B-6768	268	3B-8822	293
386-6205	227	397-1928	46, 103	3B-6769	295	3B-9110	272
386-6207	228	397-1929	47, 103	3B-6773	292	3B-9111	315
386-6209	364	397-1930	47, 103	3B-7254	269	3B-9395	278
386-6212	233	397-1931	47, 103	3B-7255	270	3B-9397	356
386-6223	306	397-1932	47, 103	3B-7257	270	3B-9400	272
386-6226	232	397-1933	44, 101	3B-7261	262	3B-9401	272
386-6237	266	397-1934	44, 101	3B-7262	262	3B-9403	272
387-2637	336	397-1935	44, 101	3B-7263	267	3B-9404	272
387-2727	312	397-1936	44, 101	3B-7265	263	3B-9406	315
387-4391	366	397-1937	45, 102	3B-7267	263	3B-9407	315
388-8897	134	397-1938	47, 103	3B-7270	263	3B-9408	315
389-3683	240	397-1940	52, 110	3B-7271	266	3B-9409	315
389-3736	267	397-1941	53, 111	3B-7272	263	3C-3793	243
390-2263	334	397-1942	54, 112	3B-7273	262	3D-2186	290
391-4604	345	397-1943	52, 110	3B-7274	266	3D-2187	289
392-0660	336	397-1944	54, 112	3B-7275	262	3D-2189	264
392-0786	237	397-1947	55, 113	3B-7276	266	3D-2675	273

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
3D-2824	376-377, 389, 393	3J-7354	376-377, 389, 393	3S-6115	354	419-5087	362
3D-4022	366	3J-7355	255	3S-8496	90	419-5988	253
3D-8884	293	3J-7706	290	3S-8497	91	419-7158	297
3D-8911	271	3K-0360	376-377, 389, 393	3S-8498	91	420-1548	272
3D-8913	291	3K-3415	315	3S-8499	91	420-1549	355
3D-9253	272	3K-3982	313	3S-8501	92	420-7636	362
3E-2303	267	3K-7928	314	3S-8502	92	420-7641	235
3E-2310	326	3K-8460	377	3S-8503	92	420-7644	320
3E-2315	267	3L-1258	268	3S-8567	90	420-7645	319
3E-2322	237	3L-1337	315	3S-8568	91	421-1018	252
3E-2332	309	3L-1850	378	3S-8569	91	421-1679	234
3E-2333	302	3L-3358	350	3S-8570	91	421-2653	428-430, 432-434, 440
3E-2344	365	3L-3869	271	3S-8571	92	421-2654	426, 430, 434, 439-440
3E-2345	327	3L-3870	183	3S-8572	92	421-5680	306
3E-4014	169	3L-6521	349	3S-8573	92	421-6167	300
3E-4015	169	3L-7024	292	3S-8666	314	421-6169	369
3E-4016	169	3L-7055	271	3S-8684	273	421-6170	369
3E-4017	169	3L-8992	264	3S-9175	314	421-6171	369
3E-4018	169	3L-8993	264	3S-9327	91	421-6171	369
3E-4041	306	3L-9071	294	3S-9328	91	421-6176	298
3E-4062	411	3L-9762	182	3S-9329	91	421-6176	228
3E-4070	411	3M-7045	377	3S-9330	92	421-6177	282
3E-4071	411	3N-1294	307	3S-9331	92	421-6178	266
3E-4091	306	3N-3894	263	3S-9332	93	421-6187	282
3E-4288	391	3N-7078	243	3T-0811	244	421-6188	282
3E-4289	391	3N-7600	266	3T-2167	245	421-6203	351
3E-4298	391	3N-7602	294	3T-4965	238	422-3520	366
3E-5276	236	3N-8278	243	3T-9549	239	422-7026	250
3E-6703	390	3N-8667	265	3V-5642	405	422-8808	328
3E-6761	391	3N-8672	265	3V-7750	239	422-8812	319
3E-6822	70	3N-8673	265	3Y-2888	244	423-1969	viii
3E-6831	110	3N-8699	269	415-2241	253	423-1970	viii
3E-6868	96	3N-9383	264	415-4641	279	423-1971	viii
3E-7403	223	3N-9409	269	415-7243	350	423-1972	viii
3E-7407	319	3P-0421	93	415-7244	267	423-1973	ix
3E-7410	333	3P-0422	93	416-2091	65, 120	423-1974	ix
3E-7420	225	3P-0440	242	416-2093	65, 86, 120	423-1975	ix
3E-7426	301	3P-0644	97	416-2095	63, 113	423-1976	ix
3E-7432	302	3P-0645	97	416-6022	306	423-1977	ix
3E-7433	303	3P-0764	244	416-6391	430, 439	423-1978	ix
3E-7437	252	3P-1823	269	416-6395	430, 439	423-1979	vii
3E-7443	319	3P-1932	237	416-6396	430, 434, 439-440	423-1980	vii
3E-7449	296	3P-2021	263	416-6401	430, 439	423-1981	viii
3F-1783	294	3P-2298	307	416-6402	430, 439	423-1982	viii
3F-8431	263	3Q-1249	261	416-6403	430, 439	423-1983	viii
3G-6927	236	3R-2704	255	416-6415	229	423-1984	viii
3G-7409	241	3R-2705	255	416-2094	60, 114	423-1985	viii
3G-8047	408	3R-3976	284	417-2760	312	423-1986	viii
3H-0120	293	3R-4437	371	417-3724	311	423-3131	321
3H-2891	350	3R-6789	385	417-7778	232	423-4361	424, 472
3H-9690	291	3R-6790	242	418-4430	224	423-4364	426, 439
3J-1907	376-377, 389, 393	3R-7117	244	418-4454	224	423-4365	425
3J-5390	377	3R-9595	264	418-5064	248	423-4366	425
3J-7352	241	3R-9704	285	418-6463	216	423-4367	424-426, 439
				419-4168	269	423-4373	426, 430, 438-440

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
423-5071	104	426-4124	254	432-2072	48, 105	432-3697	269
423-5073	104	426-4129	278	432-2073	49, 76, 105	432-3802	270
423-5074	105	426-4148	285	432-2074	49, 77, 106	432-5415	270
423-5075	105	426-4163	256	432-2075	49, 106	432-7499	276
423-5076	105	426-4165	233	432-2076	50, 78, 107	432-9432	299
423-5080	105	426-4169	259	432-2077	50, 78, 107	432-9445	299
423-5083	105	426-4171	259	432-2078	50, 78, 107	432-9579	299
423-5084	106	426-4173	259	432-2080	50, 108	432-9698	269
423-5085	106	426-4174	285	432-2081	51, 108	432-9956	269
423-5086	106	427-0079	267	432-2083	48, 76, 104	432-9983	235
423-5087	106	427-0090	268	432-2084	48, 76, 105	433-2445	303
423-5089	107	428-8455	269	432-2085	48, 105	433-4841	252
423-5092	107	430-9586	246	432-2086	49, 76, 105	434-3694	264
423-5097	141	431-6073	268	432-2087	49, 77, 106	434-3695	366
423-5099	102	431-8064	231	432-2088	49, 106	434-5383	299
423-5100	103	431-8071	231	432-2089	50, 78, 107	434-5384	299
423-5101	104	431-9023	117	432-2090	50, 78, 107	434-5512	283
423-5102	104	431-9024	62	432-2092	51, 108	434-5513	228
423-5103	110	431-9025	152	432-2093	48, 76, 104	434-5516	223
423-5109	113	431-9026	153	432-2094	49, 106	434-5532	243
423-5115	109	432-2008	45, 75, 102	432-2095	50, 78, 107	434-5564	270
423-6878	254	432-2010	45, 102	432-2099	51, 78, 109	434-5628	268
423-8180	237	432-2011	45, 102	432-2100	51, 79, 109	434-5629	268
423-5168	117	432-2012	45, 102	432-2101	52, 79, 109	434-5630	267
424-1400	425	432-2013	46, 75, 103	432-2102	51, 79, 109	434-5631	267
424-1401	425	432-2014	46, 75, 103	432-2103	52, 79, 109	434-5648	283
424-1402	425	432-2015	47, 75, 104	432-2105	55, 80, 113	435-0432	180
424-1872	274	432-2016	47, 75, 104	432-2106	56	435-9922	196
424-1873	274	432-2017	47, 75, 104	432-2107	56, 80	438-5043	251
424-8479	304	432-2018	47, 75, 104	432-2108	57, 80	438-6498	410
424-8759	267	432-2019	45, 75, 102	432-2109	57, 81	439-0448	299
425-2047	275	432-2020	46, 75, 103	432-2110	57	439-0804	98
425-2389	430, 440	432-2021	47, 75, 104	432-2111	58, 81, 114	439-1734	229
426-4016	369	432-2022	45, 75, 102	432-2112	58, 81, 114	439-1811	284
426-4017	369	432-2023	46, 75, 103	432-2113	58, 81, 114	439-1816	254
426-4018	251	432-2024	47, 75, 104	432-2114	58, 81, 114	439-1818	302
426-4036	299	432-2025	44, 101	432-2116	55, 80, 113	439-1820	319
426-4042	369	432-2026	44, 101	432-2117	56	439-1857	321
426-4043	369	432-2028	52, 79, 110	432-2118	56, 80	439-1870	232
426-4044	369	432-2029	53, 111	432-2119	57, 80	439-1874	294
426-4045	369	432-2030	53, 111	432-2120	57, 81	439-1877	351
426-4046	369	432-2031	54, 112	432-2121	58, 81, 114	439-1897	256
426-4047	369	432-2032	54, 112	432-2122	58, 81, 114	439-1904	251
426-4048	369	432-2033	54, 112	432-2123	58, 81, 114	439-1938	237
426-4049	369	432-2034	54, 112	432-2124	55, 113	439-1940	269
426-4050	369	432-2035	52, 79, 110	432-2125	55, 113	439-1941	266
426-4057	296	432-2036	53, 111	432-2126	119	439-1943	266
426-4059	223	432-2037	54, 112	432-2127	120	439-1945	266
426-4082	224	432-2038	54, 112	432-2128	61, 117	439-1947	252
426-4083	303	432-2039	52, 79, 110	432-2129	61, 83, 117	439-1948	224
426-4086	309	432-2040	110	432-2130	62	439-1951	233
426-4094	318	432-2041	110	432-2131	120	439-1955	362
426-4096	232	432-2045	257	432-2132	120	439-1959	245
426-4098	322	432-2046	269	432-2135	60, 83, 115	439-1964	255
426-4101	240	432-2070	48, 76, 104	432-2139	118	439-1983	266
426-4120	265	432-2071	48, 76, 105	432-2141	63, 113	439-1984	254

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
439-5247	446	442-5587	57, 81	448-9022	232	453-6510	254
439-5248	446	442-5588	81	449-1438	223	453-6997	254
439-5446	260	442-5590	57	449-1449	303	453-9926	360
440-0637	253	442-5591	57	450-0487	334	454-2772	269
440-0640	253	442-5593	58, 81	450-0842	291	454-6180	137
440-2679	141	442-5594	58, 81	450-0847	266	454-6181	137
441-1584	287	442-5595	58, 81	450-0868	270	454-6182	138
441-1658	267	442-5596	58, 81	450-1577	414	454-6183	138
441-1680	267	442-5597	58, 81	450-1578	414	454-6184	139
441-1832	257	442-5599	45, 75	450-1579	414	454-6185	139
441-2009	257	442-5600	45	450-1580	414	454-6186	141
441-4276	324	442-5601	46, 75	450-1581	414	454-6187	141
442-0069	455	442-5602	47, 75	450-1582	414	454-6188	141
442-0070	455	442-5603	47, 75	450-1583	414	454-6189	141
442-0071	455	442-5607	52, 79	450-1584	414	454-6793	292
442-0072	455	442-5611	61	450-1585	415	455-4746	282
442-0073	455	442-5634	52, 79	450-1586	415	456-3393	55, 80
442-0074	455	442-5636	57, 80	450-1697	225	456-3394	56
442-0075	455	442-9593	235	450-2050	344	456-3395	57
442-0076	455	442-5560	77	450-2058	261	456-3396	57, 81
442-0077	454-455	442-5561	77	450-2063	256	456-3397	58
442-0078	454-455	443-2324	267	450-2508	286	456-7225	310
442-0493	227	444-4991	254	451-0349	342	456-8409	vii, 124
442-3310	231	444-5974	436	451-0356	316	456-8410	vii, 124
442-3311	296	445-2324	252	451-0357	233	456-8416	vii, 124
442-3312	296	445-2457	253	451-0358	233	456-8420	vii, 124
442-3356	235	445-8760	310	451-0371	285	456-8421	vii, 124
442-3362	299	445-9430	455	451-0388	316	456-8422	vii, 124
442-3414	348	445-9431	455	451-0396	326	456-8423	vii, 124
442-3417	236	445-9432	455	451-0398	275	456-8424	vii, 124
442-3486	250	445-9433	455	451-0413	318	456-8425	vii, 124
442-3488	250	445-9718	270	451-0415	301	456-8426	ix, 124
442-3539	269	445-9765	231	451-0417	239	456-8427	x, 124
442-5552	48, 76	447-1258	55, 80	451-0421	338	456-8428	x, 124
442-5553	48, 76	447-1259	56, 80	451-0425	333	456-8429	x, 124
442-5554	48, 76	447-1260	57, 80	451-0427	232	456-8430	x, 124
442-5558	49, 76	447-1261	58, 81	451-0431	322	456-8431	x, 124
442-5559	49, 76	447-1262	58, 81	451-0441	259	456-8432	vii, 126
442-5564	50, 78	447-4882	141	451-0449	298	456-8433	vii, 126
442-5565	50, 78	447-7148	250	451-0459	234	456-8434	vii, 126
442-5566	50, 78	447-7149	250	451-0469	342	456-8435	vii, 126
442-5570	50	447-7510	252	451-0470	251	456-8436	vii, 126
442-5572	51, 78	447-8023	224	451-0472	298	456-8437	vii, 126
442-5573	51, 78	447-8886	455	451-0477	319	456-8438	vii, 126
442-5574	51, 79	448-2121	285	451-0479	362	456-8439	vii, 126
442-5575	51, 79	448-5773	233	451-0488	285	456-8440	vii, 126
442-5577	52, 79	448-8976	306	451-0489	239	456-8441	vii, 126
442-5578	52, 79	448-8995	323	451-0493	235	456-8442	vii, 126
442-5579	55, 80	448-8999	252	451-0494	316	456-8443	ix, 126
442-5580	55, 80	448-9002	305	451-0496	222	456-8444	ix, 126
442-5581	56	448-9003	233	451-0503	252	456-8445	ix, 126
442-5582	56	448-9007	306	451-0505	246	456-8446	ix, 126
442-5583	56, 80	448-9008	238	451-1488	262	456-8447	ix, 126
442-5584	56, 80	448-9010	323	451-1764	228	456-8448	ix, 126
442-5585	57, 80	448-9011	333	451-1784	223	456-8449	ix, 127
442-5586	57, 80	448-9018	334	451-3900	291	456-8450	ix, 127

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
456-8451	ix, 127	456-8507	viii, 194	459-0630	302	468-1907	224
456-8452	ix, 127	456-8508	viii, 194	459-0646	229	468-7184	259
456-8453	ix, 127	456-8509	viii, 194	459-0661	322	468-7741	360
456-8454	ix, 127	456-8510	viii, 194	459-0662	235	468-7743	311
456-8455	ix, 127	456-8511	viii, 194	459-0663	342	468-9673	410
456-8456	ix, 127	456-8512	viii, 194	459-0666	235	468-9679	410
456-8457	viii, 129	456-8513	viii, 194	459-0671	228	468-9682	410
456-8458	viii, 129	456-8514	viii, 209	459-0698	312	468-9685	410
456-8459	viii, 129	456-8515	viii, 209	459-0700	327	468-9686	410
456-8460	viii, 129	456-8516	viii, 209	459-0732	256	468-9694	410
456-8461	viii, 129	456-8517	viii, 209	459-0734	362	468-9702	410
456-8462	viii, 129	456-8518	viii, 130	459-0769	222	468-9710	410
456-8463	viii, 129	456-8519	viii, 130	459-0776	223	469-0586	243
456-8464	viii, 129	456-8520	viii, 130	459-0782	300	469-2133	322
456-8465	x, 129	456-8521	viii, 130	459-2254	229	469-2134	321
456-8466	x, 87	456-8522	viii, 130	459-7074	229	469-7700	256
456-8467	x, 87	456-8523	viii, 130	459-0709	403-404	469-7753	268
456-8468	x, 87	456-8524	viii	459-0710	403-404	469-7754	268
456-8469	x, 87	456-8536	128	460-3311	413, 467	469-7755	268
456-8470	x, 87	456-8537	128	460-4091	255	469-7756	268
456-8471	x, 87	456-8538	ix, 125	460-9845	360	469-7760	267
456-8472	x, 87	456-8539	ix, 125	460-9846	360	469-7843	345
456-8473	x, 87	456-8540	ix, 125	461-2698	56	469-7854	268
456-8474	x, 87	456-8541	ix, 125	461-2699	57	469-8861	282
456-8475	x, 87	456-8542	ix, 125	462-4089	282	470-4025	256
456-8476	x, 87	456-8543	ix, 125	462-4090	282	470-4039	270
456-8477	x, 87	456-8555	131	462-4169	136	470-4054	268
456-8478	x, 87	456-8556	131	462-5664	430, 440	470-4422	286
456-8479	x, 87	456-8557	131	462-8844	412	470-4435	268
456-8480	x, 88	456-8558	131	462-8845	412	470-4436	268
456-8481	x, 88	456-8559	131	462-8846	412	470-9971	259
456-8482	viii, 67	456-8560	131	462-8847	412	471-0103	223
456-8483	viii, 67	456-8561	131	462-8848	412	471-1647	251
456-8484	viii, 67	456-8562	131	463-0977	55	471-3729	277
456-8485	viii, 67	456-8563	131	463-0979	58	471-4197	302
456-8486	viii, 67	456-8647	128	463-0980	59, 82	471-6416	60, 82, 115
456-8487	x, 67	456-8648	128	463-4908	280	471-6342	410
456-8488	x, 67	456-8649	128	463-9932	298	471-6343	410
456-8489	x, 67	456-8650	128	464-2018	303	472-4348	288
456-8490	x, 67	456-8651	128	464-3341	257	472-8939	315
456-8491	x, 38	456-8652	128	464-3819	297	472-8946	315
456-8492	x, 38	456-8660	ix, 217	464-4938	297	472-8951	315
456-8493	x, 38	457-2130	300	465-5420	286	472-8953	315
456-8494	x, 38	457-6033	426, 430, 438-440	465-6101	129, 219	472-8962	315
456-8495	x, 38			465-6102	129, 219	472-8989	314
456-8496	xi, 38	458-2356	327	465-6103	129, 219	473-6154	350
456-8497	xi, 38	458-2920	426, 439	465-9012	359	473-6155	350
456-8498	xi, 38	458-2921	426, 439	465-9014	280	473-9869	250
456-8499	xi, 38	459-0583	248	466-0748	438	474-1553	276
456-8500	xi, 38	459-0585	295	466-0750	438	474-2586	235
456-8501	xi, 38	459-0590	300	466-8401	vii	474-2593	234
456-8502	xi, 38	459-0596	306	467-0030	238	474-2595	316
456-8503	xi, 38	459-0602	344	467-0748	267	474-2598	306
456-8504	xi, 38	459-0606	288	467-0875	267	474-2601	356
456-8505	xi, 38	459-0608	365	467-6124	280	474-2603	250
456-8506	vii, 194	459-0628	272	468-1668	268	474-2604	343

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
474-2605	261	479-4180	166	481-5756	166	489-4875	269
474-2609	356	479-4181	166	481-5757	168	489-4877	223
474-2619	254	479-4182	166	481-5758	168	490-5452	320
474-2623	349	479-4183	166	481-8280	52, 79	490-8643	391
474-2625	340	479-4184	167	482-1480	277	490-8667	391
474-2628	235	479-4185	168	482-4417	426, 439	491-5271	293
474-2630	300	479-4186	168	484-4251	235	491-5272	351
474-2631	222	479-4187	168	484-7653	391	491-5273	266
474-2634	232	479-4188	168	484-8797	229	491-1363	410
474-8989	251	479-4189	168	485-1325	303	491-8031	410
474-9218	311	479-4190	168	485-8524	270	491-8032	410
474-9219	360	479-4191	167	486-7587	457	492-2726	348
475-0808	239	479-4192	168	486-7588	457	492-3329	355
476-5496	139	480-2987	293	486-7589	457	492-4108	131
476-7236	55	480-2990	239	486-7590	457	492-4109	131
476-7238	56	480-2991	229	486-7591	457	492-4110	132
476-7239	57	480-2998	299	486-7592	457	492-4111	132
476-9410	356	480-2999	299	486-7593	457	492-4112	132
477-0693	312	480-3003	227	486-7594	457	492-4113	132
478-5154	362	480-3010	225	486-7595	457	492-5097	152
478-5155	254	480-3025	257	486-7596	457	492-6784	259
478-5446	189	480-3031	310	486-7597	457	492-9115	322
478-7507	189	480-3040	320	486-7970	241	492-9117	276
478-0930	410	480-4249	309	486-7973	287	493-0322	252
479-4143	168	480-9459	168	486-8608	343	493-0323	252
479-4144	168	480-9460	168	486-9601	51, 78, 109	493-1509	269
479-4145	168	480-9461	168	486-3340	410	493-1510	266
479-4146	168	480-9462	167	487-3162	311	493-1513	293
479-4147	168	480-9463	167	487-3171	276	493-6741	285
479-4148	168	480-9464	167	487-3433	276	493-6745	284
479-4149	169	480-9465	166	487-4394	311	493-6746	270
479-4150	167	480-9466	167	487-4923	276	494-1459	256
479-4154	167	480-9467	168	487-5069	285	494-2084	345
479-4155	167	480-9468	167	487-5070	298	496-2307	55, 80, 113
479-4156	167	480-9469	167	487-5651	311	496-2310	56
479-4157	167	480-9470	166	487-7821	360	496-2311	56, 80
479-4158	169	480-9471	167	487-7919	360	496-2312	80
479-4159	168, 175, 206	480-9472	168	487-7921	360	496-2313	57, 80
479-4160	168	480-9473	166	487-0853	410	496-2314	57, 80
479-4161	167	480-9474	166	487-0854	410	496-2315	57, 80
479-4162	167	480-9475	167	487-0855	410	496-2316	57, 81
479-4163	167	480-9476	167	487-1760	410	496-2317	57
479-4164	167	480-9477	166	488-0371	366	496-2318	58, 81, 114
479-4165	167	480-9478	166	488-1842	237	496-2319	58, 81, 114
479-4166	168	480-9479	167	488-1844	225	496-2320	58, 81, 114
479-4167	168	480-9480	167	488-2774	364	496-2323	59, 82
479-4169	166	481-5738	169	488-3237	241	496-9725	55, 80, 113
479-4171	166	481-5740	169	488-4813	256	496-9726	56
479-4172	166	481-5742	169	488-4816	245	496-9727	56, 80
479-4173	166	481-5747	169	488-4819	292	496-9728	57, 80
479-4174	166	481-5750	168	489-1529	270	496-9729	57, 81
479-4175	166	481-5751	168	489-1530	270	496-9730	57
479-4176	166	481-5752	168	489-1532	256	496-9731	57
479-4177	166	481-5753	168	489-1534	295, 299	496-9732	58, 81, 114
479-4178	166	481-5754	168	489-4871	255	496-9733	58, 81, 114
479-4179	166	481-5755	167	489-4872	308	496-9734	58, 81, 114

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
496-9735	59, 82	499-1155	46, 75, 103	4C-6188	449	4I-8888	392
497-0465	50, 78, 107	499-1156	47, 75, 104	4C-6494	249	4I-8889	392
497-0466	51, 108	499-1157	44	4C-7133	267	4I-8891	392
497-6356	241	499-1158	52, 79	4C-7134	267	4I-8977	226
497-8283	48, 76, 104	499-1159	53	4C-7140	267	4I-8979	225
497-8285	48, 76, 105	499-1160	53, 111	4C-7151	267	4J-0519	393
497-8287	48, 105	499-1161	53, 111	4C-7153	267	4J-0520	390, 393, 397
497-8288	49, 76, 105	499-1164	54, 112	4C-7160	267	4J-0521	393
497-8290	49, 77, 106	499-1166	54, 112	4C-9422	453	4J-0522	390, 393, 397
497-8291	49, 106	499-1169	52, 79	4C-9423	453	4J-0523	393
497-8292	50, 78, 107	499-1171	61, 117	4C-9433	451, 453	4J-0524	390, 393, 397
497-8293	50, 78, 107	499-1172	61, 117	4C-9474	451, 453	4J-0525	393
497-8294	50, 78, 107	499-1173	61, 83, 117	4C-9900	472	4J-0526	393
497-8295	50, 78, 107	499-1174	62	4D-0124	291	4J-0527	390, 393, 397
497-8297	50, 78, 107	499-1175	60, 82, 115	4D-0513	272	4J-2394	262
497-8300	50, 108	499-1176	60, 83, 115	4D-0514	378	4J-3914	291
497-8301	51, 108	499-1177	55, 113	4D-0577	291	4J-4382	377
498-0775	48, 76, 104	499-1178	118	4D-0582	314	4J-5140	390, 393, 397
498-0776	48, 76, 105	499-1179	64, 84, 119	4D-0583	354	4J-5267	390, 393, 397
498-0777	48, 105	499-1180	64, 85, 119	4D-2016	290	4J-5477	393, 396
498-0779	49, 76, 105	499-1181	64, 85, 119	4D-2560	271	4J-7533	376-377, 389, 393
498-0781	49, 77, 106	499-1183	64, 85, 119	4D-3734	314	4K-1388	376-377, 389, 393
498-0782	49, 106	499-1184	64, 85, 119	4D-3967	269	4K-2430	349
498-0783	50, 78, 107	499-1185	55, 113	4D-4184	273	4K-3026	269
498-0784	50, 78, 107	499-1186	120	4D-4267	294	4K-6297	307
498-0785	50, 108	499-1187	63, 113	4D-4917	354	4L-1847	268
498-1845	360	499-3416	268	4D-5222	265	4L-1848	349
498-1846	346	499-3417	268	4D-6314	314	4L-7412	270
498-1847	287	499-4232	326	4D-6475	291	4L-8545	271
498-3803	340	499-8642	277	4D-6534	246	4L-9337	402
498-8389	48, 76, 104	499-8646	276	4D-6585	290	4M-5317	269
498-8392	50, 78, 107	499-1182	64, 84, 119	4D-6956	358	4P-2603	265
498-8393	50, 78, 107	499-6550	410	4D-8122	358	4P-7891	264
498-8394	51, 78, 109	4B-4609	264	4D-9976	354	4P-7892	265
498-8395	52, 79, 109	4B-4845	378	4F-0186	262	4P-7894	264
498-8396	51, 78, 109	4B-5984	294	4F-0440	263	4P-9254	270
498-8399	51, 79, 109	4B-6067	292	4F-2861	262	4R-6450	287
498-8403	52, 79, 109	4B-7762	268	4H-0553	269	4R-8684	307
498-8405	51, 78, 109	4B-7770	350	4H-5451	293	4R-8697	255
498-8408	51, 79, 109	4B-8586	378	4H-6138	311	4S-3572	344
498-8411	52, 79, 109	4B-8993	237	4H-6141	273	4S-3652	344
498-9651	410	4B-9030	290	4H-6142	278	4S-4857	343
499-0218	268	4C-3660	469	4H-6147	271	4S-4869	343
499-0219	268	4C-3670	472	4H-8985	245	4S-6679	239
499-1141	45, 75, 102	4C-3680	472	4I-0893	227	4S-6680	242
499-1142	45, 75, 102	4C-4375	446	4I-0900	333	4S-6797	242
499-1144	45, 102	4C-4376	446	4I-1694	333	4S-7492	90
499-1145	46, 75, 103	4C-5052	469, 472	4I-6140	228	4S-7493	91
499-1146	46, 75, 103	4C-5054	472	4I-6141	228	4S-7494	91
499-1148	47, 75, 104	4C-5089	304	4I-6287	228	4S-7495	91
499-1149	47, 75, 104	4C-5561	245	4I-7470	263	4S-7496	92
499-1150	47, 75, 104	4C-5890	448	4I-7483	245	4S-7497	92
499-1151	47, 75, 104	4C-5891	448	4I-7651	324	4S-7498	93
499-1152	47, 75, 104	4C-5892	448	4I-7745	225	4S-7606	291
499-1153	47, 75, 104	4C-5893	448, 452	4I-7756	226		
499-1154	45, 75, 102	4C-5898	266	4I-8812	237		

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
4T-1726	270	503-7992	153	511-5620	280	518-0822	64, 119
4T-1862	236	503-1518	157	511-6054	360	518-0823	64, 85, 119
4T-3719	245	503-3024	410	511-7746	296	518-3005	157
4T-9905	238	504-2753	244	511-8645	360	518-3007	158
4U-1697	257	504-5534	298	513-4472	64, 118	518-3997	64, 119
4U-7929	242	504-5535	278	513-4473	64, 84, 118	518-3998	64, 119
4V-6485	247	505-1188	65, 84, 120	513-4474	64, 84, 118	518-3999	64, 85, 119
4V-8604	419	505-3885	55	513-8036	233	518-7796	157
4W-0066	269	505-3886	56	513-8170	157	518-7798	158
4W-4076	283	505-3887	81	513-9662	348	518-7800	63, 156
4W-8404	315	505-3888	57, 81	513-9663	360	518-7801	156
4W-8616	244	505-3890	60, 83	513-9668	364	518-0815	157
4Y-6112	244	505-3891	51, 78	514-1031	267	518-3006	157
4Y-9423	275	505-3892	51, 78	514-1950	349	518-7797	157
4Z-8154	74	505-3893	51, 78	514-2633	158	519-3995	156
500-4238	245	505-3896	51, 79	514-2645	156	519-3996	156
500-8848	282	505-3902	52, 79	514-2646	156	519-3997	63, 117
500-8849	282	505-3904	48, 76	514-6651	268	519-3998	63, 117
500-8850	282	505-3905	48, 76	514-2631	157	519-3999	63, 118
501-0431	56	505-3908	49, 76	514-2632	157	519-4006	156, 198, 213
501-1378	154	505-3910	49, 77	515-4947	285	519-4007	156
501-1380	61	505-3912	50, 78	515-4951	251	519-4008	156
501-1381	152	505-4255	161	515-6283	360	519-4009	63, 117
501-1382	153	505-4256	161	515-8378	324	519-4010	63, 83, 117
501-1383	153	505-8510	254	516-4481	252	519-4011	63, 84, 118
501-7451	360	506-2014	255	516-4484	319	519-4716	63, 117
501-8720	277	506-2015	255	516-5234	308	519-4717	63, 117
501-8727	243	506-3309	223	516-5238	285	519-4718	63, 118
501-9528	153	506-8169	161	516-8704	339	519-7630	249
501-9530	157	506-9362	294	516-9131	51, 78	519-9199	392
502-2106	64, 84, 119	507-6903	356	516-9368	437	520-0071	55
502-2107	64, 85, 119	507-6910	356	516-9370	436	520-1370	322
502-2108	64, 85, 119	507-8352	246	517-2531	438	520-8518	350
502-2489	392	508-5799	345	517-2532	438	520-3708	410
502-2490	392	508-5802	286	517-2533	438	521-4296	425
502-2491	392	508-5805	286	517-2534	438	521-5508	337
502-2492	392	508-5806	286	517-2535	437	523-2366	161
502-2493	392	508-5814	360	517-2536	437	523-8941	133
502-2494	392	508-7861	437	517-2537	436	524-0034	58, 81
502-3076	299	508-7862	437	517-2538	436	524-4076	435
502-5111	64, 85	508-7863	444	517-2540	436	524-4077	435
502-5112	64, 85	508-7865	432	517-2541	437	525-1725	259
502-5673	318	508-7866	432	517-2542	437	526-5493	428, 432
502-6693	268	508-7867	432	517-2548	435	526-5494	424-425
502-6694	268	508-7868	432	517-2549	435	526-5529	425, 429, 432
502-7079	233	508-7870	435	517-2550	435	526-5530	425, 429, 432
503-1517	157	508-7871	435	517-3480	435	526-5531	425, 429, 432
503-2216	297	508-7872	435	517-3481	435	526-5532	425, 429, 432
503-4442	153	508-7873	435	517-3482	435	526-5533	425, 429, 432
503-4446	153	509-0784	271	517-3483	435	526-5534	425, 429, 432
503-4448	61, 116	509-0785	271	517-3484	435	526-5535	425, 429, 432
503-6541	332	509-0786	271	518-0280	63, 118	526-5536	425, 429, 432
503-7460	257	510-6510	288	518-0281	63, 118	526-5537	425, 429, 432
503-7462	261	511-3223	349	518-0814	157	526-5538	425, 429, 432
503-7781	153	511-3228	267	518-0816	158	526-5539	425, 429, 432
503-7988	61, 116	511-5614	268	518-0821	64, 119	526-5540	425, 429, 432

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
526-5541	425, 429, 432	541-7102	viii, 170	541-7180	x, 129	566-7502	426, 430, 439–440
526-5542	429, 433	541-7103	viii, 170	541-7181	x, 129	566-7503	426, 430, 434, 439–440
526-5543	425	541-7109	ix, 218	541-7182	x, 129	566-7504	426, 439
526-7914	136	541-7110	ix, 218	541-7183	ix, 127	566-7505	426, 430, 434, 438–440
526-7915	134	541-7111	ix, 218	541-7184	ix, 127	567-0263	105
526-7916	135	541-7112	ix, 218	543-0394	413	567-0264	105
526-7917	136	541-7113	ix, 218	543-0395	413	567-0265	105
526-7918	135	541-7114	ix, 218	545-7807	57, 80	567-0266	106
528-5347	442	541-7115	ix, 218	546-5746	456	567-0269	107
528-5349	442	541-7116	ix, 218	546-5747	456	567-0270	104
528-5350	442	541-7117	ix, 217	550-9143	426, 430, 434, 439–440	568-1462	104
528-5351	442	541-7121	ix, 217	550-9145	434, 440	568-1467	105
528-5352	442	541-7122	viii, 165	554-6967	64, 119	568-1468	106
528-5353	423, 438, 442	541-7123	viii, 165	554-6968	64, 85, 119	568-1470	106
528-5354	442	541-7124	viii, 165	554-6965	64, 119	568-1473	107
529-7515	363	541-7125	viii, 165	554-6966	64, 119	568-4413	109
529-7516	317	541-7126	viii, 165	555-5302	198, 213	568-4415	109
529-7517	282	541-7127	viii, 165	555-5303	199, 214	568-4418	109
533-1146	428, 430	541-7128	viii, 165	555-5304	198, 213	569-1091	103
533-1147	428, 430	541-7129	viii, 165	555-5305	199, 214	569-4965	113
533-1148	428, 430	541-7130	vii, 178	555-5997	176, 207	569-4973	104
533-1165	436	541-7131	vii, 178	555-5999	176, 207	569-4975	104
533-1167	436	541-7132	vii, 178	556-2937	158	570-4869	102
533-1184	440	541-7133	vii, 178	556-2952	158	575-2963	134
533-5188	133	541-7134	vii, 178	556-6630	157	576-6123	384
533-5332	133	541-7135	vii, 178	556-6633	158	576-6124	384
536-6438	114	541-7136	vii, 178	556-2931	157	576-6125	384
536-8817	161	541-7137	vii, 178	556-2934	157	576-6126	384
537-8508	161	541-7138	vii, 178	556-6627	157	576-6127	384
540-1208	444	541-7139	viii, 179	557-5332	176, 207	576-6128	384
541-4980	61	541-7140	viii, 179	557-5334	176, 207	576-6137	440, 443
541-7076	ix, 209	541-7141	viii, 179	557-5336	176, 207	578-6149	426, 430, 434, 439–440
541-7077	ix, 209	541-7142	viii, 179	557-6001	176, 207	578-6951	52, 79
541-7078	ix, 209	541-7143	viii, 179	557-9040	176, 207	578-6960	52, 79
541-7079	ix, 201	541-7144	viii, 179	557-9041	176, 207	578-6966	52, 79
541-7080	ix, 201	541-7145	viii, 179	557-9042	176, 207	579-5138	77
541-7081	ix, 201	541-7146	viii, 179	559-9498	51, 79, 109	580-4113	63
541-7082	ix, 201	541-7147	viii, 179	561-1991	435, 440	580-4115	63, 156
541-7083	ix, 201	541-7154	x, 416	561-1992	435, 440	581-3125	157
541-7084	ix, 201	541-7155	x, 416	561-1993	435, 440	581-3126	156, 198, 213
541-7085	ix, 127	541-7156	x, 417	561-1994	435, 440	581-4022	58, 81, 114
541-7086	ix, 127	541-7157	x, 417	561-1995	435, 440	581-4023	59, 82
541-7087	x, 412	541-7158	x, 417	561-1996	435, 440	581-4024	58, 81
541-7088	x, 412	541-7159	x, 417	561-1997	435, 440	581-4025	59, 82
541-7089	x, 412	541-7160	ix, 127	561-1998	435, 440	582-9218	58, 81
541-7090	x, 412	541-7161	ix, 186	561-2023	438	583-3538	440
541-7091	x, 412	541-7162	ix, 186	561-2024	438	583-4906	82
541-7092	x, 412	541-7163	ix, 186	561-2025	426, 439	583-7081	65, 84, 120
541-7093	x, 412	541-7164	ix, 186	561-2026	426, 439	583-1250	49, 77, 106
541-7094	x, 412	541-7165	ix, 186	561-2027	440	583-1251	49, 76, 105
541-7095	x, 412	541-7167	vii, 218	561-2028	440	583-4122	59, 82
541-7096	x, 412	541-7168	vii, 218	561-2029	440	583-4393	58, 81
541-7097	x, 412	541-7169	vii, 218	561-8112	48, 76		
541-7099	vii, 126	541-7170	vii, 218	561-8115	51, 78		
541-7100	viii, 170	541-7171	vii, 218	566-7501	439		
541-7101	viii, 170	541-7172	vii, 218				

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
583-4749	58, 81	598-1908	434	5K-9239	273	5P-1125	71
583-4906	59	5B-1585	289	5K-9240	315	5P-1126	71
584-5210	443	5B-3254	371	5K-9241	315	5P-1127	71
585-4436	447	5B-7319	263	5K-9242	278	5P-1128	72
585-4437	447	5B-7442	262	5K-9243	315	5P-1129	73
585-4438	447	5B-7642	265	5K-9244	315	5P-1130	73
585-4439	447	5B-7643	265	5K-9245	273	5P-1131	71
585-4441	447	5B-7660	269	5K-9248	273	5P-1132	71
588-1114	57, 80	5B-7661	265	5K-9249	278	5P-1133	71
588-1135	57	5B-7666	292	5K-9894	273	5P-1134	72
588-1166	106	5B-8279	294	5K-9979	273	5P-1135	73
588-1176	50, 78	5B-8979	350	5K-9988	358	5P-1136	73
588-1467	57, 80	5B-9169	378	5K-9989	357	5P-1230	316
588-1506	57	5B-9892	263	5L-3785	264	5P-1271	338
588-1530	56, 80	5C-7617	253	5L-3993	350	5P-1272	338
588-1575	108	5D-0269	294	5L-5502	349	5P-1291	vii
588-1584	107	5D-0834	392	5L-6669	269	5P-1292	vii
588-1585	107	5D-1026	409	5L-8289	351	5P-1293	vii
588-1602	107	5D-6116	182	5L-8722	293	5P-1294	vii
588-1611	107	5D-9231	257	5M-6213	377	5P-1295	vii
588-1626	115	5E-3952	289	5M-6214	377	5P-1296	vii
588-1633	115	5E-5200	244	5N-2638	290	5P-1300	219
588-8435	107	5E-6102	282	5N-2918	266	5P-1307	74
588-8437	107	5E-8917	300	5N-4476	265	5P-1308	74
588-8438	107	5E-9683	302	5N-8001	266	5P-1404	238
588-8439	107	5E-9684	303	5N-8396	262	5P-1453	97
588-8440	107	5F-6371	271	5N-8778	265	5P-1706	91
588-8441	107	5G-2740	343	5P-0045	379	5P-1770	238
588-8442	108	5H-0275	371	5P-0046	379	5P-1775	284
588-1166	77	5H-4017	379	5P-0047	379	5P-1838	244
589-0040	105	5H-4018	379	5P-0048	379	5P-1907	366
589-0042	105	5H-4019	379	5P-0049	379	5P-1945	256
589-0044	106	5H-4020	379	5P-0050	379	5P-1947	251
589-1962	104	5H-4778	291	5P-0220	336	5P-2080	306
589-1963	104	5H-7598	262	5P-0234	246	5P-2191	337
589-1964	115	5H-7826	262	5P-0405	385	5P-2201	269
589-1965	115	5H-8936	268	5P-0419	241	5P-2203	271
589-2616	107	5I-3178	243	5P-0492	244	5P-2211	238
589-2617	107	5I-3190	337	5P-0597	409	5P-2230	409
589-2618	107	5I-4015	337	5P-0598	409	5P-2231	239
589-2619	108	5I-4075	337	5P-0599	409	5P-2242	345
589-2620	107	5I-4198	303	5P-0600	409	5P-2244	258
589-5024	108	5I-4370	225	5P-0720	219	5P-2299	376
589-5025	107	5I-4376	327	5P-0765	217	5P-2303	284
589-5026	107	5I-7408	246	5P-0767	217	5P-2423	366
589-5027	108	5I-8775	246	5P-0788	344	5P-2454	371
589-5028	106	5I-8784	248	5P-0789	283	5P-2517	313
589-9955	57	5J-7303	283	5P-0912	284	5P-2559	315
591-1614	433	5K-2408	266	5P-0922	98	5P-2574	241
591-1615	433	5K-3771	291	5P-0973	448	5P-2599	73
591-1616	433	5K-5068	266	5P-1031	92	5P-2618	241
591-1618	433	5K-6875	268	5P-1042	238	5P-2620	73
591-1619	433	5K-9090	390, 393, 396	5P-1045	316	5P-2621	73
591-1736	60, 83	5K-9235	315	5P-1046	251	5P-2622	73
592-1114	53	5K-9237	315	5P-1064	314	5P-2645	307
592-6091	413	5K-9238	273	5P-1065	314	5P-2647	284

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
5P-2657.....	286	5P-4700.....	97	5P-7150.....	343	5P-9464.....	285
5P-2825.....	73	5P-4818.....	290	5P-7154.....	345	5P-9517.....	314
5P-2909.....	376	5P-4854.....	339	5P-7175.....	275	5P-9560.....	236
5P-2937.....	244	5P-4877.....	71	5P-7247.....	358	5P-9593.....	93
5P-3093.....	71	5P-4900.....	284	5P-7462.....	408, 418	5P-9615.....	316
5P-3094.....	72	5P-4906.....	306	5P-7463.....	408, 418	5P-9617.....	237
5P-3096.....	73	5P-4924.....	306	5P-7464.....	408, 418	5P-9789.....	256
5P-3099.....	73	5P-4937.....	73	5P-7465.....	408, 418	5P-9808.....	316
5P-3101.....	71	5P-4968.....	283	5P-7466.....	408, 418	5P-9956.....	93
5P-3102.....	72	5P-4982.....	345	5P-7467.....	408, 418	5R-5304.....	245
5P-3105.....	73	5P-4983.....	345	5P-7468.....	408, 418	5R-5560.....	368
5P-3165.....	344	5P-4984.....	345	5P-7469.....	408, 418	5R-5561.....	368
5P-3166.....	344	5P-4996.....	376	5P-7470.....	408, 418	5R-5674.....	368
5P-3179.....	314	5P-5000.....	73	5P-7471.....	408, 418	5R-5675.....	368
5P-3229.....	91	5P-5003.....	256	5P-7506.....	306	5R-5700.....	368
5P-3230.....	93	5P-5004.....	256	5P-7507.....	306	5R-5701.....	368
5P-3237.....	242	5P-5005.....	256	5P-7603.....	357	5R-5724.....	368
5P-3238.....	266	5P-5006.....	256	5P-7662.....	247	5R-5725.....	368
5P-3320.....	378	5P-5007.....	256	5P-7684.....	377	5R-6303.....	368
5P-3411.....	308	5P-5008.....	256	5P-7703.....	408, 418	5R-6304.....	368
5P-3415.....	244	5P-5009.....	256	5P-7759.....	182	5R-6305.....	368
5P-3422.....	349	5P-5052.....	405	5P-7886.....	71	5R-6306.....	368
5P-3426.....	307	5P-5121.....	93	5P-7903.....	73	5R-6307.....	368
5P-3466.....	308	5P-5234.....	449	5P-7907.....	274	5R-6398.....	368
5P-3501.....	244	5P-5235.....	452	5P-7915.....	304	5R-6867.....	368
5P-3621.....	284	5P-5236.....	450	5P-7916.....	304	5R-6868.....	368
5P-3725.....	308	5P-5525.....	353	5P-7917.....	304	5R-6952.....	236
5P-3741.....	350	5P-5526.....	274	5P-7918.....	304	5R-7326.....	270
5P-3903.....	239	5P-5528.....	244	5P-7919.....	304	5R-8100.....	243
5P-3917.....	290	5P-5546.....	247	5P-7920.....	304	5R-8781.....	285
5P-3932.....	352	5P-5613.....	365	5P-7929.....	354	5R-8782.....	256
5P-4248.....	242	5P-5713.....	306	5P-7930.....	354	5R-8894.....	285
5P-4252.....	358	5P-5718.....	290	5P-7956.....	73	5R-8895.....	347
5P-4269.....	243	5P-5777.....	239	5P-7959.....	72	5R-9235.....	284
5P-4272.....	236	5P-5843.....	278	5P-7963.....	307	5S-2105.....	92
5P-4299.....	376	5P-5875.....	274	5P-7968.....	71	5S-2108.....	99
5P-4317.....	274	5P-5876.....	274	5P-7981.....	309	5S-2392.....	267
5P-4321.....	94	5P-5877.....	274	5P-7982.....	309	5S-2403.....	267
5P-4362.....	251	5P-5878.....	274	5P-7984.....	309	5S-2834.....	448
5P-4375.....	339	5P-6044.....	353	5P-8018.....	258	5S-2837.....	448
5P-4452.....	313	5P-6072.....	290	5P-8077.....	403-404	5S-2840.....	448
5P-4459.....	313	5P-6073.....	290	5P-8112.....	408, 418	5S-2843.....	452
5P-4461.....	313	5P-6085.....	313	5P-8113.....	283	5S-2846.....	448
5P-4479.....	286	5P-6086.....	313	5P-8182.....	408, 418	5S-2849.....	452
5P-4481.....	244	5P-6087.....	313	5P-8228.....	256	5S-2852.....	450
5P-4487.....	244	5P-6115.....	274	5P-8238.....	286	5S-3454.....	92
5P-4494.....	344	5P-6312.....	278	5P-8444.....	408, 418	5S-3777.....	93
5P-4495.....	347	5P-6315.....	290	5P-8753.....	350	5S-3778.....	91
5P-4499.....	238	5P-6399.....	284	5P-8869.....	257	5S-3779.....	90
5P-4566.....	312	5P-6416.....	308	5P-8874.....	237	5S-3784.....	91
5P-4588.....	243	5P-6451.....	71	5P-8905.....	239	5S-3788.....	92
5P-4592.....	286	5P-6922.....	274	5P-8924.....	236	5S-3811.....	93
5P-4653.....	258	5P-6941.....	258	5P-8934.....	290	5S-3820.....	93
5P-4674.....	237	5P-6944.....	237	5P-8998.....	266	5S-3826.....	93
5P-4675.....	244	5P-6985.....	358	5P-9373.....	307	5S-3832.....	93
5P-4699.....	97	5P-7039.....	273	5P-9385.....	349	5S-3836.....	93

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
5S-3842.....	93	6K-3449.....	345	6V-0398.....	370	6V-1869.....	408, 418
5S-7382.....	400	6K-3458.....	287	6V-0400.....	404	6V-1872.....	408
5T-0448.....	419	6K-3461.....	242	6V-0402.....	403-404	6V-1874.....	408, 418
5T-2119.....	258	6K-3607.....	241	6V-0404.....	391	6V-1875.....	408, 418
5U-8370.....	257	6K-4235.....	344	6V-0405.....	391	6V-1876.....	408
5V-6414.....	266	6K-6307.....	376-377, 389, 393	6V-0406.....	391	6V-1877.....	408
5V-8610.....	368			6V-0407.....	391	6V-1881.....	293
5W-1749.....	391	6K-6826.....	313	6V-0408.....	391	6V-1897.....	378
5W-2848.....	252	6K-6967.....	269	6V-0409.....	391	6V-1906.....	242
5W-5480.....	390	6K-8076.....	273	6V-0416.....	307	6V-2376.....	258
5W-9857.....	402	6K-8077.....	278	6V-0426.....	365	6V-2409.....	257
6A-3591.....	349	6K-8078.....	357	6V-0434.....	347	6V-2448.....	71
6B-1628.....	270	6K-8079.....	273	6V-0467.....	236	6V-2481.....	258
6B-2982.....	350	6K-8080.....	353	6V-0468.....	304	6V-2492.....	276
6B-3685.....	294	6K-8214.....	353	6V-0472.....	261	6V-2606.....	238
6B-4661.....	270	6K-8298.....	405	6V-0484.....	310	6V-2610.....	265
6B-5072.....	270	6K-8325.....	98	6V-0545.....	408, 418	6V-2897.....	97
6B-6765.....	292	6K-8420.....	371	6V-0581.....	367	6V-3250.....	389
6B-6766.....	294	6K-8498.....	353	6V-0675.....	314	6V-3251.....	389
6B-7280.....	270	6K-8748.....	347	6V-0676.....	354	6V-3257.....	378
6B-7639.....	349	6K-9194.....	285	6V-0678.....	266	6V-3280.....	378
6B-8128.....	264	6K-9354.....	241	6V-0683.....	408, 418	6V-3283.....	95
6B-8129.....	264	6L-1651.....	394	6V-0743.....	411	6V-3305.....	310
6B-9081.....	270	6L-4382.....	294	6V-0744.....	411	6V-3342.....	293
6C-2293.....	230	6L-4489.....	265	6V-0745.....	411	6V-3510.....	238
6C-6762.....	240	6L-5075.....	293	6V-0746.....	411	6V-3521.....	260
6D-1891.....	246	6L-5295.....	263	6V-0747.....	411	6V-3522.....	259
6D-4095.....	246	6L-5699.....	265	6V-0748.....	411	6V-3523.....	259
6D-4492.....	246	6L-5955.....	314	6V-0749.....	411	6V-3524.....	259
6D-4529.....	246	6L-7322.....	351	6V-0752.....	411	6V-3525.....	260
6D-5621.....	247	6L-9777.....	287	6V-0754.....	411	6V-3526.....	259
6D-6018.....	367	6L-9952.....	244	6V-0756.....	411	6V-3527.....	260
6D-6081.....	246	6M-5652.....	308	6V-0757.....	411	6V-3528.....	260
6D-6489.....	271	6M-6853.....	337	6V-0974.....	408	6V-3529.....	260
6D-7128.....	390	6N-2430.....	264	6V-1074.....	71	6V-3530.....	350
6D-9961.....	92	6N-3802.....	352	6V-1085.....	309	6V-3674.....	247
6E-4353.....	246	6N-3898.....	247	6V-1230.....	316	6V-4245.....	293
6F-0496.....	350	6N-4543.....	265	6V-1236.....	94	6V-4292.....	306
6F-6045.....	265	6P-4975.....	238	6V-1240.....	350	6V-4349.....	408, 418
6F-7699.....	270	6P-8855.....	282	6V-1249.....	408, 418	6V-4361.....	273
6F-7701.....	351	6R-4061.....	366	6V-1323.....	312	6V-4362.....	241
6F-7732.....	269	6R-9166.....	356	6V-1324.....	408	6V-4363.....	309
6F-8856.....	294	6S-2231.....	365	6V-1355.....	306	6V-4373.....	261
6F-8857.....	265	6S-2289.....	347	6V-1404.....	90	6V-4374.....	261
6F-8858.....	265	6S-2365.....	347	6V-1547.....	284	6V-4375.....	261
6G-6917.....	239	6S-2898.....	371	6V-1572.....	408, 418	6V-4376.....	261
6H-4746.....	244	6S-2899.....	344	6V-1573.....	408, 418	6V-4377.....	261
6H-6699.....	245	6S-2910.....	285	6V-1574.....	408, 418	6V-4378.....	261
6H-8297.....	314	6S-5693.....	345	6V-1577.....	408	6V-4381.....	261
6I-6547.....	309	6S-7744.....	241	6V-1625.....	333	6V-4383.....	261
6I-6851.....	227	6U-0464.....	258	6V-1722.....	238	6V-4387.....	260
6J-2680.....	390	6U-9892.....	259	6V-1739.....	350	6V-4388.....	260
6J-7366.....	385	6V-0298.....	97	6V-1813.....	262	6V-4389.....	260
6K-1019.....	265	6V-0301.....	239	6V-1846.....	257	6V-4390.....	260
6K-1972.....	286	6V-0394.....	241	6V-1867.....	408, 418	6V-4391.....	260
6K-3448.....	344	6V-0397.....	401	6V-1868.....	408, 418	6V-4516.....	270

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
6V-4590.....	390	6V-7359.....	408, 418	6V-8723.....	302	6V-8997.....	222
6V-4663.....	98	6V-7420.....	238	6V-8724.....	302	6V-8998.....	222
6V-4674.....	99	6V-7483.....	244	6V-8729.....	222	6V-9000.....	297
6V-4683.....	99	6V-7484.....	256	6V-8730.....	222	6V-9001.....	297
6V-4684.....	99	6V-7485.....	343	6V-8731.....	222	6V-9002.....	297
6V-4686.....	93	6V-7486.....	316	6V-8732.....	222	6V-9003.....	297
6V-4687.....	93	6V-7494.....	381	6V-8733.....	222	6V-9004.....	297
6V-4688.....	94	6V-7496.....	381	6V-8734.....	222	6V-9005.....	297
6V-4891.....	450, 453	6V-7529.....	245	6V-8736.....	222	6V-9006.....	297
6V-4892.....	450, 453	6V-7535.....	289	6V-8737.....	222	6V-9007.....	303
6V-4893.....	450	6V-7538.....	294	6V-8738.....	222	6V-9008.....	303
6V-4894.....	450	6V-7970.....	389, 395	6V-8739.....	222	6V-9009.....	303
6V-4897.....	450	6V-8076.....	310	6V-8740.....	222	6V-9010.....	224
6V-4898.....	450	6V-8077.....	305	6V-8741.....	222	6V-9012.....	256
6V-4899.....	450	6V-8104.....	243	6V-8773.....	321	6V-9013.....	294
6V-4901.....	450	6V-8245.....	316	6V-8774.....	321	6V-9027.....	389
6V-4912.....	448	6V-8251.....	351	6V-8775.....	321	6V-9028.....	389, 395
6V-4913.....	449	6V-8253.....	294	6V-8776.....	321	6V-9029.....	266
6V-4917.....	451	6V-8397.....	390, 393, 396	6V-8777.....	321	6V-9031.....	318
6V-4918.....	451	6V-8398.....	390, 393, 396	6V-8780.....	324	6V-9032.....	324
6V-4922.....	453	6V-8400.....	133, 390, 393, 396	6V-8781.....	324	6V-9035.....	242
6V-4923.....	453			6V-8782.....	324	6V-9039.....	338
6V-4924.....	451	6V-8408.....	265	6V-8783.....	324	6V-9043.....	318
6V-4925.....	451	6V-8410.....	265	6V-8784.....	324	6V-9069.....	450
6V-4963.....	449	6V-8412.....	265	6V-8786.....	324	6V-9070.....	450
6V-4964.....	448	6V-8424.....	265	6V-8787.....	318	6V-9157.....	245
6V-4972.....	451	6V-8549.....	309	6V-8788.....	318	6V-9158.....	318
6V-5063.....	389	6V-8552.....	372	6V-8790.....	318	6V-9162.....	226
6V-5064.....	389	6V-8553.....	372	6V-8792.....	318	6V-9168.....	371
6V-5065.....	389	6V-8554.....	372	6V-8843.....	217	6V-9169.....	371
6V-5138.....	390	6V-8555.....	372	6V-8918.....	402	6V-9170.....	371
6V-5258.....	238	6V-8556.....	372	6V-8926.....	240	6V-9172.....	371
6V-5320.....	236	6V-8557.....	372	6V-8934.....	223	6V-9173.....	371
6V-5513.....	351	6V-8558.....	372	6V-8936.....	223	6V-9175.....	324
6V-5535.....	345	6V-8625.....	302	6V-8943.....	223	6V-9182.....	303
6V-5601.....	308	6V-8627.....	302	6V-8945.....	223	6V-9200.....	302
6V-5653.....	306	6V-8629.....	303	6V-8946.....	223	6V-9208.....	306
6V-6015.....	472	6V-8632.....	225	6V-8947.....	223	6V-9272.....	318
6V-6222.....	145	6V-8633.....	225	6V-8948.....	223	6V-9330.....	310
6V-6560.....	389, 395	6V-8634.....	224	6V-8979.....	301	6V-9343.....	302
6V-6609.....	389	6V-8635.....	226	6V-8980.....	301	6V-9350.....	319
6V-6757.....	314	6V-8636.....	224	6V-8981.....	301	6V-9351.....	296
6V-6760.....	244	6V-8637.....	226	6V-8982.....	301	6V-9352.....	319
6V-6939.....	349	6V-8638.....	225	6V-8983.....	301	6V-9353.....	222
6V-6940.....	351	6V-8639.....	225	6V-8984.....	301	6V-9507.....	386
6V-6941.....	351	6V-8640.....	225	6V-8985.....	301	6V-9508.....	386
6V-6967.....	336	6V-8641.....	224	6V-8986.....	296	6V-9509.....	386
6V-7301.....	368	6V-8642.....	225	6V-8987.....	296	6V-9510.....	386
6V-7327.....	389	6V-8647.....	224	6V-8988.....	296	6V-9511.....	386
6V-7328.....	389	6V-8649.....	287	6V-8989.....	296	6V-9512.....	386
6V-7329.....	389	6V-8713.....	225	6V-8990.....	296	6V-9513.....	386
6V-7330.....	389	6V-8714.....	226	6V-8991.....	296	6V-9601.....	245
6V-7331.....	389	6V-8715.....	224	6V-8993.....	222	6V-9649.....	301
6V-7332.....	389	6V-8716.....	226	6V-8994.....	222	6V-9746.....	390, 393, 396
6V-7333.....	389	6V-8721.....	303	6V-8995.....	222	6V-9796.....	301
6V-7349.....	291	6V-8722.....	303	6V-8996.....	222	6V-9806.....	301

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
6V-9807.....	301	7C-0754.....	362	7J-7187.....	242	7S-4105.....	93
6V-9808.....	301	7C-3870.....	260	7J-8611.....	293	7S-7369.....	315
6V-9809.....	301	7D-0215.....	272	7J-9108.....	390, 393, 396	7S-8439.....	93
6V-9810.....	301	7D-0477.....	291	7K-0498.....	315	7S-8440.....	92
6V-9828.....	385	7D-0702.....	271	7K-1456.....	278	7S-9370.....	90
6V-9829.....	385	7D-0978.....	345	7K-1457.....	273	7T-4209.....	419
6V-9830.....	385	7D-2746.....	289	7K-1517.....	315	7T-6083.....	278
6V-9831.....	385	7D-4754.....	269	7K-2094.....	291	7U-6220.....	258
6V-9832.....	385	7D-4903.....	270	7K-2543.....	358	7U-7181.....	252
6V-9833.....	385	7D-5318.....	242	7K-3030.....	286	7U-9353.....	237
6V-9834.....	385	7D-6865.....	245	7K-3324.....	285	7V-2839.....	253
6V-9835.....	320	7D-8793.....	286	7K-3762.....	257	7V-5161.....	253
6V-9836.....	320	7E-0156.....	237	7K-4128.....	345	7V-7502.....	288
6V-9837.....	320	7E-1456.....	242	7K-4129.....	255	7W-0629.....	269
6V-9838.....	320	7E-2476.....	265	7K-6462.....	283	7W-1890.....	314
6V-9839.....	320	7E-5719.....	267	7K-9197.....	285	7W-7381.....	237
6V-9840.....	320	7E-7264.....	226	7L-2505.....	378	7X-0347.....	402
6V-9842.....	319	7E-8352.....	267	7L-7262.....	287	7X-0484.....	275
6V-9843.....	319	7E-8716.....	381	7L-7280.....	246	7X-0492.....	300
6V-9844.....	319	7F-2050.....	371	7L-7308.....	350	7X-0495.....	267
6V-9845.....	319	7F-2060.....	371	7M-7410.....	378	7X-0820.....	319
6V-9846.....	319	7F-6289.....	289	7M-8485.....	376-377, 389,	7X-0823.....	222
6V-9847.....	319	7F-6654.....	263		393	7X-0838.....	321
6V-9849.....	302	7F-6923.....	269	7N-6511.....	244	7X-0871.....	322
6V-9850.....	302	7F-7651.....	294	7Q-6091.....	249	7X-0872.....	322
6V-9851.....	302	7F-7652.....	290	7R-0042.....	228	7X-0873.....	322
6V-9852.....	302	7F-7807.....	272	7R-6370.....	229	7X-0901.....	302
6V-9853.....	302	7F-8622.....	264	7R-6371.....	232	7X-0902.....	247
6V-9854.....	302	7F-8701.....	264	7R-6708.....	358	7X-1431.....	69
6V-9855.....	302	7F-9311.....	293	7R-6774.....	296	7X-1445.....	275
6V-9872.....	224	7F-9504.....	378	7R-6968.....	232	7X-1448.....	316
6V-9873.....	224	7G-3415.....	408	7R-9570.....	323	7X-1452.....	68
6V-9874.....	225	7G-3832.....	408	7S-0570.....	90	7X-1463.....	180
6V-9875.....	226	7G-4850.....	242	7S-0571.....	91	7X-1478.....	73
6V-9876.....	297	7G-5986.....	408	7S-0572.....	91	7X-2429.....	320
6V-9877.....	303	7G-8282.....	419	7S-0573.....	91	7X-2430.....	250
6V-9957.....	89	7G-8478.....	244	7S-0574.....	92	7X-2431.....	249
6V-9958.....	90	7H-3171.....	378	7S-0575.....	92	7X-2432.....	249
6V-9959.....	90	7I-0048.....	226	7S-0577.....	92	7X-2433.....	359
6V-9960.....	90	7I-0375.....	287	7S-0592.....	98	7X-2434.....	359
6W-8220.....	260	7I-1024.....	413	7S-0614.....	98	7X-2435.....	359
6Z-2038.....	262	7I-1096.....	225	7S-0631.....	98	7X-2441.....	231
6Z-2052.....	237	7I-2022.....	241	7S-0685.....	98	7X-2444.....	322
7B-0192.....	366	7I-7439.....	413	7S-1074.....	98	7X-2459.....	327
7B-0497.....	265	7I-8310.....	228	7S-1125.....	449	7X-2464.....	222
7B-1480.....	294	7I-8331.....	246	7S-1126.....	449	7X-2470.....	239
7B-2176.....	270	7J-0204.....	376-377, 389,	7S-1150.....	99	7X-2477.....	237
7B-3395.....	294		393	7S-1212.....	99	7X-2480.....	272
7B-4115.....	263	7J-0482.....	293	7S-1217.....	99	7X-2608.....	250
7B-7138.....	292	7J-4026.....	307	7S-1707.....	93	7X-2613.....	248
7B-7169.....	264	7J-5996.....	354	7S-1720.....	93	7X-2614.....	250
7B-7908.....	264	7J-6418.....	255	7S-1809.....	98	7X-2615.....	250
7B-8057.....	292	7J-6419.....	255	7S-1851.....	99	7X-3156.....	222
7B-9008.....	264	7J-6420.....	286	7S-2371.....	96	7X-3162.....	228
7B-9665.....	378	7J-6740.....	349	7S-3122.....	92	7X-3164.....	228
7B-9978.....	231	7J-6742.....	365	7S-4078.....	92	7X-3165.....	228

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
7X-3168.....	228	8C-3346.....	350	8C-7313.....	230	8K-6686.....	307
7X-3169.....	228	8C-3370.....	226	8C-7325.....	237	8K-6898.....	316
7X-3406.....	364	8C-3415.....	327	8C-7334.....	230	8L-3161.....	371
7X-4814.....	68	8C-3443.....	226	8C-7335.....	230	8L-5008.....	289
7X-4815.....	69	8C-3991.....	243	8C-7514.....	326	8L-6005.....	349
7X-4816.....	69	8C-3996.....	449	8C-7533.....	258	8L-7971.....	366
7X-5299.....	231	8C-3999.....	258	8C-7557.....	411	8L-9137.....	385
7X-5331.....	300	8C-4000.....	226	8C-7563.....	296	8M-0505.....	241
7X-7678.....	242	8C-4065.....	257	8C-7574.....	267	8M-0506.....	241
7X-7686.....	256	8C-4066.....	365	8C-7575.....	266	8M-0547.....	285
7X-7702.....	412	8C-4082.....	327	8C-7576.....	266	8M-0744.....	371
7X-7703.....	318	8C-4424.....	379	8C-8400.....	303	8M-0792.....	272
7X-7705.....	309	8C-4434.....	256	8C-8408.....	296	8M-4389.....	394
7X-7715.....	318	8C-4985.....	245	8C-8417.....	226	8M-4390.....	394
7X-7895.....	218	8C-5053.....	245	8C-8431.....	333	8M-4432.....	394
7X-7902.....	300	8C-5063.....	412	8C-8493.....	222	8M-4435.....	394
7X-7904.....	255	8C-5064.....	412	8C-8498.....	226	8M-4436.....	394
7X-7905.....	257	8C-5185.....	275	8C-8552.....	258	8M-4437.....	394
7X-7934.....	231	8C-5193.....	389	8C-8553.....	258	8M-4438.....	394
7X-7945.....	228	8C-5234.....	69	8C-8807.....	226	8M-4443.....	394
7X-8486.....	232	8C-5723.....	226	8C-8835.....	228	8M-4445.....	394
7X-8506.....	229	8C-6427.....	245	8C-8988.....	296	8M-4446.....	394
7X-9733.....	299	8C-6444.....	319	8C-8989.....	296	8M-4986.....	394
7X-9737.....	295	8C-6504.....	391	8C-9006.....	358	8M-4987.....	394
7X-9738.....	299	8C-6515.....	327	8C-9022.....	306	8M-4988.....	394
7Y-5074.....	413	8C-6516.....	366	8C-9026.....	236	8M-4990.....	394
7Y-8419.....	238	8C-6523.....	245	8C-9028.....	305	8M-4991.....	394
8B-1261.....	350	8C-6524.....	245	8C-9029.....	236	8M-4992.....	394
8B-1847.....	314	8C-6712.....	310	8D-0071.....	345	8M-5010.....	394
8B-1931.....	270	8C-6713.....	256	8D-7276.....	246	8M-5248.....	394
8B-2283.....	262	8C-6758.....	225	8D-8428.....	238	8M-5249.....	394
8B-2664.....	270	8C-6781.....	233	8E-3695.....	239	8M-5252.....	394
8B-2777.....	292	8C-6798.....	322	8F-0024.....	446	8M-5254.....	394
8B-3308.....	263	8C-6857.....	402	8F-0884.....	350	8M-5661.....	394
8B-4884.....	295	8C-6860.....	238	8F-3271.....	290	8M-8157.....	394
8B-5774.....	269	8C-6865.....	231	8F-4731.....	245	8M-8283.....	394
8B-6021.....	268	8C-6866.....	231	8F-8306.....	270	8M-8515.....	394
8B-9579.....	351	8C-6867.....	231	8F-9055.....	295	8Q-9286.....	269
8B-9580.....	269	8C-6868.....	231	8I-1278.....	265	8Q-9297.....	266
8B-9913.....	294	8C-6869.....	231	8I-1362.....	217	8Q-9642.....	294
8C-0562.....	389	8C-6870.....	231	8I-6347.....	224	8Q-9643.....	265
8C-0569.....	326	8C-6871.....	231	8J-0426.....	238	8Q-9880.....	266
8C-0597.....	224	8C-6872.....	231	8J-1040.....	345	8R-3303.....	370
8C-2948.....	336	8C-6873.....	231	8J-3233.....	238	8R-3304.....	370
8C-3051.....	239	8C-6875.....	231	8J-3705.....	246	8S-1396.....	91
8C-3076.....	389	8C-6877.....	402	8J-3830.....	238	8S-3649.....	92
8C-3120.....	247	8C-6905.....	267	8J-4788.....	291	8S-3918.....	95
8C-3174.....	408	8C-6915.....	232	8J-7844.....	244	8S-4950.....	385
8C-3178.....	236	8C-6920.....	297	8J-8559.....	239	8S-4951.....	385
8C-3205.....	401	8C-7306.....	230	8K-0001.....	389	8S-8221.....	93
8C-3206.....	401	8C-7307.....	230	8K-0802.....	242	8S-8869.....	98
8C-3246.....	297	8C-7308.....	230	8K-0968.....	307	8S-8946.....	93
8C-3251.....	296	8C-7309.....	230	8K-2396.....	285	8S-8957.....	92
8C-3309.....	332	8C-7310.....	230	8K-3520.....	343	8S-9344.....	93
8C-3322.....	328	8C-7311.....	230	8K-4739.....	238	8S-9345.....	93
8C-3323.....	226	8C-7312.....	230	8K-5114.....	96	8S-9372.....	92

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
8S-9967.....	393	8T-2227.....	245	8T-5389.....	297	8T-7876.....	389, 395
8T-0075.....	224	8T-2270.....	256	8T-5429.....	303	8T-7877.....	389, 395
8T-0076.....	224	8T-2335.....	297	8T-5465.....	301	8T-7908.....	248
8T-0077.....	225	8T-2352.....	323	8T-5890.....	222	8T-7909.....	246
8T-0078.....	226	8T-2353.....	237	8T-5906.....	237	8T-7910.....	246
8T-0082.....	321	8T-2362.....	237	8T-5907.....	318	8T-7912.....	249
8T-0120.....	297	8T-2363.....	318	8T-6338.....	326	8T-7914.....	249
8T-0129.....	222	8T-2525.....	408, 418	8T-6445.....	222	8T-7915.....	246
8T-0130.....	301	8T-2530.....	297	8T-6451.....	304	8T-7916.....	249
8T-0151.....	237	8T-2543.....	336	8T-6453.....	226	8T-7917.....	249
8T-0164.....	297	8T-2556.....	325	8T-6454.....	320	8T-7926.....	227
8T-0195.....	241	8T-2864.....	347	8T-6663.....	227	8T-7927.....	227
8T-0197.....	226	8T-2883.....	324	8T-6675.....	409	8T-7970.....	297
8T-0198.....	226	8T-3001.....	304	8T-6684.....	303	8T-7978.....	.69
8T-0248.....	318	8T-3058.....	449	8T-6696.....	321	8T-7979.....	.69
8T-0249.....	304	8T-3059.....	448	8T-6701.....	230	8T-7980.....	.69
8T-0252.....	297	8T-3060.....	449	8T-6703.....	409	8T-8887.....	224
8T-0315.....	133, 390, 393, 396	8T-3061.....	448	8T-6725.....	229	8T-8897.....	246
8T-0379.....	318	8T-3285.....	245	8T-6755.....	318	8T-8898.....	226
8T-0404.....	303	8T-3300.....	345	8T-6756.....	293	8T-8899.....	296
8T-0405.....	225	8T-3311.....	327	8T-6776.....	231	8T-8900.....	326
8T-0447.....	466	8T-3312.....	327	8T-6777.....	301	8T-8901.....	332
8T-0448.....	466	8T-3313.....	332	8T-6850.....	389, 395	8T-8902.....	322
8T-0449.....	466	8T-3440.....	408	8T-6876.....	302	8T-8916.....	400
8T-0568.....	390	8T-3444.....	318	8T-6895.....	319	8T-8919.....	402
8T-0575.....	284	8T-3491.....	310	8T-6988.....	224	8T-8983.....	318
8T-0788.....	304	8T-3510.....	265	8T-7009.....	366	8T-8984.....	321
8T-0815.....	451	8T-3569.....	258	8T-7087.....	408, 418	8T-8985.....	227
8T-0816.....	451	8T-3611.....	227	8T-7088.....	408	8T-8986.....	303
8T-1009.....	.71	8T-4121.....	402	8T-7487.....	229	8T-9023.....	226
8T-1012.....	318	8T-4122.....	402	8T-7488.....	229	8T-9027.....	318
8T-1031.....	236	8T-4123.....	402	8T-7489.....	229	8T-9358.....	228
8T-1120.....	321	8T-4128.....	231	8T-7490.....	229	8T-9386.....	226
8T-1458.....	385	8T-4141.....	402	8T-7491.....	229	8T-9403.....	404
8T-1486.....	257	8T-4149.....	297	8T-7492.....	229	8T-9518.....	408, 418
8T-1492.....	268	8T-4184.....	402	8T-7494.....	229	8T-9543.....	ix
8T-1568.....	391	8T-4196.....	402	8T-7495.....	229	8T-9587.....	389
8T-1576.....	225	8T-4223.....	402	8T-7496.....	229	8U-0284.....	402
8T-1681.....	372	8T-4224.....	402	8T-7497.....	229	8U-0599.....	391
8T-1682.....	303	8T-4238.....	245	8T-7521.....	302	8U-1341.....	235
8T-1684.....	324	8T-4896.....	400, 402	8T-7524.....	389, 395	8U-1378.....	232
8T-1685.....	324	8T-4942.....	251	8T-7525.....	389, 395	8U-5923.....	229
8T-1686.....	303	8T-4983.....	409	8T-7526.....	389, 395	8U-5951.....	392
8T-1715.....	237	8T-4984.....	409	8T-7546.....	297	8U-6275.....	279
8T-1718.....	302	8T-4985.....	409	8T-7547.....	402	8U-6888.....	229
8T-1779.....	224	8T-4986.....	409	8T-7813.....	227	8V-7764.....	239
8T-1809.....	319	8T-4987.....	409	8T-7859.....	240	8W-0222.....	239
8T-1810.....	301	8T-4988.....	409	8T-7860.....	240	8W-2756.....	237
8T-1905.....	302	8T-4989.....	409	8T-7861.....	240	8W-9062.....	265
8T-2121.....	261	8T-4990.....	409	8T-7862.....	240	8X-3316.....	267
8T-2122.....	261	8T-4994.....	402	8T-7863.....	240	8X-3473.....	267
8T-2123.....	261	8T-5043.....	224	8T-7864.....	240	8X-5627.....	265
8T-2124.....	261	8T-5050.....	224	8T-7865.....	240	8X-6293.....	352
8T-2173.....	275	8T-5082.....	222	8T-7867.....	240	8X-7851.....	238
8T-2218.....	261	8T-5354.....	276	8T-7868.....	240	9B-1964.....	350
		8T-5360.....	400, 402	8T-787.....	395	9B-3523.....	270

Part Number Index

Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.	Part.No.	Page.No.
9D-0884	242	9S-7581	273	9U-6253	396	9U-7135	384
9D-2673	241	9S-7583	377	9U-6254	396	9U-7136	383
9D-3351	351	9S-7584	278	9U-6389	350	9U-7137	383
9D-9658	270	9S-7691	273	9U-6707	243	9U-7138	383
9F-2247	378	9S-7692	273	9U-6743	450	9U-7139	383
9F-2535	292	9S-7694	273	9U-6744	450	9U-7140	383
9H-6067	394	9S-7695	347	9U-6997	306	9U-7141	383
9J-0477	238	9S-7696	315	9U-7067	380	9U-7142	383
9J-3855	244	9S-7697	315	9U-7068	380	9U-7143	383
9J-4807	238	9S-7698	315	9U-7069	380	9U-7144	383
9J-6190	258	9S-7702	311	9U-7070	380	9U-7145	383
9J-7600	271	9S-7703	311	9U-7071	380	9U-7146	383
9J-8677	239	9S-7704	311	9U-7072	381	9U-7147	383
9J-9288	239	9S-7706	311	9U-7073	380	9U-7148	383
9K-1242	242	9S-7707	311	9U-7074	380	9U-7149	383
9K-5469	241	9S-7710	315	9U-7075	380	9U-7150	383
9L-0638	269	9S-7712	315	9U-7076	380	9U-7151	383
9L-3560	293	9S-7715	315	9U-7077	380	9U-7152	383
9L-3922	273	9S-7719	313	9U-7078	380	9U-7153	383
9L-4007	287	9S-7720	313	9U-7079	380	9U-7166	382
9L-5125	283	9S-7721	313	9U-7080	380	9U-7167	382
9L-5254	283	9S-7724	313	9U-7081	380	9U-7168	382
9L-8493	385	9S-7728	357	9U-7082	380	9U-7169	382
9L-8496	357	9S-7730	357	9U-7084	381	9U-7170	382
9L-8557	358	9S-7731	357	9U-7085	380	9U-7171	382
9L-9045	353	9S-7739	255	9U-7086	381	9U-7172	382
9L-9412	272	9S-7742	357	9U-7087	380	9U-7173	382
9M-0164	409	9S-7744	357	9U-7088	380	9U-7174	382
9M-4849	394	9S-7747	357	9U-7089	380	9U-7175	382
9M-5501	293	9S-7752	353	9U-7090	380	9U-7176	382
9M-6738	409	9S-7754	255	9U-7091	380	9U-7177	382
9M-7002	394	9S-8001	377	9U-7092	381	9U-7178	382
9M-7958	409	9S-8002	377	9U-7094	381	9U-7179	382
9M-7959	409	9S-8003	377	9U-7095	381	9U-7180	382
9M-9647	394	9S-8004	377	9U-7096	381	9U-7181	382
9N-1595	244	9S-8005	377	9U-7098	383	9U-7182	382
9Q-5446	246	9S-8006	377	9U-7099	383	9U-7183	382
9S-0176	345	9S-8007	377	9U-7100	383	9U-7184	382
9S-0284	91	9S-8008	377	9U-7101	383	9U-7185	382
9S-1339	263	9S-8009	377	9U-7102	383	9U-7186	382
9S-1812	262	9S-8010	377	9U-7103	384	9U-7187	382
9S-3172	94	9S-8895	376	9U-7120	384	9U-7188	382
9S-3173	94	9S-8896	385	9U-7121	384	9U-7189	382
9S-4180	377	9S-8927	376	9U-7122	384	9U-7190	382
9S-4181	377	9S-9334	377	9U-7123	384	9U-7191	382
9S-4182	377	9S-9370	270	9U-7124	384	9U-7192	382
9S-4183	377	9T-0975	238	9U-7125	384	9U-7193	382
9S-4185	377	9T-2136	225	9U-7126	384	9U-7194	382
9S-4188	377	9T-5212	239	9U-7127	384	9U-7195	385
9S-4190	377	9T-6322	379	9U-7128	384	9U-7196	385
9S-4191	377	9T-6635	244	9U-7129	384	9U-7197	385
9S-5518	376	9T-6865	239	9U-7130	384	9U-7198	385
9S-6130	377	9U-5228	236	9U-7131	384	9U-7199	385
9S-7296	287	9U-5229	236	9U-7132	384	9U-7200	385
9S-7336	243	9U-5792	469, 472	9U-7133	384	9U-7201	385
9S-7580	273	9U-6250	396	9U-7134	384	9U-7202	385

Part Number Index

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
9U-7261	469	9X-2527	357	9X-3874	183	9X-6578	372
9U-7440	250	9X-2538	304	9X-3875	183	9X-6579	372
9U-7443	250	9X-2541	327	9X-3876	183	9X-6580	372
9U-7445	250	9X-2604	309	9X-3877	184	9X-6581	372
9W-9577	419	9X-2608	228	9X-3878	184	9X-6582	372
9X-0262	236	9X-2623	347	9X-3879	184	9X-6583	372
9X-0263	243	9X-2650	237	9X-3880	185	9X-6642	260
9X-0435	243	9X-2733	viii	9X-3881	180	9X-6643	227
9X-2018	370	9X-2734	viii	9X-3882	180	9X-6650	247
9X-2085	297	9X-2735	viii	9X-3883	180	9X-6653	319
9X-2091	304	9X-2736	viii	9X-3884	180	9X-6656	225
9X-2134	302	9X-2737	viii	9X-3885	180	9X-7378	396
9X-2296	335	9X-2847	228	9X-3886	180	9X-7379	396
9X-2297	224	9X-2856	411	9X-3887	180	9X-7380	392, 396
9X-2304	225	9X-3807	183	9X-3888	180	9X-7381	392, 396
9X-2317	222	9X-3808	183	9X-3889	180	9X-7382	392, 396
9X-2362	vii	9X-3809	183	9X-3890	180	9X-7383	392, 396
9X-2363	vii	9X-3810	183	9X-3891	180	9X-7384	392, 396
9X-2364	vii	9X-3812	183	9X-3892	180	9X-7385	396
9X-2365	vii	9X-3813	183	9X-3893	180	9X-7423	391
9X-2366	vii	9X-3814	183	9X-3894	180	9X-7447	391
9X-2367	vii	9X-3815	183	9X-3895	180	9X-7574	97
9X-2368	vii	9X-3816	183	9X-3896	180	9X-8257	402
9X-2369	vii	9X-3821	182	9X-3897	180	9X-8260	227
9X-2370	vii	9X-3823	182	9X-3898	180	9X-8403	305
9X-2371	viii	9X-3826	182	9X-3899	180	9X-8405	238
9X-2372	viii	9X-3830	182	9X-3900	180	9X-8408	225
9X-2373	viii	9X-3832	182	9X-3901	180	9Y-2238	244
9X-2374	viii	9X-3840	181	9X-3902	180	9Y-6582	265
9X-2375	viii	9X-3842	181	9X-3903	180	9Y-7441	252
9X-2376	viii	9X-3846	181	9X-3908	168	9Y-7442	252
9X-2377	viii	9X-3849	181	9X-3947	181	9Y-7443	252
9X-2378	viii	9X-3850	181	9X-3953	167	9Y-9168	335
9X-2379	viii	9X-3852	183	9X-3956	183		
9X-2380	viii	9X-3853	183	9X-3957	182	3S-7116	100
9X-2381	viii	9X-3854	182	9X-3959	314	3S-7166	100
9X-2382	viii	9X-3855	182	9X-3962	251	3S-7252	100
9X-2383	viii	9X-3857	182	9X-3965	362	3S-8330	100
9X-2384	viii	9X-3859	182	9X-3966	306	4S-7507	100
9X-2385	viii	9X-3860	182	9X-3982	306	5P-0477	74
9X-2386	viii	9X-3861	182	9X-4611	390	5P-1010	74
9X-2387	viii	9X-3863	183	9X-6186	411	5P-1027	74
9X-2398	300	9X-3867	183	9X-6394	372	5P-3106	74
9X-2492	332	9X-3868	183	9X-6395	372	5P-7884	74
9X-2493	237	9X-3869	183	9X-6550	224		
9X-2525	357	9X-3870	183	9X-6577	372		

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