



HYDRAULIC HOSE PRODUCT GUIDE



For 6 decades, **Jason Industrial®** has become the go-to source throughout the Americas for industrial hose products serving a broad range of industries while offering a wide portfolio of hose products, couplings and hose accessories. We are now pleased to present our newest product addition, Hydraulic Hose. Within this catalog you will find our range of hydraulic hose products, couplings and crimping equipment.

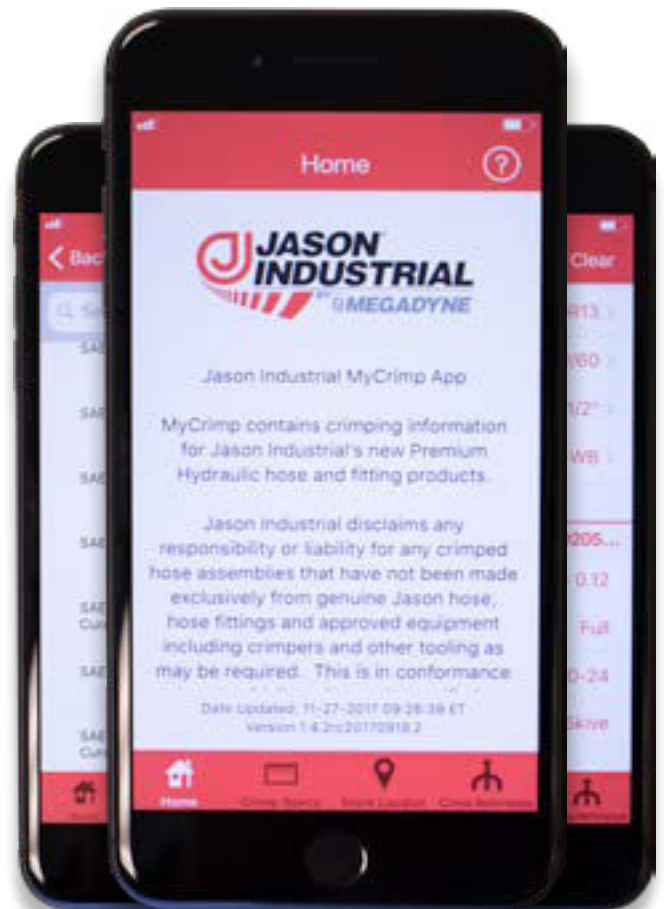
The cornerstone of Jason Industrial's success has been product quality, outstanding customer service, well stocked inventories, strong B2B tools and smooth logistical planning for partner companies. This will be the same commitment we extend to our hydraulic hose business. Jason Industrial is supported by our central warehouse just outside of Chicago as well as satellite distribution centers in Fairfield NJ, Tampa FL, Dallas TX and Bell (LA) CA. Additional stocking centers in the Americas include Montreal Canada, Mexico City, Mexico, Cartagena and Bogota Colombia, Sorocaba Brazil and Lima, Peru.

MyCrimp

Jason Industrial is pleased to provide an easy to use downloadable Mobile App enabling users a quick up to date source showing the right coupling specifications for the hose products we offer. Our App, Jason MyCrimp provides a fast, easy to use tool for obtaining important information to ensure safety by using the right coupling and hose together.

Our App, enables you to search by Hose, Coupling type or crimping equipment to obtain the right specification to ensure you are safely following the right procedures.

More information on our MyCrimp app on pages 190-191.



GENERAL INFORMATION

<u>TECHNICAL REFERENCE INDEX</u>	<u>PAGE</u>
CARE, MAINTENANCE & HOSE STORAGE	192
CHEMICAL RESISTANCE CHART	33
CONVERSION FACTORS - Decimal & Millimeter Equivalents of Fractions	187
DASH MEASURING SYSTEM	31
FIELD ATTACHABLE (REUSABLE) COUPLING ASSEMBLY PROCEDURE	171
FITTING IDENTIFICATION	17
HOW TO READ HOSE & COUPLING PART NUMBERS	31
LIABILITY GUIDELINES	7
PRESSURE RATING CONVERSION - PSI to BAR and BAR to PSI	189
SAE J1273 HYDRAULIC GUIDELINES	9
SAE WORKING PRESSURE CHART FOR HYDRAULIC HOSE	32
S.T.A.M.P.E.D. - Process For Determining The Correct Hose To Use	27
S.T.A.M.P.E.D. - Information Request Form	172
TEMPERATURE CONVERSION CHART	188
TERMS AND CONDITIONS	193
VACUUM CONVERSION TABLE FOR WATER SUCTION	187
MYCRIMP APPLICATION AND CRIMP SPECS	190

HYDRAULIC HOSE

<u>SERIES</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
5010	SAE 100R1AT, 1SN - DIN EN 853 MSHA Cover 1-Wire Braid Hose, Wrapped Cover	36
5011	SAE 100R1AT, 1SN DIN EN 853 MSHA Cover 1-Wire Braid Hose, Smooth Cover	37
5012	NEW! SAE 100R1AT, 1SN DIN EN853 - Wrapped MSHA Cover 1-Wire Braid Hose, @ Dreamshield® Extra Abrasion Resistant Cover	38
5020	SAE 100R2AT, 2SN DIN EN 853 MSHA Cover 2-Wire Braid Hose, Wrapped Cover	42
5021	SAE 100R2AT, 2SN DIN EN 853 MSHA Cover 2-Wire Braid Hose, Smooth Cover	43
5022	NEW! SAE 100R2AT, 2SN DIN EN 853 - Wrapped MSHA Cover 2-Wire Braid Hose, @ Dreamshield® Extra Abrasion Resistant Cover	44
5040	SAE 100R4 Oil Return Hose Replaces Industrial Series 4415	58
5050	SAE 100R5, SAE J1402 106-74 Type All	59
5120	SAE 100R12, DIN EN 856 R12 MSHA Cover 4-Spiral Hose	51
5122	NEW! SAE100R12, DIN EN 856 R12 - MSHA Cover 4-Spiral Hose - @ Dreamshield® Extra Abrasion Resistant Cover	52
5130	SAE 100R13, DIN EN 856 R13 MSHA Cover 4 or 6-Spiral Hose, 5,000 PSI Constant Pressure	53
5132	NEW! SAE 100R13, DIN EN 856 R13 - MSHA Cover - 4 or 6-Spiral Hose 5,000 PSI Constant Pressure, @ Dreamshield® Extra Abrasion Resistant Cover	54
5150	SAE 100R15, DIN EN 856 R15 MSHA Cover 4 or 6-Spiral Hose, 6,000 PSI Constant Pressure	55
5152	NEW! SAE 100R15, DIN EN 856 R15 - MSHA Cover - 4 or 6-Spiral Hose 6,000 PSI Constant Pressure, @ Dreamshield® Extra Abrasion Resistant Cover	56
5160	SAE 100R16 MSHA Cover 2-Wire Braid Hose, Wrapped Cover	45
5161	SAE 100R16 MSHA Cover 2-Wire Braid Hose, Smooth Cover	46
5162	NEW! SAE 100R16, - MSHA Cover - 2-Wire Braid Hose @ Dreamshield® Extra Abrasion Resistant Cover	47
5170	SAE 100R17 - MSHA Cover 1 or 2-Wire Braid Hose, Wrapped Cover 3,000 PSI Constant Pressure	39
5171	SAE 100R17 - MSHA Cover 1 or 2-Wire Braid Hose, Smooth Cover 3,000 PSI Constant Pressure	40
5172	NEW! SAE 100R17 - 3,000 PSI Constant Pressure, 1 or 2-Wire Braid Hose @ Dreamshield® Extra Abrasion Resistant MSHA Cover	41
5191	NEW! SAE 100R19 - MSHA Cover - 2-Wire Braid Hose - Smooth Cover	48
5192	NEW! SAE 100R19 - 4,000 PSI Constant Pressure - MSHA Wrapped Cover @ Dreamshield® Extra Abrasion Resistant Cover - 2-Wire Braid Hose	49

GENERAL INFORMATION

COUPLINGS

12/JB12 SERIES FOR 1-WIRE & 2-WIRE BRAID HOSES

<u>SERIES</u>	<u>DESCRIPTIVE SERIES</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
1200	JB12FS	Female Swivel 37° Flare	61
1202	JB12FS45	Female Swivel 37° Flare 45° Elbow	62
1204	JB12FS90	Female Swivel 37° Flare 90° Elbow	63
1204L NEW!	JB12FS90L	Female Swivel 37° Flare 90° Elbow - Long Drop	64
1205	JB12OFS	Female O-Ring Face Seal - Straight	65
1207	JB12OFS45	Female O-Ring Face Seal 45° Elbow	66
1209	JB12OFS90	Female O-Ring Face Seal 90° Elbow	67
1209L NEW!	JB12OFS90L	Female O-Ring Face Seal 90° Elbow - Long Drop	68
1210	JB12FA	Female Swivel SAE 45° Flare	69
1215	JB12FP	Female Pipe Rigid NPTF	70
1216 NEW!	JB12FPS	Female Pipe Swivel NPTF	71
1220	JB12MP	Male Pipe Rigid NPTF	72
1223	JB12MS	Male Pipe Swivel NPTF	73
1225	JB12MJ	Male JIC 37°	74
1226 NEW!	JB12MJBH	Male JIC 37° Flare - Bulkhead	75
1227	JB12OB	Male O-Ring Boss	76
1228	JB12OBS	Male O-Ring Boss Swivel	77
1230	JB12JISMP	Male JIS/BSP Taper Rigid Pipe - Metric	78
1232	JB12MOFS	SAE Male O-Ring Face Seal	79
1234	JB12C61S	SAE Code 61 Flange - Straight	80
1236	JB12C6145	SAE Code 61 Flange - 45° Elbow	81
1239	JB12C6190	SAE Code 61 Flange - 90° Elbow	82
1241	JB12C62S	SAE Code 62 Flange - Straight	83
1243	JB12C6245	SAE Code 62 Flange - 45° Elbow	84
1245	JB12C6290	SAE Code 62 Flange - 90° Elbow	85
1248	JB12FSPPBSP	Female Swivel Parallel Pipe - BSP 30° Cone - Metric	86
1249	JB12FSPPBSP45	Female Swivel Parallel Pipe - BSP 30° Cone 45° Elbow - Metric	87
1250	JB12FSPPBSP90	Female Swivel Parallel Pipe - BSP 30° Cone 90° Elbow - Metric	88
1252	JB12FSPPJIS	Female Swivel Parallel Pipe - JIS 30° Cone - Metric	89
1254	JB12FSPPJIS45	Female Swivel Parallel Pipe - JIS 30° Cone 45° Elbow - Metric	90
1256	JB12FSPPJIS90	Female Swivel Parallel Pipe -JIS 30° Cone 90° Elbow - Metric	91
1258 NEW!	JB12FSJISF	Female Swivel JIS 30° flare	92

COUPLINGS

12/JB12 SERIES FOR 1-WIRE & 2-WIRE BRAID HOSES

<u>SERIES</u>	<u>DESCRIPTIVE SERIES</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
1270	JB12KFSM	Female Swivel Komatsu 30° Flare - Metric	93
1271	JB12FSM	Female Swivel 60° Cone - Metric	94
1272	JB12FS45M	Female Swivel 60° Cone 45° Elbow - Metric	95
1273	JB12FS90M	Female Swivel 60° Cone 90° Elbow - Metric	96
1275	JB12MM	Male DIN 24° - Metric	97
1277	JB12LFSORM	Female Swivel O-Ring 24° Cone DIN 3865 L Series - Metric	98
1278	JB12LFSOR45M	Female Swivel O-Ring 24° Cone DIN 3865 L Series 45° Elbow- Metric	99
1279	JB12LFSOR90M	Female Swivel O-Ring 24° Cone DIN 3865 L Series 90° Elbow- Metric	100
1280	JB12FSORM	Female Swivel O-Ring 24° Cone DIN 3865 S Series - Metric	101
1281	JB12FSOR45M	Female Swivel O-Ring 24° Cone DIN 3865 S Series 45° Elbow- Metric	102
1282	JB12FSOR90M	Female Swivel O-Ring 24° Cone DIN 3865 S Series 90° Elbow- Metric	103

40/JB40 SERIES FOR 4-SPIRAL HOSES

<u>SERIES</u>	<u>DESCRIPTIVE SERIES</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
4000	JB40FS	Female Swivel 37° Flare	105
4002	JB40FS45	Female Swivel 37° Flare 45° Elbow	106
4004	JB40FS90	Female Swivel 37° Flare 90° Elbow	107
4004L	NEW! JB40FS90L	Female Swivel 37° Flare 90° Elbow - Long Drop	108
4005	JB40OFS	Female O-Ring Face Seal - Straight	109
4007	JB40OFS45	Female O-Ring Face Seal 45° Elbow	110
4009	JB40OFS90	Female O-Ring Face Seal 90° Elbow	111
4010	JB40FA	Female Swivel SAE 45° Flare	112
4020	JB40MP	Male Pipe Rigid NPTF	113
4023	JB40MS	Male Pipe Swivel NPTF	114
4025	JB40MJ	Male JIC 37°	115
4027	JB40OB	Male O-Ring Boss	116

GENERAL INFORMATION

INDEX

COUPLINGS

40/JB40 SERIES FOR 4-SPIRAL HOSES

<u>SERIES</u>	<u>DESCRIPTIVE SERIES</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
4030	JB40JISMP	Male JIS/BSP Taper Rigid Pipe - Metric	117
4032	NEW! JB40MOFS	SAE Male O-Ring Face Seal	118
4034	JB40C61S	SAE Code 61 Flange - Straight	119
4036	JB40C6145	SAE Code 61 Flange - 45° Elbow	120
4039	JB40C6190	SAE Code 61 Flange - 90° Elbow	121
4039L	NEW! JB40C6190L	SAE Code 61 Flange - 90° Elbow - Long Drop	122
4041	JB40C62S	SAE Code 62 Flange - Straight	123
4043	JB40C6245	SAE Code 62 Flange - 45° Elbow	124
4045	JB40C6290	SAE Code 62 Flange - 90° Elbow	125
4048	JB40FSPPBSP	Female Swivel Parallel Pipe - BSP 30° Cone - Metric	126
4049	JB40FSPPBSP45	Female Swivel Parallel Pipe - BSP 30° Cone 45° Elbow - Metric	127
4050	JB40FSPPBSP90	Female Swivel Parallel Pipe - BSP 30° Cone 90° Elbow - Metric	128
4052	JB40FSPPJIS	Female Swivel Parallel Pipe - JIS 30° Cone - Metric	129
4054	JB40FSPPJIS45	Female Swivel Parallel Pipe -JIS 30° Cone 45° Elbow - Metric	130
4056	JB40FSPPJIS90	Female Swivel Parallel Pipe -JIS 30° Cone 90° Elbow - Metric	131
4070	JB40KFSM	Female Swivel Komatsu 30° Flare - Metric	132
4071	JB40FSM	Female Swivel 60° Cone - Metric	133
4072	JB40FS45M	Female Swivel 60° Cone 45° Elbow - Metric	134
4073	JB40FS90M	Female Swivel 60° Cone 90° Elbow - Metric	135
4075	JB40MM	Male DIN 24° - Metric	136
4077	JB40LFSORM	Female Swivel O-Ring 24° Cone DIN 3865 L Series - Metric	137
4078	JB40LFSOR45M	Female Swivel O-Ring 24° Cone DIN 3865 L Series 45° Elbow- Metric	138
4079	JB40LFSOR90M	Female Swivel O-Ring 24° Cone DIN 3865 L Series 90° Elbow- Metric	139
4080	JB40FSORM	Female Swivel O-Ring 24° Cone DIN 3865 S Series - Metric	140
4081	JB40FSOR45M	Female Swivel O-Ring 24° Cone DIN 3865 S Series 45° Elbow- Metric	141
4082	JB40FSOR90M	Female Swivel O-Ring 24° Cone DIN 3865 S Series 90° Elbow- Metric	142

COUPLINGS

60/JB60 SERIES FOR 4-SPIRAL & 6-SPIRAL HOSES

<u>SERIES</u>	<u>DESCRIPTIVE SERIES</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
6000	JB60FS	Female Swivel 37° Flare	144
6002	JB60FS45	Female Swivel 37° Flare 45° Elbow	145
6004	JB60FS90	Female Swivel 37° Flare 90° Elbow	146
6005	JB60OFS	Female O-Ring Face Seal - Straight	147
6007	JB60OFS45	Female O-Ring Face Seal 45° Elbow	148
6009	JB60OFS90	Female O-Ring Face Seal 90° Elbow	149
6020	JB60MP	Male Pipe Rigid NPTF	150
6024	NEW! JB60MPAPI	Male Pipe API	151
6032	NEW! JB60MOFS	SAE Male O-Ring Face Seal	152
6034	JB60C61S	SAE Code 61 Flange - Straight	153
6036	JB60C6145	SAE Code 61 Flange - 45° Elbow	154
6039	JB60C6190	SAE Code 61 Flange - 90° Elbow	155
6041	JB60C62S	SAE Code 62 Flange - Straight	156
6043	JB60C6245	SAE Code 62 Flange - 45° Elbow	157
6045	JB60C6290	SAE Code 62 Flange - 90° Elbow	158
6048	JB60FSPPBSP	Female Swivel Parallel Pipe - BSP 30° Cone - Metric	159
6049	JB60FSPPBSP45	Female Swivel Parallel Pipe - BSP 30° Cone 45° Elbow - Metric	160
6050	JB60FSPPBSP90	Female Swivel Parallel Pipe - BSP 30° Cone 90° Elbow - Metric	161
6060	JB60CATS	Caterpillar Style Flange - Straight	162
6062	JB60CAT45	Caterpillar Style Flange - 45° Elbow	163
6064	JB60CAT90	Caterpillar Style Flange - 90° Elbow	164

75/JFR5 FIELD ATTACHABLE (REUSABLE) COUPLINGS - FOR SAE 100R5, J1402 TYPE AII, FMVS 106 HOSES

7500	JFR5FS	Female Swivel - 37° Flare	166
7502	JFR5FS45	Female Swivel - 37° Flare, 45° Elbow	167
7504	JFR5FS90	Female Swivel - 37° Flare, 90° Elbow	168
7510	JFR5FA	Female Swivel - SAE 45° Flare	169
7520	JFR5MP	Male Pipe Rigid - NPTF	170

CRIMPING EQUIPMENT & ACCESSORIES

JCD100S-T420		Portable Service Hose Crimper	174
JCD165M-T420		Hose Crimper	176
JCD205M-WB		Hydraulic Hose Crimper	178
JCC-200		General Production Hose Crimper	180
JIC340	NEW!	General Production Hose Crimper	182
JHS		JHS-150, -300, -500 Hose Saws and Blades	184
PAG	NEW!	Polyethylene Armor Guard	186

GUIDELINES - LIABILITY

Jason Industrial Disclaims Any Responsibility or Liability for Any Crimped Hose Assemblies That Have Not Been Made Exclusively from Genuine Jason Hose, Hose Fittings and Approved Equipment. This Is in Conformance with Current Jason Guidelines for Each Specific Hose Assembly.

Jason products are part of an engineered system which must be assembled and used in accordance with Jason instructions and limitations. Jason hose, couplings and crimping machines are a reliable assembly system designed by our engineering group. The use of other than Jason components (hose, couplings, equipment) may produce assemblies that will not meet the rated performance. Failure to follow Jason guidelines could lead to premature hose failures resulting in property damage, serious injury or death.

Jason's limited warranty shall only apply if the customer uses the hose, hose fittings and crimping equipment specifically approved by Jason's engineers.

Jason will not be responsible when interchanging hose and/or couplings with hose and/or couplings with any other manufacturer. Jason's liability ends and customer's begins when data is ignored or altered and products, other than Jason's are assembled together.

Product Liability Responsibility for Such Hose Assemblies Become the Personal Responsibility of the Assembler or the Company Endorsing These Practices.

There is the argument that hoses branded with the same SAE specification are the same and can be interchanged and used with our couplings. That is false! Hose can only be expected to perform to the requirements of SAE when they are assembled with manufacturer approved couplings. This fact is recognized by SAE in their SAE J1273 handbook:

Proper End Fitting – Care must be taken to insure proper compatibility exists between the hose and coupling selected based on the manufactures' recommendation substantiated by testing to industry standards such as SAE J517.

All Jason customers need to recognize the following critical points:

1. The data supplied with the Jason crimper was developed after extensive testing with Jason hose and couplings.
2. The data that Jason supplies is only good with products bearing the Jason name and catalog part number.
3. Jason couplings, used with other manufacturer's hose, will not necessarily produce an acceptable assembly. Hose styles with identical SAE specs, for instance, are not necessarily the same when come to performance with Jason couplings.
4. Hose compatibility with various materials is a reference only. The purchaser is responsible for the verification of suitability. Consult Jason if there is any doubt.
5. Jason crimpers can only be used to crimp approved Jason hose and couplings.
6. Minimum burst pressure ratings listed in our catalog, are for reference and design purposes only.

Minimum burst pressure ratings give no indication that the product should be used above the indicated rated working pressure.

AIRCRAFT APPLICATION GUIDELINES

There are **no** Jason products that we would endorse to be used in any aircraft applications. Our hose and coupling (includes belts) product lines are not designed for any types of aircraft, including helicopters, commercial or private airplanes, ultra-light planes and lighter-than-air craft.

If the user violates the above policy by using Jason product on an aircraft application, that user assumes the sole and exclusive responsibility and liability and Jason assumes no responsibility or liability regarding same.

AIR BRAKE ASSEMBLY GUIDELINES

Federal law requires registration with the Department of Transportation (DOT) for anyone producing air brake hose assemblies with swaged or crimp fittings. The Jason 5050 series hose has been tested and meets SAE 100R5 and J1402 Type AII/FMVSS 106 requirements with Jason provided 75 Series field attachable (reusable) couplings. Sizes 16 (7/8" bore) and larger are not included in the SAE J1402/FMVSS 106 standards.

Anyone wishing to produce any permanently crimped or swaged assembly used in airbrake systems, is required to perform all required testing to meet the federal standards, including labeling and registering their own unique manufacturing mark with DOT.

GUIDELINES

SAE J1273 HYDRAULIC GUIDELINES

Foreword - This SAE Recommended Practice is intended as a guide to consider when selecting, routing, fabricating, installing, replacing, maintaining, and storing hose force fluid power systems. It is subject to change to keep pace with experience and technical advances. For those new to hose use in a fluid-power system, this guide outlines practices to note during each phase of system design and use. Experienced designers and users skilled in achieving proper results, as well as the less experienced, can use this outline as a list of considerations to keep in mind.

Fluid power systems are complex and require extensive knowledge of both system requirements and the various types of hose. Therefore, all-inclusive, detailed, step-by-step instructions are not practical and are beyond the scope of this document. Less experienced designers and users who need more information can consult specialists such as hose suppliers and manufacturers. This guide can improve the communication process.

Safety Considerations - These recommended practices involve safety considerations; note these carefully during all phases of design and use of hose systems. Improper selection, fabrication, installation, or maintenance of hose and hose assemblies for fluid-power systems, may result in serious personal injury or property damage. These recommended practices can reduce the likelihood of component or system failure, thereby reducing the risk of injury or damage.

1. Scope - SAE J1273 provides guidelines for selection, routing, fabrication, installation, replacement, maintenance and storage of hose and hose assemblies for fluid-power systems. Many of these SAE Recommended Practices also may be suitable for other hoses and systems.

2. References

2.1 Application Documents - The following publications form a part of this specification to the extent specified herein. Unless otherwise specified, the latest issue of SAE publications shall apply.

- a. SAE J343 - Test and Procedures for SAE 100R Series Hydraulic Hose and Hose Assemblies
- b. SAE J514 - Hydraulic Tube Fittings
- c. SAE J517 - Hydraulic Hose
- d. SAE J1927 - Cumulative Damage Analysis for Hydraulic Hose Assemblies.

2.1.2 ISO Publication - Available from ANSI, 25 W. 43rd St. New York, NY 10036-8002

3. Definitions - These explanations serve only to clarify this document and are not intended to stand alone. They are presented sequentially, with the former helping to explain the latter.

3.1 Fluid Power - Energy transmitted and controlled using pressurized hydraulic fluids or compressed air.

3.2 Hose - Flexible conductor. In this document, the term hose also may refer to a hose assembly with related accessories used in fluid power applications.

3.3 Hose Fitting or Fitting - Connector which can be attached to the end of the hose.

3.4 Hose Assembly - Hose with hose fittings attached.

3.5 Hose Failure - Occurrence in which a hose stops meeting system requirements.

3.6 Hose Service Life - Length of time a hose meets system requirements without needing replacement.

4. Safety Considerations - Listed in 4.1 to 4.7 are some potential conditions and situations that may lead to personal injury and/or property damage. This list is not necessarily all inclusive. Consider reasonable and feasible means, including those described in this section, to reduce the risk of injuries or property damage.

4.1 Fluid Injections - Fine streams of escaping pressurized fluid can penetrate skin and enter a

SAE J1273 HYDRAULIC GUIDELINES

human body. These fluid injections may cause severe tissue damage and loss of limb. Consider various means to reduce the risk of fluid injections, particularly in areas normally occupied by operators. Consider careful routing, adjacent components, warnings, guards, shields and training programs. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Avoid contact with escaping fluids. Treat all leaks as though pressurized and hot enough to burn skin. Never use any part of your body to check for leaks. If a fluid-injection accident occurs, see a doctor immediately. **DO NOT DELAY OR TREAT AS A SIMPLE CUT!** Any fluid injected into the skin must be surgically removed within a few hours, or gangrene may result. Doctors unfamiliar with this type of injury should consult a knowledgeable medical source.

4.2 Whipping Hose - If a pressurized hose assembly blows apart, the fittings can be thrown off at high speed, and the loose hose can flail or whip with great force. This particularly true in compressible fluid systems. When the risk exists, consider guards and restraints to protect against injury.

4.3 Burns from Conveyed Fluids - Most fluid-power media may reach temperatures that can burn the human skin. If there is a risk of burns from escaping fluids, consider guards and shields to prevent injury to prevent injury, particularly in areas normally occupied by operators.

4.4 Fire and Explosions from Conveyed Fluids - Most fluid-power media, including fire-resistant hydraulic fluids, will burn under certain conditions. Fluids which escape from pressurized systems may form a mist or fine spray which can flash or explode upon contact with an ignition source. Consider selecting, guarding and routing hose to minimize the risk of combustion. (See section 5 and ISO 3457).

4.5 Fire and Explosions from Static-Electric Discharge - Fluid passing through hose can

generate static electricity, resulting in static-electric discharge. This may create sparks that can ignite system fluids in the surrounding atmosphere. When this potential exists, select hose specifically designed to carry the static-electric charge to the ground.

4.6 Electrical Shock – Electrocutation could occur if hose conducts electricity through a person. Most hoses are conductive. Many contain metal or have metal fittings. Even non-conductive hoses can be conduits for electricity if they carry conductive fluids. Be aware of routing or using hose near electrical sources. When this cannot be avoided, select appropriate hose. Non-conductive hoses should be considered. SAE J517 – 100R7 and 100R8, with orange covers marked “Non-conductive” are available for applications requiring non-conductive hose.

4.7 Mechanisms Controlled by Fluid Power – Mechanisms controlled by fluids in hoses can become hazardous when a hose fails. For example, when a hose bursts, objects supported by fluid pressure may fall, or vehicles or machines may lose their brakes or steering. If mechanisms are controlled by fluid power, consider safe modes of failure that minimize risks of injury or damage.

5.0 Hose Selection and Routing – A wide variety of interacting factors influence hose service life and the ability of each fluid-power system to operate satisfactorily, and the combined effects of these factors on service life are often unpredictable. Therefore, these documents should not be construed as design standards. For applications outside the specification in SAE J517, SAE J514 or other relevant design standards, performance of hose assemblies should be determined by appropriate testing. Carefully analyze each system. Then design routings and select hose and related components to meet the system-performance and hose-service-life requirements, and to minimize the risks of personal injury and/or property damage.

GENERAL INFORMATION

GUIDELINES

SAE J1273 HYDRAULIC GUIDELINES

Consider the following factors:

5.1 – System Pressures – Excessive pressure can accelerate hose assembly failure. Analyze the steady-state pressure, and the frequency and amplitude of pressure surges, such as pulses and spikes. These are rapid and transient rises in pressure which may not be indicated on many common pressure gauges and can be identified best on high-frequency-response electronic measuring instruments. For maximum hose service life, hose selection should be based on system pressure. Hose may be used above its maximum working pressure where reduced life expectancy is acceptable. SAE J1927 provides one method to help predict wore-reinforced hose service life for a given hydraulic application, where the surge pressure peaks vary, and/or the highest pressure peaks occur infrequently.

5.2 – Suction – For suction applications, such as inlet flow to pumps, select hose to withstand both the negative and positive pressures the system imposes on the hose.

5.3 - External Pressure – In certain applications, such as in autoclaves or under water, the external environment pressures may exceed the fluid pressure inside the hose. In these applications, consider the external pressures, and, if necessary, consult the manufacturers.

5.4 – Temperature – Exceeding hose temperature ratings may significantly reduce hose life. Select hose so the fluid and ambient temperatures, both static and transient, fall within the hose ratings. The effects of external heat sources should not raise the temperature of the hose above its operating maximum temperature. Select hose, heat shields, sleeving and other methods for these requirements, and route or shield hose to avoid hose damage from external heat sources.

5.5 – Permeation – Permeation, or effusion, is seepage of fluid through the hose. Certain materials in hose construction are more permeable

than others. Consider the effects of permeation when selecting hose, especially with gaseous fluid. Consult the hose and fluid manufacturers for permeability information.

5.6 – Hose-Material Compatibility – Variables that can affect compatibility of system fluids with hose materials include, but are not limited to: a) Fluid Pressure, b) Temperature, c) Concentration and d) Duration of Exposure. Because of permeation (see 5.5), consider compatibility of system fluids with the hose, tube, cover, reinforcement and fittings. Consult the fluid and hose manufacturers for compatibility information. NOTE – Many fluid/elastomer compatibility tables in manufacturer's catalogs show ratings based at room temperature (69.8°F / 21°C). These ratings may change at other temperatures. Carefully read the notes on the compatibility tables, and if in doubt, consult the manufacturer.

5.7 – Environment – Environmental conditions can cause hose and fitting degradation. Conditions to evaluate include, but are not limited to: a) Ultraviolet Light, b) Salt Water, c) Air Pollutants, d) Temperature (see 5.4), e) Ozone, f) Chemicals, g) Electricity and h) Abrasion. If necessary, consult the manufacturer for more information.

5.8 – Static-Electric Discharge – Fluid passing through the hose can generate static electricity resulting in static-electric discharge. This may create sparks that can puncture hose. If this potential exists, select hose with sufficient conductivity to carry the static-electric charge to the ground.

5.9 – Sizing – The power transmitted by pressurized fluid varies with pressure and rate of flow. Select hose with adequate size to minimize pressure loss, and to avoid hose damage from heat generation or excessive velocity. Conduct calculations, or consult the manufacturer for sizing at flow velocities.

SAE J1273 HYDRAULIC GUIDELINES

5.10 – Unintended Uses – Hose assemblies are designed for the internal forces of conducted fluids. Do not pull hose or use it for purposes that may apply external forces for which the hose or fittings were not designed.

5.11 – Specifications and Standards – When selecting hose and fittings for specific applications, refer to applicable government, industry and manufacturer’s specifications and standards.

5.12 – Unusual Applications – Applications not addressed by the manufacturer or by industry standards, may require special testing prior to selecting a hose.

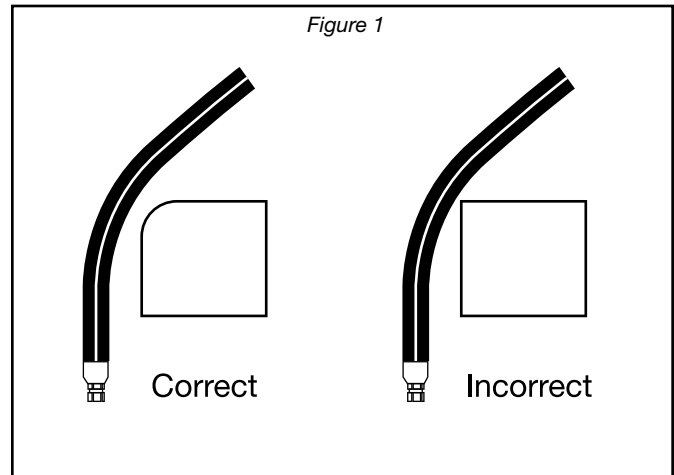
5.13 – Hose Cleanliness – The cleanliness requirements of system components, other than hose, will determine the cleanliness requirements of the application. Consult the components manufacturer’s cleanliness information for all components in the system. Hose assemblies vary in cleanliness levels; therefore, specify hose assemblies with adequate cleanliness for the system.

5.14 – Hose Fittings – Selection of the proper hose fittings for the hose and application is essential for proper operation and safe use of hose and related assembly equipment. Hose fittings are qualified with the hose. Therefore, select only hose fittings compatible with the hose for the applications. Improper selection of hose fittings or related assembly equipment for the application can result in injury or damage from leaks, or from hose assemblies blowing apart. (See 4.2, 6.2, 6.3 and 6.4).

5.15 – Vibration – Vibration can reduce hose service life. If required, conduct tests to evaluate the frequency and amplitude of system vibration. Clamps or other means may be used to reduce the effects of vibration. Consider the vibration requirements when selecting hose and predicting service life.

5.16 – Hose Cover Protection – Protect the hose cover from abrasion, erosion, snagging and cutting. Special abrasion-resistant hoses and hose guards

are available for additional protection. Route hose to reduce abrasion from hose rubbing other hose or objects that may abrade it. (See Figure 1).



5.17 – Physical Abuse – Route hose to avoid: a) Tensile Loads, b) Side Loads, c) Flattening, d) Thread Damage, e) Kinking, f) Damage to Sealing Surfaces, g) Abrasion and h) Twisting.

5.18 – Swivel-Type Adapters – Swivel-type fittings or adapters do not transfer torque to hose while being tightened. Use these as needed to prevent twisting during installation.

5.19 – Live Swivels – If two components in the system are rotating in relation to each other, live swivels may be necessary. These connectors reduce the torque transmitted to the hose.

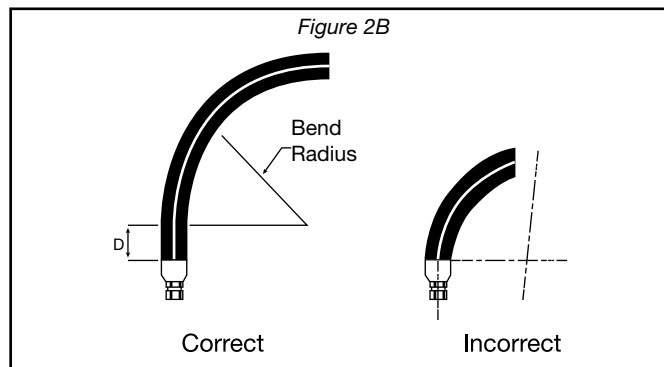
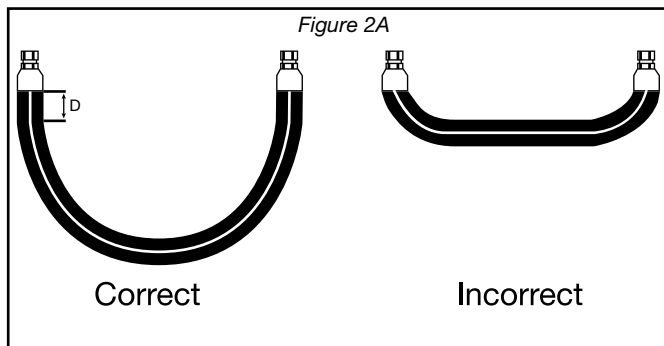
5.20 – Slings and Clamps – Use slings and clamps to support heavy or long hose and to keep it away from moving parts. Use clamps that prevent hose movement that will cause abrasion.

5.21 – Minimum Bend Radius – The minimum bend radius is defined in SAE J343 and is specified in other SAE standards and hose manufacturer’s product literature. Routing at less than minimum bend radius may reduce hose life. Sharp bending at the hose/fitting juncture may result in leaking, hose rupturing or in the hose assembly blowing apart. (See 4.2 and Figures 2A and 2B).

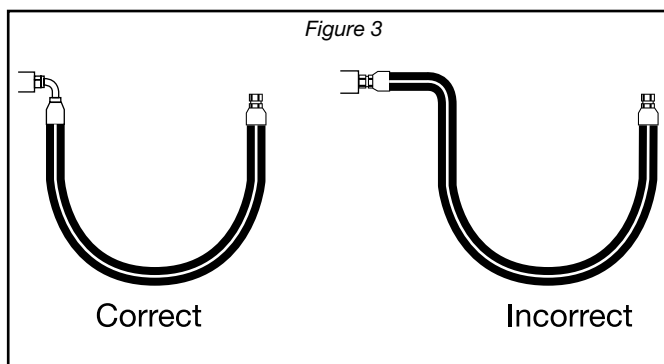
GENERAL INFORMATION

GUIDELINES

SAE J1273 HYDRAULIC GUIDELINES

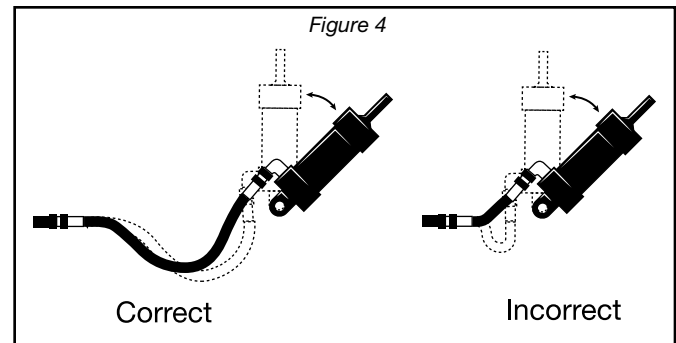


5.22 – Elbows and Adapters – In special cases, use elbows or adapters to relieve hose strain. (See Figure 3).

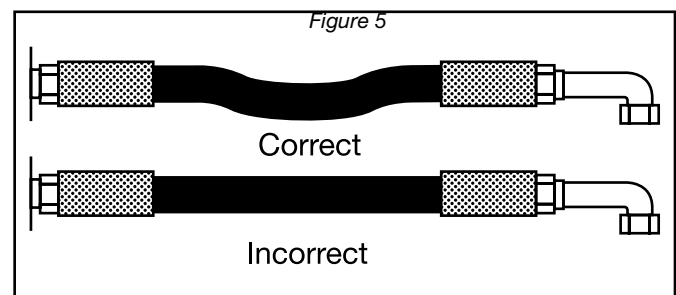


5.23 – Lengths – Unnecessarily long hose can increase pressure drop and affect system performance. When pressurized, hose that is too short may pull loose from its fittings, or stress the fitting connections, causing premature metallic or seal failures. When establishing hose length, refer to Figures 4, 5 and 6. Use the following practices:

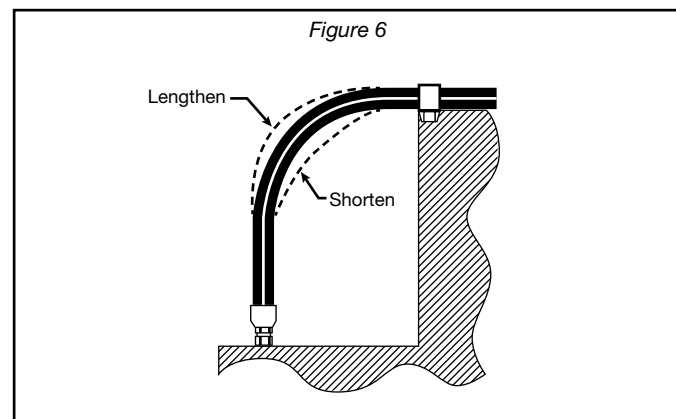
5.23.1 – Motion Absorption – Provide adequate hose length to distribute movement and prevent bends smaller than the minimum bend radius.



5.23.2 – Hose and Machine Tolerances – Design hose to allow for changes in length due to machine motion and tolerances.



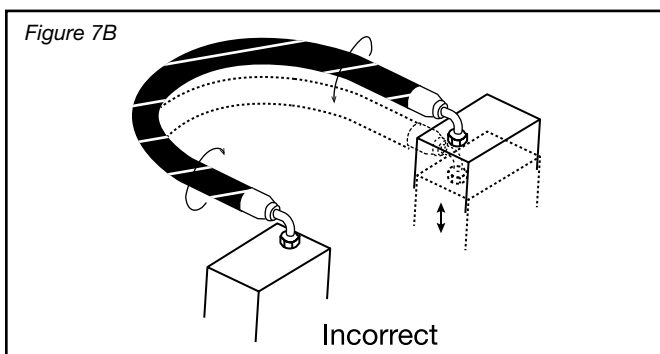
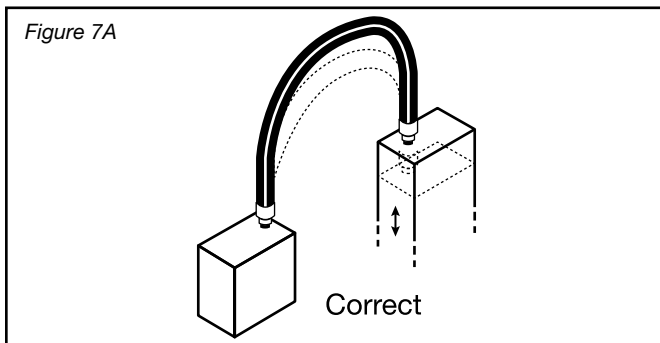
5.23.3 – Hose Length Change Due to Pressure – Design hose to accommodate length changes from changing pressures. DO NOT cross or clamp together high and low pressure hoses. The difference in length changes could wear the hose covers.



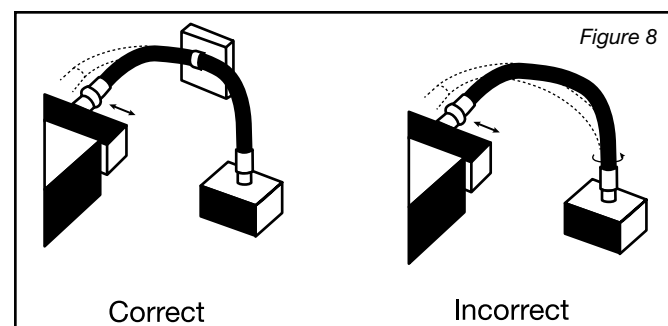
SAE J1273 HYDRAULIC GUIDELINES

5.24 – Hose Movement and Bending – Hose allows relative motion between system components. Analyze this motion when designing hose systems. The number of cycles may significantly affect hose life. Also avoid multiple planes of motion and twisting motion. Consider the motion of the hose when selecting hose and predictable service life. In applications that require hose to move or bend, refer to Figures 7A, 7B and 8, and use these practices:

5.24.1 – Bend in Only One Plane to Avoid Twisting.



5.24.2 – Prevent Hose Bending in More Than One Plane – if the hose follows a compound bend, couple it into separate segments that flex only in one place.



6. Hose-Assembly Fabrication – Persons fabricating hose assemblies should be trained in the proper use of equipment and materials. The

manufacturers' instructions and the practices listed as follows must be followed. Properly assembled fittings are vital to the integrity of a hose assembly. Improperly assembled fittings can separate from the hose and may cause serious injury or property damage from whipping hose, or from fire or explosion of vapor expelled from the hose.

6.1 – Component Inspection – Prior to assembly, examine components for:

- | | |
|------------------------|--------------------|
| a) Style or type | g) Visible defects |
| b) Cleanliness | h) Damage |
| c) Loose covers | i) Length |
| d) Nicks | j) Blisters |
| e) Inside obstructions | k) Burrs |
| f) Size | |

6.2 – Hose Fittings – Hose fitting components from one manufacturer are not usually compatible with fitting components supplied by another manufacturer. For example, do not use a hose fitting nipple from one manufacturer with a hose socket from another manufacturer. It is the responsibility of the fabricator to consult the manufacturer's written instructions or the manufacturer directly for information on proper fitting components.

6.3 – Hose and Fitting Compatibility – Care must be taken to determine proper compatibility between the hose and the fitting. Base selection on the manufacturer's recommendations substantiated by testing to industry standards, such as SAE J517. Hose from one manufacturer is not usually compatible with fittings from another. Do not intermix hose and fittings from two manufacturers without approval from both manufacturers.

6.4 – Hose Assembly Equipment – Assembly equipment from one manufacturer is usually not interchangeable with that from another manufacturer. Hose and fittings from one manufacturer should not generally be assembled with the equipment of another manufacturer.

6.5 – Safety Equipment – During fabrication, use proper safety equipment, including eye protection, breathing apparatus and adequate ventilation.

GENERAL INFORMATION

GUIDELINES

SAE J1273 HYDRAULIC GUIDELINES

6.6 – Reuse of Hose and Fittings – When fabricating hose assemblies, do not reuse:

- Field-attachable (reusable) fittings that have blown or pulled off the hose.
- Any part of hose fittings that were permanently crimped or swaged to hose.
- Hose that has been in service after system checkout (see 7.7)

6.7 – Cleanliness of Hose Assemblies –

Hose assemblies may be contaminated during fabrication. Clean hoses to specified cleanliness levels (see 5.13).

7. Hose Installation and Replacement – Use the following practices when installing hose assemblies in new systems or replacing hose assemblies in existing systems:

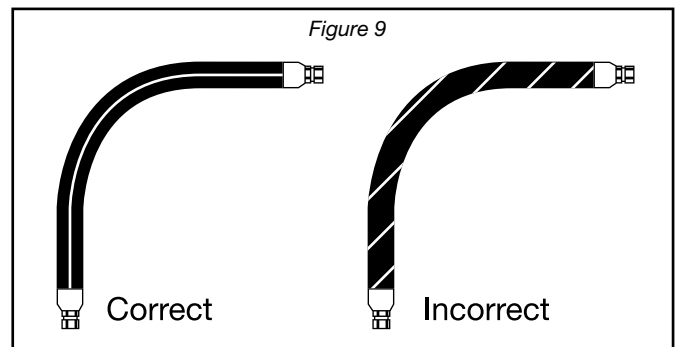
7.1 – Pre-Installation Inspection – Before installing hose assemblies, examine:

- Hose length and routing for compliance with original design.
- Assemblies for correct style, size, length and visible non-conformities.
- Fitting sealing surfaces for burrs, nicks or other damage.

NOTE: When replacing hose assemblies in existing systems, verify that the replacement is of equal quality to the original assembly.

7.2 – Handling During Installation – Handle hose with care during installation. Kinking hose, or bending at less than minimum bend radius may reduce hose life. Avoid sharp bending at the hose/fitting juncture. (See 5.21).

7.3 – Twist Angle and Orientation – Pressure applied to a twisted hose may shorten the life of the hose or loosen the connections. To avoid twisting, use the lay line or marking as a reference (see Figure 9).



7.4 – Securement and Protection – Install necessary restraints and protective devices. Determine that such devices do not create additional stress or wear points.

7.5 – Routing – Review proper routing practices provided in Section 5 and make appropriate corrections to obtain optimum performance.

7.6 – Assembly Torque – The connection end of a hose fitting is normally threaded to obtain tight pressure seal when attached to a port, an adapter or another fitting. Sometimes bolts or screws provide the threaded connection. Each size and type of connection requires different torque values, and these may vary due to type of material or exterior coating. Follow appropriate torquing instructions to obtain a proper pressure seal without over-torquing. A properly calibrated torque wrench should be used to tighten each connection, except when the manufacturer specifies tightening a specified number of hex flat turns beyond finger tight to obtain a seal.

7.7 – System Checkouts – In hydraulic or other liquid systems, eliminate all air entrapment after completing the installation. Follow manufacturers' instructions to test the system for possible malfunctions and leaks.

7.7.1 – To avoid injury during system checkouts:

- Do not touch any part of the system when checking for leaks (see 4.1).
- Stay out of potentially hazardous areas while testing hose systems (see Section 4).
- Relieve system pressure before tightening connections.

SAE J1273 HYDRAULIC GUIDELINES

8. Maintenance Inspection – A hose and fitting maintenance program may reduce equipment downtime, maintain peak operating performance, and reduce the risk of personal injury and/or property damage. The user should design and implement a maintenance program that suits a specific application and each specific hose in that application.

8.1 – Inspection Frequency – Evaluate factors such as the nature and severity of the application, past history and manufacturers’ information to establish the frequency of visual inspections and functional tests.

8.2 – Visual Inspection (Hose & Fittings) –

Visually inspect hose and fittings for:

- a. Leaks at the hose fitting or in the hose
- b. Damaged, cut or abraded cover
- c. Exposed reinforcement
- d. Kinked, crushed, flattened or twisted hose
- e. Hard, stiff, heat cracked or charred hose
- f. Blistered, soft, degraded or loose cover
- g. Cracked, damaged or badly corroded fittings
- h. Fitting slippage on hose
- i. Other signs of significant deterioration

If any of these conditions exist, evaluate those hose assemblies for correction or replacement.

8.3 – Visual Inspection (All Other Components)

– When visually inspecting hose and fittings, inspect for related items including:

- a. Leaking ports
- b. Damaged or missing hose clamps, guards or shields
- c. Excessive dirt and debris around hose.
- d. System fluid: level, type, contamination, condition and air entrainment.

If any of these are found, address them appropriately.

8.4 – Functional Test – Functional tests determine if systems with hose are leak free and operating properly. Carry out functional tests per information from equipment manufacturers.

9. Hose Storage – Age control and the manner of storage can affect hose life. Use the following practices when storing hose.

9.1 – Age Control – Maintain a system of age control to determine that hose is used before its shelf life has expired. Shelf life is the period of time when it is reasonable to expect the hose to retain full capabilities for rendering the intended service. Store in a manner that facilitates age control and first-in, first-out usage based on manufacturing date on the hose or hose assembly. Per SAE J517:

- a. Shelf life of rubber hose in bulk form, or in hose assemblies passing visual inspection and proof test, is forty quarters (ten years) from the date of manufacture.
- b. Shelf life of thermoplastic and PTFE hose is considered to be unlimited.

9.2 – Storage – Store hose and hose assemblies in a cool, dark, dry area with ends capped. When storing hose, take care to avoid damage that could reduce hose life, and follow the manufacturers’ information for storage and shelf life. Examples of factors that can adversely affect hose products in storage are:

- | | |
|--------------------------------|--------------------------|
| a. Temperature | f. Humidity |
| b. Ozone | g. Ultraviolet light |
| c. Oils | h. Solvents |
| d. Corrosive liquids and fumes | i. Insects |
| e. Rodents | j. Radioactive materials |

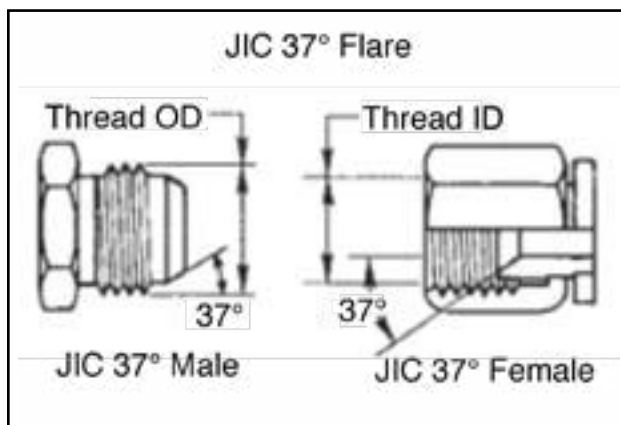
If there are any questions regarding the quality or usability of hose or hose assemblies, evaluate appropriately:

- a. Flex the hose to the minimum bend radius and compare it with new hose. After flexing, examine the cover and tube for cracks. If any appear, no matter how small, reject the hose.
- b. If the hose is wire reinforced, and the hose is unusually stiff, or a cracking sound is heard during flexing, check for rust by cutting away a section of the cover from a sample. Rust would be another reason for rejection.
- c. If doubt still persists, contact hose assembler to conduct proof-pressure tests or any other tests needed to verify hose quality.

Prepared by the SAE Fluid Conductors and Connectors Technical Committee SC3-Training and Education Committee

SAE J514, 37° Flare

This connection is widely used in many hydraulic systems. It is commonly referred to as a JIC 37° Flare. When the straight threads are engaged, the 37° male seats on the 37° female flare seat.

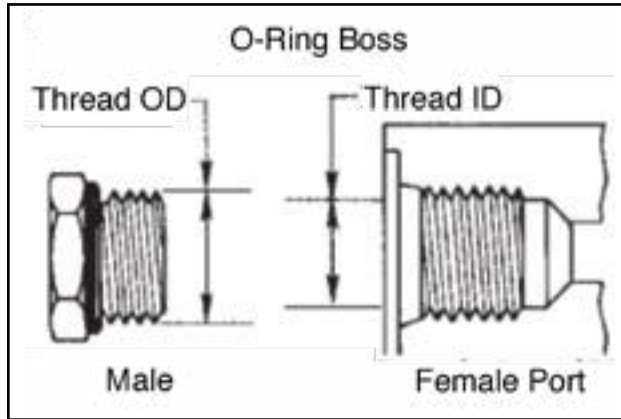


SAE J514 37° JIC Flare Thread Size and Maximum Working Pressure

SAE Dash Size	Tube Outside Diameter		Thread Size	Male Thread Outside Diameter		Female Thread Outside Diameter		Threads, Unions & Bulkheads		Threads and Female Swivels	
	inch	mm		inch	mm	inch	mm	PSI	BAR	PSI	BAR
-02	0.125	3.18	5/16-24	0.31	7.9	0.27	6.9	5000	344.8	5000	344.8
-03	0.188	4.76	3/8-24	0.38	9.6	0.34	8.6	5000	344.8	5000	344.8
-04	0.250	6.35	7/16-20	0.44	11.2	0.39	9.9	5000	344.8	4500	310.3
-05	0.313	7.94	1/2-20	0.50	12.7	0.45	11.4	5000	344.8	4000	275.8
-06	0.375	9.52	9/16-18	0.56	14.2	0.51	12.9	5000	344.8	4000	275.8
-08	0.500	12.70	3/4-16	0.75	19.0	0.67	17.0	4500	310.3	4000	275.8
-10	0.625	15.88	7/8-14	0.88	22.3	0.80	20.3	3500	241.3	3000	206.9
-12	0.750	19.05	1-1/16-12	1.06	26.9	0.98	24.9	3500	241.3	3000	206.9
-14	0.875	22.22	1-3/16-12	1.18	30.0	1.09	27.7	3000	206.9	2500	172.4
-16	1.000	25.40	1-5/16-12	1.31	33.3	1.22	31.0	3000	206.9	2500	172.4
-20	1.250	31.75	1-5/8-12	1.63	41.4	1.54	39.1	2500	172.4	2000	137.9
-24	1.500	38.10	1-7/8-12	1.88	47.7	1.79	45.5	2000	137.9	1500	103.4
-32	2.000	50.80	2-1/2-12	2.50	63.5	2.41	61.2	1500	103.4	1125	77.6

SAE J514 Straight Thread O-Ring Boss

The Straight thread connection uses the same threads as the JIC 37° flare. Instead, the 37° flare has been removed and an o-ring added. When mated to a female o-ring boss port, the o-ring is trapped in a special tapered countbore to effect the seal.



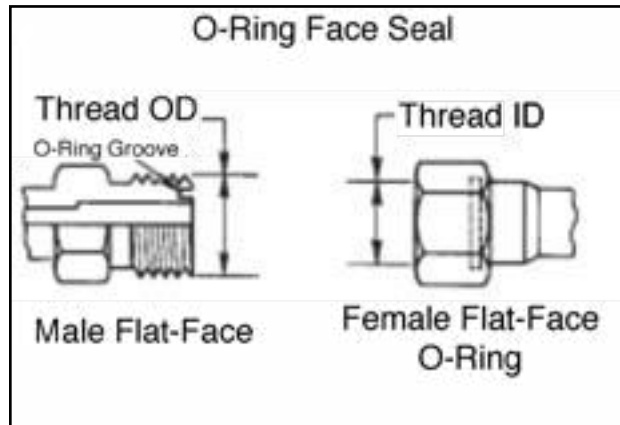
SAE J514 O-Ring Boss Thread Size and Maximum Working Pressure

SAE Dash Size	Tube Outside Diameter		Thread Size	Male Thread Outside Diameter		Female Thread Outside Diameter		Threads, Unions & Bulkheads		Threads and Female Swivels	
	inch	mm		inch	mm	inch	mm	PSI	BAR	PSI	BAR
-02	0.125	3.18	5/16-24	0.31	7.9	0.27	6.9	5000	344.8	5000	344.8
-03	0.188	4.76	3/8-24	0.38	9.6	0.34	8.6	5000	344.8	5000	344.8
-04	0.250	6.35	7/16-20	0.44	11.2	0.39	9.9	5000	344.8	4500	310.3
-05	0.313	7.94	1/2-20	0.50	12.7	0.45	11.4	5000	344.8	4000	275.8
-06	0.375	9.52	9/16-18	0.56	14.2	0.51	12.9	5000	344.8	4000	275.8
-08	0.500	12.70	3/4-16	0.75	19.0	0.67	17.0	4500	310.3	4000	275.8
-10	0.625	15.88	7/8-14	0.88	22.3	0.80	20.3	3500	241.3	3000	206.9
-12	0.750	19.05	1-1/16-12	1.06	26.9	0.98	24.9	3500	241.3	3000	206.9
-14	0.875	22.22	1-3/16-12	1.18	30.0	1.09	27.7	3000	206.9	2500	172.4
-16	1.000	25.40	1-5/16-12	1.31	33.3	1.22	31.0	3000	206.9	2500	172.4
-20	1.250	31.75	1-5/8-12	1.63	41.4	1.54	39.1	2500	172.4	2000	137.9
-24	1.500	38.10	1-7/8-12	1.88	47.7	1.79	45.5	2000	137.9	1500	103.4
-32	2.000	50.80	2-1/2-12	2.50	63.5	2.41	61.2	1500	103.4	1125	77.6

GENERAL INFORMATION

SAE J1453 O-Ring Face Seal

This connection can handle up to 6,000 PSI and is designed to be leak-free. The O-Ring in the face of the straight thread male end seals against the flat face female seat and is mechanically held in place by a swivel female nut.



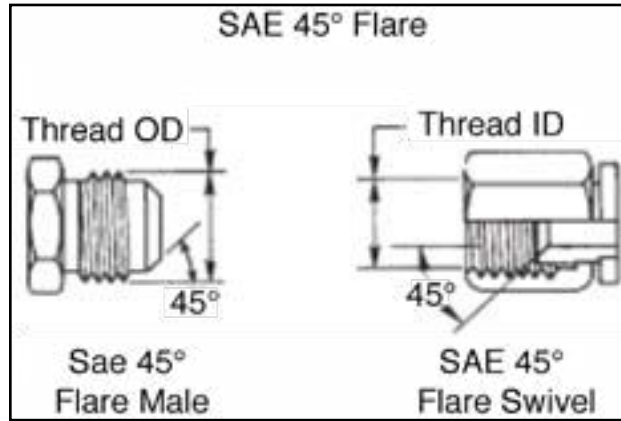
SAE J1453 O-Ring Face Seal Thread Size and Maximum Working Pressure

SAE Dash Size	Tube Outside Diameter		Thread Size	Male Thread Outside Diameter		Female Thread Outside Diameter		Threads, Unions & Bulkheads		Threads and Female Swivels	
	inch	mm		inch	mm	inch	mm	PSI	BAR	PSI	BAR
-04	0.250	6.35	9/16-20	0.56	14.2	0.51	12.9	6000	413.7	6000	413.7
-06	0.375	9.52	11/16-16	0.68	17.3	0.63	16.0	6000	413.7	6000	413.7
-08	0.500	12.70	13/16-16	0.81	20.6	0.75	19.0	6000	413.7	6000	413.7
-10	0.625	15.88	1-14	1.00	25.4	0.93	23.6	6000	413.7	6000	413.7
-12	0.750	19.05	1-3/16-12	1.18	30.0	1.10	27.8	6000	413.7	6000	413.7
-16	1.000	25.40	1-7/16-12	1.44	36.6	1.36	34.5	6000	413.7	5000	344.8
-20	1.250	31.75	1-11/16-12	1.68	42.7	1.60	40.6	4000	275.8	4000	275.8
-24	1.500	38.10	2-12	2.00	50.8	1.92	48.8	4000	275.8	3000	206.9

GENERAL INFORMATION

SAE J512, 45° Flare

The SAE 45° flare connectors seat in the same manner and are similar to the 37° connectors except for the flare angle the 45° connectors are commonly found in automotive applications, on brass adapters, and are generally used at lower pressures than the 37° flare fittings. Many sizes have threads identical to those on JIC 37° connectors. Check the threads and flares carefully to make positive identification.



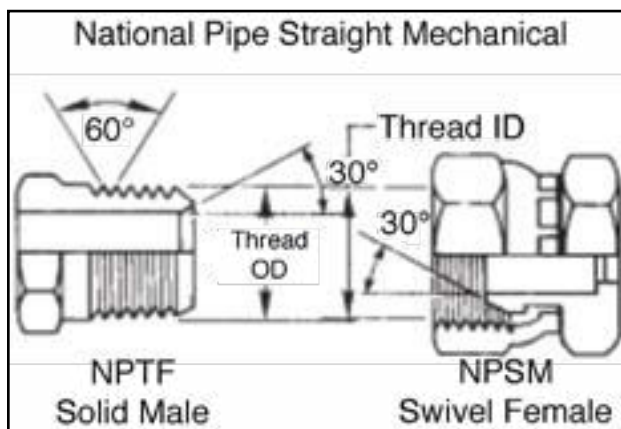
SAE J514 O-Ring Boss Thread Size and Maximum Working Pressure

SAE Dash Size	Tube Outside Diameter		Thread Size	Male Thread Outside Diameter		Female Thread Outside Diameter		Threads, Unions & Bulkheads		Threads and Female Swivels	
	inch	mm		inch	mm	inch	mm	PSI	BAR	PSI	BAR
-02	0.125	3.18	5/16-24	0.31	7.9	0.27	6.9	5000	344.8	5000	344.8
-03	0.188	4.76	3/8-24	0.38	9.6	0.34	8.6	5000	344.8	5000	344.8
-04	0.250	6.35	7/16-20	0.44	11.2	0.39	9.9	5000	344.8	4500	310.3
-05	0.313	7.94	1/2-20	0.50	12.7	0.45	11.4	4250	293.0	4000	275.8
-06	0.375	9.52	5/8-18	0.62	15.7	0.56	14.2	4000	275.8	4000	275.8
-08	0.500	12.70	3/4-16	0.75	19.0	0.68	17.0	3500	241.3	3500	241.3
-10	0.625	15.88	7/8-14	0.88	22.3	0.80	20.3	2750	189.6	2750	189.6
-12	0.750	19.05	1-1/16-14	1.06	26.9	0.99	25.1	2250	155.1	2250	155.1
-14	0.875	22.22	1-1/4-12	1.25	31.7	1.16	29.5	2000	137.9	2000	137.9
-16	1.000	25.40	1-3/8-12	1.38	35.0	1.28	32.5	2000	137.9	2000	137.9

GENERAL INFORMATION

American Dryseal Pipe Threads (NPTF & NPSM)

One of the most commonly used connections, this coupling incorporates 2 methods of sealing. The male NPTF (Dryseal) tapered thread will mate with the NPTF tapered female, which is usually a port. They seal when the special threads are crushed together. Male PTF (short Dryseal) are identical to male NPTF threads except that the thread length has been shortened by one full thread from the small end of the taper. Additional sealing aids such as thread sealant and PTFE tape are often used with these threads. If the male has a 30° seat, it will mate with a 30° cone seat in the NPSM straight thread swivel female, usually found on adapters. It is mechanically held together by the threads. NPTF and NPSM threads are not interchangeable with British pipe threads.

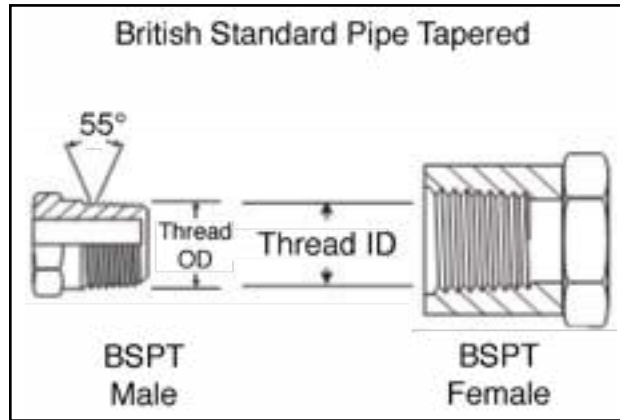


American Dryseal Pipe Threads Seal Thread Size and Maximum Working Pressure

SAE Dash Size	Tube Outside Diameter		Thread Size	Male Thread Outside Diameter		Female Thread Outside Diameter		Couplings With Pipe Threads	
	inch	mm		inch	mm	inch	mm	PSI	BAR
-02	0.125	3.18	1/8-27	0.41	10.3	0.37	9.4	5000	344.8
-04	0.250	6.35	1/4-18	0.54	13.7	0.49	12.4	4000	275.8
-06	0.375	9.52	3/8-18	0.68	17.3	0.62	15.7	3000	206.9
-08	0.500	12.70	1/2-14	0.84	21.3	0.76	19.3	3000	206.9
-12	0.750	19.05	3/4-14	1.06	26.9	0.98	24.9	2500	172.4
-16	1.000	25.40	1-11-1/2	1.31	33.3	1.24	31.5	2000	137.9
-20	1.250	31.75	1-1/4-11-1/2	1.66	42.2	1.58	40.1	1150	79.3
-24	1.500	38.10	1-1/2-11-1/2	1.90	48.3	1.82	46.2	1000	69.0
-32	2.000	50.80	2-11-1/2	2.38	60.4	2.28	57.9	1000	69.0

British Standard Pipe - BSP

The British BSP connections include two types of threads, BSPP, which are straight (or parallel) and BSPT, which are tapered. The BSPT tapered male will mate with a BSPT tapered female (usually a port) and seals on the threads. The BSPP parallel male has a 30° chamfered seat which seals with a BSPP swivel female on its 30° cone seat. This is similar to the American NPSM-NPTF connection. However, the BSPP swivel female end is commonly found on couplings. The BSP threads are similar to, but not interchangeable with the American NPTF pipe threads.



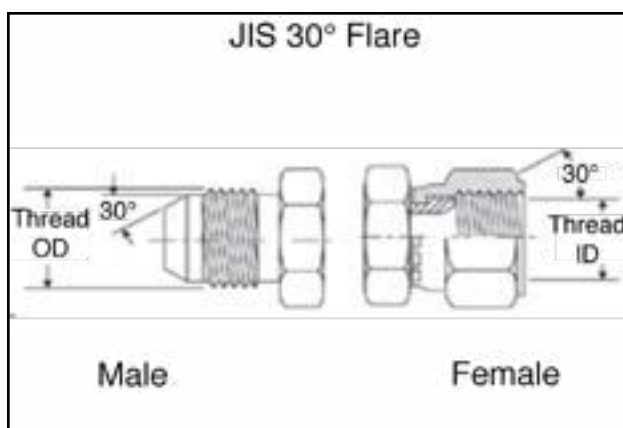
British Standard Pipe Thread

SAE Dash Size	Tube Outside Diameter		Thread Size	Male Thread Outside Diameter		Female Thread Outside Diameter	
	inch	mm		inch	mm	inch	mm
-02	0.125	3.18	1/8-28	0.41	10.3	0.37	9.4
-04	0.250	6.35	1/4-19	0.54	13.7	0.49	12.4
-06	0.375	9.52	3/8-19	0.68	17.3	0.62	15.7
-08	0.500	12.70	1/2-14	0.84	21.3	0.76	19.3
-10	0.625	15.90	5/8-14	0.90	22.9	0.83	21.1
-12	0.750	19.05	3/4-14	1.06	26.9	0.98	24.9
-16	1.000	25.40	1-11	1.31	33.3	1.24	31.5
-20	1.250	31.75	1-1/4-11	1.66	42.2	1.58	40.1
-24	1.500	38.10	1-1/2-11	1.90	48.3	1.82	46.2
-32	2.000	50.80	2-11	2.38	60.4	2.28	57.9

GENERAL INFORMATION

JIS 30° Flare with Parallel Pipe Threads

With the exception of the 30° seat, this connector is similar to the American JIC 37° flare. The straight parallel pipe threads are the same as BSPP.

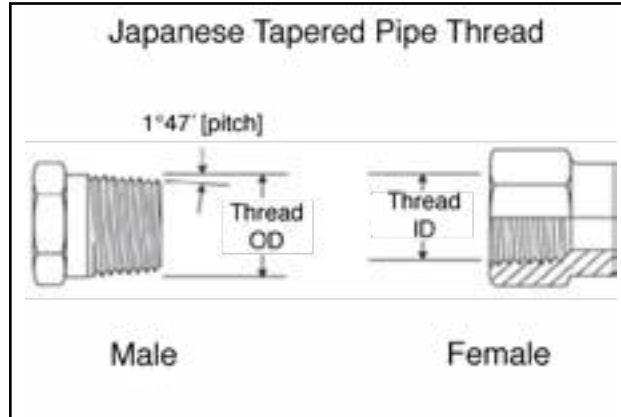


JIS 30° Flare with Parallel Pipe Threads Size

SAE Dash Size	Tube Outside Diameter		JIS/BSPP Thread Size	Male Thread Outside Diameter		Female Thread Outside Diameter	
	inch	mm		inch	mm	inch	mm
-02	0.125	3.18	1/8-28	0.37	9.4	0.32	8.1
-04	0.250	6.35	1/4-19	0.53	13.7	0.49	12.4
-06	0.375	9.52	3/8-19	0.68	17.2	0.62	16.0
-08	0.500	12.70	1/2-14	0.84	21.5	0.77	19.8
-10	0.625	15.88	5/8-14	0.91	23.1	0.81	20.6
-12	0.750	19.05	3/4-14	1.06	26.9	1.00	25.4
-16	1.000	25.40	1-11	1.34	34.0	1.25	31.8
-20	1.250	31.75	1-1/4-11	1.68	42.6	1.59	40.4
-24	1.500	38.10	1-1/2-11	1.90	48.5	1.81	46.2
-32	2.000	50.80	2-11	2.37	60.4	2.29	58.2

JIS Tapered Pipe Thread

The JIS tapered pipe thread is identical and interchangeable with the British BSPT tapered pipe thread. However, the male end does not have a 60° chamfer and will only seal when the threads are crushed together in an appropriate JIS or BSP port.

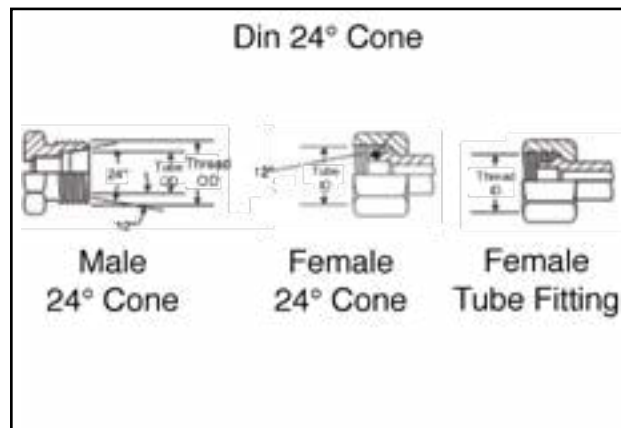


JIS Tapered Pipe Threads Size

SAE Dash Size	Tube Outside Diameter		JIS/BSPP Thread Size	Male Thread Outside Diameter		Female Thread Outside Diameter	
	inch	mm		inch	mm	inch	mm
-02	0.125	3.18	1/8-28	0.37	9.4	0.32	8.1
-04	0.250	6.35	1/4-19	0.53	13.7	0.49	12.4
-06	0.375	9.52	3/8-19	0.68	17.2	0.62	16.0
-08	0.500	12.70	1/2-14	0.84	21.5	0.77	19.8
-10	0.625	15.88	5/8-14	0.91	23.1	0.81	20.6
-12	0.750	19.05	3/4-14	1.06	26.9	1.00	25.4
-16	1.000	25.40	1-11	1.34	34.0	1.25	31.8
-20	1.250	31.75	1-1/4-11	1.68	42.6	1.59	40.4
-24	1.500	38.10	1-1/2-11	1.90	48.5	1.81	46.2
-32	2.000	50.80	2-11	2.37	60.4	2.29	58.2

DIN 24° Cone

The DIN 24° Cone male will mate with any of the females shown. The male has a 24° seat, straight, metric threads. It has a recessed counterbore which matches the tube O.D. of the coupling used with it. The mating female is a 24° cone with an O-Ring, a metric tube fitting or an universal 24°/60° cone. There is a light (L) and heavy (S) series DIN coupling. Proper identification is made by measuring both the thread size and the tube O.D. The heavy series has a smaller tube O.D. but a thicker wall section than the light. When measuring the flare angle with the seat angle gauge, use the 12° gauge. The seat angle gauge measures the angle from the connector centerline.

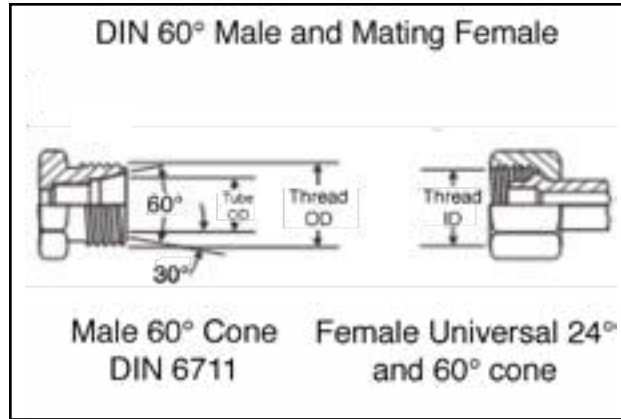


DIN 24° Cone Threads Size

Metric Thread Size	Female Thread Inside Diameter	Male Thread Inside Diameter	Tube Outside Diameter		Torque Recommendations Foot Pounds	
			Light Series	Heavy Series	minimum	maximum
			mm	mm		
M12-1.5	10.5	12.0	6	-	7	15
M14-1.5	12.5	14.0	8	-	15	26
M16-1.5	14.5	16.0	10	8	18	30
M18-1.5	16.5	18.0	12	10	22	33
M20-1.5	18.5	20.0	14	12	26	37
M22-1.5	20.5	22.0	15	14	30	52
M24-1.5	22.5	24.0	-	16	30	52
M26-1.5	24.5	26.0	18	-	44	74
M30-2.0	28.0	30.0	22	20	59	89
M36-2.0	34.0	36.0	28	25	74	111
M42-2.0	40.0	42.0	-	30	74	162
M45-2.0	43.0	45.0	35	-	133	184
M52-2.0	50.0	52.0	42	38	148	221

DIN 60° Cone

The Din 60° cone male will mate with the female universal 24° or 60° cone connector only. The male has a 60° seat and straight metric threads. The female has a 24° and 60° universal seat and straight metric threads. When measuring the flare angle with the seat angle gauge, use the 30° gauge. The seat angle gauge measures the angle from connector centerline.



DIN 60° Cone Threads Size

Metric Thread Size	Female Thread Inside Diameter	Male Thread Inside Diameter	Tube Outside Diameter		Torque Recommendations Foot Pounds	
			Light Series	Heavy Series	Minimum	Maximum
	mm	mm	mm	mm		
M12-1.5	10.5	12.0	6	-	7	15
M14-1.5	12.5	14.0	8	-	15	26
M16-1.5	14.5	16.0	10	8	18	30
M18-1.5	16.5	18.0	12	10	22	33
M20-1.5	18.5	20.0	14	12	26	37
M22-1.5	20.5	22.0	15	14	30	52
M24-1.5	22.5	24.0	-	16	30	52
M26-1.5	24.5	26.0	18	-	44	74
M30-2.0	28.0	30.0	22	20	59	89
M36-2.0	34.0	36.0	28	25	74	111
M42-2.0	40.0	42.0	-	30	74	162
M45-2.0	43.0	45.0	35	-	133	184
M52-2.0	50.0	52.0	42	38	148	221

S.T.A.M.P.E.D. PROCESS

We encourage using the STAMPED process to assist in determining the correct hose, coupling, and attachment method. It is critical in order to realize a safe hydraulic system.

S.T.A.M.P.E.D. is an acronym. It stands for the 7 major information areas required to provide a quality hose assembly for the customer, as follows:

S stands for **Size**; I.D. and length; any O.D. constraints

- Overall length should be specified to include fittings
- **Inside Diameter** - the I.D. of the hose must be adequate to keep pressure loss to a minimum and avoid damage to the hose due to heat generation or excessive turbulence.
- **Flow Rate/Fluid Velocity** - The flow rate of the system in conjunction with the inside diameter of the hose will dictate the fluid velocity through the hose. Typical fluid velocities can be seen in the nomographic chart on page 30. Please note that suction line recommendations are different than pressure lines.

T stands for **Temperature**: Temperature of both the fluid conveyed and the environmental conditions. Two areas of temperature must be considered: fluid temperature and ambient temperature. The hose selected must be capable of withstanding the minimum and maximum temperature seen by the system. Care must be taken when routing near hot manifolds, and in extreme cases, a heat shield may be advisable.

- **Maximum Intermittent Ambient Temperature:** Hose constructions which use a rubber inner tube and/or cover, can have significant change in properties when exposed to extreme heat or cold. This may require some hoses to be rated to a lower operating pressure when exposed to such conditions.
- **Fluid Temperature:** The fluid temperature is the temperature of the fluid being conveyed inside the hose during operation.
- **Ambient Temperature:** The ambient temperature is the temperature of the environment to which the hose assembly is exposed.
- **Maximum Temperature:** The maximum temperature is the highest temperature to which the fluid or the environment may reach. The temperature is typically short in duration and occurs under extreme operating conditions. The hose selected for an application should be rated at or above the maximum ambient and maximum fluid temperature.
- **Minimum Temperature:** This is the lowest temperature to which the hose assembly will be exposed. For a hydraulic system, this is based on the minimum ambient temperature. A hose should be rated at or below the minimum ambient temperature to which the assembly may be exposed.

A stands for **Application**: The conditions under which the hose assembly will be used.

The type of application in which a hose assembly will be used is very important in determining what type of hose should be selected. The most common types of applications are listed below:

- **High Impulse:** Hydraulic system is subjected to frequent pressure spikes.
- **Low Impulse:** Hydraulic system is seldom subjected to pressure spikes.
- **Non-Flexing Applications:** Hose assemblies are not subjected to bending or flexing from articulation of the equipment.
- **Flexing Applications:** Hose assemblies are subjected to bending or flexing due to articulation or movement of the equipment.

Static discharge can become an issue when non-polar liquids or mixtures including non-polar liquids are conveyed in non-conductive hose. A static charge will build, and on discharge, perforate the hose tube. To avoid this, use conductive tube products when conveying non-polar, or mixtures of non-polar liquids.

Electrical conductivity of hydraulic hoses or conveyed fluids is an issue with equipment used to work around electrical lines. If hydraulic equipment is to be used around electrical lines, always use hydraulic hoses rated as non-conductive.

Be sure to select products that will meet any regulatory standards required in the application. Examples of these standards would include: SAE, USCG, EN/DIN, ABS, etc.

Never place hoses in a position where they will be pulled on. Hoses are designed to hold pressure and convey fluids, exposing them to axial loads will cause premature failure. Any special or unusual applications should always be approved by the hose manufacturer, otherwise, additional independent testing may be required.

The following questions may need to be answered, such as:

- Where will the hose be used?
- Fluid and/or ambient temperature?
- Hose construction?
- Equipment type?
- Fluid compatibility?
- Thread end connection type?
- Working and surge pressures?
- Environmental conditions?
- Permanent or field attachable (reusable) couplings?
- Suction applications?
- Routing requirements?
- Thread type?
- Government and industry standards being met?
- Unusual mechanical loads?
- Minimum bend radius?
- Non-conductive hose required?
- Excessive abrasion?

S.T.A.M.P.E.D. PROCESS

M stands for **Material**: Fluid being conveyed, type and concentration.

Some applications require specialized oils or chemicals to be conveyed through the system. Hose selections must assume compatibility of the inner hose tube and cover material. In addition to the hose materials, all other components, which make up the hose assembly (hose ends, o-rings, etc.) must also be compatible with the fluid being used. Permeation or effusion is the movement of a substance through the hose tube walls which may degrade the hose tube, cause cover blistering, or other undesired effects, and must be considered especially when conveying compressed gases.

Be sure to select a hose that is compatible and approved by the manufacturer for the fluid conveyed. Concentration, pressure, temperature and other factors may impact the compatibility of the hose and fluid. Depending on the fluid, the maximum temperature and pressure rating of the assembly, may be lowered.

Additional caution must be exercised in hose selection for gaseous applications such as refrigerants and LP Gas.

NOTE: All block type couplings contain nitrile O-rings which must be compatible with the fluids being used.

P stands for **Pressure**: Pressure to which the assembly will be exposed. The most important step in the hose selection process is knowing the system pressure, including pressure spikes.

- **Maximum Operating Pressure:** This is the maximum pressure that the system should be exposed to in normal operating conditions. This pressure should be dictated by the relief setting of the system. Both the hose and hose end should not be rated to a pressure less than the maximum operating pressure of the system.
- **Pressure Spikes:** When a hydraulic system is subjected to a large load in a short period of time, the system pressure can overshoot the relief setting and exceed the maximum operating pressure. Frequent pressure spikes can reduce the life of hydraulic hose assemblies.

Hose assembly working pressures must be equal to or greater than the system pressure. Pressure spikes greater than the maximum working pressure will shorten hose life and must be taken into consideration.

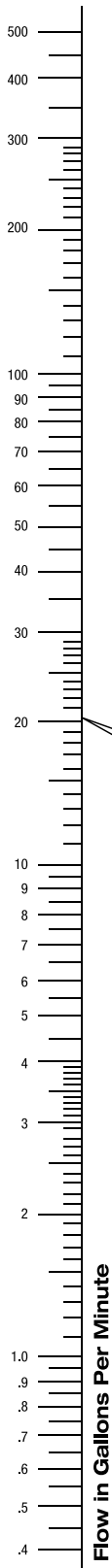
Any time a hose assembly is to be exposed to external pressures, which may exceed the internal hose pressures, be sure to consult with the hose manufacturer for recommendations.

E stands for **ENDS**: Termination end style, type, orientation, attachment methods, etc. Always use manufacturer approved couplings for hose assemblies. Be sure to select the appropriate end termination for a system working pressure and other requirements, such as, vibration resistance.

D stands for **DELIVERY**: Testing, quality, cleanliness, packaging and delivery requirements. Define any special requirements needed. Always follow manufacturer recommendations for maximum fluid velocity within a hose. Excessive fluid velocity may cause pressure loss, heat generation, hose movement or whipping, system noise and hammer effects.

NOMOGRAPHIC CHART

Flow Capacity of Hose Assemblies at Recommended Flow Velocities

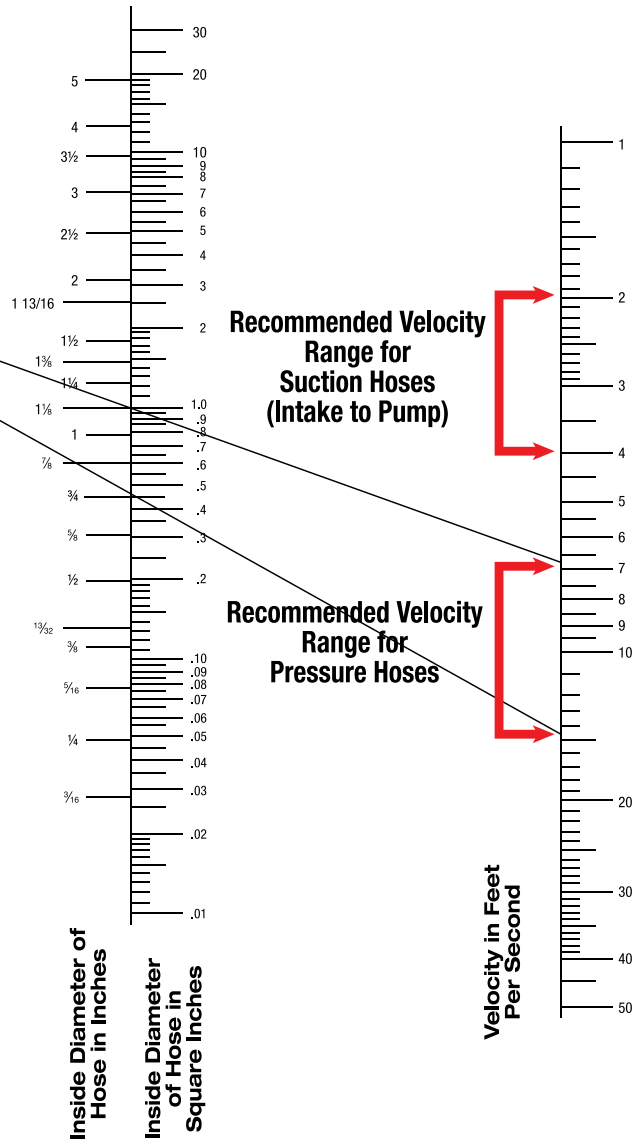


Based on Formula:
$$\text{Area (Sq. in.)} = \frac{0.321 \times (\text{GPM})}{\text{Velocity (Ft./Sec.)}}$$

Example: To determine the I.D. needed to transport 20 Gallons Per Minute (GPM) fluid volume.

Draw a straight line from 20 GPM on the left to maximum recommended velocity for pressure lines. The line intersects with the middle vertical column indicating a 3/4" I.D. (-12) hose. This is the smallest hose that should be used.

Recommendations are for oils having a maximum viscosity of 315 S.S.U. at 100°F (37.8°C), operating at temperatures between 65°F (18.3°C) and 155°F (68.3°C).



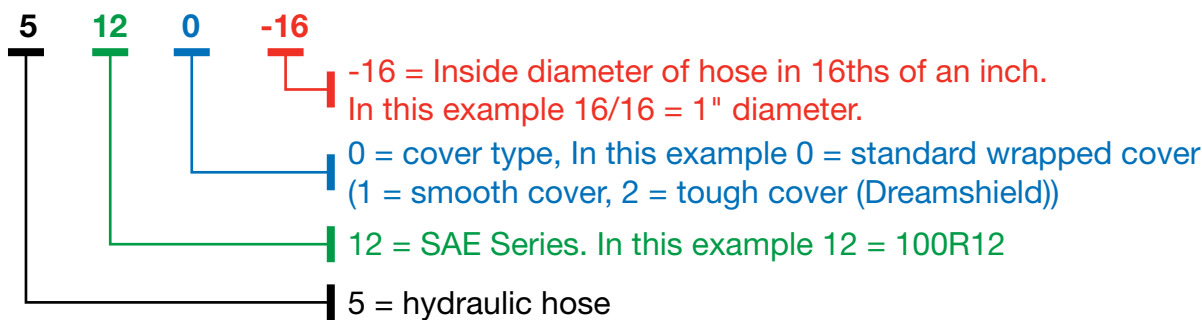
GENERAL INFORMATION

DASH NUMBER MEASURING SYSTEM

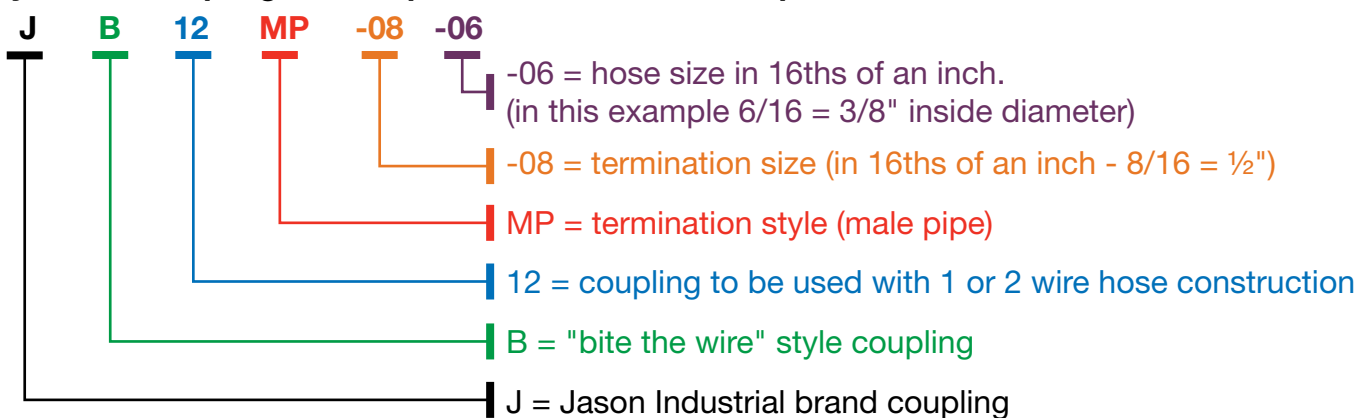
HOSE I.D.				
Dash Number	All Except SAE 100R5, SAE 100R14, SAE J51 & SAE J2064		SAE 100R5, SAE J51, SAE 100R14 & SAE J2064	
	inch	mm	inch	mm
-02	1/8	3.2	-	-
-03	3/16	4.8	-	-
-04	1/4	6.4	3/16	4.8
-05	5/16	7.9	1/4	6.4
-06	3/8	9.5	5/16	7.9
-08	1/2	12.7	13/32	10.3
-10	5/8	15.9	1/2	12.7
-12	3/4	19.0	5/8	15.9
-14	7/8	22.2	-	-
-16	1	25.4	7/8	22.2
-20	1-1/4	31.8	1-1/8	28.6
-24	1-1/2	38.1	1-3/8	34.9
-32	2	50.8	1-13/16	46.0
-36	2-1/4	57.6	-	-
-40	2-1/2	63.5	2-3/8	60.3
-48	3	76.2	-	-

HOW TO READ HOSE & COUPLING PART NUMBERS

Hydraulic Hose Part Number Example: 5120-16



Hydraulic Coupling - Descriptive Part Number Example: JB12MP-08-06



SAE HOSE WORKING PRESSURES (psi)

NOMINAL HOSE INSIDE DIAMETER IN INCHES & DASH SIZE

SAE Hose Spec	ISO Hose Spec	Description	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2	2
			(-3)	(-4)	(-5)	(-6)	(-8)	(-10)	(-12)	(-16)	(-20)	(-24)	(-32)
100R1 Type S	1436 Type 1SN	High Pressure 1 Wire Braid	3630	3260	3120	2610	2320	1890	1520	1280	900	725	600
100R2 Type S	1436 Type 2SN	High Pressure 2 Wire Braid	6020	5800	5080	4790	3990	3630	3120	2390	1800	1300	1150
100R3		2 Fabric Braid	1500	1250	1200	1125	1000	875	750	565	400		
100R4		Suction							300	250	200	150	100
100R6		1 Fabric (Braid or Spiral)	500	400	400	400	400	350	300				
100R7		Thermoplastic	3000	2750	2500	2250	2000	1500	1250	1000			
100R8		High Pressure Thermoplastic	5000	5000		4000	3500	2750	2250	2000			
100R9*		4 Wire Spiral				4500	4000		3000	3000			
100R10*		High Pressure 4 Wire Spiral	10000	8750		7500	6250		5000	4000			
100R11*		High Pressure 6 Wire Spiral	12500	11250		10000	7500		6250	5000			
100R12		4 Wire Spiral				4000	4000	4000	4000	4000	3050	2500	2500
100R13		5000 PSI Wire Spiral							5000	5000	5000	5000	5000
100R15		6000 PSI Wire Spiral				6000	6000		6000	6000	6000	6000	
100R16 Type S	11237 2SC	High Pressure Compact Wire Braid	6020	5800	5080	4790	3990	3630	3120	2390	1800		
100R17		3000 PSI Wire Braid		3000	3000	3000	3000	3000	3000	3000			
100R18		3000 PSI Thermoplastic	3000	3000	3000	3000	3000	3000	3000	3000			
100R19		4000 PSI Wire Braid		4000	4000	4000	4000	4000	4000	4000			

*The SAE J517 100R9, 100R10 and 100R11 hoses are discontinued per SAE due to lack of demand.

© 2015 by NAHAD - the Association for Hose & Accessories Distribution, Inc.

CHEMICAL RESISTANCE CHART

HOSE TYPES

GROUP 1	5120, 5130, 5150
GROUP 2	5010, 5020, 5040, 5160, 5170, 5192
GROUP 3	5050

RATING KEY

E	Good to excellent with little or no change to physical properties
G	Good, moderate change to physical properties
C	Marginal with noticeable effects on physical properties
U	Unsatisfactory
N	No Data

Warning: The following data has been compiled from generally available sources and should not be relied upon without consulting and following the manufacturers' specific chemical recommendations. Neglecting to do so might result in failure of the hose to fulfill its intended purpose and may result in possible damage to property and serious bodily injury.

	GROUP 1	GROUP 2	GROUP 3
A			
ASTM Refined, Fuel B	U	N	C
ASTM Refined, Fuel C	U	N	C
B			
Biodiesel	U	U	G
C			
Carbon Dioxide	G	G	E
Castor Oil	E	E	E
Coal Oil	G	E	E
D			
Dexron	C	G	E
Diesel Fuel (Non-Biodiesel)	U	E	E
E			
Ethylene Glycol (70°F)	E	E	E
F			
Freon 12	C	N	C
Freon 22	E	N	C
Freon 113	E	N	N
Freon 502	E	N	N
Fuel Oils	G	E	E
G			
Gas, High Octane	U	N	C
Gasoline (Non-Oxygenated)	U	N	G
Greases	U	U	C
H			
Hydraulic Fluid (Petroleum)	G	G	E
Hydraulic Fluid (Biodegradable Liquids)	N	E	N
Hydraulic Fluid (Glycol-Water Mixture)	G	E	N
Hydraulic Fluid (Mineral Oil Based)	N	E	N
Hydraulic Fluid (Phosphate Ester Fluids)	U	U	G
Hydraulic Fluid (Water-Oil Emulsions)	N	E	N

CHEMICAL RESISTANCE CHART

HOSE TYPES

GROUP 1	5120, 5130, 5150
GROUP 2	5010, 5020, 5040, 5160, 5170, 5192
GROUP 3	5050

RATING KEY

E	Good to excellent with little or no change to physical properties
G	Good, moderate change to physical properties
C	Marginal with noticeable effects on physical properties
U	Unsatisfactory
N	No Data

Warning: The following data has been compiled from generally available sources and should not be relied upon without consulting and following the manufacturers' specific chemical recommendations. Neglecting to do so might result in failure of the hose to fulfill its intended purpose and may result in possible damage to property and serious bodily injury.

	GROUP 1	GROUP 2	GROUP 3
J			
JP-4 Fuel	U	C	G
K			
Kerosene	C	C	G
L			
Lubrication Oils (Petroleum)	G	G	E
M			
Methanol	G	E	E
Mineral Oil	G	C	G
P			
Petroleum	G	E	E
Phosphate Esters (72°F)	U	U	E
S			
SAE No. 10 Oil	C	C	E
Sea Water	E	E	E
Silicate Esters	E	U	G
Silicone Grease	E	E	E
Silicone Oil	E	E	E
Soap Solution	G	G	E
T			
Transmission Fluid, Type A	G	C	G
Trisodium Phosphate	E	E	E
Turpentine	U	C	C
V, W			
Vinegar	G	G	E
Water (72°F)	E	E	E
Water (140°F)	E	E	E
Water (212°F)	U	U	E
Water/Glycol Solutions (72°F)	E	G	E
Water/Glycol Solutions (125°F)	E	G	E
Water/Glycol Solutions (180°F)	E	G	E

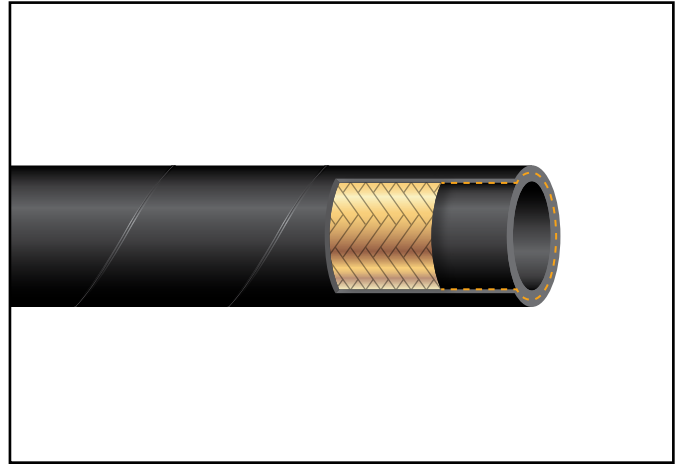
GENERAL INFORMATION

HYDRAULIC HOSE - 1 & 2 WIRE BRAID

<u>SERIES</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
5010	SAE 100R1AT, 1SN DIN EN 853 - MSHA Cover 1-Wire Braid Hose, Wrapped Cover	36
5011	SAE 100R1AT, 1SN DIN EN 853 - MSHA Cover 1-Wire Braid Hose, Smooth Cover	37
5012 NEW!	SAE 100R1AT, 1SN, DIN EN853 - MSHA Cover Dreamshield® Extra Abrasion-Resistant Wrapped Cover 1-Wire Braid Hose	38
5020	SAE 100R2AT, 2SN DIN EN 853 - MSHA Cover 2-Wire Braid Hose, Wrapped Cover	42
5021	SAE 100R2AT, 2SN DIN EN 853 - MSHA Cover 2-Wire Braid Hose, Smooth Cover	43
5022 NEW!	SAE 100R2AT, 2SN, DIN EN 853 - MSHA Cover Dreamshield® Extra Abrasion Resistant Wrapped 2-Wire Braid Hose	44
5160	SAE 100R16 - MSHA Cover 2-Wire Braid Hose, Wrapped Cover	45
5161	SAE 100R16 - MSHA Cover 2-Wire Braid Hose, Smooth Cover	46
5162 NEW!	SAE 100R16 - MSHA Cover 2-Wire Braid Hose, Dreamshield® Extra Abrasion Resistant Wrapped Cover	47
5170	SAE 100R17 - MSHA Cover - 3,000 PSI Constant Pressure 1 or 2-Wire Braid Hose, Wrapped Cover	39
5171	SAE 100R17 - MSHA Cover - 3,000 PSI Constant Pressure 1 or 2-Wire Braid Hose, Smooth Cover	40
5172 NEW!	SAE 100R17 - MSHA Cover - 3,000 PSI Constant Pressure Dreamshield® Extra Abrasion Resistant Wrapped Cover 1 or 2 - Wire Braid Hose	41
5191 NEW!	SAE 100R19 - MSHA Cover - 4,000 PSI Constant Pressure 2 Wire Braid Hose, Smooth Cover	48
5192 NEW!	SAE 100R19 - MSHA Cover - 4,000 PSI Constant Pressure 2 Wire Braid Hose, Dreamshield® Extra Abrasion Resistant Wrapped Cover	49

5010 SERIES

**SAE 100R1AT, 1SN,
DIN EN 853 - MSHA Cover
1-Wire Braid Hose, Wrapped Cover**



APPLICATIONS: Used for medium pressure hydraulic lines on mobile equipment, machine tools and farm equipment. Meets or exceeds SAE 100R1 and EN 853 1SN.

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and abrasion resistant synthetic rubber, MSHA approved
	Reinforcement: One wire braid of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5010-04	1/4	6.4	0.53	13.4	3,263	225	13054	900	3.9	100	0.15	0.22	500	152.4
5010-05	5/16	7.9	0.59	15.0	3,118	215	12473	860	4.5	115	0.17	0.26	500	152.4
5010-06	3/8	9.5	0.69	17.4	2,611	180	10443	720	5.1	130	0.22	0.33	500	152.4
5010-08	1/2	12.7	0.81	20.6	2,321	160	9283	640	7.1	180	0.27	0.40	400	122.0
5010-10	5/8	15.9	0.93	23.7	1,886	130	7542	520	7.9	200	0.30	0.45	250	76.2
5010-12	3/4	19.1	1.09	27.7	1,523	105	6092	420	9.4	240	0.42	0.63	250	76.2
5010-16	1	25.4	1.40	35.6	1,276	88	5105	352	11.8	300	0.57	0.85	200	61.0
5010-20	1-1/4	31.8	1.71	43.5	914	63	3655	252	16.5	420	0.83	1.23	130	40.0
5010-24	1-1/2	38.1	1.99	50.6	725	50	2901	200	19.7	500	1.00	1.49	130	40.0
5010-32	2	50.8	2.52	64.0	580	40	2321	160	24.8	630	1.38	2.06	130	40.0

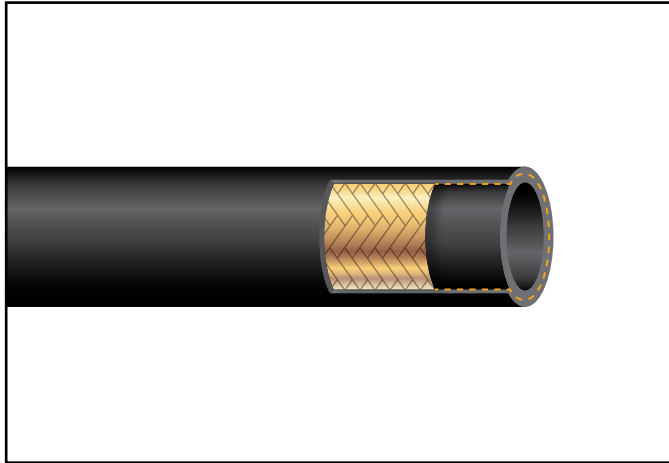
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC HOSE - 1&2 WIRE BRAID

5011 SERIES

**SAE 100R1AT, 1SN,
DIN EN 853 - MSHA Cover
1-Wire Braid Hose, Smooth Cover**



APPLICATIONS: Used for medium pressure hydraulic lines on mobile equipment, machine tools and farm equipment. Meets or exceeds SAE 100R1 and EN 853 1SN.

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and abrasion resistant synthetic rubber, MSHA approved
	Reinforcement: One wire braid of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5011-04	1/4	6.4	0.53	13.4	3,263	225	13054	900	3.9	100	0.15	0.22	500	152.4
5011-05	5/16	7.9	0.59	15.0	3,118	215	12473	860	4.5	115	0.17	0.26	500	152.4
5011-06	3/8	9.5	0.69	17.4	2,611	180	10443	720	5.1	130	0.22	0.33	500	152.4
5011-08	1/2	12.7	0.81	20.6	2,321	160	9283	640	7.1	180	0.27	0.40	400	122.0
5011-12	3/4	19.1	1.09	27.7	1,523	105	6092	420	9.4	240	0.42	0.63	250	76.2
5011-16	1	25.4	1.40	35.6	1,276	88	5105	352	11.8	300	0.57	0.85	200	61.0

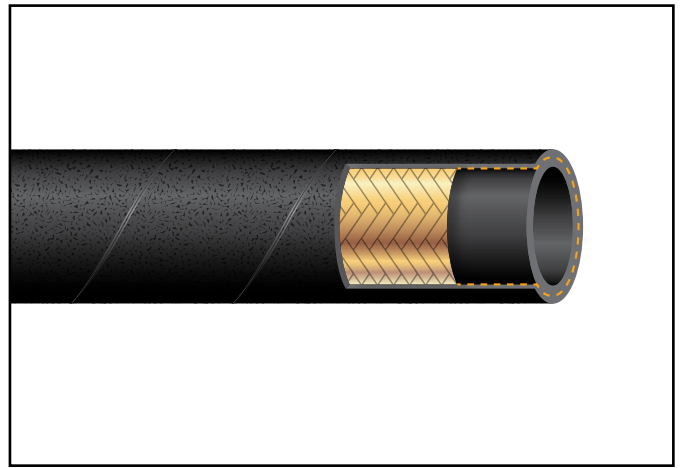
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

5012 SERIES



SAE 100R1AT, 1SN, DIN EN853
Ⓢ Dreamshield® Extra Abrasion-Resistant
Wrapped MSHA Cover - 1-Wire Braid Hose



APPLICATIONS: Used for medium pressure hydraulic lines on mobile equipment, machine tools and farm equipment. Meets or exceeds SAE 100R1 and EN 853 1SN.

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and extra abrasion resistant Ⓢ Dreamshield® synthetic rubber, MSHA approved
	Reinforcement: One wire braid of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5012-04	1/4	6.4	0.53	13.4	3,263	225	13054	900	3.9	100	0.15	0.22	500	152.4
5012-05	5/16	7.9	0.59	15.0	3,118	215	12473	860	4.5	115	0.17	0.26	500	152.4
5012-06	3/8	9.5	0.69	17.4	2,611	180	10443	720	5.1	130	0.22	0.33	500	152.4
5012-08	1/2	12.7	0.81	20.6	2,321	160	9283	640	7.1	180	0.27	0.40	400	122.0
5012-10	5/8	15.9	0.93	23.7	1,886	130	7542	520	7.9	200	0.30	0.45	250	76.2
5012-12	3/4	19.1	1.09	27.7	1,523	105	6092	420	9.4	240	0.42	0.63	250	76.2
5012-16	1	25.4	1.40	35.6	1,276	88	5105	352	11.8	300	0.57	0.85	200	61.0
5012-20	1-1/4	31.8	1.71	43.5	914	63	3655	252	16.5	420	0.83	1.23	150	45.7
5012-24	1-1/2	38.1	1.99	50.6	725	50	2901	100	19.7	500	1.00	1.49	150	45.7
5012-32	2	50.8	2.52	64.0	580	40	2321	160	24.8	630	1.38	2.06	150	45.7

Contact Customer Service for availability.

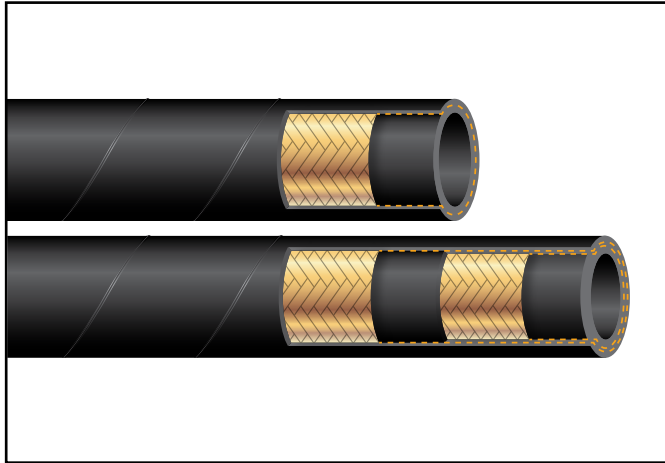
We disclaim any liability for use of our products in applications other than which they are designed.

⚠ WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC HOSE - 1&2 WIRE BRAID

**SAE 100R17 - 3,000 PSI
Constant Pressure - MSHA Cover
1 or 2-Wire Braid Hose, Wrapped Cover**

5170 SERIES



APPLICATIONS: Used for medium pressure hydraulic lines on mobile equipment, machine tools and farm equipment. Meets or exceeds SAE 100R17.

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and abrasion resistant synthetic rubber, MSHA approved
	Reinforcement: 1/4" to 5/8" - one wire braid of high tensile steel with protective coating 3/4" to 1" - two wire braids of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

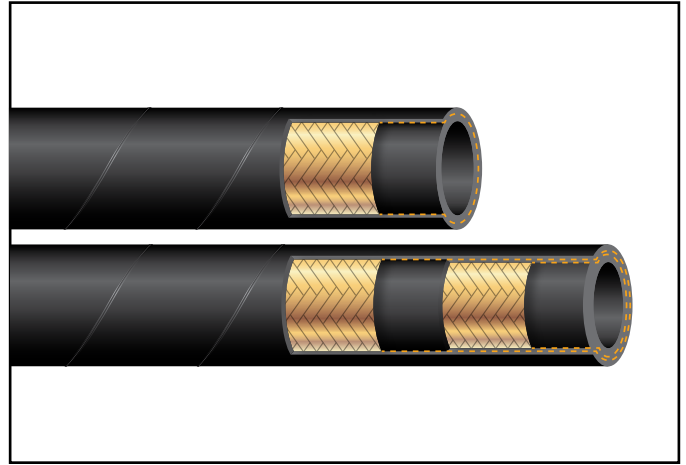
Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5170-04	1/4	6.4	0.49	12.5	3000	210	12000	840	2.0	50	0.15	0.22	500	152.4
5170-05	5/16	7.9	0.56	14.3	3000	210	12000	840	2.2	55	0.17	0.26	500	152.4
5170-06	3/8	9.5	0.65	16.5	3000	210	12000	840	2.6	65	0.22	0.33	500	152.4
5170-08	1/2	12.7	0.78	19.7	3000	210	12000	840	3.5	90	0.27	0.40	400	122.0
5170-10	5/8	15.9	0.94	24.0	3000	210	12000	840	3.9	100	0.48	0.71	250	76.2
5170-12	3/4	19.1	1.10	28.0	3000	210	12000	840	4.7	120	0.62	0.92	250	76.2
5170-16	1	25.4	1.43	36.2	3000	210	12000	840	5.9	150	0.91	1.35	200	61.0

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

5171 SERIES

**SAE 100R17 - 3,000 PSI
Constant Pressure - MSHA Cover
1 or 2-Wire Braid Hose, Smooth Cover**



APPLICATIONS: Used for medium pressure hydraulic lines on mobile equipment, machine tools and farm equipment. Meets or exceeds SAE 100R17.

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and abrasion resistant synthetic rubber, MSHA approved
	Reinforcement: 1/4" to 5/8" - one wire braid of high tensile steel with protective coating 3/4" to 1" - two wire braids of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5171-04	1/4	6.4	0.5	13.0	3000	210	12000	840	2.0	50	0.15	0.22	500	152.4
5171-05	5/16	7.9	0.6	14.3	3000	210	12000	840	2.2	55	0.17	0.26	500	152.4
5171-06	3/8	9.5	0.6	16.5	3000	210	12000	840	2.6	65	0.22	0.33	500	152.4
5171-08	1/2	12.7	0.8	19.7	3000	210	12000	840	3.5	90	0.27	0.40	400	122.0
5171-12	3/4	19.1	1.10	28.0	3000	210	12000	840	4.7	120	0.62	0.92	250	76.2
5171-16	1	25.4	1.43	36.2	3000	210	12000	840	5.9	150	0.91	1.35	200	61.0

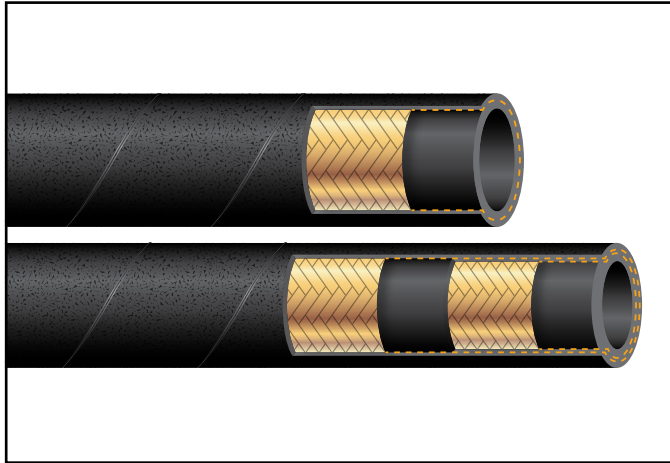
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC HOSE - 1&2 WIRE BRAID

SAE 100R17 - 3,000 PSI Constant Pressure 5172 Series 1 or 2-Wire Braid Hose, Wrapped MSHA Cover

☪ Dreamshield® Extra Abrasion Resistant Cover



APPLICATIONS: Used for medium pressure hydraulic lines on mobile equipment, machine tools and farm equipment. Meets or exceeds SAE 100R17

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and extra abrasion resistant ☪ Dreamshield® synthetic rubber, MSHA approved
	Reinforcement: 1/4" to 5/8" - one wire braid of high tensile steel with protective coating 3/4" to 1" - two wire braids of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

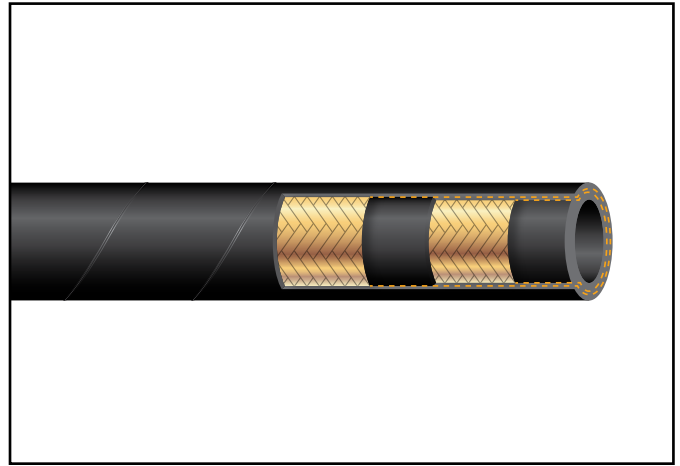
Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5172-04	1/4	6.4	0.49	12.5	3000	210	12000	840	2.0	50	0.15	0.22	500	152.4
5172-05	5/16	7.9	0.56	14.3	3000	210	12000	840	2.2	55	0.17	0.26	500	152.4
5172-06	3/8	9.5	0.65	16.5	3000	210	12000	840	2.6	65	0.22	0.33	500	152.4
5172-08	1/2	12.7	0.78	19.7	3000	210	12000	840	3.5	90	0.27	0.40	400	122.0
5172-10	5/8	15.9	0.94	24.0	3000	210	12000	840	3.9	100	0.48	0.71	250	76.2
5172-12	3/4	19.1	1.10	28.0	3000	210	12000	840	4.7	120	0.62	0.92	250	76.2
5172-16	1	25.4	1.43	36.2	3000	210	12000	840	5.9	150	0.91	1.35	200	61.0

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

5020 SERIES

**SAE 100R2AT, 2SN,
DIN EN 853 - MSHA Cover
2-Wire Braid Hose, Wrapped Cover**



APPLICATIONS: Used for high pressure hydraulic lines on off-road construction equipment, machine tools, farm and marine equipment. Meets or exceeds SAE 100R2 and EN 853 2SN.

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and abrasion resistant synthetic rubber, MSHA approved
	Reinforcement: Two wire braids of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5020-04	1/4	6.4	0.59	15.0	5802	400	23206	1600	3.9	100	0.24	0.35	500	152.4
5020-05	5/16	7.9	0.65	16.6	5076	350	20306	1400	4.5	115	0.28	0.41	500	152.4
5020-06	3/8	9.5	0.75	19.0	4786	330	19145	1320	5.1	130	0.34	0.51	500	152.4
5020-08	1/2	12.7	0.87	22.2	3989	275	15954	1100	7.1	180	0.43	0.64	400	122.0
5020-10	5/8	15.9	1.00	25.4	3626	250	14504	1000	7.9	200	0.48	0.71	250	76.2
5020-12	3/4	19.1	1.15	29.3	3118	215	12473	860	9.4	240	0.62	0.92	250	76.2
5020-16	1	25.4	1.50	38.1	2393	165	9573	660	11.8	300	0.91	1.35	200	61.0
5020-20	1-1/4	31.8	1.90	48.3	1813	125	7252	500	16.5	420	1.23	1.83	130	40.0
5020-24	1-1/2	38.1	2.15	54.6	1305	90	5221	360	19.7	500	1.52	2.25	130	40.0
5020-32	2	50.8	2.65	67.3	1160	80	4641	320	24.8	630	1.95	2.90	130	40.0

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC HOSE - 1&2 WIRE BRAID

**SAE 100R2AT, 2SN,
DIN EN 853 - MSHA Cover
2-Wire Braid Hose, Smooth Cover**

5021 SERIES



APPLICATIONS: Used for high pressure hydraulic lines on off-road construction equipment, machine tools, farm and marine equipment. Meets or exceeds SAE 100R2 and EN 853 2SN.

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and abrasion resistant synthetic rubber, MSHA approved
	Reinforcement: Two wire braids of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5021-04	1/4	6.4	0.59	15.0	5802	400	23206	1600	3.9	100	0.24	0.35	500	152.4
5021-05	5/16	7.9	0.65	16.6	5076	350	20306	1400	4.5	115	0.28	0.41	500	152.4
5021-06	3/8	9.5	0.75	19.0	4786	330	19145	1320	5.1	130	0.34	0.51	500	152.4
5021-08	1/2	12.7	0.87	22.2	3989	275	15954	1100	7.1	180	0.43	0.64	400	122.0
5021-12	3/4	19.1	1.15	29.3	3118	215	12473	860	9.4	240	0.62	0.92	250	76.2
5021-16	1	25.4	1.50	38.1	2393	165	9573	660	11.8	300	0.91	1.35	200	61.0

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

5022 SERIES



**SAE 100R2AT, 2SN,
DIN EN 853 - MSHA Cover
Dreamshield® Extra Abrasion Resistant
2-Wire Braid Hose, Wrapped Cover**



APPLICATIONS: Used for high pressure hydraulic lines on off-road construction equipment, machine tools, farm and marine equipment. Meets or exceeds SAE 100R2 and EN 853 2SN.

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and extra abrasion resistant Dreamshield® synthetic rubber, MSHA approved
	Reinforcement: Two wire braids of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

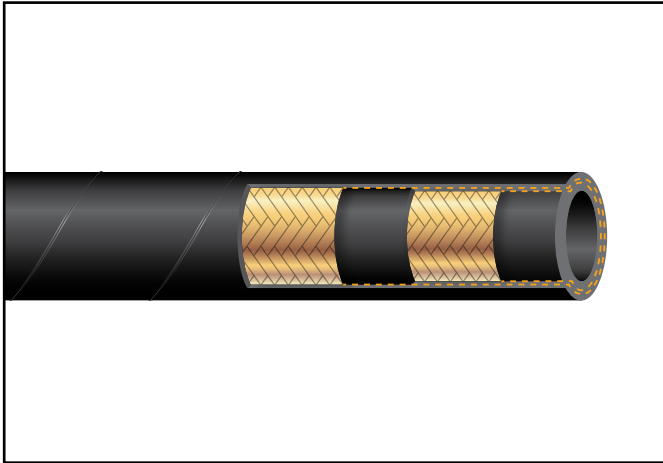
Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5022-04	1/4	6.4	0.59	15.0	5,802	400	23206	1600	3.9	100	0.24	0.35	500	152.4
5022-05	5/16	7.9	0.65	16.6	5,076	350	20306	1400	4.5	115	0.28	0.41	500	152.4
5022-06	3/8	9.5	0.75	19.0	4,786	330	19145	1320	5.1	130	0.34	0.51	500	152.4
5022-08	1/2	12.7	0.87	22.2	3,989	275	15954	1100	7.1	180	0.43	0.64	400	122.0
5022-10	5/8	15.9	1.00	25.4	3,626	250	14504	1000	7.9	200	0.48	0.71	250	76.2
5022-12	3/4	19.1	1.15	29.3	3,118	215	12473	860	9.4	240	0.62	0.92	250	76.2
5022-16	1	25.4	1.50	38.1	2,393	165	9573	660	11.8	300	0.91	1.35	200	61.0
5022-20	1-1/4	31.8	1.90	48.3	1,813	125	7252	500	16.5	420	1.23	1.83	150	45.7
5022-24	1-1/2	38.1	2.15	54.6	1,305	90	5221	360	19.7	500	1.52	2.25	150	45.7
5022-32	2	50.8	2.65	67.3	1,160	80	4641	320	24.8	630	1.95	2.90	150	45.7

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC HOSE - 1&2 WIRE BRAID

SAE 100R16 - MSHA Cover
2-Wire Braid Hose, Wrapped Cover
ISO Spec 11237 Type 2SC



APPLICATIONS: Used for high pressure hydraulic lines on off-road construction equipment, machine tools, farm and marine equipment. Meets or exceeds SAE 100R16 (Type 2SC).

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and abrasion resistant synthetic rubber, MSHA approved
	Reinforcement: Two wire braids of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5160-04	1/4	6.4	0.53	13.5	5,800	400	23,200	1,600	2.0	50	0.19	0.29	500	152.4
5160-05	5/16	7.9	0.59	15.0	5,080	350	20,320	1,400	2.2	55	0.22	0.32	500	152.4
5160-06	3/8	9.5	0.69	17.4	4,790	330	19,160	1,320	2.6	65	0.28	0.41	500	152.4
5160-08	1/2	12.7	0.81	20.6	3,990	275	15,960	1,100	3.5	90	0.34	0.51	400	122.0
5160-10	5/8	15.9	0.93	23.7	3,630	250	14,520	1,000	3.9	100	0.43	0.64	250	76.2
5160-12	3/4	19.1	1.09	27.7	3,120	215	12,480	860	4.7	120	0.56	0.83	250	76.2
5160-16	1	25.4	1.40	35.5	2,390	165	9,560	660	5.9	150	0.81	1.20	200	61.0

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC HOSE - 1&2 WIRE BRAID

5161 SERIES

SAE 100R16 - MSHA Cover
2-Wire Braid Hose, Smooth Cover
ISO Spec 11237 Type 2SC



APPLICATIONS: Used for high pressure hydraulic lines on off-road construction equipment, machine tools and farm equipment. Meets or exceeds SAE 100R16 (Type 2SC).

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and abrasion resistant synthetic rubber, MSHA approved
	Reinforcement: Two wire braids of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5161-04	1/4	6.4	0.53	13.5	5800	400	23200	1600	2.0	50	0.19	0.29	500	152.4
5161-05	5/16	7.9	0.59	15.0	5080	350	20320	1400	2.2	55	0.22	0.32	500	152.4
5161-06	3/8	9.5	0.69	17.4	4790	330	19160	1320	2.6	65	0.28	0.41	500	152.4
5161-08	1/2	12.7	0.81	20.6	3990	275	15960	1100	3.5	90	0.34	0.51	400	122.0
5161-12	3/4	19.1	1.09	27.7	3120	215	12480	860	4.7	120	0.56	0.83	250	76.2
5161-16	1	25.4	1.40	35.5	2390	165	9560	660	5.9	150	0.81	1.20	200	61.0

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC HOSE - 1&2 WIRE BRAID

SAE 100R16 - MSHA Cover

Ⓜ Dreamshield® Extra Abrasion Resistant Cover

2-Wire Braid Hose, Wrapped Cover

5162 SERIES



APPLICATIONS: Used for high pressure hydraulic lines on off-road construction equipment, machine tools, farm and marine equipment. Meets or exceeds SAE 100R16.

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and extra abrasion resistant Ⓜ Dreamshield® synthetic rubber, MSHA approved
	Reinforcement: Two wire braids of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5162-04	1/4	6.4	0.57	14.4	5,800	400	23200	1600	2.0	50	0.24	0.35	500	152.4
5162-05	5/16	7.9	0.62	15.7	5,080	350	20320	1400	2.2	55	0.28	0.41	500	152.4
5162-06	3/8	9.5	0.74	18.8	4,790	330	19160	1320	2.6	65	0.34	0.51	500	152.4
5162-08	1/2	12.7	0.86	21.9	3,990	275	15960	1100	3.5	90	0.43	0.64	400	122.0
5162-10	5/8	15.9	1.00	25.4	3,630	250	14520	1000	3.9	100	0.48	0.71	250	76.2
5162-12	3/4	19.1	1.14	28.9	3,120	215	12480	860	4.7	120	0.62	0.92	250	76.2
5162-16	1	25.4	1.44	36.5	2,390	165	9560	660	5.9	150	0.91	1.35	200	61.0

We disclaim any liability for use of our products in applications other than which they are designed.

⚠ WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

SERIES 5191



**SAE 100R19 - MSHA Cover
4,000 PSI Constant Pressure
2-Wire Braid Hose, Smooth Cover**



APPLICATIONS: Used for high pressure hydraulic lines on off-road construction equipment, machine tools, farm and marine equipment. Meets or exceeds SAE 100R19.

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and abrasion resistant synthetic rubber, MSHA approved
	Reinforcement: Two wire braids of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5191-04	1/4	6.4	0.54	13.6	4,000	280	16000	1120	2.0	50	0.19	0.29	500	152.4
5191-06	3/8	9.5	0.69	17.5	4,000	280	16000	1120	2.6	65	0.27	0.41	500	152.4
5191-08	1/2	12.7	0.81	20.6	4,000	280	16000	1120	3.5	90	0.34	0.51	400	122.0
5191-10	5/8	15.9	0.94	24.0	4,000	280	16000	1120	3.9	100	0.43	0.64	250	76.2
5191-12	3/4	19.1	1.07	27.2	4,000	280	16000	1120	4.7	120	0.55	0.83	250	76.2
5191-16	1	25.4	1.40	35.5	4,000	280	16000	1120	5.9	150	0.80	1.20	200	61.0

This is a special order product only. No product will be stocked.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC HOSE - 1&2 WIRE BRAID

SAE 100R19 - MSHA Cover
☉ Dreamshield® Extra Abrasion Resistant Cover
2-Wire Braid Hose, Wrapped Cover
4,000 PSI Constant Pressure

5192 SERIES



APPLICATIONS: Used for high pressure hydraulic lines on off-road construction equipment, machine tools, farm and marine equipment. Meets or exceeds SAE 100R19.

CONSTRUCTION:	Tube: Synthetic Rubber
	Cover: Oil, weather and extra abrasion resistant ☉ Dreamshield® synthetic rubber, MSHA approved
	Reinforcement: Two wire braids of high tensile steel with protective coating

TEMPERATURE RANGE: -40°F (-40°C) to +212°F (+100°C)

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5192-04	1/4	6.4	0.54	13.6	4,000	280	16000	1120	2.0	50	0.19	0.29	500	152.4
5192-06	3/8	9.5	0.69	17.5	4,000	280	16000	1120	2.6	65	0.27	0.41	500	152.4
5192-08	1/2	12.7	0.81	20.6	4,000	280	16000	1120	3.5	90	0.34	0.51	400	122.0
5192-10	5/8	15.9	0.94	24.0	4,000	280	16000	1120	3.9	100	0.43	0.64	250	76.2
5192-12	3/4	19.1	1.07	27.2	4,000	280	16000	1120	4.7	120	0.55	0.83	250	76.2
5192-16	1	25.4	1.40	35.5	4,000	280	16000	1120	5.9	150	0.80	1.20	200	61.0

We disclaim any liability for use of our products in applications other than which they are designed.

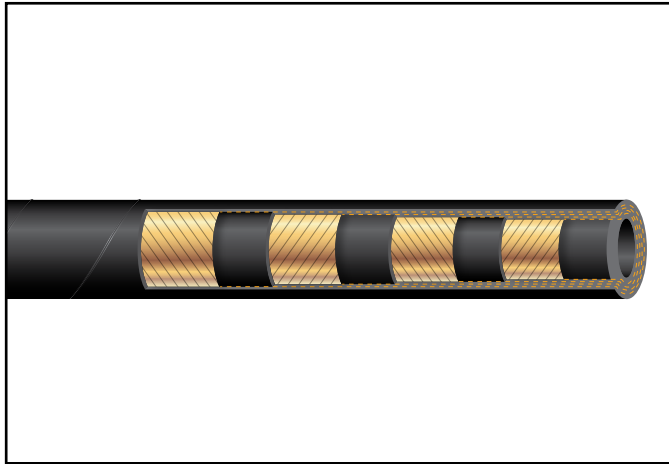
⚠ WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC HOSE - 4 OR 6-SPIRAL HOSE

<u>SERIES</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
5120	SAE 100R12, DIN EN 856 R12 - Wrapped MSHA Cover 4-Spiral Hose	51
5122 NEW!	SAE 100R12, DIN EN 856 R12 Dreamshield [®] Extra Abrasion Resistant Wrapped MSHA Cover - 4-Spiral Hose	52
5130	SAE 100R13, DIN EN 856 R13 - Wrapped MSHA Cover 4 or 6 -Spiral Hose, 5000 PSI Constant Pressure	53
5132 NEW!	SAE 100R13, DIN EN 853 R13 Dreamshield [®] Extra Abrasion Resistant Wrapped MSHA Cover 4 or 6-Spiral Hose, 5,000 PSI- Constant Pressure	54
5150	SAE 100R15, DIN EN 856 R15 - Wrapped MSHA Cover 4 or 6 -Spiral Hose, 6000 PSI Constant Pressure	55
5152 NEW!	SAE 100R15, DIN EN 856 R15 Dreamshield [®] Extra Abrasion Resistant Wrapped MSHA Cover 4 or 6-Spiral Hose, 6,000 PSI Constant Pressure	56



SAE 100R12, DIN EN 856 R12
Wrapped MSHA Cover
4-Spiral Hose



APPLICATIONS: Used for very high pressure hydraulic service.
 Meets or exceeds SAE 100R12 and EN 856 R12.

CONSTRUCTION:	Tube: Special Synthetic Rubber
	Cover: Oil, weather and abrasion resistant synthetic rubber, wrapped, MSHA approved
	Reinforcement: 4-spirals of high tensile steel

TEMPERATURE RANGE: -40°F (-40°C) to +250°F (+120°C)

COUPLINGS: 40/JB40 Series - see pages 105 thru 142

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5120-06	3/8	9.5	0.79	20.0	4,000	280	16000	1120	3.9	100	0.42	0.62	130	40
5120-08	1/2	12.7	0.93	23.5	4,000	280	16000	1120	4.9	125	0.52	0.78	130	40
5120-10	5/8	15.9	1.09	27.6	4,000	280	16000	1120	5.5	140	0.71	1.06	130	40
5120-12	3/4	19.1	1.20	30.5	4,000	280	16000	1120	5.9	150	0.81	1.20	130	40
5120-16	1	25.4	1.50	38.1	4,000	280	16000	1120	8.9	225	1.22	1.82	130	40
5120-20	1-1/4	31.8	1.83	46.6	3,000	210	12000	840	9.8	250	1.71	2.55	130	40
5120-24	1-1/2	38.1	2.09	53.2	2,500	175	10000	700	19.7	500	2.00	2.98	130	40
5120-32	2	50.8	2.63	66.8	2,500	175	10000	700	25.6	650	2.80	4.17	130	40

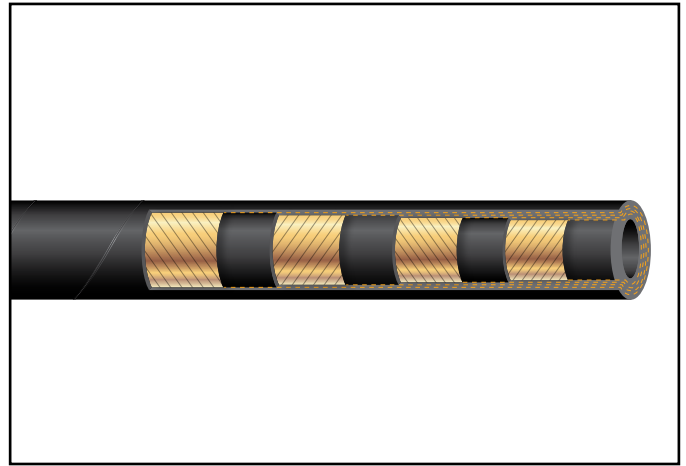
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

5122 SERIES



SAE 100R12, DIN EN 856 R12
Ⓞ Dreamshield® Extra Abrasion Resistant Cover
Wrapped MSHA Cover - 4-Spiral Hose



APPLICATIONS: Used for very high pressure hydraulic service.
 Meets or exceeds SAE 100R12 and EN 856 R12.

CONSTRUCTION:

- Tube:** Special Synthetic Rubber
- Cover:** Oil, weather and extra abrasion resistant Ⓞ Dreamshield® synthetic rubber, wrapped, MSHA approved
- Reinforcement:** 4-spirals of high tensile steel

TEMPERATURE RANGE: -40°F (-40°C) to +250°F (+120°C)

COUPLINGS: 40/JB40 Series - see pages 105 thru 142

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5122-06	3/8	9.5	0.79	20.0	4,000	280	16000	1120	4.9	125	0.42	0.62	150	45.7
5122-08	1/2	12.7	0.93	23.5	4,000	280	16000	1120	7.1	180	0.52	0.78	150	45.7
5122-10	5/8	15.9	1.09	27.6	4,000	280	16000	1120	7.9	200	0.71	1.06	150	45.7
5122-12	3/4	19.1	1.20	30.5	4,000	280	16000	1120	9.4	240	0.81	1.20	150	45.7
5122-16	1	25.4	1.50	38.1	4,000	280	16000	1120	11.8	300	1.22	1.82	150	45.7
5122-20	1-1/4	31.8	1.83	46.6	3,000	210	12000	840	16.5	420	1.71	2.55	150	45.7
5122-24	1-1/2	38.1	2.09	53.2	2,500	175	10000	700	19.7	500	2.00	2.98	150	45.7
5122-32	2	50.8	2.63	66.8	2,500	175	10000	700	24.8	630	2.80	4.17	150	45.7

We disclaim any liability for use of our products in applications other than which they are designed.

⚠ WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

SAE 100R13, DIN EN 856 R13 Wrapped MSHA Cover

5130 SERIES

4 or 6-Spiral Hose, 5,000 PSI, Constant Pressure



APPLICATIONS: Used for very high pressure hydraulic service.
Meets or exceeds SAE 100R13 and EN 856 R13.

CONSTRUCTION:	Tube: Special Synthetic Rubber
	Cover: Oil, weather and abrasion resistant synthetic rubber, wrapped, MSHA approved
	Reinforcement: 4-spirals of high tensile steel for 3/4" and 1" ID's 6 spirals of high tensile steel for 1-1/4", 1-1/2" and 2" ID's

TEMPERATURE RANGE: -40°F (-40°C) to +250°F (+120°C)

COUPLINGS: 60/JB60 Series - see pages 144 thru 164

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5130-12	3/4	19.1	1.26	32.0	5,000	345	20000	1380	9.4	240	1.09	1.63	130	40
5130-16	1	25.4	1.51	38.4	5,000	345	20000	1380	11.8	300	1.39	2.07	130	40
5130-20	1-1/4	31.8	1.94	49.3	5,000	345	20000	1380	16.5	420	2.60	3.87	130	40
5130-24	1-1/2	38.1	2.26	57.3	5,000	345	20000	1380	19.7	500	3.25	4.85	130	40
5130-32	2	50.8	2.82	71.6	5,000	345	20000	1380	25.2	640	4.31	6.42	130	40

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC HOSE - 4 & 6 SPIRAL



**SAE 100R13, DIN EN 856 R13
Wrapped MSHA Cover**

**☪ Dreamshield® Extra Abrasion Resistant Cover
4 or 6-Spiral Hose - 5,000 PSI- Constant Pressure**



APPLICATIONS: Used for very high pressure hydraulic service.
Meets or exceeds SAE 100R13 and EN 856 R13

CONSTRUCTION:	Tube: Special Synthetic Rubber
	Cover: Oil, weather and extra abrasion resistant ☪ Dreamshield® synthetic rubber, wrapped, MSHA approved
	Reinforcement: 4-spirals of high tensile steel for 3/4" and 1" ID's 6 spirals of high tensile steel for 1-1/4", 1-1/2" and 2" ID's

TEMPERATURE RANGE: -40°F (-40°C) to +250°F (+120°C)

COUPLINGS: 60/JB60 Series - see pages 144 thru 164

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5132-12	3/4	19.1	1.26	32.0	5,000	345	20000	1380	9.4	240	1.09	1.63	150	45.7
5132-16	1	25.4	1.51	38.4	5,000	345	20000	1380	11.8	300	1.39	2.07	150	45.7
5132-20	1-1/4	31.8	1.94	49.3	5,000	345	20000	1380	16.5	420	2.60	3.87	150	45.7
5132-24	1-1/2	38.1	2.26	57.3	5,000	345	20000	1380	19.7	500	3.25	4.85	150	45.7
5132-32	2	50.8	2.82	71.6	5,000	345	20000	1380	24.8	630	4.31	6.42	150	45.7

We disclaim any liability for use of our products in applications other than which they are designed.

⚠ WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC HOSE - 4 & 6 SPIRAL

SAE 100R15, DIN EN 856 R15
Wrapped MSHA Cover
4 or 6-Spiral Hose, 6,000 PSI
Constant Pressure



APPLICATIONS: Used for extreme high pressure hydraulic service.
 Meets or exceeds SAE 100R15 and EN 856 R15

CONSTRUCTION:	Tube: Special Synthetic Rubber
	Cover: Oil, weather and abrasion resistant synthetic rubber, wrapped, MSHA approved
	Reinforcement: 4-spirals of high tensile steel for 3/8" and 1" ID 6 spirals of high tensile steel for 1-1/4", to 2" ID

TEMPERATURE RANGE: -40°F (-40°C) to +250°F (+120°C)

COUPLINGS: Contact Jason Industrial for recommendations.

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5150-06	3/8	9.5	0.83	21.2	6000	420	24000	1680	5.9	150	0.51	0.76	130	40
5150-08	1/2	12.8	0.96	24.4	6000	420	24000	1680	7.9	200	0.60	0.90	130	40
5150-10	5/8	15.9	1.13	28.7	6000	420	24000	1680	9.3	235	0.84	1.25	130	40
5150-12	3/4	19.1	1.26	32.0	6000	420	24000	1680	10.4	265	1.09	1.63	130	40
5150-16	1	25.4	1.51	38.4	6000	420	24000	1680	13.0	330	1.39	2.07	130	40
5150-20	1-1/4	31.8	1.94	49.3	6000	420	24000	1680	17.5	445	2.60	3.87	130	40
5150-24	1-1/2	38.1	2.26	57.3	6000	420	24000	1680	20.9	530	3.25	4.85	130	40
5150-32	2	50.8	2.83	72.0	6000	420	24000	1680	23.6	600	4.31	6.42	130	40

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

5152 Series



**SAE 100R15, DIN EN 856 R15
Wrapped MSHA Cover**

**☪ Dreamshield® Extra Abrasion Resistant Cover
4 or 6-Spiral Hose, 6,000 PSI Constant Pressure**



APPLICATIONS: Used for very high pressure hydraulic service.
Meets or exceeds SAE 100R15 and EN 856 R15

CONSTRUCTION:	Tube: Special Synthetic Rubber
	Cover: Oil, weather and extra abrasion resistant ☪ Dreamshield® synthetic rubber, wrapped, MSHA approved
	Reinforcement: 4-spirals of high tensile steel for 3/4" and 1" ID's 6 spirals of high tensile steel for 1-1/4" to 2" ID's

TEMPERATURE RANGE: -40°F (-40°C) to +250°F (+120°C)

COUPLINGS: 60/JB60 Series - pages 144 thru 164

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5152-12	3/4	19.1	1.26	32.0	6,000	420	24000	1680	10.4	265	1.09	1.63	150	45.7
5152-16	1	25.4	1.51	38.4	6,000	420	24000	1680	13.0	330	1.39	2.07	150	45.7
5152-20	1-1/4	31.8	1.94	49.3	6,000	420	24000	1680	17.5	445	2.60	3.87	150	45.7
5152-24	1-1/2	38.1	2.26	57.3	6,000	420	24000	1680	20.9	530	3.25	4.85	150	45.7
5152-32	2	50.8	2.83	72.0	6,000	420	24000	1680	26.4	670	4.31	6.42	150	45.7

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC HOSE - 4 & 6 SPIRAL

HYDRAULIC HOSE - SAE 100R4, Oil Return Lines

<u>SERIES</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
5040 NEW!	SAE 100R4, Oil Return Lines Replaces Industrial Series 4415	58

HYDRAULIC HOSE - TRANSPORTATION, AIR BRAKE

<u>SERIES</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
5050	SAE 100R5, SAE J1402 Type All DOT FMVSS 106-74 Type All	59

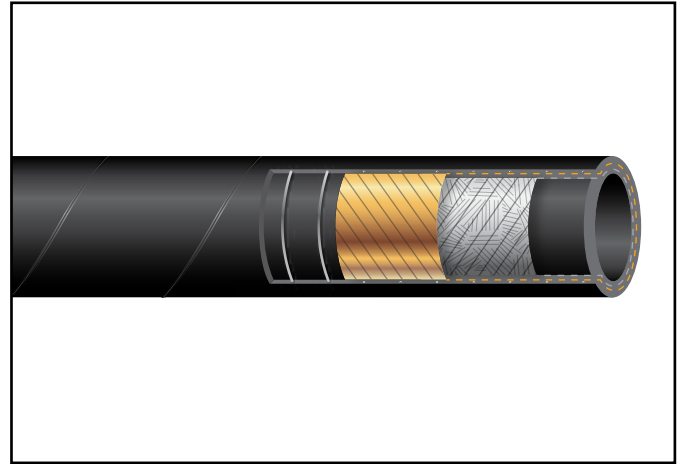


Federal law requires registration with the Department of Transportation (DOT) for anyone producing air brake hose assemblies with swaged or crimp fittings. The Jason 5050 Series hoses have been tested and meet SAE 100R5 and J1402 Type All/FMVSS 106 requirements with the Jason 75 Series field attachable (reusable) couplings. Sizes 16 (7/8" bore) and larger are not included in the SAE J1402/FMVSS 102 standards.

5040 SERIES



**SAE 100R4
Oil Return Hose**



NOTE: Series 5040 will replace the 4415 industrial hose. The 4415 series will be phased out as inventories are depleted and replaced by the Series 5040 hose. This will be a running change.

APPLICATIONS: Used for oil return lines of hydraulic systems in industrial and agricultural systems.

CONSTRUCTION:	Tube: Nitrile, black, ARPM Class A
	Cover: CR, black ARPM Class B
	Reinforcement: Two ply synthetic fabric with a wire helix

TEMPERATURE RANGE:	-40°F (-40°C) to +212°F (+100°C)
---------------------------	----------------------------------

COUPLINGS: 12/JB12 Series - see pages 61 thru 103

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5040-12	3/4	19.1	1.14	29.0	300	20.7	1200	82.8	2.0	50.8	0.45	0.67	100	30.5
5040-16	1	25.4	1.38	35.0	250	17.2	1000	68.8	2.6	66.0	0.50	0.74	100	30.5
5040-20	1-1/4	31.8	1.65	42.0	200	13.8	800	55.2	3.3	83.8	0.64	0.95	100	30.5
5040-24	1-1/2	38.1	1.93	49.0	150	10.4	600	41.6	3.8	95.3	0.80	1.19	100	30.5
5040-32	2	50.8	2.44	62.0	100	6.9	400	27.6	5.3	134.6	0.99	1.47	100	30.5

Note: Check with customer service for availability of these part numbers.

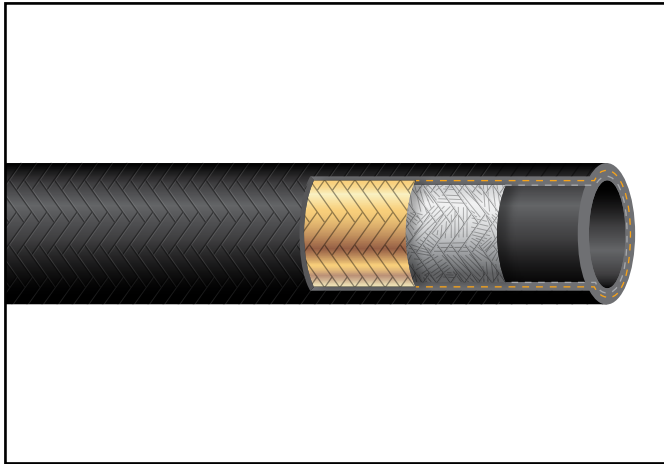
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC HOSE - OIL RETURN

**SAE 100R5, SAE J1402 Type All
DOT FMVSS 106-74 Type All**

5050 SERIES



APPLICATIONS: Used for general purpose truck and hydraulic hose. For use in air brake, oil lines and medium pressure hydraulic applications.

CONSTRUCTION:	Tube: CPE Rubber
	Cover: Oil and weather resistant rubber impregnated synthetic braid
	Reinforcement: Synthetic textile and one wire braid of high tensile steel

TEMPERATURE RANGE: -40°F (-40°C) to +300°F (+125°C)
Continuous use at maximum temperature will reduce service duration.

COUPLINGS: 75/JFR5 Series - see pages 166 thru 170

Part Number	Inside Diameter		Outside Diameter		Working Pressure		Burst Pressure		Minimum Bend Radius		Weight		Standard Pack	
	inch	mm	inch	mm	PSI	BAR	PSI	BAR	inch	mm	lbs./ft.	kg/m	feet	meter
5050-04	3/16	4.8	0.51	12.9	3046	210	12183	840	3.0	75	0.17	0.25	300	91.5
5050-05	1/4	6.4	0.57	14.5	3046	210	12183	840	3.4	85	0.20	0.30	300	91.5
5050-06	5/16	8.0	0.66	16.8	2277	157	9109	628	4.0	100	0.25	0.37	250	76.2
5050-08	13/32	10.3	0.75	19.1	2031	140	8122	560	4.6	115	0.29	0.43	250	76.2
5050-10	1/2	12.7	0.90	22.9	1769	122	7078	488	5.5	140	0.40	0.59	200	61.0
5050-12	5/8	16.0	1.07	27.1	1523	105	6092	420	6.5	165	0.50	0.74	200	61.0
5050-16	7/8	22.2	1.21	30.73	812	56	3249	236	7.4	188	0.50	0.75	150	45.7

NOTE: Only approved field attachable (reusable) screw together couplings can be used on this hose for compliance with DOT FMVSS 106 requirements. No crimp couplings may be used on any airbrake hose without the end assembler testing, registering and complying with DOT.

We disclaim any liability for use of our products in applications other than which they are designed.

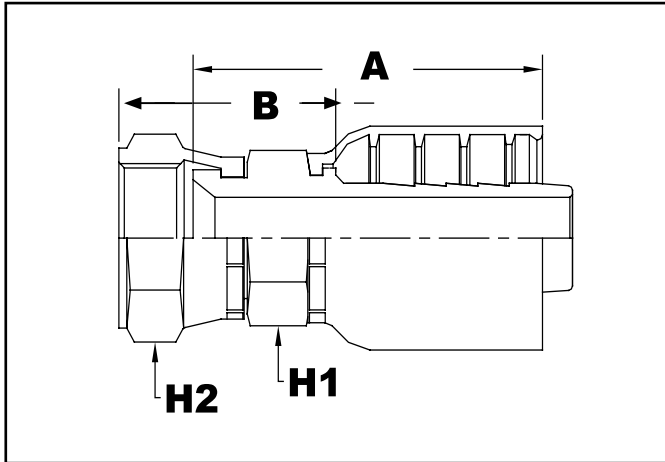
WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 12/JB12 SERIES FOR 1 & 2-WIRE BRAID HOSE

<u>SERIES</u>	<u>DESCRIPTIVE SERIES</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
1200	JB12FS	Female Swivel - 37° Flare	61
1202	JB12FS45	Female Swivel - 37° Flare, 45° Elbow	62
1204	JB12FS90	Female Swivel - 37° Flare, 90° Elbow	63
1204L	NEW! JB12FS90L	Female Swivel-37° Flare, 90° Elbow - Long Drop	64
1205	JB12OFS	Female O-Ring Face Seal - Straight	65
1207	JB12FOFS45	Female O-Ring Face Seal - 45° Elbow	66
1209	JB12OFS90	Female O-Ring Face Seal - 90° Elbow	67
1209L	NEW! JB12OFS90L	Female O-Ring Face Seal - 90° Elbow - Long Drop	68
1210	JB12FA	Female Swivel SAE 45° Flare	69
1215	JB12FP	Female Pipe Rigid NPTF	70
1216	NEW! JB12FPS	Female Pipe Swivel NPTF	71
1220	JB12MP	Male Pipe Rigid NPTF	72
1223	JB12MS	Male Pipe Swivel	73
1225	JB12MJ	Male JIC 37°	74
1226	NEW! JB12MJBH	Male JIC 37° Flare - Bulkhead	75
1227	JB12OB	Male O-Ring Boss	76
1228	JB12OBS	Male O-Ring Boss Swivel	77
1230	JB12JISMP	Male JIS/BSP Taper Rigid Pipe - Metric	78
1232	JB12MOFS	Male O-Ring Face Seal	79
1234	JB12C61S	SAE Code 61 Flange Straight	80
1236	JB12C6145	SAE Code 61 Flange 45° Elbow	81
1239	JB12C6290	SAE Code 61 Flange 90° Elbow	82
1241	JB12C62S	SAE Code 62 Flange Straight	83
1243	JB12C6245	SAE Code 62 Flange 45° Elbow	84
1245	JB12C6290	SAE Code 61 Flange 90° Elbow	85
1248	JB12FSPPBSP	Female Swivel Parallel Pipe - BSP 30° Cone Metric	86
1249	JB12FSPPBSP45	Female Swivel Parallel Pipe - BSP 30° Cone 45° Elbow - Metric	87
1250	JB12FSPPBSP90	Female Swivel Parallel Pipe - BSP 30° Cone 90° Elbow - Metric	88
1252	JB12FSPPJIS	Female Swivel Parallel Pipe - JIS 30° Cone Metric	89
1254	JB12FSPPJIS45	Female Swivel Parallel Pipe - JIS 30° Cone 45° Elbow - Metric	90
1256	JB12FSPPJIS90	Female Swivel Parallel Pipe - JIS 30° Cone 90° Elbow - Metric	91
1258	NEW! JB12FSJISF	Female Swivel JIS 30° flare	92
1270	JB12KFSM	Female Swivel Komatsu 30° Flare Metric	93
1271	JB12FSM	Female Swivel 60° Cone Metric	94
1272	JB12FS45M	Female Swivel 60° Cone 45° Elbow Metric	95
1273	JB12FS90M	Female Swivel 60° Cone 90° Elbow Metric	96
1275	JB12MM	Male DIN 24° - Metric	97
1277	JB12LFSORM	Female Swivel O-Ring 24° Cone DIN 3865 L-Series Metric	98
1278	JB12LFSORM45	Female Swivel O-Ring 24° Cone DIN 3865 L-Series - 45° Elbow Metric	99
1279	JB12LFSORM90	Female Swivel O-Ring 24° Cone DIN 3865 L-Series - 90° Elbow Metric	100
1280	JB12FSORM	Female Swivel O-Ring 24° Cone DIN 3865 S-Series - Metric	101
1281	JB12FSORM45	Female Swivel O-Ring 24° Cone DIN 3865 S-Series - 45° Elbow Metric	102
1282	JB12FSORM90	Female Swivel O-Ring 24° Cone DIN 3865 S-Series - 90° Elbow Metric	103

JB12FS SERIES Female Swivel 37° Flare

1200 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	H1		H2		lbs	kg	
									inch	mm	inch	mm			
1200-0404	JB12FS-04-04	7/16-20	1/4	6.4	1.61	41.0	0.83	21.0	0.56	14.2	0.56	14.2	0.12	0.05	250
1200-0504	JB12FS-05-04	1/2-20	1/4	6.4	1.65	42.0	0.87	22.0	0.56	14.2	0.56	14.2	0.13	0.06	250
1200-0604	JB12FS-06-04	9/16-18	1/4	6.4	1.65	42.0	0.87	22.0	0.56	14.2	0.69	17.4	0.14	0.06	250
1200-0406	JB12FS-04-06	7/16-20	3/8	9.5	1.97	50.0	0.91	23.0	0.69	17.4	0.56	14.2	0.18	0.08	130
1200-0506	JB12FS-05-06	1/2-20	3/8	9.5	-	-	-	-	0.69	17.4	0.56	14.2	0.19	0.09	130
1200-0606	JB12FS-06-06	9/16-18	3/8	9.5	1.97	50.0	0.91	23.0	0.69	17.4	0.69	17.4	0.21	0.10	130
1200-0806	JB12FS-08-06	3/4-16	3/8	9.5	1.97	50.0	0.91	23.0	0.69	17.4	0.87	22.2	0.26	0.12	130
1200-0808	JB12FS-08-08	3/4-16	1/2	12.7	2.13	54.0	0.91	23.0	0.87	22.2	0.87	22.2	0.30	0.14	100
1200-1008	JB12FS-10-08	7/8-14	1/2	12.7	2.17	55.0	0.94	24.0	0.87	22.2	1.00	25.4	0.32	0.14	80
1200-1208	JB12FS-12-08	1-1/16-12	1/2	12.7	2.17	55.0	0.94	24.0	0.87	22.2	1.00	25.4	0.42	0.19	80
1200-0810	JB12FS-08-10	3/4-16	5/8	15.9	2.59	65.8	1.06	27.0	1.06	27	0.87	22.2	0.33	0.15	70
1200-1010	JB12FS-10-10	7/8-14	5/8	15.9	2.48	63.0	0.98	25.0	0.87	22.2	1.00	25.4	0.39	0.18	70
1200-1210	JB12FS-12-10	1-1/16-12	1	25.4	2.60	66.0	1.06	27.0	1.06	26.9	1.25	31.7	0.46	0.21	70
1200-1212	JB12FS-12-12	1-1/16-12	3/4	19.1	2.60	66.0	1.06	27.0	1.06	26.9	1.25	31.7	0.53	0.24	50
1200-1412	JB12FS-14-12	1-3/16-12	3/4	19.1	-	-	-	-	1.06	26.9	1.31	33.3	0.68	0.31	50
1200-1612	JB12FS-16-12	1-5/16-12	3/4	19.1	2.60	66.0	1.06	27.0	1.06	26.9	1.37	34.9	0.72	0.33	50
1200-1616	JB12FS-16-16	1-5/16-12	1	25.4	3.07	78.0	1.30	33.0	1.50	38.1	1.37	34.9	1.07	0.48	36
1200-2016	JB12FS-20-16	1-5/8-12	1	25.4	3.15	80.0	1.34	34.0	2.00	50.8	2.00	50.8	1.34	0.61	15
1200-2020	JB12FS-20-20	1-5/8-12	1-1/4	31.8	3.23	82.0	1.38	35.0	2.00	50.8	2.00	50.8	1.74	0.79	15
1200-2424	JB12FS-24-24	1-7/8-12	1-1/2	38.1	4.02	102.0	1.69	43.0	2.25	57.1	2.12	53.9	2.41	1.09	12
1200-3232	JB12FS-32-32	2-1/2-12	2	50.8	4.96	126.0	2.17	55.0	2.50	63.5	2.87	73.0	4.24	1.92	8

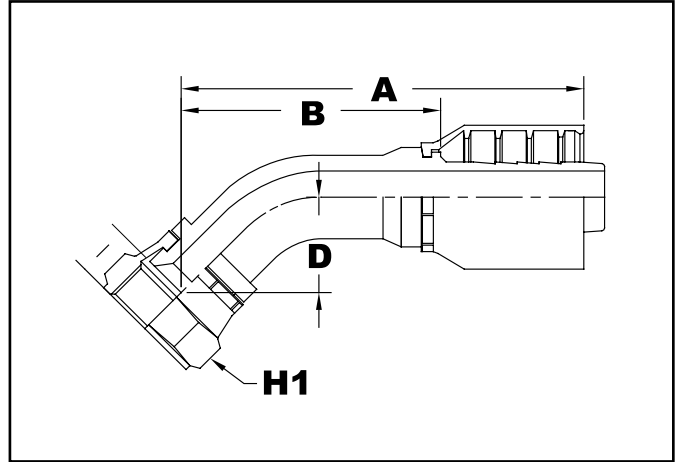
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1202 SERIES

JB12FS45 SERIES
Female Swivel 37° Flare - 45° Elbow



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	H1	lbs	
1202-0404	JB12FS45-04-04	7/16-20	1/4	6.4	2.17	55.0	1.34	34.0	0.51	13.0	0.56	14.2	0.12	0.05	250
1202-0504	JB12FS45-05-04	1/2-20	1/4	6.4	2.17	55.0	1.34	34.0	0.51	13.0	0.69	17.4	0.13	0.06	250
1202-0604	JB12FS45-06-04	9/16-18	1/4	6.4	2.20	56.0	1.38	35.0	0.55	14.0	0.69	17.4	0.14	0.06	250
1202-0606	JB12FS45-06-06	9/16-18	3/8	9.5	2.68	68.0	1.61	41.0	0.63	16.0	0.69	17.4	0.21	0.10	130
1202-0806	JB12FS45-08-06	3/4-16	3/8	9.5	2.68	68.0	1.61	41.0	0.63	16.0	0.87	22.2	0.25	0.11	130
1202-0808	JB12FS45-08-08	3/4-16	1/2	12.7	3.15	80.0	1.89	48.0	0.75	19.0	0.87	22.2	0.31	0.14	100
1202-1008	JB12FS45-10-08	7/8-14	1/2	12.7	3.15	80.0	1.89	48.0	0.75	19.0	1.00	25.4	0.35	0.16	80
1202-1010	JB12FS45-10-10	7/8-14	5/8	15.9	3.54	90.0	2.01	51.0	0.75	19.0	1.00	25.4	0.41	0.19	70
1202-1212	JB12FS45-12-12	1-1/16-12	3/4	19.1	4.45	113.0	2.87	73.0	1.02	26.0	1.25	31.7	0.77	0.35	50
1202-1616	JB12FS45-16-16	1-5/16-12	1	25.4	4.80	122.0	3.03	77.0	1.22	31.0	1.50	38.1	1.31	0.60	36
1202-2020	JB12FS45-20-20	1-5/8-12	1-1/4	31.8	5.91	150.0	4.06	103.0	1.57	40.0	2.00	50.8	2.20	1.00	15
1202-2424	JB12FS45-24-24	1-7/8-12	1-1/2	38.1	6.89	175.0	4.53	115.0	1.81	46.0	2.12	53.9	2.41	1.09	12
1202-3232	JB12FS45-32-32	2-1/2-12	2	50.8	8.31	211.0	5.51	140.0	2.44	62.0	2.87	73.0	4.23	1.92	8

*Standard Pack is 1.

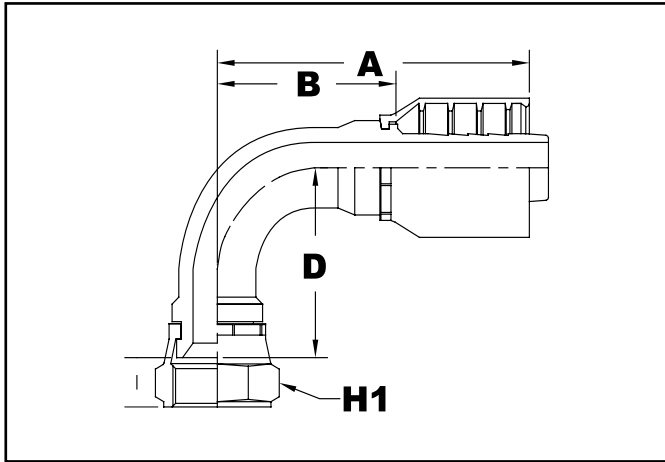
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12FS90 SERIES

Female Swivel 37° Flare - 90° Elbow

1204 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	H1	lbs.	
1204-0404	JB12FS90-04-04	7/16-20	1/4	6.4	2.01	51.0	1.18	30.0	0.94	24.0	0.56	14.2	0.12	0.05	200
1204-0504	JB12FS90-05-04	1/2-20	1/4	6.4	2.01	51.0	1.18	30.0	0.94	24.0	0.69	17.4	0.15	0.07	200
1204-0604	JB12FS90-06-04	9/16-18	1/4	6.4	2.01	51.0	1.18	30.0	0.98	25.0	0.69	17.4	0.14	0.06	200
1204-0406	JB12FS90-04-06	7/16-20	3/8	9.5	2.72	69.0	1.65	42.0	1.10	28.0	0.56	14.2	0.21	0.10	200
1204-0606	JB12FS90-06-06	9/16-18	3/8	9.5	2.72	69.0	1.65	42.0	1.14	29.0	0.69	17.4	0.21	0.10	110
1204-0806	JB12FS90-08-06	3/4-16	3/8	9.5	2.72	69.0	1.65	42.0	1.14	29.0	0.87	22.2	0.26	0.12	110
1204-0608	JB12FS90-06-08	9/16-18	1/2	12.7	2.76	70.0	1.50	38.0	1.22	31.0	0.69	17.4	0.25	0.11	70
1204-0808	JB12FS90-08-08	3/4-16	1/2	12.7	2.76	70.0	1.50	38.0	1.22	31.0	0.87	22.2	0.33	0.15	70
1204-1008	JB12FS90-10-08	7/8-14	1/2	12.7	2.76	70.0	1.50	38.0	1.22	31.0	1.00	25.4	0.35	0.16	70
1204-1208	JB12FS90-12-08	1-1/16-12	1/2	12.7	2.76	70.0	1.50	38.0	1.22	31.0	1.25	31.7	0.41	0.19	70
1204-1010	JB12FS90-10-10	7/8-14	5/8	15.9	2.80	71.0	1.65	42.0	1.38	35.0	1.00	25.4	0.44	0.20	70
1204-1210	JB12FS90-12-10	1-1/16-12	5/8	15.9	2.80	71.0	1.65	42.0	1.50	38.0	1.25	31.7	0.49	0.22	32
1204-1212	JB12FS90-12-12	1-1/16-12	3/4	19.1	3.98	101.0	2.40	61.0	1.97	50.0	1.25	31.7	0.83	0.38	32
1204-1612	JB12FS90-16-12	1-5/16-12	3/4	19.1	3.98	101.0	2.40	61.0	1.97	50.0	1.25	31.7	0.81	0.37	32
1204-1616	JB12FS90-16-16	1-5/16-12	1	25.4	4.96	126.0	3.19	81.0	2.44	62.0	2.50	63.5	1.49	0.68	15
1204-2020	JB12FS90-20-20	1-5/8-12	1-1/4	31.8	5.51	140.0	3.66	93.0	3.23	82.0	1.98	50.4	2.47	1.12	10
1204-2424	JB12FS90-24-24	1-7/8-12	1-1/2	38.1	5.94	151.0	3.58	91.0	3.39	86.0	2.12	53.9	3.23	1.46	7
1204-3232	JB12FS90-32-32	2-1/2-12	2	50.8	8.11	206.0	5.31	135.0	5.28	134.0	2.87	73.0	6.99	3.17	3

*Standard Pack is 1.

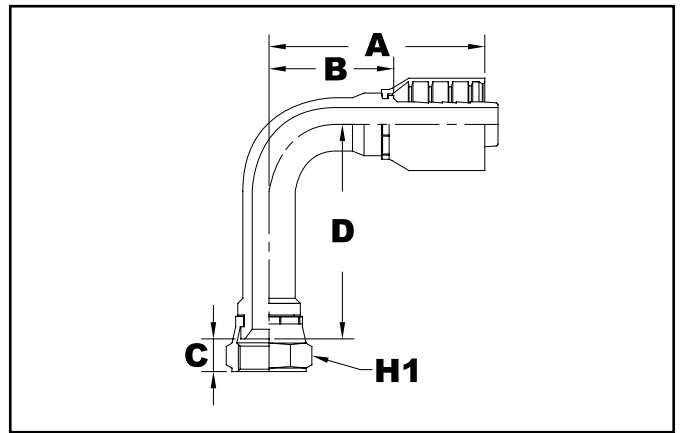
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1204L SERIES



**JB12FS90L SERIES
Female Swivel 37° Flare
90° Elbow Long Drop**



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
1204L-0404	JB12FS90L-04-04	7/16-20	1/4	6.4	2.01	51.0	1.18	30.0	1.81	46.0	0.56	14.2	0.13	0.06	200
1204L-0504	JB12FS90L-05-04	1/2-20	1/4	6.4	2.01	51.0	1.18	30.0	1.81	46.0	0.69	17.4	0.15	0.07	200
1204L-0604	JB12FS90L-06-04	9/16-18	1/4	6.4	1.89	48.0	1.07	27.2	2.17	55	0.69	17.46	0.15	0.07	200
1204L-0606	JB12FS90L-06-06	9/16-18	3/8	9.5	2.72	69.0	1.65	42.0	2.17	55.0	0.69	17.4	0.24	0.11	110
1204L-0806	JB12FS90L-08-06	3/4-16	3/8	9.5	2.72	69.0	1.65	42.0	2.44	62.0	0.87	22.2	0.26	0.12	110
1204L-0808	JB12FS90L-08-08	3/4-16	1/2	12.7	2.76	70.0	1.50	38.0	2.44	62.0	0.87	22.2	0.35	0.16	70
1204L-1008	JB12FS90L-10-08	7/8-14	1/2	12.7	2.76	70.0	1.50	38.0	2.56	65.0	1.00	25.4	0.37	0.17	70
1204L-1010	JB12FS90L-10-10	7/8-14	5/8	15.9	2.80	71.0	1.65	42.0	2.56	65.0	1.00	25.4	0.57	0.26	50
1204L-1212	JB12FS90L-12-12	1-1/16-12	3/4	19.1	3.98	101.0	2.40	61.0	3.74	95.0	1.25	31.7	1.01	0.46	28
1204L-1412	JB12FS90L-14-12	1-5/16-12	3/4	19.1	3.67	93.3	2.13	54.0	3.78	96	1.38	35	0.88	0.4	28
1204L-1616	JB12FS90L-16-16	1-5/16-12	1	25.4	4.96	126.0	3.19	81.0	4.33	110.0	1.50	38.1	1.68	0.76	12
1204L-2020	JB12FS90L-20-20	1-5/8-12	1-1/4	31.8	5.51	140.0	3.66	93.0	5.28	134.0	2.00	50.8	2.91	1.32	8
1204L-2424	JB12FS90L-24-24	1-7/8-12	1-1/2	38.1	6.34	161.1	4.00	101.6	5.55	141.0	2.17	55	3.92	1.78	5

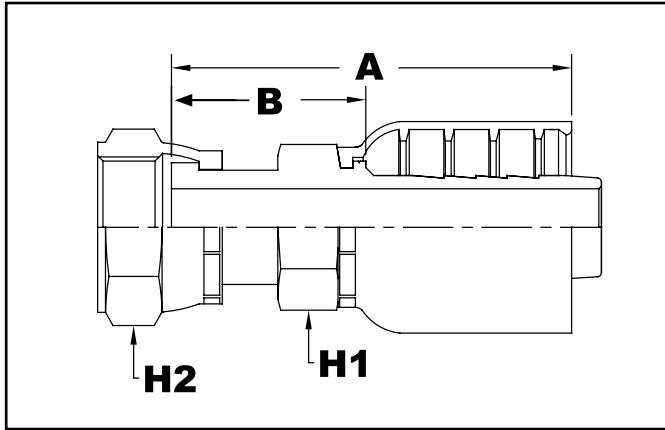
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12OFS SERIES Female O-Ring Face Seal Straight

1205 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack qty
			inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	
									inch	mm	inch	mm			
1205-0404	JB12OFS-04-04	9/16-18	1/4	6.4	1.89	48.0	1.10	28.0	0.56	14.2	0.69	17.4	0.03	0.07	250
1205-0604	JB12OFS-06-04	11/16-16	1/4	6.4	1.97	50.0	1.18	30.0	0.69	17.4	0.81	20.6	0.03	0.07	250
1205-0804	JB12OFS-08-04	13/16-16	1/4	6.4	2.09	53.0	1.30	33.0	0.69	17.4	0.94	23.8	0.02	0.05	250
1205-0606	JB12OFS-06-06	11/16-16	3/8	9.5	2.20	56.0	1.14	29.0	0.69	17.4	0.81	20.6	0.04	0.10	130
1205-0806	JB12OFS-08-06	13/16-16	3/8	9.5	2.32	59.0	1.26	32.0	0.69	17.4	0.94	23.8	0.05	0.11	130
1205-0608	JB12OFS-06-08	11/16-16	1/2	12.7	2.36	60.0	1.14	29.0	0.81	20.6	0.81	20.6	0.03	0.07	80
1205-0808	JB12OFS-08-08	13/16-16	1/2	12.7	2.48	63.0	1.26	32.0	0.81	20.6	0.94	23.8	0.07	0.16	80
1205-1008	JB12OFS-10-08	1-14	1/2	12.7	2.76	70.0	1.54	39.0	0.81	20.6	1.12	28.5	0.07	0.16	80
1205-1208	JB12OFS-12-08	1-3/16-12	1/2	12.7	2.87	73.0	1.65	42.0	0.94	23.8	1.37	34.9	0.14	0.30	50
1205-0810	JB12OFS-08-10	13/16-16	5/8	15.9	2.76	70.0	1.26	32.0	0.94	23.8	0.94	23.8	0.06	0.14	70
1205-1010	JB12OFS-10-10	1-14	5/8	15.9	2.76	70.0	1.54	39.0	0.81	20.6	1.12	28.5	0.10	0.23	60
1205-1210	JB12OFS-12-10	1-3/16-12	5/8	15.9	3.15	80.0	1.65	42.0	1.00	25.4	1.37	34.9	0.15	0.34	70
1205-1012	JB12OFS-10-12	1-14	3/4	19.1	3.07	78.0	1.54	39.0	1.06	26.9	1.12	28.5	0.05	0.12	50
1205-1212	JB12OFS-12-12	1-3/16-12	3/4	19.1	3.15	80.0	1.61	41.0	1.12	28.5	1.37	34.9	0.15	0.32	50
1205-1612	JB12OFS-16-12	1-7/16-12	3/4	19.1	3.23	82.0	1.69	43.0	1.25	31.7	1.62	41.2	0.17	0.38	50
1205-1616	JB12OFS-16-16	1-7/16-12	1	25.4	3.54	90.0	1.77	45.0	1.37	34.9	1.62	41.2	0.22	0.49	36
1205-2016	JB12OFS-20-16	1-11/16-12	1	25.4	3.07	78.0	1.30	33.0	1.37	34.9	1.87	47.6	0.28	0.62	15
1205-1620	JB12OFS-16-20	1-7/16-12	1-1/4	31.8	3.58	91.0	1.73	44.0	1.75	44.4	1.62	41.2	0.35	0.78	15
1205-2020	JB12OFS-20-20	1-11/16-12	1-1/4	31.8	3.39	86.0	1.54	39.0	1.75	44.4	1.87	47.6	0.38	0.84	15
1205-2420	JB12OFS-24-20	2-12	1-1/4	31.8	3.46	88.0	1.61	41.0	1.75	44.4	2.25	57.1	0.44	0.98	12
1205-2424	JB12OFS-24-24	2-12	1-1/2	38.1	3.94	100.0	1.61	41.0	1.87	47.6	2.25	57.1	0.52	1.15	12

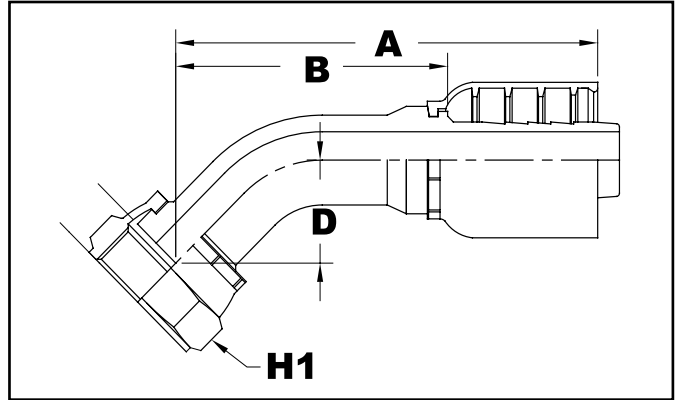
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1207 SERIES

**JB120FS45 SERIES
Female O-Ring Face Seal - 45° Elbow**



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes		Weight		Bulk Pack
					inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
1207-0404	JB120FS45-04-04	9/16-18	1/4	6.4	2.17	55.0	1.34	34.0	0.51	13.0	0.69	17.4	0.14	0.06	250
1207-0604	JB120FS45-06-04	11/16-16	1/4	6.4	2.20	56.0	1.38	35.0	0.55	14.0	0.81	20.6	0.15	0.07	130
1207-0804	JB120FS45-08-04	13/16-16	1/4	6.4	2.28	58.0	1.46	37.0	0.63	16.0	0.94	23.8	0.11	0.05	250
1207-0605	JB120FS45-06-05	11/16-16	5/16	7.9	2.20	56.0	1.38	35.0	0.55	14.0	0.81	20.6	0.11	0.05	200
1207-0406	JB120FS45-04-06	9/16-18	3/8	9.5	2.64	67.0	1.57	40.0	0.59	15.0	0.69	17.4	0.11	0.05	130
1207-0606	JB120FS45-06-06	11/16-16	3/8	9.5	2.68	68.0	1.61	41.0	0.63	16.0	0.81	20.6	0.22	0.10	130
1207-0806	JB120FS45-08-06	13/16-16	3/8	9.5	2.76	70.0	1.61	41.0	0.67	17.0	0.81	20.6	0.25	0.11	130
1207-0608	JB120FS45-06-08	11/16-16	1/2	12.7	3.23	82.0	1.77	45.0	0.83	21.0	0.94	23.8	0.15	0.07	130
1207-0808	JB120FS45-08-08	13/16-16	1/2	12.7	3.27	83.0	1.97	50.0	0.83	21.0	0.94	23.8	0.36	0.16	80
1207-1008	JB120FS45-10-08	1-14	1/2	12.7	3.23	82.0	2.01	51.0	0.79	20.0	1.12	28.5	0.39	0.18	80
1207-1208	JB120FS45-12-08	1-3/16-12	1/2	12.7	3.23	82.0	1.97	50.0	0.79	20.0	1.37	34.9	0.26	0.12	80
1207-0810	JB120FS45-08-10	13/16-12	5/8	15.9	3.62	92.0	2.09	53.0	0.79	20.0	1.29	32.8	0.18	0.08	70
1207-1010	JB120FS45-10-10	1-14	5/8	15.9	3.66	93.0	2.13	54.0	0.83	21.0	1.12	28.5	0.52	0.24	70
1207-1210	JB120FS45-12-10	1-3/16-12	5/8	15.9	3.62	92.0	2.09	53.0	0.79	20.0	1.37	34.9	0.28	0.13	50
1207-1012	JB120FS45-10-12	1-14	3/4	19.1	4.57	116.0	2.99	76.0	1.14	29.0	1.12	28.5	0.26	0.12	32
1207-1212	JB120FS45-12-12	1-3/16-12	3/4	19.1	4.53	115.0	2.95	75.0	1.10	28.0	1.37	34.9	0.91	0.41	32
1207-1612	JB120FS45-16-12	1-7/16-12	3/4	19.1	4.76	121.0	2.99	76.0	1.18	30.0	1.62	41.2	0.77	0.35	32
1207-1216	JB120FS45-12-16	1-3/16-12	1	25.4	4.76	121.0	2.99	76.0	1.18	30.0	1.37	34.9	0.46	0.21	18
1207-1616	JB120FS45-16-16	1-7/16-12	1	25.4	4.76	121.0	2.99	76.0	1.14	29.0	1.62	41.2	1.29	0.58	18
1207-2016	JB120FS45-20-16	1-11/16-12	1	25.4	4.88	124.0	3.11	79.0	1.30	33.0	1.87	47.6	1.62	0.74	10
1207-1620	JB120FS45-16-20	1-7/16-12	1-1/4	31.8	5.79	147.0	3.94	100.0	1.46	37.0	1.87	47.6	1.72	0.78	12
1207-2020	JB120FS45-20-20	1-11/16-12	1-1/4	31.8	5.91	150.0	4.06	103.0	1.57	40.0	1.62	41.2	2.24	1.02	10
1207-2420	JB120FS45-24-20	2-12	1-1/4	31.8	5.94	151.0	4.09	104.0	1.61	41.0	2.25	57.1	2.38	1.08	10
1207-2424	JB120FS45-24-24	2-12	1-1/2	38.1	6.85	174.0	4.49	114.0	1.77	45.0	2.25	57.1	2.50	1.14	7

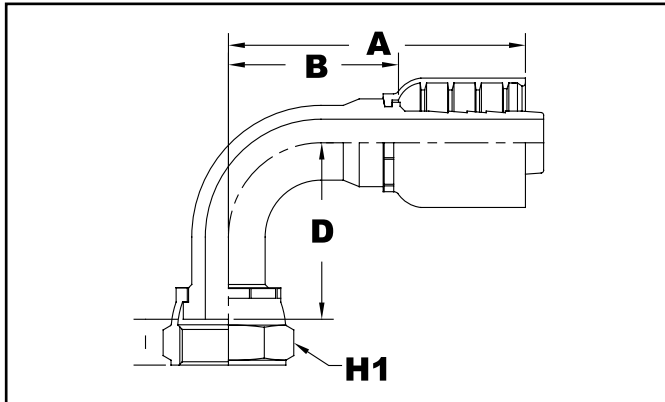
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12OFS90 SERIES Female O-Ring Face Seal - 90° Elbow

1209 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size H1		Weight		Bulk Pack qty
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
1209-0404	JB12OFS90-04-04	9/16-18	1/4	6.4	2.01	51.0	1.18	30.0	0.94	24.0	0.69	17.4	0.15	0.07	200
1209-0604	JB12OFS90-06-04	11/16-16	1/4	6.4	2.01	51.0	1.18	30.0	1.02	26.0	0.81	20.6	0.17	0.08	250
1209-0804	JB12OFS90-08-04	13/16-16	1/4	6.4	2.01	51.0	1.18	30.0	1.10	28.0	0.94	23.8	0.11	0.05	70
1209-0605	JB12OFS90-06-05	11/16-16	5/16	7.9	2.01	51.0	1.18	30.0	1.02	26.0	0.81	20.6	0.11	0.05	110
1209-0406	JB12OFS90-04-06	9/16-18	3/8	9.5	2.72	69.0	1.65	42.0	0.98	25.0	0.69	17.4	0.11	0.05	110
1209-0606	JB12OFS90-06-06	11/16-16	3/8	9.5	2.72	69.0	1.65	42.0	1.02	26.0	0.81	20.6	0.23	0.11	110
1209-0806	JB12OFS90-08-06	13/16-16	3/8	9.5	2.72	69.0	1.65	42.0	1.10	28.0	0.94	23.8	0.31	0.14	100
1209-0608	JB12OFS90-06-08	11/16-16	1/2	12.7	2.76	70.0	1.50	38.0	1.10	28.0	0.81	20.6	0.15	0.07	110
1209-0808	JB12OFS90-08-08	13/16-16	1/2	12.7	2.76	70.0	1.50	38.0	1.18	30.0	0.94	23.8	0.36	0.16	70
1209-1008	JB12OFS90-10-08	1-14	1/2	12.7	2.76	70.0	1.50	38.0	1.22	31.0	1.12	28.5	0.39	0.18	70
1209-1208	JB12OFS90-12-08	1-3/16-12	1/2	12.7	2.76	70.0	1.50	38.0	1.18	30.0	1.37	34.9	0.56	0.26	50
1209-0810	JB12OFS90-08-10	13/16-12	5/8	15.9	2.80	71.0	1.65	42.0	1.46	37.0	0.94	23.8	0.40	0.18	70
1209-1010	JB12OFS90-10-10	1-14	5/8	15.9	2.80	71.0	1.65	42.0	1.50	38.0	1.12	28.5	0.47	0.22	70
1209-1210	JB12OFS90-12-10	1-3/16-12	5/8	15.9	2.80	71.0	1.65	42.0	1.46	37.0	1.37	34.9	0.57	0.26	50
1209-1012	JB12OFS90-10-12	1-14	3/4	19.1	3.98	101.0	2.40	61.0	1.97	50.0	1.37	34.9	0.26	0.12	32
1209-1212	JB12OFS90-12-12	1-3/16-12	3/4	19.1	3.98	101.0	2.40	61.0	1.93	49.0	1.62	41.2	0.99	0.45	32
1209-1612	JB12OFS90-16-12	1-7/16-12	3/4	19.1	3.98	101.0	2.40	61.0	1.93	49.0	1.37	34.9	0.87	0.40	32
1209-1216	JB12OFS90-12-16	1-3/16-12	1	25.4	4.96	126.0	3.19	81.0	2.24	57.0	1.37	34.9	0.93	0.42	15
1209-1616	JB12OFS90-16-16	1-7/16-12	1	25.4	4.96	126.0	3.19	81.0	2.24	57.0	1.62	41.2	1.51	0.68	10
1209-2016	JB12OFS90-20-16	1-11/16-12	1	25.4	4.96	126.0	3.19	81.0	2.36	60.0	1.87	47.6	0.63	0.29	10
1209-1620	JB12OFS90-16-20	1-7/16-12	1-1/4	31.8	5.51	140.0	3.66	93.0	2.91	74.0	1.62	41.2	0.62	0.28	10
1209-2020	JB12OFS90-20-20	1-11/16-12	1-1/4	31.8	5.51	140.0	3.66	93.0	3.03	77.0	1.87	47.6	2.48	1.13	10
1209-2420	JB12OFS90-24-20	2-12	1-1/4	31.8	5.51	140.0	3.66	93.0	3.03	77.0	2.25	57.1	2.54	1.15	7
1209-2424	JB12OFS90-24-24	2-12	1-1/2	38.1	5.94	151.0	3.58	91.0	3.15	80.0	2.25	57.1	3.42	1.55	7

*Standard Pack is 1.

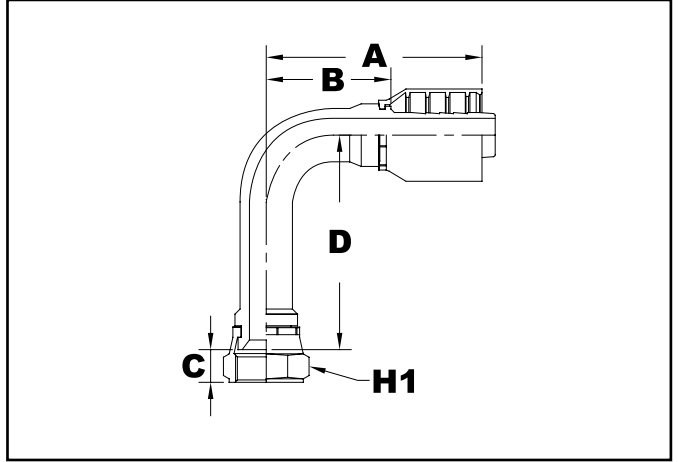
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1209L SERIES



**JB12OFS90L SERIES
Female O-Ring Face Seal
90° Elbow - Long Drop**



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
1209L-0404	JB12OFS90L-04-04	9/16-18	1/4	6.4	2.01	51.0	1.18	30.0	1.81	46.0	0.56	14.2	0.15	0.07	200
1209L-0606	JB12OFS90L-06-06	11/16-16	3/8	9.5	2.72	69.0	1.65	42.0	2.17	55.0	0.69	17.4	0.26	0.12	110
1209L-0808	JB12OFS90L-08-08	13/16-16	1/2	12.7	2.76	70.0	1.50	38.0	2.44	62.0	0.87	22.3	0.35	0.16	70
1209L-1010	JB12OFS90L-10-10	1-14	5/8	15.9	2.80	71.0	1.65	42.0	2.56	65.0	1.00	25.4	0.62	0.28	50
1209L-1212	JB12OFS90L-12-12	1-3/16-12	3/4	19.1	3.98	101.0	2.40	61.0	3.74	95.0	1.25	21.7	0.86	0.39	28
1209L-1616	JB12OFS90L-16-16	1-7/16-12	1	25.4	4.96	126.0	3.19	81.0	4.33	110.0	1.50	38.1	1.72	0.78	12

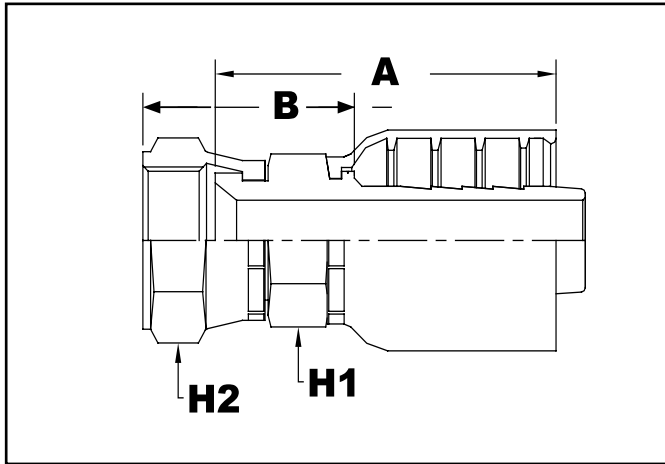
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12FA SERIES Female Swivel - SAE 45° Flare

1210 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack	
			inch	mm	inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg		qty
											inch	mm	inch	mm				
1210-0404	JB12FA-04-04	7/16-20	1/4	6.4	1.61	41.0	0.83	21.0	-	-	0.56	14.2	0.56	14.2	0.12	.05	250	
1210-0606	JB12FA-06-06	5/8-18	3/8	9.5	1.97	50.0	0.91	23.0	-	-	0.69	17.4	0.69	17.4	0.19	.09	130	
1210-0808	JB12FA-08-08	3/4-16	1/2	12.7	2.13	54.0	0.91	23.0	-	-	0.87	22.2	0.87	22.2	0.29	.13	100	
1210-1212	JB12FA-12-12	1-1/16-14	3/4	19.1	2.60	66.0	1.06	27.0	-	-	1.06	26.9	1.25	31.7	0.54	.25	50	
1210-1616	JB12FA-16-16	1-5/16-12	1	25.4	3.07	78.0	1.30	33.0	-	-	1.50	38.1	1.34	34.0	0.93	.42	36	

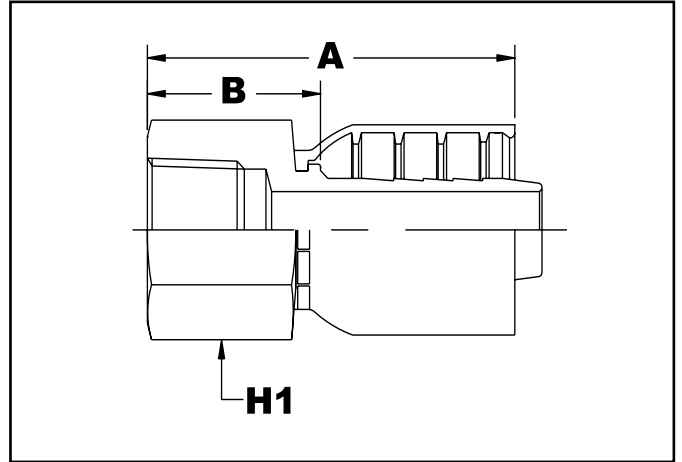
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1215 SERIES

**JB12FP SERIES
Female Pipe Rigid NPTF**



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack		
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	H1		H2		lbs	kg	qty
													inch	mm	inch	mm			
1215-0404	JB12FP-04-04	1/4-18	1/4	6.4	1.74	44.3	0.93	23.5	-	-	0.75	19.0	-	-	0.14	.06	250		
1215-0604	JB12FP-06-04	3/8-18	1/4	6.4	1.90	48.3	1.08	27.5	-	-	0.87	22.0	-	-	0.13	.06	200		
1215-0406	JB12FP-04-06	1/4-18	3/8	9.5	1.90	48.3	1.08	27.5	-	-	0.87	22.0	-	-	0.19	.09	180		
1215-0606	JB12FP-06-06	3/8-18	3/8	9.5	2.17	55.0	1.10	28.0	-	-	0.87	22.0	-	-	0.21	.10	130		
1215-0808	JB12FP-08-08	1/2-14	1/2	12.7	2.50	63.5	1.24	31.5	-	-	1.06	27.0	-	-	0.32	.15	100		
1215-1212	JB12FP-12-12	3/4-14	3/4	19.1	2.93	74.3	1.38	35.0	-	-	1.42	36.0	-	-	0.65	.30	50		
1215-1616	JB12FP-16-16	1-11.5	1	25.4	3.48	88.5	1.73	44.0	-	-	1.61	41.0	-	-	1.01	.46	36		

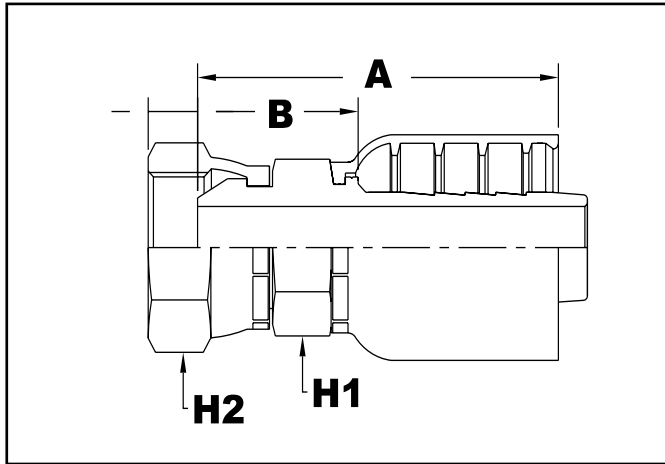
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12FPS SERIES
Female Pipe Swivel NPTF

1216 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack
											H1		H2				
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
1216-0404	JB12FPS-04-04	1/4-18	1/4	6.4	1.77	44.9	0.95	24.1	-	-	0.75	19	-	-	0.15	0.07	250
1216-0606	JB12FPS-06-06	3/8-18	3/8	9.5	2.06	52.2	0.99	25.2	-	-	0.87	22	-	-	0.24	0.11	130
1216-0808	JB12FPS-08-08	1/2-14	1/2	12.7	2.30	58.5	1.04	26.5	-	-	1.06	27	-	-	0.37	0.17	80
1216-1212	JB12FPS-12-12	3/4-14	3/4	19.1	2.79	70.9	1.24	31.6	-	-	1.26	32	-	-	0.62	0.28	50
1216-1616	JB12FPS-16-16	1-11.5	1	25.4	3.17	80.6	1.42	36.1	-	-	1.42	36	-	-	1.06	0.48	36

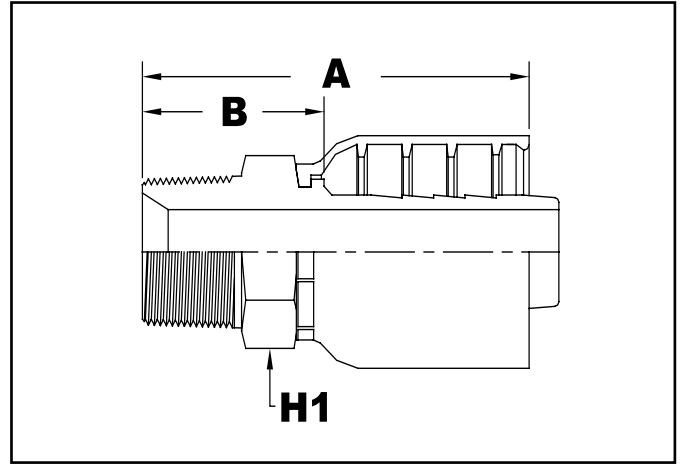
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1220 SERIES

**JB12MP SERIES
Male Pipe Rigid NPTF**



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack qty
			inch	mm	inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	
											inch	mm	inch	mm			
1220-0204	JB12MP-02-04	1/8-27	1/4	6.4	1.81	46.0	1.02	26.0	-	-	0.56	14.2	-	-	0.10	0.04	250
1220-0404	JB12MP-04-04	1/4-18	1/4	6.4	1.81	46.0	1.02	26.0	-	-	0.56	14.2	-	-	0.11	0.05	250
1220-0604	JB12MP-06-04	3/8-18	1/4	6.4	1.93	49.0	1.14	29.0	-	-	0.75	19.0	-	-	0.14	0.06	200
1220-0804	JB12MP-08-04	1/2-14	1/4	6.4	2.05	52.0	1.26	32.0	-	-	0.87	22.2	-	-	0.19	0.08	200
1220-0405	JB12MP-04-05	1/4-18	5/16	7.9	1.93	49.0	1.06	27.0	-	-	0.69	17.4	-	-	0.11	0.05	250
1220-0605	JB12MP-06-05	3/8-18	5/16	7.9	2.01	51.0	1.14	29.0	-	-	0.69	17.4	-	-	0.11	0.05	130
1220-0406	JB12MP-04-06	1/4-18	3/8	9.5	2.13	54.0	1.06	27.0	-	-	0.69	17.4	-	-	0.17	0.08	180
1220-0606	JB12MP-06-06	3/8-18	3/8	9.5	2.20	56.0	1.14	29.0	-	-	0.69	17.4	-	-	0.18	0.08	180
1220-0806	JB12MP-08-06	1/2-14	3/8	9.5	2.32	59.0	1.26	32.0	-	-	0.87	22.2	-	-	0.23	0.11	100
1220-0608	JB12MP-06-08	3/8-18	1/2	12.7	2.13	54.0	1.06	27.0	-	-	0.87	22.2	-	-	0.22	0.10	100
1220-0808	JB12MP-08-08	1/2-14	1/2	12.7	2.48	63.0	1.30	33.0	-	-	0.87	22.2	-	-	0.28	0.13	100
1220-1208	JB12MP-12-08	3/4-14	1/2	12.7	2.48	63.0	1.26	32.0	-	-	1.06	26.9	-	-	0.36	0.17	100
1220-0610	JB12MP-06-10	3/8-18	5/8	15.9	2.64	67.0	1.06	27.0	-	-	0.94	23.8	-	-	0.26	0.12	100
1220-0810	JB12MP-08-10	1/2-14	5/8	15.9	2.76	70.0	1.30	33.0	-	-	0.94	23.8	-	-	0.35	0.16	80
1220-1210	JB12MP-12-10	3/4-14	5/8	15.9	2.76	70.0	1.26	32.0	-	-	1.06	26.9	-	-	0.43	0.19	60
1220-0812	JB12MP-08-12	1/2-14	3/4	19.1	2.80	71.0	1.26	32.0	-	-	1.06	26.9	-	-	0.43	0.20	80
1220-1212	JB12MP-12-12	3/4-14	3/4	19.1	2.91	74.0	1.38	35.0	-	-	1.06	26.9	-	-	0.50	0.23	50
1220-1612	JB12MP-16-12	1-11.5	3/4	19.1	3.11	79.0	1.57	40.0	-	-	1.37	34.9	-	-	0.63	0.28	50
1220-1216	JB12MP-12-16	3/4-14	1	25.4	3.19	81.0	1.42	36.0	-	-	1.37	34.9	-	-	0.81	0.37	50
1220-1616	JB12MP-16-16	1-11.5	1	25.4	3.43	87.0	1.61	41.0	-	-	1.37	34.9	-	-	0.88	0.40	36
1220-2016	JB12MP-20-16	1-1/4-11.5	1-1/4	25.4	3.57	90.6	1.81	46.1	-	-	1.81	46	-	-	1.21	0.55	30
1220-2020	JB12MP-20-20	1-1/4-11.5	1-1/4	31.8	3.78	96.0	1.93	49.0	-	-	1.69	42.8	-	-	1.14	0.52	15
1220-2424	JB12MP-24-24	1-1/2-11.5	1-1/2	38.1	4.29	109.0	1.97	50.0	-	-	2.00	50.8	-	-	2.08	0.95	15
1220-3232	JB12MP-32-32	2-11.5	2	50.8	5.08	129.0	2.20	56.0	-	-	2.50	63.5	-	-	3.48	1.58	8

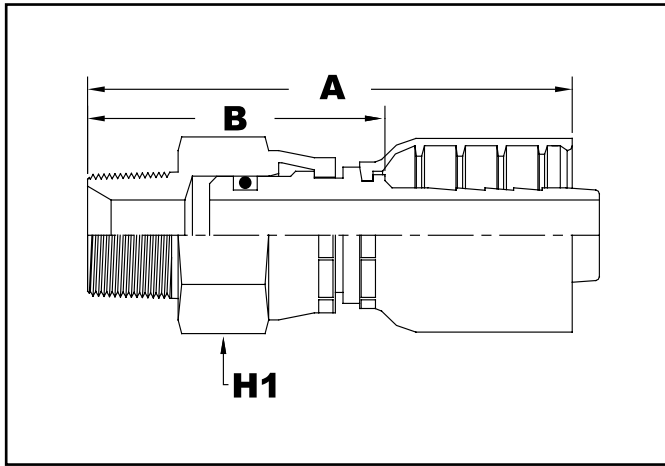
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12MS SERIES
Male Pipe Swivel NPTF

1223 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
1223-0404	JB12MS-04-04	1/4-18	1/4	6.4	2.28	58.0	1.46	37.0	-	-	0.69	17.4	-	-	0.16	0.074	250
1223-0606	JB12MS-06-06	3/8-18	3/8	9.5	2.80	71.0	1.73	44.0	-	-	0.87	22.2	-	-	0.28	0.127	130
1223-0806	JB12MS-08-06	1/2-14	3/8	9.5	2.99	76.0	1.93	49.0	-	-	1.00	25.4	-	-	0.35	0.157	100
1223-0608	JB12MS-06-08	3/8-18	1/2	12.7	2.99	76.0	1.73	44.0	-	-	0.87	22.2	-	-	0.33	0.149	80
1223-0808	JB12MS-08-08	1/2-14	1/2	12.7	3.15	80.0	1.93	49.0	-	-	1.00	25.4	-	-	0.39	0.175	100
1223-1212	JB12MS-12-12	3/4-14	3/4	19.1	3.94	100.0	2.40	61.0	-	-	1.37	34.9	-	-	0.94	0.426	50
1223-1616	JB12MS-16-16	1-11.5	1	25.4	4.65	118.1	2.87	72.8	-	-	1.50	38.1	-	-	1.21	0.548	36

Note: Not for use as a live swivel. For installation only.

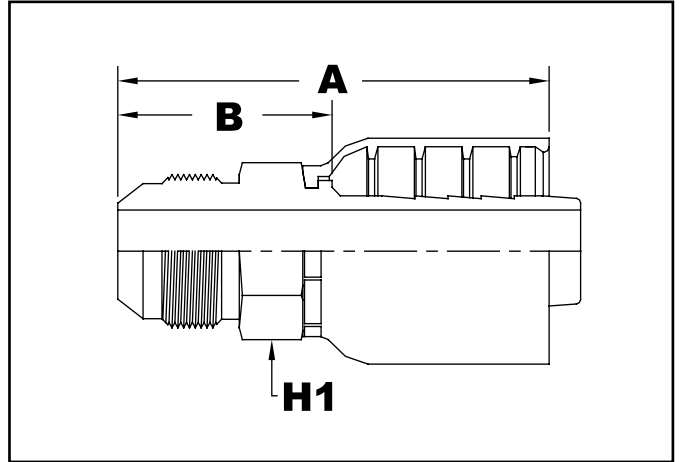
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1225 SERIES

**JB12MJ SERIES
Male JIC - 37°**



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack qty
			in.	mm	in.	mm	in.	mm	in.	mm	H1		H2		lbs.	kg	
											inch	mm	in.	mm			
1225-0404	JB12MJ-04-04	7/16-20	1/4	6.4	1.81	46.0	1.02	26.0	-	-	0.56	14.2	-	-	0.10	0.04	250
1225-0504	JB12MJ-05-04	1/2-20	1/4	6.4	1.81	46.0	1.02	26.0	-	-	0.56	14.2	-	-	0.12	0.05	250
1225-0604	JB12MJ-06-04	9/16-18	1/4	6.4	1.85	47.0	1.06	27.0	-	-	0.69	17.4	-	-	0.12	0.05	250
1225-0506	JB12MJ-05-06	1/2-20	3/8	9.5	2.13	54.0	1.06	27.0	-	-	0.75	19.0	-	-	0.17	0.08	200
1225-0606	JB12MJ-06-06	9/16-18	3/8	9.5	2.13	54.0	1.06	27.0	-	-	0.75	19.0	-	-	0.19	0.09	130
1225-0806	JB12MJ-08-06	3/4-16	3/8	9.5	2.24	57.0	1.18	30.0	-	-	0.87	22.2	-	-	0.21	0.10	130
1225-1006	JB12MJ-10-06	7/8-14	3/8	9.5	2.32	59.0	1.26	32.0	-	-	0.94	23.8	-	-	0.26	0.12	130
1225-0808	JB12MJ-08-08	3/4-16	1/2	12.7	2.40	61.0	1.18	30.0	-	-	0.87	22.2	-	-	0.28	0.13	100
1225-1008	JB12MJ-10-08	7/8-14	1/2	12.7	2.48	63.0	1.26	32.0	-	-	0.94	23.8	-	-	0.28	0.13	80
1225-1208	JB12MJ-12-08	1-1/16-12	1/2	12.7	2.72	69.0	1.50	38.0	-	-	1.12	28.5	-	-	0.38	0.17	80
1225-1010	JB12MJ-10-10	7/8-14	5/8	15.9	2.80	71.0	1.30	33.0	-	-	0.94	23.8	-	-	0.33	0.19	70
1225-1210	JB12MJ-12-10	1-1/16-12	5/8	15.9	2.99	76.0	1.50	38.0	-	-	1.12	28.5	-	-	0.45	0.21	70
1225-1212	JB12MJ-12-12	1-1/16-12	3/4	19.1	3.07	78.0	1.54	39.0	-	-	1.12	28.5	-	-	0.50	0.23	50
1225-1612	JB12MJ-16-12	1-5/16-12	3/4	25.4	3.11	79.0	1.57	40.0	-	-	1.37	34.9	-	-	0.60	0.27	50
1225-1616	JB12MJ-16-16	1-5/16-12	1	25.4	3.35	85.0	1.57	40.0	-	-	1.37	34.9	-	-	0.88	0.40	36
1225-2016	JB12MJ-20-16	1-5/8-12	1	25.4	3.35	85.0	1.57	40.0	-	-	1.37	34.9	-	-	1.14	0.52	15
1225-2020	JB12MJ-20-20	1-5/8-12	1-1/4	31.8	3.58	91.0	1.73	44.0	-	-	1.87	47.6	-	-	1.41	0.64	15
1225-2420	JB12MJ-24-20	1-7/8-12	1-1/4	31.8	4.02	102.0	1.89	48.0	-	-	2.00	50.8	-	-	2.64	1.20	15
1225-2424	JB12MJ-24-24	1-7/8-12	1-1/2	38.1	4.37	111.0	2.03	51.5	-	-	2.00	50.8	-	-	2.07	0.94	12

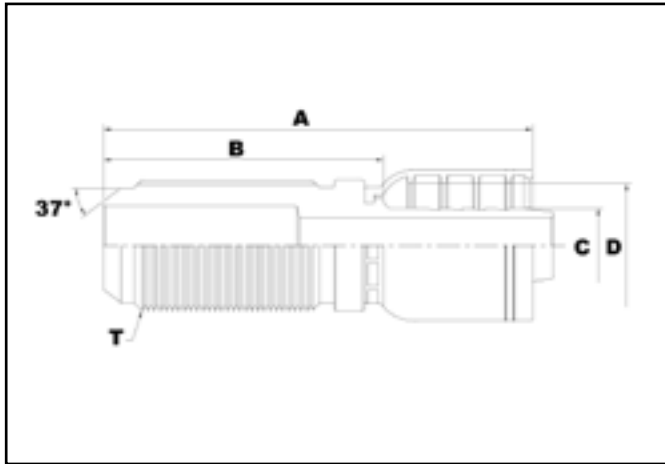
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12MJBH SERIES
Male JIC - 37°
Bulkhead

1226 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	
1226-1208	JB12MJBH-12-08	1-1/16-12	1/2	12.7	4.82	122.4	3.34	84.9	-	-	-	-	-	-	0.64	0.29	45
1226-1612	JB12MJBH-16-12	1-5/16-12	1	25.4	4.45	113.0	2.90	73.7	-	-	-	-	-	-	0.88	0.40	40

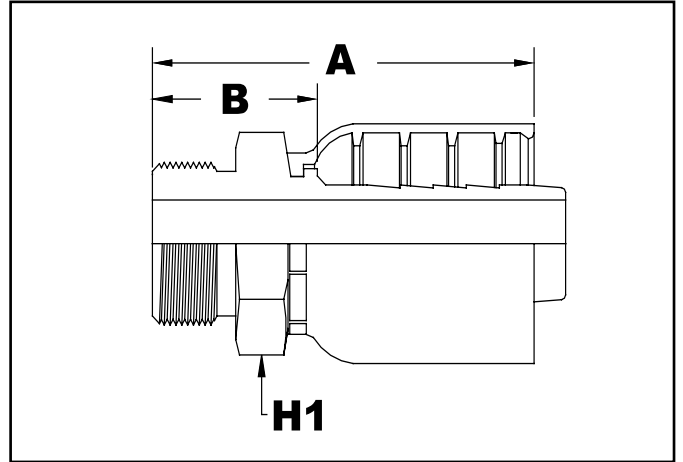
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1227 SERIES

**JB12OB SERIES
Male O-Ring Boss**



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
1227-0404	JB12OB-04-04	7/16-20	1/4	6.4	1.69	43.0	0.87	22.0	-	-	0.56	14.2	-	-	0.10	0.05	250
1227-0504	JB12OB-0504	1/2-20	1/4	6.4	1.67	42.4	0.85	21.6	-	-	0.62	15.8	-	-	0.13	0.06	250
1227-0604	JB12OB-06-04	9/16-18	1/4	6.4	1.81	46.0	0.98	25.0	-	-	0.69	17.4	-	-	0.14	0.06	250
1227-0606	JB12OB-06-06	9/16-18	3/8	9.5	2.05	52.0	0.98	25.0	-	-	0.69	17.4	-	-	0.17	0.08	130
1227-0806	JB12OB-08-06	3/4-16	3/8	9.5	2.05	52.0	0.98	25.0	-	-	1.06	26.9	-	-	0.21	0.10	130
1227-0808	JB12OB-08-08	3/4-16	1/2	12.7	2.24	57.0	0.98	25.0	-	-	0.87	26.9	-	-	0.24	0.11	100
1227-1008	JB12OB-10-08	7/8-14	1/2	12.7	2.28	58.0	1.02	26.0	-	-	1.00	25.4	-	-	0.30	0.14	80
1227-1010	JB12OB-10-10	7/8-14	5/8	15.9	2.56	65.0	1.02	26.0	-	-	1.00	25.4	-	-	0.33	0.15	70
1227-1212	JB12OB-12-12	1-1/16-12	3/4	19.1	2.76	70.0	1.18	30.0	-	-	1.25	31.7	-	-	0.48	0.22	36
1227-1616	JB12OB-16-16	1-5/16-12	1	25.4	3.07	78.0	1.30	33.0	-	-	1.50	38.1	-	-	0.85	0.39	36

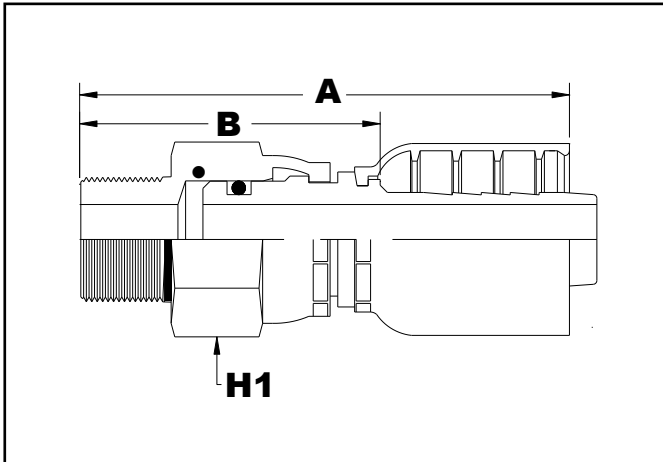
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

**JB12OBS SERIES
Male O-Ring Boss Swivel**

1228 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack	
			in.	mm	in.	mm	in.	mm	in.	mm	H1		H2		lbs.	kg		qty
											in.	mm	in.	mm				
1228-0404	JB12OBS-04-04	7/16-20	1/4	6.4	2.24	56.8	1.42	36.0	-	-	0.69	17.5	-	-	0.15	0.07	250	
1228-0604	JB12OBS-06-04	9/16-18	1/4	6.4	2.38	60.4	1.56	39.6	-	-	0.69	17.5	-	-	0.22	0.10	250	
1228-0406	JB12OBS-04-06	7/16-20	3/8	9.5	2.50	63.5	1.44	36.5	-	-	0.69	17.5	-	-	0.20	0.09	200	
1228-0606	JB12OBS-06-06	9/16-18	3/8	9.5	2.64	67.1	1.58	40.1	-	-	1.06	26.9	-	-	0.26	0.12	100	
1228-0806	JB12OBS-08-06	3/4-16	3/8	9.5	2.74	69.6	1.68	42.6	-	-	1.00	25.4	-	-	0.32	0.15	130	
1228-0808	JB12OBS-08-08	3/4-16	1/2	12.7	2.96	75.1	1.70	43.1	-	-	1.00	25.4	-	-	0.36	0.17	100	
1228-1212	JB12OBS-12-12	1-1/16-12	3/4	19.1	3.80	96.4	2.25	57.1	-	-	1.38	35.0	-	-	0.77	0.35	36	
1228-1616	JB12OBS-16-16	1-5/16-12	1	25.4	4.65	118.0	2.89	73.5	-	-	1.61	41.0	-	-	0.94	0.43	36	

Note: Not for use as a live swivel. For installation only.

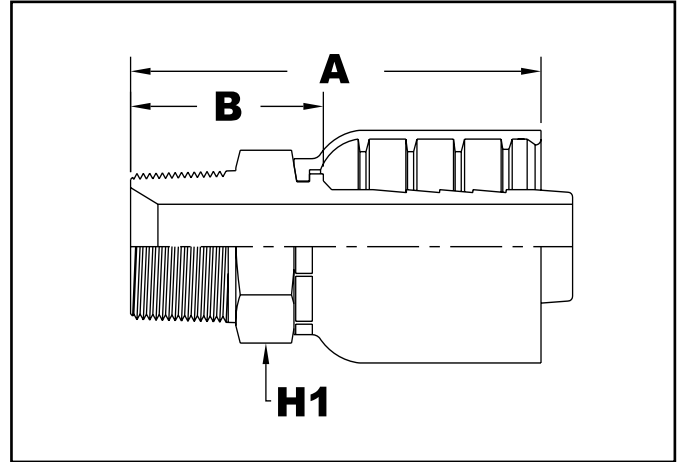
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1230 SERIES

JB12JISMP SERIES
Male BSP/JIS Taper Rigid Pipe - Metric



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack qty
			inch	mm	inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	
											inch	mm	inch	mm			
1230-0404	JB12JISMP-04-04	1/4-19	1/4	6.4	1.65	42.0	0.87	22.0	-	-	0.75	19.0	-	-	0.11	0.05	250
1230-0604	JB12JISMP-06-04	3/8-19	1/4	6.4	1.85	47.0	1.06	27.0	-	-	0.87	22.0	-	-	0.16	0.07	250
1230-0605	JB12JISMP-06-05	3/8-19	5/16	7.9	1.85	47.0	1.06	27.0	-	-	0.87	22.0	-	-	0.18	0.08	130
1230-0606	JB12JISMP-06-06	3/8-19	3/8	9.5	2.13	54.0	1.06	27.0	-	-	0.87	22.0	-	-	0.21	0.09	130
1230-0806	JB12JISMP-08-06	1/2-14	3/8	9.5	2.28	58.0	1.22	31.0	-	-	1.06	27.0	-	-	0.26	0.12	100
1230-0808	JB12JISMP-08-08	1/2-14	1/2	12.7	2.44	62.0	1.22	31.0	-	-	1.06	27.0	-	-	0.30	0.14	80
1230-1208	JB12JISMP-12-08	3/4-14	1/2	12.7	2.52	64.0	1.30	33.0	-	-	1.26	32.0	-	-	0.57	0.26	100
1230-0810	JB12JISMP-08-10	1/2-14	5/8	15.9	2.70	68.5	1.17	29.7	-	-	1.06	27	-	-	0.33	0.15	70
1230-1210	JB12JISMP-12-10	3/4-14	5/8	15.9	2.52	64.0	1.30	33.0	-	-	1.26	32.0	-	-	0.60	0.27	60
1230-1212	JB12JISMP-12-12	3/4-14	3/4	19.1	2.95	75.0	1.42	36.0	-	-	1.26	32.0	-	-	0.67	0.31	50
1230-1612	JB12JISMP-16-12	1-11	3/4	19.1	3.07	78.0	1.54	39.0	-	-	1.42	36.0	-	-	0.84	0.38	50
1230-1616	JB12JISMP-16-16	1-11	1	25.4	3.35	85.0	1.57	40.0	-	-	1.42	36.0	-	-	0.88	0.40	36
1230-2020	JB12JISMP-20-20	1-1/4-11	1-1/4	31.8	3.70	94.0	1.85	47.0	-	-	1.81	46.0	-	-	1.58	0.72	15

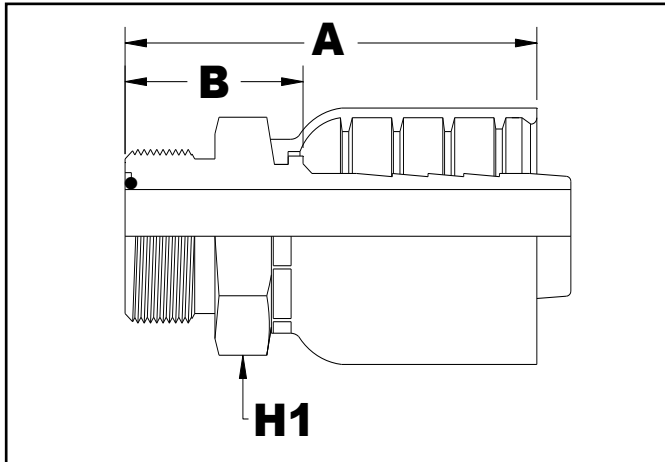
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

**JB12MOFS SERIES
SAE Male O-Ring Face Seal**

1232 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	lbs	kg	
1232-0404	JB12MOFS-04-04	9/16-18	1/4	6.4	1.70	43.1	0.88	22.3	0.63	15.9	0.11	0.05	250
1232-0604	JB12MOFS-06-04	11/16-16	1/4	6.4	1.75	44.5	0.93	23.7	0.75	19.0	0.15	0.07	250
1232-0606	JB12MOFS-06-06	11/16-16	3/8	9.5	2.02	51.2	0.95	24.2	0.75	19.0	0.20	0.10	130
1232-0806	JB12MOFS-08-06	13/16-16	3/8	9.5	2.08	52.8	0.82	20.8	0.87	22.2	0.20	0.10	130
1232-0808	JB12MOFS-08-08	13/16-16	1/2	12.7	2.30	58.3	1.04	26.3	0.87	22.2	0.23	0.11	80
1232-1008	JB12MOFS-10-08	1-14	1/2	12.7	2.40	61.0	1.14	29.0	1.06	27.0	0.30	0.14	80
1232-1010	JB12MOFS-10-10	1-14	5/8	15.9	2.64	67.0	1.11	28.2	1.06	27.0	0.37	0.18	70
1232-1208	JB12MOFS-12-08	1-1/16-12	1/2	12.7	2.54	64.5	1.28	32.5	1.26	32	0.42	0.19	60
1232-1210	JB12MOFS-12-10	1-3/16-12	5/8	15.9	2.78	70.5	1.25	31.7	1.26	32	0.49	0.22	50
1232-1212	JB12MOFS-12-12	1-3/16-12	3/4	19.1	2.81	71.3	1.26	32.0	1.26	32.0	0.50	0.25	36
1232-1612	JB12MOFS-16-12	1-7/16-12	3/4	19.1	2.91	73.8	1.36	34.5	1.50	38.0	0.63	0.31	36
1232-1616	JB12MOFS-16-16	1-7/16-12	1	25.4	3.21	81.5	1.46	37.0	1.50	38.0	0.89	0.43	36

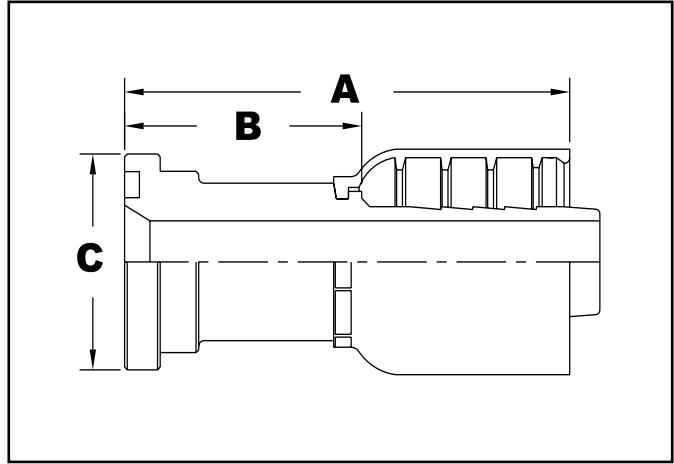
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1234 SERIES

**JB12C61S SERIES
SAE Code 61 Flange - Straight**



HYDRAULIC HOSE - 1&2 WIRE BRAID

Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs	kg	qty
1234-0808	JB12C61S-08-08	1/2	12.7	1/2	12.7	2.99	76.0	1.77	45.0	-	-	1.19	30.1	0.37	0.17	80
1234-1208	JB12C61S-12-08	3/4	19.1	1/2	12.7	2.99	76.0	1.77	45.0	-	-	1.50	38.1	0.35	0.16	100
1234-1212	JB12C61S-12-12	3/4	19.1	3/4	19.1	3.31	84.0	1.77	45.0	-	-	1.50	38.1	0.63	0.29	50
1234-1612	JB12C61S-16-12	1	25.4	3/4	19.1	3.15	80.0	1.61	41.0	-	-	1.75	44.4	0.85	0.39	50
1234-1616	JB12C61S-16-16	1	25.4	1	25.4	3.98	101.0	2.20	56.0	-	-	1.75	44.4	1.10	0.50	36
1234-2016	JB12C61S-20-16	1-1/4	31.8	1	25.4	3.90	99.0	2.13	54.0	-	-	2.00	50.8	1.63	0.74	36
1234-2020	JB12C61S-20-20	1-1/4	31.8	1-1/4	31.8	4.33	110.0	2.48	63.0	-	-	2.00	50.8	1.72	0.78	15
1234-2420	JB12C61S-24-20	1-1/2	38.1	1-1/4	31.8	4.57	116.0	2.72	69.0	-	-	2.37	60.3	1.91	0.87	15
1234-3220	JB12C61S-32-20	2	50.8	1-1/4	31.8	4.57	116.0	2.72	69.0	-	-	2.81	71.4	3.11	1.41	12
1234-2424	JB12C61S-24-24	1-1/2	38.1	1-1/2	38.1	5.16	131.0	2.83	72.0	-	-	2.37	60.3	2.37	1.08	15
1234-3224	JB12C61S-32-24	2	50.8	1-1/2	38.1	5.43	138.0	3.11	79.0	-	-	2.81	71.4	3.51	1.59	12
1234-2432	JB12C61S-24-32	1-1/2	38.1	2	50.8	5.43	138.0	3.11	79.0	-	-	2.37	60.3	3.55	1.61	15
1234-3232	JB12C61S-32-32	2	50.8	2	50.8	5.91	150.0	3.11	79.0	-	-	2.81	71.4	3.88	1.76	8

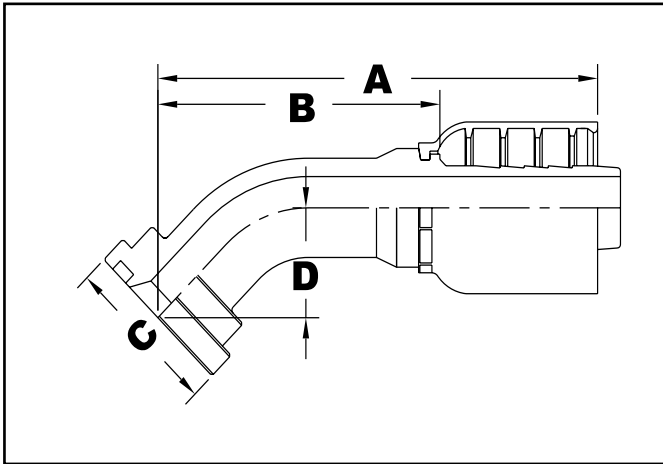
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12C6145 SERIES
SAE Code 61 Flange - 45° Elbow

1236 SERIES



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
1236-0808	JB12C6145-08-08	1/2	12.7	1/2	12.7	3.15	80.0	1.89	48.0	0.75	19.0	1.19	30.1	0.32	0.15	80
1236-1208	JB12C6145-12-08	3/4	19.1	1/2	12.7	3.27	83.0	2.01	51.0	0.87	22.0	1.50	38.1	0.48	0.22	80
1236-1212	JB12C6145-12-12	3/4	19.1	3/4	19.1	4.57	116.0	2.99	76.0	1.14	29.0	1.50	38.1	0.74	0.34	32
1236-1612	JB12C6145-16-12	1	25.4	3/4	19.1	4.57	116.0	2.99	76.0	1.14	29.0	1.75	44.4	0.76	0.35	32
1236-1616	JB12C6145-16-16	1	25.4	1	25.4	4.41	112.0	3.03	77.0	1.22	31.0	1.75	44.4	1.08	0.49	18
1236-2016	JB12C6145-20-16	1-1/4	31.8	1	25.4	4.41	112.0	3.03	77.0	1.22	31.0	2.00	50.8	1.24	0.56	18
1236-2020	JB12C6145-20-20	1-1/4	31.8	1-1/4	31.8	5.83	148.0	3.98	101.0	1.50	38.0	2.00	50.8	1.80	0.82	12
1236-2420	JB12C6145-24-20	1-1/2	38.1	1-1/4	31.8	5.91	150.0	4.06	103.0	1.57	40.0	2.37	60.3	1.95	0.88	12
1236-2424	JB12C6145-24-24	1-1/2	38.1	1-1/2	38.1	6.81	173.0	4.45	113.0	1.73	44.0	2.37	60.3	2.37	1.08	12
1236-3224	JB12C6145-32-24	2	50.8	1-1/2	38.1	6.81	173.0	4.45	113.0	1.73	44.0	2.81	71.4	2.41	1.10	10
1236-3232	JB12C6145-32-32	2	50.8	2	50.8	8.23	209.0	5.43	138.0	2.36	60.0	2.81	71.4	5.12	2.32	6

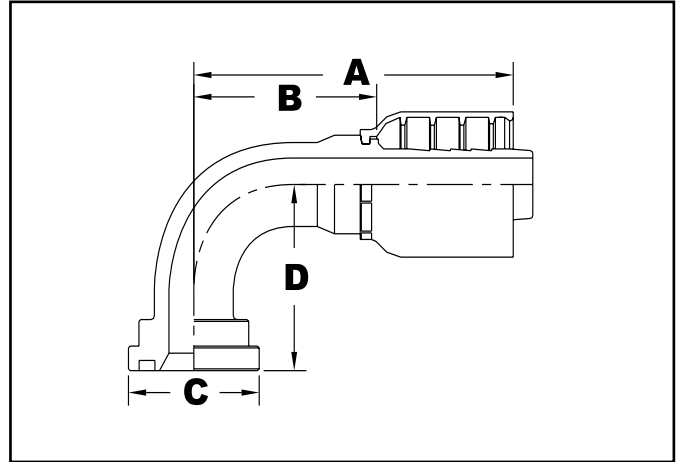
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1239 SERIES

**JB12C6190 SERIES
SAE Code 61 Flange - 90° Elbow**



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
1239-0808	JB12C6190-08-08	1/2	12.7	1/2	12.7	2.76	70.0	1.50	38.0	1.34	34.0	0.81	20.6	0.33	0.15	50
1239-1208	JB12C6190-12-08	3/4	19.1	1/2	12.7	2.76	70.0	1.50	38.0	1.38	35.0	1.50	38.1	0.78	0.35	50
1239-1212	JB12C6190-12-12	3/4	19.1	3/4	19.1	3.98	101.0	2.40	61.0	2.13	54.0	1.50	38.1	0.87	0.40	50
1239-1612	JB12C6190-16-12	1	25.4	3/4	19.1	3.98	101.0	2.40	61.0	2.13	54.0	1.75	44.4	0.85	0.39	50
1239-1616	JB12C6190-16-16	1	25.4	1	25.4	4.96	126.0	3.19	81.0	2.44	62.0	1.75	44.4	1.36	0.62	50
1239-2016	JB12C6190-20-16	1-1/4	31.8	1	25.4	4.96	126.0	3.19	81.0	2.44	62.0	2.00	50.8	1.31	0.59	50
1239-2416	JB12C6190-24-16	1-1/2	38.1	1	25.4	4.96	126.0	3.19	81.0	2.44	62.0	2.37	60.3	1.67	0.76	24
1239-2020	JB12C6190-20-20	1-1/4	31.8	1-1/4	31.8	5.51	140.0	3.66	93.0	3.11	79.0	2.00	50.8	2.02	0.92	24
1239-2420	JB12C6190-24-20	1-1/2	38.1	1-1/4	31.8	5.51	140.0	3.66	93.0	3.19	81.0	2.37	60.3	2.33	1.06	24
1239-2424	JB12C6190-24-24	1-1/2	38.1	1-1/2	38.1	5.94	151.0	3.58	91.0	3.27	83.0	2.37	60.3	2.55	1.16	24
1239-3224	JB12C6190-32-24	2	50.8	1-1/2	38.1	5.94	151.0	3.58	91.0	3.27	83.0	2.81	71.4	3.08	1.40	24
1239-3232	JB12C6190-32-32	2	50.8	2	50.8	8.11	206.0	5.31	135.0	5.16	131.0	2.81	71.4	6.02	2.73	24

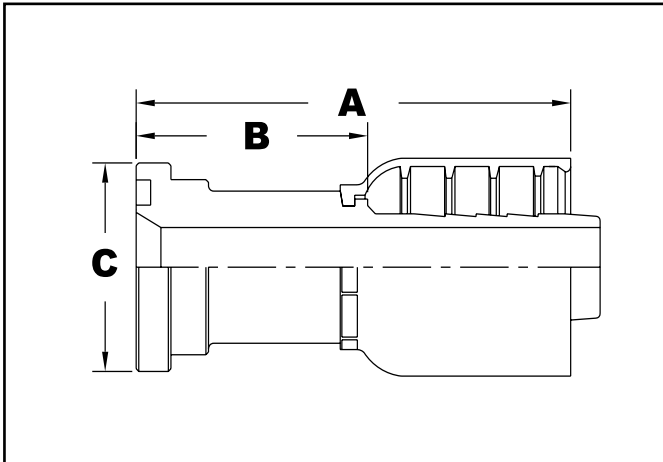
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

⚠ WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12C62S SERIES
SAE Code 62 Flange - Straight

1241 SERIES



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
1241-1212	JB12C62S-12-12	3/4	19.1	3/4	19.1	3.46	88.0	1.93	49.0	-	-	1.62	41.2	0.63	0.29	50
1241-1612	JB12C62S-16-12	1	25.4	3/4	19.1	3.90	99.0	2.36	60.0	-	-	1.87	47.6	0.99	0.45	50
1241-1616	JB12C62S-16-16	1	25.4	1	25.4	4.21	107.0	2.44	62.0	-	-	1.87	47.6	1.32	0.60	36
1241-2016	JB12C62S-20-16	1-1/4	31.8	1	25.4	4.37	111.0	2.91	74.0	-	-	2.12	53.9	1.65	0.75	36
1241-2020	JB12C62S-20-20	1-1/4	31.8	1-1/4	31.8	4.41	112.0	2.95	75.0	-	-	2.12	53.9	1.96	0.89	15
1241-2420	JB12C62S-24-20	1-1/2	38.1	1-1/4	31.8	4.41	112.0	2.95	75.0	-	-	2.50	63.5	2.43	1.10	15
1241-2424	JB12C62S-24-24	1-1/2	38.1	1-1/2	38.1	5.51	140.0	3.19	81.0	-	-	2.50	63.5	2.79	1.27	15
1241-3224	JB12C62S-32-24	2	50.8	1-1/2	38.1	6.30	160.0	3.98	101.0	-	-	3.12	79.3	4.45	2.02	12
1241-3232	JB12C62S-32-32	2	50.8	2	50.8	6.77	172.0	3.98	101.0	-	-	3.12	79.3	5.01	2.27	8

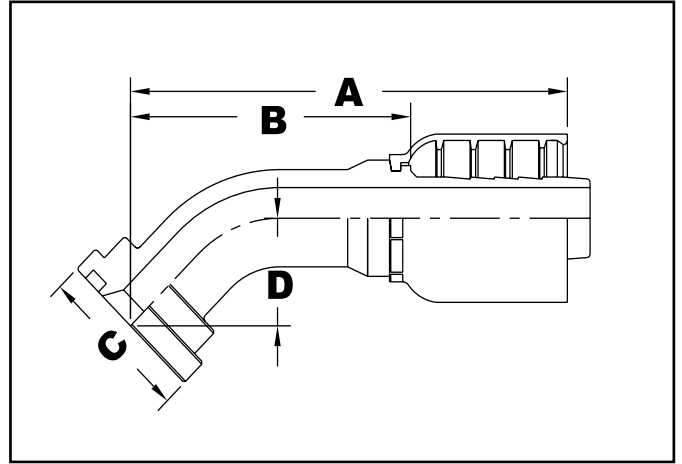
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1243 SERIES

JB12C6245 SERIES
SAE Code 62 Flange - 45° Elbow



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
1243-1212	JB12C6245-12-12	3/4	19.1	3/4	19.1	4.69	119.0	3.11	79.0	1.26	32.0	1.62	41.2	0.83	0.38	32
1243-1616	JB12C6245-16-16	1	25.4	1	25.4	4.61	117.0	3.23	82.0	1.42	36.0	1.87	47.6	1.34	0.61	18
1243-2020	JB12C6245-20-20	1-1/4	31.8	1-1/4	31.8	6.14	156.0	4.29	109.0	1.81	46.0	2.12	53.9	2.09	0.95	12
1243-2424	JB12C6245-24-24	1-1/2	38.1	1-1/2	38.1	7.05	179.0	4.69	119.0	1.97	50.0	2.50	63.5	2.89	1.31	12
1243-3232	JB12C6245-32-32	2	50.8	2	50.8	8.82	224.0	6.02	153.0	2.95	75.0	3.12	79.3	5.18	2.35	6

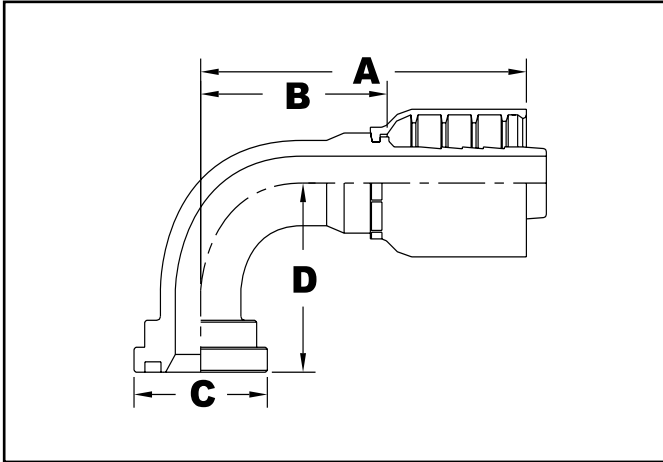
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12C6290 SERIES
SAE Code 62 Flange - 90° Elbow

1245 SERIES



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
1245-1212	JB12C6290-12-12	3/4	19.1	3/4	19.1	3.98	101.0	3.11	79.0	2.28	58.0	1.62	41.2	0.85	0.39	32
1245-1616	JB12C6290-16-16	1	25.4	1	25.4	4.96	126.0	3.23	82.0	2.72	69.0	1.87	47.6	1.36	0.62	15
1245-2020	JB12C6290-20-20	1-1/4	31.8	1-1/4	31.8	5.51	140.0	4.29	109.0	3.54	90.0	2.12	53.9	2.29	1.04	15
1245-2424	JB12C6290-24-24	1-1/2	38.1	1-1/2	38.1	5.94	151.0	4.69	119.0	3.62	92.0	2.50	63.5	3.18	1.44	10
1245-3232	JB12C6290-32-32	2	50.8	2	50.8	8.11	206.0	6.02	153.0	6.02	153.0	3.12	79.3	7.08	3.21	7

*Standard Pack is 1.

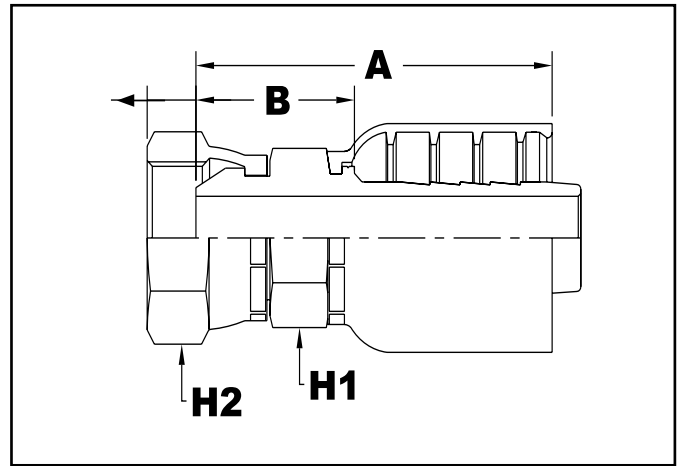
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1248 SERIES

1248 Series will replace 1252 Series

JB12FSPPBSP SERIES
Female Swivel - BSP Parallel Pipe
30° Cone - Metric



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack Qty
			inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	
									inch	mm	inch	mm			
1248-0404	JB12FSPPBSP-04-04	1/4-19	1/4	6.4	1.77	45.0	0.98	25.0	0.67	17.0	0.75	19.0	0.17	0.08	250
1248-0606	JB12FSPPBSP-06-06	3/8-19	3/8	9.5	2.17	55.0	1.10	28.0	0.75	19.0	0.87	22.0	0.25	0.11	130
1248-0808	JB12FSPPBSP-08-08	1/2-14	1/2	12.7	2.36	60.0	1.14	29.0	0.87	22.0	1.06	27.0	0.36	0.16	80
1248-1010	JB12FSPPBSP-10-10	5/8-14	5/8	15.9	2.64	67.0	1.14	29.0	1.06	27.0	1.06	27.0	0.25	0.20	70
1248-1210	JB12FSPPBSP-12-10	3/4-14	5/8	15.9	2.76	70.1	1.23	31.3	1.26	32.0	1.26	32.0	0.36	0.24	60
1248-1212	JB12FSPPBSP-12-12	3/4-14	3/4	19.1	2.80	71.0	1.26	32.0	1.06	27.0	1.26	32.0	0.44	0.27	50
1248-1616	JB12FSPPBSP-16-16	1-11	1	25.4	3.19	81.0	1.42	36.0	1.42	36.0	1.61	41.0	1.05	0.48	36
1248-2020	JB12FSPPBSP-20-20	1-1/4-11	1-1/4	31.8	3.66	93.0	1.81	46.0	1.81	46.0	1.97	50.0	1.48	0.67	15
1248-2424	JB12FSPPBSP-24-24	1-1/2-11	1-1/2	38.1	4.12	104.7	1.78	45.2	2.17	55.0	2.17	55.0	2.38	1.08	15
1248-3232	JB12FSPPBSP-32-32	2-11	2	50.8	5.13	130.3	2.35	59.8	2.36	60.0	2.76	70.0	4.50	2.04	8

Please note that 1248 Series will replace the 1252 Series

*Standard Pack is 1.

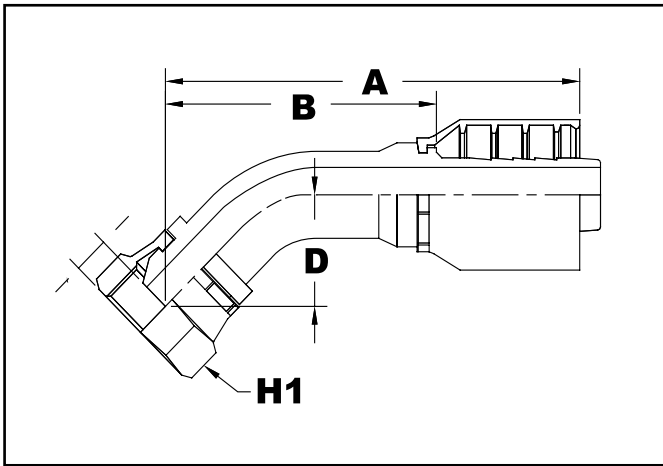
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1249 Series will replace 1254 Series

JB12FSPPBSP45 SERIES
Female Swivel - BSP Parallel Pipe
30° Cone - 45° Elbow - Metric

1249 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
1249-0404	JB12FSPPBSP45-04-04	1/4-19	1/4	6.4	2.28	58.0	1.50	38.0	0.67	17.0	0.75	19.0	0.15	0.07	250
1249-0606	JB12FSPPBSP45-06-06	3/8-19	3/8	9.5	2.80	71.0	1.73	44.0	0.75	19.0	0.87	22.0	0.24	0.11	130
1249-0808	JB12FSPPBSP45-08-08	1/2-14	1/2	12.7	3.31	84.0	2.05	52.0	0.91	23.0	1.06	27.0	0.34	0.15	80
1249-1010	JB12FSPPBSP45-10-10	5/8-14	5/8	15.9	3.62	92.0	2.09	53.0	0.83	21.0	1.06	27.0	0.49	0.22	70
1249-1212	JB12FSPPBSP45-12-12	3/4-14	3/4	19.1	4.61	117.0	3.03	77.0	1.18	30.0	1.26	32.0	0.82	0.37	32
1249-1616	JB12FSPPBSP45-16-16	1-11	1	25.4	4.92	125.0	3.15	80.0	1.73	44.0	1.61	41.0	1.34	0.61	18
1249-2020	JB12FSPPBSP45-20-20	1-1/4-11	1-1/4	31.8	6.02	153.0	4.17	106.0	1.65	42.0	1.97	50.0	1.72	0.78	12
1249-2424	JB12FSPPBSP45-24-24	1-1/2-11	1-1/2	38.1	6.93	176.0	4.57	116.0	1.89	48.0	2.17	55.0	3.40	1.54	12
1249-3232	JB12FSPPBSP45-32-32	2-11	2	50.8	8.46	215.0	5.67	144.0	2.60	66.0	2.76	70.0	6.37	2.89	6

Please note that 1249 Series will replace 1254 Series

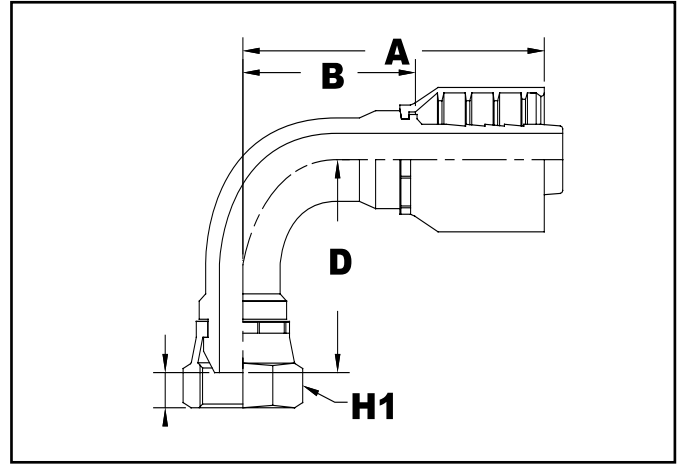
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1250 SERIES

1250 Series will replace 1256 Series
JB12FSPPBSP90 SERIES
Female Swivel - BSP Parallel Pipe
30° Cone - 90° Elbow - Metric



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
1250-0404	JB12FSPPBSP90-04-04	1/4-19	1/4	6.4	2.01	51.0	1.18	30.0	1.10	28.0	0.75	19.0	0.15	0.07	250
1250-0606	JB12FSPPBSP90-06-06	3/8-19	3/8	9.5	2.72	69.0	1.65	42.0	1.26	32.0	0.87	22.0	0.25	0.11	100
1250-0808	JB12FSPPBSP90-08-08	1/2-14	1/2	12.7	2.76	70.0	1.50	38.0	1.38	35.0	1.06	27.0	0.38	0.17	70
1250-1212	JB12FSPPBSP90-12-12	3/4-14	3/4	19.1	3.98	101.0	2.40	61.0	2.13	54.0	1.26	32.0	0.81	0.37	32
1250-1616	JB12FSPPBSP90-16-16	1-11	1	25.4	4.96	126.0	3.19	81.0	2.56	65.0	1.61	41.0	0.88	0.40	15
1250-2020	JB12FSPPBSP90-20-20	1-1/4-11	1-1/4	31.8	5.51	140.0	3.66	93.0	3.39	86.0	1.97	50.0	1.54	0.70	15
1250-2424	JB12FSPPBSP90-24-24	1-1/2-11	1-1/2	38.1	5.94	151.0	3.58	91.0	3.46	88.0	2.17	55.0	2.09	0.95	10
1250-3232	JB12FSPPBSP90-32-32	2-11	2	50.8	8.11	206.0	5.31	135.0	5.51	140.0	2.76	70.0	7.30	3.31	6

Please note that 1250 Series will replace 1256 Series

*Standard Pack is 1.

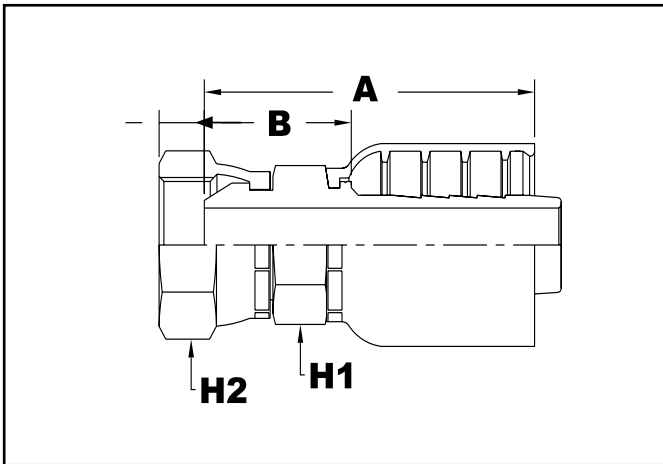
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1252 Series will be replaced by 1248 Series

JB12FSPPJIS SERIES
Female Swivel - JIS Parallel Pipe
30° Flare - Straight Metric

1252 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	
									inch	mm	inch	mm			
1252-0404	JB12FSPPJIS-04-04	1/4-19	1/4	6.4	1.73	44.0	0.94	24.0	0.75	19.0	0.75	19.0	0.17	0.08	250
1252-0604	JB12FSPPJIS-06-04	3/8-19	1/4	6.4	1.73	44.0	0.94	24.0	0.87	22.0	0.87	22.0	0.19	0.09	200
1252-0606	JB12FSPPJIS-06-06	3/8-19	3/8	9.5	2.05	52.0	0.98	25.0	0.87	22.0	0.87	22.0	0.25	0.11	130
1252-0806	JB12FSPPJIS-08-06	1/2-14	3/8	9.5	2.05	52.0	0.98	25.0	1.06	27.0	1.06	27.0	0.29	0.13	100
1252-0808	JB12FSPPJIS-08-08	1/2-14	1/2	12.7	2.24	57.0	1.02	26.0	1.06	27.0	1.06	27.0	0.36	0.16	80
1252-1210	JB12FSPPJIS-12-10	3/4-14	5/8	15.9	2.72	69.0	1.22	31.0	1.06	27.0	1.42	36.0	0.54	0.25	60
1252-1212	JB12FSPPJIS-12-12	3/4-14	3/4	19.1	2.76	70.0	1.22	31.0	1.26	32.0	1.42	36.0	0.68	0.31	50
1252-1616	JB12FSPPJIS-16-16	1-11	1	25.4	3.15	80.0	1.38	35.0	1.42	36.0	1.61	41.0	1.05	0.48	36
1252-2020	JB12FSPPJIS-20-20	1-1/4-11	1-1/4	31.8	3.50	89.0	1.65	42.0	1.81	46.0	1.97	50.0	1.48	0.67	15
1252-2424	JB12FSPPJIS-24-24	1-1/2-11	1-1/2	38.1	4.09	104.0	1.77	45.0	2.17	55.0	2.17	55.0	2.39	1.08	15
1252-3232	JB12FSPPJIS-32-32	2-11	2	50.8	5.12	130.0	2.32	59.0	2.36	60.0	2.87	73.0	4.50	2.04	8

Please note that 1252 Series will be replaced by 1248 Series.

*Standard Pack is 1.

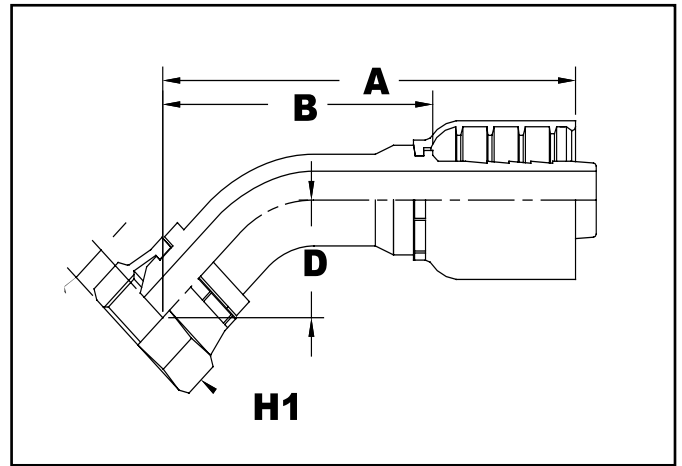
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1254 SERIES

1254 Series will be replaced by Series 1249

JB12FSPPJIS45 SERIES
Female Swivel - JIS Parallel Pipe
30° Flare - 45° Elbow - Metric



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
1254-0404	JB12FSPPJIS45-04-04	1/4-19	1/4	6.4	2.24	57.0	1.5	37.0	0.6	16.0	0.7	19.0	0.15	0.07	250
1254-0606	JB12FSPPJIS45-06-06	3/8-19	3/8	9.5	2.80	71.0	1.7	44.0	0.7	18.0	0.9	22.0	0.24	0.11	130
1254-0808	JB12FSPPJIS45-08-08	1/2-14	1/2	12.7	3.27	83.0	2.0	51.0	0.8	20.0	1.1	27.0	0.36	0.16	80
1254-1212	JB12FSPPJIS45-12-12	3/4-14	3/4	19.1	4.69	119.0	3.1	79.0	1.2	30.0	1.4	36.0	0.88	0.40	32
1254-1616	JB12FSPPJIS45-16-16	1-11	1	25.4	4.88	124.0	3.1	79.0	1.3	33.0	1.6	41.0	1.20	0.54	18
1254-2020	JB12FSPPJIS45-20-20	1-1/4-11	1-1/4	31.8	6.02	153.0	4.2	106.0	1.7	42.0	2.0	50.0	1.34	0.61	12
1254-2424	JB12FSPPJIS45-24-24	1-1/2-11	1-1/2	38.1	6.93	176.0	4.6	116.0	1.9	48.0	2.2	55.0	1.72	0.78	12
1254-3232	JB12FSPPJIS45-32-32	2-11	2	50.8	8.46	215.0	5.7	144.0	2.6	66.0	2.9	73.0	6.37	2.89	6

Please note that 1249 Series will be replaced by 1254 Series

*Standard Pack is 1.

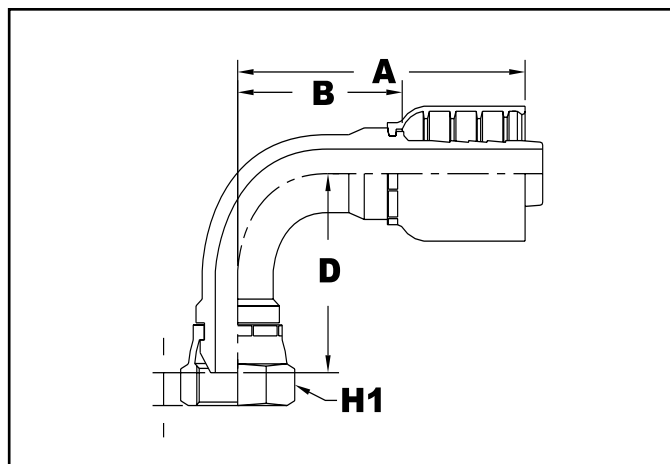
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1256 Series will be replaced by 1250 Series

JB12FSPPJIS90 SERIES
Female Swivel - JIS Parallel Pipe
30° Flare - 90° Elbow - Metric

1256 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs	kg	qty
1256-0404	JB12FSPPJIS90-04-04	1/4-19	1/4	6.4	2.01	51.0	1.18	30.0	1.06	27.0	0.75	19.0	0.15	0.07	200
1256-0606	JB12FSPPJIS90-06-06	3/8-19	3/8	9.5	2.72	69.0	1.65	42.0	1.22	31.0	0.87	22.0	0.25	0.11	100
1256-0808	JB12FSPPJIS90-08-08	1/2-14	1/2	12.7	2.76	70.0	1.50	38.0	1.30	33.0	1.06	27.0	0.36	0.16	70
1256-1212	JB12FSPPJIS90-12-12	3/4-14	3/4	19.1	3.98	101.0	2.40	61.0	2.09	53.0	1.42	36.0	0.95	0.43	32
1256-1616	JB12FSPPJIS90-16-16	1-11	1	25.4	4.96	126.0	3.19	81.0	2.48	63.0	1.61	41.0	1.54	0.70	15
1256-2020	JB12FSPPJIS90-20-20	1-1/4-11	1-1/4	31.8	5.51	140.0	3.66	93.0	3.35	85.0	1.97	50.0	2.56	1.16	15
1256-2424	JB12FSPPJIS90-24-24	1-1/2-11	1-1/2	38.1	5.94	151.0	3.58	91.0	3.46	88.0	2.17	55.0	2.91	1.32	10
1256-3232	JB12FSPPJIS90-32-32	2-11	2	50.8	8.11	206.0	5.31	135.0	5.51	140.0	2.87	73.0	3.29	1.49	6

Please note that 1256 Series will be replaced by 1250 Series

*Standard Pack is 1.

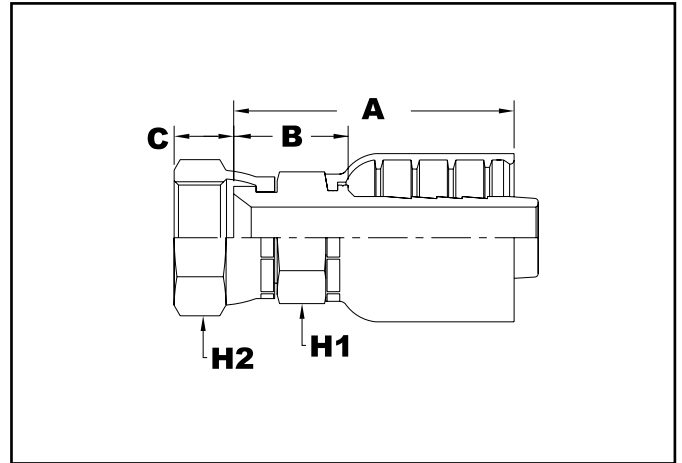
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1258 SERIES



JB12FSJISF SERIES
Female Swivel - JIS, 30° Flare



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	H1		H2		lbs	kg	
									inch	mm	inch	mm			
1258-0404	JB12FSJISF-04-04	1/4-19	1/4	6.4	1.61	41.0	0.82	21.0	0.68	17.2	0.75	19.0	0.15	0.07	250
1258-0606	JB12FSJISF-06-06	3/8-19	3/8	9.5	1.93	49.0	0.87	22.0	0.87	22.0	0.87	22.0	0.24	0.11	130
1258-0808	JB12FSJISF-08-08	1/2-14	1/2	12.7	2.17	55.0	0.94	24.0	1.06	27.0	1.06	27.0	0.35	0.16	80
1258-1212	JB12FSJISF-12-12	3/4-14	3/4	19.1	2.60	66.0	1.06	27.0	1.26	32.0	1.42	36.0	0.64	0.29	50
1258-1616	JB12FSJISF-16-16	1-11.5	1	25.4	3.03	77.0	1.26	32.0	1.42	36.0	1.61	41.0	1.08	0.49	36

*Standard Pack is 1.

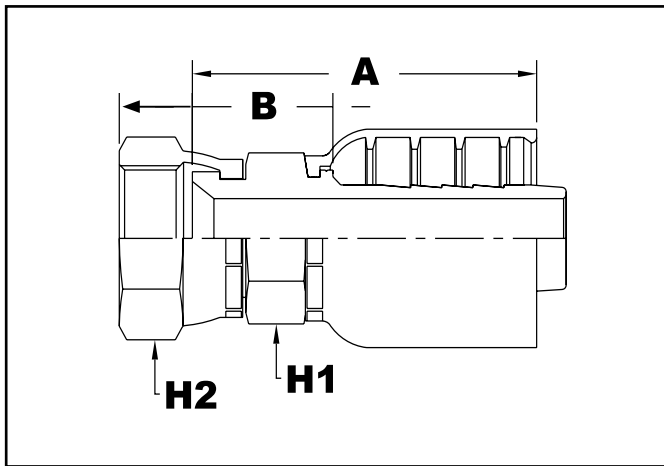
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12KFSM SERIES

Female Swivel - Komatsu 30° Flare - Metric

1270 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack qty
			inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	
1270-1404	JB12KFSM-14-04	M14-1.5	1/4	6.4	1.61	41.0	0.83	21.0	0.67	17.0	0.75	19.1	0.15	0.07	250
1270-1806	JB12KFSM-18-06	M18-1.5	3/8	9.5	1.97	50.0	0.91	23.0	0.87	22.0	0.94	24.0	0.26	0.12	100
1270-2208	JB12KFSM-22-08	M22-1.5	1/2	12.7	2.17	55.0	0.94	24.0	1.06	27.0	1.06	27.0	0.35	0.16	70
1270-2410	JB12KFSM-24-10	M24-1.5	5/8	15.9	2.72	69.0	1.22	31.0	1.06	27.0	1.26	32.0	0.51	0.23	32
1270-3012	JB12KFSM-30-12	M30-1.5	3/4	19.1	2.99	76.0	1.46	37.0	1.26	32.0	1.42	36.0	0.66	0.30	15
1270-3316	JB12KFSM-33-16	M33-1.5	1	25.4	3.11	79.0	1.34	34.0	1.42	36.0	1.61	41.0	1.16	0.53	15

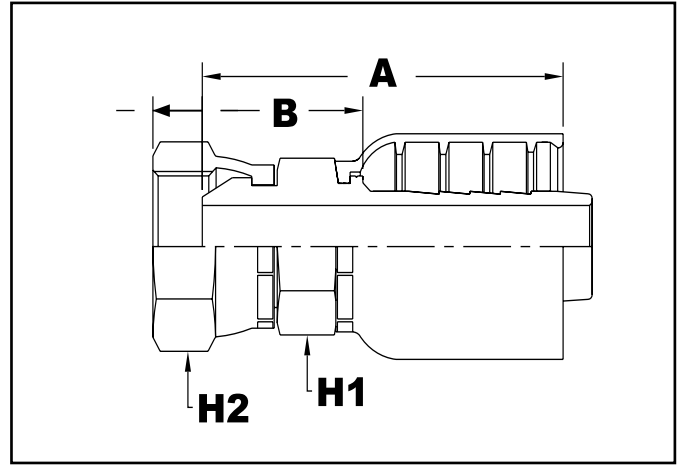
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1271 SERIES

JB12FSM SERIES
Female Swivel - 60° Cone DIN - Metric



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	qty
									inch	mm	inch	mm			
1271-1604	JB12FSM-16-04	M16-1.5	1/4	6.4	1.77	45.0	0.98	25.0	0.75	19.0	0.75	19.0	0.20	0.09	200
1271-1804	JB12FSM-18-04	M18-1.5	1/4	6.4	1.77	45.0	0.98	25.0	0.87	22.0	0.87	22.0	0.22	0.10	150
1271-2005	JB12FSM-20-05	M20-1.5	5/16	7.9	1.89	48.0	1.02	26.0	0.94	24.0	0.94	24.0	0.26	0.12	100
1271-2006	JB12FSM-20-06	M20-1.5	3/8	9.5	2.17	55.0	1.10	28.0	0.94	24.0	0.94	24.0	0.26	0.12	130
1271-2206	JB12FSM-22-06	M22-1.5	3/8	9.5	2.17	55.0	1.10	28.0	1.02	26.0	1.02	26.0	0.31	0.14	100
1271-2408	JB12FSM-24-08	M24-1.5	1/2	12.7	2.36	60.0	1.14	29.0	1.18	30.0	1.18	30.0	0.44	0.20	80
1271-3012	JB12FSM-30-12	M30-1.5	3/4	19.1	2.80	71.0	1.26	32.0	1.42	36.0	1.42	36.0	0.70	0.32	50
1271-4216	JB12FSM-42-16	M42-1.5	1	19.1	3.19	81.0	1.42	36.0	1.97	50.0	1.97	50.0	1.21	0.55	8

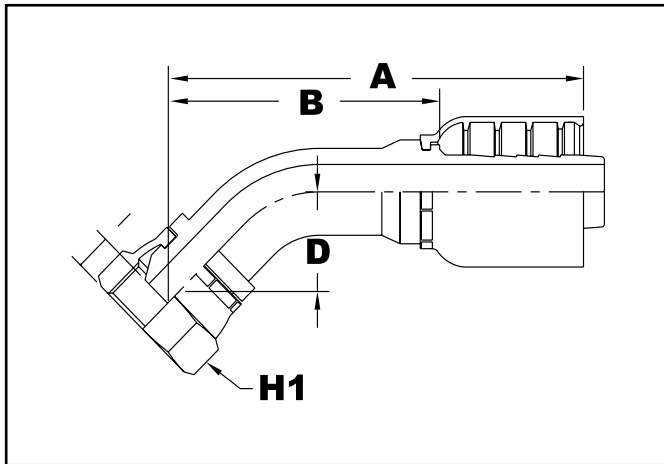
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12FSM45 SERIES
Female Swivel - 60° Cone
45° Elbow - Metric

1272 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size H1		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
1272-1604	JB12FSM45-16-04	M16-1.5	1/4	6.4	2.24	57.0	1.46	37.0	0.63	16.0	1.42	36.0	0.39	10.0	0.11	0.05	100
1272-1804	JB12FSM45-18-04	M18-1.5	1/4	6.4	2.32	59.0	1.54	39.0	0.71	18.0	1.42	36.0	0.47	12.0	0.22	0.10	100
1272-2006	JB12FSM45-20-06	M20-1.5	3/8	9.5	2.80	71.0	1.73	44.0	0.71	18.0	1.42	36.0	0.47	12.0	0.33	0.15	100
1272-2206	JB12FSM45-22-06	M22-1.5	3/8	9.5	2.87	73.0	1.81	46.0	0.79	20.0	1.42	36.0	0.59	15.0	0.35	0.16	100
1272-2408	JB12FSM45-24-08	M24-1.5	1/2	12.7	3.27	83.0	2.01	51.0	0.79	20.0	1.42	36.0	0.63	16.0	0.35	0.16	50
1272-3012	JB12FSM45-30-12	M30-1.5	3/4	19.1	4.69	119.0	3.11	79.0	1.18	30.0	1.42	36.0	0.87	22.0	0.86	0.39	32
1272-3816	JB12FSM45-38-16	M38-1.5	1	25.4	4.88	124.0	3.11	79.0	1.30	33.0	1.61	41.0	1.10	28.0	1.46	0.66	6
1272-4520	JB12FSM45-45-20	M45-1.5	1-1/4	31.8	6.02	153.0	4.17	106.0	1.65	42.0	1.97	41.0	1.38	35.0	2.65	1.20	6

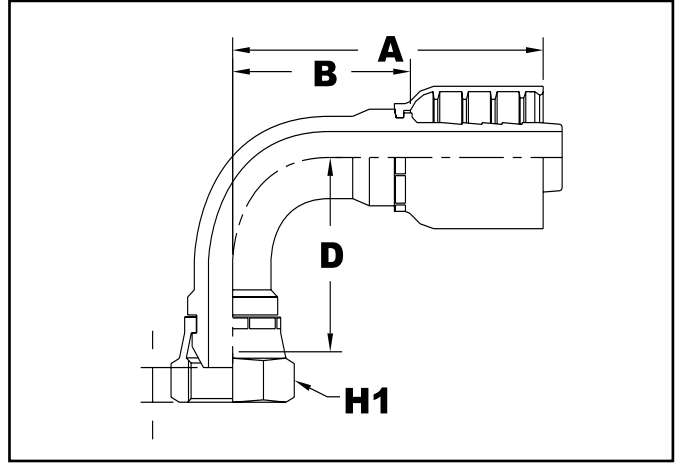
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1273 SERIES

JB12FS90M SERIES
Female Swivel - 60° Cone - DIN
90° Elbow - Metric



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs	kg	qty
1273-1604	JB12FS90M-16-04	M16-1.5	1/4	6.4	2.01	51.0	1.18	30.0	1.06	27.0	1.42	36.0	0.39	10	0.15	0.07	70
1273-1804	JB12FS90M-18-04	M18-1.5	1/4	6.4	2.01	51.0	1.18	30.0	1.14	29.0	1.42	36.0	0.47	12	0.22	0.10	70
1273-2006	JB12FS90M-20-06	M20-1.5	3/8	9.5	2.72	69.0	1.65	42.0	1.22	31.0	1.42	36.0	0.47	12	0.26	0.12	100
1273-2206	JB12FS90M-22-06	M22-1.5	3/8	9.5	2.72	69.0	1.65	42.0	1.30	33.0	1.42	36.0	0.59	15	0.29	0.13	50
1273-2408	JB12FS90M-24-08	M24-1.5	1/2	12.7	2.76	70.0	1.50	38.0	1.30	33.0	1.42	36.0	0.63	16	0.31	0.14	50
1273-3012	JB12FS90M-30-12	M30-1.5	3/4	19.1	3.98	101.0	2.40	61.0	2.09	53.0	1.42	36.0	0.87	22	0.86	0.39	32
1273-3816	JB12FS90M-38-16	M38-1.5	1	25.4	4.96	126.0	3.19	81.0	2.48	63.0	1.61	41.0	1.10	28	1.65	0.75	3
1273-4520	JB12FS90M-45-20	M45-1.5	1	25.4	5.51	140.0	3.66	93.0	3.35	85.0	1.97	50.0	1.38	35	2.21	1.00	3

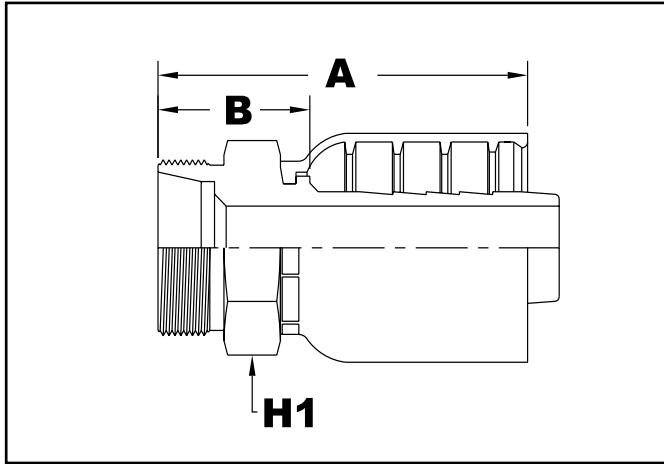
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12MM SERIES
Male 24° DIN - Metric
L Series (Light)

1275 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
1275-1404	JB12MM-14-04	M14-1.5	1/4	6.4	1.65	42.0	0.87	22.0	0.67	17.0	0.31	8	0.10	0.05	250
1275-1606	JB12MM-16-06	M16-1.5	3/8	9.5	1.97	50.0	0.91	23.0	0.67	17.0	0.39	10	0.19	0.09	130
1275-1806	JB12MM-18-06	M18-1.5	3/8	9.5	2.01	51.0	0.94	24.0	0.75	19.0	0.47	12	0.19	0.09	130
1275-2208	JB12MM-22-08	M22-1.5	1/2	12.7	2.20	56.0	0.98	25.0	0.87	22.0	0.59	15	0.26	0.12	80
1275-2610	JB12MM-26-10	M26-1.5	5/8	15.9	2.52	64.0	1.02	26.0	1.06	27.0	0.71	18	0.34	0.16	60
1275-3012	JB12MM-30-12	M30-2.0	3/4	19.1	2.68	68.0	1.14	29.0	1.18	30.0	0.87	22	0.51	0.23	50
1275-3616	JB12MM-36-16	M36-2.0	1	25.4	2.99	76.0	1.22	31.0	1.42	36.0	1.10	28	0.87	0.39	8
1275-4520	JB12MM-45-20	M45-2.0	1-1/4	31.8	3.46	88.0	1.61	41.0	1.81	46.0	1.38	35	1.32	0.60	8

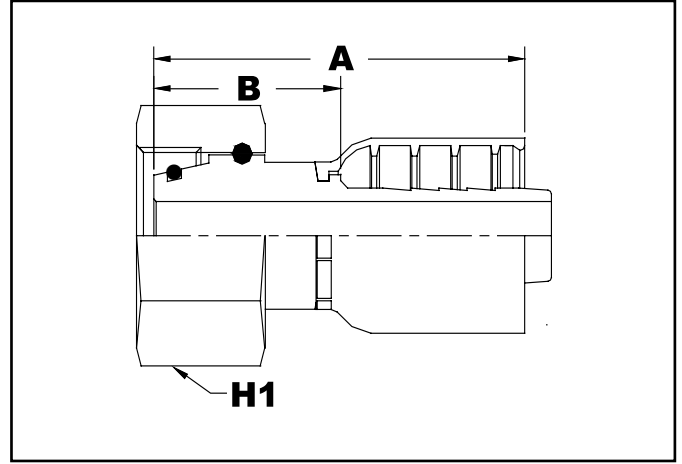
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1277 SERIES

JB12LFSORM SERIES
Female Swivel O-Ring - 24° Cone
L Series (Light) DIN 3865 - Metric



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
1277-1204	JB12LFSORM-12-04	M12-1.5	1/4	6.4	1.68	42.7	0.86	21.9	0.55	14.0	0.24	6.0	0.13	0.06	80
1277-1404	JB12LFSORM-14-04	M14-1.5	1/4	6.4	1.89	48.0	1.10	28.0	0.67	17.0	0.31	8.0	0.14	0.06	150
1277-1605	JB12LFSORM-16-05	M16-1.5	5/16	7.9	1.81	45.9	0.94	23.9	0.75	19.0	0.39	10.0	0.19	0.09	150
1277-1606	JB12LFSORM-16-06	M16-1.5	3/8	9.5	2.32	59.0	1.26	32.0	0.75	19.0	0.39	10.0	0.22	0.10	130
1277-1806	JB12LFSORM-18-06	M18-1.5	3/8	9.5	2.28	58.0	1.22	31.0	0.87	22.0	0.47	12.0	0.25	0.11	130
1277-2208	JB12LFSORM-22-08	M22-1.5	1/2	12.7	2.60	66.0	1.38	35.0	1.06	27.0	0.59	15.0	0.35	0.16	80
1277-2610	JB12LFSORM-26-10	M26-1.5	5/8	15.9	3.03	77.0	1.54	39.0	1.26	32.0	0.71	18.0	0.58	0.26	60
1277-3012	JB12LFSORM-30-12	M30-2.0	3/4	19.1	3.15	80.0	1.61	41.0	1.42	36.0	0.87	22.0	0.68	0.31	50
1277-3616	JB12LFSORM-36-16	M36-2.0	1	25.4	3.58	91.0	1.81	46.0	1.61	40.8	1.10	28.0	1.17	0.53	8
1277-4520	JB12LFSORM-45-20	M45-2.0	1-1/4	31.8	4.02	102.0	2.17	55.0	1.97	50.0	1.38	35.0	1.76	0.80	8
1277-5224	JB12LFSORM-52-24	M52-2.0	1-1/2	38.1	4.17	105.9	1.82	46.2	2.36	59.9	1.65	42.0	3.02	1.37	8

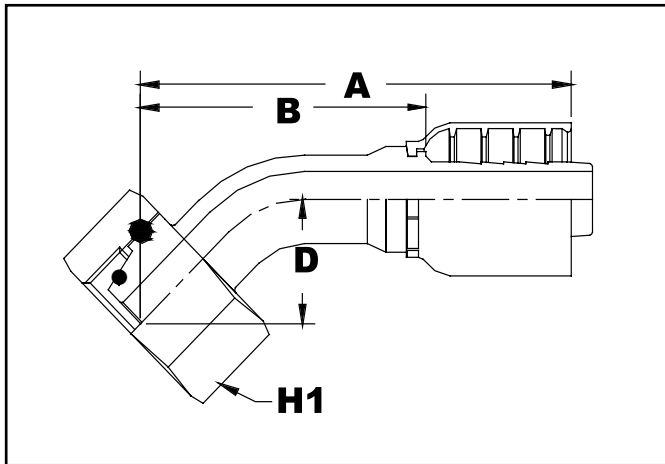
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12LFSORM45 SERIES
Female Swivel O-Ring - 24° Cone
Series (Light) DIN 3865 - 45° Elbow - Metric

1278 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
1278-1204	JB12LFSORM45-12-04	M12-1.5	1/4	6.4	2.24	57.0	1.42	36.0	0.59	15.0	0.55	14.0	0.24	6.0	0.14	0.06	130
1278-1404	JB12LFSORM45-14-04	M14-1.5	1/4	6.4	2.36	60.0	1.54	39.0	0.71	18.0	0.67	17.0	0.31	8.0	0.14	0.06	250
1278-1604	JB12LFSORM45-16-04	M16-1.5	1/4	6.4	2.44	62.0	1.61	41.0	0.75	19.0	0.75	19.0	0.39	10.0	0.17	0.08	100
1278-1605	JB12LFSORM45-16-05	M16-1.5	5/16	7.9	1.72	43.8	0.86	21.8	0.82	20.8	0.55	14.0	0.39	10.0	0.21	0.10	100
1278-1805	JB12LFSORM45-18-05	M18-1.5	5/16	7.9	2.01	51.0	1.14	29.0	1.48	37.6	0.87	22.0	0.47	12.0	0.22	0.10	100
1278-1606	JB12LFSORM45-16-06	M16-1.5	3/8	9.5	2.87	73.0	1.81	46.0	0.83	21.0	0.75	19.0	0.39	10.0	0.25	0.11	100
1278-1806	JB12LFSORM45-18-06	M18-1.5	3/8	9.5	2.87	73.0	1.81	46.0	0.83	21.0	0.87	22.0	0.47	12.0	0.24	0.11	100
1278-2208	JB12LFSORM45-22-08	M22-1.5	1/2	12.7	3.43	87.0	2.17	55.0	1.10	28.0	1.06	27.0	0.59	15.0	0.35	0.16	50
1278-2610	JB12LFSORM45-26-10	M26-1.5	5/8	15.9	4.02	102.0	2.48	63.0	1.18	30.0	1.26	32.0	0.71	18.0	0.54	0.24	50
1278-3010	JB12LFSORM45-30-10	M30-2.0	5/8	15.9	4.29	108.9	2.77	70.4	1.42	36.0	1.42	36.0	0.87	22.0	0.68	0.31	50
1278-2612	JB12LFSORM45-26-12	M26-1.5	3/4	19.1	4.92	125.0	3.35	85.0	1.50	38.0	1.26	32.0	0.71	18.0	0.75	0.34	32
1278-3012	JB12LFSORM45-30-12	M30-2.0	3/4	19.1	4.84	123.0	3.27	83.0	1.42	36.0	1.42	36.0	0.87	22.0	0.86	0.39	32
1278-3612	JB12LFSORM45-36-12	M36-2.0	3/4	19.1	4.84	123.0	3.27	83.0	1.42	36.0	1.61	41.0	1.10	28.0	0.90	0.41	36
1278-3616	JB12LFSORM45-36-16	M36-2.0	1	25.4	5.08	129.0	3.31	84.0	1.46	37.0	1.61	41.0	1.10	28.0	1.52	0.69	6
1278-4520	JB12LFSORM45-45-20	M45-2.0	1-1/4	31.8	6.18	157.0	4.33	110.0	1.85	47.0	1.97	50.0	1.38	35.0	3.33	1.51	6
1278-5224	JB12LFSORM45-5224	M52-2.0	1-1/2	38.1	7.09	180.0	4.72	120.0	2.48	63.0	2.36	60.0	1.77	45.0	8.16	3.70	6

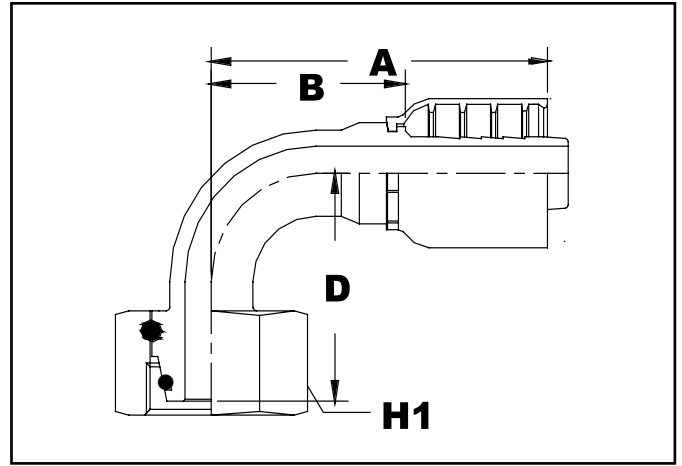
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1279 SERIES

JB12LFSORM90 SERIES
Female Swivel O-Ring - 24° Cone
L Series (Light) DIN 3865 - 90° Elbow - Metric



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size H1		Tube Outside Diameter		Weight		Bulk Pack qty
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
1279-1204	JB12LFSORM90-12-04	M12-1.5	1/4	6.4	2.01	51.0	1.18	30.0	1.02	26.0	0.55	14.0	0.24	6.0	0.14	0.06	110
1279-1404	JB12LFSORM90-14-04	M14-1.5	1/4	6.4	2.01	51.0	1.18	30.0	1.18	30.0	0.67	17.0	0.31	8.0	0.16	0.07	70
1279-1604	JB12LFSORM90-16-04	M16-1.5	1/4	6.4	2.01	51.0	1.18	30.0	1.22	31.0	0.75	19.0	0.39	10.0	0.18	0.08	70
1279-1605	JB12LFSORM90-16-05	M16-1.5	5/16	7.9	2.01	51.0	1.14	29.0	1.48	37.6	0.75	19.0	0.39	10.0	0.21	0.10	70
1279-1805	JB12LFSORM90-18-05	M18-1.5	5/16	7.9	2.01	51.0	1.14	29.0	1.30	33.0	0.87	22.0	0.47	12.0	0.24	0.11	70
1279-1606	JB12LFSORM90-16-06	M16-1.5	3/8	9.5	2.72	69.0	1.65	42.0	1.26	32.0	0.87	22.0	0.39	10.0	0.24	0.11	100
1279-1806	JB12LFSORM90-18-06	M18-1.5	3/8	9.5	2.72	69.0	1.65	42.0	1.30	33.0	0.87	22.0	0.47	12.0	0.26	0.12	100
1279-2208	JB12LFSORM90-22-08	M22-1.5	1/2	12.7	2.76	70.0	1.50	38.0	1.46	37.0	1.06	27.0	0.59	15.0	0.39	0.18	50
1279-2610	JB12LFSORM90-26-10	M26-1.5	5/8	15.9	2.80	71.0	1.65	42.0	2.01	51.0	1.26	32.0	0.71	18.0	0.82	0.37	50
1279-3010	JB12LFSORM90-30-10	M30-2.0	5/8	15.9	3.64	92.5	2.11	53.7	2.32	59.0	1.42	36.0	0.87	22.0	0.82	0.37	50
1279-2612	JB12LFSORM90-26-12	M26-1.5	3/4	19.1	3.98	101.0	2.40	61.0	2.48	63.0	1.26	32.0	0.71	18.0	0.68	0.31	32
1279-3012	JB12LFSORM90-30-12	M30-2.0	3/4	19.1	3.98	101.0	2.40	61.0	2.40	61.0	1.42	36.0	0.87	22.0	0.97	0.44	32
1279-3612	JB12LFSORM90-36-12	M36-2.0	3/4	19.1	3.98	101.0	2.40	61.0	2.40	61.0	1.61	41.0	1.10	28.0	0.86	0.39	36
1279-3616	JB12LFSORM90-36-16	M36-2.0	1	25.4	4.96	126.0	3.19	81.0	2.68	68.0	1.61	41.0	1.10	28.0	1.66	0.75	3
1279-4520	JB12LFSORM90-45-20	M45-2.0	1-1/4	31.8	5.51	140.0	3.66	93.0	3.43	87.0	1.97	50.0	1.38	35.0	2.21	1.00	3
1279-5224	JB12LFSORM90-5224	M52-2.0	1-1/2	38.1	5.94	151.0	3.58	91.0	3.58	91.0	2.36	60.0	1.77	45.0	2.47	1.12	3

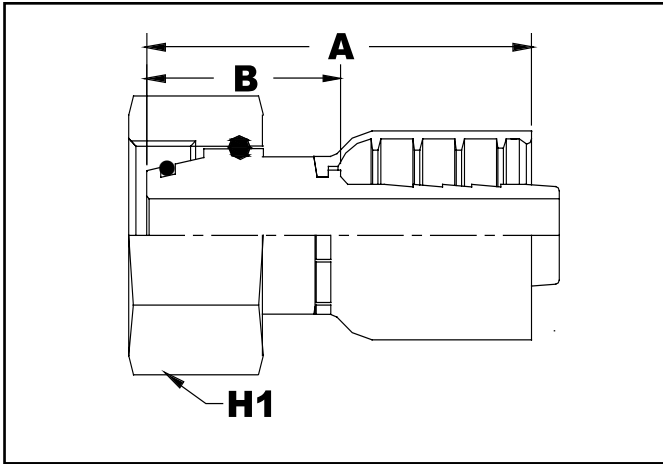
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12SFSORM SERIES
Female Swivel O-Ring - 24° Cone
Series (Standard) DIN 3865 - Metric

1280 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
1280-1604	JB12SFSORM-16-04	M16-1.5	1/4	6.4	1.62	41.1	0.80	20.3	0.55	14.0	0.31	8.0	0.18	0.08	200
1280-1804	JB12SFSORM-18-04	M18-1.5	1/4	6.4	1.89	48.0	1.10	28.0	0.87	22.0	0.39	10.0	0.18	0.08	150
1280-2005	JB12SFSORM-20-05	M20-1.5	5/16	7.9	1.81	45.9	0.44	23.9	0.94	24.0	0.47	12.0	0.24	0.11	100
1280-1806	JB12SFSORM-18-06	M18-1.5	3/8	9.5	2.32	59.0	1.26	32.0	0.87	22.0	0.39	10.0	0.22	0.10	130
1280-2006	JB12SFSORM-20-06	M20-1.5	3/8	9.5	2.32	59.0	1.26	32.0	0.94	24.0	0.47	12.0	0.26	0.12	130
1280-2206	JB12SFSORM-22-06	M22-1.5	3/8	9.5	2.32	59.0	1.26	32.0	1.06	27.0	0.55	14.0	0.41	0.19	100
1280-2408	JB12SFSORM-24-08	M24-1.5	1/2	12.7	2.60	66.0	1.38	35.0	1.18	30.0	0.63	16.0	0.42	0.19	80
1280-3010	JB12SFSORM-30-10	M30-2.0	5/8	15.9	3.03	77.0	1.54	39.0	1.42	36.0	0.79	20.0	0.95	0.43	60
1280-3012	JB12SFSORM-30-12	M30-2.0	3/4	19.1	2.63	66.7	1.08	27.4	1.42	36.0	0.79	20.0	0.97	0.44	50
1280-3612	JB12SFSORM-36-12	M36-2.0	3/4	19.1	3.15	80.0	1.61	41.0	1.61	41.0	0.98	25.0	0.97	0.44	36
1280-3616	JB12SFSORM-36-16	M36-2.0	1	25.4	3.58	91.0	1.81	46.0	1.61	41.0	0.98	25.0	1.15	0.52	8
1280-4216	JB12SFSORM-42-16	M42-2.0	1	25.4	3.58	91.0	1.81	46.0	1.97	50.0	1.18	30.0	1.45	0.66	8
1280-5220	JB12SFSORM-52-20	M52-2.0	1-1/4	31.8	4.02	102.0	2.17	55.0	2.36	60.0	1.50	38.0	1.93	0.88	8
1280-5224	JB12SFSORM-52-24	M52-2.0	1-1/2	38.1	4.76	121.0	2.44	62.0	2.36	60.0	1.50	38.0	2.38	1.08	8

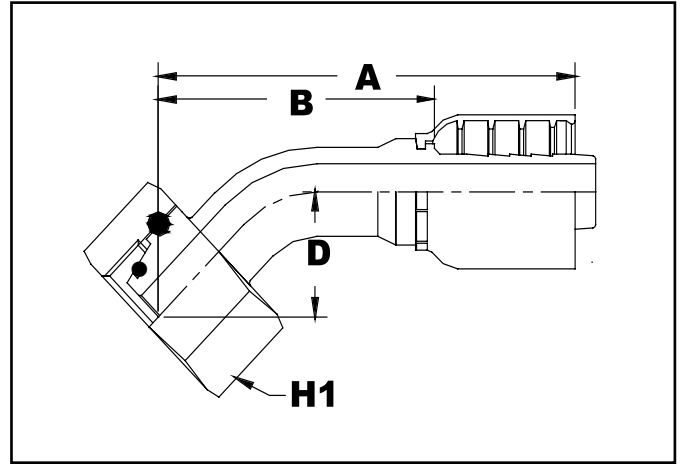
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

1281 SERIES

JB12SFSORM45 SERIES
Female Swivel O-Ring - 24° Cone
S (Standard) DIN 3865 - 45° Elbow - Metric



HYDRAULIC COUPLINGS - 12/JB12

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
1281-1604	JB12SFSORM45-16-04	M16-1.5	1/4	6.4	2.31	58.8	1.50	38.0	0.79	20.0	0.75	19.0	0.31	8.0	0.17	0.08	100
1281-1804	JB12SFSORM45-18-04	M18-1.5	1/4	6.4	2.52	64.0	1.69	43.0	0.83	21.0	0.87	22.0	0.39	10.0	0.10	0.05	100
1281-2005	JB12SFSORM45-20-05	M20-1.5	5/16	7.9	2.83	72.0	1.97	50.0	0.94	24.0	0.94	24.0	0.47	12.0	0.26	0.12	80
1281-1806	JB12SFSORM45-18-06	M18-1.5	3/8	9.5	2.95	75.0	1.89	48.0	0.91	23.0	0.87	22.0	0.39	10.0	0.20	0.09	100
1281-2006	JB12SFSORM45-20-06	M20-1.5	3/8	9.5	2.95	75.0	1.89	48.0	0.91	23.0	0.94	24.0	0.47	12.0	0.28	0.13	100
1281-2206	JB12SFSORM45-22-06	M22-1.5	3/8	9.5	2.95	75.0	1.89	48.0	0.91	23.0	1.06	27.0	0.55	14.0	0.17	0.08	100
1281-2408	JB12SFSORM45-24-08	M24-1.5	1/2	12.7	3.50	89.0	2.24	57.0	1.18	30.0	1.26	32.0	0.63	16.0	0.46	0.21	50
1281-3010	JB12SFSORM45-30-10	M30-2.0	5/8	15.9	3.94	100.0	2.40	61.0	1.10	28.0	1.42	36.0	0.79	20.0	0.29	0.13	50
1281-3012	JB12SFSORM45-30-12	M30-2.0	3/4	19.1	4.84	123.0	3.27	83.0	1.42	36.0	1.42	36.0	0.79	20.0	0.84	0.38	32
1281-3612	JB12SFSORM45-36-12	M36-2.0	3/4	19.1	4.88	124.0	3.31	84.0	1.46	37.0	1.81	46.0	0.98	25.0	1.13	0.51	36
1281-3616	JB12SFSORM45-36-16	M36-1.5	1	25.4	5.12	130.0	3.35	85.0	1.50	38.0	1.81	46.0	0.98	25.0	1.52	0.69	6
1281-4216	JB12SFSORM45-42-16	M42-2.0	1	25.4	5.12	130.0	3.35	85.0	1.50	38.0	1.97	50.0	1.18	30.0	1.41	0.64	6
1281-5220	JB12SFSORM45-52-20	M52-2.0	1-1/4	31.8	6.22	158.0	4.37	111.0	1.89	48.0	2.36	60.0	1.50	38.0	2.23	1.01	6
1281-5224	JB12SFSORM45-52-24	M52-2.0	1-1/2	38.1	7.05	179.0	4.69	119.0	2.44	62.0	2.36	60.0	1.50	38.0	3.33	1.51	6

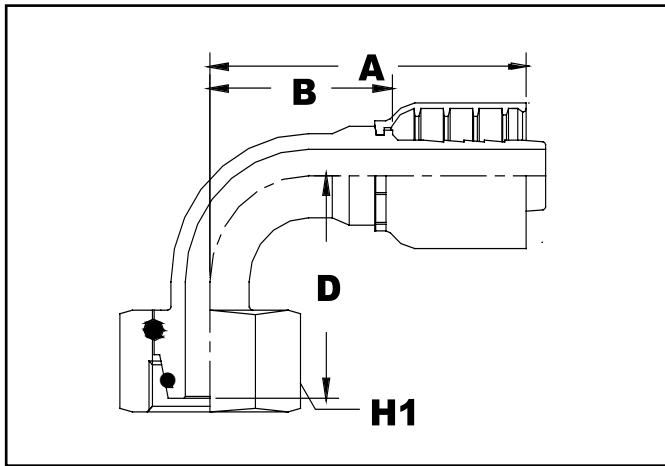
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB12SFSORM90 SERIES
Female Swivel O-Ring - 24° Cone
S (Standard) DIN 3865 - 90° Elbow - Metric

1282 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
1282-1804	JB12SFSORM90-18-04	M18-1.5	1/4	6.4	2.01	51.0	1.18	30.0	1.34	34.0	0.87	22.0	0.39	10.0	0.19	0.09	70
1282-2005	JB12SFSORM90-20-05	M20-1.5	5/16	7.9	2.01	51.0	1.14	29.0	1.46	37.0	0.94	24.0	0.47	12.0	0.29	0.13	70
1282-1806	JB12SFSORM90-18-06	M18-1.5	3/8	9.5	2.72	69.0	1.65	42.0	1.38	35.0	0.87	22.0	0.39	10.0	0.25	0.12	100
1282-2006	JB12SFSORM90-20-06	M20-1.5	3/8	9.5	2.72	69.0	1.65	42.0	1.38	35.0	0.94	24.0	0.47	12.0	0.32	0.15	100
1282-2206	JB12SFSORM90-22-06	M22-1.5	3/8	9.5	2.72	69.0	1.65	42.0	1.42	36.0	1.06	27.0	0.55	14.0	0.17	0.08	50
1282-2408	JB12SFSORM90-24-08	M24-1.5	1/2	12.7	2.76	70.0	1.50	38.0	1.57	40.0	1.18	30.0	0.63	16.0	0.48	0.22	50
1282-3010	JB12SFSORM90-30-10	M30-2.0	5/8	15.9	2.80	71.0	1.65	42.0	1.93	49.0	1.42	36.0	0.79	20.0	1.15	0.52	50
1282-3012	JB12SFSORM90-30-12	M30-2.0	3/4	19.1	3.98	101.0	2.40	61.0	2.40	61.0	1.42	36.0	0.79	20.0	0.97	0.44	32
1282-3612	JB12SFSORM90-36-12	M36-2.0	3/4	19.1	3.98	101.0	2.40	61.0	2.44	62.0	1.61	41.0	0.98	25.0	1.25	0.57	36
1282-3616	JB12SFSORM90-36-16	M36-2.0	1	25.4	4.96	126.0	3.19	81.0	2.72	69.0	1.61	41.0	0.98	25.0	1.57	0.71	3
1282-4216	JB12SFSORM90-42-16	M42-2.0	1	25.4	4.96	126.0	3.19	81.0	2.76	70.0	1.97	50.0	1.18	30.0	1.77	0.80	3
1282-5220	JB12SFSORM90-52-20	M52-2.0	1-1/4	31.8	5.51	140.0	3.66	93.0	3.39	86.0	2.36	60.0	1.50	38.0	2.47	1.22	3
1282-5224	JB12SFSORM90-52-24	M52-2.0	1-1/2	38.1	5.94	151.0	3.58	91.0	3.54	90.0	2.36	60.0	1.50	38.0	2.47	1.22	3

*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

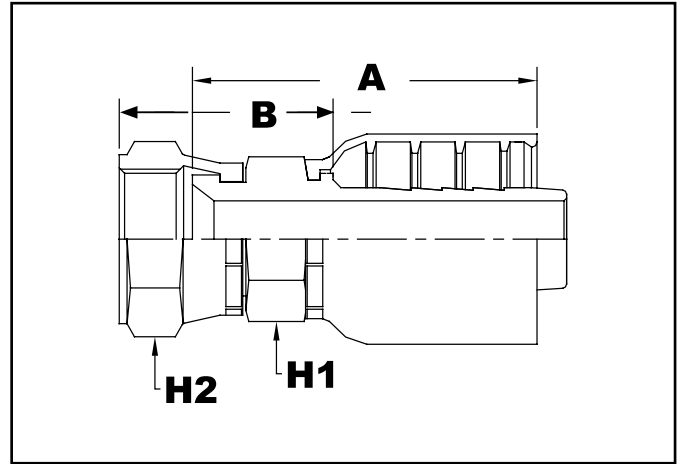
HYDRAULIC COUPLINGS - 12/JB12

40/JB40 SERIES COUPLINGS - FOR 4-WIRE BRAID HOSES

<u>SERIES</u>	<u>DESCRIPTIVE</u>	<u>DESCRIPTION</u> <u>SERIES</u>	<u>PAGE</u>
4000	JB40FS	Female Swivel 37° Flare	105
4002	JB40FS45	Female Swivel 37° Flare, 45° Elbow	106
4004	JB40FS90	Female Swivel 37° Flare, 90° Elbow	107
4004L	NEW! JB40FS90L	Female Swivel 37° Flare, 90° Elbow - Long Drop	108
4005	JB40OFS	Female O-Ring Face Seal - Straight	109
4007	JB40FOFS45	Female O-Ring Face Seal - 45° Elbow	110
4009	JB40OFS90	Female O-Ring Face Seal - 90° Elbow	111
4010	JB40FA	Female Swivel SAE 45° Flare	112
4020	JB40MP	Male Pipe Rigid NPTF	113
4023	JB40MS	Male Pipe Swivel NPTF	114
4025	JB40MJ	Male JIC 37°	115
4027	JB40OB	Male O-Ring Boss	116
4030	JB40JISMP	Male JIS/BSP Taper Pipe - Metric	117
4032	NEW! JB40MOFS	SAE Male O-Ring Face Seal	118
4034	JB40C61S	SAE Code 61 Flange Straight	119
4036	JB40C6145	SAE Code 61 Flange 45° Elbow	120
4039	JB40C6290	SAE Code 62 Flange 90° Elbow	121
4039L	JB40C6190L	SAE Code 61 Flange 90° Elbow - Long Drop	122
4041	JB40C62S	SAE Code 62 Flange Straight	123
4043	JB40C6245	SAE Code 62 Flange 45° Elbow	124
4045	JB40C6290	SAE Code 62 Flange 90° Elbow	125
4048	JB40FSPPBSP	Female Swivel Parallel Pipe - BSP 30° Cone Metric	126
4049	JB40FSPPBSP45	Female Swivel Parallel Pipe - BSP 30° Cone 45° Elbow - Metric	127
4050	JB40FSPPBSP90	Female Swivel Parallel Pipe - BSP 30° Cone 90° Elbow - Metric	128
4052	JB40FSPPJIS	Female Swivel Parallel Pipe - JIS 30° Cone - Metric	129
4054	JB40FSPPJIS45	Female Swivel Parallel Pipe - JIS 30° Cone 45° Elbow - Metric	130
4056	JB40FSPPJIS90	Female Swivel Parallel Pipe - JIS 30° Cone 90° Elbow - Metric	131
4070	JB40KFSM	Female Swivel Komatsu 30° Flare Metric	132
4071	JB40FSM	Female Swivel 60° Cone - Metric	133
4072	JB40FS45M	Female Swivel 60° Cone - 45° Elbow - Metric	134
4073	JB40FS90M	Female Swivel 60° Cone - 90° Elbow - Metric	135
4075	JB40MM	Male DIN 24° Metric	136
4077	JB40LFSORM	Female Swivel O-Ring 24° Cone DIN 3865 L-Series Metric	137
4078	JB40LFSORM45	Female Swivel O-Ring 24° Cone DIN 3865 L-Series - 45° Elbow Metric	138
4079	JB40LFSORM90	Female Swivel O-Ring 24° Cone DIN 3865 L-Series - 90° Elbow Metric	139
4080	JB40FSORM	Female Swivel O-Ring 24° Cone DIN 3865 S-Series - Metric	140
4081	JB40FSORM45	Female Swivel O-Ring 24° Cone DIN 3865 S-Series - 45° Elbow Metric	141
4082	JB40FSORM90	Female Swivel O-Ring 24° Cone DIN 3865 S-Series - 90° Elbow Metric	142

JB40FS SERIES
Female Swivel JIC 37° Flare

4000 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	qty
4000-0606	JB40FS-06-06	9/16-18	3/8	9.5	2.01	51.0	0.91	23.0	0.69	17.4	0.69	17.4	0.24	0.11	130
4000-0806	JB40FS-08-06	3/4-16	3/8	9.5	2.01	51.0	0.91	23.0	0.69	17.4	0.87	22.2	0.29	0.13	130
4000-1006	JB40FS-10-06	7/8-14	3/8	9.5	2.01	51.0	0.91	23.0	0.87	22.2	1.00	25.4	0.29	0.13	100
4000-0808	JB40FS-08-08	3/4-16	1/2	12.7	2.13	54.0	0.91	23.0	0.87	22.2	0.87	22.2	0.34	0.15	100
4000-1008	JB40FS-10-08	7/8-14	1/2	12.7	2.20	56.0	0.94	24.0	0.87	22.2	1.00	25.4	0.35	0.16	80
4000-1208	JB40FS-12-08	1-1/16-12	1/2	12.7	2.41	61.2	1.11	28.2	0.87	22.2	1.00	25.4	0.46	0.21	50
4000-1212	JB40FS-12-12	1-1/16-12	3/4	19.1	2.64	67.0	1.06	27.0	1.06	26.9	1.25	31.7	0.58	0.27	50
4000-1412	JB40FS-14-12	1-3/16-12	3/4	19.1	2.70	68.6	1.13	28.8	1.26	32.0	1.38	35.0	0.68	0.31	50
4000-1612	JB40FS-16-12	1-5/16-12	3/4	19.1	2.81	71.3	1.24	31.5	1.26	32.0	1.25	31.8	0.85	0.39	50
4000-1216	JB40FS-12-16	1-1/16-12	1	25.4	3.01	76.5	1.18	30.0	1.81	46.0	1.97	50.0	0.95	0.43	36
4000-1616	JB40FS-16-16	1-5/16-12	1	25.4	3.11	79.0	1.30	33.0	1.50	38.1	1.37	34.9	1.15	0.52	36
4000-2016	JB40FS-20-16	1-5/8-12	1	25.4	3.23	82.0	1.34	34.0	1.62	41.2	2.00	50.8	1.43	0.65	15
4000-2020	JB40FS-20-20	1-5/8-12	1-1/4	31.8	3.23	82.0	1.38	35.0	1.87	47.6	2.00	50.8	1.94	0.88	15
4000-2424	JB40FS-24-24	1-7/8-12	1-1/2	38.1	4.02	102.0	1.69	43.0	2.12	53.9	2.12	53.9	2.49	1.13	12
4000-3232	JB40FS-32-32	2-1/2-12	2	50.8	4.96	126.0	2.17	55.0	2.50	73.0	2.87	73.0	4.55	2.07	8

*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

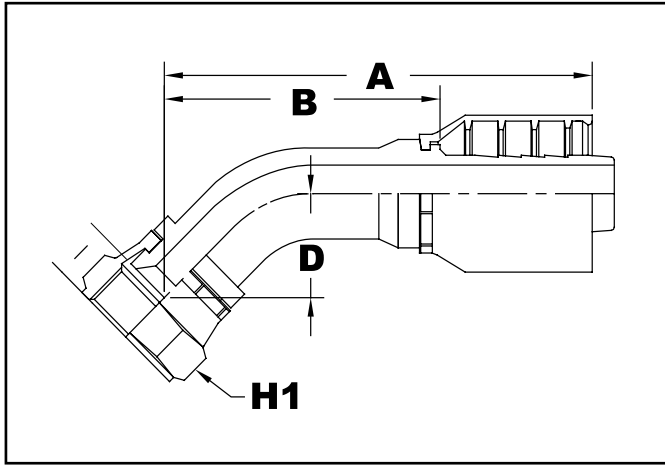
WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 40/JB40

4002 SERIES

JB40FS45 SERIES

Female Swivel - JIC 37° Flare - 45° Elbow



HYDRAULIC COUPLINGS - 40/JB40

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4002-0606	JB40FS45-06-06	9/16-18	3/8	9.5	2.72	69.0	1.65	42.0	0.63	16.0	0.69	17.4	0.24	0.11	130
4002-0806	JB40FS45-08-06	3/4-16	3/8	9.5	2.72	69.0	1.65	42.0	0.63	16.0	0.87	22.2	0.26	0.12	130
4002-1006	JB40FS45-10-06	7/8-14	3/8	9.5	2.93	74.5	1.87	47.5	0.75	19.0	1.06	27.0	0.29	0.13	80
4002-0808	JB40FS45-08-08	3/4-16	1/2	12.7	3.19	81.0	1.93	49.0	0.75	19.0	0.87	22.2	0.35	0.16	80
4002-1008	JB40FS45-10-08	7/8-14	1/2	12.7	3.19	81.0	1.93	49.0	0.75	19.0	1.00	25.4	0.42	0.19	80
4002-1212	JB40FS45-12-12	1-1/16-12	3/4	19.1	4.53	115.0	2.95	75.0	1.02	26.0	1.25	31.7	0.82	0.37	32
4002-1616	JB40FS45-16-16	1-5/16-12	1	25.4	4.80	122.0	3.03	77.0	1.22	31.0	1.50	38.1	1.39	0.63	18
4002-2020	JB40FS45-20-20	1-5/8-12	1-1/4	31.8	5.91	150.0	4.06	103.0	1.57	40.0	2.00	50.8	2.40	1.09	12
4002-2424	JB40FS45-24-24	1-7/8-12	1-1/2	38.1	6.89	175.0	4.53	115.0	1.81	46.0	2.12	53.9	2.49	1.13	10
4002-3232	JB40FS45-32-32	2-1/2-12	2	50.8	8.31	211.0	5.51	140.0	2.44	62.0	2.87	73.0	6.65	3.02	6

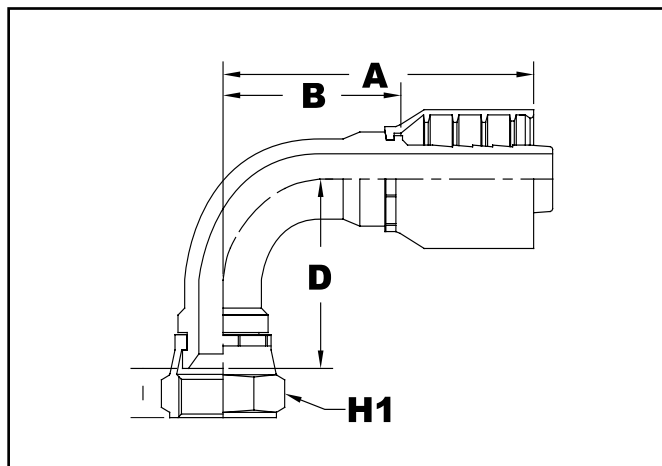
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40FS90 SERIES
Female Swivel
JIC 37° Flare - 90° Elbow

4004 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4004-0606	JB40FS90-06-06	9/16-18	3/8	9.5	2.76	70.0	1.65	42.0	1.14	29.0	0.69	17.4	0.24	0.11	110
4004-0806	JB40FS90-08-06	3/4-16	3/8	9.5	2.76	70.0	1.65	42.0	1.14	29.0	0.87	22.2	0.29	0.13	110
4004-0808	JB40FS90-08-08	3/4-16	1/2	12.7	2.80	71.0	1.50	38.0	1.22	31.0	0.87	22.2	0.37	0.17	70
4004-1008	JB40FS90-10-08	7/8-14	1/2	12.7	2.80	71.0	1.50	38.0	1.22	31.0	1.00	25.4	0.38	0.17	70
4004-1208	JB40FS90-12-08	1-1/16-12	1/2	12.7	2.80	71.0	1.50	38.0	1.22	31.0	1.25	31.7	0.44	0.20	50
4004-1212	JB40FS90-12-12	1-1/16-12	3/4	19.1	4.02	102.0	2.40	61.0	1.97	50.0	1.25	31.7	0.88	0.40	32
4004-1616	JB40FS90-16-16	1-5/16-12	1	25.4	5.04	128.0	3.19	81.0	2.44	62.0	1.50	38.1	1.57	0.71	15
4004-2020	JB40FS90-20-20	1-5/8-12	1-1/4	31.8	5.51	140.0	3.66	93.0	3.23	82.0	1.98	50.4	2.67	1.21	10
4004-2424	JB40FS90-24-24	1-7/8-12	1-1/2	38.1	5.94	151.0	3.58	91.0	3.39	86.0	2.12	53.9	3.30	1.50	7
4004-3232	JB40FS90-32-32	2-1/2-12	2	50.8	8.11	206.0	5.31	135.0	5.35	136.0	2.87	73.0	7.30	3.31	3

*Standard Pack is 1.

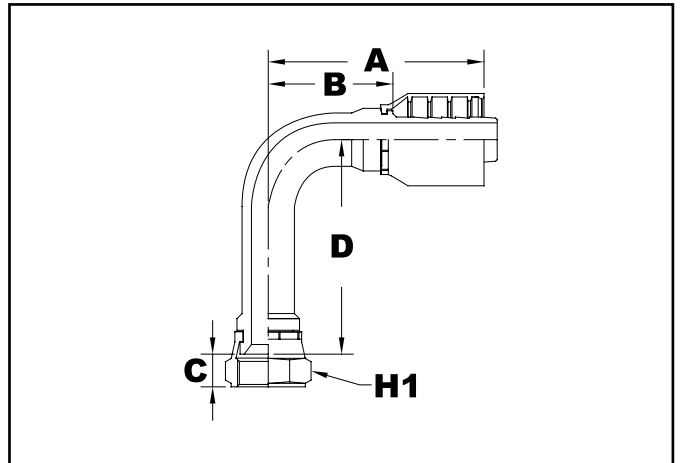
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4004L SERIES



JB40FS90L SERIES
Female Swivel JIC 37° Flare
90° Elbow - Long Drop



HYDRAULIC COUPLINGS - 40/JB40

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
4004L-0606	JB40FS90L-06-06	9/16-18	3/8	9.5	2.76	70.0	1.65	42.0	2.17	55.0	0.69	17.4	0.22	0.1	130
4004L-0806	JB40FS90L-08-06	3/4-16	3/8	9.5	2.76	70.0	1.65	42.0	2.44	62.0	0.87	22.2	0.26	0.12	130
4004L-0808	JB40FS90L-08-08	3/4-16	1/2	12.7	2.80	71.0	1.50	38.0	2.44	62.0	0.87	22.2	0.33	0.15	80
4004L-1008	JB40FS90L-10-08	7/8-14	1/2	12.7	2.80	71.0	1.50	38.0	2.56	65.0	1.00	25.4	0.35	0.16	80
4004L-1212	JB40FS90L-12-12	1-1/16-12	3/4	19.1	4.02	102.0	2.40	61.0	3.74	95.0	1.25	31.8	0.62	0.28	50
4004L-1616	JB40FS90L-16-16	1-5/16-12	1	25.4	5.04	128.0	2.40	61.0	4.33	110.0	1.50	38.1	1.06	0.48	36
4004L-2020	JB40FS90L-20-20	1-5/8-12	1-1/4	31.8	3.65	92.6	1.58	40.1	3.23	82	1.81	46	1.94	0.88	15
4004L-2424	JB40FS90L-24-24	1-7/8-12	1-1/2	38.1	4.43	112.4	1.69	42.9	3.39	86	2.17	55	2.47	1.12	12

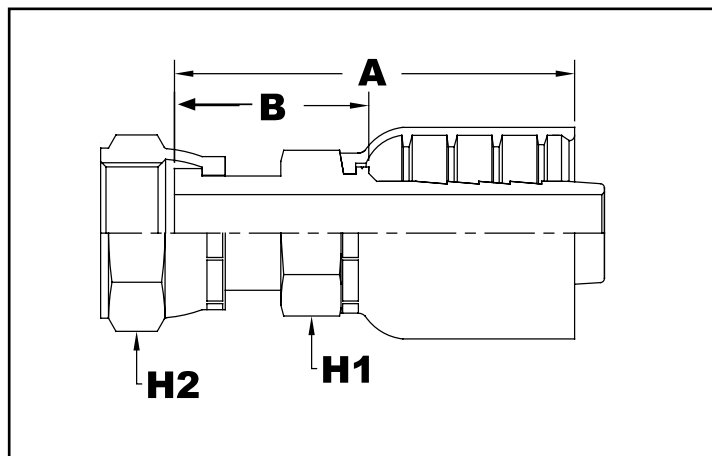
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40OFS SERIES Female O-Ring Face Seal - Straight

4005 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	
4005-0606	JB40OFS-06-06	11/16-16	3/8	9.5	1.90	48.2	0.80	20.2	0.69	17.4	0.81	20.6	0.25	0.11	130
4005-0806	JB40OFS-08-06	13/16-16	3/8	9.5	2.24	57.0	1.14	29.0	0.69	17.4	0.94	23.8	0.31	0.14	130
4005-0608	JB40OFS-06-08	11/16-16	1/2	12.7	2.40	61.0	1.14	29.0	0.81	20.6	0.81	20.6	0.31	0.14	80
4005-0808	JB40OFS-08-08	13/16-16	1/2	12.7	2.52	64.0	1.26	32.0	0.81	20.6	0.94	23.8	0.35	0.16	80
4005-1012	JB40OFS-10-12	1-14	3/4	19.1	3.11	79.0	1.54	39.0	1.06	26.9	1.12	28.5	0.62	0.28	50
4005-1212	JB40OFS-12-12	1-3/16-12	3/4	19.1	3.19	81.0	1.61	41.0	1.12	28.5	1.37	34.9	0.76	0.35	50
4005-1612	JB40OFS-16-12	1-7/16-12	3/4	19.1	3.27	83.0	1.69	43.0	1.25	31.7	1.62	41.2	0.90	0.41	50
4005-1616	JB40OFS-16-16	1-7/16-12	1	25.4	3.62	92.0	1.77	45.0	1.37	34.9	1.62	41.2	1.17	0.53	36
4005-2016	JB40OFS-20-16	1-11/16-12	1	25.4	3.15	80.0	1.30	33.0	1.37	34.9	1.87	47.6	1.65	0.75	15
4005-1620	JB40OFS-16-20	1-7/16-12	1-1/4	31.8	3.58	91.0	1.73	44.0	1.75	44.4	1.62	41.2	1.92	0.87	15
4005-2020	JB40OFS-20-20	1-11/16-12	1-1/4	31.8	3.39	86.0	1.54	39.0	1.75	44.4	1.87	47.6	2.05	0.93	15
4005-2420	JB40OFS-24-20	2-12	1-1/4	31.8	3.46	88.0	1.61	41.0	1.75	44.4	2.25	57.1	2.40	1.09	12
4005-2424	JB40OFS-24-24	2-12	1-1/2	38.1	3.94	100.0	1.61	41.0	1.87	47.6	2.25	57.1	2.61	1.18	12

*Standard Pack is 1.

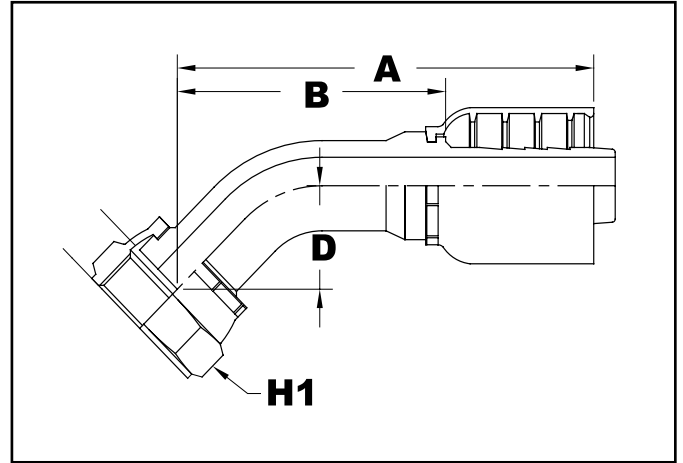
We disclaim any liability for use of our products in applications other than which they are designed.

⚠ WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 40/JB40

4007 SERIES

**JB40OFS45 SERIES
Female O-Ring Face Seal
45° Elbow**



HYDRAULIC COUPLINGS - 40/JB40

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4007-0606	JB40OFS45-06-06	11/16-16	3/8	9.5	2.72	69.0	1.61	41.0	0.63	16.0	0.81	20.6	0.24	0.11	110
4007-0806	JB40OFS45-08-06	13/16-16	3/8	9.5	2.76	70.0	1.69	43.0	0.71	18.0	0.94	23.8	0.29	0.13	100
4007-0608	JB40OFS45-06-08	11/16-16	1/2	12.7	3.15	80.0	1.89	48.0	0.71	18.0	0.81	20.6	0.31	0.14	110
4007-0808	JB40OFS45-08-08	13/16-16	1/2	12.7	3.66	93.0	1.97	50.0	0.79	20.0	0.94	23.8	0.39	0.18	70
4007-1012	JB40OFS45-10-12	1-14	3/4	19.1	4.61	117.0	2.99	76.0	1.14	29.0	1.12	28.5	0.68	0.31	32
4007-1212	JB40OFS45-12-12	1-3/16-12	3/4	19.1	4.57	116.0	2.95	75.0	1.10	28.0	1.37	34.9	0.96	0.44	32
4007-1612	JB40OFS45-16-12	1-7/16-12	3/4	19.1	4.57	116.0	2.95	75.0	1.10	28.0	1.62	41.2	1.06	0.48	32
4007-1616	JB40OFS45-16-16	1-7/16-12	1	25.4	4.84	123.0	2.99	76.0	1.18	30.0	1.62	41.2	1.37	0.62	10
4007-2016	JB40OFS45-20-16	1-11/16-12	1	25.4	4.96	126.0	3.11	79.0	1.30	33.0	1.87	47.6	2.09	0.95	10
4007-1620	JB40OFS45-16-20	1-7/16-12	1-1/4	31.8	5.79	147.0	3.94	100.0	1.46	37.0	1.87	47.6	2.23	1.01	10
4007-2020	JB40OFS45-20-20	1-11/16-12	1-1/4	31.8	5.91	150.0	4.06	103.0	1.57	40.0	1.87	47.6	2.44	1.11	10
4007-2420	JB40OFS45-24-20	2-12	1-1/4	31.8	5.94	151.0	4.09	104.0	1.61	41.0	2.25	57.1	2.32	1.05	7
4007-2424	JB40OFS45-24-24	2-12	1-1/2	38.1	6.85	174.0	4.49	114.0	1.77	45.0	2.25	57.1	2.58	1.17	7

*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

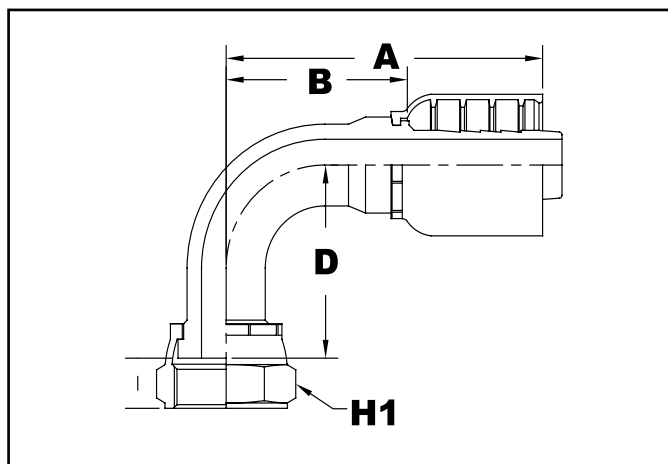
⚠ WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40OFS90 SERIES

Female O-Ring Face Seal

90° Elbow

4009 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4009-0606	JB40OFS90-06-06	11/16-18	3/8	9.5	2.76	70.0	1.65	42.0	1.02	26.0	0.81	20.6	0.24	0.11	110
4009-0806	JB40OFS90-08-06	13/16-16	3/8	9.5	2.76	70.0	1.65	42.0	1.10	28.0	0.94	23.8	0.31	0.14	100
4009-0608	JB40OFS90-06-08	11/16-16	1/2	12.7	2.80	71.0	1.50	38.0	1.10	28.0	0.81	20.6	0.29	0.13	110
4009-0808	JB40OFS90-08-08	13/16-16	1/2	12.7	2.80	71.0	1.50	38.0	1.18	30.0	0.94	23.8	0.39	0.18	70
4009-1012	JB40OFS90-10-12	1-14	3/4	19.1	4.02	102.0	2.40	61.0	1.97	50.0	1.12	28.5	0.46	0.21	32
4009-1212	JB40OFS90-12-12	1-3/16-12	3/4	19.1	4.02	102.0	2.40	61.0	1.93	49.0	1.37	34.9	1.05	0.48	32
4009-1616	JB40OFS90-16-16	1-7/16-12	1	25.4	5.04	128.0	3.19	81.0	2.24	57.0	1.62	41.2	1.59	0.72	10
4009-2016	JB40OFS90-20-16	1-11/16-12	1	25.4	5.04	128.0	3.19	81.0	2.36	60.0	1.87	47.6	2.58	1.17	10
4009-1620	JB40OFS90-16-20	1-7/16-12	1-1/4	31.8	5.51	140.0	3.66	93.0	2.91	74.0	1.62	41.2	2.54	1.15	10
4009-2020	JB40OFS90-20-20	1-11/16-12	1-1/4	31.8	5.51	140.0	3.66	93.0	3.03	77.0	1.87	47.6	2.69	1.22	10
4009-2420	JB40OFS90-24-20	2-12	1-1/4	31.8	5.51	140.0	3.66	93.0	3.03	77.0	2.25	57.1	3.20	1.45	7
4009-2424	JB40OFS90-24-24	2-12	1-1/2	38.1	5.94	151.0	3.58	91.0	3.15	80.0	2.25	57.1	3.48	1.58	7

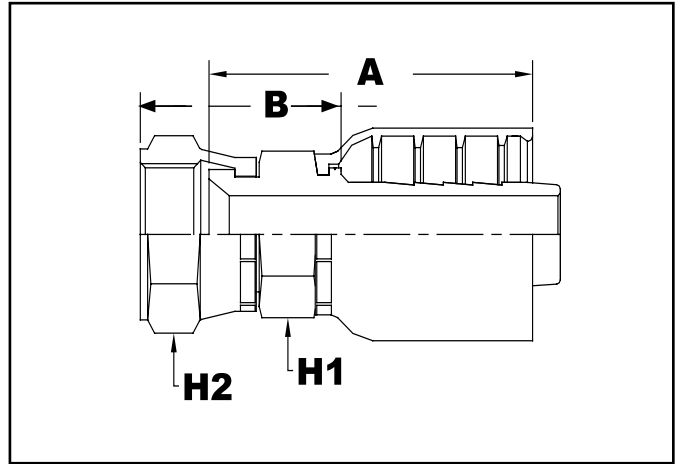
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

⚠ WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4010 SERIES

**JB40FA SERIES
Female Swivel SAE 45° Flare**



HYDRAULIC COUPLINGS - 40/JB40

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
									H1		H2				
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
4010-0606	JB40FA-06-06	5/8-18	3/8	9.5	2.01	51.0	0.91	23.0	0.69	17.4	0.69	17.4	0.24	0.11	130
4010-0808	JB40FA-08-08	3/4-16	1/2	12.7	2.17	55.0	0.91	23.0	0.87	22.2	0.87	22.2	0.33	0.15	100
4010-1010	JB40FA-10-10	7/8-16	5/8	15.9	2.52	64.0	0.98	25.0	0.87	22.2	1.00	25.4	0.44	0.20	70
4010-1212	JB40FA-12-12	1-1/16-14	3/4	19.1	2.64	67.0	1.06	27.0	1.06	26.9	1.25	31.7	0.60	0.27	50
4010-1616	JB40FA-16-16	1-5/16-12	1	25.4	3.15	80.0	1.30	33.0	1.50	38.1	1.37	34.9	1.06	0.48	36

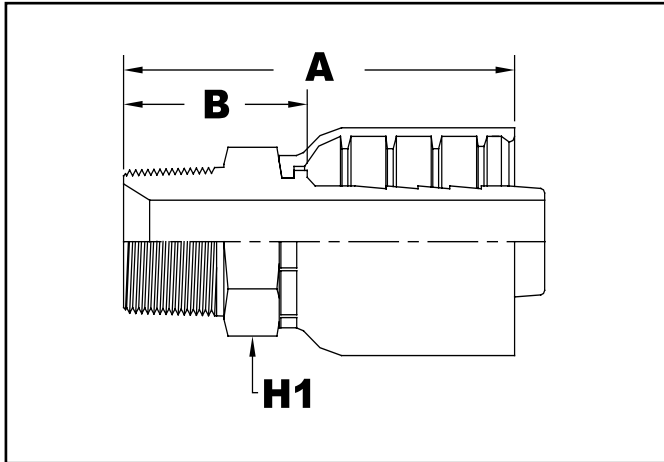
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40MP SERIES
Male Pipe Rigid NPTF

4020 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
4020-0606	JB40MP-06-06	3/8-18	3/8	9.5	2.20	56.0	1.14	29.0	0.69	17.4	0.21	0.10	130
4020-0806	JB40MP-08-06	1/2-14	3/8	9.5	2.38	60.5	1.28	32.5	0.87	22.2	0.27	0.12	100
4020-0608	JB40MP-06-08	3/8-18	1/2	12.7	2.35	59.8	1.06	26.8	0.87	22.2	0.24	0.11	100
4020-0808	JB40MP-08-08	1/2-14	1/2	12.7	2.52	64.0	1.30	33.0	0.87	22.2	0.32	0.15	100
4020-1208	JB40MP-12-08	3/4-14	1/2	12.7	2.48	63.0	1.26	32.0	1.06	26.9	0.40	0.18	100
4020-1212	JB40MP-12-12	3/4-14	3/4	19.1	2.91	74.0	1.26	35.0	1.06	26.9	0.55	0.25	50
4020-1612	JB40MP-16-12	1-11.5	3/4	19.1	3.11	79.0	1.38	40.0	1.37	34.9	0.68	0.31	50
4020-1616	JB40MP-16-16	1-11.5	1	25.4	3.43	87.0	1.57	41.0	1.37	34.9	0.96	0.44	36
4020-2016	JB40MP-20-16	1-1/4-11.5	1	25.4	3.78	96.0	1.61	49.0	1.69	42.8	1.21	0.55	36
4020-2020	JB40MP-20-20	1-1/4-11.5	1-1/4	31.8	3.78	96.0	1.93	49.0	1.69	42.8	1.35	0.61	15
4020-2424	JB40MP-24-24	1-1/2-11.5	1-1/2	38.1	4.29	109.0	1.93	50.0	2.00	50.8	2.16	0.98	15
4020-3232	JB40MP-32-32	2-11.5	2	50.8	5.08	129.0	2.28	58.0	2.50	63.5	3.79	1.72	8

*Standard Pack is 1.

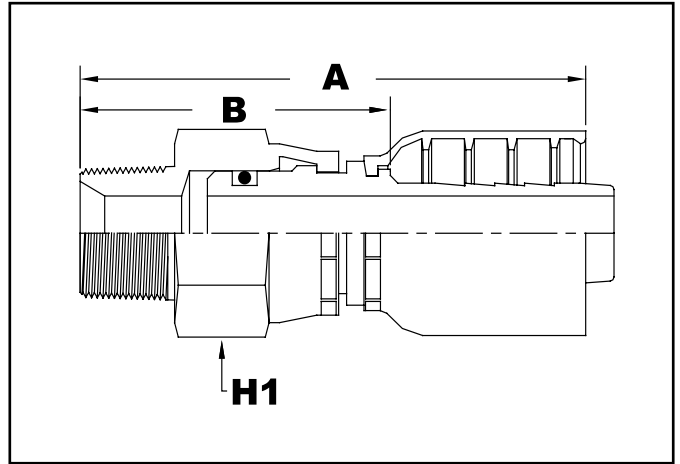
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 40/JB40

4023 SERIES

**JB40MS SERIES
Male Pipe Swivel NPTF**



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
4023-0606	JB40MS-06-06	3/8-18	3/8	9.5	2.64	67.0	1.73	44.0	0.87	22.2	0.31	0.14	130
4023-0808	JB40MS-08-08	1/2-14	1/2	12.7	3.15	80.0	1.93	49.0	1.00	25.4	0.42	0.19	100
4023-1208	JB40MS-12-08	3/4-14	1/2	12.7	3.62	92.0	2.40	61.0	1.37	34.9	0.86	0.39	100
4023-1212	JB40MS-12-12	3/4-14	3/4	19.1	3.94	100.0	2.40	61.0	1.37	34.9	0.99	0.45	50
4023-1612	JB40MS-16-12	1-11.5	3/4	19.1	4.41	112.0	2.40	73.0	1.50	38.1	1.21	0.55	50
4023-1616	JB40MS-16-16	1-11.5	1	25.4	4.65	118.0	2.87	73.0	1.50	38.1	1.28	0.58	36

Note: Not for use as a live swivel. For installation only.

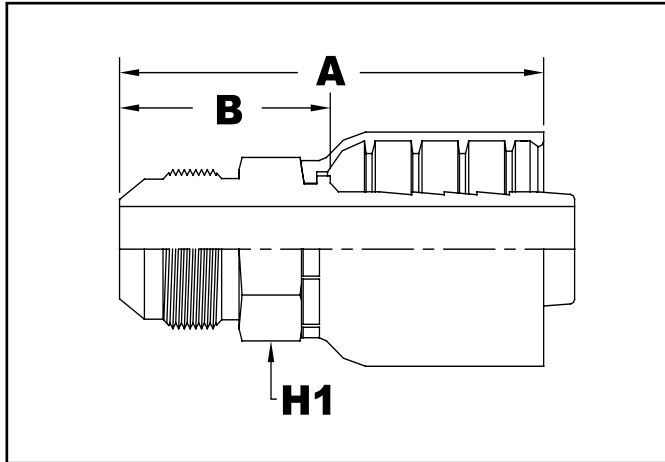
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40MJ SERIES
Male JIC 37°

4025 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4025-0606	JB40MJ-06-06	9/16-18	3/8	9.5	2.13	54.0	1.06	27.0	0.75	19.0	0.23	0.10	130
4025-0806	JB40MJ-08-06	3/4-16	3/8	9.5	2.28	58.0	1.18	30.0	0.87	22.2	0.24	0.11	130
4025-0808	JB40MJ-08-08	3/4-16	1/2	12.7	2.40	61.0	1.18	30.0	0.87	22.2	0.32	0.15	100
4025-1008	JB40MJ-10-08	7/8-14	1/2	12.7	2.48	63.0	1.26	32.0	1.00	25.4	0.32	0.15	80
4025-1208	JB40MJ-12-08	1-1/16-12	1/2	12.7	2.72	69.0	1.50	38.0	1.12	28.5	0.42	0.19	50
4025-1212	JB40MJ-12-12	1-1/16-12	3/4	19.1	3.11	79.0	1.54	39.0	1.12	28.5	0.55	0.25	50
4025-1412	JB40MJ-14-12	1-3/16-12	3/4	19.1	3.11	79.0	1.57	40.0	1.25	31.7	0.60	0.27	50
4025-1616	JB40MJ-16-16	1-5/16-12	1	25.4	3.43	87.0	1.57	40.0	1.37	34.9	0.96	0.44	36
4025-2016	JB40MJ-20-16	1-5/8-12	1	25.4	3.37	85.6	1.73	44.0	1.87	47.6	1.21	0.55	15
4025-2020	JB40MJ-20-20	1-5/8-12	1-1/4	31.8	3.86	98.0	1.89	48.0	2.00	50.8	1.61	0.73	15

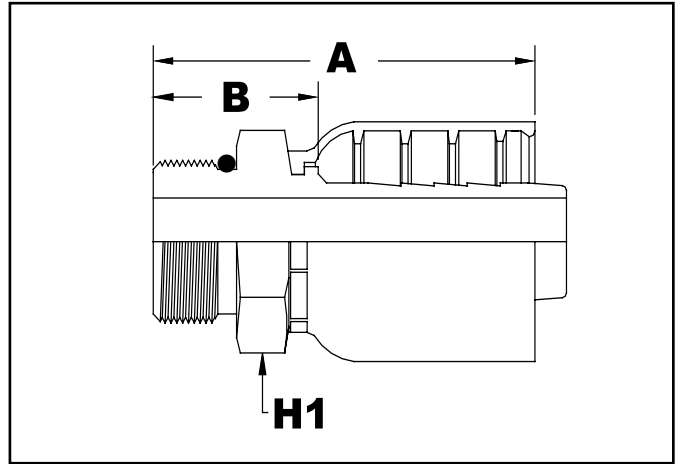
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4027 SERIES

**JB400B SERIES
Male O-Ring Boss**



HYDRAULIC COUPLINGS - 40/JB40

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
4027-0606	JB400B-06-06	9/16-18	3/8	9.5	2.09	53.0	0.91	23.0	0.87	22.2	0.20	0.09	130
4027-0806	JB400B-08-06	3/4-16	3/8	9.5	2.09	53.0	0.98	25.0	0.87	22.2	0.24	0.11	130
4027-0808	JB400B-08-08	3/4-16	1/2	12.7	2.28	58.0	1.06	27.0	1.06	26.9	0.28	0.13	100
4027-1008	JB400B-10-08	7/8-14	1/2	12.7	2.32	59.0	0.91	23.0	1.50	38.1	0.35	0.16	80
4027-1010	JB400B-10-10	7/8-14	5/8	15.9	2.60	66.0	0.91	23.0	0.87	22.2	0.39	0.18	70
4027-1210	JB400B-12-10	1-1/16-12	5/8	15.9	2.76	70.0	0.98	25.0	0.87	22.2	0.51	0.23	36
4027-1212	JB400B-12-12	1-1/16-12	3/4	19.1	2.80	71.0	1.06	27.0	1.06	26.9	0.53	0.24	36
4027-1412	JB400B-14-12	1-3/16-12	3/4	19.1	2.91	74.0	1.30	33.0	1.50	38.1	0.55	0.25	36
4027-1616	JB400B-16-16	1-5/16-12	1	25.4	3.15	80.0	1.30	33.0	1.50	38.1	0.93	0.42	36

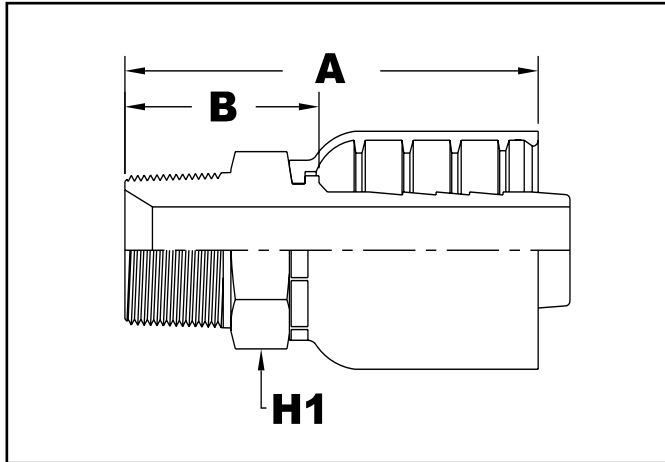
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40JISMP SERIES
Male JIS/BSP Taper Rigid Pipe

4030 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
4030-0606	JB40JISMP-06-06	3/8-19	3/8	9.5	2.17	55.0	1.06	27.0	0.87	22.0	0.24	0.11	130
4030-0806	JB40JISMP-08-06	1/2-14	3/8	9.5	2.32	59.0	1.22	31.0	1.06	27.0	0.29	0.13	100
4030-0608	JB40JISMP-06-08	3/8-19	1/2	12.7	2.36	60.0	1.10	28.0	1.06	27.0	0.31	0.14	100
4030-0808	JB40JISMP-08-08	1/2-14	1/2	12.7	2.48	63.0	1.22	31.0	1.06	27.0	0.33	0.15	80
4030-1208	JB40JISMP-12-08	3/4-14	1/2	12.7	2.56	65.0	1.30	33.0	1.26	32.0	0.60	0.27	100
4030-0812	JB40JISMP-08-12	1/2-14	3/4	19.1	2.76	70.0	1.22	31.0	1.26	32.0	0.55	0.25	80
4030-1212	JB40JISMP-12-12	3/4-14	3/4	19.1	2.99	76.0	1.42	36.0	1.26	32.0	0.73	0.33	50
4030-1612	JB40JISMP-16-12	1-11	3/4	19.1	3.07	78.0	1.54	39.0	1.42	36.0	0.90	0.41	50
4030-1216	JB40JISMP-12-16	3/4-14	1	25.4	3.74	95.0	1.50	38.0	1.42	36.0	0.88	0.40	50
4030-1616	JB40JISMP-16-16	1-11	1	25.4	3.35	85.0	1.57	40.0	1.42	36.0	0.95	0.43	36
4030-1620	JB40JISMP-16-20	1-11	1-1/4	31.8	3.46	88.0	1.61	41.0	1.81	46.0	1.63	0.74	36
4030-2020	JB40JISMP-20-20	1-1/4-11	1-1/4	31.8	3.70	94.0	1.85	47.0	1.81	46.0	1.79	0.81	15
4030-2424	JB40JISMP-24-24	1-1/2-11	1-1/2	38.1	3.98	101.0	2.09	53.0	2.36	60.0	2.23	1.01	15

*Standard Pack is 1.

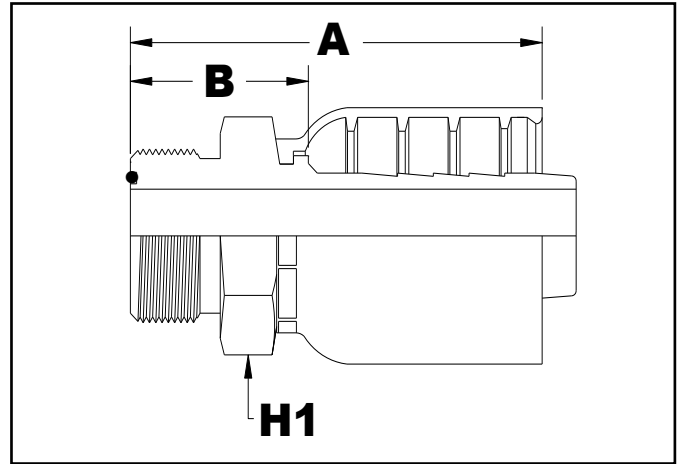
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4032 SERIES



**JB40MOFS SERIES
SAE MALE O-RING FACE SEAL**



Catalog Part Number	Descriptive Part Number	Thread	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
4032-1212	JB40MOFS-12-12	1-3/16-12	3/4	19.1	3/4	19.1	2.83	71.8	1.26	32.0	1.26	32	0.62	0.28	50
4032-1612	JB40MOFS-16-12	1-7/16-12	3/4	19.1	3/4	19.1	2.93	74.3	1.36	34.5	1.50	38	0.75	0.34	42
4032-1616	JB40MOFS-16-16	1-7/16-12	1	25.4	1	25.4	3.29	83.5	1.46	37.0	1.50	38	1.08	0.49	36

*Standard Pack is 1.

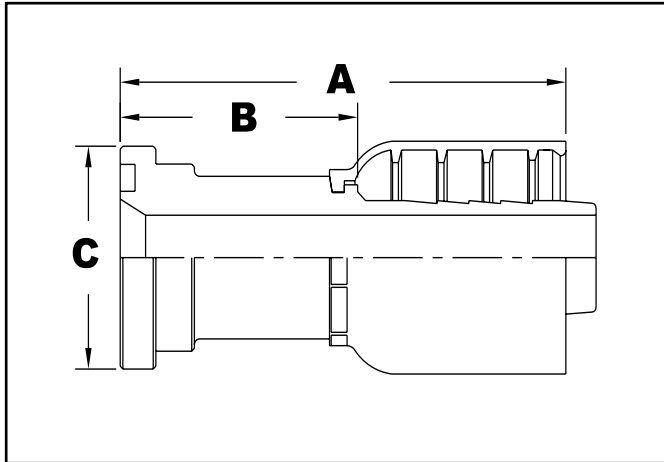
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 40/JB40

JB40C61S SERIES
SAE Code 61 Flange - Straight

4034 SERIES



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4034-1212	JB40C61S-12-12	3/4	19.1	3/4	19.1	3.35	85.0	1.77	45.0	1.50	38.1	0.68	0.31	50
4034-1612	JB40C61S-16-12	1	25.4	3/4	19.1	3.19	81.0	1.61	41.0	1.75	44.4	0.90	0.41	50
4034-1616	JB40C61S-16-16	1	25.4	1	25.4	4.06	103.0	2.20	56.0	1.75	44.4	1.18	0.54	36
4034-2016	JB40C61S-20-16	1-1/4	31.8	1	25.4	3.98	101.0	2.13	54.0	2.00	50.8	1.71	0.76	36
4034-2020	JB40C61S-20-20	1-1/4	31.8	1-1/4	31.8	4.33	110.0	2.48	63.0	2.00	50.8	1.92	0.87	15
4034-2420	JB40C61S-24-20	1-1/2	38.1	1-1/4	31.8	4.57	116.0	2.72	69.0	2.37	60.3	2.11	0.96	15
4034-2424	JB40C61S-24-24	1-1/2	38.1	1-1/2	38.1	5.16	131.0	2.83	72.0	2.37	60.3	2.45	1.11	15
4034-3224	JB40C61S-32-24	2	50.8	1-1/2	38.1	5.43	138.0	3.11	79.0	2.81	71.4	3.59	1.63	12
4034-3232	JB40C61S-32-32	2	50.8	2	50.8	5.91	150.0	3.11	79.0	2.81	71.4	4.19	1.90	8

*Standard Pack is 1.

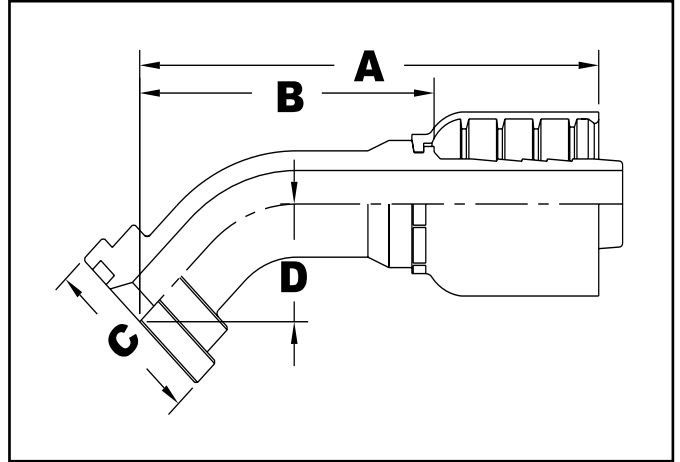
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 40/JB40

4036 SERIES

JB40C6145 SERIES
SAE Code 61 Flange - 45° Elbow



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4036-0808	JB40C6145-08-08	1/2	12.7	1/2	12.7	3.19	81.0	1.89	48.0	0.75	19.0	1.19	30.1	0.36	0.16	80
4036-1208	JB40C6145-12-08	3/4	19.1	1/2	12.7	3.31	84.0	2.01	51.0	0.87	22.0	1.50	38.1	0.52	0.24	80
4036-1212	JB40C6145-12-12	3/4	19.1	3/4	19.1	4.61	117.0	2.99	76.0	1.14	29.0	1.50	38.1	0.79	0.36	32
4036-1612	JB40C6145-16-12	1	25.4	3/4	19.1	4.61	117.0	2.99	76.0	1.14	29.0	1.75	44.4	0.82	0.37	32
4036-1616	JB40C6145-16-16	1	25.4	1	25.4	4.49	114.0	3.03	77.0	1.22	31.0	1.75	44.4	1.16	0.53	18
4036-2016	JB40C6145-20-16	1-1/4	31.8	1	25.4	4.49	114.0	3.03	77.0	1.22	31.0	2.00	50.8	1.33	0.60	18
4036-2020	JB40C6145-20-20	1-1/4	31.8	1-1/4	31.8	5.83	148.0	3.98	101.0	1.50	38.0	2.00	50.8	2.01	0.91	12
4036-2420	JB40C6145-24-20	1-1/2	38.1	1-1/4	31.8	5.91	150.0	4.06	103.0	1.57	40.0	2.37	60.3	2.15	0.98	12
4036-2424	JB40C6145-24-24	1-1/2	38.1	1-1/2	38.1	6.81	173.0	4.45	113.0	1.73	44.0	2.37	60.3	2.45	1.11	12
4036-3224	JB40C6145-32-24	2	50.8	1-1/2	38.1	6.81	173.0	4.45	113.0	1.73	44.0	2.81	71.4	2.49	1.13	10
4036-3232	JB40C6145-32-32	2	50.8	2	50.8	8.23	209.0	5.43	138.0	2.36	60.0	2.81	71.4	5.43	2.46	6

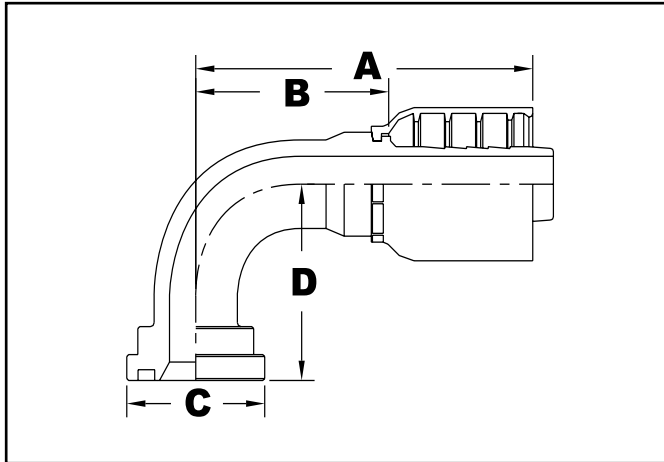
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

! **WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40C6190 SERIES
SAE Code 61 Flange - 90° Elbow

4039 SERIES



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4039-0808	JB40C6190-08-08	1/2	12.7	1/2	12.7	2.80	71.0	1.50	38.0	1.34	34.0	0.81	20.6	0.36	0.17	70
4039-1208	JB40C6190-12-08	3/4	19.1	1/2	12.7	2.80	71.0	1.50	38.0	1.38	35.0	1.50	38.1	0.81	0.37	70
4039-1608	JB40C6190-16-08	1	25.4	1/2	12.7	2.80	71.0	1.50	38.0	1.38	35.0	1.75	44.4	0.82	0.37	70
4039-1210	JB40C6190-12-10	3/4	19.1	5/8	15.9	2.83	72.0	1.65	42.0	1.65	42.0	1.50	38.1	0.85	0.39	32
4039-1212	JB40C6190-12-12	3/4	19.1	3/4	19.1	4.02	102.0	2.40	61.0	2.13	54.0	1.50	38.1	0.93	0.42	32
4039-1612	JB40C6190-16-12	1	25.4	3/4	19.1	4.02	102.0	2.40	61.0	2.13	54.0	1.75	44.4	0.90	0.41	32
4039-1616	JB40C6190-16-16	1	25.4	1	25.4	5.04	128.0	3.19	81.0	2.44	62.0	1.75	44.4	1.44	0.66	15
4039-2016	JB40C6190-20-16	1-1/4	31.8	1	25.4	5.04	128.0	3.19	81.0	2.44	62.0	2.00	50.8	1.48	0.67	15
4039-2020	JB40C6190-20-20	1-1/4	31.8	1-1/4	31.8	5.51	140.0	3.66	93.0	3.11	79.0	2.00	50.8	2.23	1.01	15
4039-2424	JB40C6190-24-24	1-1/2	38.1	1-1/2	38.1	5.94	151.0	3.58	91.0	3.27	83.0	2.37	60.3	2.62	1.19	10
4039-3224	JB40C6190-32-24	2	50.8	1-1/2	38.1	5.94	151.0	3.58	91.0	3.27	83.0	2.81	71.4	3.16	1.43	7
4039-3232	JB40C6190-32-32	2	50.8	2	50.8	8.11	206.0	5.31	135.0	5.16	131.0	2.81	71.4	6.33	2.87	6

*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

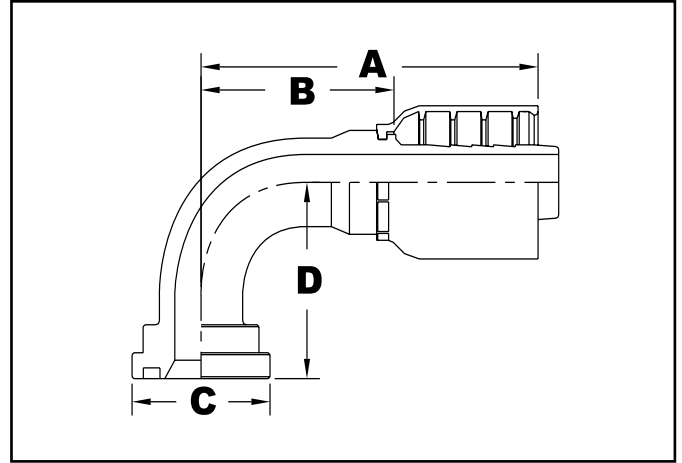
⚠ WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 40/JB40

4039L SERIES



**JB40C6190L SERIES
SAE Code 61 Flange
90° Elbow - Long Drop**



HYDRAULIC COUPLINGS - 40/JB40

Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length			"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty	
4039L-1212	JB40C6190L-12-12	3/4	19.1	3/4	19.1	4.02	102.0	2.40	61.0	61.0	5.1	130.0	1.50	38.1	1.13	0.51	20
4039L-1612	JB40C6190L-16-12	1	25.4	3/4	19.1	4.02	102.0	2.40	61.0	61.0	6.1	155.0	1.75	44.4	1.28	0.58	10
4039L-1616	JB40C6190L-16-16	1	25.4	1	25.4	5.04	128.0	3.19	81.0	81.0	6.1	155.0	1.75	44.4	1.61	0.73	10
4039L-2016	JB40C6190L-20-16	1-1/4	31.8	1	25.4	4.82	122.5	3.19	81.0	81.0	4.7	120.0	2.00	50.8	1.70	0.77	10
4039L-2020	JB40C6190L-20-20	1-1/4	31.8	1-1/4	31.8	5.51	140.0	3.66	93.0	93.0	6.6	168.0	2.00	50.8	2.54	1.15	7

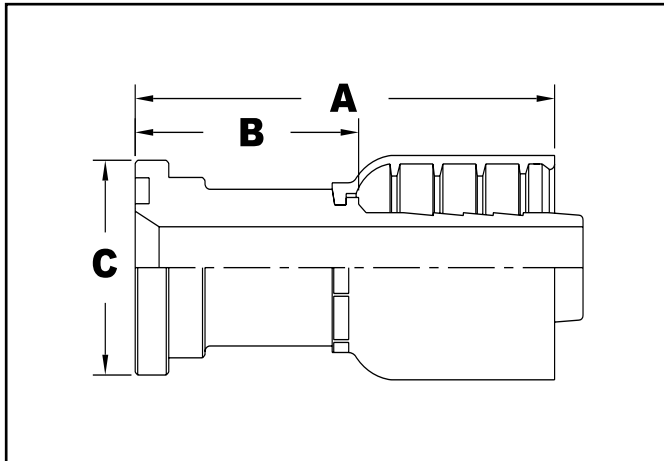
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40C62S SERIES
SAE Code 62 Flange - Straight

4041 SERIES



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4041-1212	JB40C62S-12-12	3/4	19.1	3/4	19.1	3.50	89.0	1.93	49.0	1.62	41.2	0.68	0.31	32
4041-1612	JB40C62S-16-12	1	25.4	3/4	19.1	3.94	100.0	2.36	60.0	1.87	47.6	1.05	0.47	32
4041-1616	JB40C62S-16-16	1	25.4	1	25.4	4.29	109.0	2.44	62.0	1.87	47.6	1.40	0.64	15
4041-2016	JB40C62S-20-16	1-1/4	31.8	1	25.4	4.37	111.0	2.91	74.0	2.12	53.9	1.73	0.79	10
4041-2020	JB40C62S-20-20	1-1/4	31.8	1-1/4	31.8	4.41	112.0	2.95	75.0	2.12	53.9	2.16	0.98	15
4041-2420	JB40C62S-24-20	1-1/2	38.1	1-1/4	31.8	4.41	112.0	2.95	75.0	2.50	63.5	2.62	1.19	15
4041-2424	JB40C62S-24-24	1-1/2	38.1	1-1/2	38.1	5.51	140.0	3.19	81.0	2.50	63.5	2.87	1.30	10
4041-3224	JB40C62S-32-24	2	50.8	1-1/2	38.1	6.30	160.0	3.98	101.0	3.12	79.3	5.84	2.65	7
4041-3232	JB40C62S-32-32	2	50.8	2	50.8	6.77	172.0	3.98	101.0	3.12	79.3	5.32	2.41	6

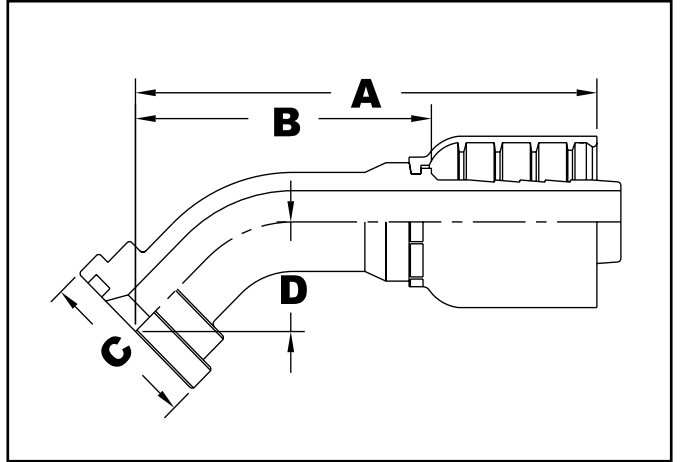
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4043 SERIES

**JB40C6245 SERIES
SAE Code 62 Flange - 45° Elbow**



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4043-1212	JB40C6245-12-12	3/4	19.1	3/4	19.1	4.72	120.0	3.11	79.0	1.26	32.0	1.62	41.2	0.88	0.40	32
4043-1616	JB40C6245-16-16	1	25.4	1	25.4	4.69	119.0	3.23	82.0	1.42	36.0	1.87	47.6	1.42	0.65	18
4043-2020	JB40C6245-20-20	1-1/4	31.8	1-1/4	31.8	6.14	156.0	4.29	109.0	1.81	46.0	2.12	53.9	2.29	1.04	12
4043-2424	JB40C6245-24-24	1-1/2	38.1	1-1/2	38.1	7.05	179.0	4.69	119.0	1.97	50.0	2.50	63.5	2.95	1.34	12
4043-3232	JB40C6245-32-32	2	50.8	2	50.8	8.82	224.0	6.02	153.0	2.95	75.0	3.12	79.3	6.54	2.97	6

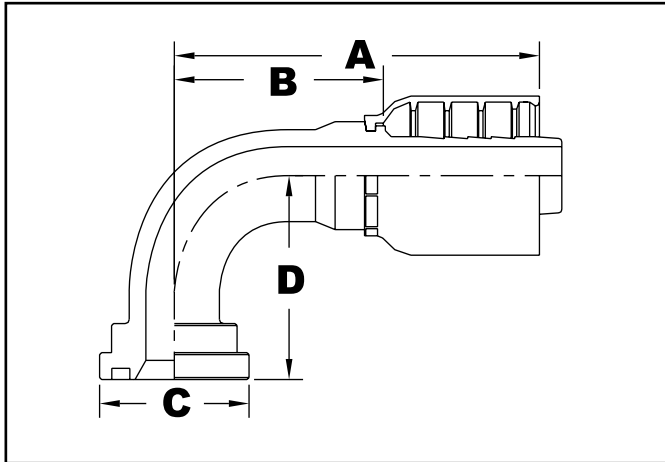
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40C6290 SERIES
SAE Code 62 Flange - 90° Elbow

4045 SERIES



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4045-1212	JB40C6290-12-12	3/4	19.1	3/4	19.1	3.98	101.0	3.11	79.0	2.28	58.0	1.62	41.2	0.90	0.41	32
4045-1616	JB40C6290-16-16	1	25.4	1	25.4	4.96	126.0	3.23	82.0	2.72	69.0	1.87	47.6	1.44	0.66	15
4045-2020	JB40C6290-20-20	1-1/4	31.8	1-1/4	31.8	5.51	140.0	4.29	109.0	3.54	90.0	2.12	53.9	2.49	1.13	15
4045-2424	JB40C6290-24-24	1-1/2	38.1	1-1/2	38.1	5.94	151.0	4.69	119.0	3.62	92.0	2.50	63.5	3.25	1.48	10
4045-3232	JB40C6290-32-32	2	50.8	2	50.8	8.11	206.0	6.02	153.0	6.02	153.0	3.12	79.3	7.52	3.41	6

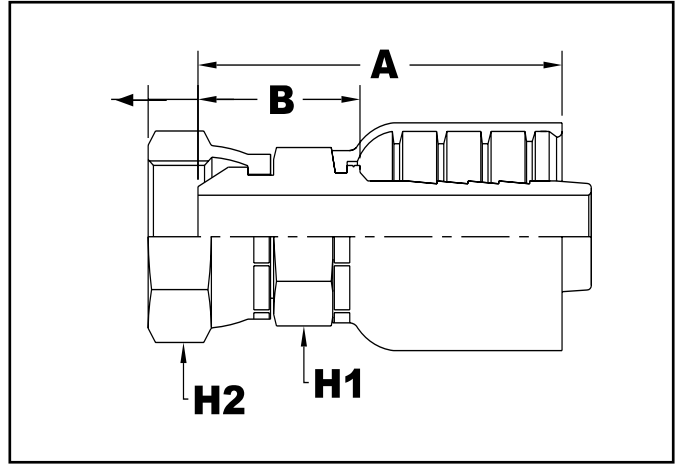
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

⚠ WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4048 SERIES

JB40FSPPBSP SERIES
Female Swivel BSP
Parallel Pipe - 30° Cone



HYDRAULIC COUPLINGS - 40/JB40

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	qty
									inch	mm	inch	mm			
4048-0606	JB40FSPPBSP-06-06	3/8-19	3/8	9.5	2.20	56.0	1.10	28.0	0.75	19.0	0.87	22.0	0.28	0.13	130
4048-0808	JB40FSPPBSP-08-06	1/2-14	1/2	12.7	2.40	61.0	1.14	29.0	0.87	22.0	1.06	27.0	0.39	0.18	80
4048-1010	JB40FSPPBSP-10-10	5/8-14	5/8	15.9	2.68	68.0	1.14	29.0	1.06	27.0	1.06	27.0	0.50	0.23	70
4048-1212	JB40FSPPBSP-12-12	3/4-14	3/4	19.1	2.83	72.0	1.26	32.0	1.06	27.0	1.26	32.0	0.65	0.30	50
4048-1616	JB40FSPPBSP-16-16	1-11	1	25.4	3.27	83.0	1.42	36.0	1.42	36.0	1.61	41.0	1.13	0.51	36
4048-2020	JB40FSPPBSP-20-20	1-1/4-11	1-1/4	31.8	3.66	93.0	1.81	46.0	1.81	46.0	1.97	50.0	1.68	0.76	15
4048-2424	JB40FSPPBSP-24-24	1-1/2-11	1-1/2	38.1	4.09	104.0	1.77	45.0	2.17	55.0	2.17	55.0	2.47	1.12	15
4048-3232	JB40FSPPBSP-32-32	2-11	2	50.8	5.12	130.0	2.32	59.0	2.50	63.5	2.76	70.0	4.70	2.13	8

Please note that 4048 Series will replace 4052 Series

*Standard Pack is 1.

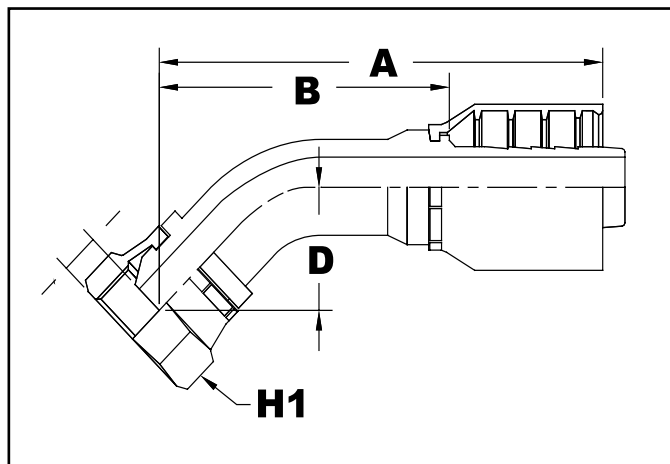
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4049 Series will replace 4054 Series

JB40FSPPBSP45 SERIES
Female Swivel BSP
Parallel Pipe - 45° Elbow - Metric

4049 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
4049-0606	JB40FSPPBSP45-06-06	3/8-19	3/8	9.5	2.83	72.0	1.73	44.0	0.75	19.0	0.87	22.0	0.26	0.12	130
4049-0808	JB40FSPPBSP45-08-08	1/2-14	1/2	12.7	3.35	85.0	2.05	52.0	0.91	23.0	1.06	27.0	0.37	0.17	80
4049-1010	JB40FSPPBSP45-10-10	5/8-14	5/8	15.9	3.66	93.0	2.09	53.0	0.83	21.0	1.06	27.0	0.55	0.25	70
4049-1212	JB40FSPPBSP45-12-12	3/4-14	3/4	19.1	4.65	118.0	3.03	77.0	1.18	30.0	1.26	32.0	0.93	0.42	32
4049-1616	JB40FSPPBSP45-16-16	1-11	1	25.4	5.00	127.0	3.15	80.0	1.73	44.0	1.61	41.0	1.51	0.68	18
4049-2020	JB40FSPPBSP45-20-20	1-1/4-11	1-1/4	31.8	6.02	153.0	4.17	106.0	1.65	42.0	1.97	50.0	1.92	0.87	12
4049-2424	JB40FSPPBSP45-24-24	1-1/2-11	1-1/2	38.1	6.93	176.0	4.57	116.0	1.89	48.0	2.17	55.0	3.48	1.58	12
4049-3232	JB40FSPPBSP45-32-32	2-11	2	50.8	8.46	215.0	5.67	144.0	2.60	66.0	2.76	70.0	6.68	3.03	6

Please note that 4049 Series will replace 4054 Series

*Standard Pack is 1.

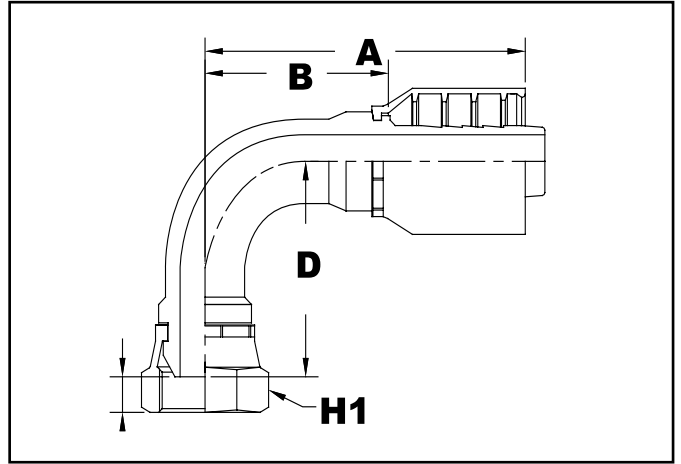
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4050 SERIES

4050 Series will replace 4056 Series

**JB40FSPPBSP90 SERIES
Female Swivel BSP Parallel Pipe
30° Cone - 90° Elbow - Metric**



HYDRAULIC COUPLINGS - 40/JB40

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4050-0606	JB40FSPPBSP90-06-06	3/8-19	3/8	9.5	2.76	70.0	1.65	42.0	1.26	32.0	0.87	22.0	0.29	0.13	100
4050-0808	JB40FSPPBSP90-08-08	1/2-14	1/2	12.7	2.80	71.0	1.50	38.0	1.38	35.0	1.06	27.0	0.41	0.19	70
4050-1212	JB40FSPPBSP90-12-12	3/4-14	3/4	19.1	4.02	102.0	2.40	61.0	2.13	54.0	1.26	32.0	0.94	0.43	32
4050-1616	JB40FSPPBSP90-16-16	1-11	1	25.4	5.04	128.0	3.19	81.0	2.56	65.0	1.61	41.0	1.73	0.78	15
4050-2020	JB40FSPPBSP90-20-20	1-1/4-11	1-1/4	31.8	5.51	140.0	3.66	93.0	3.39	86.0	1.97	50.0	2.76	1.25	15

Please note that 4050 Series will replace 4056 Series

*Standard Pack is 1.

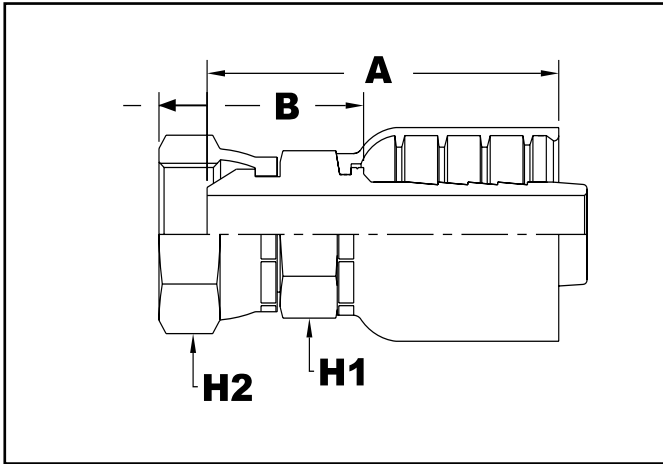
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4052 Series will be replaced by 4048 Series

JB40FSPPJIS SERIES
Female Swivel JIS
Parallel Pipe - 30° Cone - Metric

4052 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	qty
4052-0606	JB40FSPPJIS-06-06	3/8-19	3/8	9.5	2.09	53.0	0.98	25.0	0.87	22.0	0.87	22.0	0.28	0.13	130
4052-0806	JB40FSPPJIS-08-06	1/2-14	3/8	9.5	2.09	53.0	0.98	25.0	1.06	27.0	1.06	27.0	0.33	0.15	100
4052-0808	JB40FSPPJIS-08-08	1/2-14	1/2	12.7	2.28	58.0	1.02	26.0	1.06	27.0	1.06	27.0	0.40	0.18	80
4052-1212	JB40FSPPJIS-12-12	3/4-14	3/4	19.1	2.80	71.0	1.22	31.0	1.26	32.0	1.42	36.0	0.74	0.33	50
4052-1616	JB40FSPPJIS-16-16	1-11	1	25.4	3.23	82.0	1.38	35.0	1.42	36.0	1.61	41.0	1.13	0.51	36
4052-2020	JB40FSPPJIS-20-20	1-1/4-11	1-1/4	31.8	3.50	89.0	1.65	42.0	1.81	46.0	1.97	50.0	1.68	0.76	15
4052-2424	JB40FSPPJIS-24-24	1-1/2-11	1-1/2	38.1	4.09	104.0	1.77	45.0	2.17	55.0	2.17	55.0	2.47	1.12	15
4052-3232	JB40FSPPJIS-32-32	2-11	2	50.2	5.12	130.0	2.32	59.0	2.36	60.0	2.87	73.0	4.81	2.18	8

Please note that 4052 Series will be replaced by 4048 Series

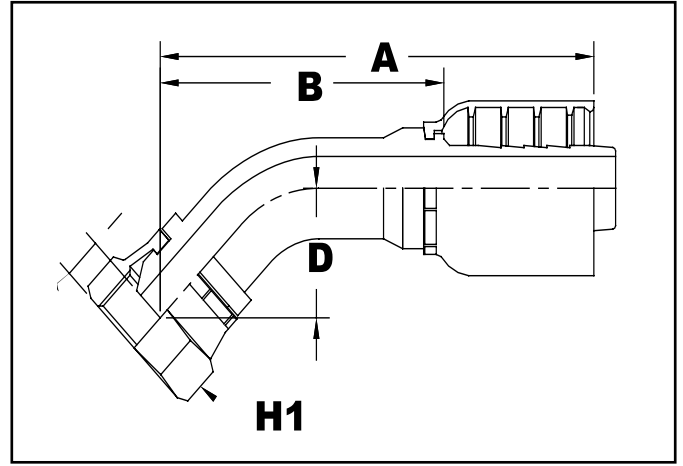
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

! WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4054 SERIES

JB40FSPPJIS45 SERIES
Female Swivel JIS Parallel Pipe
30° Cone - 45° Elbow - Metric



HYDRAULIC COUPLINGS - 40/JB40

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4054-0606	JB40FSPPJIS45-06-06	3/8-19	3/8	9.5	2.83	72.0	1.73	44.0	0.71	18.0	0.87	22	0.26	0.12	130
4054-0808	JB40FSPPJIS45-08-08	1/2-14	1/2	12.7	3.31	84.0	2.01	51.0	0.79	20.0	1.06	27	0.40	0.18	80
4054-1212	JB40FSPPJIS45-12-12	3/4-14	3/4	19.1	4.72	120.0	3.11	79.0	1.18	30.0	1.42	36	0.93	0.42	32
4054-1616	JB40FSPPJIS45-16-16	1-11	1	25.4	4.96	126.0	3.11	79.0	1.30	33.0	1.61	41	1.41	0.64	18
4054-2020	JB40FSPPJIS45-20-20	1-1/4-11	1-1/4	31.8	6.02	153.0	4.17	106.0	1.65	42.0	1.97	50	1.92	0.87	12
4054-2424	JB40FSPPJIS45-24-24	1-1/2-11	1-1/2	38.1	6.93	176.0	4.57	116.0	1.89	48.0	2.17	55	3.48	1.58	12
4054-3232	JB40FSPPJIS45-32-32	2-11	2	50.2	8.46	215.0	5.67	144.0	2.60	66.0	2.87	73	6.68	3.03	6

Please note that 4054 Series will be replaced by 4049 Series

*Standard Pack is 1.

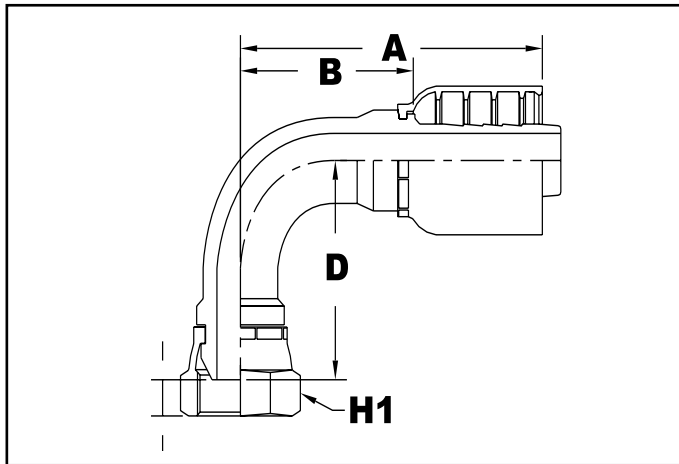
We disclaim any liability for use of our products in applications other than which they are designed.

! WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4056 Series will be replaced by 4050 Series

JB40FSPPJIS90 SERIES
Female Swivel JIS Parallel Pipe
30° Cone - 90° Elbow - Metric

4056 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
4056-0606	JB40FSPPJIS90-06-06	3/8-19	3/8	9.5	2.76	70.0	1.65	42.0	1.22	31.0	0.87	22	0.29	0.13	100
4056-0808	JB40FSPPJIS90-08-08	1/2-14	1/2	12.7	2.80	71.0	1.50	38.0	1.30	33.0	1.06	27	0.40	0.18	70
4056-1212	JB40FSPPJIS90-12-12	3/4-14	3/4	19.1	4.02	102.0	2.40	61.0	2.09	53.0	1.42	36	1.00	0.45	32
4056-1616	JB40FSPPJIS90-16-16	1-11	1	25.4	5.04	128.0	3.19	81.0	2.48	63.0	1.61	41	1.62	0.73	15
4056-2020	JB40FSPPJIS90-20-20	1-1/4-11	1-1/4	31.8	5.51	140.0	3.66	93.0	3.35	85.0	1.97	50	2.18	0.99	15
4056-2424	JB40FSPPJIS90-24-24	1-1/2-11	1-1/2	38.1	5.94	151.0	3.58	91.0	3.46	88.0	2.17	55	2.76	1.25	10
4056-3232	JB40FSPPJIS90-32-32	2-11	2	50.2	8.11	206.0	5.31	135.0	5.51	140.0	2.87	73	7.61	3.45	6

Please note that 4056 Series will be replaced by 4050 Series

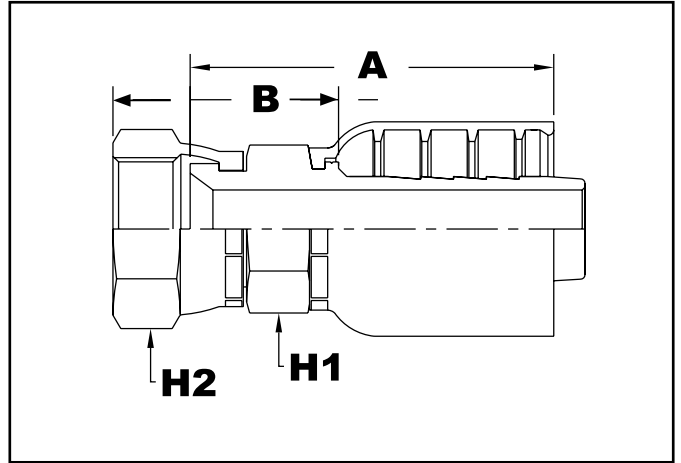
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4070 SERIES

**JB40KFSM SERIES
Komatsu Female Swivel
30° Flare - Metric**



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	qty
4070-1806	JB40KFSM-18-06	M18-1.5	3/8	9.5	2.01	51.0	0.91	23.0	0.87	22	0.94	24	0.31	0.14	130
4070-2208	JB40KFSM-22-08	M22-1.5	1/2	12.7	2.20	56.0	0.94	24.0	1.06	27	1.06	27	0.39	0.18	80
4070-2410	JB40KFSM-24-10	M24-1.5	5/8	15.9	2.76	70.0	1.22	31.0	1.06	27	1.26	32	0.57	0.26	60
4070-3012	JB40KFSM-30-12	M30-1.5	3/4	19.1	3.03	77.0	1.46	37.0	1.26	32	1.42	36	0.71	0.32	50
4070-3316	JB40KFSM-33-16	M33-1.5	1	25.4	3.19	81.0	1.34	34.0	1.42	36	1.61	41	1.25	0.57	8

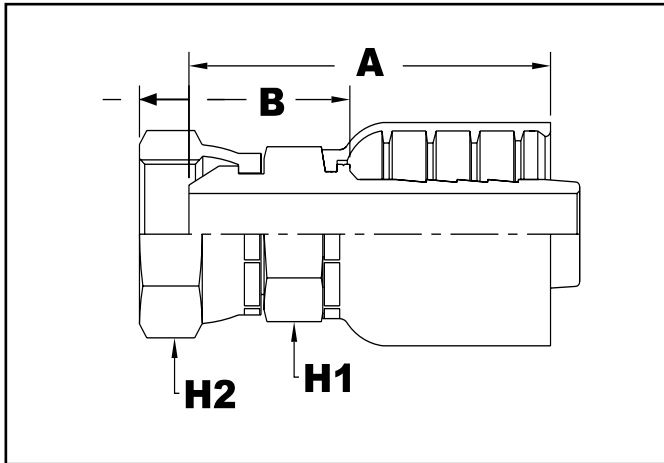
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40FSM SERIES
Female Swivel 60° Cone - Metric
DIN 3863

4071 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	
4071-2006	JB40FSM-20-06	M20-1.5	3/8	9.5	2.13	54.0	1.02	26.0	0.94	24	0.94	24	0.26	0.12	130
4071-2206	JB40FSM-22-06	M22-1.5	3/8	9.5	2.20	56.0	1.10	28.0	1.02	26	1.02	26	0.26	0.12	100
4071-2408	JB40FSM-24-08	M24-1.5	1/2	12.7	2.36	60.0	1.14	29.0	1.18	30	1.18	30	0.31	0.14	80
4071-3012	JB40FSM-30-12	M30-1.5	3/4	19.1	2.83	72.0	1.26	32.0	1.42	36	1.42	36	0.77	0.35	50
4071-3816	JB40FSM-38-16	M38-1.5	1	25.4	2.87	73.0	1.26	32.0	1.81	46	1.81	46	1.23	0.56	8
4071-4520	JB40FSM-45-20	M45-1.5	1-1/4	31.8	3.23	82.0	1.38	35.0	1.97	50	1.97	50	1.76	0.80	8

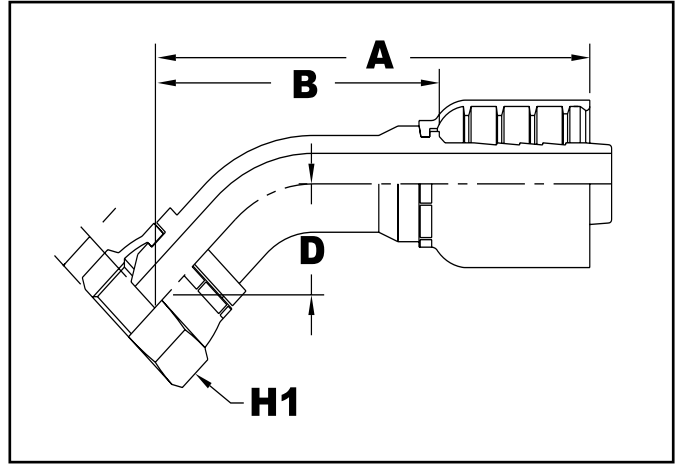
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4072 SERIES

**JB40FSM45 SERIES
Female Swivel 30° Cone
45° Elbow - Metric - DIN 3863**



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
4072-2006	JB40FSM45-20-06	M20-1.5	3/8	9.5	2.83	72.0	1.77	45.0	0.71	18.0	1.42	36.0	0.37	0.17	100
4072-2206	JB40FSM45-22-06	M22-1.5	3/8	9.5	2.91	74.0	1.85	47.0	0.79	20.0	1.42	36.0	0.37	0.17	100
4072-2408	JB40FSM45-24-08	M24-1.5	1/2	12.7	3.31	84.0	2.05	52.0	0.79	20.0	1.42	36.0	0.40	0.18	50
4072-3012	JB40FSM45-30-12	M30-1.5	3/4	19.1	4.72	120.0	3.15	80.0	1.18	30.0	1.42	36.0	0.95	0.43	32
4072-3816	JB40FSM45-38-16	M38-1.5	1	25.4	4.96	126.0	3.19	81.0	1.30	33.0	1.61	41.0	1.61	0.73	6
4072-4520	JB40FSM45-45-20	M45-1.5	1-1/4	31.8	6.02	153.0	4.17	106.0	1.65	42.0	1.97	50.0	2.76	1.25	6

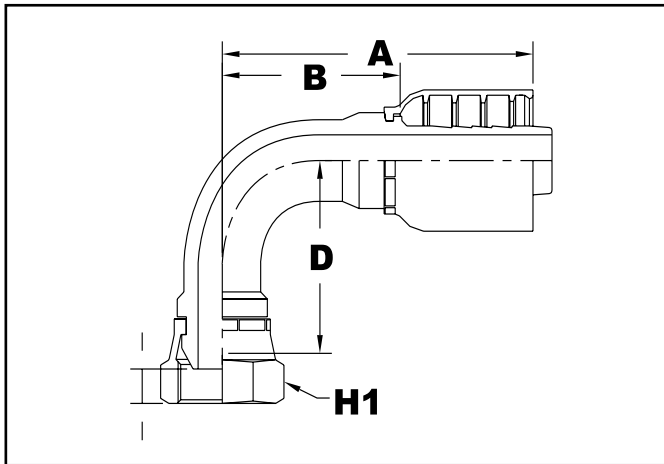
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

! **WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40FSM90 SERIES
Female Swivel 60° Cone
90° Elbow - Metric - DIN 3863

4073 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4073-2006	JB40FSM90-20-06	M20-1.5	3/8	9.5	2.76	70.0	1.69	43.0	1.22	31.0	1.42	36.0	0.20	0.09	100
4073-2206	JB40FSM90-22-06	M22-1.5	3/8	9.5	2.76	70.0	1.69	43.0	1.30	33.0	1.42	36.0	0.22	0.10	100
4073-2408	JB40FSM90-24-08	M24-1.5	1/2	12.7	2.80	71.0	1.54	39.0	1.30	33.0	1.42	36.0	0.26	0.12	50
4073-3012	JB40FSM90-30-12	M30-1.5	3/4	19.1	4.02	102.0	2.44	62.0	2.09	53.0	1.42	36.0	0.97	0.44	32
4073-3816	JB40FSM90-38-16	M38-1.5	1	25.4	5.04	128.0	3.27	83.0	2.48	63.0	1.61	41.0	1.87	0.85	6
4073-4520	JB40FSM90-45-20	M45-1.5	1-1/4	31.8	5.51	140.0	3.66	93.0	3.35	85.0	1.97	50.0	2.65	1.20	6

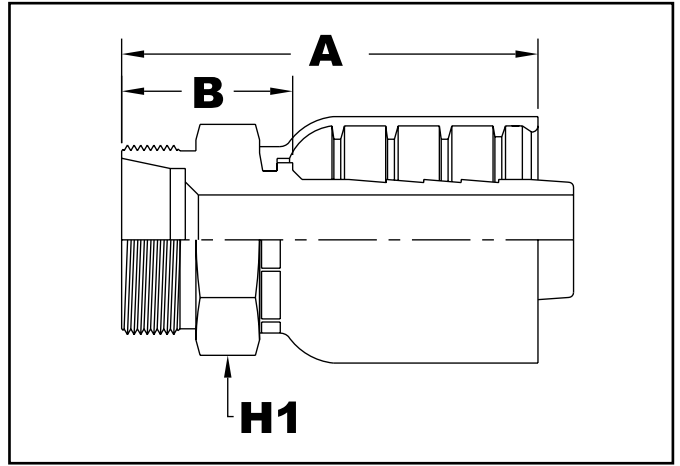
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4075 SERIES

**JB40MM SERIES
Male DIN 3853 - Metric**



HYDRAULIC COUPLINGS - 40/JB40

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4075-1806	JB40MM-18-06	M18-1.5	3/8	9.5	2.01	51.0	0.91	23.0	0.75	19.0	0.39	10	0.22	0.10	130
4075-2006	JB40MM-20-06	M20-1.5	3/8	9.5	2.01	51.0	0.91	23.0	0.87	22.0	0.47	12	0.24	0.11	130
4075-2206	JB40MM-22-06	M22-1.5	3/8	9.5	2.20	56.0	0.94	24.0	0.87	22.0	0.55	14	0.31	0.14	100
4075-2408	JB40MM-24-08	M24-1.5	1/2	12.7	2.24	57.0	0.98	25.0	1.18	30.0	0.63	16	0.33	0.15	80
4075-3010	JB40MM-30-10	M30-2.0	5/8	15.9	2.56	65.0	1.02	26.0	1.18	30.0	0.79	20	0.51	0.23	60
4075-3612	JB40MM-36-12	M36-2.0	3/4	19.1	2.72	69.0	1.14	29.0	1.42	36.0	0.98	25	0.73	0.33	36
4075-4216	JB40MM-42-16	M42-2.0	1	25.4	3.07	78.0	1.22	31.0	1.65	42.0	1.18	30	0.79	0.36	8
4075-5220	JB40MM-52-20	M52-2.0	1-1/4	31.8	3.46	88.0	1.61	41.0	2.17	55.0	1.50	38	1.08	0.49	8

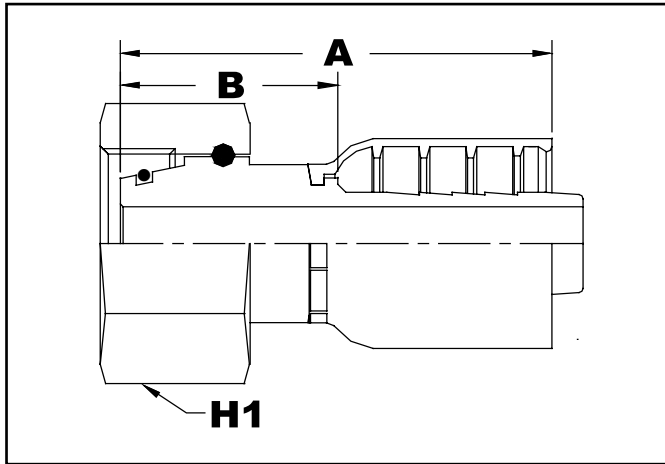
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40LFSORM SERIES
Female Swivel O-Ring
24° Cone - DIN 3865 L (Light)

4077 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4077-1606	JB40LFSORM-16-06	M16-1.5	3/8	9.5	2.36	60.0	1.26	32.0	0.75	19.0	0.39	10.0	0.29	0.13	130
4077-1806	JB40LFSORM-18-06	M18-1.5	3/8	9.5	2.32	59.0	1.22	31.0	0.87	22.0	0.47	12.0	0.31	0.14	130
4077-2208	JB40LFSORM-22-08	M22-1.5	1/2	12.7	2.64	67.0	1.38	35.0	1.06	27.0	0.59	15.0	0.35	0.16	80
4077-2610	JB40LFSORM-26-10	M26-1.5	5/8	15.9	3.07	78.0	1.54	39.0	1.26	32.0	0.71	18.0	0.42	0.19	60
4077-3012	JB40LFSORM-30-12	M30-2.0	3/4	19.1	3.19	81.0	1.61	41.0	1.42	36.0	0.87	22.0	0.73	0.33	50
4077-3616	JB40LFSORM-36-16	M36-2.0	1	25.4	3.66	93.0	1.81	46.0	1.61	41.0	1.10	28.0	1.26	0.57	8
4077-4520	JB40LFSORM-45-20	M45-2.0	1-1/4	31.8	4.02	102.0	2.17	55.0	1.97	50.0	1.38	35.0	1.76	0.80	8

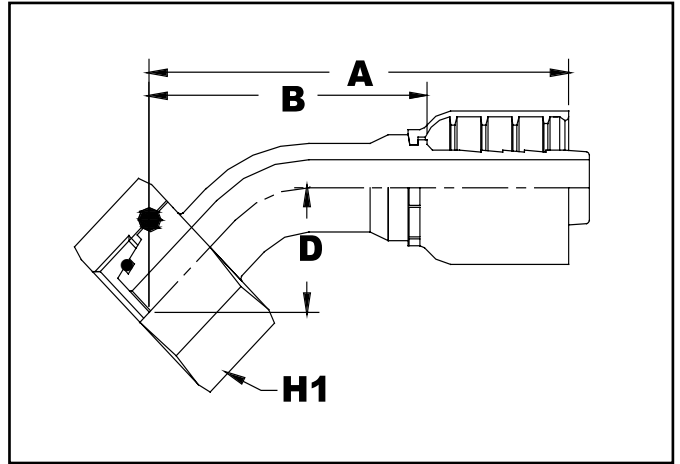
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4078 SERIES

JB40LFSORM45 SERIES
Female Swivel O-Ring - 24° Cone
DIN 3865 L (Light) - 45° Elbow



HYDRAULIC COUPLINGS - 40/JB40

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4078-1606	JB40LFSORM45-16-06	M16-1.5	3/8	9.5	2.91	74.0	1.81	46.0	0.83	21.0	0.75	19.0	0.39	10.0	0.29	0.13	100
4078-1806	JB40LFSORM45-18-06	M18-1.5	3/8	9.5	29.1	74.0	1.81	46.0	0.83	21.0	0.87	22.0	0.47	12.0	0.31	0.14	100
4078-2208	JB40LFSORM45-22-08	M22-1.5	1/2	12.7	3.46	88.0	2.17	55.0	1.10	28.0	1.06	27.0	0.59	15.0	0.33	0.15	50
4078-2610	JB40LFSORM45-26-10	M26-1.5	5/8	15.9	4.06	103.0	2.48	63.0	1.18	30.0	1.26	32.0	0.71	18.0	0.57	0.26	50
4078-2612	JB40LFSORM45-26-12	M26-1.5	3/4	19.1	4.96	126.0	3.35	85.0	1.50	38.0	1.26	32.0	0.71	18.0	0.60	0.27	32
4078-3012	JB40LFSORM45-30-12	M30-2.0	3/4	19.1	4.88	124.0	3.27	83.0	1.42	36.0	1.42	36.0	0.87	22.0	0.95	0.43	32
4078-3612	JB40LFSORM45-36-12	M36-2.0	3/4	19.1	4.88	124.0	3.27	83.0	1.42	36.0	1.61	41.0	1.10	28.0	1.04	0.47	36
4078-3616	JB40LFSORM45-36-16	M36-2.0	1	25.4	5.16	131.0	3.31	84.0	1.46	37.0	1.61	41.0	1.10	28.0	1.57	0.71	6
4078-4520	JB40LFSORM45-45-20	M45-2.0	1-1/4	31.8	6.18	157.0	4.33	110.0	1.85	47.0	1.97	50.0	1.38	35.0	2.80	1.27	6
4078-5224	JB40LFSORM45-52-24	M52-2.0	1-1/2	38.1	7.09	180.0	4.72	120.0	2.48	63.0	2.36	60.0	1.65	42.0	3.20	1.45	6

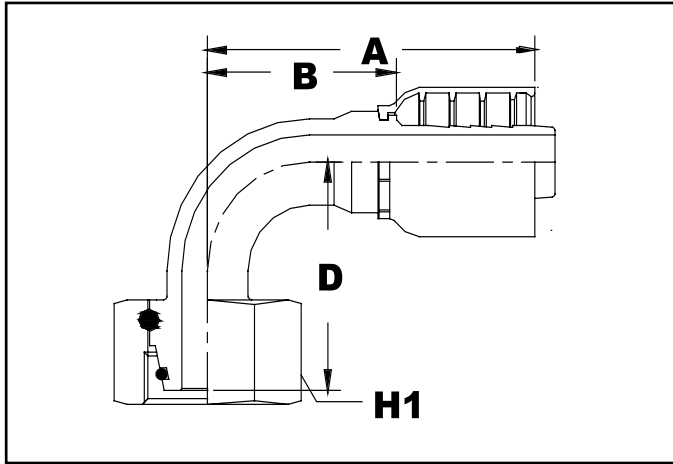
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40LFSORM90 SERIES
Female Swivel O-Ring
24° Cone - DIN 3865 L (Light) - 90° Elbow

4079 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4079-1606	JB40LFSORM90-16-06	M16-1.5	3/8	9.5	2.76	70.0	1.65	42.0	1.26	32.0	0.75	19.0	0.39	10.0	0.18	0.08	100
4079-1806	JB40LFSORM90-18-06	M18-1.5	3/8	9.5	2.76	70.0	1.65	42.0	1.30	33.0	0.87	22.0	0.47	12.0	0.20	0.09	100
4079-2208	JB40LFSORM90-22-08	M22-1.5	1/2	12.7	2.80	71.0	1.50	38.0	1.46	37.0	1.06	27.0	0.59	15.0	0.24	0.11	50
4079-2610	JB40LFSORM90-26-10	M26-1.5	5/8	15.9	2.83	72.0	1.65	42.0	2.01	51.0	1.26	32.0	0.71	18.0	0.84	0.38	50
4079-2612	JB40LFSORM90-26-12	M26-1.5	3/4	19.1	4.02	102.0	2.40	61.0	2.48	63.0	1.26	32.0	0.71	18.0	0.99	0.45	32
4079-3012	JB40LFSORM90-30-12	M30-2.0	3/4	19.1	4.02	102.0	2.40	61.0	2.40	61.0	1.42	36.0	0.87	22.0	1.10	0.50	32
4079-3612	JB40LFSORM90-36-12	M36-2.0	3/4	19.1	4.02	102.0	2.40	61.0	2.40	61.0	1.61	41.0	1.10	28.0	1.74	0.79	36
4079-3616	JB40LFSORM90-36-16	M36-2.0	1	25.4	5.04	128.0	3.19	81.0	2.68	68.0	1.61	41.0	1.10	28.0	1.92	0.87	3
4079-4520	JB40LFSORM90-45-20	M45-2.0	1-1/4	31.8	5.51	140.0	3.66	93.0	3.43	87.0	1.97	50.0	1.38	35.0	2.65	1.20	3
4079-5224	JB40LFSORM90-52-24	M52-2.0	1-1/2	38.1	5.94	151.0	3.58	91.0	3.58	91.0	2.36	60.0	1.65	42.0	3.66	1.66	3

*Standard Pack is 1.

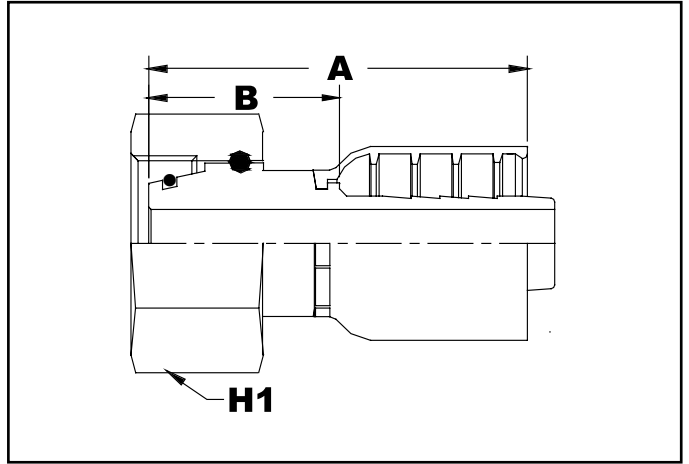
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 40/JB40

4080 SERIES

JB40FSORM SERIES
Female Swivel O-Ring - 24° Cone
DIN 3865 S (Standard)



HYDRAULIC COUPLINGS - 40/JB40

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4080-1806	JB40FSORM-18-06	M18-1.5	3/8	9.5	2.36	60.0	1.26	32.0	0.87	22.0	0.39	10.0	0.26	0.12	130
4080-2006	JB40FSORM-20-06	M20-1.5	3/8	9.5	2.36	60.0	1.26	32.0	0.94	24.0	0.47	12.0	0.31	0.14	100
4080-2206	JB40FSORM-22-06	M22-1.5	3/8	9.5	2.36	60.0	1.26	32.0	1.06	27.0	0.55	14.0	0.44	0.20	100
4080-2408	JB40FSORM-24-08	M24-1.5	1/2	12.7	2.64	67.0	1.38	35.0	1.18	30.0	0.63	16.0	0.45	0.21	80
4080-3010	JB40FSORM-30-10	M30-2.0	5/8	15.9	3.03	77.0	1.54	39.0	1.42	36.0	0.79	20.0	1.01	0.46	60
4080-3612	JB40FSORM-36-12	M36-2.0	3/4	19.1	3.15	80.0	1.61	41.0	1.61	41.0	0.98	25.0	1.02	0.46	36
4080-4216	JB40FSORM-42-16	M42-2.0	1	25.4	3.66	93.0	1.81	46.0	1.97	50.0	1.18	30.0	1.53	0.70	8
4080-5220	JB40FSORM-52-20	M52-2.0	1-1/4	31.8	4.02	102.0	2.17	55.0	2.36	60.0	1.50	38.0	2.13	0.97	8
4080-5224	JB40FSORM-52-24	M52-2.0	1-1/2	38.1	4.76	121.0	2.44	62.0	2.36	60.0	1.50	38.0	2.36	1.07	8

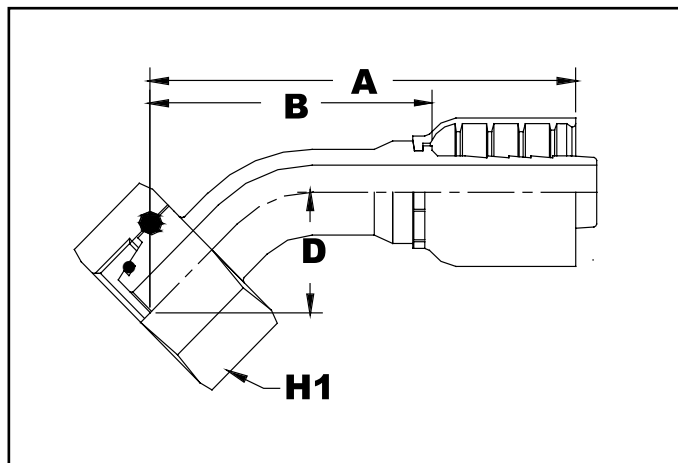
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB40FSORM45 SERIES
Female Swivel O-Ring - 24° Cone
DIN 3865 - S (Standard) - 45° Elbow

4081 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4081-1806	JB40FSORM45-18-06	M18-1.5	3/8	9.5	2.99	76.0	1.89	48.0	0.91	23.0	0.87	22.0	0.39	10.0	0.33	0.15	100
4081-2006	JB40FSORM45-20-06	M20-1.5	3/8	9.5	2.99	76.0	1.89	48.0	0.91	23.0	0.94	24.0	0.47	12.0	0.37	0.17	100
4081-2206	JB40FSORM45-22-06	M22-1.5	3/8	9.5	2.99	76.0	1.89	48.0	0.91	23.0	1.06	27.0	0.55	14.0	0.40	0.18	100
4081-2408	JB40FSORM45-24-08	M24-1.5	1/2	12.7	3.54	90.0	2.24	57.0	1.18	30.0	1.26	32.0	0.63	16.0	0.50	0.23	50
4081-3010	JB40FSORM45-30-10	M30-2.0	5/8	15.9	3.98	101.0	2.40	61.0	1.10	28.0	1.42	36.0	0.79	20.0	0.86	0.39	50
4081-3012	JB40FSORM45-30-12	M30-2.0	3/4	19.1	4.88	124.0	3.27	83.0	1.42	36.0	1.42	36.0	0.79	20.0	0.90	0.41	32
4081-3612	JB40FSORM45-36-12	M36-2.0	3/4	19.1	4.92	125.0	3.31	84.0	1.46	37.0	1.81	46.0	0.98	25.0	1.19	0.54	36
4081-3616	JB40FSORM45-36-16	M36-2.0	1	25.4	5.20	132.0	3.35	85.0	1.50	38.0	1.81	46.0	0.98	25.0	1.43	0.65	6
4081-4216	JB40FSORM45-42-16	M42-2.0	1	25.4	5.20	132.0	3.35	85.0	1.50	38.0	1.97	50.0	1.18	30.0	1.57	0.71	6
4081-5220	JB40FSORM45-52-20	M52-2.0	1-1/4	31.8	6.22	158.0	4.37	111.0	1.89	48.0	2.36	60.0	1.50	38.0	1.85	0.84	6
4081-5224	JB40FSORM45-52-24	M52-2.0	1-1/2	38.1	7.05	179.0	4.69	119.0	2.44	62.0	2.36	60.0	1.50	38.0	3.20	1.45	6

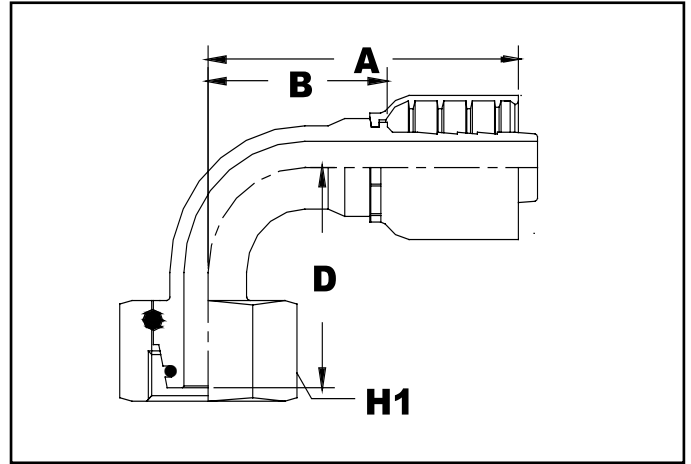
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

4082 SERIES

JB40FSORM SERIES
Female Swivel O-Ring - 24° Cone
DIN 3865 S (Standard) - 90° Elbow



HYDRAULIC COUPLINGS - 40/JB40

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size H1		Tube Outside Diameter		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
4082-1806	JB40FSORM90-18-06	M18-1.5	3/8	9.5	2.76	70.0	1.65	42.0	1.38	35.0	0.87	22.0	0.39	10.0	0.24	0.11	100
4082-2006	JB40FSORM90-20-06	M20-1.5	3/8	9.5	2.76	70.0	1.65	42.0	1.38	35.0	0.94	24.0	0.47	12.0	0.26	0.12	100
4082-2206	JB40FSORM90-22-06	M22-1.5	3/8	9.5	2.76	70.0	1.65	42.0	1.42	36.0	1.06	27.0	0.55	14.0	0.29	0.13	50
4082-2408	JB40FSORM90-24-08	M24-1.5	1/2	12.7	2.80	71.0	1.50	38.0	1.57	40.0	1.18	30.0	0.63	16.0	0.52	0.24	50
4082-3010	JB40FSORM90-30-10	M30-2.0	5/8	15.9	2.83	72.0	1.65	42.0	1.93	49.0	1.42	36.0	0.79	20.0	0.88	0.40	50
4082-3012	JB40FSORM90-30-12	M30-2.0	3/4	19.1	4.02	102.0	2.40	61.0	2.40	61.0	1.42	36.0	0.79	20.0	1.02	0.46	32
4082-3612	JB40FSORM90-36-12	M36-2.0	3/4	19.1	4.02	102.0	2.40	61.0	2.44	62.0	1.61	41.0	0.98	25.0	1.31	0.59	36
4082-3616	JB40FSORM90-36-16	M36-2.0	1	25.4	5.04	128.0	3.19	81.0	2.72	69.0	1.61	41.0	0.98	25.0	1.66	0.75	3
4082-4216	JB40FSORM90-42-16	M42-2.0	1	25.4	5.04	128.0	3.19	81.0	2.76	70.0	1.97	50.0	1.18	30.0	1.85	0.84	3
4082-5220	JB40FSORM90-52-20	M52-2.0	1-1/4	31.8	5.51	140.0	3.66	93.0	3.39	86.0	2.36	60.0	1.50	38.0	2.45	1.11	3
4082-5224	JB40FSORM90-52-24	M52-2.0	1-1/2	38.1	5.94	151.0	3.58	91.0	3.54	90.0	2.36	60.0	1.50	38.0	3.46	1.57	3

*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

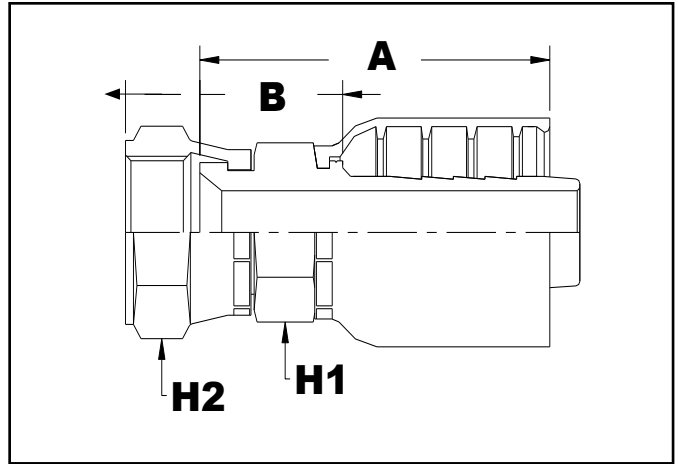
WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

60/JB60 SERIES COUPLINGS - FOR 4 & 6-WIRE SPIRAL HOSES

<u>SERIES</u>	<u>DESCRIPTIVE SERIES</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
6000	JB60FS	Female Swivel JIC 37° Flare	144
6002	JB60FS45	Female Swivel JIC 37° Flare 45° Elbow	145
6004	JB60FS90	Female Swivel JIC 37° Flare 90° Elbow	146
6005	JB60OFS	Female O-Ring Face Seal - Straight	147
6007	JB60OFS45	Female O-Ring Face Seal - 45° Elbow	148
6009	JB60OFS90	Female O-Ring Face Seal - 90° Elbow	149
6020	JB60MP	Male Pipe Rigid NPTF	150
6024	NEW! JB60MPAPI	Male Pipe API	151
6032	NEW! JB60MOFS	SAE Male O-Ring Face Seal	152
6034	JB60C61S	SAE Code 61 Flange Straight	153
6036	JB60C6145	SAE Code 61 Flange 45° Elbow	154
6039	JB60C6190	SAE Code 61 Flange 90° Elbow	155
6041	JB60C62S	SAE Code 62 Flange Straight	156
6043	JB60C6245	SAE Code 62 Flange 45° Elbow	157
6045	JB60C6290	SAE Code 62 Flange 90° Elbow	158
6048	JB60FSPPBSP	Female Swivel Parallel Pipe - BSP 30° Cone - Metric	159
6049	JB60FSPPBSP45	Female Swivel Parallel Pipe - BSP 30° Cone - 45° Elbow - Metric	160
6050	JB60FSPPBSP90	Female Swivel Parallel Pipe - BSP 30° Cone - 90° Elbow - Metric	161
6060	JB60CATS	Caterpillar Style Flange - Straight	162
6062	JB60CAT45	Caterpillar Style Flange - 45° Elbow	163
6064	JB60CAT90	Caterpillar Style Flange - 90° Elbow	164

6000 SERIES

**JB60FS SERIES
Female Swivel JIC 37° Flare**



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
									H1		H2				
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
6000-1212	JB60FS-12-12	1-1/16-12	3/4	19.1	2.68	68.0	1.14	29.0	1.06	26.9	1.25	31.7	0.77	0.35	50
6000-1616	JB60FS-16-16	1-5/16-12	1	25.4	3.39	86.0	1.34	34.0	1.50	38.1	1.37	34.9	1.21	0.55	36
6000-2020	JB60FS-20-20	1-5/8-12	1-1/4	31.8	4.06	103.0	1.57	40.0	1.87	47.6	2.00	50.8	2.24	1.01	15
6000-2424	JB60FS-24-24	1-7/8-12	1-1/2	38.1	4.21	107.0	1.69	43.0	2.12	53.9	2.12	53.9	3.27	1.48	12
6000-3232	JB60FS-32-32	2-1/2-12	2	50.8	5.16	131.0	2.17	55.0	2.50	63.5	2.87	73.0	4.92	2.23	8

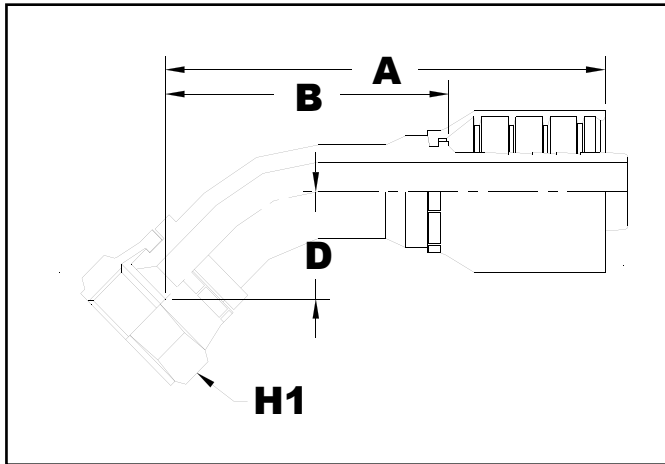
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB60FS45 SERIES
Female Swivel JIC 37° Flare - 45° Elbow

6002 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
6002-1212	JB60FS45-12-12	1-1/16-12	3/4	19.1	4.96	126.0	2.95	75.0	1.02	26.0	1.25	31.7	0.79	0.36	32
6002-1616	JB60FS45-16-16	1-5/16-12	1	25.4	5.08	129.0	3.03	77.0	1.22	31.0	1.50	38.1	1.41	0.64	18
6002-2020	JB60FS45-20-20	1-5/8-12	1-1/4	31.8	6.46	164.0	4.06	103.0	1.57	40.0	2.00	50.8	2.24	1.01	12
6002-2424	JB60FS45-24-24	1-7/8-12	1-1/2	38.1	7.09	180.0	4.53	115.0	1.81	46.0	2.12	53.9	3.27	1.48	10
6002-3232	JB60FS45-32-32	2-1/2-12	2	50.8	8.50	216.0	5.51	140.0	2.44	62.0	2.87	73.0	4.92	2.23	6

*Standard Pack is 1.

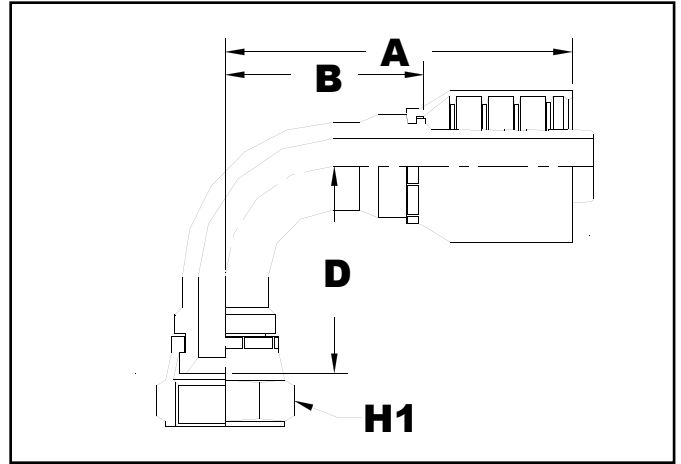
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

6004 SERIES

JB60FS90 SERIES

Female Swivel JIC 37° Flare - 90° Elbow



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
6004-1212	JB60FS90-12-12	1-1/16-12	3/4	19.1	4.45	113.0	2.40	61.0	1.97	50.0	1.25	31.7	0.86	0.39	32
6004-1616	JB60FS90-16-16	1-5/16-12	1	25.4	5.31	135.0	3.19	81.0	2.44	62.0	1.50	38.1	1.30	0.59	15
6004-2020	JB60FS90-20-20	1-5/8-12	1-1/4	31.8	6.06	154.0	3.66	93.0	3.23	82.0	2.00	50.8	2.90	1.31	10
6004-2424	JB60FS90-24-24	1-7/8-12	1-1/2	38.1	6.14	156.0	3.58	91.0	3.39	86.0	2.12	53.9	3.51	1.59	7
6004-3232	JB60FS90-32-32	2-1/2-12	2	50.8	8.31	211.0	5.31	135.0	5.28	134.0	2.87	73.0	7.76	3.52	3

*Standard Pack is 1.

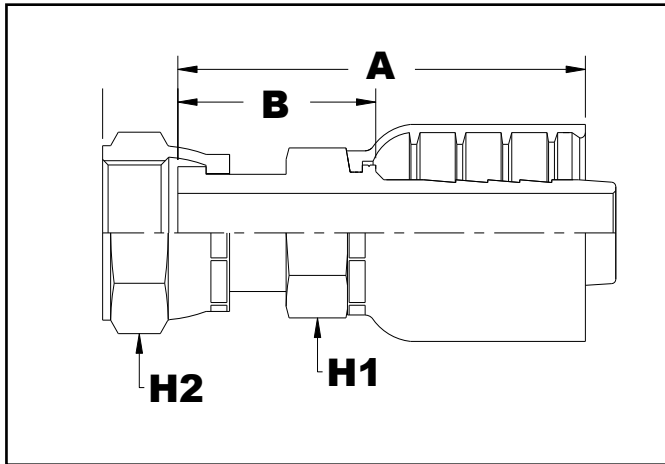
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 60/JB60

JB60OFS SERIES
Female O-Ring Face Seal - Straight

6005 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	
									inch	mm	inch	mm			
6005-1212	JB60OFS-12-12	1-3/16-12	3/4	19.1	3.62	92.0	1.61	41.0	1.12	28.5	1.37	34.9	0.49	0.22	50
6005-1616	JB60OFS-16-16	1-7/16-12	1	25.4	3.90	99.0	1.77	45.0	1.31	33.3	1.62	41.2	0.66	0.30	36
6005-2020	JB60OFS-20-20	1-11/16-12	1-1/4	31.8	3.94	100.0	1.54	39.0	1.37	34.9	1.87	47.6	2.38	1.08	12
6005-2424	JB60OFS-24-24	2-12	1-1/2	38.1	4.13	105.0	1.61	41.0	1.87	47.6	2.26	57.3	2.99	1.36	12

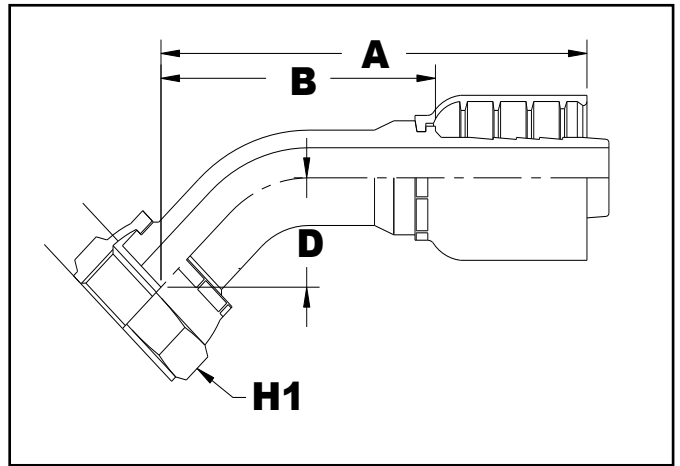
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

6007 SERIES

**JB60OFS45 SERIES
Female O-Ring Face Seal
45° Elbow**



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
6007-1212	JB60OFS45-12-12	1-3/16-12	3/4	19.1	5.00	127.0	2.95	75.0	1.10	28.0	1.37	34.9	0.88	0.40	32
6007-1616	JB60OFS45-16-16	1-7/16-12	1	25.4	5.12	130.0	2.99	76.0	1.18	30.0	1.62	41.2	1.37	0.62	18
6007-2020	JB60OFS45-20-20	1-11/16-12	1-1/4	31.8	6.46	164.0	4.06	103.0	1.57	40.0	1.87	47.6	2.78	1.26	10
6007-2424	JB60OFS45-24-24	2-12	1-1/2	38.1	7.05	179.0	4.49	114.0	1.77	45.0	2.25	57.1	3.00	1.36	10

*Standard Pack is 1.

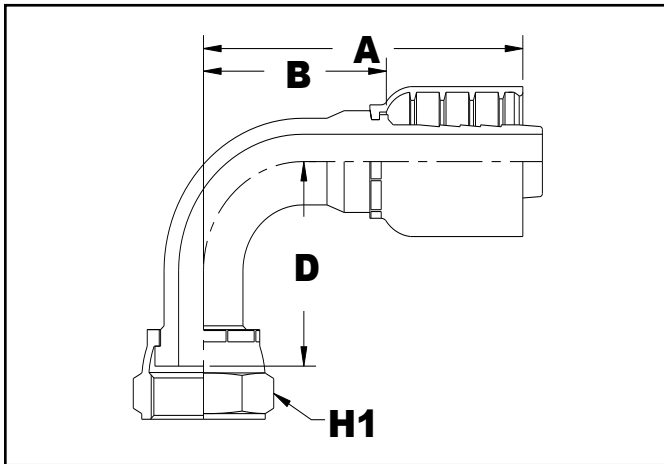
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 60/JB60

JB60OFS90 SERIES
Female O-Ring Face Seal
90° Elbow

6009 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
6009-1212	JB60OFS90-12-12	1-3/16-12	3/4	19.1	4.45	113.0	2.40	61.0	1.93	49.0	1.37	34.9	0.93	0.42	32
6009-1616	JB60OFS90-16-16	1-7/16-12	1	25.4	5.31	135.0	3.19	81.0	2.24	57.0	1.62	41.2	1.94	0.88	10
6009-2020	JB60OFS90-20-20	1-11/16-12	1-1/4	31.8	6.06	154.0	3.66	93.0	3.03	77.0	1.87	47.6	2.87	1.30	10
6009-2424	JB60OFS90-24-24	2-12	1-1/2	38.1	6.14	156.0	3.58	91.0	3.15	80.0	2.25	57.1	3.99	1.81	7

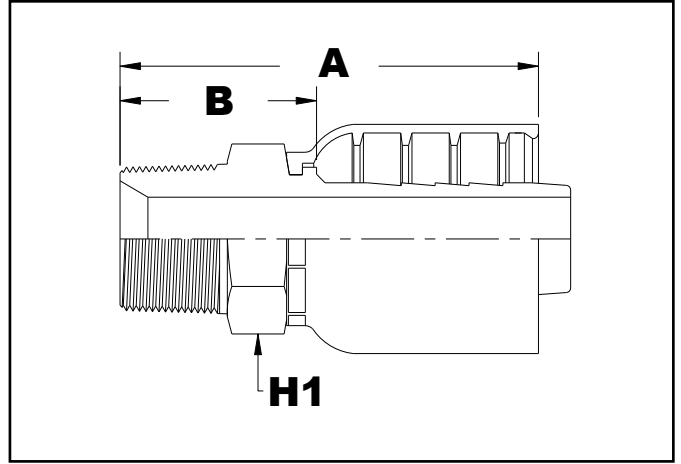
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

6020 SERIES

**JB60MP SERIES
Male Pipe Rigid NPTF**



HYDRAULIC COUPLINGS - 60/JB60

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Size		Weight		Bulk Pack	
			in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	qty	
6020-1212	JB60MP-12-12	3/4-14	3/4	19.1	19.1	3.35	85.0	1.46	37.0	1.06	27.0	0.69	0.31	50
6020-1616	JB60MP-16-16	1-11.5	1	25.4	25.4	4.13	105.0	1.69	43.0	1.42	36.0	1.09	0.50	36
6020-2020	JB60MP-20-20	1-1/4-11.5	1-1/4	31.8	31.8	4.61	117.0	2.05	52.0	1.81	46.0	2.02	0.92	15
6020-2424	JB60MP-24-24	1-1/2-11.5	1-1/2	38.1	38.1	4.49	114.0	2.05	52.0	1.97	50.0	2.47	1.12	15
6020-3232	JB60MP-32-32	2-11.5	2	50.8	50.8	5.28	134.0	2.28	58.0	2.36	60.0	4.06	1.84	8

*Standard Pack is 1.

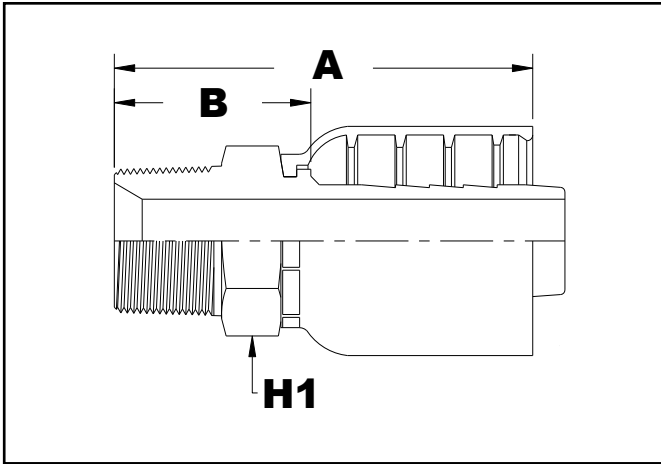
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

6024 SERIES



**JB60MPAPI SERIES
Male Pipe API**



Catalog Part Number	Descriptive Part Number	API Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size H1		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
6024-2424	JB60MPAPI-24-24	1-1/2 - 11.5	1-1/2	38.1	4.49	114.0	2.04	51.8	-	-	2.0	50.8	2.45	1.11	12
6024-3232	JB60MPAPI-32-32	2 - 11.5	2	50.8	5.63	142.9	2.78	70.6	-	-	2.5	63.5	4.06	1.84	6

*Standard Pack is 1.

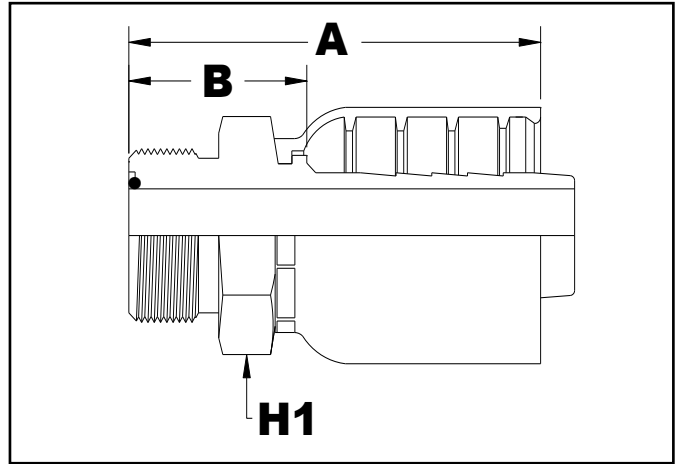
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

6032 SERIES



**JB60MOFS SERIES
SAE Male O-Ring Face Seal**



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
6032-1212	JB60MOFS-12-12	3/4-14	3/4	19.1	3.25	82.5	1.26	32.0	1.26	32	0.99	0.45	48
6032-1616	JB60MOFS-16-16	1-11.5	1.0	25.4	3.56	90.5	1.46	37.0	1.50	38	1.08	0.49	30

*Standard Pack is 1.

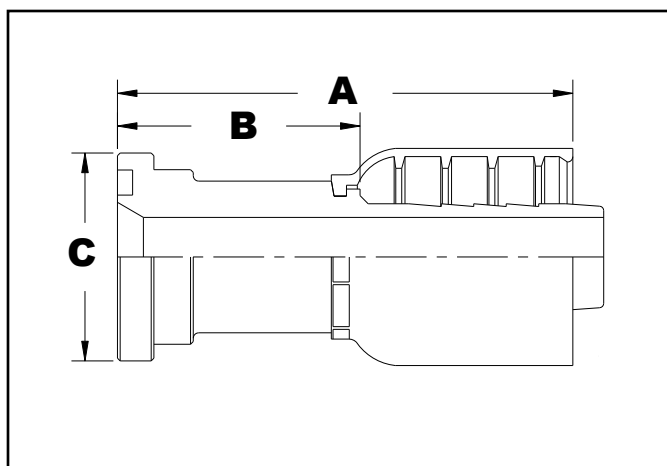
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 60/JB60

JB60C61S SERIES
SAE Code 61 Flange - Straight

6034 SERIES



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
6034-1212	JB60C61S-12-12	3/4	19.1	3/4	19.1	3.35	85.0	1.89	48.0	1.50	38.1	0.81	0.37	50
6034-1616	JB60C61S-16-16	1	25.4	1	25.4	3.66	93.0	2.05	52.0	1.75	44.4	1.33	0.60	36
6034-2020	JB60C61S-20-20	1-1/4	31.8	1-1/4	31.8	4.69	119.0	3.03	77.0	2.00	50.8	2.00	0.91	15
6034-2424	JB60C61S-24-24	1-1/2	38.1	1-1/2	38.1	4.49	114.0	3.11	79.0	2.37	60.3	2.54	1.15	15
6034-3232	JB60C61S-32-32	2	50.8	2	50.8	4.72	120.0	3.19	81.0	2.81	71.4	4.60	2.08	8

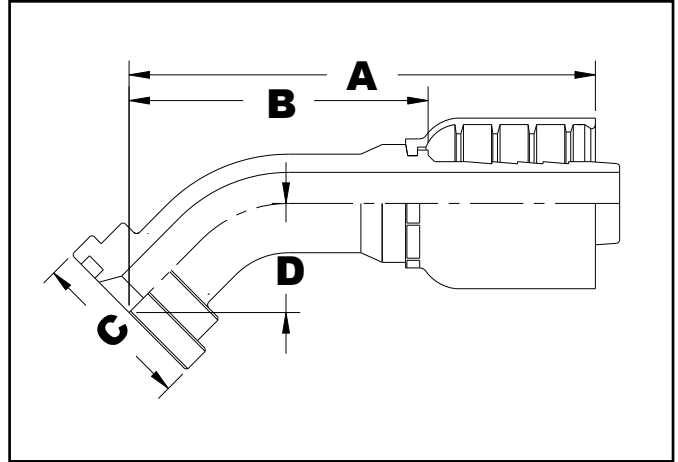
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

6036 SERIES

JB60C6145 SERIES
SAE Code 61 Flange - 45° Elbow



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
6036-1212	JB60C6145-12-12	3/4	19.1	3/4	19.1	5.04	128.0	2.99	76.0	1.14	29.0	1.50	38.1	0.89	0.40	32
6036-1616	JB60C6145-16-16	1	25.4	1	25.4	4.46	121.0	3.03	77.0	1.22	31.0	1.75	44.4	1.42	0.65	18
6036-2020	JB60C6145-20-20	1-1/4	31.8	1-1/4	31.8	6.38	162.0	3.98	101.0	1.50	38.0	2.00	50.8	2.31	1.05	12
6036-2424	JB60C6145-24-24	1-1/2	38.1	1-1/2	38.1	7.01	178.0	4.45	113.0	1.57	40.0	2.37	60.3	2.70	1.23	12
6036-3232	JB60C6145-32-32	2	50.8	2	50.8	8.43	214.0	5.43	138.0	2.36	60.0	2.81	71.4	6.04	2.74	6

*Standard Pack is 1.

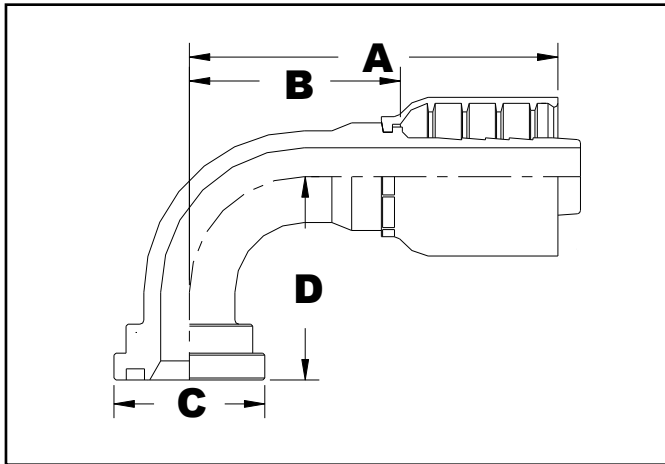
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 60/JB60

JB60C6190 SERIES
SAE Code 61 Flange - 90° Elbow

6039 SERIES



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
6039-1212	JB60C6190-12-12	3/4	19.1	3/4	19.1	4.45	113.0	2.40	61.0	2.13	54.0	1.50	38.1	0.96	0.44	32
6039-1616	JB60C6190-16-16	1	25.4	1	25.4	5.31	135.0	3.19	81.0	2.44	62.0	1.75	44.4	1.63	0.74	15
6039-2020	JB60C6190-20-20	1-1/4	31.8	1-1/4	31.8	6.06	154.0	3.66	93.0	3.11	79.0	2.00	50.8	2.76	1.25	15
6039-2424	JB60C6190-24-24	1-1/2	38.1	1-1/2	38.1	6.14	156.0	3.58	91.0	3.27	83.0	2.37	60.3	2.83	1.29	10
6039-3232	JB60C6190-32-32	2	50.8	2	50.8	8.31	211.0	5.31	135.0	5.16	131.0	2.81	71.4	6.92	3.14	6

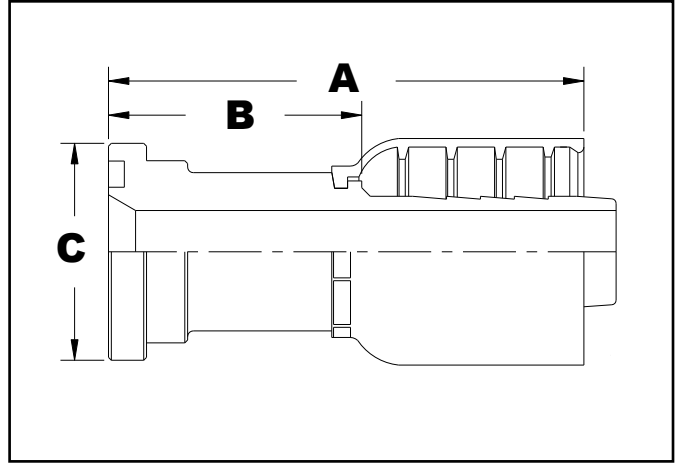
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

6041 SERIES

**JB60C62S SERIES
SAE Code 62 Flange - Straight**



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
6041-1212	JB60C62S-12-12	3/4	19.1	3/4	19.1	3.82	97.0	2.05	52.0	1.62	41.2	0.89	0.40	50
6041-1616	JB60C62S-16-16	1	25.4	1	25.4	4.09	104.0	2.36	60.0	1.87	47.6	1.55	0.70	36
6041-2020	JB60C62S-20-20	1-1/4	31.8	1-1/4	31.8	5.91	150.0	3.54	90.0	2.12	53.9	2.43	1.10	15
6041-2424	JB60C62S-24-24	1-1/2	38.1	1-1/2	38.1	7.05	179.0	4.29	109.0	2.50	63.5	3.12	1.42	15
6041-3232	JB60C62S-32-32	2	50.8	2	50.8	7.56	192.0	5.35	136.0	3.12	79.3	5.71	2.59	8

*Standard Pack is 1.

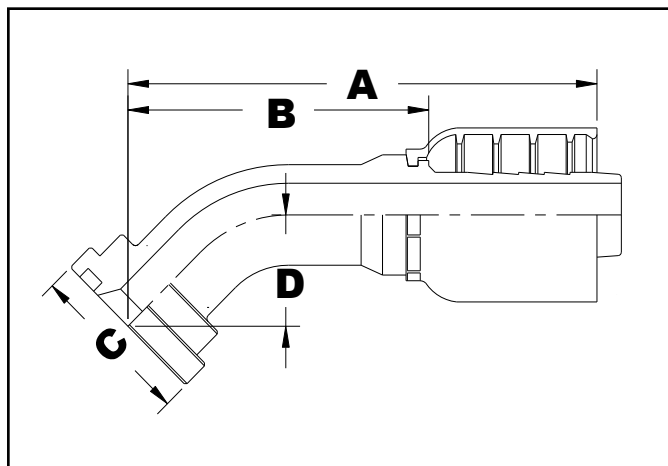
We disclaim any liability for use of our products in applications other than which they are designed.

⚠ WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 60/JB60

JB60C6245 SERIES
SAE Code 62 Flange - 45° Elbow

6043 SERIES



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
6043-1212	JB60C6245-12-12	3/4	19.1	3/4	19.1	5.16	131.0	3.11	79.0	1.26	32.0	1.62	41.2	0.93	0.42	32
6043-1616	JB60C6245-16-16	1	25.4	1	25.4	4.96	126.0	3.23	82.0	1.42	36.0	1.87	47.6	1.45	0.66	18
6043-2020	JB60C6245-20-20	1-1/4	31.8	1-1/4	31.8	6.69	170.0	4.29	109.0	1.81	46.0	2.12	53.9	2.58	1.17	12
6043-2424	JB60C6245-24-24	1-1/2	38.1	1-1/2	38.1	7.24	184.0	4.69	119.0	1.97	50.0	2.50	63.5	3.16	1.44	12
6043-3232	JB60C6245-32-32	2	50.8	2	50.8	9.02	229.0	6.02	153.0	2.95	75.0	3.12	79.3	7.85	3.56	6

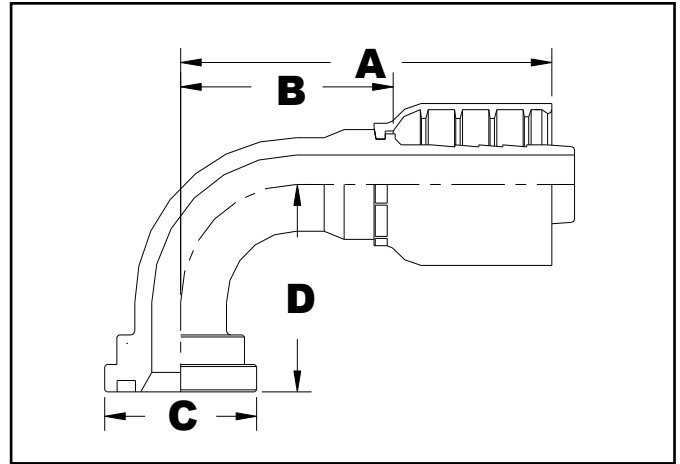
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

⚠ WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

6045 SERIES

JB60C6290 SERIES
SAE Code 62 Flange - 90° Elbow



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
6045-1212	JB60C6290-12-12	3/4	19.1	3/4	19.1	4.41	112.0	3.11	79.0	2.28	58.0	1.62	41.2	1.00	0.45	32
6045-1616	JB60C6290-16-16	1	25.4	1	25.4	5.24	133.0	3.23	82.0	2.72	69.0	1.87	47.6	1.79	0.81	15
6045-2020	JB60C6290-20-20	1-1/4	31.8	1-1/4	31.8	6.06	154.0	4.29	109.0	3.54	90.0	2.12	53.9	2.79	1.26	15
6045-2424	JB60C6290-24-24	1-1/2	38.1	1-1/2	38.1	6.14	156.0	4.69	119.0	3.62	92.0	2.50	63.5	3.30	1.50	10
6045-3232	JB60C6290-32-32	2	50.8	2	50.8	8.31	211.0	6.02	153.0	6.02	153.0	3.12	79.3	7.76	3.52	6

*Standard Pack is 1.

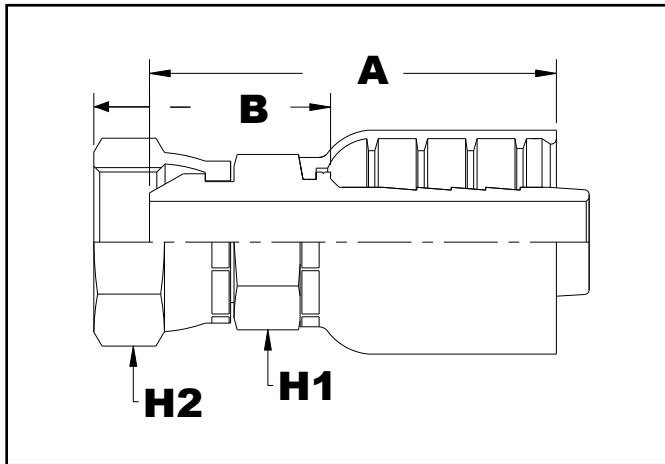
We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

HYDRAULIC COUPLINGS - 60/JB60

JB60FSPPBSP SERIES
Female Swivel Parallel Pipe
BSP - 30° Cone - Metric

6048 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	qty
6048-1212	JB60FSPPBSP-12-12	3/4-14	3/4	19.1	3.23	82.0	1.34	34.0	1.26	32.0	1.42	36.0	0.79	0.36	50
6048-1616	JB60FSPPBSP-16-16	1-11	1	25.4	3.90	99.0	1.50	38.0	1.42	36.0	1.61	41.0	1.32	0.60	36
6048-2020	JB60FSPPBSP-20-20	1-1/4-11	1-1/4	31.8	4.49	114.0	1.93	49.0	1.81	46.0	1.97	50.0	2.28	1.03	15
6048-2424	JB60FSPPBSP-24-24	1-1/2-11	1-1/2	38.1	4.69	119.0	2.09	53.0	2.17	55.0	2.17	55.0	2.68	1.21	15
6048-3232	JB60FSPPBSP-32-32	2-11	2	50.8	5.31	135.0	2.32	59.0	2.50	63.5	2.87	73.0	5.18	2.35	8

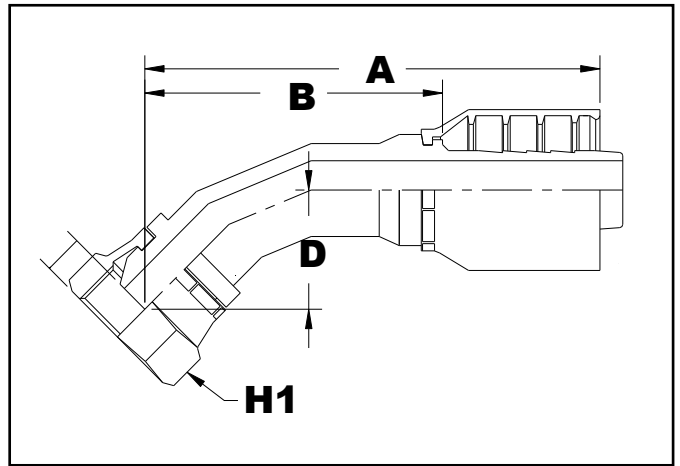
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

6049 SERIES

**JB60FSPPBSP45 SERIES
Female Swivel Parallel Pipe
BSP - 30° Cone - 45° Elbow - Metric**



HYDRAULIC COUPLINGS - 60/JB60

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
6049-1212	JB60FSPPBSP45-12-12	3/4-14	3/4	19.1	5.16	131.0	3.11	79.0	1.18	30.0	1.42	36.0	0.77	0.35	32
6049-1616	JB60FSPPBSP45-16-16	1-11	1	25.4	5.24	133.0	3.11	79.0	1.30	33.0	1.61	41.0	1.21	0.55	18
6049-2020	JB60FSPPBSP45-20-20	1-1/4-11	1-1/4	31.8	6.57	167.0	4.17	106.0	1.65	42.0	1.97	50.0	2.23	1.01	12
6049-2424	JB60FSPPBSP45-24-24	1-1/2-11	1-1/2	38.1	7.13	181.0	4.57	116.0	1.89	48.0	2.17	55.0	3.26	1.48	12
6049-3232	JB60FSPPBSP45-32-32	2-11	2	50.8	8.66	220.0	5.67	144.0	2.60	66.0	2.87	73.0	4.92	2.23	6

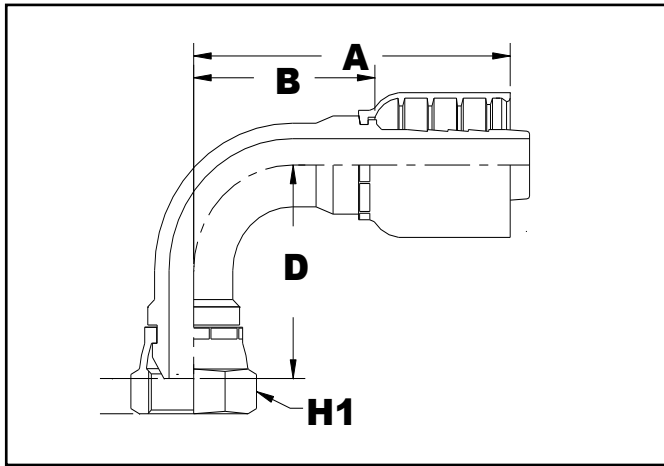
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

! WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB60FSPPBSP90 SERIES
Female Swivel Parallel Pipe
BSP - 30° Cone - 90° Cone - Metric

6050 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Size		Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
6050-1212	JB60FSPPBSP90-12-12	3/4-14	3/4	19.1	4.45	113.0	2.40	61.0	2.09	53.0	1.42	36.0	0.93	0.42	32
6050-1616	JB60FSPPBSP90-16-16	1-11	1	25.4	5.31	135.0	3.19	81.0	2.48	63.0	1.61	41.0	0.73	0.33	15
6050-2020	JB60FSPPBSP90-20-20	1-1/4-11	1-1/4	31.8	6.06	154.0	3.66	93.0	3.35	85.0	1.97	50.0	3.03	1.37	15
6050-2424	JB60FSPPBSP90-24-24	1-1/2-11	1-1/2	38.1	6.14	156.0	3.58	91.0	3.46	88.0	2.17	55.0	3.68	1.67	10
6050-3232	JB60FSPPBSP90-32-32	2-11	2	50.8	8.31	211.0	5.31	135.0	5.51	140.0	2.87	73.0	8.05	3.65	6

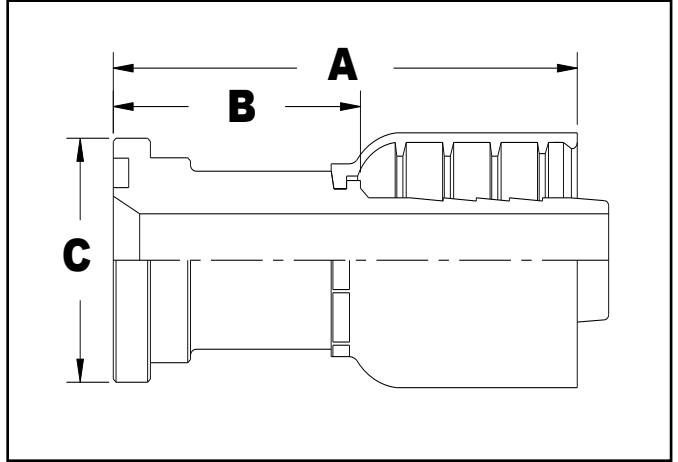
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

6060 SERIES

JB60CATS SERIES
Caterpillar Style Flange - Straight



HYDRAULIC COUPLINGS - 60/JB60

Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
6060-1212	JB60CATS-12-12	3/4	19.1	3/4	19.1	3.82	97.0	2.05	52.0	1.62	41.2	1.00	0.45	50
6060-1612	JB60CATS-16-12	1	25.4	3/4	19.1	4.44	112.7	2.51	63.8	1.87	47.6	1.28	0.58	30
6060-1616	JB60CATS-16-16	1	25.4	1	25.4	4.09	104.0	2.36	60.0	1.87	47.6	1.54	0.70	36
6060-2016	JB60CATS-20-16	1-1/4	31.8	1	25.4	5.19	131.9	3.20	81.4	2.13	54.0	1.92	0.87	18
6060-2020	JB60CATS-20-20	1-1/4	31.8	1-1/4	31.8	5.91	150.0	3.54	90.0	2.12	53.9	2.59	1.17	15
6060-2420	JB60CATS-24-20	1-1/2	38.1	1-1/4	31.8	5.81	147.6	3.33	84.6	2.50	63.5	2.84	1.29	10
6060-2424	JB60CATS-24-24	1-1/2	38.1	1-1/2	38.1	7.05	179.0	4.29	109.0	2.50	63.5	3.05	1.39	15
6060-3232	JB60CATS-32-32	2	50.8	2	50.8	7.56	192.0	5.35	136.0	3.12	79.3	5.80	2.63	8

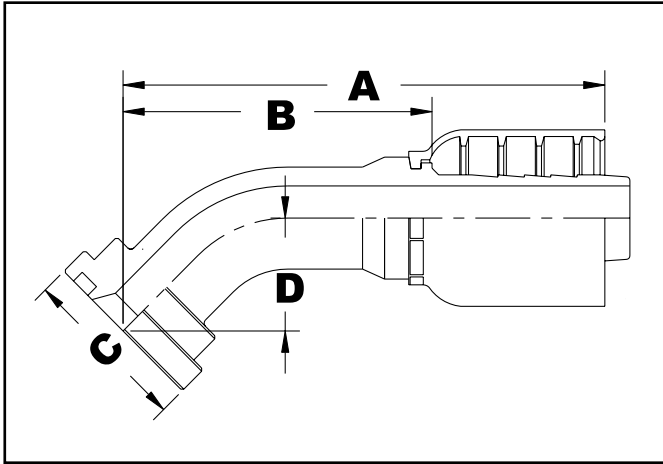
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

⚠ WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JB60CAT45 SERIES
Caterpillar Style Flange - 45° Elbow

6062 SERIES



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
6062-1212	JB60CAT45-12-12	3/4	19.1	3/4	19.1	5.16	131.0	3.11	79.0	1.26	32.0	1.62	41.2	1.04	0.47	32
6062-1616	JB60CAT45-16-16	1	25.4	1	25.4	4.96	126.0	3.23	82.0	1.42	36.0	1.87	47.6	1.70	0.77	18
6062-2020	JB60CAT45-20-20	1-1/4	31.8	1-1/4	31.8	6.69	170.0	4.29	109.0	1.81	46.0	2.12	53.9	2.77	1.25	12
6062-2424	JB60CAT45-24-24	1-1/2	38.1	1-1/2	38.1	7.24	184.0	4.69	119.0	1.97	50.0	2.50	63.5	3.36	1.53	12
6062-3232	JB60CAT45-32-32	2	50.8	2	50.8	9.02	229.0	6.02	153.0	2.95	75.0	3.12	79.3	6.88	3.12	6

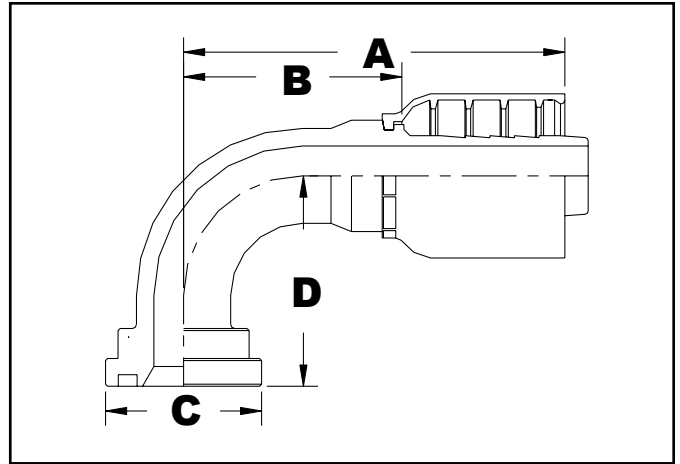
*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

6064 SERIES

JB60CAT90 SERIES
Caterpillar Style Flange - 90° Elbow



Catalog Part Number	Descriptive Part Number	Flange Size		Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Flange Diameter -C-		Weight		Bulk Pack
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	qty
6064-1212	JB60CAT90-12-12	3/4	19.1	3/4	19.1	4.41	112.0	3.11	79.0	2.28	58.0	1.62	41.2	1.08	0.49	32
6064-1612	JB60CAT90-16-12	1	25.4	3/4	19.1	4.33	109.9	2.40	61.0	2.59	65.7	1.87	47.6	1.28	0.58	20
6064-1616	JB60CAT90-16-16	1	25.4	1	25.4	5.24	133.0	3.23	82.0	2.72	69.0	1.87	47.6	1.90	0.86	15
6064-2016	JB60CAT90-20-16	1-1/4	31.8	1	25.4	5.18	131.5	3.19	81.0	2.91	74	2.12	53.9	1.98	0.90	15
6064-2020	JB60CAT90-20-20	1-1/4	31.8	1-1/4	31.8	6.06	154.0	4.29	109.0	3.54	90.0	2.12	53.9	2.94	1.33	15
6064-2420	JB60CAT90-24-20	1-1/2	38.1	1-1/4	31.8	6.14	156.0	3.66	93.0	3.61	91.6	2.50	63.5	3.18	1.44	7
6064-2424	JB60CAT90-24-24	1-1/2	38.1	1-1/2	38.1	6.14	156.0	4.69	119.0	3.62	92.0	2.50	63.5	3.69	1.68	10
6064-3232	JB60CAT90-32-32	2	50.8	2	50.8	8.31	211.0	6.02	153.0	6.02	153.0	3.12	79.3	7.63	3.46	6

*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

FIELD ATTACHABLE (REUSABLE) COUPLINGS - FOR SAE 100R5, J1402 TYPE AII, FMVSS 106 HOSES

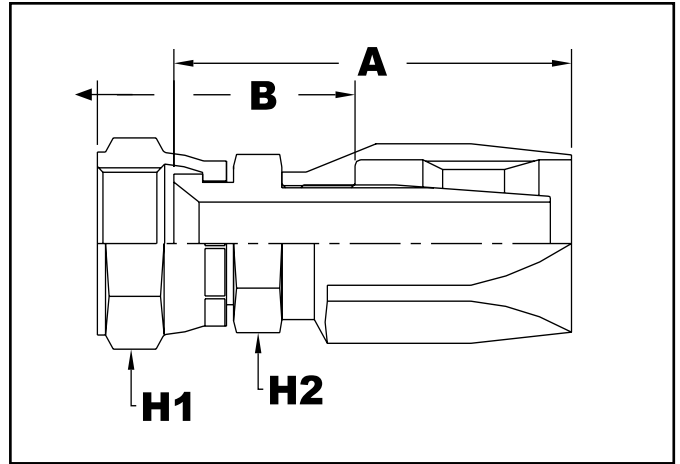
<u>SERIES</u>	<u>DESCRIPTIVE SERIES</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
7500	JFR5FS	Female Swivel JIC 37° Flare	166
7502	JFR5FS45	Female Swivel JIC 37° Flare 45° Elbow	167
7504	JFR5FS90	Female Swivel JIC 37° Flare 90° Elbow	168
7510	JFR5FA	Female Swivel SAE 45° Flare	169
7520	JFR5MP	Male Pipe Rigid NPTF	170

*Federal law requires registration with the Department of Transportation (DOT) for anyone producing air brake hose assemblies with swaged or crimp fittings. The Jason 5050 Series hoses have been tested and meet SAE 100R5 and J1402 Type AII/FMVSS 106 requirements with the Jason 75 Series field attachable (reusable) couplings. Sizes 16 (7/8" bore) and larger are not included in the SAE J1402/FMVSS 106 standards.



7500 SERIES

**JFR5FS SERIES
Female Swivel JIC 37° Flare**



HYDRAULIC COUPLINGS - 75/JFR5

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	lbs.	kg	
7500-0404	JFR5FS-04-04	7/16-20	3/16	4.8	1.94	49.3	1.19	30.2	-	-	0.56	14.2	0.56	14.2	0.10	0.05	N/A
7500-0505	JFR5FS-05-05	1/2-20	1/4	6.4	2.08	52.8	1.30	33.0	-	-	0.63	16.0	0.63	16.0	0.12	0.05	N/A
7500-0606	JFR5FS-06-06	9/16-18	5/16	7.9	2.31	58.7	1.41	35.8	-	-	0.69	17.4	0.69	17.4	0.17	0.08	N/A
7500-0808	JFR5FS-08-08	3/4-16	13/32	10.3	2.84	72.1	1.58	40.1	-	-	0.87	22.2	0.87	22.2	0.27	0.12	N/A
7500-1010	JFR5FS-10-10	7/8-14	1/2	12.7	3.06	77.7	1.67	42.4	-	-	1.00	25.4	1.00	25.4	0.41	0.19	N/A
7500-1212	JFR5FS-12-12	1-1/16-12	5/8	15.9	3.50	88.9	1.92	48.8	-	-	1.25	31.7	1.25	31.7	0.57	0.26	N/A
7500-1616	JFR5FS-16-16	1-5/16-12	7/8	22.2	3.19	81.0	1.92	48.8	-	-	1.50	38.1	1.50	38.1	0.70	0.32	N/A
7500-2020	JFR5FS-20-20	1-5/8-12	1-1/8	28.6	3.38	85.9	2.03	51.6	-	-	2.00	50.8	2.00	50.8	1.35	0.61	N/A

*Standard Pack is 1.

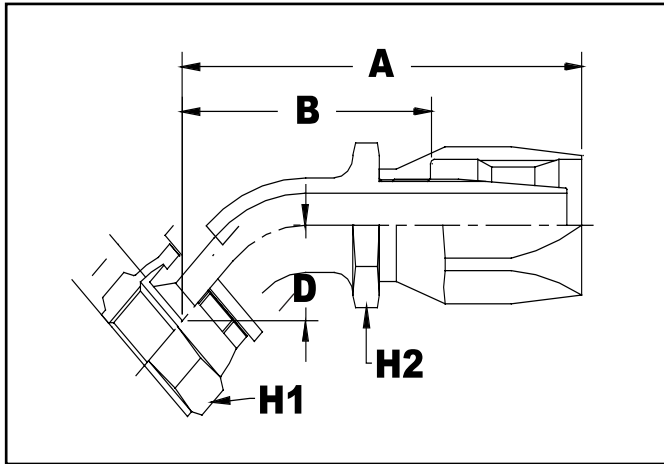
We disclaim any liability for use of our products in applications other than which they are designed.

NOTE: Only approved field attachable (reusable) screw together couplings can be used on this hose for compliance with DOT FMVSS 106 requirements. No crimp couplings may be used on any airbrake hose without the end assembler testing, registering and complying with DOT.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JFR5FS45 SERIES
Female Swivel JIC 37° Flare
45° Elbow

7502 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
7502-0404	JFR5FS45-04-04	7/16-20	3/16	4.8	0.84	21.3	1.10	27.9	0.33	8.4	0.56	14.2	0.56	14.2	0.09	0.04	N/A
7502-0505	JFR5FS45-05-05	1/2-20	1/4	6.4	1.06	26.9	1.28	32.5	0.36	9.1	0.63	16.0	0.63	16.0	0.12	0.05	N/A
7502-0606	JFR5FS45-06-06	9/16-18	5/16	7.9	2.23	56.6	1.33	33.8	0.39	9.9	0.69	17.4	0.69	17.4	0.17	0.08	N/A
7502-0808	JFR5FS45-08-08	3/4-16	13/32	10.3	2.98	75.7	1.84	46.7	0.55	14.0	0.87	22.2	0.87	19.0	0.23	0.10	N/A
7502-1010	JFR5FS45-10-10	7/8-14	1/2	12.7	3.23	82.0	1.64	41.7	0.63	16.0	1.00	25.4	1.00	22.2	0.45	0.20	N/A
7502-1212	JFR5FS45-12-12	1-1/16-12	5/8	15.9	3.78	96.0	2.22	56.4	0.77	19.6	1.25	31.7	1.25	28.5	0.64	0.29	N/A
7502-1616	JFR5FS45-16-16	1-5/16-12	7/8	22.2	3.56	90.4	2.23	56.6	0.89	22.6	1.50	38.1	1.50	35.0	0.84	0.38	N/A

*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

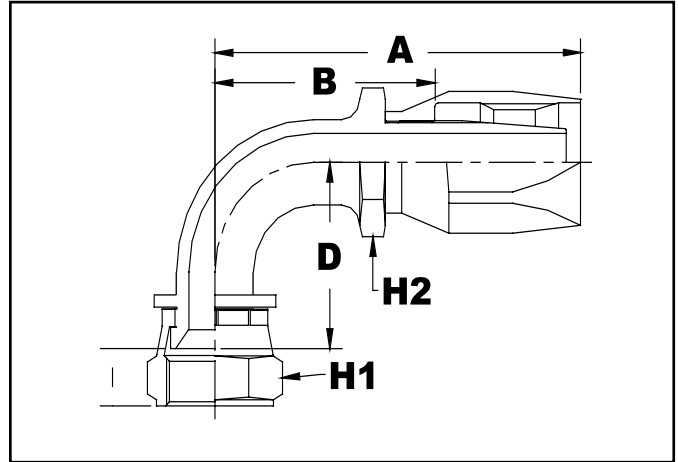
NOTE: Only approved field attachable (reusable) screw together couplings can be used on this hose for compliance with DOT FMVSS 106 requirements. No crimp couplings may be used on any airbrake hose without the end assembler testing, registering and complying with DOT.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

7504 SERIES

JFR5FS90 SERIES

Female Swivel JIC 37° Flare - 90° Elbow



HYDRAULIC COUPLINGS - 75/JFR5

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
7504-0404	JFR5FS90-04-04	7/16-20	3/16	4.8	1.75	44.5	1.00	25.4	0.69	17.5	0.56	14.2	0.56	14.2	0.11	0.05	N/A
7504-0505	JFR5FS90-05-05	1/2-20	1/4	6.4	1.97	50.0	1.19	30.2	0.77	19.6	0.63	16.0	0.63	16.0	0.12	0.05	N/A
7504-0606	JFR5FS90-06-06	9/16-18	5/16	7.9	2.13	54.1	1.23	31.2	0.84	21.3	0.69	17.4	0.69	17.4	0.17	0.08	N/A
7504-0808	JFR5FS90-08-08	3/4-16	13/32	10.3	2.75	69.9	1.61	40.9	1.09	27.7	0.87	22.2	0.87	22.2	0.26	0.12	N/A
7504-1010	JFR5FS90-10-10	7/8-14	1/2	12.7	2.94	74.7	1.66	42.2	1.23	31.2	1.00	25.4	1.00	25.4	0.47	0.21	N/A
7504-1212	JFR5FS90-12-12	1-1/16-12	5/8	15.9	3.75	95.3	2.17	55.1	1.81	46.0	1.25	31.7	1.25	31.7	0.66	0.30	N/A
7504-1616	JFR5FS90-16-16	1-5/16-12	7/8	22.2	3.55	90.2	2.28	57.9	2.14	54.4	1.50	38.1	1.50	38.1	0.90	0.41	N/A

*Standard Pack is 1.

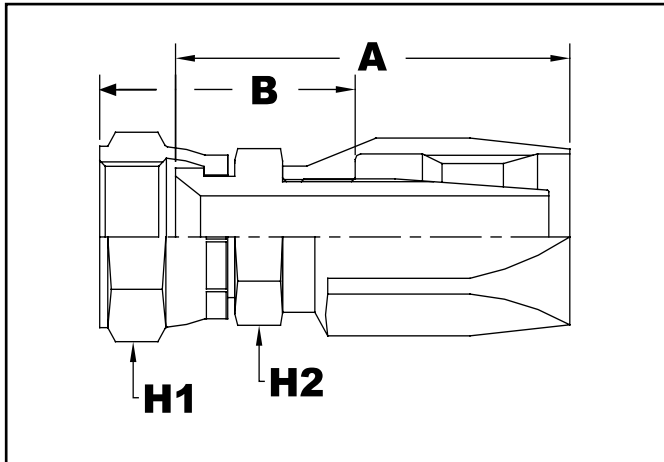
We disclaim any liability for use of our products in applications other than which they are designed.

NOTE: Only approved field attachable (reusable) screw together couplings can be used on this hose for compliance with DOT FMVSS 106 requirements. No crimp couplings may be used on any airbrake hose without the end assembler testing, registering and complying with DOT.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JFR5FA SERIES
Female Swivel SAE 45° Flare

7510 SERIES



Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	qty
7510-0404	JFR5FA-04-04	7/16-20	3/16	4.8	1.94	49.3	0.83	21.1	-	-	0.56	14.2	0.56	14.2	0.09	0.04	N/A
7510-0505	JFR5FA-05-05	1/2-20	1/4	6.4	2.08	52.8	0.94	23.9	-	-	0.63	16.0	0.63	16.0	0.12	0.05	N/A
7510-0606	JFR5FA-06-06	5/8-18	5/16	7.9	2.34	59.4	1.02	25.9	-	-	0.75	19.1	0.75	19.1	0.18	0.08	N/A
7510-0808	JFR5FA-08-08	3/4-16	13/32	10.3	2.84	72.1	1.14	29.0	-	-	0.87	22.2	0.87	22.2	0.27	0.12	N/A
7510-1010	JFR5FA-10-10	7/8-14	1/2	12.7	3.06	77.7	1.17	29.7	-	-	1.00	25.4	1.00	25.4	0.41	0.19	N/A
7510-1212	JFR5FA-12-12	1-1/16-14	5/8	15.9	3.50	88.9	1.34	34.0	-	-	1.25	31.7	1.25	31.7	0.60	0.27	N/A

*Standard Pack is 1.

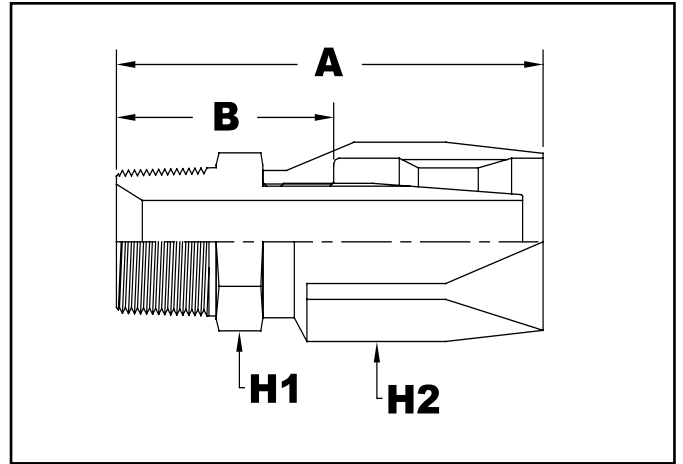
We disclaim any liability for use of our products in applications other than which they are designed.

NOTE: Only approved field attachable (reusable) screw together couplings can be used on this hose for compliance with DOT FMVSS 106 requirements. No crimp couplings may be used on any airbrake hose without the end assembler testing, registering and complying with DOT.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

7520 SERIES

**JFR5MP SERIES
Male Pipe NPTF**



HYDRAULIC COUPLINGS - 75/JFR5

Catalog Part Number	Descriptive Part Number	Thread	Hose Inside Diameter		"A" Dimension Overall Length		"B" Dimension Cut-Off Length		"D" Dimension Drop		Hex Sizes				Weight		Bulk Pack
			inch	mm	inch	mm	inch	mm	inch	mm	H1		H2		lbs.	kg	qty
											inch	mm	inch	mm			
7520-0404	JFR5MP-04-04	1/4-18	3/16	4.8	1.86	47.2	1.11	28.2	-	-	0.56	14.2	0.63	15.9	0.10	0.05	N/A
7520-0405	JFR5MP-04-05	1/4-18	1/4	6.4	1.97	50.0	1.19	30.2	-	-	0.56	14.2	0.69	17.4	0.11	0.05	N/A
7520-0606	JFR5MP-06-06	3/8-18	5/16	7.9	2.20	55.9	1.27	32.3	-	-	0.69	17.4	0.81	20.6	0.15	0.07	N/A
7520-0808	JFR5MP-08-08	1/2-14	13/32	10.3	2.72	69.1	1.56	39.6	-	-	0.87	19.1	0.94	23.8	0.26	0.12	N/A
7520-0810	JFR5MP-08-10	1/2-14	1/2	12.7	2.86	72.6	1.59	40.4	-	-	0.87	19.1	1.12	28.4	0.36	0.16	N/A
7520-1212	JFR5MP-12-12	3/4-14	5/8	15.9	3.20	81.3	1.67	42.4	-	-	1.06	26.9	1.25	31.7	0.49	0.22	N/A
7520-1616	JFR5MP-16-16	1-11.5	7/8	22.2	2.98	75.7	1.72	43.7	-	-	1.38	35.1	1.44	36.5	0.63	0.29	N/A
7520-2020	JFR5MP-20-20	1-1/4-11.5	1-1/8	28.6	3.19	81.0	1.83	46.5	-	-	1.75	44.5	1.75	44.4	1.08	0.49	N/A

*Standard Pack is 1.

We disclaim any liability for use of our products in applications other than which they are designed.

NOTE: Only approved field attachable (reusable) screw together couplings can be used on this hose for compliance with DOT FMVSS 106 requirements. No crimp couplings may be used on any airbrake hose without the end assembler testing, registering and complying with DOT.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

FIELD ATTACHABLE (REUSABLE) COUPLING ASSEMBLY PROCEDURE

1. Place socket only (removing insert if it is already screwed into socket) securely in vise to allow insertion into the hose.

2. The hose to be assembled should be cleanly cut square with minimal burrs on the outside and clean on the inside. A slight chamfering of the hose's inner tube is good practice to make installation easier.

3. Do not oil the socket during this stage. The hose tube can be lubed with suitable oil or it can be lubed after inserted in socket. **(Figure 1)**

4. Turn the hose into the socket restrained in the vise counter-clockwise until fully bottomed out **(Figure 2)**. Then turn the hose clockwise 1/4-to-1/2 turn.

5. Generously lubricate the inside of the hose (if not done earlier), including the threads that engage the insert. Likewise, lube the insert mating threads with the same suitable oil. **(Figures 3 & 4)**

6. Carefully push the insert into the socket/hose assembly while turning the insert clockwise to engage the threads. **(Figure 5)**

7. Using a suitable wrench on the insert hex, turn until completely threaded. Do not overtighten the threads past fully engaged. Damage to the components can occur if over-torqued, especially on smaller sizes. **(Figure 6)**



CRIMPING EQUIPMENT & ACCESSORIES



<u>SERIES</u>	<u>PAGE</u>
JCD100S-T420 Portable Service Hose Crimper	174
JCD165M-T420 Hose Crimper	176
JCD205M-WB Hydraulic Hose Crimper	178
JCC-200 General Production Hose Crimper	180
JIC340 - NEW! General Production Hose Crimper	182
JHS JHS-150, -300, -500 Hose Saws and Blades	184
PAG - NEW! Polyethylene Armor Guard	186

JCD100S-T420

PORTABLE SERVICE HOSE CRIMPER

The JCD100S-T420 Portable Series hose crimper with the T420 Micrometer Style Adjustment and 35 tons of crimping force has the capability to crimp hoses up to 1" 2 wire and 3/4" 4SP.



T420 Flex Caged Die Sets & Flex Cages

- Flex caged dies sets for heavy duty environments.
- Eliminates need to replace broken screws and springs.



Accurate and Repeatable

The "MicroSite" indicator on the T420 micrometer allows the operator to make accurate and fast repeatable crimps.



Light Weight Portable Unit

Truly "portable" crimper can be carried to almost any location where service is required.



CRIMPX Die Lubricant Oil

- Extends die life and performance.
- Easy to use and hands stay clean.

ENGINEERED TO ACCOMMODATE YOUR NEEDS

- Hose capacity up to 1" 2 wire and 3/4" 4SP.
- T420 micrometer is fully adjustable for a precise crimp.
- Available Hand Pump, Pneumatic Pump 10,000 psi or Multi-Electric Pump.
- Crimper position can be adjusted for optimum crimping position or dropped to vertical position for better balance when the crimper is being carried.
- Removable Pusher and 2 piece T420 rubber caged die set make accurate fitting positioning easy.
- JCD100S-T420 Portable Crimper weights only 47 lbs.
- Optional Die Storage Shelf keeps dies organized and readily available.
- Base mounting holes allow the crimper to be bench or truck bed mounted if required.

DURABLE, RELIABLE DESIGN = PROFITABILITY

- 35 Tons of crimping force.
- Open design to provide excellent operator visibility.
- Complete range of dies and accessories available.

WARNING: This product can expose you to chemicals including DINP, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

The JCD100S-T420 Portable Series hose crimper paired with either a Hand Pump, Pneumatic Pump or Multi-Electric Pump make the perfect combination for portable crimping requirements.



T420 Micrometer (Included)
P/N: 103085



Hand Pump (Optional) P/N: VHP-10-25



Pneumatic Pump (Optional) P/N: VAP-10-100



Multi-Electric Pump (Optional)



T420/D Series Die Removal Magnet (Included) P/N: 104679



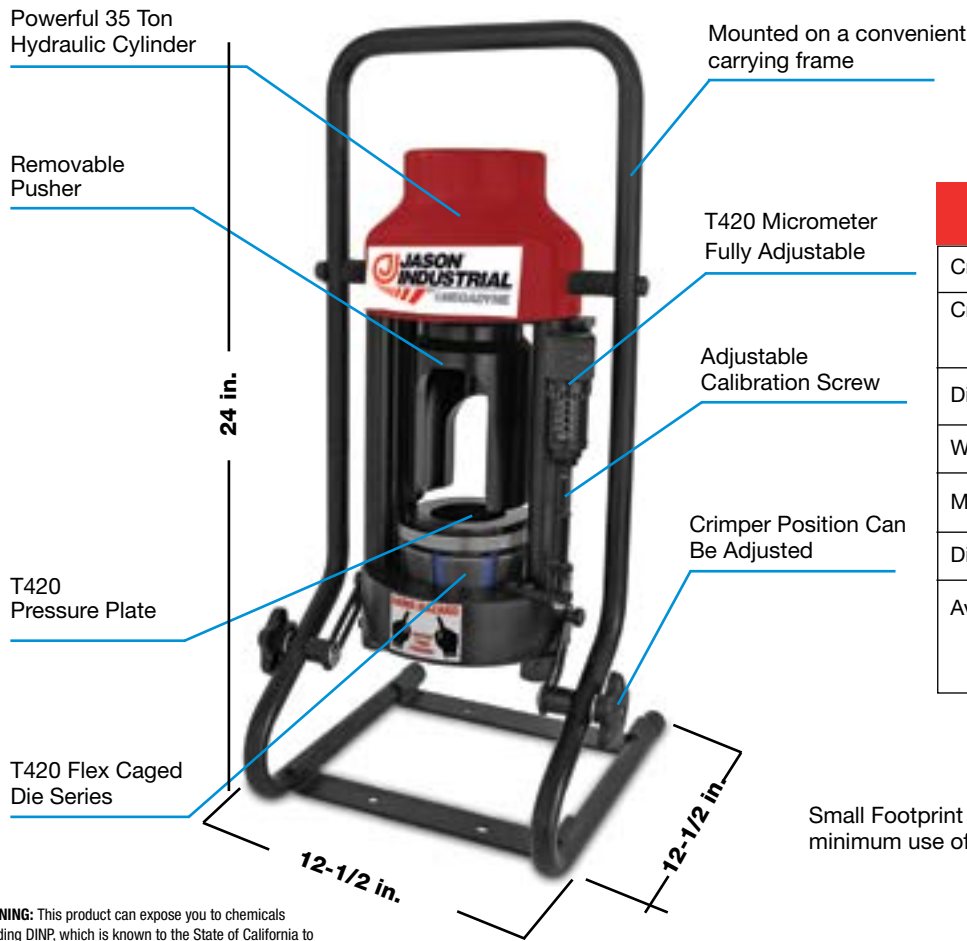
CRIMPX Die Lubricant: Oil 4 oz bottle with dauber cap (Included) P/N: 103886



CRIMPX Die Lubricant: Grease 4 oz can with brush (Optional) P/N: 104162



Die Storage Shelf (Optional) P/N: 101431



TECHNICAL DATA	
Crimping Force:	35 Ton
Crimping Capacity:	1" - 2 Wire 3/4" 4SP
Dimensions - L:	12-1/2" x W: 12-1/2" x H: 24"
Weight:	47 lbs.
Micrometer Style Adjustment:	T420
Die Series:	JCD160-T420 Flex Caged
Available Pumps:	Hand Pump Pneumatic Pump Multi-Electric Pump

Small Footprint for minimum use of space



WARNING: This product can expose you to chemicals including DINP, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JCD165M-T420

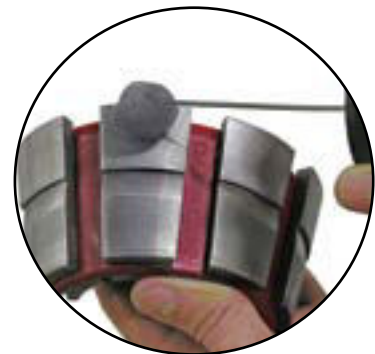


HOSE CRIMPER



Micrometer Automatic Shut-off

- Easy to use and calibrate.
- Ideal for repeatable crimps.



Crimp X Die Lubricant Oil

- To extend die life and performance.
- Easy to use and hands stay clean.

The JCD165M-T420 Series crimper with micrometer style adjustment and 62 tons of crimping force has the capability to crimp 4 spiral hoses up to 1-1/4".

ENGINEERED TO ACCOMMODATE YOUR NEEDS

- Hose capacity up to 1-1/4" 4 spiral.
- Automatic Shut-off for precise crimps.
- Removable pusher and two piece rubber cage crimp die set make accurate fitting positioning easy.
- Built-in adjustable retraction stop limits ram retraction to only the amount require to remove the hose and coupling saving time on multiple crimps.
- Optional die storage shelf keeps dies organized and readily available.
- Optional flexible built-in work lamp to illuminate work area for better visibility.
- Base mounting holes allow crimper to bench or truck bed mounted if required.

DURABLE RELIABLE DESIGN = PROFITABILITY

- 62 tons of crimping force.
- Open design to provide excellent operator visibility.
- Complete range of dies and accessories available.



T-420 Flex Caged Die Sets & Flex Cages

- For heavy duty applications.
- Eliminates need to replace broken screws and springs.
- Minimum maintenance.

WARNING: This product can expose you to chemicals including DINP, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov



Adjustable Retraction Stop



Coupling Stop (Included)



Die Storage Shelf (Optional)



Built-In Lamp (Optional)

TECHNICAL DATA

DIES	T420 Flex Cage
Maximum Crimping Force	62 Tons
Crimping Capacity	Up to 1-1/4" 4 Spiral
Power	1HP / 110V / 1phz (Standard) 2HP / 220V / 1phz (Optional)
Adjustment	T-420 Adjustable Micrometer
Dimensions	L: 24" x W: 12.5" x H: 22.5"
Weight	140 lbs.
Reservoir Capacity	1 US Gallon
Oil Type	ISO 46 Hydraulic Oil
Built-In Lamp	Optional
Die Storage Shelf	P/N:101431 (Optional)
Coupling Stop	P/N:100954 (Included)
Crimp X Die Lubricant 4 Oz.	P/N: 103886 (Included)

WARNING: This product can expose you to chemicals including DINP, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

**Die Stack with EN98-032 Die Series**

1. Large Pusher Plate.
2. EN98-032 Die Series (Not included).

**Die Stack with EN98-020 Die Series**

1. Bent Tube Pusher Plate.
2. Standard Pusher Plate.
3. EN98-020 Die Series (Not included).
4. Cone Insert.

ENGINEERED TO ACCOMMODATE YOUR NEEDS

- Hose capacity up to 1-1/4" 6SP (with standard dies EN98-020, and up to 2" 6-wire hose (with optional EN98-032 die series).
- An infinitely adjustable micrometer and electronic shut off switch make accurate crimps.
- Inverted die positioning gives good visibility allowing the operator to accurately position the fitting prior to making the final crimp.
- Removable pusher and inverted die position make accurate fitting positioning easy.
- Built-in adjustable retraction stop limits ram retraction to only the amount required to remove the hose and coupling saving time on multiple crimps.
- Flexible built-in work lamp to illuminate work area for better visibility.
- Pneumatic remote switch can be operated with hand or foot.
- Base mounting holes allow the crimper to be bench or truck bed mounted if required.

DURABLE, RELIABLE DESIGN = PROFITABILITY

- 80 Tons of crimping force.
- Open design to provide excellent operator visibility.
- Complete range of dies and accessories available.

**High Visibility**

Inverted die position allows operator to accurately position the fitting prior to crimping.

**Save Time**

Adjustable retraction stop limits ram retraction.

WARNING: This product can expose you to chemicals including DINP, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

The JCD205M-WB is a unique vertical crimper with its powerful 80 ton hydraulic cylinder comes packed with functions and features that enable you to quickly and accurately crimp all of your hose assemblies up to 2" 6 wire hose (with EN98-032 Die Series).



Metric Micrometer (Included)
P/N: 101587



Pneumatic Pendent Switch (Included) P/N: 101349



D205/D206 Coupling Stop (Included) P/N: 101631



CRIMPX Die Lubricant (Included)
Grease 4 oz can with brush
P/N: 104162



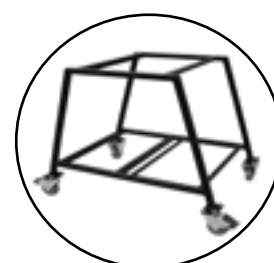
Built-in flexible 24" Work Lamp (Included) P/N: 1668-02



(5) Screws for die series EN98-020 (Included) P/N: EN84-115
(5) Springs for die series EN98-020 (Included) P/N: LL 022D 01



D205/D206 Die Storage Shelf (Optional) P/N: 101625
(BLACK)



D205/D206 Mobile Cart (Optional) P/N: 101956

Powerful 80 Ton Hydraulic Cylinder

Built-in Work Lamp

Removable Pusher

Easy Adjustable Micrometer for an accurate crimp

Electronic Shut Off

Small Footprint for minimum use of space

Adjustable Retraction Stop

2HP/220V/Single Phase Pump For Fast Crimps

Main Power Switch

Electrical Enclosure

Reservoir

Pneumatic Remote Switch

TECHNICAL DATA

80 Ton	160 Ton
EN98-020 dies	EN98-032 dies
1-1/4" - 1-2 Wire	2" - 1-2 Wire
1-1/4" - 4 SP	2" - 4 SP
1-1/4" - 6 SP	2" - 6 SP
Dimensions - L: 32" x W: 17" x H: 29"	
Weight: 305 lbs.	
Power: 2HP/220V/1 Phase (Standard) 1HP/110V/1 Phase (Optional)	
Micrometer Style Adjustment	
Die Series: EN98-020 / EN98-032	
Reservoir Capacity: 1 US Gallon	
Oil Type: ISO 46 Hydraulic Oil	

WARNING: This product can expose you to chemicals including DINP, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

JCC-200

GENERAL PRODUCTION HOSE CRIMPER



MICROMETER ADJUSTABLE AND EASY TO USE!

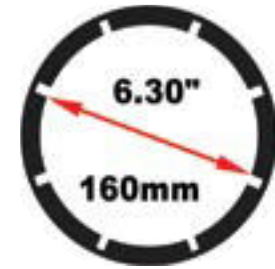
ENGINEERED TO ACCOMMODATE YOUR NEEDS

- Hose capacity up to 2-1/2" 6 wire hydraulic and up to 3" industrial hose.
- Maximum head opening without dies 6.30" (160mm).
- Micrometer Style Adjustment makes precise settings of crimp diameters simple.
- Foot Switch permits dies to be "jogged" into position and keeps both hands free.
- Easy grease maintenance through 8 grease fittings..
- Protective Master Die Foam Pads between the die fingers prevent debris from dropping into the critical surfaces and causing permanent damage.
- Reservoir mounting holes allow the crimper to be bench or truck bed mounted if required.

DURABLE, RELIABLE DESIGN = PROFITABILITY

- 340 Tons of crimping force.
- 55 HP motor wired at 230 volts 3 phase with gear pump for fast crimps (standard).
- Complete range of dies and accessories available.

WARNING: This product can expose you to chemicals including DINP, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov



Max Head Opening
W/O Dies



Micrometer Style Adjustment
Provides speed, precision
and repeatability.



Quick Change Tool
Makes die changes a quick
and simple process.



Save Time
Removable back stop for multiple
crimps of the same hose and fitting.



Protective Master Die Foam Pads
to prevent debris from dropping
into the critical surfaces.

The features found on the JCC200 Series hose crimper and the accessories included make it the best value of any crimper in its class.



99mm Quick Change Tool (Included) P/N: 102571



Foot Pedal Assembly (Included) P/N: 104118



Manual Back Stop (Included) P/N: MBS-60



Adapter Die Set 130mm OD to 99mm ID (Included) P/N: 101575



Mini Grease Gun w/ CRIMPX Die Lubricant 3 oz mini grease tube (Included) P/N: 103889



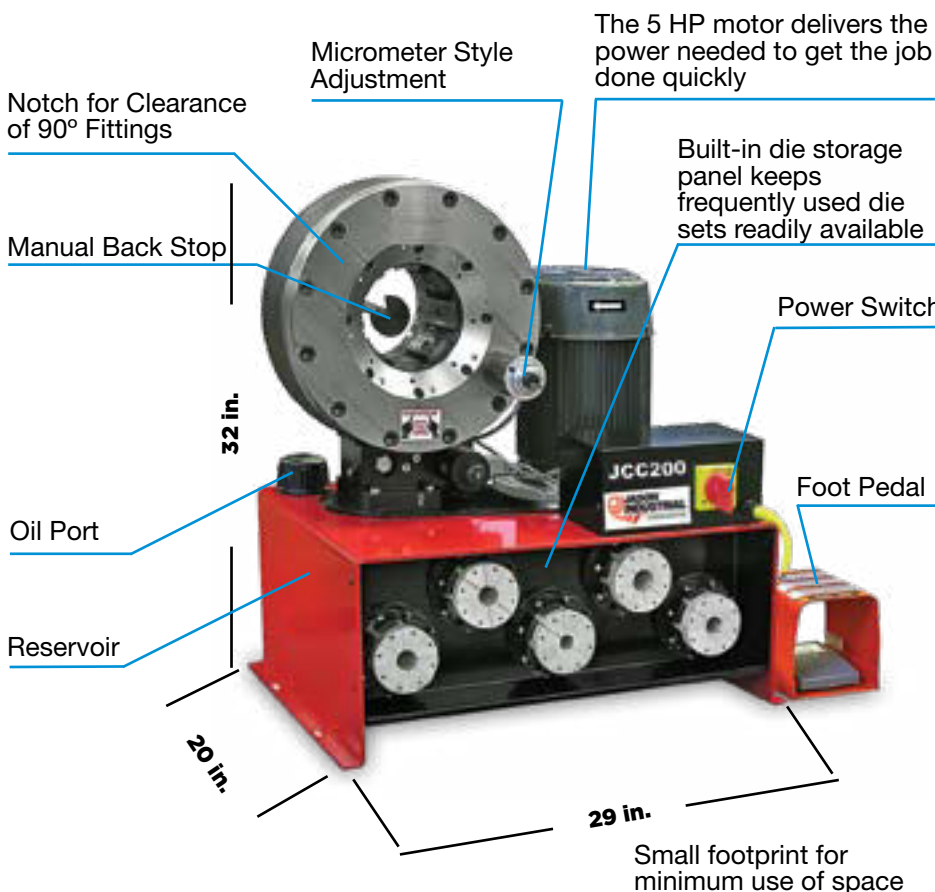
Die Rack 9 Station Die Holders (Included) P/N: 102616-99mm



Micrometer Style Adjustment



Crimper Stand 16 Station Die Holders (Optional) P/N: 101247-99



TECHNICAL DATA	
Crimping Force: 340 Ton	
Max. Crimping Capacity:	2SP: 2-1/2" 4SP: 2-1/2" 6SP: 2-1/2"
Max. Industrial Crimping Capacity: 3"	
Dimensions: L: 20" x W: 29" x H: 32"	
Weight: 635 lbs.	
Power:	5HP / 230V / 3 Phase (Standard) 5HP / 440V / 3 Phase (Optional) 5HP / 230V / 1 Phase (Optional) 1HP / 12VDC (Optional) 1HP / 24VDC (Optional)
Die Series: 99S / 130S	
Adjustability: Micrometer	
Opening Without Dies: 160mm / 6.30"	
Master Die Inside Diameter: 130mm / 5.12"	
Master Die Travel: 38mm / 1.5"	
Reservoir Capacity: 8 US Gallons	
Oil Type: ISO 46 Hydraulic Oil	

WARNING: This product can expose you to chemicals including DINP, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

GENERAL PRODUCTION HOSE CRIMPER WITH InfoCrimp™ CONTROLLER



CRIMPING EQUIPMENT & ACCESSORIES

FUNCTIONALITY:

- Easy to use interface, on a 10-inch color capacitive touch screen.
- Daily reports*.
- Remote downloading of updated crimp specifications*.
- Save thousands of favorite crimp details.
- Security - end-to-end data encryption from tablet to cloud.
- Operators only have access to essential crimp applications.

OPERATIONALLY:

- Bluetooth calipers provided with each crimper.
- User accounts track operations to individual team members.
- Remote troubleshooting*.
- In-depth training and tutorial guides.
- Video support*.

LONGEVITY:

- Preventative maintenance alerts.
- Full controller backup to the cloud*.
- Future enhancements through cloud updates*.

*Needs connection to Wi-Fi.

TECHNICAL DATA

Crimping Force: 340 Ton	
Max. Crimping Capacity:	2SP: 2-½" 4SP: 2-½" 6SP: 2-½"
Max. Industrial Crimping Capacity: 3"	
Weight: 635 lbs.	
Power:	7.5HP / 230V / 3 Phase (Standard) 7.5HP / 440V / 3 Phase (Optional) 5HP / 230V / 1 Phase (Optional)
Die Series: 99S / 130S	
Adjustability: Inch / Metric	
Opening Without Dies: 160mm / 6.30"	
Master Die Inside Diameter: 130mm / 5.12"	
Master Die Travel: 38mm / 1.5"	
Reservoir Capacity: 8 US Gallons	
Oil Type: ISO 46 Hydraulic Oil	

WARNING: This product can expose you to chemicals including DINP, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

The features found on the JIC340 Series hose crimper and the accessories included make it the best value of any crimper in its class.



99mm Quick Change Tool (Included) P/N: 102571



CC-Foot Switch (Included) P/N: CC-FOOTSWITCH



Manual Back Stop (Included) P/N: MBS-60



Electronic Back Stop (Optional) P/N: EBS-60



Adapter Die Set 130mm OD to 99mm ID (Included) P/N: 101575



Mini Grease Gun w/ CRIMPX Die Lubricant 3 oz mini grease tube (Included) P/N: 103889



Die Rack 9 Station Die Holders (Optional) P/N: 102616-99mm



Crimper Stand 16 Station Die Holders (Optional) P/N: 101247-99



View Operation History



Verified Crimp Accuracy



Save Thousands of Favorite Crimp Details



Be Alerted to Preventative Maintenance

JHS-150/JHS-300/JHS-500

These rugged, JHS-150/JHS-300/JHS-500 dependable saws offer features not found on other saws. Choose the one with the capacity and features which meet your individual requirements.



HOSE SAWS



Mister Hose Assembly



Hose Channel System



Hose Bending Pins



Counter



Hose Helper



Available Vacuum Port

ENGINEERED TO ACCOMMODATE YOUR NEEDS

- **Mister Hose Assembly (Optional) (P/N: 103172)**
Available only for the JHS-300 and JHS-500 Hose Saws. The Mister sprays a fine mist of air tool oil on the saw blade for longer blade life and cleaner cuts.
- **Hose Channel System (Optional) (P/N: 103073)**
Available in 5 foot sections only for the JHS-300 and JHS-500 Hose Saws. The Hose Channel System both measures and supports the hoses up to 2 inch diameter as they are being cut.
- **Counter (Included) (P/N: 1895T42)**
Available only for the JHS-300 and JHS-500 Hose Saws. The Counter makes it easy to keep track of the number of cuts made and is easily reset to zero.
- **Hose Helper (Included) (P/N: 103297)**
Available only for the JHS-300 and JHS-500 Hose Saws. The Hose Helper attachment prevents the hose from being drawn back during a cut and gives the operator the ability to more precisely control the cut length.

DURABLE, RELIABLE DESIGN = PROFITABILITY

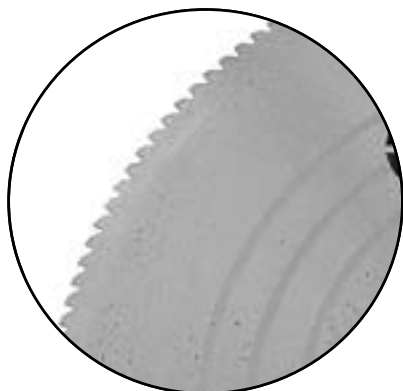
- Powerful motors (Available different configurations) to make cutting fast.
- Available different types of blades to meet your requirements and it is easy to change blades.
- Available Vacuum Port only for the JHS-300 and JHS-500 Hose Saws.
- Hose Bending Pins prevent the blade from binding during a cut (included in all models).
- Base mounting holes allow the hose saw to be bench or truck bed-mounted if required.

WARNING: This product can expose you to chemicals including DINP, which is known to the State of California to cause cancer, birth defects or other reproductive harm.
For more information visit www.P65WARNINGS.ca.gov

NOTE: The edges of the blade may appear to be dull. This does not mean that the blade is not effective. As long as the blade is still giving clean cuts, do not replace the blade.

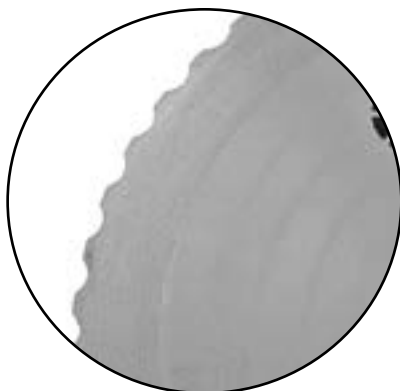
NOTE: New blades must be properly conditioned to assure long life and clean cuts. For the first ten cuts, feed the blade slowly through a medium size hose. This will properly break in and condition the blade for long life.

***NOTE:** Pay close attention to the direction of rotation marked on the blade - it is the opposite of most blades of this type.



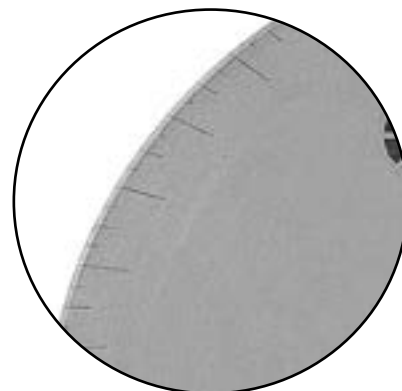
***Serrated Blade (General Purpose):**

Is recommended to cut multi-spiral hose.



Scalloped Blade (General Purpose):

Is recommended to cut multi-spiral hose.



Double Bevel Blade with SS Slots:

Is recommended for braided hose with minimum debris during the cut.

Hose Saw Model	Blade Type	Blade Size Durometer	Arbor Size	Part Number
JHS-150	Serrated (Included)	10 inch	1 inch	103502
	Scalloped (Available)	10 inch	1 inch	104034
	Double Bevel w/ SS Slots (Available)	10 inch	1 inch	104050
JHS-300 & JHS-500	Serrated (Included)	12 inch	1 inch	103187
	Scalloped (Available)	12 inch	1 inch	104033
	Double Bevel w/ SS Slots (Available)	12 inch	1 inch	102210



TECHNICAL DATA

JHS-150		JHS-300		JHS-500	
Cutting Capacity: 1-1/4" 4SP		Cutting Capacity: 2" 2 Wire		Cutting Capacity: 2" 6SP	
Dimensions:	L: 28-3/4" x W: 21" x H: 12-1/4"	Dimensions:	L: 29-3/4" x W: 26-3/4" x H: 16"	Dimensions:	L: 29-3/4" x W: 26-3/4" x H: 16"
Weight: 70 lbs.		Weight: 120 lbs.		Weight: 120 lbs.	
Power:	1HP/230V/1 Phase (Standard) 1HP/110V/1 Phase (Optional)	Power:	3HP/230V/3 Phase (Standard) 3HP/480V/3 Phase (Optional) 3HP/230V/1 Phase (Optional)	Power:	5HP/230V/3 Phase (Standard) 5HP/480V/3 Phase (Optional) 5HP/230V/1 Phase (Optional)

POLYETHYLENE ARMOR GUARD



Application: Used to protect hose assemblies from external mechanical damage

Construction Material: Polyethylene (black)

Catalog Part Number	Hose Inside Diameter		Armor Guard Inside Diameter		Length Per Carton	
	inch	mm	inch	mm	feet	meter
PAG-04	1/4	6.4	0.55	14.0	328	100
PAG-06	3/8	9.5	0.63	16.0	328	100
PAG-08	1/2	12.7	0.83	21.0	164	50
PAG-12	3/4	19.1	1.06	27.0	98.4	30
PAG-16	1	25.4	1.22	31.0	82	25
PAG-20	1-1/4	31.8	1.69	43.0	65.6	20

***Order in carton quantities only. No cut lengths**

We disclaim any liability for use of our products in applications other than which they are designed.

WARNING: This product can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information visit www.P65WARNINGS.ca.gov

CONVERSION TABLES

DECIMAL & MILLIMETER EQUIVALENTS OF FRACTIONS

inch = 25.4 millimeters												
Fractional Inch				Decimal			Fractional Inch				Decimal	
1/64	1/32	1/16	1/8	inch	mm		1/64	1/32	1/16	1/8	inch	mm
1	-	-	-	0.016	0.40		33	-	-	-	0.516	13.10
2	1	-	-	0.031	0.79		34	17	-	-	0.531	13.50
3	-	-	-	0.047	1.19		35	-	-	-	0.547	13.90
4	2	1	-	0.063	1.59		36	18	9	-	0.563	14.30
5	-	-	-	0.078	1.98		37	-	-	-	0.578	14.70
6	3	-	-	0.094	2.38		38	19	-	-	0.594	15.10
7	-	-	-	0.109	2.78		39	-	-	-	0.609	15.50
8	4	2	1	0.125	3.18		40	20	10	5	0.625	15.90
9	-	-	-	0.141	3.57		41	-	-	-	0.641	16.30
10	5	-	-	0.156	4.00		42	21	-	-	0.656	16.70
11	-	-	-	0.172	4.40		43	-	-	-	0.672	17.10
12	6	3	-	0.188	4.80		44	22	11	-	0.688	17.50
13	-	-	-	0.203	5.20		45	-	-	-	0.703	17.90
14	7	-	-	0.219	5.60		46	23	-	-	0.719	18.30
15	-	-	-	0.234	6.00		47	-	-	-	0.734	18.70
16	8	4	2	0.250	6.40		48	24	12	6	0.750	19.10
17	-	-	-	0.266	6.70		49	-	-	-	0.766	19.50
18	9	-	-	0.281	7.10		50	25	-	-	0.781	19.80
19	-	-	-	0.297	7.50		51	-	-	-	0.797	20.30
20	10	5	-	0.313	7.90		52	26	13	-	0.813	20.60
21	-	-	-	0.328	8.30		53	-	-	-	0.828	21.00
22	11	-	-	0.344	8.70		54	27	-	-	0.844	21.40
23	-	-	-	0.359	9.10		55	-	-	-	0.859	21.80
24	12	6	3	0.375	9.50		56	28	14	7	0.875	22.20
25	-	-	-	0.391	9.90		57	-	-	-	0.891	22.60
26	13	-	-	0.406	10.30		58	29	-	-	0.906	23.00
27	-	-	-	0.422	10.70		59	-	-	-	0.922	23.40
28	14	7	-	0.438	11.10		60	30	15	-	0.938	23.80
29	-	-	-	0.453	11.50		61	-	-	-	0.953	24.20
30	15	-	-	0.469	11.90		62	31	-	-	0.969	24.60
31	-	-	-	0.484	12.30		63	-	-	-	0.984	25.00
32	16	8	4	0.500	12.70		64	32	16	8	1.000	25.40

VACUUM CONVERSION TABLE FOR WATER (SUCTION)

ATM	PSI	Meter	Feet	mm	in Hg	%
0.1	1.40	1	3ft. 3-3/8 in.	73.60	2.90	10
0.2	2.80	2	6 ft. 6-3/4 in.	147.10	5.80	20
0.3	4.20	3	9 ft. 10-1/8 in.	220.70	8.70	30
0.4	5.70	4	13 ft. 1-1/2 in.	294.20	11.60	40
0.5	7.10	5	16 ft. 4-13/16 in.	367.80	14.50	50
0.6	8.50	6	19 ft. 8-3/16 in.	441.30	17.40	60
0.7	10.00	7	22 ft. 11-9/16 in.	514.90	20.30	70
0.8	11.40	8	26 ft. 2-5/16 in.	588.40	23.20	80
0.9	12.80	9	29 ft. 6-3/8 in.	662.00	26.00	90
1.0	14.20	10	32 ft. 9-11/16 in.	735.50	29.00	100

TEMPERATURE CONVERSION

Look up reading in middle column (shaded). If in degrees Centigrade, read Fahrenheit equivalent in right-hand column; if in Fahrenheit degrees, read Centigrade equivalent in left-hand column.

$$^{\circ}\text{F} = (^{\circ}\text{C} \times 1.8) + 32 \quad ^{\circ}\text{C} = (^{\circ}\text{F} - 32) \times .5556$$

C	F ^C	F	C	F ^C	F	C	F ^C	F
-51	-60	-76	.6	33	91.4	22.2	72	161.6
-46	-50	-58	1.1	34	93.2	22.8	73	163.4
-40	-40	-40	1.7	35	95.0	23.3	74	165.2
-24	-30	-22	2.2	36	96.8	23.9	75	167.0
-29	-20	-4	2.8	37	98.6	24.4	76	168.8
-23	-10	14	3.3	38	100.4	25.0	77	170.6
-17.8	0	32	3.9	39	102.2	25.6	78	172.4
-17.2	1	33.8	4.4	40	104.0	26.1	79	174.2
-16.7	2	35.6	5.0	41	105.8	26.7	80	176.0
-16.1	3	37.4	5.6	42	107.6	27.2	81	177.8
-15.6	4	39.2	6.1	43	109.4	27.8	82	179.6
-15.0	5	41.0	6.7	44	111.2	28.3	83	181.4
-14.4	6	42.8	7.2	45	113.0	28.9	84	183.2
-13.9	7	44.6	7.8	46	114.8	29.4	85	185.0
-13.3	8	46.4	8.3	47	116.6	30.0	86	186.8
-12.8	9	48.2	8.9	48	118.4	30.6	87	188.6
-12.2	10	50.0	9.4	49	120.2	31.1	88	190.4
-11.7	11	51.8	10.0	50	122.0	31.7	89	192.2
-11.1	12	53.6	10.6	51	123.8	32.2	90	194.0
-10.6	13	55.4	11.1	52	125.6	32.8	91	195.8
-10.0	14	57.2	11.7	53	127.4	33.3	92	197.6
-9.4	15	59.0	12.2	54	129.2	3.9	93	199.4
-8.9	16	60.8	12.8	55	131.0	34.4	94	201.2
-8.3	17	62.6	13.3	56	132.8	35.0	95	203.0
-7.8	18	64.4	13.9	57	134.6	35.6	96	204.8
-7.2	19	66.2	14.4	58	136.4	36.1	97	206.6
-6.7	20	68.0	15.0	59	138.2	36.7	98	208.4
-6.1	21	69.8	15.6	60	140.0	37.2	99	210.2
-5.6	22	71.6	16.1	61	141.8	37.8	100	212.0
-5.0	23	73.4	16.7	62	143.6	-	-	-
-4.4	24	75.2	17.2	63	145.4	-	-	-
-3.9	25	77.0	17.8	64	147.2	43	110	230
-3.3	26	78.8	18.3	65	149.0	49	120	248
-2.8	27	80.6	18.9	66	150.8	54	130	266
-2.2	28	82.4	19.4	67	152.6	60	140	284
-1.7	29	84.2	20.0	68	154.4	66	150	302
-1.1	30	86.0	20.6	69	156.2	71	160	320
-0.6	31	87.7	21.1	70	158.0	77	170	338
0	32	89.6	21.7	71	159.8	82	180	356

CONVERSION TABLES

PRESSURE RATING CONVERSION

TABLE 1: PSI TO BAR CONVERSION

PSI	BAR	PSI	BAR
1	0.07	95	6.55
2	0.14	100	6.89
3	0.21	110	7.58
4	0.28	120	8.27
5	0.34	130	8.96
6	0.41	140	9.65
7	0.48	150	10.34
8	0.55	160	11.03
9	0.62	170	11.72
10	0.69	180	12.41
11	0.76	190	13.10
12	0.83	200	13.79
13	0.90	210	14.48
14	0.97	220	15.17
15	1.03	230	15.86
16	1.10	240	16.55
17	1.17	250	17.24
18	1.24	275	18.96
19	1.31	300	20.68
20	1.38	325	22.41
21	1.45	650	24.13
22	1.52	375	25.86
23	1.59	400	27.58
24	1.66	425	29.30
25	1.72	450	31.03
30	2.07	475	32.75
35	2.41	500	34.47
40	2.76	550	37.92
45	3.10	600	41.37
50	3.45	650	44.82
55	3.79	700	48.26
60	4.14	750	51.71
65	4.48	800	55.16
70	4.83	850	58.61
75	5.17	900	62.05
80	5.52	950	65.90
85	5.86	1000	68.95
90	6.21	-	-

TABLE 2: BAR TO PSI CONVERSION

BAR	PSI	BAR	PSI
1	14.50	95	1378.0
2	29.01	100	1450.0
3	43.51	110	1595.0
4	58.02	120	1740.0
5	72.52	130	1885.0
6	87.02	140	2031.0
7	101.50	150	2176.0
8	116.00	160	2321.0
9	130.50	170	2466.0
10	145.00	180	2611.0
11	159.50	190	2756.0
12	174.00	200	2901.0
13	188.50	210	3046.0
14	203.10	220	3191.0
15	217.60	230	3336.0
16	323.10	240	3481.0
17	246.60	250	3626.0
18	261.10	275	3989.0
19	275.60	300	4351.0
20	290.10	325	4714.0
21	304.60	350	5076.0
22	319.10	375	5439.0
23	333.60	400	5802.0
24	348.10	425	6164.0
25	362.60	450	6527.0
30	435.10	475	6889.0
35	507.60	500	7252.0
40	280.20	550	7977.0
45	652.70	600	8702.0
50	725.20	650	9427.0
55	797.70	700	10153.0
60	870.20	750	10878.0
65	942.70	800	11603.0
70	1015.0	850	12328.0
75	1088.0	900	13053.0
80	1160.0	950	13779.0
85	1233.0	1000	14504.0
90	1305.0	-	-



MyCrimp

Jason Industrial is pleased to provide an easy to use downloadable Mobile App enabling users

coupling specifications for the hose products we offer. Our App, Jason MyCrimp provides a fast, easy to use tool for obtaining important information to ensure safety by using the right coupling and hose together.

Our App, enables you to search by Hose, Coupling type or crimping equipment to obtain the right specification to ensure you are safely following the right procedures.

Our Application features include:

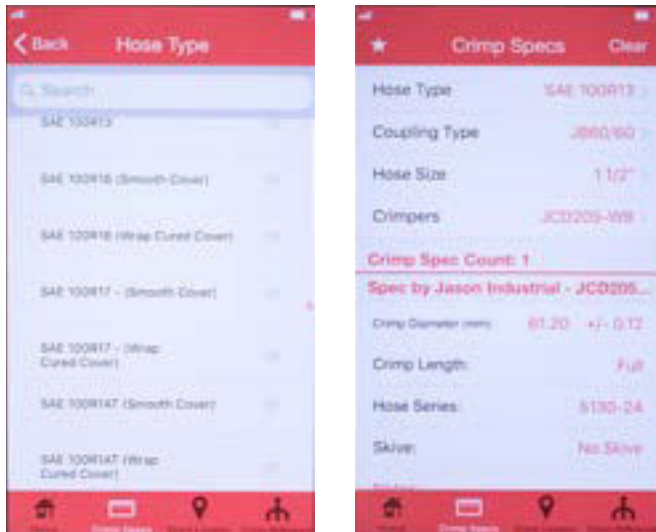
- Online/Offline Functionality-however, when online, the application downloads the most current information
- Complete up to date specifications on your smart phone (iOS and Android)
- Search by Hose, Coupling Type, Hose Size or Crimper



Jason Industrial Hydraulic Hose, Couplings and Crimping Equipment is now available in the Americas in:

- 1 & 2 Wire Braid Hose and 38 Series of Couplings
- 4 Spiral Hose and 35 Series of Couplings
- 4 and 6 Spiral Hose and 19 Series of Couplings





Guidelines - Liability

Jason Industrial® products are part of an engineered system which must be assembled and used in accordance with Jason instructions and limitations. Jason hose, couplings and crimping machines are a reliable assembly system designed by our engineering group. The use of non-Jason components (hose, couplings, equipment) may produce assemblies that will not meet the rated performance. Failure to follow Jason guidelines could lead to premature hose failures resulting in property damage, serious injury or death.

Jason's limited warranty shall only apply if the customer uses the hose, hose fittings and crimping equipment specifically approved by Jason's engineers.

Jason will not be responsible when interchanging hose and/or couplings with hose and/or couplings with any other manufacturer. Jason's liability ends and customer's begins when data is ignored or altered and products, other than Jason's are assembled together.

Jason Industrial disclaims any responsibility or liability for any crimped hose assemblies that have NOT been made exclusively from genuine Jason hose, hose fittings and approved equipment. This is in conformance with current Jason Industrial guidelines for each specific hose assembly.

Product liability responsibility for such hose assemblies become the personal responsibility of the assembler or the company endorsing these practices.

Proper End Fitting - Care must be taken to ensure proper compatibility exists between the hose and coupling selected based on the manufacturers' recommendation substantiated by testing to industry standards such as SAE J517.

Current Crimp Specifications:

Jason Industrial's recommended crimping specifications are available online at www.jasonindustrial.com or you can scan the Q.R. code below to be taken directly to them.



Critical Points

- The data supplied with the Jason crimper was developed after extensive testing with Jason hose and couplings.
- The data that Jason supplies only pertains to products bearing the Jason name and catalog part number.
- Jason couplings, used with other manufacturer's hose, will not necessarily produce an acceptable assembly. Hose styles with identical SAE specs, for instance, are not necessarily the same when it comes to performance with Jason couplings.
- Hose compatibility with various materials is a reference only. The purchaser is responsible for the verification of sustainability. Consult Jason if there is any doubt.
- Jason crimpers can only be used to crimp approved Jason hose and couplings.
- Minimum burst pressure ratings listed in our catalog are for reference and design purpose only. Minimum burst pressure ratings give no indication that the product should be used above the indicated rated working pressure.

HOSE CARE, MAINTENANCE & STORAGE

Hose has a limited life and the user must be alert to signs of impending failure, particularly when the conditions of service include high working pressures and/or the conveyance or containment of hazardous materials. The periodic inspection and testing procedures described here provide a schedule of specific measures which constitute a minimum level of user action to detect signs indicating hose deterioration or loss of performance before conditions leading to malfunction or failure are reached.

General instructions are also described for the proper storage of hose to minimize deterioration from exposure to elements or environments which are known to be deleterious to rubber products. Proper storage conditions can enhance and extend substantially the ultimate life of hose products.

SAFETY WARNING: Failure to properly follow the manufacturer's recommended procedures for the care, maintenance and storage of a particular hose might result in the failure to perform in the manner intended and might result in possible damage to property and serious bodily harm.

General Care and Maintenance of Hose

Hose should not be subjected to any form of abuse in service. It should be handled with reasonable care. Hose should not be dragged over sharp or abrasive surfaces unless specifically designed for such service. Care should be taken to protect hose from severe end loads for which the hose or hose assembly were not designed. Hose should be used at or below its rated working pressure; any changes in pressure should be made gradually so as not to subject the hose to excessive surge pressures. Hose should not be kinked or be run over by equipment. In handling the large size hose, dollies should be used whenever possible; slings or handling rigs, properly placed, should be used to support heavy hose used in oil suction and discharge service.

General Test & Inspection Procedures

An inspection and hydrostatic test should be made at periodic intervals to determine if a hose is suitable for continued service. A visual inspection of the hose should be made for loose covers, kinks, bulges, or soft spots which might indicate broken or displaced reinforcement. The couplings or fittings should be closely examined and, if there is any sign of movement of the hose from the couplings, the hose should be removed from service. The periodic inspection should include a hydrostatic test for one minute at 150% of the recommended working pressure of the hose. An exception to this would be the woven jacketed fire hose.* During the hydrostatic test, the hose should be straight, not coiled or in a kinked position. Water is the usual test medium and, following the test, the hose may be flushed with alcohol to remove traces of moisture. A regular schedule for testing should be followed and inspection records maintained.

Safety Warning: Before conducting any pressure tests on hose, provision must be made to ensure the safety of the personnel performing the tests and to prevent any possible damage to property. Only trained personnel using proper tools and procedures should conduct any pressure tests.

- 1. Air or any other compressible gas must never be used as the test media because of the explosive action of the gas should a failure occur. Such a failure might result in possible damage to property and serious bodily injury.**
- 2. Air should be removed from the hose by bleeding it through an outlet valve while the hose is being filled with the test medium.**
- 3. Hose to be pressure tested must be restrained by placing steel rods or straps close to each end and at approximate 10' (3m) intervals along its length to keep the hose from "whipping" if failure occurs; the steel rods or straps are to be anchored firmly to the test structure but in such a manner that they do not contact the hose which must be free to move.**
- 4. The outlet end of hose is to be bulwarked so that a blown-out fitting will be stopped.**

5. Provisions must be made to protect testing personnel from the forces of the pressure media if a failure occurs.

6. Testing personnel must never stand in front of or in back of the ends of a hose being pressure tested.

7. If liquids such as gasoline, oil, solvent, or other hazardous fluids are used as a test fluid, precautions must be taken to protect against fire or other damage should a hose assembly fail and the test liquid be sprayed over the surrounding area.

Storage

Rubber hose products in storage can be affected adversely by temperature, humidity, ozone, sunlight, oils, solvents, corrosive liquids and fumes, insects, rodents and radioactive materials.

The appropriate method for storing hose depends to a great extent on the size (diameter and length), the quantity to be stored, and the way in which it is packaged. Hose should not be piled or stacked to such an extent that the weight of the stack creates distortions on the lengths stored at the bottom.

Since hose products vary considerably in size, weight and length, it is not practical to establish definite recommendations on this point. Hose having a very light wall will not support as much load as could a hose having a heavier wall or hose having a wire reinforcement. Hose which is shipped in coils or bales should be stored so that the coils are in a horizontal plane.

Whenever feasible, rubber hose products should be stored in their original shipping containers, especially when such containers are wooden crates or cardboard cartons which provide some protection against the deteriorating effects of oils, solvents, and corrosive liquids; shipping containers also afford some protection against ozone and sunlight.

Certain rodents and insects will damage rubber hose products and adequate protection from them should be provided.

Cotton jacketed hose should be protected against fungal growths if the hose is to be stored for prolonged periods in humidity conditions in excess of 70%

The ideal temperature for storage of rubber product ranges from 50° to 70°F (10-21°C) with a maximum limit of 100°F (38°C). If stored below 32°F (0°C), some rubber products become stiff and would require warming before being placed in service. Rubber products should not be stored near sources of heat, such as radiators, base heaters, etc., nor should they be stored under conditions of high or low humidity.

To avoid adverse effects of high ozone concentration, rubber hose products should not be stored near electrical equipment that may generate ozone or be stored for any lengthy period in geographical areas of known high ozone concentration.

Hose should not be stored in locations where the ozone level exceeds the National Institute of Occupational Safety and Health's upper limit of 0.10 ppm. Exposure to direct or reflected sunlight—even through windows should also be avoided. Uncovered hose should not be stored under fluorescent or mercury lamps which generate light waves harmful to rubber.

Storage areas should be relatively cool and dark, and free from dampness and mildew. Items should be stored on a first-in, first-out basis, since even under the best of conditions, an unusually long shelf life could deteriorate certain rubber products.

*Woven jacket fire hose should be tested in accordance with the service test provisions contained in the current edition of the National Fire Protection Association Bulletin No. 1962 - Standard for the Care, Use and Service Testing of Fire Hose.

- Reprinted with permission from the Association of Rubber Products Manufacturers (ARPM), Hose Handbook, RMA/IP-2/2003 (ARPM has replaced RMA)

TERMS, CONDITIONS AND LIMITED WARRANTY OF SALE

All prices, terms and conditions of sale are subject to change without prior notice. Buyer agrees to all terms and conditions of seller upon the placement of any and all purchase orders.

GENERAL

- All orders are subject to a minimum charge of \$100.00
- All claims must be made within seven (7) days of receipt of merchandise.
- The company reserves the right at all times to reject any and all orders for any reason.

PAYMENT TERMS

- Net 30 days (to approved and qualified accounts)
- We reserve the right to hold shipments against past due accounts.
- Seller may require full or partial payment in advance if, in its sole judgement, the financial condition of the buyer does not justify the terms specified.
- All past due accounts are subject to a late payment charge of 1.5% per month, or maximum allowed by law if different, along with the expenses incidental to collection including reasonable attorney's fees
- Returned checks are subject to a minimum \$50.00 charge.

ACCEPTANCE, ALTERATION AND CANCELLATION OF ORDERS

Orders for other than standard items or standard lengths may not be cancelled after purchase has been committed, production scheduled or any costs incurred.

RETURN OF DEFECTIVE MERCHANDISE

Defective or failed material to be held at the buyer's premises until authorization has been granted by seller to return or dispose of merchandise. Merchandise to be returned for final inspection must be returned Freight Prepaid in the most economical way. Credit will be issued for material found to be defective upon our inspection based on prices at time of purchase.

MERCHANDISE SHIPPED IN ERROR

Buyer must notify seller immediately on any merchandise shipped in error. Upon notification, merchandise is to be returned to seller either via truck on a Freight Collect basis, via carrier of our choice, or via UPS on a Freight Prepaid basis. Buyer will be reimbursed for cost of merchandise, plus any additional freight which may have been incurred due to shipping error.

MERCHANDISE ORDERED IN ERROR

Standard packaged merchandise only may be returned, provided that the merchandise is in the original buyer's possession not more than 30 days. If merchandise is accepted for return, merchandise must be returned Freight Prepaid, and buyer will be charged a minimum of 15% rehandling charge, plus a chargeback for outbound freight charges if the original order was shipped prepaid. Returns are not accepted for any merchandise that is specifically manufactured to meet the buyer's requirement of either specifications or large quantity.

DELIVERY, DAMAGES, SHORTAGES

Delivery to the initial common carrier shall constitute the delivery to the buyer. Our responsibility, insofar as transportation risks are concerned, ceases upon the delivery of the merchandise in good condition to such a carrier, and all the merchandise shall be shipped at the buyer's risk.

GOODS DAMAGED IN SHIPMENT

Upon receipt of shipment, any evidence of damage to original shipping package must be reported by the receiving party and a claim made with the delivering carrier upon receipt of shipment.

CONCEALED DAMAGE

Any evidence of damage to material shipped, upon the opening of the original shipping package, must be reported by the receiving party to and a claim made with the delivering carrier without delay.

LIMITED WARRANTY

The merchandise or products sold or distributed by Jason Industrial are warranted to our customers to be free from defects in material and workmanship at the time of shipment by us. All warranty claims shall be made within 90 days after we have shipped the merchandise. Our liability hereunder is limited to the purchase price of any merchandise proved defective, or, at our option, to the replacement of such merchandise upon its authorized return to us.

THIS WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, EXPRESSED, IMPLIED, STATUTORY, OR OTHERWISE CREATED UNDER APPLICABLE LAW INCLUDING, BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL WE BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOSS OF PROFITS.



Founded in 1958 in Fairfield NJ, Jason Industrial quickly gained a solid reputation as a go to source for both industrial hose and power transmission belts. Products, supported by reliable stocks and knowledgeable customer care quickly enabled Jason to become well recognized as a solid partner to distributors across the States. In subsequent decades, Jason expanded its successful Fairfield business model across the US opening distribution centers in Carol Stream, IL; Tampa, FL; Dallas, TX; Los Angeles, CA and Portland, OR. Outside of the US, expansion took place in Canada, Mexico, Brazil, Colombia and Peru.

In 2007, Jason Industrial was acquired by Megadyne and became part of the Megadyne Group. In 2018, the Megadyne Group joined with Ammeraal to create AMMEGA. Today, Jason Industrial is a Commercial Division of AMMEGA serving North, Central and South America offering a wide range of both industrial and hydraulic hose, couplings, equipment and accessories.

info-us@megadynegroup.com

www.JasonIndustrial.com

BRAZIL

Sorocaba

Phone +55 15 2101 7700
Info.br@megadynegroup.com

CANADA

Edmonton

Phone +1 780 461 4400
Info.ca@megadynegroup.com

Montreal

Phone +1 514 31 2341
Info.ca@megadynegroup.com

Toronto

Phone +1 905 602 4400
Info.ca@megadynegroup.com

COLOMBIA

Bogotá

Phone +57 (1) 471 0503
Info.co@megadynegroup.com

Cartagena

Phone +57 (5) 672 997
Info.co@megadynegroup.com

MEXICO

Mexico C.P.

Phone +52 55 5587 3680
info.mx@megadynegroup.com

PERU

Lima

Phone +51 713 0069
info.pe@megadynegroup.com

U.S.A

California

Phone +1 323 265 8061
info.us@megadynegroup.com

Florida

Phone +1 813 241 4111
info.us@megadynegroup.com

Illinois

Phone +1 630 752 0600
info.us@megadynegroup.com
221 S. Westgate Dr.
Carol Stream, IL 60188

New Jersey

Phone +1 973 227 4904
info.us@megadynegroup.com
340 Kaplan Dr
Fairfield, NJ 07004

Oregon

Phone +1 503 231 7224
info.us@megadynegroup.com

Texas

Phone +1 972 438 6992
info.us@megadynegroup.com

www.jasonindustrial.com

