









# Hose, Fittings and Equipment

Catalog 4400 February 2015





## Parker Hannifin – the global leader and your partner



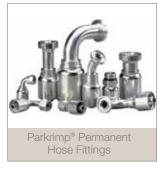
With annual sales exceeding \$13 billion, Parker Hannifin is the world's leading diversified manufacturer of motion and control technologies and systems, providing precision-engineered solutions for a wide variety of mobile, industrial and aerospace markets. Our products are vital to virtually everything that moves or requires control, including the manufacture and processing of raw materials, durable goods, infrastructure development and all forms of transport.

Within Parker's seven operating groups, the company's engineering expertise spans the core motion technologies – electromechanical, hydraulic and pneumatic – with a full complement of fluid handling, filtration, sealing and shielding, climate control, process control and aerospace technologies.

The leader in "dry technology" for the fluid power industry, Parker's Fluid Connectors Group is your single source for high-quality tube fittings, hose and hose fittings, thermoplastic tubing, brass fittings and valves, quick-disconnect couplings and assembly tools. The Fluid Connectors Group serves customers in a broad range of markets, including Aerial Lift, Agriculture, Bulk Chemical Handling, Construction Machinery,

Food & Beverage, Fuel & Gas Delivery, Industrial Machinery, Medical, Mining, Mobile, Oil & Gas and Transportation. Products are available for shipment 24 hours a day, supported by 49 manufacturing facilities throughout the world, a global distribution network and 25 company-owned stocking service centers. Our commitment to you is impeccable customer service. To meet your specific requirements, we offer a broad range of programs designed to reduce your overall operating costs, streamline manufacturing, improve productivity, manage inventory, enhance delivery and address safety and environmental issues. For value-added services that generate value-added solutions, team up with Parker!









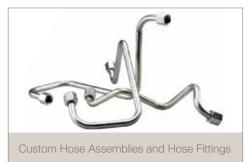


## **Hose Products Division**











With a long history of providing premier customer service, Hose Products Division is the leading manufacturer of hose, fittings and crimping technology for industrial and hydraulic markets. Continually expanding our products to better serve the market, we offer world-class service technologies including the Parker Tracking System, Onsite containers, rapid prototyping and smart phone applications. Our division headquarters in Wickliffe, Ohio, is our precision-engineered-solution center for products, materials and processes, and is equipped with state-of-the-art development, testing and performance technology. Hose Products Division has several manufacturing locations within the United States dedicated to delivering a quality product on time. Knowing that uptime and productivity are major drivers in your business success, we proudly present our new catalog outlining Parker's best-in-class hose products and services.

Best regards,

Ben Mather General Manager

## PARKER SAFETY GUIDE FOR SELECTING AND USING HOSE, TUBING, FITTINGS AND RELATED ACCESSORIES



FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF HOSE, TUBING, FITTINGS, ASSEMBLIES OR RELATED ACCESSORIES ("PRODUCTS") CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE. POSSIBLE CONSEQUENCES OF FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THESE PRODUCTS INCLUDE BUT ARE NOT LIMITED TO:

- Fittings thrown off at high speed.
- High velocity fluid discharge.
- Explosion or burning of the conveved fluid.
- Electrocution from high voltage electric powerlines.
- Contact with suddenly moving or falling objects that are controlled by the conveyed fluid.
- Injections by high-pressure fluid discharge.
- Dangerously whipping hose.
- Contact with conveyed fluids that may be hot, cold, toxic or otherwise injurious.
- Sparking or explosion caused by static electricity buildup or other sources of electricity.
- Sparking or explosion while spraying paint or flammable liquids.

Before selecting or using any of these products, it is important that you read and follow the instructions below. Only hose from Parker's Stratoflex Products Division is approved for in flight aerospace applications, and no other hose can be used for such in flight applications.

Parker Publication No. 4400-B1 Revised 2007

#### DO NOT MIX & MATCH

#### DO NOT MIX & MATCH -

Components from different manufacturers should not be combined to create hose assemblies (apart from rare instances when both manufacturers have approved the exception). To mix and match components is to increase the risk of hose failure – a dangerous situation regardless of setting or application. Possible consequences of hose failure resulting from the use of incompatible components include:

- Fittings thrown off at high speed
- High velocity fluid discharge
- Fluid injection injury
- Violently "whipping" hose
   Sparking or explosion from sprayed flammable fluids
- Suddenly moving / falling objects otherwise held static by fluid pressure

The individual is solely responsible for the hose assemblies he or she fabricates. Fluid power professionals should abide by three basic tenets when fabricating hose assemblies:

- Only assemble hoses and fittings of the same make
- Always use a crimper approved by the manufacturer of the hose and fittings
- Crimp only to the manufacturer's specification

Parker's recommendations are consistent with SAE standard J1273: Industry Consensus on Best Practices for Using Hydraulic Hose. The complete technical paper, which includes SAE-recommended practices for hose assembly fabrication, can be purchased from www.SAE.org.

#### **QR READER INTRODUCTION**

You'll see QR tags throughout our catalog. These tags enable you to see additional product and other content on the web using your mobile device. You'll need a QR reader to get started. Please visit <a href="www.mobile-barcodes.com/qr-code-software">www.mobile-barcodes.com/qr-code-software</a> for more information and a list of QR code readers you can install at no cost.



## **Table of contents**

If you have questions about the products contained in this catalog, or their applications, please contact:

Hose Products Division Phone: (440) 943-5700 Fax: (440) 943-3129 www.parkerhose.com

Extra care is taken in the preparation of this literature, but Parker is not responsible for any inadvertent typographical errors or omissions. Information is subject to change without notice. The information in this catalog is only accurate as of the date publication. For more current information, please visit

www.parkerhose.com

#### Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions in the "Offer of Sale."

www.parker.com/offerofsale

GlobalCore Constant Working Pressure Hydraulic – Industry Standard Suction and Return Push-Lok® Phosphate Ester Low Temperature Transportation Alternative/Marine Fuel Refrigerant	A
Fittings Parkrimp (crimp) Field Attachable	В
Equipment  Parkrimp Crimpers  Die Selection Charts  Pumps  Hose Assembly Equipment	С
Accessories Flange Adapters and Kits O-Rings Hose Guards Clamps Workstations	D
Technical Size Temperature Application	

Pressure Information

Part Number Index Safety Guide

Media

# Hose Products Division – the market leader and your supplier of choice.



### Put a bite on the braid.

Parker's world-recognized tiger mascot has represented the Parkrimp No-Skive hose assembly program since its introduction in 1980. In a contest originally held by our marketing department, the tiger was the winning suggestion over three others: a turtle (deemed "too slow"), an alligator ("not very good looking") and a shark ("too intimidating" particularly at the time of the release of the movie Jaws).

More than three decades later, the tiger graphic still supports the Parkrimp message everywhere, clearly symbolizing our unique, patented Parkrimp fittings with tapered steel teeth and our Parkrimp crimping machines. Their ability to eliminate hose cover skiving and achieve the metal-to-metal grip of factory assemblies revolutionized the process for markets worldwide. And today, it's the industry standard.

Pride in our products: At Parker, we believe the best fluid connector products for your operation are the ones that get the job done right. We offer the most comprehensive line of hoses, fittings, equipment and accessories you'll need. And if there's something you need that's not a standard product, we're able to design and manufacture it for you with ease.

You'll also benefit from our ultimate competitive advantage – our network of distribution outlets that can provide our products nearly anytime and anywhere. We strive to provide customers with local engineering, local products and local service.

MSHA IC-40/26

Dorker A22/A2

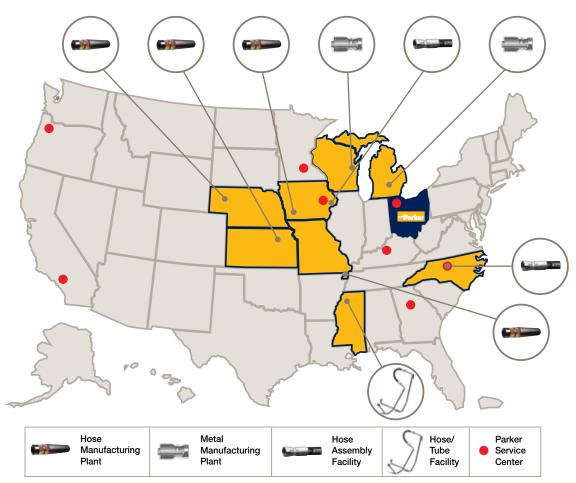
Parker offers the largest selection of hoses plus more fitting sizes than any other manufacturer. You'll find a wide variety of hoses including braided, spiral and multi-purpose, and more than 4,500 Parkrimp fittings. Parker products have been designed, tested and approved to meet and exceed global standards.



The right product is available for your application, including hose that features a variety of abrasion-resistant cover choices, flexibility, a wide range of media compatibility and more – characteristics that make Parker the hose supplier of choice for customers that demand the most from their equipment.

Polo Internal Control

## Made in the U.S.A. – serving the world.









## QUALITY

Being a solutions provider means helping our customers achieve higher levels of success by engineering the best systems for their requirements. It means looking at the customer applications from many angles to find new ways to create value.

Our customers define it, we deliver it.

## Services – easy to do business with.



#### PARKER TRACKING SYSTEM (PTS)

PTS helps customers reduce equipment and machinery downtime by increasing the speed, timing and accuracy of acquiring replacements. Using our web-based application, PTS generates a unique identification code for each hose assembly which is printed on a durable barcode or RFID label.

PTS can eliminate costly hours of equipment downtime, helping customers achieve greater productivity and profitability.

## www.parker.com/pts



#### **MOBILE PHONE APP**

Need a hose or fitting? We'll help you find it. Configure your selection by using Parker's STAMP process, or browse by category for thousands of hoses, fittings and accessories. It's like a catalog in your pocket, only better. How can something so powerful, be so small?

#### www.hosefinder.com



#### **KITTING**

Want to speed up assembly on the factory floor? Parker custom kits might be just what you're looking for. From fittings and adapters to pre-made assemblies, custom kits can hold a wide range of materials, in the exact order and quantities you need. What's the advantage? Streamlined procedures. Quicker assembly. Lower costs. And a single part number for easier processing.



#### **VENDOR MANAGED INVENTORY**

Enjoy a customized program where Parker personnel can manage your inventory in person or remotely. Reduce overall inventory, increase your inventory turns and increase your efficiency.



#### CAD

By making thousands of CAD files available, Parker provides its customers with the resources to do more.

## Continuously developing ways to serve our customers.

#### **CRIMPSOURCE™**

The industry's most complete resource for crimper technical information, Crimpsource contains all of the crimp specifications approved for Parker's rubber, industrial and thermoplastic hose:

- Crimp specs
- · PDFs of technical manuals for easy downloading
- Parts lists
- Troubleshooting advice
- PDFs of crimper decals

Crimpsource provides easy access to all of the specifications necessary to correctly fabricate a factory quality hose assembly. A series of drop down menus enables users to find what they need quickly and easily.

Choose your crimper, and then select the hose, fittings and current specifications needed to make hose assemblies. You can also print a simple-to-follow data specification sheet or crimper decal.

# Hame > Division > Hisse Products De Parker Crimpsource Karrykrimp Crimp Spec Manual Part List Dies Cathestone Troubleshooting Crimp Decal

#### √ Choose Crimper

Karrykrimp

Minikrimp

Parkrimp 1

Karrykrimp 2

PHastkrimp

Superkrimp

Parkrimp 2

## www.parker.com/crimpsource

#### **BREADMAN**

Lean logistics and delivery of Parker products and kits directly to the customer's assembly line, work station or warehouse.

- 100% parts availability minimizes downtime, increases production and reduces costs
- Elimination of stock checking reduces manpower and maintains production levels
- Daily delivery reduces inventory and overheads
- Electronic order processing eliminates paperwork and reduces administration costs



## Parker hose meets evolving industry specifications.

#### **NEW Standard**

International ISO Standard – many of our new hoses are designed to the ISO 18752 specification. This specification allows for the performance of the hose to dictate the grading it receives. Parker knows how tough hose applications can be, and we built our newest spiral hoses to withstand the toughest requirements ISO 18752 has to offer... and more.

#### Legacy

SAE hoses – pressure varies by size (R9, R10, R11, R12)

#### Newer

SAE hoses (R13, R15, R17, R19) are constant pressure

#### **Future**

ISO standard 18752

- Hose spec established in 2006
- Constant working pressure class hoses
- Differentiated performance levels
- Industry trend toward ISO specs

#### ISO 18752 Performance Definitions (Section 4.2 Grades and Types)

Hoses are classified according to their resistance to impulse into four grades: A, B, C and D. Each grade is classified by outside diameter into standard types (AS, BS and CS) and compact types (AC, BC, CC and DC), as shown in the table below.

Grades and Types											
		Resistance to Impulse									
Grade	Type <sup>a</sup>	Temperature °C	Impulse Pressure (% of MWPb)	Minimum Number of Cycles							
A	AS	100	133%	200,000							
	AC	100	155 70	200,000							
В	BS	100	133%	500,000							
В	ВС	100	13370	300,000							
c	CS	120	133% and 120% <sup>c</sup>	500,000							
	CC	120	13370 and 12070°	500,000							
D	D DC 120		133%	1,000,000							

<sup>&</sup>lt;sup>a</sup> Standard or compact, e.g. CS is grade C and standard type.

Standard types have larger outside diameters and larger bend radii and compact types have smaller outside diameters and smaller bend radii.

<sup>&</sup>lt;sup>b</sup> Maximum working pressure.

c 120% of the MWP shall be used for classes 350, 420 and 560 instead of 133%.



## **ISO 18752 Pressure Classes**

Tthe ISO pressure class specification addresses the most demanding and highest performance applications.

Class	<b>;</b>	35	70	140	210	250	280	350	420	560
MWP <sup>a</sup> (I MWP <sup>a</sup> (I	MPa)	35 3.5 500	70 7 1000	140 14 2000	210 21 3000	250 25 3500	280 28 4000	350 35 5000	420 42 6000	560 56 8000
Nomin ISO	al Size Inch									
5	-3	•	•	•	•	•	•	•	•	N/A
6.3	-4	•	•	•	•	•	•	•	•	N/A
8	-5	•	•	•	•	•	•	•	•	N/A
10	-6	•	•	•	•	•	•			N/A
12.5	-8	•	•	•	•	•	•		•	N/A
16	-10	•	•	•	•	•	•			•
19	-12	•	•	•	•	•	•			•
25	-16	•	•	•	•	•	•			
31.5	-20	•	•	•	•	•	•	•		•
38	-24	•	•	•	•	•	•			N/A
51	-32	•	•	•	•	•	•	•	•	N/A
63	-40	•	•	N/A						
76	-48	•	•	N/A						
102	-64	•	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note:  $\bullet = Applicable$  N/A = Not Applicable

<sup>a</sup> = Maximum Working Pressure

## The Parker Tracking System (PTS)

## Global asset tagging and identification system.



PTS helps customers reduce equipment and machinery downtime by increasing the speed, timing and accuracy of acquiring replacements. Using a web-based application, PTS generates a unique identification code for each hose assembly which is printed on a durable barcode or RFID label.

PTS equipment is easy to own and operate



PTS is an advanced global tagging and tracking solution already being deployed on OEM machinery and mobile equipment in dozens of countries.

PTS can eliminate hours of costly equipment downtime, helping customers achieve greater productivity and profitability.



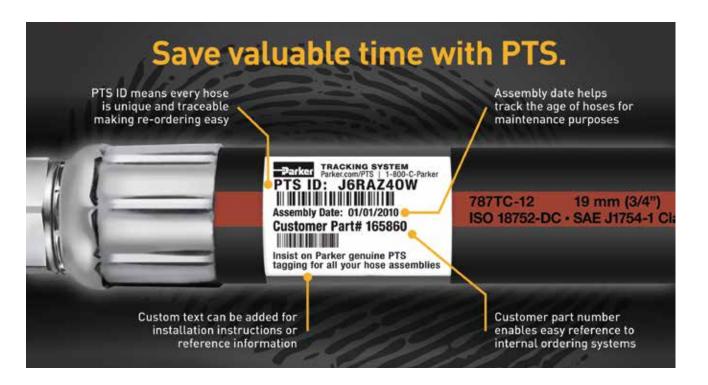
The Parker Tracking System is a unique and valuable service available exclusively for Parker customers.

The Parker Tracking System (PTS) is a unique and valuable service available exclusively for Parker customers. PTS reduces vehicle or asset downtime by increasing the speed, timing and accuracy of necessary hose assembly replacements.

Using a secure Web-based application, PTS generates a unique identification code for each hose assembly which is printed on an ultra-durable barcode or RFID label. PTS labels are specifically engineered to withstand harsh chemicals, temperatures, UV exposure and other challenging conditions.

#### Why use PTS:

- Capture, record and recall unique hose assembly information – on demand.
- Receive fast and accurate product identification to speed replacement, regardless of where the original assembly was made.
- Hose assemblies can be replaced with only the PTS ID number, eliminating the need to remove hoses prior to replacement, providing critical machine uptime and enabling a more conveniently scheduled repair.
- Reporting tools assist in continuous improvement programs and preventative maintenance initiatives.



#### **How PTS Works:**

- PTS labels are customized with specific assembly information and attached to the hose when the assembly is made.
- When the assembly requires replacement, simply call your local distributor with your PTS number, or call 1-800-C-Parker to find an authorized distributor near you.
- The distributor can create an exact replacement of your hose assembly and either ship it to you or have it ready to pick up once you arrive. Distributors can also scan your hose label in-store.
- Data is collected about your failure which may help us in recommending different components or accessories designed to get the most from your machine or equipment.

PTS labels are specifically engineered to withstand harsh chemicals, temperatures, UV exposure and other challenging conditions.



## The benefits of working with Parker Hose

Bring the power of Parker to the palm of your hand.



Hose Finder
Parker Hose Selection Guide

Parker is committed to delivering customer service options to help you work smarter, faster, and better.

Need the latest? Go online.
From complete product information on hose, to 3D-CAD models of our complete fitting line, you'll find everything you need at www.parkerhose.com.

what you need quickly and easily.

Download yours today at

www.hosefinder.com.

Whatever you do, visit our site often. It's the fastest and easiest way to keep up with changing technology and our ever expanding product offering.





Configure your selection by using Parker's STAMP process, or browse by category for thousands of hoses, fittings and accessories.

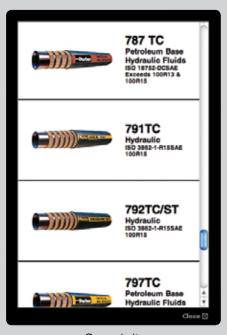
- **1 Browse it.** It's easy to use.
- 2 STAMP it. Use the STAMP search or browse the catalog to find the product you are looking for.
- **3 Search it.** Results include all the details you need to make an informed decision.
- 4 Find it. Choose the "Find It" link and you'll be directed to one of Parker's 12,000 worldwide distributor locations.



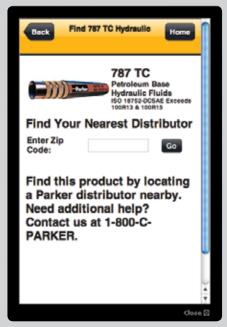
Browse it.



STAMP it.



Search it.



Find it.

HoseFinder is currently available for iPhone®, Blackberry® and Android™ mobile phones... and at no charge.

## The Parker Fluid Connectors Group

## Take advantage of our connections.

Need help with the big picture? Turn to Parker. As part of the Fluid Connectors Group, we have everything to keep the ideas flowing.

## More products

Nobody offers you more than Parker. We have the largest selection of hose, more fitting sizes and configurations than any other manufacturer. Our products deliver the exceptional quality and reliability you've come to expect from us, meeting or exceeding market standards. Plus they're available in a wide choice of materials, designs, shapes, sizes, covers, and capabilities for your specific leak-free performance requirements.

But more parts are only part of what we offer you.



## More people

Our 2,100 worldwide distributors give you more places to go for more help, faster. Which means when your equipment is down, we're there for you, right near the job site.

Nobody else can equal that kind of convenient service.

#### Mobile services

Parker is your best bet for on-the-job help. Our mobile services operate 24 hours a day, 7 days a week, to arrive at your plant or job site fast. Complete with factory-trained professionals to troubleshoot your problem. Our mobile vans carry a full complement of hose, all major fitting configurations, and a complete set of metrics everything that's needed to create a replacement. It's like having your Parker distributor come to you! Find out more at parker.com/distributors.







#### **ParkerStores**

ParkerStores provide walk-in customers with the ability to personally select the parts they need in a retail environment.

Customers can see, touch, and feel the parts they're considering, and talk directly to staff when advice is needed. With more than 1,800 locations in 75 countries, ParkerStores are yet another way customers can get in, get out, and get going.



## ParkerStore Onsite mobile work containers

To provide expert service even in the most remote job site locations, the ParkerStore Onsite Program delivers a fully customized mobile workspace directly to your job site. These highly efficient and mobile container-based work sites provide all the technology, equipment and inventory needed for remote fabrication of hose and tube assemblies, and much more.

The ParkerStore Onsite container solution will significantly reduce the time it takes to obtain critical spares or fabricate replacement hose assemblies. Equipment and labor downtime are greatly reduced, keeping your operations up and running longer. Find out more at www.parker.com/onsite.

Your ParkerStore Onsite container can be personalized to meet your specific site or project needs.



Cargo Doors



Security Doors



Storage Racks and Cabinets



Heating/Cooling



Full Electrical Service



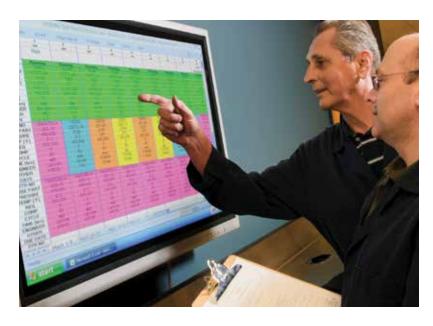
Rugged Lighting Service





## Parker testing facilities

## Assuring superior quality and performance.







Multiple test capabilities and the latest testing technology combine to assure the integrity of Parker products globally.

Putting designs to the test, our world class development and test capabilities assure our customers of world-class quality and performance. In the field or in our advanced development and test facility, Parker is unsurpassed in both technical knowledge and testing capabilities. With the latest in technology, our state-of-theart materials development and performance test labs are capable of determining baseline engineering and design properties. Additionally, we simulate application and environmental conditions encountered every day, both common and complex, assuring the integrity of Parker products designed to meet your needs.

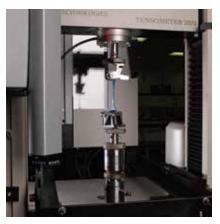
Consistency in product performance starts with consistent materials. Parker's materials

development laboratory uses the latest technology in equipment and methods to evaluate the behaviors of elastomeric materials under varying conditions. Our in-house capability assures the materials in our design are engineered to withstand the extremes of application and the environment, time after time, every time.

With specialized skills, and time-tested experience, Parker engineers have built an impressive record of problem solving for our customers. We understand the importance of product selection, designed and tested to meet your unique demands. And our customers understand the value of our solutions.



Thermogravametric analyzer



Tensometer



Soxhlet extraction



Salt spray test



Rubber mixing





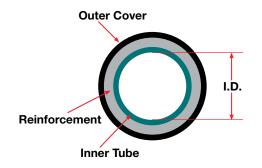
## Before you spec it, STAMP it.





# When you order hose and fittings from Parker,

remember the word "STAMP." That way you won't forget important information!



The hose size is determined by the inside diameter which can be measured or found on the layline.

#### Size

Parker uses a system of measurement called Dash Numbers to indicate hose and fitting size. The dash number, or dash size, is the measure of a hose's Inner Diameter (I.D.) in sixteenths of an inch. (The exception to this is SAE 100R5 hose. See the chart below for complete details.)

This measuring system of the inside diameter of the hose is universally used by the fluid power industry today. Don't know the hose size? Check the layline. If the original printing has worn off, the original hose must be cut and the inside

diameter measured. Be sure to measure the overall assembly length and fitting orientation before cutting the hose.

The hose I.D. must be sized accurately to obtain the proper flow velocity. A flow that's too slow results in sluggish system performance, while a flow that's too high causes excessive pressure drops, system damage, and leaks.

Use the Flow Capacity Nomogram in Section E to determine the proper hose I.D. for an application's flow rate requirements.

Hose I.D. (Inches)											
		Transportation perant Hoses		portation gerant Hoses							
Dash No.	Inches	Millimeters	Inches	Millimeters							
-3	3/16	5	-	-							
-4	1/4	6,3	3/16	5							
-5	5/16	8	1/4	6,3							
-6	3/8	10	5/16	8							
-8	1/2	12,5	13/32	10							
-10	5/8	16	1/2	12,5							
-12	3/4	19	5/8	16							
-16	1	25	7/8	22							
-20	1-1/4	31,5	1-1/8	29							
-24	1-1/2	38	1-3/8	35							
-32	2	51	1-13/16	46							
-40	2-1/2	63	2-3/8	60							
-48	-	_	3	76							



## **Temperature**





When specifying hose, there are two temperatures you need to identify. One is the **ambient temperature**, which is the temperature that exists outside the hose where it is being used; the other is the **media temperature**, which is the temperature of the media conveyed through the hose.

Very high or low ambient temperatures can have adverse affects on the hose cover and reinforcement materials, resulting in reduced service life.

Media temperatures can have a much greater impact on hose life. For example, rubber loses flexibility if operated at high temperatures for extended periods.

Parker hoses carry different temperature ratings for different fluids. For example, 811HT hose has a temperature range of -40°F to +257°F (-40°C to +125°C) for petroleum-based hydraulic fluids. However for water, water/glycol, and water/oil emulsion hydraulic fluids, the range drops to a rating of up to +185°F (+ 85°C). Air is rated even lower at up to 158°F (+ 70°C).

Some media can increase or decrease the effects of temperature on the hose. The maximum rated temperature of a hose is specific to the media. See the Minimum/ Maximum Temperature Chart in Section E for a full listing of all temperature ratings.



Parker offers a wide range of special types of hoses for low and high temperatures. See pages A-6 to A-7 Hose Overview.

## **Application**

Before selecting a hose, it is important to consider how the hose assembly will be used. Answering the following questions may help:

- What type of equipment is involved?
- What are the environmental factors?
- Are mechanical loads applied to the assembly?
- Will the routing be confined?
- What about hose fittings permanent or field attachable?
- Will the assembly be subjected to abrasion?

Sometimes specific applications require specific hoses. For example, applications where hoses will encounter rubbing or abrasive surfaces, would be best handled by our family of abrasion-resistant hose with both Tough and Super Tough covers.

When application space is tight, bend radius is another important consideration. Parker offers a full line of hoses designed for one-half SAE bend radius at full SAE-rated pressures. We ofer hoses with increased flexibility and smaller outer diameters enabling faster, easier routing in small spaces, reducing both hose length and inventory requirements.

Industry standards set specific requirements concerning construction type, size, tolerances, burst pressure, and impulse cycles of hoses. Parker hydraulic hoses meet or exceed standards such as:

- SAE (Society of Automotive Engineers)
- EN (European Norm)
- DIN (Deutsches Institut f
  ür Normung)
- ISO (International Organization for Standardization)





Governmental agencies control additional standards for particular industries such as U.S.C.G. and ABS. You must select a hose that meets the legal requirements as well as the functional requirements of the application.

#### **Hose Hint**

A hose assembly should be routed so that the hose is not stretched, compressed, or kinked to assure maximum service life and safety.



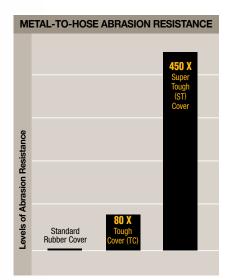


## Compact Spiral<sup>™</sup> Bend Radius

Not only is it 1/2 the bend radius, but it takes 1/3 less effort to bend.

**SAE 100R15** 

21"



Results from the ISO 6945 metal-to-hose abrasion test show that Tough Cover and Super Tough cover hoses offer significantly greater abrasion resistance than standard rubber cover hose.

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## Media

What will the hose convey? Some applications require the use of specialized oils or chemicals. The hose you order must be compatible with the medium being conveyed. Compatibility must cover the inner tube, the cover, hose fittings, and o-rings as well. Use the

Chemical Resistance Chart found in Section E to select the correct components of the hose assembly that will be compatible with your system's media. The chart contains the chemical resistance rating of a variety of fluids.







#### **Pressure**

When considering hose pressure, it's important to know both the system working pressure and any surge pressures and spikes.

Hose selection must be made so that the published maximum working pressure of the hose is equal to or greater than the maximum system pressure.

Surge pressures or peak transient pressures in the system must be below the published maximum working pressure for the hose.

Each Parker hose has a pressure rating which can be found on the Hose Overview Chart on page A-6, to A-7 and in Section E.

All Parker hydraulic hoses have passed the industry rated specifications for burst pressure and carry a 4:1 design factor unless otherwise noted. Burst pressure ratings for hose are for manufacturing test purposes only. They are not an indication that the product can be used above the published maximum working pressure. It is for this reason that the burst pressure ratings have been removed from the hose charts within the catalog.

Care must also be taken when looking at the "weakest link" of the hose assembly. A hose assembly is rated at the maximum working pressure of the hose and the fitting component. Therefore the maximum working pressure of the hose assembly is the lesser of the rated



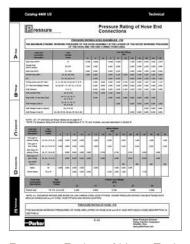
To mix and match components is to increase the risk of hose failure – a dangerous situation regardless of setting or application.

working pressure of the hose and the end connections used.

Here is an example: An F471TC0101040404-60" hose assembly (which consists of 471TC-4 hose and two 10143-4-4 fittings) would have a maximum working pressure of the lesser of the three components. In this case the fittings have a 12,000 psi rating. The hose has a 5,800 psi rating. Therefore the maximum pressure rating of the hose assembly would be 5,800 psi. Pressure ratings for each Parker end connection can be found on the Pressure Rating of Hose End Connections -PSI Chart in Section E.



Hose Overview page A-6 to A-7.



Pressure Rating of Hose End Connections page E-45.

Pressure spikes can occur during machine operation in an instant. They can occur so quickly in fact, that standard glycerin filled gages will never detect them. Using a pressure diagnostic system like Parker's Senso Control can help detect how often and how drastic these pressure spikes are. Contact your Parker representative today.



## Hose basics

## Everything you need to know.

## **Hose Hint**

Use the layline of the hose as a visual index when routing and tightening the assembly to ensure the hose is not twisted or kinked.

## It's all in the family

At Parker, we believe the best hose for your operation is the one that gets the job done right — no more, no less. That's why we offer you a comprehensive line of hoses, as well as all the options that go with it. Worried about price?

## Abrasion? We've got you covered

Our expanded line of abrasionresistant hose offers you a world of protection, not to mention a choice of covers: Tough Cover (TC) for tough environments; and SuperTough (ST) for the really rough stuff.

Parker 422/421-8 Worldwide WP 16,0 MPa

Porker 722TC-12 19 mm (3/4")
ABS • DNV • SAE J1942-1 • MSHA IC-40/26 © 28,0

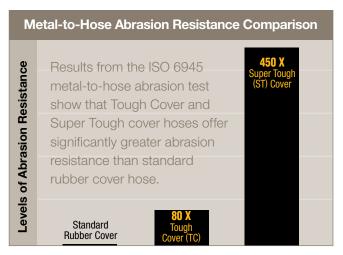
Parker SUBSRVV() I(HI 851ST-8

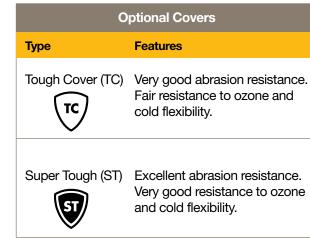


We've got rubber hoses that are an exceptional value. Need hose that can take the heat? We've designed hoses for that. Looking for hose to handle the most demanding conditions? No problem. We have hoses made specifically for high temperatures, tight bending, abrasive environments, and more.

Not sure what hose you need? Talk to our experts. They're trained to know, and they're happy to help. Our TC- and ST-covered hoses can simplify your assemblies by eliminating the need for any additional protective sleeving.

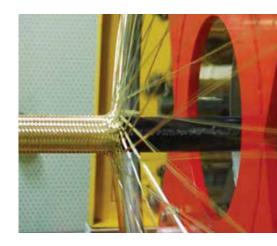
From the superior flexibility and tighter bend radius of our wire-braided hoses... to the wide fluid compatibility and high pressure performance of our No-Skive spiral hoses... our expanded family of abrasion-resistant hoses gets the job done right, giving you the results you need in the construction, forestry, mining, injection molding, refuse and recycling, and energy industries.











## Braided vs. spiral hose

Hydraulic hose can be referred to by construction style, of which there are two main types: braided and spiral. The majority of "low-pressure hoses" have a textile braided construction. They're commonly used to transmit petroleum-based fluids, diesel fuel, hot lubricating oil, air, ethylene glycol anti-freeze, and water.

"Medium-pressure hoses" typically feature one- and two-wire braided construction. These hoses are frequently found on construction equipment, heavy-duty trucks, and fleet vehicle applications. In general, braided hose is selected for its flexibility.

At one time in the industry, two-wire braided hose was most commonly used in many applications. But the advent of larger, off-road specialty equipment drove the creation of spiral hose, which is very well suited for applications where extremely high impulse pressure is encountered.

Today, hydrostatic drives using four and six-wire spiral hoses can be found on everything from lawn tractors to earth movers. Because today's world demands faster, more powerful equipment requiring increased working pressures, Parker is responding with an expansive offering of spiral products.



Contact your local Parker distributor to see the full range of hose choices, and to discuss their various applications.

## Inner beauty

The inner tube of a hose is offered in several different rubber compounds. Each rubber compound can react differently to the media being conveyed. The inner tube must also resist effects of high or low temperatures and environmental elements. The table on the right highlights popular rubber compounds used for hose inner tubes:

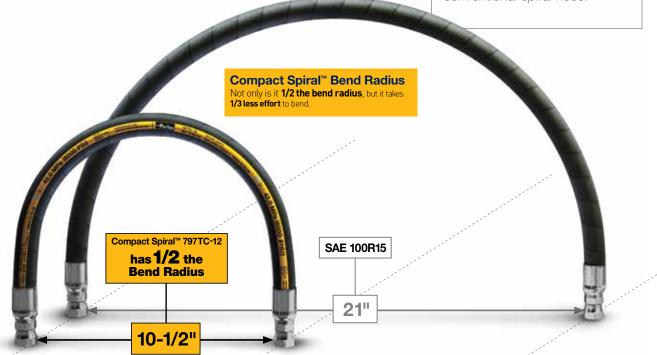
Inner Tube Compounds									
Туре	Features								
PKR® Rubber	Excellent resistance to ozone and weathering; good heat resistance. Good resistance to petroleum-based fluids.								
Synthetic Rubber	Excellent resistance to petroleum-based fluids and environmentally friendly fluids.								
Butyl Rubber	Very good weathering resistance. Good physical properties. Poor resistance to petroleum-based fluids.								
EPDM Rubber	Excellent resistance to phosphate ester fluids and dry air. Poor resistance to petroleum-based fluids.								

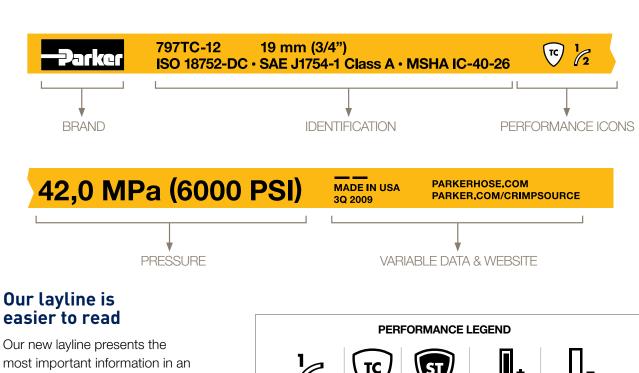
## Strong like spiral bends like braided

Looking for flexible hose that can be routed in tight spaces?

Parker has a full line of hoses designed for one-half SAE bend radius at full SAE pressure. These hoses plumb and bend tighter than other SAE 100R1, 100R2, 100R4, 100R12 and 100R13 type hoses, reducing hose length requirements by up to 47%. The tighter bend radius means fewer bent tube fittings, and longer life in applications where machinery movement causes hoses to bend sharply. It also means reduced inventory requirements for you.

Compact Spiral Hose has half the bend radius of its SAE counterpart and a significantly smaller bend radius than corresponding-size Parker conventional spiral hose.







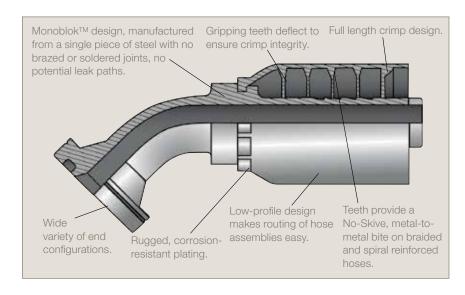
# **Parker Fittings.** The products of choice for custom and standard applications.



## **Crimpable fittings**

Parker Parkrimp assemblies consist of No-Skive hose and fittings, permanently joined by any one of our Parkrimp crimpers. The teeth in Parker's crimped fittings bite down to the hose wire for a metal-to-metal grip with maximum integrity. Our one-piece fittings can be combined with many No-Skive hose types to cover low-, medium- and high-pressure applications, as well as special application categories that can also be used with permanent crimped fittings.

We offer steel, brass, and stainless steel fittings from 3/16" to 3", with our steel fittings featuring a corrosion-resistant plating that exceeds SAE standards. Styles include o-ring face seal, flare, male pipe, metric designs and many more. All are compatible with the easy-to-use Parkrimp system of crimping machines.



When combined with our No-Skive hose, Parker Parkrimp fittings provide factory-quality hose assemblies quickly and cost effectively.

## Monoblok™ fittings

Monoblok™ fittings are manufactured from a single piece of steel. First introduced in ultra-high-pressure hydraulic applications, their lack of brazed or

soldered joints provides the utmost in leak protection, eliminating any potential leak paths. Parker Monoblok fittings are available in a wide variety of end configurations and fitting series. These fittings also feature: No-Skive, bite-the-wire, full-length crimp, corrosion-resistant plating, weather seal, and a low-profile design.



## **Metric fittings**

Parker's metric fittings are available in a full range of DIN, BSP, BSPP, French GAZ, and JIS configurations to meet worldwide applications. Parker's metric fittings are available in a wide range of sizes to meet your requirements.

## Field attachable fittings

Parker field attachable fittings enable you to make hose assemblies right at the job site without special tools or machines.

Our wide range of No-Skive hose – hose that does not require the removal of the outer cover or inner tube prior to assembly – combines with a variety of field attachable steel, stainless steel, and brass fittings quickly and easily.

Parker field attachable fittings include the popular Push-Lok® style, as well as two- and three-piece series fittings that use an interchangeable nipple with one- and two-wire braided hose.

## Custom fittings for short-run or special applications

Custom tube and hose fittings are available from Parker.
Configurations include NPTF,
JIC, SAE, GAZ, ISO, DIN, JIS,

and BSP in a wide range of sizes. Material options include steel, stainless steel and brass. All of our products are manufactured to world-class standards.

#### Hose Hint

How tight is tight enough? Differences in platings and other variables can affect the amount of torque required to ensure a proper connection. Always refer to this catalog or go to www.parkerhose.com for proper assembly procedures.

Hose End Type	Pressure	Seal Reliability	Vibration Resistance	Ease of Installation	Reusability	Temperature
Seal-Lok – 0-Ring Face Seal	Excellent	Excellent	Very Good	Excellent	Excellent	Limited by Seal
37° Flare	Very Good	Good	Good	Good	Good	Excellent
Tapered – (NPT, NPTF, BSPT and Metric Taper)	Good*	Poor	Poor	Good	Poor	Excellent
Four-Bolt Flange	Excellent	Good	Excellent	Very Good	Excellent	Limited by Seal

\*Rated 'Poor' for dynamic pressure systems.

#### **Hose Hint**

Never mix and match one manufacturer's fittings with hose from another manufacturer. Parker hose, fittings, and crimpers are designed to work together as a system. This ensures optimum product performance, reliability, and safety.



# Fittings with XTR coating for extreme resistance to corrosion

Parker XTR coating provides more than seven times SAE standard protection. An outstanding advantage for equipment in highly caustic applications and environments, Parker's proprietary formulation has been tested to resist corroding for more than 720 hours. Parker products with XTR coating assure all the leak-free performance and installation advantages that our customers expect. Even the assembly torque remains the same. For unmatched quality, service and support, now with extreme corrosion resistance, specify Parker hose and tube fitting products with XTR coating. For additional information, refer to Bulletin 4480-B158.

## Parkrimp Crimpers.

# Easy to use for safe and reliable high performance hose assemblies



Parker's Parkrimp

users with several key

• Perfect alignment: Parker's

exclusive Parkalign™ system

features a positive-stop design that

positions the fitting in the die for a

perfect crimp every time. Parkalign

the right position to be crimped, as

compared to "eyeballing" the proper

position of the fitting in a variable

• Efficient design: Bottomloading

Parkrimp crimpers make it much

• Linked dies: Parkrimp dies are

linked together to prevent

segments from being misplaced or worse, mismatched.

easier for operators to manage long

benefits operators by enabling

them to "feel" that the hose is in

system provides

advantages:

crimper.

hose assemblies.

With Parkrimp, you benefit from a full-length crimp. Our low-profile design makes routing hose assemblies easy. No-Skive hoses and fittings combine with the Parkrimp system to create high-quality, reliable hydraulic hose assemblies every time.

high-quality, reliable hydraulic hose assemblies every time.

• Color-coded dies: Parkrimp dies

## Color-coded dies: Parkrimp dies are color coded by size, making for easy identification and reduced set-up time.

- Durability: Since they were introduced in 1980, Parkrimp crimpers have been designed and manufactured to provide years of reliable service.
- **Decals:** Parkrimp crimpers come with an information-rich decal that provides the list of proper hose and fitting combinations, tools required and the crimp specification for each hose and fitting combination.
- Crimpsource: the most complete online resource for Parker crimp specifications, technical manuals, decals and more.

The complete system from one source: No-Skive hose, No-Skive fittings, and crimping machines with worldwide availability and service.

Parker Hose Product Division also offers a full line of crimping accessories, including conversion kits, cabinets, cut-off saws, push-on tables, die racks, and mandrel tool kits. See the Equipment section for full details.

## Modular design with all the familiar Parkrimp system advantages

Parker offers two Parkrimp-style modular crimpers – the Karrykrimp and the Karrykrimp 2. Their modular design enables the customer to choose between the portability that Parker Karrykrimp crimpers have always offered and the new option to make these same crimpers bench-mounted units.

The modular design gives users the flexibility of a portable crimper with the advantage of increased productivity when connected to the stationary

**Modular Crimper –**Portable or BenchMounted



Karrykrimp 2

Karrykrimp



Karrykrimp Bench Mount



Karrykrimp 2 Bench Mount





Parkrimp dies are color coded and linked together – making them easy to use.



The Parkalign system's positive stop feature ensures users will make a perfect crimp every time.

Downloadable decals are just one of the many assets found on Crimpsource.

#### The modular crimper features:

- A single crimping unit can be either portable or bench-mounted
- Faster cycle times on bench mounted units
- Increased height enables longer bent tube fittings to be crimped
- Cylinder maintenance on the Karrykrimp 2 is now possible

Parker's Parkrimp® System continues to lead the industry in ease of use, accuracy and effectiveness. The Parkrimp system is designed to crimp fittings to the proper diameter every time, meaning fluid power professionals will not waste valuable time dialing variable settings that can produce mis-crimps. Designed to produce accurate crimps from the first time it's used, Parkrimp system crimpers require no calibration and continuously produce proper crimps, time after time.

PN: PK2 HOSE DECAL 4/11		Die Selection and Crimp Diameters P							PN: PK2 MASTER DECAL 4/11			
Hose	Fittings	RED	FUR	YEL	BLU	ONG.	GRIN	-16 BLK	-20 WHT	- 24 RED	- 32 GRON	
Die		80C-854	80C-A05	800-A06	SSC ADE	80C-A10	BOC A12	80C-A16	80C-A20	83C-824	B3C-A5	
381TC 431 471ST 361ST 436 472TC		Same	2-11-	Come	barre	Samuel Control	10.000	89C-A16H	830-A20H	and the same of	- The P.	
422 451TG 482TG 424 4515T 4825T 426 42YTG		0.645 0.665	0.710	0.825 0.845	0.945 0.965	1,060	1.245 1.265	1.590 1.610	1.970 1.990	2.290 2.310	2.735 2.755	
Tools Required	ios	Small Sever Dier (80C-AXX) and Adapter Bowl (83C-OCB)					Gift Linge S VIV (83C-A			Shier Di AXX)		
221WC 964 601 902/301 541 604 501UT 361 881 722TC I-6 thru-20 only)	43 Series	0.685 0.705	0.750 0.770	0.865 0.885	0.985 1.005	1.100	1.285 1.305	1.630 1.650	2.010 2.030	2.330 2.350	2.775 2.795	
Tools Fequined		0	100 <b>0</b>	pacer fling ( 80C-AXX), ar	ROC-Floory, 5 nd Adapter 8	roell Silver Ol lowf (83C-OC	ie 201)			Plate (63 and Larg (63CAX	Spacer C-R02H) e Silver D	
Die .				830-006	400 DEE	93G-D10				_		
701				0000	1.140	1.260						
						1.280		G. word Arthreton				

## Parker Crimpsource™

Crimpsource is the industry's most complete resource for crimper technical information. It contains all of the crimp specifications approved for Parker's rubber, industrial and thermoplastic hose:

- Crimp specs
- PDFs of technical manuals for easy downloading
- Parts lists
- Troubleshooting advice
- PDFs of crimper decals for immediate printing

Crimpsource provides easy access to all the specifications necessary to correctly fabricate a factory quality hose assembly.

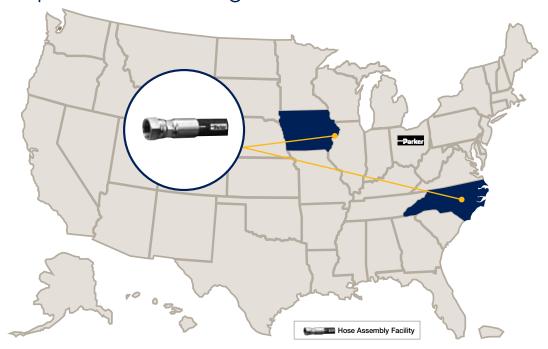


A series of drop-down menus enables users to find what they need quickly and easily. Choose your crimper and then select the hose, fittings and current specifications needed to make hose assemblies.

You can also print a simple-to-follow data specification sheet or crimper decal. Crimpsource is available at **www.parker.com/crimpsource.** 

## Parker's superior capabilities.

Your competitive advantages.



## Downloadable CAD drawings

Downloadable CAD drawings of Parker fittings are available at **www.parkerhose.com.** You can check the form, fit, and function of the fitting before specifying the actual part.



Online 3D-CAD models help designers work faster, smarter.

## Custom manufacturing capabilities

Markets are shifting to replacing sections of hose with hard plumbing. These custom projects can include tube fabrication and fittings not found anywhere else. Using custom tube and compound assemblies can reduce your overall costs and eliminate warranty issues.

Completely custom products are available from a dedicated Parker Hose Products Division facility. Using standard Parker hoses, fittings and tubing, our experts create custom tube and compound assemblies that exactly match your specifications to provide increased durability and reliability.

Organized to provide fast quotes and highly responsive service,

our Custom Manufacturing department can produce a single critical piece or production quantities to meet your needs, quickly and efficiently. Contact our staff to talk about creating the best in customized, leak-free products. Call 888-882-1202.

## Dedicated hose assembly plants

All Parker Hose assemblies are manufactured in our own facilities solely dedicated to hose assembly production and premier customer service. Our dedicated hose assembly plants offer our customers unique benefits including:

- Competitive hose assembly pricing
- A more diverse range of hose assembly capabilities and accessory options

- A larger selection of hose and fitting inventory for assemblies
- The quality assurance that comes with manufacturing in a TS-16949-certified facility

#### **Custom kits**

Want to speed up assembly on the factory floor? Parker custom kits are just what you're looking for. From fittings and adapters to pre-made assemblies, custom kits can hold a wide range of materials, in the exact order and quantities you need.



What's the advantage?
Streamlined procedures.
Quicker assembly. Lower costs.
And a single part number for easier processing. Call your
Parker representative today.

Parker experts can create custom tube and compound assemblies that exactly match your specifications.



## Technical support, education and training

Need help? Don't hesitate to ask. Our technicians and marketspecific engineers can be found around the country and throughout the world to offer you engineering support, fluid connector system design, and product selection assistance. Phone consultation, as well as on- or off-site sessions are available virtually anywhere for all customers, distributors, and employees. Topics range from hose routing tips and troubleshooting to critical safety procedures. Our Parker experts reflect our extensive commitment to training and education, and are an important part of our value-added services.

Want some help? Call
1-800-C-PARKER, or
check with your local distributor.
Don't know who that is? Go to
www.parker.com then click on
"where to buy" on the home page
to find out.



## Parker Training and Certification (P-TAC)

P-TAC encompasses online (e-learning) and off-line (instructor-led classroom) training in addition to certification recognition.

Parker.com/PTAC





## **NOTES**





# Hose visual index

В

GlobalCore	387 A-13	487 A-14	722 A-15
787 A-16	/SO 18752 797 A-17	ISO 18752	ISO 18752 451TC A-18
ISO 18752	ISO 18752	Constant Working Pressure Hose	SAE 100R17
451ST A-18  SAE 100R17	451TC Twin Tough A-19  SAE 100R17	711 A-20	351TC A-21  SAE 100R19
351ST A-21  SAE 100R19	772TC A-22  SAE 100R12	772ST A-22  SAE 100R12	781 A-23  SAE 100R13
P35 A-23  SAE 100R13	782TC A-24  SAE 100R13	782ST A-24  SAE 100R13	791TC A-25  SAE 100R15
792TC A-26  SAE 100R15	792ST A-26  SAE 100R15	Hydraulic – Industry Standard Hose	JK A-27  SAE 100R2 TYPE AT
422 A-28  SAE 100R1 TYPE AT	482TC A-29  SAE 100R1 TYPE AT	482ST A-29  SAE 100R1 TYPE AT	426 A-30  SAE 100R1 TYPE AT
302 A-31 SAE 100R2	431 A-32	436 A-33  SAE 100R16	471TC A-34  ISO 11237
471ST A-34  ISO 11237	471TC Twin Tough A-35  ISO 11237	472TC A-36  EN 857 2SC	AX A-37  SAE 100R1
BXX A-38	722TC A-39  SAE 100R12	722ST A-39  SAE 100R12	721 A-40  SAE 100R12
721TC A-40	721ST A-41	701 A-42	731 A-42
SAE 100R12	SAE 100R12	ISO 3862-4SP	ISO 3862-1-4SH

# Hose visual index

В

C

	811 A-43	811HT A-44	881 A-44
Suction & Return Line Hose	PARENT IN SCHOOL	MOVES and arctored	MONTH IN SICH CO.
	SAE 100R4	SAE 100R4	SAE 100R4
Push-Lok Multipurpose Hose	801 A-45	836 A-47	804 A-47
821FR A-48	821 A-48	Phosphate Ester Hose	424 A-49
304 A-50	774 A-50	F42 A-51	Low- Temperature Hose
472LT A-52  EN 857	722LT A-53  SAE 100R12	792LT A-53  SAE 100R15	Transportation Hose
293 A-54  SAE J1402 AI	213 A-55 SAE J1402 AI	266 A-56 SAE J1402 AII	201 A-57  SAE 100R5, SAE J1402 AII
206 A-58 SAE 100R5, SAE J1402 AII	226 A-59  J1402 All	611HT A-60 SAE J517, 100R6	271 A-61  SAE J1402 A
Alternative/ Marine Hose	SS23CG A-62  CGA TYPE III	SS25UL A-63  UL STANDARD 21	221FR A-64 SAE J1527 R3
Refrigerant Hose	285 A-65  SAE J2064 TYPE C	244 A-66  SAE J2064 TYPE B CLASS 1	

Parker offers a wide variety of hoses including braided, spiral, multi-purpose, transportation, refrigerant, LP gas and more. Parker's product line has been tested and approved to meet

B

C

D

and exceed global standards. Our hoses range in size from 3/16" to 3" I.D. and are compatible with crimp and field-attachable style fittings. Specific hose information is displayed throughout Catalog 4400

Hose Section. Hose page content is defined by the information shown below. Please take a moment and review.



#### **Performance Legend**



Half SAE Bend



ToughCover



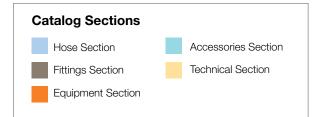
SuperTough Cover



High Temperature



Low Temperature



#### **Parker Hose Nomenclature**

Example: 451TC-8

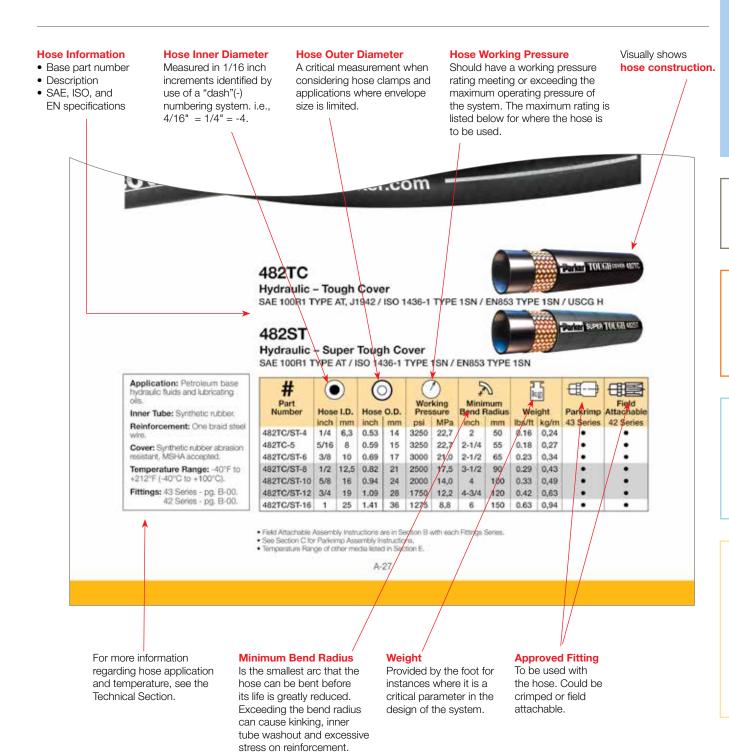
451TC-8 - Hose Type

451TC-8 - Indicates the special feature of the hose

(in this case, 'Tough Cover')

451TC-8 - Hose inside diameter dash size

(in this case, 8/16" or 1/2")



# **Hose overview chart**

В

C

D

	Hose Size	Hose Reinforcement	-4	-5	-6	-8	-10	-12	-16	-20	-24	-32	-40	-48	Standard Temp. Range °F	SAE	ISO	EN	Page
	387	No. Of Concession	3000		3000	3000	3000	3000	3000	3000	3000	3000			-40/+212/ +257		18752		A-13
ę.	487		4000		4000	4000	4000	4000	4000	4000	4000	4000			-40/+212/ +257		18752		A-14
GlobalCore	722				4000	4000	4000	4000	4000						-40/+212/ +257		18752		A-15
9	787		5000		5000	5000	5000	5000	5000	5000	5000	5000			-40/+212/ +257		18752		A-16
	797		6000		6000	6000	6000	6000	6000	6000	6000	6000			-40/+212/ +257		18752		A-17
	451TC/ST		3000		3000	3000	3000	3000	3000	3000					-40/+212	100R17			A-18
	451TC Twin Tough				3000	3000									-40/+212	100R17	11237-1		A-19
	711										3000	3000			-40/+212				A-20
Constant Working Pressure	351TC/ST		4000		4000	4000	4000	4000							-40/+212	100R19			A-21
ant Worki	772TC/ST				4000	4000	4000	4000	4000	3000	2500	2500			-40/+257	100R12	3862-1-R12	856-R12	A-22
Const	781							5000	5000	5000	5000								A-23
	P35											5000			-40/+257	100R13	3862-1-R13	856-R13	A-23
	782TC/ST							5000	5000	5000	5000				-40/+257	100R13	3862-1-R13	856-R13	A-24
	791TC							6000	6000	6000	6000				-40/+257	100R15	3862-1-R15		A-25
	792TC/ST							6000	6000						-40/+257	100R15	3862-1-R15		A-26
	JK		10500		10000										-40/+120	100R2AT			A-27
	422		3250	3125	2600	2325	1875	1525	1275	900	725	575			-40/+212	100R1AT	1436-1-1SN		A-28
	482TC/ST		3250	3250	3000	2500	2000	1750	1275						-40/+212	100R1AT	1436-1-1SN	853-1SN	A-29
	426		2750		2250	2000	1500	1250	1000	625	500	375			-50/+302	100R1AT			A-30
_	302		5800	5000	4750	4000	3600	3100	2400	1800	1300	1150			-40/+212	100R2	1436-1-2SN		A-31
andarc	431		5000	4250	4000	3500	2750	2250	2000						-40/+257				A-32
itry Sta	436				4000	3500	2750	2250	2000						-55/+302	100R16			A-33
Hydraulic – Industry Standard	471TC/ST		5800		5000	4250	3625	3125	2500						-40/+212		11237	857-2SC	A-34
Hydrai	471TC Twin Tough				5000	4250									-40/+212		11237	857	A-35
	472TC									2250	1800	1300			-40/+212			857-2SC	A-36
	AX		3000		3000	2500	1500	1250	1000						-40/+212	100R1			A-37
	вхх		5000		4000	3500	2750	2250	2000						-40/+212				A-38
	722TC/ST									3000	2500	2500			-40/+257	100R12 J1942	3862-1 Type R12	Type R12	A-39

# **Hose overview chart**

	Hose Size	Hose Reinforcement	-4	-5	-6	-8	-10	-12	-16	-20	-24	-32	-40	-48	Standard Temp. Range °F	SAE	ISO	EN	Page
	721/721TC				4000	4000	4000	4000	4000	3000	2500	2500			-40/+257	100R12	3862-1-R12	856-R12	A-40
Hydraulic	721ST					4000	4000	4000	4000	3000					-40/+257	100R12	3862-1-R12	856-R12	A-41
Î	701				6500	6000	5000								-40/+212		3862-1-4SP	856-4SP	A-42
	731							6000	5500	4700	4200	3600			-40/+212		3862-1-4SH	856-4SH	A-42
n Line	811/811HT with HC							100	70	50	50	50	62		-40/+212 /+257	100R4			A-43
Suction and Return Line	811/811HT with 81							300	250	200	150	100	62		-40/+212 /+257	100R4			A-44
Suctio	881 with HC							100	70	50	50	50	62		-40/+257	100R4			A-44
	881 with 43/81/ DB							300	250	200	150	100	62		-40/+257	100R4			A-44
	801	Carried Africa	350		350	300	300	300	200						-40/+257				A-45
¥	836	(An in the in	400		400	400	350	300							-55/+302				A-47
Push-Lok	804	Trans Paris II	150		150	150	150	150							-40/+176				A-47
•	821FR	MOD WALLES	350		300	300		250							-40/+212				A-48
	821	Marie	350		300	300	250	250							-40/+212				A-48
ŗ.	304		5000		4000	3500	2750	2250	2000	1625	1250	1125			-40/+176				A-50
ite Ester	774							4000	4000	3000	2500	2500			-40/+176				A-50
Phosphate	424								1000	625	500	375			-40/+176				A-49
<u>=</u>	F42					6000		6000	6000	6000					-40/+176				A-51
욘	472LT		5800		5000	4250	3625	3125	2500						-70/+212			857	A-52
Low-Temp	722LT				4000	4000	4000	4000	4000	3000	2500				-70/+212	100R12	3862-1-R12	856	A-53
្ន	792LT								6000	6000	6000				-70/+212	100R15			A-53
	293		500		500	500	450	450	450						-58/+302	J1402 AI			A-54
	213		2000	1500	1500	1250	1000	750	400	300	300	200	175		-50/+302	J1402 AI			A-55
Ē	266	La Manager	2000	1500	1500	1250	1250	750	400	300	250				-55/+302	J1402 AII			A-56
Transportation	201		3000	3000	2250	2000	1750	1500	800	625	500	350	350	200	-40/+302	100R5/J1402 All			A-57
anspo	206		3000	3000	2250	2000	1750	1500	800	625	500	350	350		-55/+302	100R5/J1402 All			A-58
Ė	226		2000		1500	1250	1250	750	500						-40/+302	J1402			A-59
	611HT	and an included	400		400	400	350	300							-55/+302	J517 100R6		854	A-60
	271				225	225									-50/+212	J1402 A			A-61
larine	SS23CG				425	425	425	425							-40/+250				A-62
Alternative/Marine	SS25UL		350	350	350	350	350	350							-40/+250				A-63
Altern	221FR			500	500	500	500	500	500						-4/+212	J1527 R3/J1942	7840		A-64
Refrigerant	285		500		500	500	500	500							-22/+257	J2064 Type C			A-65
Refriç	244								500	500	350				-22/+257	J2064 Type B Class 1			A-66









# How to order crimped hose assemblies

A

Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8	Box 9	Box 10	Box 11
F	436	06	39	08	08	08		-24		



В

Box 1: Prefix

Description
Parkrimp Crimp Fittings (43, 71, 77 Series, etc.)
Parkrimp Crimp Fittings (26 Series only)
Permanent Crimp Fittings (HY Series only)
Permanent Crimp Fittings (81 Series only)

C

Box 2:	Hose Type			
Symbol	Description			
436 =	SAE 100R16 Hose			
Note: see page A-6 for complete list of Parker Hoses				

Box 3:	1st Fitting End Configuration
Symbol	Description
06 =	Female JIC 37 Degree Swivel Straight
Note: Se	e page E-30 for a complete list of fitting configurations

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Box 4: Symbol	2nd Fitting End Configuration  Description
39 =	Female JIC 37 Degree Swivel 90 Degree Elbow - Short Drop

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Box 5:	1st Fitting End Connection Size
Symbol	Description
08 =	1/2" Female JIC (3/4x16 Thread)

Box 6:	2nd Fitting End Connection Size
Symbol	Description
08 =	1/2" Female JIC (3/4x16 Thread)

Box 7:	Hose Size
Symbol	Description
08 =	1/2 inch Hose Inner Diameter

Box 8:	Fitting Material
Symbol	Description
No Suffix	= Steel
B =	Brass
C =	316 Stainless Steel
BA =	Brass nipple with steel nut and socket
BS =	Brass nipple with brass nut and steel socket

	· · ·
Box 9:	Over All Length (OAL)
Symbol	Description
24 =	Expressed in inches (610 mm)

OAL of a hose assembly is measured from the end of the straight fitting or centerline of the fitting seat. OAL of the Seal-Lok® hose assembly is measured to the sealing surface of the straight fittings or to the centerline of the elbow fittings

Box 10:	Displacement Angle	
Symbol	Description	
270	Specified only if two (2) elbow fittings are used. Starting with either end as the far end, measure angle clockwise to describe the displacement angle of the near end	

Box 11	: Hose Assembly Guards
Symbo	ol Description
SG =	Spring Guard
AG =	Armor Guard
HG =	Polyguard
PG =	ParKoil™
FS =	Fire Sleeve
AS =	Partek Sleeving
PS =	Partek Sleeving
Note:	When spelling out an assembly part number, list entire sleeving part number

# How to order field attachable hose assemblies

Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8	Box 9	Box 10	Box 11
R	201	06	39	06	06	08		-24		



Box	1:	Prefix
Sym	lode	Description
R = M = B = C =		Field Attachable (all series except 22 & 23) Field Attachable (22 & 23 Series only) Clamp i.e., 88HC-H and 88DB on 88 Series Worm Gear Clamp i.e., 88H Series on 88 Series

Box 2:	Hose Type
Symbol	Description
201=	SAE 100R5
Note: Se	e page A-6 for complete list of Parker Hoses

Box 3:	1st Fitting End Configuration		
Symbol	Description		
06 =	Female JIC 37 Degree Swivel - Str.		
Note: See page E-30 for a complete list of fitting configurations			

2nd Fitting End Configuration
Description
JIC 37 Degree Flare Elbow

1st Fitting End Connection Size
Description
3/8" JIC (9/16x18 Thread)

Box 6: Symbol	2nd Fitting End Connection Size  Description
06=	3/8" JIC (9/16x18 Thread)

Box 7:	Hose Size
Symbol	Description
08 =	13/32 inch Hose Inner Diameter

Box 8: Fitting Material										
Sym	nbol	Description								
No	Suffix =	Steel								
В	=	Brass								
С	=	316 Stainless Steel								
ВА	=	Brass nipple with steel nut and socket								
BS	=	Brass nipple with brass nut and steel socket								

Box 9:	: Over All Length (OAL)									
Symbol	Description									
24 =	Expressed in inches (610 mm)									
OAL of a hose assembly is measured from the end of the straight fitting or centerline of the fitting seat. OAL of the Seal-Lok® hose assembly is measured to the sealing										

surface of the straight fittings or to the centerline of the

elbow fittings

Box 10:	Displacement Angle
Symbol	Description
270	Specified only if two (2) elbow fittings are used. Starting with either end as the far end, measure angle clockwise to describe the displacement angle of the near end

Box 11:	Hose Assembly Guards
Symbol	Description
SG =	Spring Guard
AG =	Armor Guard
HG =	Polyguard
PG =	ParKoil™
FS =	Fire Sleeve
AS =	Partek Sleeving
PS =	Partek Sleeving
	When spelling out an assembly part number, list entire sleeving part number

<sup>•</sup> See page E-14 for Agency Approval For Building Hose Assemblies Key

# **GLOBALCORE**

# Five Hoses. Two Fittings. One Solution.

Providing a simple solution of robust hydraulic hoses designed to endure the tough conditions where work gets done, GlobalCore is the future that OEMs and end users around the world have been asking for.

You know Parker as the global leader in providing unprecedented performance and value for hydraulic systems with high-pressure applications. With our GlobalCore solution, you can significantly reduce your inventory and part number complexity by using just five hoses and two fittings.

Designed to meet the most common working pressures in industry, GlobalCore stands above the competition and serves customers around the world with a simple family of constant working pressure hoses.

GlobalCore hoses are manufactured in the major regions of the world – North America, Europe and Asia – supporting the equipment they serve, regardless of where it was originally manufactured, or where it is today.

Designed, built and tested to the ISO 18752 specifications, GlobalCore reduces engineering and service complexity by providing the first comprehensive product family across the most commonly used constant working pressure classes.

Parker's worldwide reach makes GlobalCore easier to specify and source through our unrivaled industrial distribution network of 13,000 locations globally.

Hoses	-4	-6	-8	-10	-12	-16	-20	-24	-32
21 MPa / 3,000 psi	387	387	387	387	387	387	387	387	387
28 MPa / 4,000 psi	487	487/722	487/722	487/722	487/722	487/722	487	487	487
35 MPa / 5,000 psi	787	787	787	787	787	787	787	787	787
42 MPa / 6,000 psi	797	797	797	797	797	797	797	797	797
			*						
Fittings	-4	-6	-8	-10	-12	-16	-20	-24	-32
21 MPa / 3,000 psi	43	43	43	43	43	43	43,77	77	77
28 MPa / 4,000 psi	43	43	43	43	43	43	77	77	77
35 MPa / 5,000 psi	43	43	77	77	77	77	77	77	77
42 MPa / 6,000 psi	43	43	77	77	77	77	77	77	77





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# Leading the World.

# **High Performance**

Because challenges can emerge anytime and anywhere, your solution should endure the tough conditions of your work environment. The high performance standards designed, engineered and manufactured into GlobalCore provide the longest service life possible.

With GlobalCore hoses tested to twice their ISO 18752 standard, high performance in rugged environments and high impulse applications is ensured.

Long known as the premier manufacturer of hydraulic hoses, you can expect Parker's GlobalCore system will continue to meet our own rigouous standards of excellence.

Additional value is realized through:

- 212° / 257° F temperature ratings
- Standard, ToughCover and SuperTough cover technologies for abrasion resistance
- ½ minimum bend radius
- Low force to flex for ease of installation
- Advanced inner tube chemistry

# **Cohesive**

GlobalCore is a unified system that delivers hoses designed, built and tested to the ISO 18752 specification.

Released in 2006, and quickly adopted by customers worldwide, Parker is at the forefront of delivering this universal standard for hydraulic hoses.

The ISO 18752 specification was developed based on how hoses are specified and used by customers - by pressure range, and not by construction. It's a truer specification

	ISO 18752 Performance Definitions (4.2 Grades and Types)													
		Resistance to Impulse												
Grade	Typea	Temperature °C	Impulse Pressure (% of MWPb)	Minimum Number of Cycles										
Α	AS	100	133%	200.000										
^	AC	100	13370	200,000										
В	BS	100	133%	E00.000										
Ь	ВС	100	133%	500,000										
С	CS	120	133% and 120% <sup>c</sup>	E00.000										
U	CC	120	133% and 120%	500,000										
D	DC	120	133%	1,000,000										

<sup>a</sup> Standard or compact, e.g. CS is grade C and standard type.

Standard types have larger outside diameters and larger bend radii and compact types have smaller outside diameters and smaller bend radii.

<sup>b</sup> Maximum working pressure.

c 120% of the MWP shall be used for classes 350, 420 and 560 instead of 133%.

ISO 18752 classifies according to their resistance to impulse into four grades: A, B, C and D. Each grade is classified by outside diameter into standard types (AS, BS and CS) and compact types (AC, BC, CC and DC) as shown in this table.

based on today's needs. Although the specification covers hoses ranging from 500 psi through 8,000 psi and in sizes from -3 to -64, our focus is on the critical range where our customers operate.

GlobalCore expands our range of ISO 18752 hoses and provides options for the most critical sizes and pressure ranges - 3,000 psi to 6,000 psi in sizes -4 through -32.

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# Global

A single cohesive family of complimentary products so qualified has never before been offered globally.

With manufacturing locations in the major global regions, regardless of where your equipment was originally manufactured or is today, GlobalCore will support your hydraulic hose needs.

# **Simple**

The GlobalCore system is simple. With only five hoses, you'll enjoy selecting the right hose based on working pressure.

Selecting the fitting is even simpler. Choose the renowned 43 Series, with more than 2,500 configurations, or the 77 Series, designed specifically for higher pressure applications and available in more than 500 configurations.

# **Agency Approvals**

GlobalCore will carry the most common international agency approvals as requested by our customers. ABS, DNV, Lloyd's, MSHA, USCG will be comprehensive approvals, while other certifications will be specific to designated hoses or sizes.











Visit parkerglobalcore.com for the latest list of hose and agency approvals.



Catalog 4400 US GlobalCore: **3000 PSI Hydraulic Hose:** 387

## **HYDRAULIC**

# 387

#### **Markets**



























Parker's GlobalCore 387 hose provides 3,000 psi (21 MPa) constant working pressure in all sizes. Available in a variety of cover options so you can match the right cover to your application, 387 hose offers you the choice of Standard, ToughCover and SuperTough. Designed, built and tested to the ISO 18752 performance specifications. Parker's 387 hose is unmatched in today's marketplace.

- ½ ISO 18752 mminimum bend radius
- Low force to flex for ease of installation
- 3,000 psi constant working pressure in all sizes
- Exceeds ISO 18752 performance specification (AC, BC and CC)
- Synthetic rubber inner tube provides a wider range of fluid compatibility
- TC cover provides 80 times the abrasion resistance compared to Standard rubber cover hose
- ST cover provides 450 times the abrasion resistance compared to Standard rubber cover hose

#### **Performance**









# 387 Hydraulic – Constant Working Pressure ISO 18752 - AC/BC/CC



# Part Number	Standard Cover	Tough Cover 387TC	Super Tough 387ST	Hose I.D.		Hose	О.D.	Word Pres	-	Minir Bend F		s Weigh		Parkrimp	Parkrimp
387	ISO 1875	2 Perfor	mance	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series	77 Series
387-4	AC	AC	AC	1/4	6,3	0.53	13,4	3000	21,0	2	50	0.16	0,24	•	
387-6	AC	AC	AC	3/8	10	0.69	17,4	3000	21,0	2-1/2	65	0.23	0,34	•	
387-8	AC	AC	AC	1/2	12,5	0.82	20,7	3000	21,0	3-1/2	90	0.29	0,43	•	
387-10	AC	AC	AC	5/8	16	0.94	23,9	3000	21,0	4	100	0.33	0,49	•	
387-12	AC	AC	AC	3/4	19	1.10	27,8	3000	21,0	4-3/4	120	0.58	0,86	•	
387-16	AC	AC	AC	1	25	1.40	35,4	3000	21,0	6	150	0.79	1,17	•	
387-20	вс	CC	CC	1-1/4	31,5	1.82	46,3	3000	21,0	8-1/4	210	1.74	2,59	•	•
387-24	вс	CC	CC	1-1/2	38	2.08	52,8	3000	21,0	10	250	2.01	2,99		•
387-32	ВС	CC	CC	2	51	2.61	66,2	3000	21,0	12-1/2	320	2.75	4,09		•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: One or two braid steel wire (4-spiral for size -20, -24 and -32).

Cover: Standard Cover: Synthetic rubber

ToughCover: Synthetic rubber abrasion resistant SuperTough: Synthetic rubber super abrasion resistant

**Fittings:** 43 Series, sizes -4 to -20 - pg. B-25. 77 Series, sizes -20 to -32 - pg. B-94.

**Temperature Range:** Standard Cover: -40°F to +212°F (-40°C to +100°C)

ToughCover & SuperTough: -40°F to +257°F (-40°C to +125°C)

В

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Hydraulic Hose: 487 GlobalCore: 4000 PSI Catalog 4400 US

## **HYDRAULIC**

# 487

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#### **Markets**















Parker's GlobalCore 487 hose provides 4,000 psi (28 MPa) constant working pressure in all sizes. Designed for high performance, 487 is available in a variety of cover options, including Standard, ToughCover and SuperTough. Its synthetic rubber inner tube provides a wider range of fluid compatibility. Rated to the ISO 18752 performance specification, 487 will excel in multiple applications around the world.

- ½ ISO 18752 minimum bend radius
- Low force to flex for ease of installation
- 4,000 psi constant working pressure in all sizes
- Exceeds ISO 18752 performance specification (AC, BC & CC)
- TC cover provides 80 times the abrasion resistance compared to Standard rubber cover hose
- ST cover provides 450 times the abrasion resistance compared to Standard rubber cover hose

В

#### **Performance**







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# **487 Hydraulic – Constant Working Pressure**ISO 18752 - AC/BC/CC



# Part Number	Standard Cover 487	Tough Cover 487TC	Super Tough 487ST	Hose I.D.		Hose O.D.		Wor Pres	king sure	Minimum Bend Radius		um idius Weigh		Parkrimp	Parkrimp
487	ISO 1875	2 Perfor	mance	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series	77 Series
487-4	AC	AC	AC	1/4	6,3	0.52	13,1	4000	28,0	2	50	0.20	0,30	•	
487-6	AC	AC	AC	3/8	10	0.68	17,2	4000	28,0	2-1/2	65	0.28	0,42	•	
487-8	AC	AC	AC	1/2	12,5	0.81	20,4	4000	28,0	3-1/2	90	0.35	0,52	•	
487-10	AC	AC	AC	5/8	16	0.94	23,9	4000	28,0	4	100	0.44	0,66	•	
487-12	AC	AC	AC	3/4	19	1.10	27,8	4000	28,0	4-3/4	120	0.58	0,86	•	
487-16	вс	CC	CC	1	25	1.49	37,8	4000	28,0	6	150	1.34	1,99	•	
487-20	вс	CC	CC	1-1/4	31,5	1.82	46,3	4000	28,0	8-1/4	210	1.74	2,59		•
487-24	вс	CC	cc	1-1/2	38	2.03	52,8	4000	28,0	10	250	2.07	3,08		•
487-32	ВС	CC	CC	2	51	2.65	67,3	4000	28,0	12-1/2	320	4.35	6,47		•

Application: Petroleum base hydraulic fluids and lubricating oils

Inner Tube: Synthetic rubber

Reinforcement: One- or two-braid steel wire (four-spiral for sizes -16, -20,-24 and -32)

Cover: Standard Cover: Synthetic rubber

ToughCover: Synthetic rubber abrasion resistant SuperTough: Synthetic rubber super abrasion resistant

**Fittings:** 43 Series, sizes -4 to -16 - pg. B-25. 77 Series, sizes -20 to -32 - pg. B-94.

**Temperature Range:** Standard Cover: -40°F to +212°F (-40°C to +100°C)

ToughCover & SuperTough: -40°F to +257°F (-40°C to +125°C)

GlobalCore: 4000 PSI Catalog 4400 US **Hydraulic Hose: 722** 

# **HYDRAULIC**

# **722**

#### **Markets**



















Parker's GlobalCore 722 spiral hose provides 4,000 psi (28 MPa) constant working pressure in sizes -6 through -16. Designed for high-pressure, highimpulse applications, 722 hose is offered in Standard, Tough Cover and Super Tough cover options. It is one-half the bend radius of 100R12 hose, making it easy to install and reducing the amount of hose needed. Meeting the ISO 18752 performance specification, Parker's 722 hose excels in multiple applications around the world.

- ½ ISO 18752 minimum bend radius
- 4,000 psi constant working pressure
- Exceeds ISO 18752 performance specification (BC and CC)
- 4-spiral construction for longer life in high-impulse, heavy-duty cycle applications
- TC cover provides 80 times the abrasion resistance compared to Standard rubber cover hoses
- ST cover provides 450 times the abrasion resistance compared to Standard rubber cover hoses

#### **Performance**





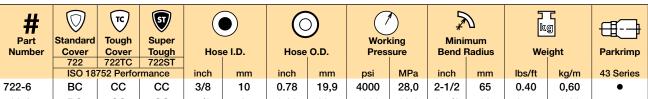




# **722**

# **Hydraulic - Constant Working Pressure**

ISO 18752 - BC/CC



11		~							4		1 100	<b>S</b>	TH-T	
Part	Standard	Tough	Super					Worl	king	Mini	mum	_	_	
Number	Cover	Cover	Tough	Hos	Hose I.D.		Hose O.D.		Pressure		Radius	Weight		Parkrimp
	722	722TC	722ST											
	ISO 18	752 Perfor	rmance	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
722-6	ВС	CC	CC	3/8	10	0.78	19,9	4000	28,0	2-1/2	65	0.40	0,60	•
722-8	вс	CC	CC	1/2	12,5	0.89	22,7	4000	28,0	3-1/2	90	0.54	0,80	•
722-10	ВС	CC	CC	5/8	16	1.04	26,4	4000	28,0	4	100	0.74	1,10	•
722-12	BC	CC	CC	3/4	19	1.21	30,7	4000	28,0	4-3/4	120	0.94	1,40	•
722-16	ВС	CC	CC	1	25	1.50	37,8	4000	28,0	6	150	1.34	1,99	•

Application: Petroleum base hydraulic fluids and lubricating oils

Inner Tube: Synthetic rubber

Reinforcement: Four-spiral steel wire Cover: Standard Cover: Synthetic rubber

ToughCover: Synthetic rubber abrasion resistant SuperTough: Synethic rubber super abrasion resistant

Fittings: 43 Series - pg. B-25.

Temperature Range: Standard Cover: -40°F to +212°F (-40°C to +100°C) - BC

ToughCover & SuperTough: -40°F to +257°F (-40°C to +125°C)

Hydraulic Hose: 787 GlobalCore: 5000 PSI Catalog 4400 US

## **HYDRAULIC**

# **787**

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#### **Markets**















Parker's GlobalCore 787 hose provides 5,000 psi (35 MPa) constant working pressure in all sizes. Compared with conventional spiral hose, the Compact Spiral design 787 hose offers measurably greater advantages in routing and installation, product size and weight, inventory savings and much more. The 787 hose meets ISO 18752 performance specification.

- ½ ISO 18752 minimum bend radius
- 5,000 psi constant working pressure in all sizes
- Meets ISO 18752 performance specification
- Nearly 30% smaller O.D. by area than SAE spiral
- Twice the impulse/life tested up to 2,000,000 cycles
- Flex impulse tested providing a hose superior in both performance and service life
- Less hose weight than SAE spiral

**Performance** 









787

B

**Hydraulic – Constant Working Pressure** 

ISO 18752 - AC/BC/DC



# Part Number	Standard Cover	Tough Cover	Super Tough Cover 787ST		Hose I.D.		I.D. Hose O.D.			Working Pressure		num Radius	um Indius Weight		Parkrimp	Parkrimp
	ISO 18	752 Perfo	rmance	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series	77 Series	
787-4	AC	AC	AC	1/4	6,3	0.51	13,0	5000	35,0	2	50	0.21	0.31	•		
787-6	AC	AC	AC	3/8	10	0.68	17,2	5000	35,0	2-1/2	63	0.28	0,42	•		
787-8	ВС	DC	DC	1/2	12,5	0.83	21,1	5000	35,0	3-1/2	90	0.45	0,67		•	
787-10	ВС	DC	DC	5/8	16	0.94	23,9	5000	35,0	4	100	0.54	0,80		•	
787-12	ВС	DC	DC	3/4	19	1.10	27,9	5000	35,0	4-3/4	120	0.78	1,16		•	
787-16	ВС	DC	DC	1	25	1.40	35,7	5000	35,0	6	150	1.17	1,74		•	
787-20	ВС	DC	DC	1-1/4	31,5	1.77	44,9	5000	35,0	8-1/4	210	1.95	2,89		•	
787-24	ВС	DC	DC	1-1/2	38	2.08	52,8	5000	35,0	10	255	2.66	3,96		•	
787-32	ВС	DC	DC	2	51	2.66	67,6	5000	35,0	12-1/2	318	4.37	6,50		•	

Application: Petroleum-based hydraulic fluids, lubricating oils

Inner Tube: Proprietary synthetic rubber

Reinforcement: Two-braid steel wire for sizes -4 to -6, Four- or six-compact spiral steel wires for sizes - 8 to -32

Cover: Standard Cover: Synthetic rubber

ToughCover: Synthetic rubber abrasion resistant SuperTough: Synthetic rubber super abrasion resistant

**Fittings:** 43 Series: sizes -4 to -6 - pg. B-25 77 Series: sizes -8 to -32 - pg. B-94

**Temperature Range:** Standard Cover: -40°F to +212°F (-40°C to +100°C)

ToughCover & SuperTough: -40°F to +257°F (-40°C to +125°C)

(-4 to -6 rated to +212°F)

Catalog 4400 US GlobalCore: **6000 PSI Hydraulic Hose:** 797

## **HYDRAULIC**

# 797

#### **Markets**













Parker's GlobalCore 797 hose provides 6,000 psi (42 MPa) constant working pressure in all sizes. Compared with conventional spiral hose, the Compact Spiral design 797 hose offers measurably greater advantages in routing and installation, product size and weight, inventory savings and much more. The 797 hose meets ISO 18752 performance specification.

- ½ the bend radius of SAE spiral
- 6,000 psi constant working pressure in all sizes
- Meets ISO 18752 performance specification
- Nearly 30% smaller O.D. by area than SAE spiral
- Twice the impulse/life tested up to 2,000,000 cycles
- Flex impulse tested providing a hose superior in both performance and service life
- Less hose weight than SAE spiral

#### **Performance**









# **797 Hydraulic – Constant Working Pressure**ISO 18752 - AC/BC/CC/DC



# Part Number	Standard Cover	Tough Cover 797TC	Super Tough Cover 797ST	Hose	Hose I.D.		Hose O.D.		king sure	Minin Bend F	num	num adius Wei		Parkrimp	Parkrimp
		752 Perfor		inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series	77 Series
797-4	AC	AC	AC	1/4	6,3	0.51	13,0	6000	42,0	2	50	0.21	0,31	•	
797-6	вс	CC	CC	3/8	10	0.66	17,0	6000	42,0	2-1/2	63	0.31	0,46	•	
797-8	ВС	DC	DC	1/2	12,5	0.83	21,1	6000	42,0	4	100	0.45	0,67		•
797-10	ВС	DC	DC	5/8	16	0.94	23,9	6000	42,0	4-1/2	115	0.54	0,80		•
797-12	ВС	DC	DC	3/4	19	1.10	27,9	6000	42,0	5-1/4	135	0.78	1,16		•
797-16	ВС	DC	DC	1	25	1.40	35,7	6000	42,0	6-1/2	165	1.17	1,74		•
797-20	вс	DC	DC	1-1/4	31,5	1.77	44,9	6000	42,0	8-3/4	225	1.95	2,89		•
797-24	ВС	CC	CC	1-1/2	38	2.08	52,8	6000	42,0	12	305	2.66	3,96		•
797-32	BC	CC	cc	2	51	2.66	67,6	6000	42,0	15	380	4.37	6,50		•

Application: Petroleum-based hydraulic fluids, lubricating oils

Inner Tube: Proprietary synthetic rubber

Reinforcement: Two-braid steel wire for sizes -4, Four- or six-compact spiral steel wires for sizes - 6 to -32

Cover: Standard Cover: Synthetic rubber

ToughCover: Synthetic rubber abrasion resistant SuperTough: Synthetic rubber super abrasion resistant

**Fittings:** 43 Series: sizes -4 to -6 - pg. B-25 77 Series: sizes -8 to -32 - pg. B-94

**Temperature Range:** Standard Cover: -40°F to +212°F (-40°C to +100°C)

ToughCover & SuperTough: -40°F to +257°F (-40°C to +125°C)

(-4 rated to +212°F)

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# 451TC/ST, 451TC Twin Tough

**Markets** 























Parker 451TC and 451ST hydraulic hoses are what to specify when abrasion resistance and ease of use are required. Plus, you can choose the cover that provides the abrasion resistance for your application.

- One-half SAE 100R1 minimum bend radius flexible, easy to work with and install
- Specially engineered TC and ST covers prolong hose life and minimize downtime
- 3,000 psi constant working pressure in all sizes
- Exceeds SAE 100R17 specification

# Parker TOUGH COVER 451TC-12 W

#### **Performance**







## 451TC

Hydraulic - Tough Cover

SAE 100R17, J1942 / ISO 11237 - 1 TYPE R17 - Constant Working Pressure / USCG HF / ABS

# 451ST

Hydraulic - Super Tough Cover

SAE 100R17 / ISO 11237 - 1 TYPE R17 - Constant Working Pressure

# Part Number	r Hose I.E		Hose I.D.		Hose	O.D.		king sure	Mini	mum Radius	lk	g ght	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series		
451TC/ST-4	1/4	6,3	0.52	13	3000	21,0	2	50	0.16	0,24	•		
451TC/ST-6	3/8	10	0.68	17	3000	21,0	2-1/2	65	0.23	0,34	•		
451TC/ST-8	1/2	12,5	0.80	20	3000	21,0	3-1/2	90	0.35	0,52	•		
451TC/ST-10	5/8	16	0.94	24	3000	21,0	4	100	0.44	0,66	•		
451TC/ST-12	3/4	19	1.10	28	3000	21,0	4-3/4	120	0.58	0,86	•		
451TC/ST-16	1	25	1.40	35	3000	21,0	6	150	0.79	1,17	•		
451TC/ST-20	1-1/4	31,5	1.85	47	3000	21,0	8-1/4	210	1.50	2,23	•		

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: One or two braid steel wire (4-spiral for size -20). Cover: Synthetic rubber abrasion resistant, MSHA accepted.

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

Fittings: 43 Series - pg. B-25.

• See Section C for Parkrimp Assembly Instructions.

• Temperature Range of other media listed in Section E.

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Twin Tough hoses eliminate the labor and material costs required to manually bundle two separate hoses using tie straps or plastic sleeves. Plus, Parker's Twin Tough saves valuable time in the field.

- 3,000 psi constant working pressure in -6-6 and -8-8
- One-wire braided construction
- Abrasion-resistant TC cover



#### **Performance**



#### 451TC

## Hydraulic - Twin Tough Cover

SAE 100R17, J1942 / ISO 11237 - 1 TYPE R17 - Constant Working Pressure / USCG HF / ABS

# Part Number	Hose I.D.		Hose			king sure	Minir Bend F	num	\text{\text{\$\exititt{\$\text{\$\exititt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$}\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\tex{\$\text{\$\text{\$\text{\$\text{\$\exititt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\tex{	_	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
451TC-6-6	3/8	10	0.68	17	3000	21,0	2-1/2	65	0.46	0,68	•
451TC-8-8	1/2	12,5	0.80	20	3000	21,0	3-1/2	90	0.70	1,04	•

For assembly instructions see page C-16.

**Application:** Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: One braid steel wire.

**Cover:** Synthetic rubber abrasion resistant, MSHA accepted. **Temperature Range:** -40°F to +212°F (-40°C to +100°C).

Fittings: 43 Series - pg. B-25.

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

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# 711

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#### **Markets**









711 hose is a medium-pressure, 4-wire spiral constructed hose offered in two large I.D. sizes. Designed for high-impulse, long-life applications like injection molding.

• 3000 psi constant working pressure

# 711

## **Hydraulic**

J1942 / USCG HF / DNV / ABS



# Part Number	Hose I.D.		Hose	O.D.		king sure		num Radius	₩ei		Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	71 Series
711-24	1-1/2	38,0	2.07	53	3000	21,0	22	560	2.01	2,99	•
711-32	2	51,0	2.59	66	3000	21,0	28	710	2.75	4,09	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

**Reinforcement:** Four spiral steel wire. **Cover:** Synthetic rubber, MSHA accepted.

**Temperature Range:**  $-40^{\circ}F$  to  $+212^{\circ}F$  ( $-40^{\circ}C$  to  $+100^{\circ}C$ ).

Fittings: 71 Series - pg. B-69.

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See Section C for Parkrimp Assembly Instructions.

<sup>•</sup> Temperature Range of other media listed in Section E.

# **351TC/ST**

#### **Markets**















351TC – Braided construction offering 4000 psi is more flexible than its standard spiral counterpart.

- Specifically engineered TC and ST covers prolong hose life and minimize downtime
- 4000 psi constant working pressure in all sizes
- Exceeds SAE 100R19, J517 specifications



#### **Performance**







## 351TC

**Hydraulic – Tough Cover** SAE 100R19, J517 – Constant Working Pressure

# 351ST

**Hydraulic – Super Tough Cover** SAE 100R19, J517 – Constant Working Pressure



Hydraulic Hose: 351TC/ST



# Part Number	Hose I.D.		Hose	O.D.	Wor		Mini	mum Radius	_	g ght	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
351TC/ST-4	1/4	6,3	.51	13	4000	28	2	50	0.20	0,30	•
351TC/ST-6	3/8	10	.67	17	4000	28	2-1/2	65	0.28	0,42	•
351TC/ST-8	1/2	12,5	.80	20	4000	28	3-1/2	90	0.35	0,52	•
351TC/ST-10	5/8	16	.93	24	4000	28	4	100	0.44	0,66	•
351TC/ST-12	3/4	19	1.09	28	4000	28	4-3/4	120	0.58	0,86	•

**Application:** Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Two braids steel wire.

**Cover:** Synthetic rubber abrasion resistant, MSHA accepted. **Temperature Range:** -40°F to +212°F (-40°C to +100°C).

Fittings: 43 Series - pg. B-25.

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

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# **772TC/ST**

Markets

















Durable four-spiral construction with synthetic rubber inner tube providing a wider range of fluid compatibility.

- Synthetic rubber inner tube provides a wider range of fluid compatibility
- Meets SAE 100R12 specifications

#### **Performance**





**772TC** 

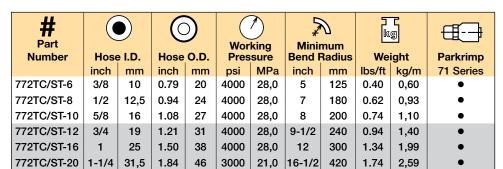
Hydraulic - Tough Cover

SAE 100R12, J1942 / ISO 3862-1 TYPE R12 / EN 856 TYPE R12 / USCG HF / DNV / ABS

## 772ST

**Hydraulic - Super Tough Cover** 

SAE 100R12 / ISO 3862-1 TYPE R12 / EN 856 TYPE R12



17,5

17,5

20

25

500

630

2.01

2.75

2,99

4,09

2500

2500

Application: Petroleum base hydraulic fluids and lubricating oils.

2.07

2.59

53

66

38

51

Inner Tube: Synthetic rubber.

772TC/ST-24

772TC/ST-32

Reinforcement: Four spiral steel wire.

1-1/2

2

**Cover:** Synthetic rubber abrasion resistant, MSHA accepted. **Temperature Range:** -40°F to +257°F (-40°C to +125°C).

Fittings: 71 Series - pg. B-69.

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See Section C for Parkrimp Assembly Instructions.

Temperature Range of other media listed in Section E.

Hydraulic Hose: 781, P35

# **HYDRAULIC**

#### Markets















# 781

Designed for high-pressure applications and for high-impulse, high-duty cycles.

- 4- or 6-wire spiral construction
- Constant working pressure 5000 psi in all sizes
- Meets SAE 100R13 specifications

## 781

#### **Hydraulic**

SAE 100R13, J1942 / ISO 3862-1 TYPE R13 / EN856 TYPE R13 / USCG HF / DNV / ABS

# Part Number	Hose I.D.		Hose	O.D.	Wor Pres			mum Radius	k Wei		Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	78 Series
781-12	3/4	19	1.26	32	5000	35,0	9-1/2	240	1.07	1,59	•
781-16	1	25	1.52	39	5000	35,0	12	300	1.48	2,20	•
781-20	1-1/4	31,5	1.96	50	5000	35,0	16-1/2	420	2.48	3,69	•
781-24	1-1/2	38	2.26	57	5000	35,0	20	500	3.22	4,79	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

**Reinforcement:** Four or six spiral steel wire. Cover: Synthetic rubber, MSHA accepted.

Temperature Range: -40°F to +257°F (-40°C to +125°C).

Fittings: 78 Series - pg. B-114.

#### **Markets**













# **P35**

Large-bore 2 inch size for high-pressure applications.

- Meets SAE 100R13, ISO 3862-1 Type R13 and EN 856 Type R13 specifications
- No-Skive design eliminates the need to remove the hose cover before crimping
- Approved with S6 Series fittings
- MSHA accepted cover

# **P35**

#### Hydraulic

SAE 100R13, J1942 / ISO 3862-1 TYPE R13 / EN856 TYPE R13 / USCG HF / DNV / ABS / BV

# Part Number	Hose	e I.D.	Hose	O.D.		king ssure	Minir Bend F		k Wei	_	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	S6 Series
P35-32	2	51	2.80	71	5000	35,0	25	630	5.03	7,48	•

NOTE: P35-32 Hose must be crimped with S6 Series fittings.

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Four or six spiral steel wire. Cover: Synthetic rubber, MSHA accepted.

Temperature Range: -40°F to +257°F (-40°C to +125°C).

Fittings: S6 Series - pg. B-123.

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

# **782TC/ST**

Markets















Performance





**782TC** 

• Meets SAE 100R13 specification

SAE 100R13, J1942 / ISO 3862-1 TYPE R13 / EN856 TYPE R13 / USCG HF / DNV / ABS / BV

Hydraulic - Tough Cover

Robust construction with synthetic rubber inner tube providing wider fluid compatibility.

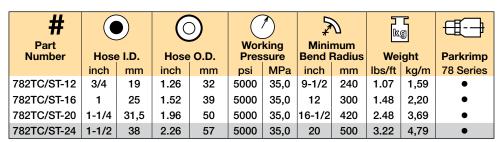
**782ST** 

Hydraulic - Super Tough Cover

SAE 100R13 / ISO 3862-1 TYPE R13 / EN856 TYPE R13

• Synthetic rubber inner tube for wide fluid compatibility

• 5000 psi constant working pressure in all sizes



Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Four or six spiral steel wire.

Cover: Synthetic rubber abrasion resistant, MSHA accepted. Temperature Range: -40°F to +257°F (-40°C to +125°C).

Fittings: 78 Series - pg. B-114.

<sup>•</sup> See Section C for Parkrimp Assembly Instructions.

Temperature Range of other media listed in Section E.

# **791TC**

#### **Markets**













Designed for up to 6000 psi high-impulse, high-duty cycle applications.

- One-half minimum bend radius
- 6000 psi constant working pressure in all sizes
- Exceeds SAE 100R15 specification

#### **Performance**

## **791TC**

**Hydraulic – Extreme Tough Cover** 

SAE 100R15, J1942 / ISO 3862-1 TYPE R15 / USCG HF / DNV / ABS

# Part Number	Hose	e I.D.	Hose	O.D.		king sure		mum Radius	k Wei	_	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	79 Series
791TC-12	3/4	19	1.26	32	6000	42,0	8	200	1.07	1,59	•
791TC-16	1	25	1.52	39	6000	42,0	10	250	1.48	2,20	•
791TC-20	1-1/4	31,5	1.97	50	6000	42,0	10	250	2.48	3,69	•
791TC-24	1-1/2	38	2.28	58	6000	42,0	12	305	3.22	4,79	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Four or six spiral steel wire.

Cover: Synthetic rubber abrasion resistant, MSHA accepted. **Temperature Range:** -40°F to +257°F (-40°C to +125°C).

Fittings: 79 Series - pg. B-127.

Hydraulic Hose: 791TC

<sup>•</sup> See Section C for Parkrimp Assembly Instructions.

<sup>•</sup> Temperature Range of other media listed in Section E.

Hydraulic Hose: 792TC/ST

# **792TC/ST**

Markets



















Designed for up to 6000 psi high-impulse, high-duty cycle applications with a synthetic rubber inner tube providing wider fluid compatibility.

- One-half minimum bend radius
- 6000 psi constant working pressure in all sizes
- Exceeds SAE 100R15 specification

#### **Performance**



B



**792TC** 

Hydraulic – Tough Cover SAE 100R15, J1942 / ISO 3862-1 TYPE R15 / USCG HF / DNV / ABS

## **792ST**

Hydraulic – Super Tough SAE 100R15 / ISO 3862-1 TYPE R15



# Part Number	Hose I.D.		Hose	O.D.		king	Minir Bend F	num	k Wei	写 gj	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	79 Series
792TC/ST-12	3/4	19	1.26	32	6000	42,0	10-1/2	265	1.07	1,59	•
792TC/ST-16	1	25	1.52	39	6000	42,0	13	330	1.48	2,20	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

**Reinforcement:** Four or six spiral steel wire.

**Cover:** Synthetic rubber abrasion resistant, MSHA accepted. **Temperature Range:** -40°F to +257°F (-40°C to +125°C).

Fittings: 79 Series - pg. B-127.

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- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

# JK - Jack Hose

#### **Markets**







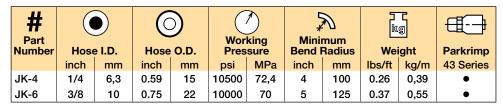
Parker Jack Hose should be your choice for use on hydraulically powered jacking equipment. From its engineered inner tube, and twin braids of high-tensile steel reinforcement, to its durable outer cover, our hydraulic Jack Hose has been designed for high performance, easily supporting the rigors of high tonnage hydraulic jack applications. Jack Hose comes with the added benefits of the world's largest distributor network and Parker's unequalled technical services.

- 10,500 max working pressure
- Engineered inner tube provides exceptional hydraulic fluid compatibility
- No-Skive design eliminates the need to remove hose cover before crimping

## JK

#### Hydraulic - Jack Hose

SAE 100R2 AT / ISO 1436-1 TYPE 2SN / EN 853 TYPE 2SN / 1J100,NFPA 1936



NOTE: THIS PRODUCT CAN ONLY BE ASSEMBLED BY CERTIFIED DISTRIBUTORS OR CUSTOMERS ACCORDING TO THE METHODS PRESCRIBED IN BULLETIN 4480-T18-US. JK HOSE HAS A 2:1 DESIGN FACTOR.

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber

**Reinforcement:** Two braids steel wire **Cover:** Synthetic rubber, MSHA accepted

**Temperature Range:** -40°F to +120°F (-40°C to +49°C)

**Fittings:** 10143-4-4, 10143-4-6, 10143-6-4, 10143-6-6 pg. B-27.



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See Section C for Parkrimp Assembly Instructions.

Temperature Range of other media listed in Section E.

# 422

## **Markets**



















Parker's worldwide hose line is designed to accommodate global customer requirements. Manufactured to strict international specifications, 422 hose offers customers consistency of performance combined with improved availability anywhere in the world.

- One-wire braid hose design manufactured to international specifications (ISO 1436-1 Type 1SN)
- Increased working pressures for improved reliability and expanded applications versus standard SAE 100R1

• Synthetic rubber inner tube for greater fluid compatibility and bio-oil resistance



# 422

## **Hvdraulic Worldwide**

ISO 1436-1 TYPE 1SN/SAE 100R1 TYPE AT, J1942 / EN 853 TYPE 1SN / USCG HF / DNV / ABS

# Part Number	Hose I.D.		Hose	O.D.	Wor Pres		Minii Bend F		_	g ight	Vacuu Ratii	um ng	Parkrimp	Field Attachable
	inch	mm	inch	mm	nei	MDa	inch	mm	lhe/ft		inches of Hg		43 Series	42 Series
422-4	1/4	6,3			3250		4	100		0,24	24	81	40 Octios	42 Jenes ●
422-5	5/16	6,3		15	3125	21,5	4-1/2	115		0,27	24	81	•	•
422-6	3/8	10	0.68	17	2600	18,0	5	130	0.23	0,34	24	81	•	•
422-8	1/2	12,5	0.81	21	2325	16,0	7	180	0.29	0,43	24	81	•	•
422-10	5/8	16	0.94	24	1875	13,0	8	200	0.33	0,49	24	81	•	•
422-12	3/4	19	1.09	28	1525	10,5	9-1/2	240	0.42	0,63	24	81	•	•
422-16	1	25	1.41	36	1275	8,8	12	300	0.63	0,94	24	81	•	•
422-20	1-1/4	31,5	1.79	45	900	6,3	16-1/2	420	0.8	1,19	18	61	•	
422-24	1-1/2	38	2	51	725	5,0	20	500	1	1,49	18	61	•	
422-32	2	51	2.54	64	575	4,0	25	630	1.5	2,24	18	61	•	•

**Application:** Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber. Reinforcement: One braid steel wire.

Cover: Synthetic rubber.

**Temperature Range:**  $-40^{\circ}$ F to  $+212^{\circ}$ F ( $-40^{\circ}$ C to  $+100^{\circ}$ C).

Fittings: 43 Series - pg. B-25. 42 Series - pg. B-179. • Field Attachable Assembly Instructions are in Section B with each Fittings Series.

Darker 422 421 Works

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

# **482TC/ST**

#### **Markets**

Synthetic rubber inner tube provides wide fluid compatibility.

• 1/2 minimum bend radius for ease of routing

• Meets SAE 100R1 specification

















#### Performance







## 482TC

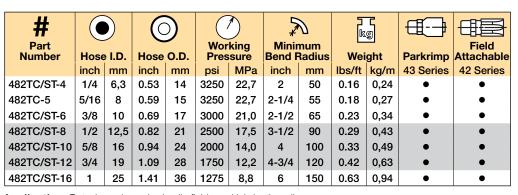
Hydraulic - Tough Cover

SAE 100R1 TYPE AT, J1942 / ISO 1436-1 TYPE 1SN / EN853 TYPE 1SN / USCG H

## 482ST

Hydraulic - Super Tough Cover

SAE 100R1 TYPE AT / ISO 1436-1 TYPE 1SN / EN853 TYPE 1SN



Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber. Reinforcement: One braid steel wire.

Cover: Synthetic rubber abrasion resistant, MSHA accepted. Temperature Range: -40°F to +212°F (-40°C to +100°C).

Fittings: 43 Series - pg. B-25. 42 Series - pg. B-179.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.



Parker SUPER TOT GH 4555

Hydraulic Hose: 482TC/ST

# 426

426

**Markets** 













Designed for high-temperature applications that can handle temperatures up to 302° F.

- Engine compartment applications
- Meets SAE 100R1 specification
- Distinctive blue cover indicates high temperature rating
- Temperature up to 302° F

## **Performance**



B

**Hydraulic – High-Temperature** SAE 100R1 TYPE AT, J1942 / USCG HF / ABS



# Part			0		Wor	king	₹ Minii	num	k	<b>G</b>	<b>#</b>
Number	Hose	e I.D.	Hose	O.D.	Pres	sure	Bend F	Radius	Wei	ght	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
426-4	1/4	6,3	0.53	13	2750	19,2	4	100	0.16	0,24	•
426-6	3/8	10	0.68	17	2250	15,7	5	125	0.23	0,34	•
426-8	1/2	12,5	0.81	21	2000	14,0	7	180	0.29	0,43	•
426-10	5/8	16	0.94	24	1500	10,5	8	200	0.33	0,49	•
426-12	3/4	19	1.09	28	1250	8,7	9-1/2	240	0.44	0,65	•
426-16	1	25	1.40	36	1000	7,0	12	300	0.66	0,98	•
426-20	1-1/4	31,5	1.79	45	625	4,3	16-1/2	420	0.94	1,40	•
426-24	1-1/2	38	2.00	51	500	3,5	20	500	0.98	1,46	•
426-32	2	51	2.54	64	375	2,6	25	630	1.46	2,18	•

**Application:** Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: PKR®.

Reinforcement: One braid steel wire. Cover: PKR®. rubber, blue, MSHA accepted

Temperature Range: -50°F to +302°F (-46°C to +150°C).

Fittings: 43 Series - pg. B-25.

<sup>•</sup> See Section C for Parkrimp Assembly Instructions.

Temperature Range of other media listed in Section E.

# 302

#### Markets















Parker's 302 hose, a universal two-wire construction hose designed to accommodate global customer requirements, is manufactured to strict international quality specifications. Parker's 302 offers customers consistency of performance combined with continuous availability anywhere in the world. It offers a high working pressure, long service life and a wide fluid compatibility.

- Universal two-wire hose design manufactured to international specifications (ISO 1436-1 Type 2SN)
- Increased working pressures for improved reliability and expanded applications
- Synthetic rubber inner tube for greater fluid compatibility and bio-oil resistance

Parker 302/301-16 Worldwide WP 16,5 MPa (2400 PSI) ISO 1436-

## 302

#### **Hydraulic Worldwide**

ISO 1436-1 TYPE 2SN / SAE 100R2 TYPE AT, J1942 / EN 853 TYPE 2SN / USCG HF / DNV / ABS / BV



#						7		9	k	<b>S</b>	<del></del>	
Part Number	Hos	e ID	Hose O.D.		Wor Pres	sure	Minin Bend F		Wei	·	Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	Мра	inch	mm	lbs/ft	kg/m	43 Series	30 Series
302-4	1/4	6,3	0.59	15,0	5800	40	4	100	0.26	0,39	•	•
302-5	5/16	8	0.65	16,6	5000	35	4-1/2	115	0.28	0,42	•	
302-6	3/8	10	0.75	19,0	4750	33	5	130	0.37	0,55	•	•
302-8	1/2	12,5	0.88	22,3	4000	28	7	180	0.45	0,67	•	•
302-10	5/8	16	1.00	25,5	3600	25	8	200	0.52	0,77	•	•
302-12	3/4	19	1.16	29,4	3100	21,5	9-1/2	240	0.67	1,00	•	•
302-16	1	25	1.50	38,1	2400	16,5	12	300	1.00	1,49	•	•
302-20	1-1/4	31,5	1.86	47,1	1800	12,5	16-1/2	420	1.16	1,73	•	•
302-24	1-1/2	38	2.14	54,5	1300	9	20	500	1.44	2,14	•	•
302-32	2	51	2.64	67,2	1150	8	25	630	1.99	2,96	•	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Two braids steel wire.

Cover: Synthetic rubber.

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

Fittings: 43 Series - pg. B-25.

30 Series - pg. B-173.

• Field Attachable Assembly Instructions are in Section B with each Fittings Series.

• See Section C for Parkrimp Assembly Instructions.

• Temperature Range of other media listed in Section E.

# 431

#### **Markets**



















For applications with tighter routing requirements and needing a reduced bend radius, 431 features a compact construction and 1/2 minimum bend radius.

- Features a smaller O.D. for tighter routing
- Compact construction
- Half the minimum bend radius

B

C

## **Performance**



## **Hydraulic**

SAE J1942 / USCG H



# Part Number	Hose	e I.D. Hose		0.0	Worl		Mini	mum Radius	lx	ight	Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft		43 Series	42 Series
431-4	1/4	6,3	0.53	13	5000	34,5	2	50	0.18	0,27	•	
431-5	5/16	8	0.59	15	4250	29,3	2-1/4	55	0.24	0,36	•	•
431-6	3/8	10	0.68	17	4000	27,5	2-1/2	65	0.28	0,42	•	•
431-8	1/2	12,5	0.81	21	3500	24	3-1/2	90	0.34	0,51	•	•
431-10	5/8	16	0.94	24	2750	19	4	100	0.44	0.66	•	•
431-12	3/4	19	1.09	28	2250	15,5	4-3/4	120	0.54	0,80	•	•
431-16	1	25	1.41	36	2000	13,8	6	150	0.82	1,22	•	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Two braids steel wire. Cover: Synthetic rubber, MSHA accepted.

Temperature Range: -40°F to +257°F (-40°C to +125°C).

**Fittings:** 43 Series - pg. B-25. 42 Series - pg. B-179.

<sup>•</sup> Field Attachable Assembly Instructions are in Section B with each Fittings Series.

See Section C for Parkrimp

Assembly Instructions.
• Temperature Range of other media listed in Section E.

# 436

#### **Markets**





















has the flexibility to work in almost any application - including tight spots. Engineered to withstand high pressure within a wide range of working temperatures, Parker 436 is not only versatile, but dependable over a long hose life. For quality, service and value, there's simply no match.

With one-half the minimum SAE bend radius and a smaller hose O.D., 436 hose

- Compact construction provides easier routing
- Temperatures up to 302° F
- Distinctive blue cover indicates high temperature capability
- Reduced bend radius and excellent flexibility
- 2-wire braided reinforcement with smaller construction
- Meets SAE 100R16 / ISO 11237 Type R16 specifications

#### **Performance**



# 436

#### **Hydraulic - Compact High Temperature** SAE 100R16 / ISO 11237 TYPE R16



# Part Number	Hose	e I.D.	Hose	O.D.	Worl Pres		Minir Ber Rad	nd	_	了 ⑤	Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series	42 Series
436-6	3/8	10	0.68	17	4000	27,5	2-1/2	65	0.28	0,42	•	•
436-8	1/2	12,5	0.81	21	3500	24	3-1/2	90	0.34	0,51	•	•
436-10	5/8	16	0.94	24	2750	19	4	100	0.44	0,66	•	•
436-12	3/4	19	1.09	28	2250	15,5	4-3/4	120	0.54	0,80	•	•
436-16	1	25	1.41	36	2000	13,8	6	150	0.82	1,22	•	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: PKR®

Reinforcement: Two braids steel wire. Cover: PKR rubber, blue, MSHA accepted.

Temperature Range: -55°F to +302°F (-48°C to +150°C).

Fittings: 43 Series - pg. B-25. 42 Series - pg. B-179.

 Field Attachable Assembly Instructions are in Section B with each Fittings Series.

 See Section C for Parkrimp Assembly Instructions.

• Temperature Range of other media listed in Section E.

# **471TC/ST**

#### **Markets**













2-wire braided compact construction.

- Smaller O.D. for ease of installation
- Approved with 43 Series fittings
- Provides 1/2 minimum bend radius

Parker SUPER'IV) UGH 471ST-12 WP 21,5 MPa (3125

B





Performance



## 471TC

**Hydraulic - Tough Cover** 

J1942 / ISO 11237 / EN 857 TYPE 2SC / USCG HF / DNV / ABS / BV



**Hydraulic – Super Tough Cover** ISO 11237 / EN 857 TYPE 2SC



arker TOYGHeover 47170

# Part Number	Hose	e I.D.	Hose	O.D.	Wor Pres	king sure MPa	Minir Bend F		We	ight	Vacui Ratii inches of Hg	um	Parkrimp 43 Series
471TC/ST-4	1/4	6,3	0.51	13	5800	40,0	2	50	0.20	0,30	28	95	•
471TC/ST-6	3/8	10	0.68	17	5000	35,0	2-1/2	65	0.28	0,42	28	95	•
471TC/ST-8	1/2	12,5	0.80	20	4250	29,7	3-1/2	90	0.35	0,52	28	95	•
471TC/ST-10	5/8	16	0.94	24	3625	25,0	4	100	0.44	0,66	28	95	•
471TC/ST-12	3/4	19	1.09	28	3125	21,5	4-3/4	120	0.58	0,86	24	80	•
471TC/ST-16	1	25	1.40	35	2500	17,5	6	150	0.79	1,17	24	80	•

For larger sizes see 472TC.

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Two braids steel wire.

Cover: Synthetic rubber abrasion resistant, MSHA accepted. Temperature Range: -40°F to +212°F (-40°C to +100°C).

Fittings: 43 Series - pg. B-25.

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

# **471TC Twin Tough**

#### **Markets**











Twin Tough hoses eliminate the labor and material costs required to manually bundle two separate hoses using tie straps or plastic sleeves. Plus, Parker's Twin Tough saves valuable time in the field.

- 5000 psi constant working pressure in -6-6 and 4000 psi in -8-8
- Two-wire braided construction
- Abrasion-resistant TC cover



**Hydraulic Hose:** 471TC Twin Tough

#### Performance



## 471TC

Hydraulic – Twin Tough Cover

J1942 / ISO 11237 / EN 857 TYPE 2SC / USCG HF / DNV / ABS / BV

# Part Number	Hose I.D.		Hose O.D.		Working Pressure		Minimum Bend Radius		T C kg Weight		Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
471TC-6-6	3/8	10	0.68	17	5000	35,0	2-1/2	65	0.56	0,84	•
471TC-8-8	1/2	12,5	0.80	20	4250	29,7	3-1/2	90	0.70	1,04	•

For assembly instructions see page C-16.

**Application:** Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

**Reinforcement:** Two braids steel wire.

**Cover:** Synthetic rubber abrasion resistant, MSHA accepted. **Temperature Range:** -40°F to +212°F (-40°C to +100°C).

Fittings: 43 Series - pg. B-25.

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<sup>•</sup> See Section C for Parkrimp Assembly Instructions.

Temperature Range of other media listed in Section E.

# 472TC

**Markets** 





















Large sizes offered for bigger jobs.

- Synthetic rubber inner tube provides wide fluid compatibility
- Available in larger sizes: -20, -24, -32
- 2-wire braided construction

## 472TC



**Hydraulic – Tough Cover** 

SAE J1942-1 USCG HF Type B / EN 857 TYPE 2SC / DNV / ABS

# Part Number	Hose	Hose I.D.		Hose O.D.		Working Pressure		Minimum Bend Radius		了	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
472TC-20	1-1/4	31,5	1.79	45	2250	15,7	8-1/4	210	1.34	2,01	•
472TC-24	1-1/2	38	2.01	51	1800	12,5	10	250	1.44	2,16	•
472TC-32	2	51	2.54	65	1300	9,0	12-1/2	315	1.93	2,90	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

**Reinforcement:** Two braids steel wire.

**Cover:** Synthetic rubber abrasion resistant, MSHA accepted. **Temperature Range:** -40°F to +212°F (-40°C to +100°C).

Fittings: 43 Series - pg. B-25.

 See Section C for Parkrimp Assembly Instructions.

 Temperature Range of other media listed in Section E.

A-36

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Designed for many markets and applications requiring a one-wire braided hose.

## **HYDRAULIC**

## AX

#### **Markets**



















• 1-wire braided construction

• Approved with HY Series fittings

### **AX Hydraulic** SAE J1942 / USCG H



# Part Number	Hose	e I.D.	Hose	O.D.		king sure	Minii Bend I	mum	Wei		Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	HY Series
AX-04	1/4	6,3	0.50	13	3000	21	2	50	0.15	0,22	•
AX-06	3/8	10	0.62	16	3000	21	2-1/2	65	0.19	0,28	•
AX-08	1/2	12,5	0.75	19	2500	17,5	3-1/2	90	0.24	0,36	•
AX-10	5/8	16	0.88	22	1500	10,5	4	100	0.29	0,43	•
AX-12	3/4	19	1.01	26	1250	8,7	4-3/4	120	0.34	0,51	•
AX-16	1	25	1.29	33	1000	7	6	150	0.48	0,72	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic Rubber. Reinforcement: One braid steel wire. Cover: Synthetic rubber, MSHA accepted.

**Temperature Range:**  $-40^{\circ}$ F to  $+212^{\circ}$ F ( $-40^{\circ}$ C to  $+100^{\circ}$ C).

Fittings: HY Series - pg. B-132.



<sup>•</sup> See Section C for Parkrimp Assembly Instructions.

Temperature Range of other

media listed in Section E.

## **HYDRAULIC**

## Α

#### **Markets**





















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## **BXX**

Designed as a 2-wire braided option for selected pressure/temperature ranges, up to 5000 psi.

- Designed as a cost competitive option for applications not requiring industry standard specifications
- 2-wire braided construction
- Approved with HY Series fittings

## **BXX**

## Hydraulic

SAE J1942 / USCG H



# Part Number	Hose	I.D.	Hose	O.D.		king sure		mum Radius	k k Wei	ight	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	HY Series
BXX-04	1/4	6,3	0.59	15	5000	35	4	100	0.27	0,40	•
BXX-06	3/8	10	0.74	19	4000	28	5	125	0.38	0,57	•
BXX-08	1/2	12,5	0.87	22	3500	24,5	7	180	0.46	0,69	•
BXX-10	5/8	16	1.00	25	2750	19,2	8	200	0.55	0,82	•
BXX-12	3/4	19	1.15	29	2250	15,7	9-1/2	240	0.65	0,97	•
BXX-16	1	25	1.49	38	2000	14	12	305	0.98	1,46	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

**Reinforcement:** Two braids steel wire. **Cover:** Synthetic rubber, MSHA accepted.

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

Fittings: HY Series - pg. B-132.

<sup>•</sup> See Section C for Parkrimp Assembly Instructions.

Temperature Range of other media listed in Section E.

B

## **HYDRAULIC**

## **722TC / ST**

#### **Markets**





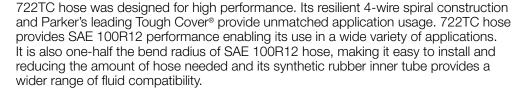












- Half the bend radius of SAE 100R12 hose, reducing the amount of hose needed to make your connection
- 4-spiral construction for longer lasting hose in high impulse, heavy duty cycle applications
- SAE 100R12 performance to cover a wide variety of applications
- Synthetic rubber inner tube provides a wider range of fluid compatibility
- TC cover provides 80 times the abrasion resistance compared to standard rubber cover hose
- ST cover provides 450 times the abrasion resistance compared to standard rubber cover hose



## Performance







### 722TC / ST

Hydraulic - Tough Cover SAE 100R12, J1942 / ISO 3862-1 TYPE R12 / EN 856 TYPE R12 / USCG HF / DNV / ABS

# Part Number	Hose	e I.D.	Hose	O.D.		king	Minin Bend F	num	kç Wei	_	Parkrimp	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series	71 Series
722TC/ST-20	1-1/4	31,4	1.84	46	3000	21,0	8-1/4	210	1.74	2,59	•	
722TC/ST-24	1-1/2	38	2.07	53	2500	17,5	10	250	2.01	2,99		•
722TC/ST-32	2	51	2.59	66	2500	17,5	12-1/2	320	2.75	4,09		•

Application: Petroleum based hydraulic fluids, lubricating oils.

Inner Tube: Synthetic rubber.

**Reinforcement:** Four spiral steel wire. **Cover:** Synthetic rubber, MSHA accepted.

**Temperature Range:**  $-40^{\circ}\text{F}$  to  $+257^{\circ}\text{F}$  ( $-40^{\circ}\text{C}$  to  $125^{\circ}\text{C}$ ).

**Fittings:** 43 Series, sizes -6 to -20 - pg. B-25. 71 Series, size -24 to -32 - pg. B-69.

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.



**Hydraulic Hose:** 722TC/ST



F

## **HYDRAULIC**

## 721, 721TC

**Markets** 



















The Parker 721 family of hoses pushes the envelope in high-pressure applications where space is tight. Critical high-pressure applications in limited spaces calls for 721 hose. With its one-half SAE 100R12 minimum bend radius and abrasion resistant cover offering, 721 hose enables you to use less hose while guarding against hose-to-hose and hose-to-object abrasion. No matter how demanding the environment, 721 hose will keep your equipment working hard.

- One-half SAE 100R12 minimum bend radius means you use less hose
- Specially engineered Tough Cover compound resists abrasion in aggressive environments
- Up to 4000 psi working pressure
- Unique three-color layline makes hose easy to identify

#### **Performance**



Hydraulic

721

SAE 100R12 / ISO 3862-1 TYPE R12 / EN 856 TYPE R12

## **721TC**

Hydraulic - Tough Cover

SAE 100R12, J1942 / ISO 3862-1 TYPE R12 / EN 856 TYPE R12 / USCG HF / DNV / ABS

# Part Number	Hose	e I.D.	Hose	O.D.		king sure	Minin Bend F	num	k Wei	g g ght	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	71 Series
721/721TC-6	3/8	10	0.80	20	4000	28,0	2-1/2	62,5	0.40	0,60	•
721/721TC-8	1/2	12,5	0.93	24	4000	28,0	3-1/2	90	0.62	0,93	•
721/721TC-10	5/8	16	1.08	27	4000	28,0	4	100	0.74	1,10	•
721/721TC-12	3/4	19	1.21	31	4000	28,0	4-3/4	120	0.94	1,40	•
721/721TC-16	1	25	1.50	38	4000	28,0	6	150	1.34	1,99	•
721/721TC-20	1-1/4	31,5	1.84	46	3000	21,0	8-1/4	210	1.74	2,59	•
721/721TC-24	1-1/2	38	2.07	53	2500	17,5	10	250	2.01	2,99	•
721/721TC-32	2	51	2.59	66	2500	17,5	12-1/2	320	2.75	4,09	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

**Reinforcement:** Four spiral steel wire.

**Cover:** Synthetic rubber abrasion resistant, MSHA accepted. **Temperature Range:** -40°F to +257°F (-40°C to +125°C).

Fittings: 71 Series - pg. B-69.







See Section C for Parkrimp Assembly Instructions.

<sup>•</sup> Temperature Range of other media listed in Section E.

B

## **HYDRAULIC**

## **721ST**

#### **Markets**



















The Parker 721 family of hoses pushes the envelope in high-pressure applications where space is tight. Critical high-pressure applications in limited spaces calls for 721 hose. With its one-half SAE 100R12 minimum bend radius and abrasion resistant cover offering, 721 hose enables you to use less hose while guarding against hose-to-hose and hose-to-object abrasion. No matter how demanding the environment, 721 hose will keep your equipment working hard.

- One-half SAE 100R12 minimum bend radius means you use less hose
- Specially engineered Tough Cover compound resists abrasion in aggressive environments
- Up to 4000 psi working pressure
- Unique three-color layline makes hose easy to identify

#### **Performance**





#### Hydraulic - SuperTough Cover

SAE 100R12 / ISO 3862-1 TYPE R12 / EN 856 TYPE R12

# Part Number	Hose	e I.D.	Hose	O.D.		king sure	Minin Bend F	num Radius	k Wei	了	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	71 Series
721ST-8	1/2	12,5	0.94	24	4000	28,0	3-1/2	90	0.54	0,80	•
721ST-10	5/8	16	1.08	27	4000	28,0	4	100	0.74	1,10	•
721ST-12	3/4	19	1.21	31	4000	28,0	4-3/4	120	0.94	1,40	•
721ST-16	1	25	1.50	38	4000	28,0	6	150	1.34	1,99	•
721ST-20	1-1/4	31,5	1.84	46	3000	21,0	8-1/4	210	1.74	2,59	•

**Application:** Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

**Reinforcement:** Four spiral steel wire.

**Cover:** Synthetic rubber abrasion resistant, MSHA accepted. **Temperature Range:** -40°F to +257°F (-40°C to +125°C).

Fittings: 71 Series - pg. B-69.

Parker Sure 101 GH 7751

**Hydraulic Hose: 721ST** 

<sup>•</sup> See Section C for Parkrimp Assembly Instructions.

<sup>•</sup> Temperature Range of other media listed in Section E.

Parker NO-SKIVE TW

## **HYDRAULIC**

## Α



**Markets** 















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## 701, 731

4-wire spiral construction meeting European EN 456 4SP or 4SH standard.

• These two hoses pair together to provide a wide range of sizes for applications that need to meet European specifications

### 701

#### **Hydraulic**

SAE J1942 / ISO 3862-1 TYPE 4SP / EN 856 TYPE 4SP / USCG H, HF / ABS

# Part Number	Hose	e I.D.	Hose	O.D.		king sure	Minin Bend I		k Wei	ਹ ਭੂ ight	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	70 Series
701-6	3/8	10	0.84	21	6500	45,0	7	180	0.52	0,78	•
701-8	1/2	12,5	0.97	25	6000	41,5	9	230	0.62	0,93	•
701-10	5/8	16	1.11	28	5000	35,0	10	250	0.77	1,15	•

Application: Petroleum base hydraulic fluids and lubricating oils.

**Inner Tube:** Synthetic rubber.

**Reinforcement:** Four spiral steel wire.

Cover: Synthetic rubber.

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

Fittings: 70 Series - pg. B-59.

## 731

## Hydraulic

SAE J1942 / ISO 3862-1 TYPE 4SH / EN 856 TYPE 4SH / USCG HF / DVN / ABS

# Part Number	Hose	e I.D.	Hose	O.D.		king sure	Minir Bend F	num	Kg Wei	្វ ight	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	73 Series
731-12	3/4	19	1.27	32	6000	42,0	11	280	1.16	1,72	•
731-16	1	25	1.52	39	5500	38,0	13-1/2	340	1.44	2,14	•
731-20	1-1/4	31,5	1.79	45	4700	32,5	18	460	1.99	2,96	•
731-24	1-1/2	38	2.10	53	4200	29,0	22	560	2.15	3,20	•
731-32	2	51	2.68	68	3600	25,0	27	700	3.56	5,30	•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

**Reinforcement:** Four spiral steel wire.

Cover: Synthetic rubber.

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

Fittings: 73 Series - pg. B-83.

- See Section C for Parkrimp
   Assembly Instructions
- Assembly Instructions.

  Temperature Range of other media listed in Section E.

## **SUCTION & RETURN**

## 811, 811HT, 881 Suction Line

#### Markets

























These hoses combine to meet a wide range of suction and return application requirements.

- Up to one-half the SAE minimum bend radius for standard and high-temperature applications
- Meets or exceeds SAE 100R4 requirements
- Compatible with Parkrimp or field attachable fittings
- High-visibility layline
- Suitable for vacuum applications from 25 to 28 in/Hg
- Oil- and weather-resistant synthetic rubber cover
- High-temperature range for petroleum-based hydraulic fluids of -40° F to +257° F for 811HT

### **Performance**



#### 811 **Suction and Return Line** 1/2 SAE Minimum Bend Radius SAE 100R4, J1942 / USCG HF



# Part Number	Hose	e I.D.	Hose	О.D.	<b>W</b> o 81/8	orking 8BDB		ure HC	Min	imum Radius	Dia Control	ght	Vacu Ratii	um	Parkrimp	Field Attachable 88 Series
	inch	mm	inch	mm	psi	MPa	psi	MPa	inch	mm	lbs/ft	kg/m	of Hg	kPa	81 Series	w/HC or DB
811-12	3/4	19,0	1.18	30,0	300	2,1	100	0,7	2-1/2	64	0.42	0,63	25	84	•	•
811-16	1	25,4	1.50	38,0	250	1,7	70	0,5	3	76	0.65	0,96	25	84	•	•
811-20	1-1/4	31,8	1.77	45,0	200	1,4	50	0,3	4	102	0.82	1,22	25	84	•	•
811-24	1-1/2	38,1	2.05	52,0	150	1	50	0,3	5	127	1.04	1,55	25	84	•	•
811-32	2	50,8	2.50	63,6	100	0,7	50	0,3	6	152	1.26	1,87	25	84	•	•
811-40	2-1/2	63,5	3.00	76,2	62	0,4	62	0,4	7	178	1.64	2,45	25	84		•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Multiple layers of fiber spiral and one helical wire.

Cover: Synthetic rubber.

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

Fittings: 81 Series - pg. B-203. 88 Series - pg. B-203.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

#### **Performance**



## 811HT

#### Suction and Return Line - High-Temperature 1/2 SAE Minimum Bend Radius

SAE 100R4, J1942 / USCG HF



# Part Number	Hose	e I.D.	Hose	O.D.			Pressu		Minin Bend F	num	_	Ğ ight	Vacui Ratii	um	Parkrimp	Field Attachable
	inch	mm	inch	mm	81/8 psi	MPa	188 psi	MPa	inch	mm	lbs/ft	kg/m	inches of Ha	kPa	81 Series	88 Series w/HC or DB
811HT-12	3/4	19,0	1.18	30,0	300	2,1	100	0,7	2-1/2	64		0,63	28	95	•	•
811HT-16	1	25,4	1.50	38,0	250	1,7	70	0,5	3	76	0.65	0,96	28	95	•	•
811HT-20	1-1/4	31,8	1.77	45,0	200	1,4	50	0,3	4	102	0.82	1,22	28	95	•	•
811HT-24	1-1/2	38,1	2.05	52,0	150	1	50	0,3	5	127	1.04	1,55	28	95	•	•
811HT-32	2	50,8	2.50	63,6	100	0,7	50	0,3	6	152	1.26	1,87	28	95	•	•
811HT-40	2-1/2	63,5	3,00	76,2	62	0,4	62	0,4	7	178	1.82	2,71	28	95		•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Multiple layers of fiber spiral and one helical wire.

Cover: Synthetic rubber, MSHA accepted.

Temperature Range: -50°F to +257°F (-46°C to +125°C).

Fittings: 81 Series - pg. B-203. 88 Series - pg. B-203.

### 881

### **Suction and Return Line**

SAE 100R4, J1942 / USCG H, HF



# Part Number	Hose	e I.D.	Hose	O.D.		rking F	Pressu			mum Radius	k Wei	g ght	Vacue Ration	um ng	Parkrimp	Field Attachable 88 Series
	inch	mm	inch	mm	psi	MPa	psi	Мра	inch	mm	lbs/ft	kg/m	of Hg	kPa	43/81 Series	w/HC or DB
881-12	3/4	19,0	1.20	30,6	300	2,1	100	0,7	5	127	0.50	0,74	28	95	•	•
881-16	1	25,4	1.49	37,9	250	1,7	70	0,5	6	152	0.60	0,89	28	95	•	•
881-20	1-1/4	31,8	1.78	45,3	200	1,4	50	0,3	8	203	0.89	1,32	28	95	•	•
881-24	1-1/2	38,1	2.06	52,4	150	1	50	0,3	10	254	1.11	1,65	28	95	•	•
881-32	2	50,8	2.48	63,1	100	0,7	50	0,3	12	305	1.27	1,89	28	95	•	•
881-40	2-1/2	63,5	3.00	76,2	62	0,4	62	0,4	14	356	1.82	2,71	28	95		•

Application: Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Multiple layers of fiber braid and one helical wire.

Cover: Synthetic rubber, MSHA accepted.

**Temperature Range:**  $-40^{\circ}$ F to  $+257^{\circ}$ F ( $-40^{\circ}$ C to  $+125^{\circ}$ C).

Fittings: 43 Series - pg. B-25. 81 Series - pg. B-203. 88 Series - pg. B-203.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- See Section C for Parkrimp Assembly Instructions.

  • Temperature Range of other media
- listed in Section E.

C

## **PUSH-LOK®**

## 801 Multipurpose

#### **Markets**















Parker's Push-Lok Plus multipurpose hose line features the widest fluid compatibility. application range and size range in the industry. It also incorporates the highest working pressure in all sizes, making it the most versatile general-purpose hose available. The Push-Lok system is easy to use. No clamps or special tools are required during installation. And with Parker's exclusive color-code system, you can inventory, maintain and identify your hose needs easily and efficiently. The industry's most complete line of low-pressure 801, 804 hose and fittings, Push-Lok offers the range and versatility to meet all your instrumentation needs.

- Easy assembly and organization with Parker's exclusive color-code system
- Push-Lok assemblies can be made in seconds, saving valuable time and cost
- The unique seal of Push-Lok ensures reliable, durable, leak-free service

HALLING TO HOUSE



## 801 – Push-Lok Plus®



Available Cover Colors:













Parker PUSH-LOX PIDS 80



# Part Number	Ноог		H000		Work		Minir Bend F		_	g g	Vacui Ratii	um	Parkrimp	Field Attachable
Number	поѕе	 	поѕе	. O.D.	Fies	Sure	Della F	auius	wei	_	inches	•	Parkrillip	Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	of Hg	kPa	<b>HY Series</b>	82 Series
801-4	1/4	6,3	0.50	12,7	350	2,4	2-1/2	65	0.09	0,13	28	95	•	•
801-6	3/8	10	0.63	15,9	350	2,4	3	75	0.11	0,16	28	95	•	•
801-8	1/2	12,5	0.78	19,8	300	2,1	5	125	0.18	0,27	28	95	•	•
801-10	5/8	16	0.91	23,0	300	2,1	6	150	0.19	0,28	15	51	•	•
801-12	3/4	19	1.03	26,2	300	2,1	7	180	0.24	0,36	15	51	•	•
801-16	1	25	1.28	32,6	200	1,4	10	250	0.37	0,55	15	51	•	•

Application: Pneumatic, petroleum base hydraulic fluid, lubricating oils and antifreeze solutions.

Diesel fuel - approved only when coupled with HY Series fittings.

Inner Tube: Synthetic rubber. Reinforcement: One fiber braid. Cover: Synthetic rubber, MSHA accepted

Temperature Range: Air: +158°F (+70°C) Water: +185°F (+85°C)

**Oil:** -40°F to 257°F (-40°C to +125°C). Fittings: 82 Series - pg. B-186.

HY Series - pg. B-132.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- Push-Lok is not recommended for any fuel, refrigerant. or for use in air conditioners and heat pump applications.
- Push-Lok is not recommended for applications where extreme pulsation is encountered
- See Section B for Assembly Instructions.
- Temperature Range of other media listed in Section E.







Catalog 4400 US

**Push-Lok Plus 801** hose provides the quick and easy assembly/ disassembly advantage and the fullest range of color-coding to benefit your operations. It's now approved with both 82 Series push on and HY Series crimp fittings.

**Push-Lok Plus 804** hose features quick and easy assembly and provides an EPDM inner-tube for hot water, dry air and phosphate ester fluids. Not to be used in applications with lubricated air or media that is oil based.

**Push-Lok 821** is a higher-pressure multipurpose hose that is widely used for shop air systems and general industrial and maintenance applications. Approved with 82 Series fittings, it's also available with a fire-resistant (FR) cover for use near welding operations.

**Push-Lok Plus 836** delivers high-temperature up to 302° F, heat-resistant performance and higher working pressures than 821, along with the same HY and 82 Series fittings compatibility.

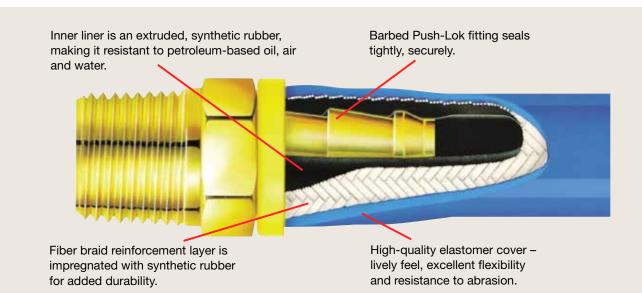
#### The color-coded advantages

In applications where a number of hose lines carry different media, Push-Lok colors reduce timely "tracing" of lines, preventing disconnection of the wrong line and unnecessary, costly downtime.

Using color-coded Push-Lok hose is an excellent way to:

- Enhance product appearance
- Improve inventory control
- Identify industrial drop lines









## **PUSH-LOK®**

## 836, 804 Multipurpose

#### Performance

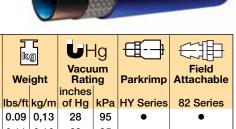


### 836 – Push-Lok Plus<sup>®</sup>

Multipurpose - High-Temperature

Available Cover Colors: BLU BLK





Parker PUSH-LOXPIUS 836

# Working **Part** Minimum Hose I.D. Hose O.D. Pressure Bend Radius Number inch mm inch mm psi MPa inch 1/4 836-4 6,3 0.50 12,7 400 2,8 2-1/2 65 836-6 3/8 10 0.63 15,9 400 2,8 3 75 0.11 0,16 28 95 • 836-8 1/2 12.5 0.78 19.8 400 2.8 4 100 0.18 0.27 28 95 836-10 5/8 16 0.91 23,0 350 2,4 0.19 0,28 61 5 125 18 3/4 19 | 1.03 | 26,2 | 300 2,1 0.24 0,36 61 836-12 6 150 18

Application: Pneumatic, petroleum base hydraulic fluid, lubricating oils, diesel fuels and antifreeze solutions.

Inner Tube: PKR®.

Reinforcement: One fiber braid. Cover: PKR, MSHA accepted.

**Temperature Range:** 

**Air:** +212°F (+100°C) Water: +185°F (+85°C)

**Oil:**  $-55^{\circ}$ F to  $+302^{\circ}$ F ( $-48^{\circ}$ C to  $+150^{\circ}$ C).

Diesel fuels: -40°C to 150°C (-40°F to 302°F) with HY crimps only

Fittings: HY Series - pg. B-132. 82 Series - pg. B-186.

### 804

## **Dry Air/Hot Water**

Available Cover Colors: BLK





# Part Number	Hose	e I.D.	Hose	O.D.		king	Minin Bend F	num	k We	כ ∰ ight	Vacu Rat inches	ium ing	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	of Hg	kPa	82 Series
804-4	1/4	6,3	0.50	12,7	150	1,0	2-1/2	65	0.09	0,13	15	51	•
804-6	3/8	10	0.63	15,9	150	1,0	3	75	0.11	0,16	15	51	•
804-8	1/2	12,5	0.78	19,8	150	1,0	5	130	0.18	0,27	15	51	•
804-10	5/8	16	0.91	23,0	150	1,0	6	150	0.19	0,28	15	51	•
804-12	3/4	19	1.03	26,2	150	1,0	7	180	0.24	0,36	15	51	•

Application: Phosphate ester, dry air and water.

Inner Tube: EPDM rubber. Reinforcement: One fiber braid.

Cover: EPDM rubber. Temperature Range: Air: +158°F (+70°C)

Phosphate ester: -40° to +176°F (-40° to +80°C)

Water: +200°F (+93°C).

Fittings: 82 Series - pg. B-186.

• Field Attachable Assembly Instructions are in Section B with each Fittings Series.

• Push-Lok is not recommended for any fuel, refrigerant, or for use in air conditioners and heat pump applications.

• Push-Lok is not recommended for applications where extreme pulsation is encountered.

• See Section B for Assembly Instructions. • Temperature Range of other media listed in

Section E.

### **PUSH-LOK®**

## 821FR, 821 Multipurpose

821FR

#

**Part** 

Number

821FR-4

821FR-6

821FR-8

Multipurpose – Fire-Resistant Cover

Hose I.D. Hose O.D.

6,3

0.50

12,5 0.78 19,8

3/4 | 19 | 1.03 | 26,2 |

0.63 15,9

12,7

**Available Cover Colors:** 



Working

psi

350

300 2,1

300

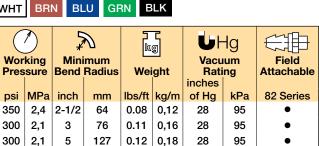
250





0.22

0,33



28

95

Catalog 4400 US

PARKER PUSH-LOK BOTHER

1,7 Application: Pneumatic, petroleum base hydraulic fluid, lubricating oils and antifreeze solutions.

7

178

MPa

2,4

2,1

Inner Tube: PKR®.

Reinforcement: One fiber braid. Cover: Fire resistant fiber braid.

inch mm inch mm

1/4

3/8 10

1/2

Hose cover colors include: White, Brown, Blue, Green, and Black.

**Temperature Range:** Air: +212°F (+100°C) Water: +185°F (+85°C)

Oil: -40°F to +212°F (-40°C to +100°C). Fittings: 82 Series - pg. B-186.

821

Multipurpose

Available Cover Colors: BLK





# Part Number	Hose	e I.D.	Hose	O.D.	Worl Pres		Min	imum Radius	We	g ght	Vacui Ratii inches	um ng	Field Attachable
	inch	mm	inch	mm	psi	МРа	inch	mm	lbs/ft	kg/m		kPa	82 Series
821-4	1/4	6,3	0.50	12,7	350	2,4	2-1/2	64	0.06	0,09	28	95	•
821-6	3/8	10	0.63	15,9	300	2,1	3	76	0.09	0,13	28	95	•
821-8	1/2	12,5	0.78	19,8	300	2,1	5	127	0.12	0,18	28	95	•
821-10	5/8	16	0.91	23,0	250	1,7	6	152	0.19	0,28	28	95	•
821-12	3/4	19	1.03	26,2	250	1,7	7	178	0.21	0,31	28	95	•

Application: Pneumatic, petroleum base hydraulic fluid, lubricating oils and antifreeze solutions.

Inner Tube: Synthetic rubber. Reinforcement: One fiber braid.

Cover: Fiber braid. Temperature Range: Air: +158°F (+70°C) Water: +185°F (+85°C)

Oil: -40°F to +212°F (-40°C to +100°C).

Fittings: 82 Series - pg. B-186.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- Push-Lok is not recommended for any fuel, refrigerant, or for use in air conditioners and heat pump applications.
- Push-Lok is not recommended for applications where extreme pulsation is encountered.
- See Section B for Assembly Instructions.
- Temperature Range of other media listed in Section E.

## **PHOSPHATE-ESTER**

## 304, 774, 424, F42

#### **Markets**









#### **424** hose

- Up to 1000 psi
- Dimensionally conforms to SAE 100R1 Type AT specification

will be the last thing you'll need to worry about.

 Uses Parkrimp 43 Series fittings, providing the widest selection of end configurations available anywhere

#### 304 hose

- Up to 5000 psi
- Dimensionally conforms to SAE 100R2 Type AT specification
- Uses Parkrimp 43 Series fittings, providing the widest selection of end configurations available anywhere

#### 774 hose

If getting aircraft into the air is your job, Parker's family of phosphate-ester compatible hoses is the choice for you. Our hose selection offers the industry's largest selection of low-, medium- and high-pressure hoses specifically designed to resist aggressive airline hydraulic fluids. Parker's phosphate-ester hose line, together with the proper EPDM O-ring face seal and 37° Flare fittings and pipe adapters, means your leak-free assemblies

- Up to 4000 psi
- Dimensionally conforms to SAE 100R12 and EN 856 Type R12 specifications
- Uses Parkrimp 71 Series fittings

#### F42 hose

- 6000 psi maximum working pressure
- Compatible with phosphate ester based hydraulic fluids with a temperature range of -40°C to +80°C (-40°F to +176°F)
- Uses Parkrimp 70 / 79
   Series fittings

# **424**Hydraulic – Phosphate-Ester Base Fluids



# Part Number	Hose	e I.D.	Hose	O.D.	Worl	-		mum Radius	_	s g ight	Vacu Rati	ıum	Parkrimp
										Ĭ. <i>,</i>	inches		40.0
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	of Hg	kPa	43 Series
424-16	1	25	1.40	36	1000	6,9	12	300	0.63	0,94	20	68	•
424-20	1-1/4	31,5	1.73	44	625	4,3	16-1/2	420	0.80	1,19	20	68	•
424-24	1-1/2	38	2.00	51	500	3,5	20	500	1.00	1,49	15	51	•
424-32	2	51	2.50	64	375	2,6	25	630	1.50	2,23	11	37	•

Application: Phosphate-ester base hydraulic fluids.

Inner Tube: EPDM rubber.

Reinforcement: One braid steel wire.

Cover: EPDM rubber, green.

Temperature Range: -40°F to +176°F (-40°C to +80°C).

Fittings: 43 Series - pg. B-25.

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

4

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E

## **PHOSPHATE-ESTER**

А

B

# **304**Hydraulic – Phosphate-Ester Base Fluids



# Part Number	Hose	e I.D.	Hose	O.D.	Wor	king sure	Minir Bend F	num	k Wei	☐ ☑ ight	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
304-4	1/4	6,3	0.59	15	5000	34,5	4	100	0.26	0,39	•
304-6	3/8	10	0.75	19	4000	27,5	5	130	0.37	0,55	•
304-8	1/2	12,5	0.88	22	3500	24	7	180	0.45	0,67	•
304-10	5/8	16	1.00	16	2750	19	8	200	0.53	0,79	•
304-12	3/4	19	1.16	29	2250	15,5	9-1/2	240	0.67	1,00	•
304-16	1	25	1.50	38	2000	13,8	12	300	1.00	1,49	•
304-20	1-1/4	31,5	1.86	47	1625	11,2	16-1/2	420	1.16	1,73	•
304-24	1-1/2	38	2.14	54	1250	8,6	20	500	1.44	2,14	•
304-32	2	51	2.64	67	1125	7,8	25	630	1.99	2,96	•

Application: Phosphate-ester base hydraulic fluids.

Inner Tube: EPDM rubber.

Reinforcement: Two braids steel wire.

Cover: EPDM rubber, green.

**Temperature Range:** -40°F to +176°F (-40°C to +80°C).

Fittings: 43 Series - pg. B-25.

# 774 Hydraulic – Phosphate-Ester Base Fluids



# Part Number	Hose	e I.D.	Hose	O.D.		king sure	Minir Bend F	num	₩e	ट ड्डा ight	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	71 Series
774-12	3/4	19	1.21	31	4000	28,0	9-1/2	240	0.94	1,40	•
774-16	1	25	1.50	38	4000	28,0	12	300	1.34	1,99	•
774-20	1-1/4	31,5	1.84	46	3000	21,0	16-1/2	420	1.74	2,59	•
774-24	1-1/2	38	2.07	53	2500	17,5	20	500	2.01	2,99	•
774-32	2	51	2.59	66	2500	17,5	25	630	2.75	4,09	•

**Application:** Phosphate-ester base hydraulic fluids.

Inner Tube: EPDM rubber.

Reinforcement: Four spiral steel wire.

Cover: EPDM rubber, green.

Temperature Range: -40°F to +176°F (-40°C to +80°C).

Fittings: 71 Series - pg. B-69.

• See Section C for Parkrimp Assembly Instructions.

• Temperature Range of other media listed in Section E.

## **PHOSPHATE-ESTER**

**F42**Hydraulic – Phosphate-Ester Base Fluids



# Part Number	Hose	e I.D.	Hose	O.D.		king	Minir Bend F		k wei		Parkrimp	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	70 Series	79 Series
F42-8	1/2	12,5	0.97	25,0	6000	42,0	8	200	0.56	0,83	•	
F42-12	3/4	19	1.26	31,9	6000	42,0	10-1/2	265	1.03	1,53		•
F42-16	1	25	1.52	38,5	6000	42,0	13	330	1.40	2,08		•
F42-20	1-1/4	31,5	1.97	50	6000	42,0	17-1/2	445	2.66	3,96		•

**Application:** Phosphate-ester base hydraulic fluids.

Inner Tube: EPDM rubber.

**Reinforcement:** Four or six-spiral steel wire.

Cover: EPDM rubber, green.

**Temperature Range:** -40°F to +176°F (-40°C to +80°C).

**Fittings:** 70 Series - pg. B-59. 79 Series - pg. B-127.

В

C

D

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See Section C for Parkrimp Assembly Instructions.

Temperature Range of other media listed in Section E.

### **LOW TEMP**

## 472LT, 722LT, 792LT

#### **Markets**













In extremely cold and usually remote areas, a hose burst or leak in a critical application can cause expensive downtime and possible environmental issues. Selecting the right hose for dependable, long-life performance in these applications is essential.

Parker's family of low-temperature hoses are designed specifically to excel in the brutal operating conditions of extreme cold!

- Delivers superior performance in extreme cold conditions
- Rated as low as -70°F (-57°C)
- The choice for heavy construction equipment, side booms, mining equipment, mobile equipment, arctic oil field, snow grooming equipment, snow making machinery and cold storage applications
- These No-Skive hoses use Parker's standard 43, 71 and 79 Series fittings and easy-to-use Parkrimp style crimping system



#### **Performance**



### 472LT

## **Low-Temperature Braided**

EN 857 Type 2SC

# Part Number	Hose	I.D.	Hose	O.D.		king sure	Minin Bend R	num	k Wei	_	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series
472LT-4	1/4	6,3	0.53	13,1	5800	40,0	2	50	0.20	0,30	•
472LT-6	3/8	10	0.68	17,2	5000	35,0	2-1/2	65	0.24	0,42	•
472LT-8	1/2	12,5	0.80	20,4	4250	29,7	3-1/2	90	0.35	0,52	•
472LT-10	5/8	16	0.95	23,9	3625	25,0	4	100	0.44	0,66	•
472LT-12	3/4	19	1.09	27,7	3125	21,5	4-3/4	120	0.58	0,86	•
472LT-16	1	25	1.39	35,4	2500	17,5	6	150	0.79	1,17	•

Application: Petroleum based hydraulic fluids and lubricating oils in low temperature conditions.

**Inner Tube:** Proprietary synthetic rubber compound. Reinforcement: Two braids high tensile steel wire. Cover: Proprietary synthetic rubber compound.

**Temperature Range:** -70°F to +212°F (-57°C to +100°C).

Fittings: 43 Series, sizes -4 to -16 - pg. B-25.

- · See Section C for Parkrimp Assembly Instructions.
- · Temperature Range of other media listed in Section E.













#### **Performance**

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## **722LT**

#### **Low-Temperature Spiral**

SAE 100R12 / ISO 3862-1 Type R12 / EN 856 Type R12

# Part Number	Hose	I.D.	Hose	O.D.	Worl Pres		Minin Bend R		版( <b>W</b> ei		Parkrimp	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	43 Series	71 Series
722LT-6	3/8	10	0.78	19,8	4000	28,0	2-1/2	65	0.40	0,60	•	
722LT-8	1/2	12,5	0.89	22,6	4000	28,0	3-1/2	90	0.54	0,80	•	
722LT-10	5/8	16	1.04	26,4	4000	28,0	4	100	0.74	1,10	•	
722LT-12	3/4	19	1.21	30,6	4000	28,0	4-3/4	120	0.94	1,40	•	
722LT-16	1	25	1.49	37,7	4000	28,0	6	150	1.34	1,99	•	
722LT-20	1-1/4	31,4	1.82	46,2	3000	21,0	8-1/4	210	1.74	2,59	•	
722LT-24	1-1/2	38	2.06	52,5	2500	17,5	10	250	2.01	2,99		•

**Application:** Snow grooming equipment; heavy construction equipment; sidebooms.

Inner Tube: Nitrile synthetic rubber.Reinforcement: Four spiral steel wire.

Cover: Synthetic Rubber.

**Temperature Range:**  $-70^{\circ}F$  to  $+212^{\circ}F$  ( $-57^{\circ}C$  to  $+100^{\circ}C$ ).

**Fittings:** 43 Series, sizes -6 to -20 - pg. B-25. 71 Series, size -24 - pg. B-69.

#### Performance



### 792LT

#### **Low-Temperature NO-SKIVE**

SAE / ISO - Exceeds SAE 100R15 / ISO 3862-1 Type R12 / EN

# Part Number	Hose	I.D.	Hose	O.D.	Worl Press		Minii	num Radius	₩ei	g ight	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	79 Series
792LT-16	1	25	1.52	38,7	6000	42,0	13	300	1.48	2,20	•
792LT-20	1-1/4	31,5	1.97	50	6000	42,0	17-1/2	445	2.48	3,69	•
792LT-24	1-1/2	38	2.22	57	6000	42,0	20-3/4	530	3.22	4,79	•

**Application:** Petroleum base hydraulic fluids and lubricating oils.

Inner Tube: Synthetic rubber.

Reinforcement: Four or six spiral wires, high tensile steel

Cover: PKR Rubber.

**Temperature Range:** -70°F to +212°F (-57°C to +100°C).

Fittings: 79 Series - pg. B-127.

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.



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Parker's transportation hose selection has all your vehicle and equipment

## **TRANSPORTATION**

## 293, 213, 266

#### **Markets**



#### **Performance**



### 293

#### Transportation – Air Brake Hose SAE J1402 AI / D.O.T. FMVSS 106 AI-AIR BRAKE



# Part Number	Hose	I.D.	Hose	O.D.	Worl Press		Minir Bend F		_	9	Vacuu Ratir inches	um ng	Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	МРа	inch	mm	lbs/ft				26 Series	21/23 Series
293-4	3/16	5	0.49	12,5	500	3,5	1/2	15	0.10	0,15	28	95	•	•
293-6	5/16	8	0.62	15,7	500	3,5	1	25	0.15	0,22	28	95	•	•
293-8	13/32	10	0.74	18,7	500	3,5	1-1/2	40	0.18	0,27	28	95	•	•
293-10	1/2	12,5	0.83	21,1	450	3,1	2	50	0.20	0,30	28	95	•	•
293-12	5/8	16	0.96	24,3	450	3,1	2-1/2	65	0.22	0,33	28	95	•	•
293-16	7/8	22	1.21	30,6	450	3,1	3-1/4	80	0.25	0,37	20	68	•	•

Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels and antifreeze solutions.

Inner Tube: PKR®.

Reinforcement: One fiber braid.

Cover: Abrasion resistant nylon fiber braid.

**Temperature Range:** -58°F to +302°F (-50°C to +150°C).

**Fittings:** 26 Series - pg. B-9. 21 Series - pg. B-157. 23 Series - pg. B-169.

- Field Attachable Assembly Instructions are in Section B with each Fittings Series.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

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## **TRANSPORTATION**

#### **Markets**







### **Performance**



### 213

#### **Transportation**

SAE J1402 AI / D.O.T. FMVSS 106 AI-AIR BRAKE



# Part Number	Hose I	. <b>D</b> .	Hose	O.D.	Wor		Mini	mum Radius	_	_	Vacuu Ratir	ım ıg	Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft		inches of Hg		26 Series	21/23 Series
213-4	3/16	5	0.49	12,5	2000	14	3/4	20	0.12	0,18	28	95	•	•
213-5	1/4	6,3	0.55	14	1500	10,5	1	25	0.14	0,21	28	95	•	•
213-6	5/16	8	0.62	16	1500	10,5	1-1/4	30	0.17	0,25	28	95	•	•
213-8	13/32	10	0.74	19	1250	8,7	1-3/4	45	0.20	0,30	28	95	•	•
213-10	1/2	12,5	0.83	21	1000	7	2-1/4	55	0.22	0,33	28	95	•	•
213-12	5/8	16	0.96	24	750	5,2	2-3/4	70	0.24	0,36	28	95	•	•
213-16	7/8	22	1.21	31	400	2,8	3-1/2	90	0.30	0,45	20	68	•	•
213-20	1-1/8	29	1.49	38	300	2,1	4-1/2	115	0.44	0,65	20	68	•	•
213-24	1-3/8	35	1.73	44	300	2,1	7-1/2	190	0.52	0,77	15	51	•	•
213-32	1-13/16	46	2.14	54	200	1,4	14	355	0.67	1,00	11	37	•	•
213-40*	2-3/8	61	2.88	73	175	1,2	24	610	1.31	1,95	11	64	•	•

<sup>\*</sup>NOTE: Due to fitting size, this is a factory crimp only.

Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels and antifreeze solutions.

Inner Tube: PKR®.

Reinforcement: One fiber braid and one steel braid.

Cover: Fiber braid.

Temperature Range: -50°F to +302°F (-45°C to +150°C).

Fittings: 26 Series - pg. B-9. 21 Series - pg. B-157. 23 Series - pg. B-169.



• See page E-5 for charted effects temperature has on maximum working pressures of 201, 206, 213, and 266 hose.

• See Section B for Field Attachable Assembly

• See Section C for Parkrimp Assembly Instructions.

• Temperature Range of other media listed in Section E.

## **TRANSPORTATION**

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#### **Markets**







## Performance



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### 266

#### **Transportation**

SAE J1402 AII / D.O.T. FMVSS 106 AII-AIR BRAKE



# Part Number	Hose	I.D.	Hose	O.D.	Worl Pres		Minin Bend R		_	了 g ght	Vacui Ratir inches	um ng	Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	of Hg	kPa	26 Series	20/22 Series
266-4	3/16	5	0.52	13,2	2000	14	3/4	20	0.15	0,22	28	95	•	•
266-5	1/4	6,3	0.58	14,8	1500	10,5	1	25	0.16	0,24	28	95	•	•
266-6	5/16	8	0.68	17,2	1500	10,5	1-1/4	30	0.23	0,34	28	95	•	•
266-8	13/32	10	0.77	19,5	1250	8,7	1-3/4	45	0.26	0,39	28	95	•	•
266-10	1/2	12,5	0.92	23,4	1250	8,7	2-1/4	55	0.38	0,56	28	95	•	•
266-12	5/8	16	1.08	27,4	750	5,2	2-3/4	70	0.42	0,63	20	68	•	•
266-16	7/8	22	1.24	31,4	400	2,8	3-1/2	90	0.48	0,71	15	51	•	•
266-20	1-1/8	29	1.50	38,4	300	2,1	4-1/2	115	0.51	0,76	15	51	•	•
266-24	1-3/8	35	1.75	44,5	250	1,7	5-1/2	140	0.68	1,01	11	37	•	•

Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels and antifreeze solutions.

Inner Tube: PKR®.

Reinforcement: One fiber braid and one steel braid.

Cover: Fiber braid.

Temperature Range: -55°F to +302°F (-48°C to +150°C).

**Fittings:** 26 Series - pg. 9. 20 Series - pg. B-147. 22 Series - pg. B-165.

See page E-5 for charted effects temperature has on maximum working pressures of 201, 206, 213, and 266 hose.

<sup>•</sup> See Section B for Field Attachable Assembly Instructions.

<sup>•</sup> See Section C for Parkrimp Assembly Instructions.

<sup>•</sup> Temperature Range of other media listed in Section E.

#### 201, 206 **TRANSPORTATION**

#### **Markets**







### **Performance**



### 201

### **Transportation**

SAE 100R5 SAE J1402 All / D.O.T. FMVSS 106 All-AIR BRAKE

#	•	)	(		(		5	9	lk (	<u></u>	U	łg	<del></del>	# <b>B</b>
Part Number	Hose I	.D.	Ho: O.I		Worl Pres			mum Radius	Wei	ght	Vacui Ratii	ng	Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	inches of Hg		26 Series	20/22 Series
201-4	3/16	5	0.52	13	3000	21	3	75	0.15	0,22	28	95	•	•
201-5	1/4	6,3	0.58	15	3000	21	3-3/8	85	0.18	0,27	28	95	•	•
201-6	5/16	8	0.68	17	2250	15,7	4	100	0.23	0,34	28	95	•	•
201-8	13/32	10	0.77	20	2000	14	4-1/2	115	0.27	0,40	28	95	•	•
201-10	1/2	12,5	0.92	23	1750	12,2	5-1/2	140	0.37	0,55	28	95	•	•
201-12	5/8	16	1.08	27	1500	10,5	6-1/2	165	0.40	0,60	28	95	•	•
201-16	7/8	22	1.23	31	800	5,6	7-3/8	185	0.46	0,68	20	68	•	•
201-20	1-1/8	29	1.50	38	625	4,3	9	230	0.51	0,76	20	68	•	•
201-24	1-3/8	35	1.75	44	500	3,5	10-1/2	265	0.68	1,01	15	51	•	•
201-32	1-13/16	46	2.22	56	350	2,4	13-1/4	335	0.89	1,32	11	37	•	•
201-40	2-3/8	60	2.88	73	350	2,4	24	610	1.31	1,95	11	37	•	•
201-48	3	76	3.56	90	200	1,4	33	840	2.09	3,11	11	37		•

Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels and antifreeze solutions.

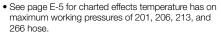
Inner Tube: Synthetic rubber.

Reinforcement: One fiber braid and one steel braid.

Cover: Fiber braid.

Temperature Range: -40°F to +302°F (-40°C to +150°C).

Fittings: 26 Series - pg. B-9. 20 Series - pg. B-147. 22 Series - pg. B-165.



See Section B for Field Attachable Assembly Instructions.

See Section C for Parkrimp Assembly Instructions.
Temperature Range of other media listed in Section E.

arker 201 AIR BRAKE

## **TRANSPORTATION**

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#### **Markets**







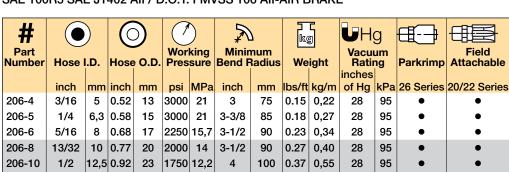
## Performance



206

#### **Transportation**





100

100

140

190

335

610

0.40 0,60

0.46

0.51

0.68

0.89

1.31

0,68

0,76

1,01

1,32

1,95

95

68

68

51

37

37

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20

20

15

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Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels and antifreeze solutions.

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5-1/2

7-1/2

13-1/4

24

Inner Tube: PKR®.

206-12

206-16

206-20

206-24

206-32

Reinforcement: One fiber braid and one steel braid.

2.22

60 2.88

Cover: Fiber braid, blue.

5/8

7/8

1-1/8

1-3/8

1-13/16

2-3/8

16 1.08

22 1.23

29 1.50

35 1.75

46

**Temperature Range:** -55°F to +302°F (-48°C to +150°C).

27

31

38

44

56

73

1500 10,5

2,4

800 5,6

625 4,3

500 3,5

350

350 2,4

**Fittings:** 26 Series - pg. B-9. 20 Series - pg. B-147. 22 Series - pg. B-165.

See page E-5 for charted effects temperature has on maximum working pressures of 201, 206, 213, and 266 hose.

<sup>•</sup> See Section B for Field Attachable Assembly Instructions.

<sup>•</sup> See Section C for Parkrimp Assembly Instructions.

<sup>•</sup> Temperature Range of other media listed in Section E.

## TRANSPORTATION 226

#### **Markets**









Parker's latest option in our transportation product line is the 226 hose. The 226 hose is reinforced with one steel braid and one fiber braid making it excellent for rugged transportation applications. The MSHA approved, blue, rubber cover provides additional protection from heat, oil, and grease. This hose is designed for flexibility in transportation systems making installation easier and quicker. Our transportation hose selection has all of your vehicle and equipment applications covered.

- Compatible with petroleum-based hydraulic fluids, diesel fuels, antifreeze solutions, water and air
- Meets D.O.T. FMVSS 106, SAE J1402, and MSHA approved standards
- Hyraulic fluid temperature range from -40°F to 302°F (-40°C to 150°C)
- No-skive design

### **226**

Transportation
SAE J1402 All / D.O.T. FMVSS
106 All - Air Brake



# Part Number	Hose	) I.D.	Hose	O.D.	Worl Pres			mum Radius	kç Wei	ght	Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	26 Series	20/22 Series
226-4	3/16	5	0.50	12,5	2000	14	3	75	0.15	0,22	•	•
226-6	5/16	8	0.68	17	1500	10,5	4	100	0.22	0,33	•	•
226-8	13/32	10	0.77	20	1250	8,7	4-5/8	120	0.26	0,39	•	•
226-10	1/2	12,5	0.92	23	1250	8,7	5-1/2	140	0.38	0,56	•	•
226-12	5/8	16	1.08	27	750	5,2	6-1/2	165	0.45	0,67	•	•
226-16*	7/8	22	1.23	31	500	3,5	7-3/8	185	0.49	0,73	•	•

\*D.O.T. approval through -12 only.

**Application:** Petroleum base hydraulic fluids and lubricating oils, diesel fuels and antifreeze solutions, water, water/oil, emulsion, water/glycol hydraulic fluid and air.

Inner Tube: PKR®

**Reinforcement:** One fiber braid/one steel wire braid reinforcement.

Cover: Blue, "PKR" synethic rubber cover.

#### Temperature Range:

- Hydraulic Fluids: -40°F to +302°F (-40°C to +150°C)
- Air: Up to +200°F (+93°C)
- Water, water/oil emulsion and water/glycol hydraulic fluids: Up to +185°F (+85°C)

Fittings: 26 Series, 20 Series, 22 Series

- See Section B for Field Attachable Assembly Instructions
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

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#### **611HT TRANSPORTATION**



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#### **Markets**









## **Performance**



## **611HT**

## **Transportation**

SAE J517 / 100R6 EN 854 TYPE R6



Parker STIHT HISTENS

# Part Number	Hose	I.D.	Hose	O.D.	Worl Press		Minir Bend F		Wei	了 g ght	Vacue Ratio	um	Parkrimp
	inch	mm	inch	mm	psi	МРа	inch	mm	lbs/ft	kg/m	inches of Hg		HY Series
611HT-4	1/4	6,2	0.47	11,9	400	2,8	2 1/2	65	0.09	0,13	28	95	•
611HT-6	3/8	9,3	0.59	15,1	400	2,8	3	75	0.11	0,16	28	95	•
611HT-8	1/2	12,5	0.75	19,0	400	2,8	4	100	0.18	0,27	28	95	•
611HT-10	5/8	15,7	0.88	22,2	350	2,4	5	125	0.19	0,28	18	61	•
611HT-12	3/4	18,8	1.00	25,4	300	2,1	6	150	0.254	0,36	18	61	•

Application: Petroleum base hydraulic fluids and lubricating oils, diesel fuels and antifreeze solutions.

Inner Tube: PKR®.

Reinforcement: One fiber braid.

Cover: Synthetic rubber abrasion resistant, MSHA accepted. **Temperature Range:** -55°F to +302°F (-48°C to +150°C).

Fittings: HY Series - pg. B-132.

- See Section B for Field Attachable Assembly Instructions.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

## **TRANSPORTATION** 271 Air Brake



#### **Markets**







## **271**

## **Transportation – Air Brake Hose** SAE J1402 A - AIR BRAKE



# Part Number	Hose	I.D.	Hose	O.D.	Worl Pres		Minir Bend F	num	k Wei	_	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	25 Series
271-6	3/8	10	0.75	19	225	1,6	1-3/4	45	0.20	0,30	•
271-8	1/2	12,5	0.88	22	225	1,6	2	50	0.26	0,39	•

**Application:** Air brake systems. **Inner Tube:** Synthetic rubber.

Reinforcement: One or more fiber braid.

Cover: Synthetic Rubber.

**Temperature Range:**  $-50^{\circ}$ F to  $+212^{\circ}$ F ( $-46^{\circ}$ C to  $+100^{\circ}$ C).

Fittings: 25 Series - pg. B-5.

• See page E-5 for charted effects temperature has on
maximum working pressures of 201, 206, 213, and

<sup>266</sup> hose.See Section B for Field Attachable Assembly Instructions.

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<sup>•</sup> See Section C for Parkrimp Assembly Instructions.

<sup>•</sup> Temperature Range of other media listed in Section E.

# ALTERNATIVE / MARINE

## SS23CG

#### **Markets**









If you make or maintain LPG / CNG powered equipment, SS23CG hose is your choice for gas permeation resistance and reliable performance. SS23CG exceeds Canadian Gas Association specification CAN / CGA-8.1-M86 Type III which means it meets permeation requirements of 1,6 g/m²-day. You can specify it with confidence – anywhere.

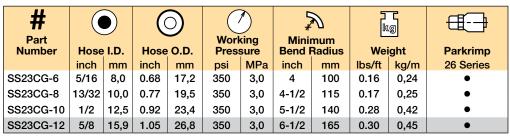


Embossed layline per industry standard

## SS23CG

# Transportation – Compressed Natural Gas and Liquefied Petroleum Gas

CGA TYPE III, ECE110 CLASS 1 / UL STANDARD 21 LPG



FACTORY MADE HOSE ASSEMBLIES ONLY. Contact Hose Products Division for more information.

Application: Liquefied petroleum gas (LPG), Compressed natural gas (CNG).

Inner Tube: Nylon.

Reinforcement: One steel braid.

Cover: Synthetic rubber.

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

Fittings: 26 Series - pg. B-9.

 See Section B for Field Attachable Assembly Instructions.

United Street

- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

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# ALTERNATIVE / MARINE

## SS25UL

#### **Markets**









- Low-pressure service with liquefied petroleum gas
- UL Standard 21 certification
- Oil and LPG resistant synthetic fiber cover
- Compatible with 26 Series Parkrimp style fittings



## SS25UL

**Transportation – Liquefied Petroleum Gas** AGA-AS / NZS 1869D / UL STANDARD 21



# Part Number	Hose	) I.D.	Hose	O.D.		king	<i>≨</i> Minir Bend F	num	k Wei	☐ ③	Parkrimp	Field Attachable
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	26 Series	20/22 Series
SS25UL-4	3/16	5	0.52	13,2	350	2,4	0.75	20	0.11	0,16	•	•
SS25UL-5	1/4	6,3	0.58	14,8	350	2,4	1	25	0.13	0,19	•	•
SS25UL-6	5/16	8	0.68	17,2	350	2,4	1-1/4	30	0.18	0,27	•	•
SS25UL-8	13/32	10	0.77	19,5	350	2,4	1-3/4	45	0.21	0,31	•	•
SS25UL-10	1/2	12,5	0.92	23,4	350	2,4	2-1/4	55	0.29	0,43	•	•
SS25UL-12	5/8	16	1.08	27,4	350	2,4	2-3/4	70	0.37	0,55	•	•

Application: Liquefied petroleum gas (LPG).

Inner Tube: Synthetic rubber.

**Reinforcement:** One fiber braid and one stainless steel wire braid.

Cover: Fiber braid.

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

**Fittings:** 26 Series - pg. B-9. 20 Series - pg. B-147. 22 Series - pg. B-165.

 See Section B for Field Attachable Assembly Instructions.

• See Section C for Parkrimp Assembly Instructions.

• Temperature Range of other media listed in Section E.

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# ALTERNATIVE / MARINE

## **221FR**

#### **Markets**







A fire-resistant hose for gasoline or diesel fuel systems on recreational or commercial marine vessels.

- ISO 7840 and USCG approved
- Marine fuel and engine hose



### **221FR**

**Transportation – Marine Fuel and Engine Hose** SAE J1527 TYPE A CLASS I, USCG SAE J1942 / ISO 7840 / USCG H, HF / GERMAN LLOYD / LLOYDS RE



# Part Number	Hose		O.	ose D.		sure		imum Radius mm	Wei	ight	Vacuu Ratin inches	ım ig		Field Attachable 20/22 Series
221FR-5	1/4		0.58		500		1	25		0,28	24	81	•	•
221FR-6	5/16	8	0.68	17	500	3,5	1-1/4	30	0.23	0,34	24	81	•	•
221FR-8	13/32	10	0.77	20	500	3,5	1-3/4	45	0.28	0,42	24	81	•	•
221FR-10	1/2	12,5	0.92	23	500	3,5	2-1/4	55	0.39	0,58	20	68	•	•
221FR-12	5/8	16	1.08	27	500	3,5	2-3/4	70	0.41	0,61	20	68	•	•
221FR-16	7/8	22	1.23	31	500	3,5	3-1/2	90	0.47	0,70	20	68	•	•

ISO 7840 with 26 Series fittings ONLY.

Application: Gasoline, ethanol blends, diesel fuels, petroleum base hydraulic fluid, and lubricating oils.

**Inner Tube:** Synthetic rubber.

**Reinforcement:** One braid steel wire.

Cover: Synthetic rubber, blue, MSHA accepted.

**Temperature Range:** -4°F to +212°F (-20°C to +100°C).

Fittings: 26 Series - pg. B-9.

20 Series - pg. B-147.

22 Series - pg. B-165.

• See Section B for Field Attachable Assembly Instructions.

 See Section C for Parkrimp Assembly Instructions.

• Temperature Range of other media listed in Section E.

E

## REFRIGERANT

## 285

#### **Markets**





Designed specifically for the rigorous requirements of bus and transit applications, Parker's refrigerant hose exceeds all requirements.

- 285 and 244 combine to offer a wide range of sizes
- Air conditioning hose
- Excellent effusion rate
- Long service life
- Resists moisture ingression
- Parkrimp compatible

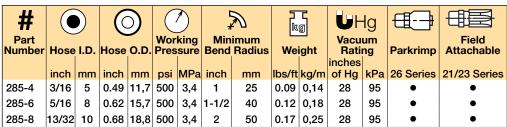
## 285

285-10

285-12

## Refrigerant

SAE J2064 TYPE C



65

75

0.18 0,27

0.23 0,34

28

28

95

95

Application: Refrigerant 134a.

16

Inner Tube: Synthetic rubber with nylon barrier.

Reinforcement: One fiber braid.

Cover: Synthetic rubber.

1/2 12,5

5/8

Temperature Range: -22°F to +257°F (-30°C to +125°C).

0.83 21,1 500

0.96 24,4 500

3,4 2-1/2

3,4

3

Fittings: 26 Series - pg. B-9.

21 Series - pg. B-157. 23 Series - pg. B-169.





- See Section B for Field Attachable Assembly Instructions.
- See Section C for Parkrimp Assembly Instructions.
- Temperature Range of other media listed in Section E.

## REFRIGERANT

244

A

#### **Markets**





Designed specifically for the rigorous requirements of bus and transit applications, Parker's refrigerant hose exceeds all requirements.

- 244 and 285 combine to offer a wide range of sizes
- Air conditioning hose
- Excellent effusion rate
- Long service life
- Resists moisture ingression
- Parkrimp compatible

В

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## 244 Refrigerant

SAE J2064 TYPE B, CLASS I



# Part Number	Hose	I.D.	Hose	O.D.	Wor Pres			mum Radius	Wei	g ght	Vacu Rati	um	Parkrimp
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/m	inches of Hg	kPa	26 Series
244-16	7/8	22	1.23	31	500	3,5	7-1/2	190	0.51	0,76	28	95	•
244-20	1-1/8	29	1.50	38	500	3,5	9	230	0.56	0,83	28	95	•
244-24	1-3/8	35	1.75	44	350	2,4	10-1/2	270	0.62	0,92	28	95	•

**Application:** Refrigerant 134a. **Inner Tube:** Butyl rubber.

Reinforcement: One braid steel wire.

Cover: Fiber braid.

**Temperature Range:** -22°F to +257°F (-30°C to +125°C).

Fittings: 26 Series - pg. B-9.

<ul> <li>See Section B for Field Attachable Assembl</li> </ul>
Instructions.

<sup>•</sup> See Section C for Parkrimp Assembly Instructions.

• Temperature Range of other media listed in Section E.



Parkrimp (Crimp) Series Field Attachable Series

**Fittings** 

В



	b	1

### C

## D

E

Parkrimp (crimp	) Series	of Fittings
-----------------	----------	-------------

26 Series       B-9         43 Series       B-25         70 Series       B-59         71 Series       B-69         73 Series       B-83         77 Series       B-92         78 Series       B-112         56 Series       B-121         79 Series       B-125         HY Series       B-130         81 Series       B-201	25 Series	
43 Series       B-25         70 Series       B-59         71 Series       B-69         73 Series       B-83         77 Series       B-92         78 Series       B-112         S6 Series       B-121         79 Series       B-125         HY Series       B-130	26 Series	B-9
71 Series       B-69         73 Series       B-83         77 Series       B-92         78 Series       B-112         S6 Series       B-121         79 Series       B-125         HY Series       B-130	43 Series	B-25
73 Series       B-83         77 Series       B-92         78 Series       B-112         S6 Series       B-121         79 Series       B-125         HY Series       B-130	70 Series	B-59
77 Series       B-92         78 Series       B-112         S6 Series       B-121         79 Series       B-125         HY Series       B-130	71 Series	B-69
78 Series       B-112         S6 Series       B-121         79 Series       B-125         HY Series       B-130	73 Series	B-83
S6 Series       B-121         79 Series       B-125         HY Series       B-130	77 Series	B-92
79 Series	78 Series	B-112
HY Series B-130	S6 Series	B-121
	79 Series	B-125
81 Series	HY Series	B-130
	81 Series	B-201

## **Field Attachable Series of Fittings**

20 Series	S E	3-145
21 Series	s E	3-155
	s E	
23 Series	s E	3-167
30 Series	S E	3-171
42 Series	s E	3-177
82 Series	S E	3-184
88 Series	5 E	3-201
TB Series	s E	3-209



## How to Read the Fittings Section

With more than 750 end configurations, Parker's brass, stainless steel and Chromium-6 free plated steel fittings include O-ring face seal, flare, straight thread, pipe and metric designs, in both crimp and field attachable styles. Along with Parker hose, all fittings have been tested and approved, and meet stringent industry standards worldwide. Fitting page content is defined by the information shown below. Please take a moment and review.

#### **How to Select Parkrimp Hose Fittings**

Example: 1JC43-12-8C

1JC43-12-8C - Fitting (1=Crimp, 2=Field

attachable, 3=Push-Lok, Blank=Nipple with clamp)

1JC43-12-8C - End Connection 1JC43-12-8C - Fitting Series

1JC43-12-8C - Size of Fitting End Connection

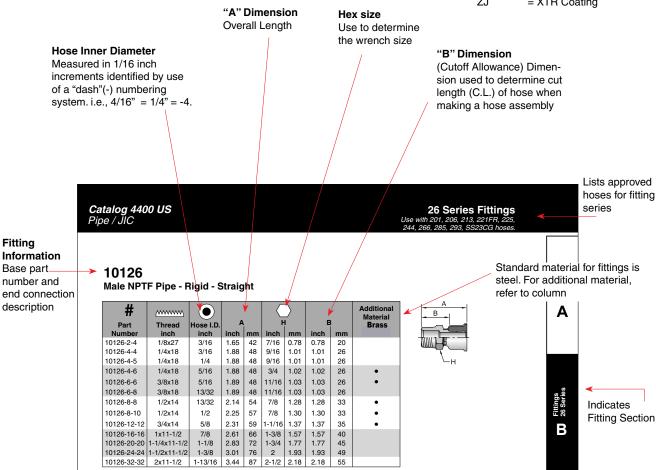
1JC43-12-8C - Hose Size 1JC43-12-8C - Fitting Material No Suffix = Steel В

= 316 Stainless Steel C = Brass Nipple with BA

= Brass

Steel Nut and Socket BS = Brass Nipple with Brass Nut and Steel Socket

SM = Metric Index ZJ = XTR Coating



B-3

Continued on next page



В

## How to select hose fittings

To make ordering Parker products easier, we have outlined the nomenclature for hose and fittings on this page. For information on ordering hose assemblies, see Section A.

#### **How to Select Hose**

Example: 451TC-8

**451**TC-8 - Hose type

451TC-8 - Indicates the special feature of the hose

(in this case, 'Tough Cover')

451TC-8 - Hose inside diameter dash size (in this case, 8/16" or 1/2")



#### **How to Select Parkrimp Hose Fittings**

Example: 1JC43-12-8C

JC43-12-8C - Fitting (1 = Crimp, 2 = Field Attachable, 3 = Push-Lok, Blank = Nipple with clamp or shell)

1JC43-12-8C - End connection (In this case, a female Seal-Lok – swivel – straight)

1JC43-12-8C - Fitting series

1JC43-12-8C - Size of fitting end connection (In this case, 12/16" or 3/4")

1JC43-12-8C - Hose size (In this case, 8/16" or 1/2")

1JC43-12-8C - Fitting material:

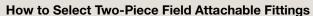
No Suffix = Steel

B = Brass

C = 316 Stainless Steel

BA = Brass Nipple with Steel Nut and Socket BS = Brass Nipple with Brass Nut and Socket

SM = Metric Hex



When selecting a two-piece field attachable fitting, the fitting part number (found in Section B of this catalog)

needs to be broken down into two distinct numbers for the nipple and the socket.

Example: 20120-16-16B **Socket Part Number** 

Example: 20020-16B

20020-16B - Fitting (1 = Crimp, 2 = Field Attachable, 3 = Push-Lok, Blank = Nipple with clamp or shell)

20020-16B - End connection ("00" represents that it is a socket)

20020-16B - Fitting series

20020-16B - Hose size (In this case, 16/16" or 1")

20020-16B - Fitting material:

No Suffix = Steel

B = Brass

C = 316 Stainless Steel

BA = Brass Nipple with Steel Nut and Socket BS = Brass Nipple with Brass Nut and Socket

SM = Metric Hex

#### Nipple Part Number

Example: 0120-16-16B

\_0120-16-16B - Fitting (1 = Crimp, 2 = Field Attachable, 3 = Push-Lok, Blank = Nipple with clamp or shell)

0120-16-16B - End connection (In this case, a male NPTF Pipe - rigid - straight)

0120-16-16B - Fitting series

0120-16-16B - Size of fitting end connection (In this case, 16/16" or 1")

0120-16-16B - Hose size (In this case, 16/16" or 1")

0120-16-16B - Fitting material:

No Suffix = Steel

B = Brass

C = 316 Stainless Steel

BA = Brass Nipple with Steel Nut and Socket BS = Brass Nipple with Brass Nut and Socket

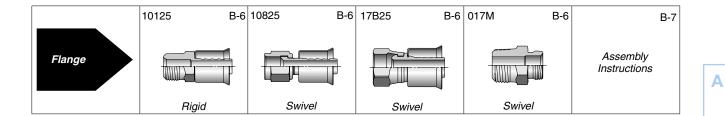
SM = Metric Hex











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A

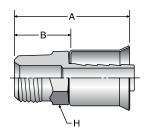
В

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10125

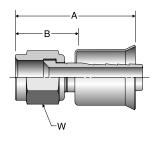
Male NPTF Pipe - Rigid



#			^			В	
Part Number	Thread inch	Hose I.D.	inch	mm	inch	inch	mm
10125-6-6B-VS	3/8X18	3/8	1.72	44	11/16	1.00	25
10125-6-8B-VS	3/8X18	1/2	1.72	44	11/16	1.00	25
10125-8-6B-VS	1/2X14	3/8	2.05	52	7/8	1.33	34
10125-8-8B-VS	1/2X14	1/2	2.05	52	7/8	1.33	34

## 10825

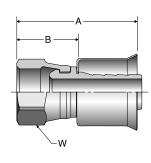
Female SAE 45° - Swivel



#			_					
Part	Thread	Hose I.D.	A		A   H		В	
Number	inch	inch	inch	mm	inch	inch	mm	
10825-6-6B	5/8X18	3/8	1.82	46	3/4	1.10	28	
10825-8-6B	3/4X16	3/8	1.80	46	7/8	1.08	27	
10825-8-8B	3/4X16	1/2	1.95	50	7/8	1.22	31	

## 17B25

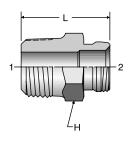
Female Air Brake Jounce Line - Swivel - Straight



#		•					
Part	Thread	Hose I.D.	A		Н	В	
Number	inch	inch	inch	mm	inch	inch	mm
17B25-8-6B	3/4X20	3/8	1.59	40	7/8	0.87	22
17B25-8-8B	3/4X20	1/2	1.59	40	7/8	0.87	22

## 017M

**Air Brake Adapter** 



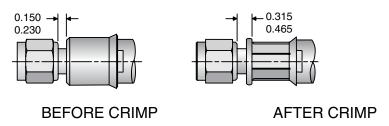
#							
Part Number	Thread End 1  NPTF inch			ad End 2 IEFinch	L   inch   mm		H inch
017M-6-8B	6	3/8X18	8	3/4X20	1.13	29	3/4
017M-8-8B	8	1/2X14	8	3/4X20	1.33	34	7/8

#### **Assembly Instructions**

1. On the 08 end configurations only, the use of a mandrel is required. This mandrel is designed to set the proper gap between the nut and the shell. To match the correct fitting with the proper mandrel part number refer to the table below.



- 2. The assembly mandrels can be used with a common bench vise or on the TH2-7 push-on stand. Refer to Bulletin 4480-T13-USA for push-on stand instructions.
- 3. When using a common bench vise, place the mandrel in the vise, put the fitting on the mandrel (nut first) then push on the hose until it bottoms. Visually check the sight hole on the side of the shell to assure that the hose is fully inserted.
- 4. Remove mandrel from fitting and check for proper gap between nut and shell. (See table below).
- 5. Now crimp the fitting onto the hose. Refer to CrimpSource for correct crimp dies and crimping dimensions.
- 6. Check for proper gap between nut and shell after crimp. (See table below)



NOTE: B dimension is measured from the back of the fully-seated nut to the start of the crimp length. The nut must be free to swivel after crimping of the shell.

		A Le	ngth	B Length			
Fitting Part Number	Required Assembly Tool	mm	inch	mm	inch		
10625-4-4B	TH2-7M25-4						
10825-4-4B	I HZ-7 IVIZO-4						
10625-6-6B	TH2-7M25-6	3,80	0.150	8,00	0.310		
10825-6-6B	I HZ-7 IVIZO-0	5,85	0.230	11,80	0.465		
10625-8-8B	THO ZMOE O						
10825-8-8B	TH2-7M25-8						

NOTE: The "Required Assembly Tool" must be used to assemble all fittings listed above.

7. For all other 25 series fittings, use of mandrel is not necessary. Push fitting onto hose until it bottoms. Visually check sight hole on the side of the shell to assure that the hose is fully inserted.









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B-9

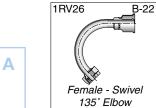


В

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F



Refrigerant Tube Mender

1T126 B-23

Male
(w/Nut & Ferrule)

B-23 1T126 B-24

Fitting
Assembly
Instructions

В

C

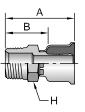
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**10126**Male NPTF Pipe - Rigid

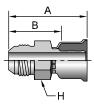
# Part		Hose I.D.	A			<u> </u>	В		Additional Material
Number	inch	inch	inch	mm	inch	mm	inch	mm	Brass (B)
10126-2-4	1/8x27	3/16	1.65	42	7/16	0.78	0.78	20	
10126-4-4	1/4x18	3/16	1.88	48	9/16	1.01	1.01	26	
10126-4-5	1/4x18	1/4	1.88	48	9/16	1.01	1.01	26	
10126-4-6	1/4x18	5/16	1.88	48	3/4	1.02	1.02	26	•
10126-6-6	3/8x18	5/16	1.89	48	11/16	1.03	1.03	26	•
10126-6-8	3/8x18	13/32	1.89	48	11/16	1.03	1.03	26	•
10126-8-8	1/2x14	13/32	2.14	54	7/8	1.28	1.28	33	•
10126-8-10	1/2x14	1/2	2.25	57	7/8	1.30	1.30	33	•
10126-12-12	3/4x14	5/8	2.31	59	1-1/16	1.37	1.37	35	•
10126-16-16	1x11-1/2	7/8	2.61	66	1-3/8	1.57	1.57	40	
10126-20-20	1-1/4x11-1/2	1-1/8	2.83	72	1-3/4	1.77	1.77	45	
10126-24-24	1-1/2x11-1/2	1-3/8	3.01	76	2	1.93	1.93	49	
10126-32-32	2x11-1/2	1-13/16	3.44	87	2-1/2	2.18	2.18	55	



## **10326** Male JIC 37° - Rigid

# Part		······································	Hose I.D.	A			) 1	E	3	Additional Material
Number		inch	inch	inch	mm	inch	mm	inch	mm	Brass (B)
10326-4-4	1/4	7/16x20	3/16	2.02	50	1/2	1.15	1.15	29	•
10326-6-6	3/8	9/16x18	5/16	2.12	54	3/4	1.26	1.26	32	•
10326-8-8	1/2	3/4X16	13/32	1.94	49	13/16	1.08	1.08	27	•
10326-10-10	5/8	7/8X14	1/2	2.49	64	15/16	1.54	1.54	39	•
10326-16-16	1	1-5/16x12	7/8	2.79	71	1-3/8	1.75	1.75	44	

B-11



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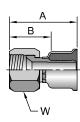
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В

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#### 10626

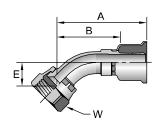
Female JIC 37° - Swivel



# Part		·//···································	Hose I.D.	A		$\bigcirc$	В		Additional Material
Number		inch	inch	inch	mm	inch	inch	mm	Brass (B)
10626-6-6	3/8	9/16x18	5/16	1.81	45	11/16	0.95	23	•
10626-6-8	3/8	9/16x18	13/32	1.67	52	11/16	1.19	30	•
10626-12-12	3/4	1-1/16x12	5/8	2.29	58	1-1/4	1.35	34	•
10626-16-16	1	1-5/16x12	7/8	2.53	64	1-1/2	1.49	38	•
10626-20-20	1-1/4	1-5/8x12	1-1/8	2.56	65	2	1.50	38	•
10626-24-24	1-1/2	1-7/8x12	1-3/8	2.77	70	2-1/4	1.69	43	
10626-32-32	2	2-1/2x12	1-13/16	3.30	84	2-7/8	2.04	52	

#### 13726

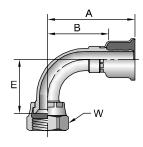
Female JIC 37° - Swivel - 45° Elbow - Short Drop



#		·····								
Part	Т	hread	Hose I.D.	Α		E		W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
13726-4-4	1/4	7/16x20	3/16	2.01	51	0.39	10	9/16	1.14	29
13726-6-6	3/8	9/16x18	5/16	2.72	69	0.43	11	11/16	1.86	47
13726-8-8	1/2	3/4x16	13/32	2.82	72	0.55	15	7/8	1.96	50
13726-10-10	5/8	7/8x14	1/2	2.96	75	0.63	16	1	2.01	51
13726-12-12	3/4	1-1/16x12	5/8	3.44	87	0.83	21	1-1/4	2.50	63
13726-16-16	1	1-5/16x12	7/8	3.34	85	0.90	23	1-1/2	2.30	58
13726-20-20	1-1/4	1-5/8x12	1-1/8	3.74	95	1.18	30	2	2.68	68
13726-24-24	1-1/2	1-7/8x12	1-3/8	3.92	100	1.16	29	2-1/4	2.84	72

#### 13926

Female JIC 37° - Swivel - 90° Elbow - Short Drop

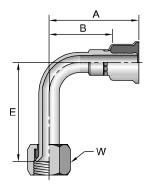


#						_				
Part	T	hread	Hose I.D.	ļ <i>F</i>	4	E		W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
13926-4-4	1/4	7/16x20	3/16	1.82	46	0.83	21	9/16	0.95	24
13926-6-6	3/8	9/16x18	5/16	2.15	55	0.91	23	11/16	1.29	33
13926-8-8	1/2	3/4x16	13/32	2.22	56	1.09	28	7/8	1.36	35
13926-10-10	5/8	7/8x14	1/2	2.23	57	1.26	32	1	1.28	33
13926-10-12	5/8	7/8x14	5/8	2.52	64	1.23	31	1	1.58	40
13926-12-12	3/4	1-1/16x12	5/8	2.28	58	1.82	46	1-1/4	1.30	34
13926-16-16	1	1-5/16x12	7/8	3.30	84	2.14	54	1-1/2	2.26	57
13926-20-20	1-1/4	1-5/8x12	1-1/8	3.60	91	2.57	65	2	2.62	67
13926-24-24	1-1/2	1-7/8x12	1-3/8	3.92	100	2.82	72	2-1/4	2.84	72

#### 14126

#### Female JIC 37° - Swivel - 90° Elbow - Long Drop

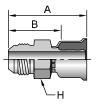
# Part		·//·//	Hose I.D.	Į.	١	E	<b>.</b>	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
14126-4-4	1/4	7/16x20	1/4	2.05	52	1.81	46	9/16	1.18	30
14126-6-6	3/8	9/16x18	5/16	2.02	51	2.13	54	11/16	1.16	29
14126-8-8	1/2	3/4X16	13/32	2.35	60	2.43	62	7/8	1.49	38
14126-10-10	5/8	7/8x14	1/2	2.11	54	2.76	70	1	1.16	29
14126-16-16	1	1-5/16x12	7/8	3.17	81	4.33	110	1-1/2	2.13	54



#### 10426

#### Male SAE 45° - Rigid

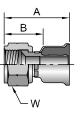
# Part		vvvvv	Hose I.D.			H		2
Number		inch	inch	inch	mm	inch	inch	mm
10426-4-4	1/4	7/16x20	3/16	1.97	50	1/2	1.18	28
10426-6-6	3/8	5/8x18	5/16	2.04	52	11/16	1.18	30



#### 10826

#### Female SAE 45° - Swivel

# Part		······································	Hose I.D.	1 1		$\bigvee_{\mathbf{W}}$	-		Additional Material
Number		inch	inch	inch	mm	inch	inch	mm	Brass (B)
10826-6-6	3/8	5/8x18	5/16	1.84	47	3/4	0.98	25	•
10826-10-8	5/8	7/8x14	13/32	2.21	56	1	1.35	34	
10826-10-10	5/8	7/8x14	1/2	2.13	54	1	1.18	30	
10826-12-12	3/4	1-1/16x14	5/8	2.19	56	1-1/4	1.25	32	•

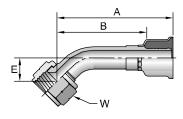


#### 17726

#### Female SAE 45° - Swivel - 45° Elbow

# Part			Thread Hose I.D		Hose I.D.			E		$\left  \bigcirc_{\mathbf{w}} \right $	W	
Number	i	nch	inch	inch	mm	inch	mm	inch	inch	mm		
17726-4-4	1/4	7/16x20	3/16	2.29	58	0.39	10	9/16	1.43	36		
17726-6-6	3/8	5/8x18	5/16	2.72	69	0.43	11	11/16	1.86	47		
17726-8-8	1/2	3/4x16	13/32	2.82	72	0.59	14	7/8	1.96	50		
17726-10-10	5/8	7/8x14	1/2	2.96	75	0.63	16	1	2.01	51		
17726-12-12	3/4	1-1/16x14	5/8	3.43	87	0.83	21	1-1/4	2.49	63		

B-13



Notch on nut signifies SAE 45° flare fitting.



•

В

C

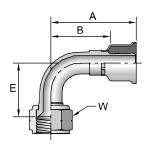
С

В

D

#### 17926

#### Female SAE 45° - Swivel - 90° Elbow

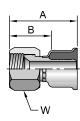


# Part		······································	Hose I.D.	Į.	<b>A</b>	E	<u> </u>	$\bigcirc$		В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
17926-4-4	1/4	7/16x20	3/16	1.75	44	0.83	21	9/16	0.89	23
17926-6-6	3/8	5/8x18	5/16	2.15	55	0.91	23	3/4	1.29	33
17926-8-8	1/2	3/4x16	13/32	2.31	58.7	1.00	25.4	7/8	1.45	37
17926-10-10	5/8	7/8x14	1/2	2.23	57	1.26	32	1	1.28	33
17926-12-12	3/4	1-1/16x14	5/8	2.28	58	1.82	46	1-1/4	1.34	34

Notch on nut signifies 45° flare fitting.

#### 16826

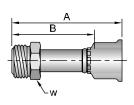
#### Female JIC 37° / SAE 45° - Dual Flare - Swivel



# Part		··········	Hose I.D.		١	$\bigcirc$		В	Additional Material
Number	j	inch	inch	inch	mm	inch	inch	mm	Brass (B)
16826-4-4	1/4	7/16x20	3/16	1.67	42	9/16	0.80	20	•
16826-4-5	1/4	7/16x20	1/4	1.55	48	9/16	1.03	26	
16826-4-6	1/4	7/16x20	5/16	1.55	39	9/16	0.07	17	
16826-5-5	5/16	1/2x20	1/4	1.77	45	5/8	0.90	23	
16826-8-6	1/2	3/4x16	5/16	1.76	56	7/8	1.34	34	
16826-8-8	1/2	3/4x16	13/32	1.91	49	7/8	1.05	27	
16826-8-10	1/2	3/4x16	1/2	2.36	60	7/8	1.41	36	•
16826-10-10	5/8	7/8x14	1/2	2.17	55	1	1.23	31	•
16826-10-12	5/8	7/8x14	5/8	1.96	61	1	1.53	37	

#### 12826

#### Male Inverted SAE 45° - Swivel



# Part	Thread		Thread Hose I.D.		4	<b>A</b>	W		В
Number	inch		inch	inch	inch mm		inch	mm	
12826-4-4	1/4	7/16x24	3/16	2.43	62	7/16	1.56	40	
12826-5-5	5/16	1/2x20	1/4	2.56	65	1/2	1.69	43	
12826-6-6	3/8	5/8x18	5/16	2.87	73	5/8	2.01	51	
12826-8-8	1/2	3/4x18	13/32	3.00	76	3/4	2.14	54	
12826-10-10	5/8	7/8x18	1/2	3.17	81	7/8	2.22	56	

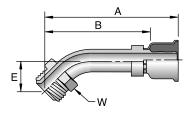
See Accessories Section for O-Rings and Flange Kits.



#### 16726

#### Male Inverted SAE 45° - Swivel - 45° Elbow

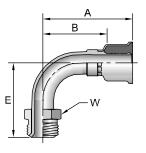
# Part		····· read	Hose I.D.	,	<b>\</b>	E	<b>.</b>	W		В
Number	ir	nch	inch	inch	mm	inch	mm	inch	inch	mm
16726-4-4	1/4	7/16x24	3/16	2.20	56	0.63	16	7/16	1.33	34
16726-5-5	5/16	1/2x20	1/4	2.30	58	0.70	18	1/2	1.43	36
16726-6-6	3/8	5/8x18	5/16	2.55	65	0.87	22	5/8	1.69	43
16726-8-8	1/2	3/4x18	13/32	2.60	66	1.09	28	3/4	1.74	44



#### 16926

#### Male Inverted SAE 45° - Swivel - 90° Elbow

# Part		vvvv read	Hose I.D.	ı	<b>1</b>	E	<b>=</b>	$\bigvee_{\mathbf{W}}$	E	3
Number	inch		inch	inch	mm	inch	mm	inch	inch	mm
16926-4-4	1/4	7/16x24	3/16	2.27	58	1.56	40	7/16	1.40	36
16926-6-6	3/8	5/8x18	5/16	1.89	48	1.48	38	5/8	1.03	26
16926-8-8	1/2	3/4x18	13/32	2.25	57	1.88	48	3/4	1.39	35
16926-10-10	5/8	7/8x18	1/2	2.70	69	2.17	55	7/8	1.75	44

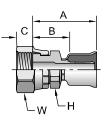


В

#### **1JC26**

#### Female Seal-Lok® - Swivel - Short

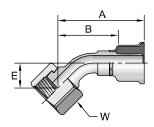
# Part			Hose I.D.		١	(	<b>,</b>	$\bigcirc$	$\bigcirc$	E	3
Number	inch		inch	inch	mm	inch	mm	inch	inch	inch	mm
1JC26-4-4	1/4	9/16x18	3/16	1.66	42	0.31	8	9/16	11/16	0.79	20
1JC26-6-6	3/8	11/16x16	5/16	1.70	43	0.34	9	11/16	13/16	0.84	21
1JC26-8-8	1/2	13/16x16	13/32	1.76	45	0.43	11	13/16	15/16	0.90	23
1JC26-10-10	5/8	1x14	1/2	2.16	55	0.53	13	15/16	1-1/8	1.21	31
1JC26-12-12	3/4	1-3/16x12	5/8	2.13	54	0.55	14	1-1/8	1-3/8	1.19	30
1JC26-16-16	1	1-7/16x12	7/8	2.39	61	0.56	14	1-3/8	1-5/8	1.35	34
1JC26-20-20	1-1/4	1-11/16x12	1-1/8	2.45	62	0.59	15	1-7/8	1-7/8	1.39	35



When measuring overall length to the end of the nut, B + C must be used to calculate cut-off allowance. See Accessories Section for O-Rings.

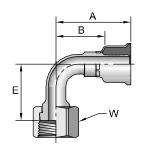
В

#### **1J726** Female Seal-Lok® - Swivel - 45° Elbow



#	_	······								
Part		Thread	Hose I.D.	F	4	E		W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J726-4-4	1/4	9/16x18	3/16	1.99	51	0.39	10	11/16	1.12	28
1J726-6-6	3/8	11/16x16	5/16	2.43	62	0.43	11	13/16	1.57	40
1J726-8-8	1/2	13/16x16	13/32	2.77	70	0.59	15	15/16	1.91	49
1J726-10-10	5/8	1x14	1/2	3.26	83	0.63	16	1-1/8	2.31	59
1J726-12-12	3/4	1-3/16x12	5/8	3.13	80	0.83	21	1-3/8	2.19	56
1J726-16-16	1	1-7/16x12	7/8	3.61	92	0.94	24	1-5/8	2.57	65
1J726-20-20	1-1/4	1-11/16x12	1-1/8	3.93	100	1.00	25	1-7/8	2.87	73

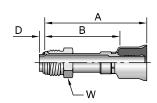
#### **1J926** Female Seal-Lok® - Swivel - 90° Elbow - Short Drop



# Part	Thread		Hose I.D.	Į.	<b>\</b>	E	<b>.</b>	w $\bigcirc$	E	3
Number	inch		inch	inch	mm	inch	mm	inch	inch	mm
1J926-4-4	1/4	9/16x18	3/16	1.80	46	0.83	21	11/16	0.93	24
1J926-6-6	3/8	11/16x16	5/16	1.86	47	0.91	23	13/16	1.00	25
1J926-8-8	1/2	13/16X16	13/32	2.14	54	1.14	29	15/16	1.28	33
1J926-10-10	5/8	1x14	1/2	2.53	64	1.26	32	1-1/8	1.58	40
1J926-12-12	3/4	1-3/16x12	5/8	2.51	64	1.89	48	1-3/8	1.57	40
1J926-16-16	1	1-7/16X12	7/8	3.56	90	2.21	56	1-5/8	2.52	64
1J926-20-20	1-1/4	1-11/16X12	1-1/8	4.05	103	2.51	64	1-7/8	2.99	76

#### **1S526** Male Tube-O - Swivel - Short Pilot

B-16



# Part			Hose I.D.		4	[	)	$\bigvee_{\mathbf{W}}$		3
Number	inch		inch	inch	mm	inch	mm	inch	inch	mm
1S526-6-6	3/8	5/8x18	5/16	2.54	65	0.18	4,7	5/8	1.68	43
1S526-7-6	11/16	11/16x16	5/16	2.57	65	0.18	4,7	5/8	1.71	43
1S526-8-8	1/2	3/4x18	13/32	2.68	68	0.18	4,7	3/4	1.82	46
1S526-10-10	5/8	7/8x18	1/2	3.46	88	0.18	4,7	7/8	2.51	64
1S526-10-12	5/8	7/8x18	5/8	3.63	92	0.18	4,7	7/8	2.69	68
1S526-12-12	3/4	1-1/16x16	5/8	4.00	102	0.18	4,7	1-1/16	3.06	78

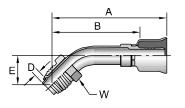
When measuring overall length to the end of the nut, B+D must be used to calculate cut-off allowance.



#### 15R26

#### Male Tube-O - Swivel - 45° Elbow - Short Pilot

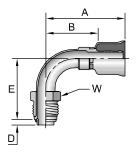
# Part		·/····	Hose I.D.	1	4		)	E	<b>=</b>	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
15R26-6-6	3/8	5/8x18	5/16	2.52	64	0.18	4,7	0.85	22	5/8	1.66	42
15R26-8-8	1/2	3/4x18	13/32	2.53	64	0.18	4,7	1.05	27	3/4	1.67	42
15R26-10-10	5/8	7/8x18	1/2	2.99	76	0.18	4,7	1.25	32	7/8	2.04	52
15R26-10-12	5/8	7/8x18	5/8	3.16	80	0.18	4,7	1.25	32	7/8	2.22	56



#### 15K26

#### Male Tube-O - Swivel - 90° Elbow - Short Pilot

# Part		///// hread	Hose I.D.	4		[	)	E	<b>.</b>	<b>M</b>	E	3
Number		inch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
15K26-6-6	3/8	5/8X18	5/16	2.06	52	0.18	4,7	1.76	45	5/8	1.19	30
15K26-7-6	7/16	11/16x16	5/16	2.21	56	0.18	4,7	1.76	44	11/16	1.35	34
15K26-8-8	1/2	3/4x18	13/32	2.06	52	0.18	4,7	1.74	44	3/4	1.20	30
15K26-10-10	5/8	7/8x18	1/2	2.34	59	0.18	4,7	2.20	56	7/8	1.39	35
15K26-10-12	5/8	7/8x18	5/8	2.51	64	0.18	4,7	2.20	56	7/8	1.57	40

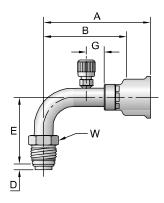


#### 15K26-PB

Male Tube-O - Swivel - 90° Elbow - Short Pilot with High Pressure Charge Port for R134a

#	<u>~~~</u>	····												
Part	Thr	ead	Hose I.D.	F	A		)	E			3	W	E	3
Number	in	ch	inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	inch	mm
15K26-8-8-PB	1/2	3/4x18	13/32	2.70	69	0.18	4,6	1.74	44	0.60	15	3/4	1.88	48

B-17



В

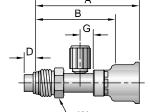
3

D



#### 14526-PT

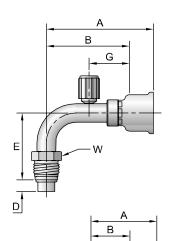
Male Tube-O - Swivel - Long Pilot With With Low Pressure Charge Port for R134a



# Part	Thread	Hose I.D.	Д		D		G	ì	W	E	3
Number	inch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
14526-10-12-PT	5/8 7/8x18	5/8	3.45	88	0.38	9,8	0.44	11	7/8	2.51	64

#### 15M26-PT

Male Tube-O - Swivel - 90° Elbow - Long Pilot With Low Pressure Charge Port for R134a



В

C

D

# Part		Hose I.D.	Ą	<b>\</b>	[	)	E	<u> </u>	C	à	$\bigcirc$	E	3
Number	inch	inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	inch	mm
15M26-10-12-PT	5/8 7/8x18	5/8	3.25	83	0.38	9,8	2.25	57	0.60	15	7/8	2.31	59

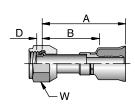
#### 15G26

Male Tube-O - Rigid - Internal Long Pilot (3-Step)

# Part		vvvv	Hose I.D.	,	Ą	H	E	3
Number	i	nch	inch	inch	mm	inch	inch	mm
15G26-6-6	3/8	5/8x18	3/8	1.78	45	0.625	0.92	23
15G26-8-8	1/2	3/4x16	13/32	1.95	50	3/4	1.09	28
15G26-10-10	5/8	7/8x14	1/2	4.05	103	7/8	3.10	79
15G26-10-12	5/8	7/8x14	5/8	2.19	56	0.875	1.25	32

#### **15S26**

Female Tube-O - Swivel - Short Pilot

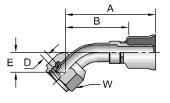


# Part	_	////// hread	Hose I.D.	Į.		Ę	)	$\left  \bigcirc_{\mathbf{w}} \right $	В	
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
15S26-6-6	3/8	5/8x18	5/16	2.54	65	0.18	4,7	3/4	1.68	43
15S26-8-8	1/2	3/4x16	13/32	2.68	68	0.18	4,7	7/8	1.82	46
15S26-10-10	5/8	7/8x14	1/2	2.84	72	0.18	4,7	1-1/16	1.89	48
15S26-10-12	5/8	7/8x14	5/8	3.63	92	0.18	4,7	1-1/16	2.69	68
15S26-12-12	3/4	1-1/16x14	5/8	4.00	102	0.18	4,7	1-1/4	3.06	78

#### 15H26

#### Female Tube-O - Swivel 45° Elbow - Short Pilot

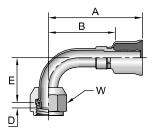
# Part		_	·······	Hose I.D.	A		D		E		$\bigcirc$		В
Number	r	i	nch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
15H26-6-6	3   ;	3/8	5/8x18	5/16	2.35	60	0.18	4,7	0.54	14	3/4	1.49	38
15H26-8-8	3	1/2	3/4x16	13/32	2.48	63	0.18	4,7	0.60	15	7/8	1.62	41
15H26-10	-10	5/8	7/8x14	1/2	3.23	82	0.18	4,7	0.67	17	1 1/16	2.28	58
15H26-10	-12	5/8	7/8x14	3/4	3.43	87	0.18	4,7	0.67	17	1-1/16	2.46	62



#### 15T26

#### Female Tube-O - Swivel - 90° Elbow - Short Pilot

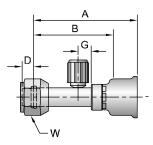
# Part	_	·····································	Hose I.D.	A	<b>\</b>	D		E		$\bigcirc$	i	3
Number		inch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
15T26-6-6	3/8	5/8x18	5/16	1.89	48	0.18	4,7	1.15	29	3/4	1.03	26
15T26-8-8	1/2	3/4x16	13/32	2.34	59	0.18	4,7	1.46	37	7/8	1.48	38
15T26-10-10	5/8	7/8x14	1/2	2.08	53	0.18	4,7	1.75	44	1-1/16	1.08	27
15T26-10-12	5/8	7/8x14	5/8	2.20	56	0.18	4,7	1.53	39	1-1/16	1.26	32
15T26-12-12	3/4	1-1/16x14	5/8	2.63	67	0.18	4,7	1.75	44	1-1/4	1.69	43



#### 15926-PB

#### Female Tube-O - Swivel - Long Pilot With High Pressure Charge Port for R134a

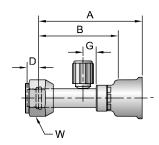
# Part		·······	Hose I.D.	A		[	)	G	ì	$\bigcirc$	E	3
Number	i	nch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
15926-6-6-PB	3/8	5/8x18	5/16	3.25	83	0.28	7,1	0.75	19	3/4	2.39	61
15926-8-8-PB	1/2	3/4x16	13/32	2.74	70	0.38	9,8	0.50	13	7/8	1.88	48



#### 15926-PT

#### Female Tube-O - Swivel - Long Pilot With Low Pressure Charge Port for R134a

# Part		······································	Hose I.D.	Δ	<u> </u>	D		G		$\bigcirc$	E	3
Number	i	nch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
15926-10-12-PT	5/8	7/8x14	5/8	3.47	88	0.38	9,8	0.60	15	1-1/16	2.53	64











# A B G G

#### 15N26-PB

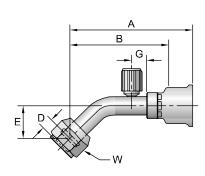
Female Tube-O - Swivel - 45° Elbow - Long Pilot With High Pressure Charge Port for R134a

# Part		······	Hose I.D.	4		D		E		G	ì	$\bigcirc$		В
Number	i	nch	inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	inch	mm
15N26-8-8-PB	1/2	3/4x16	13/32	3.67	93	0.38	9,8	0.90	23	0.60	15	7/8	2.81	72

#### 15N26-PT

Female Tube-O - Swivel - 45° Elbow - Long Pilot With Low Pressure Charge Port for R134a

# Part		············iread	Hose I.D.	A	<b>\</b>		)	E		G		W	В	3
Number	i	nch	inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	inch	mm
15N26-10-12-PT	5/8	7/8x14	5/8	3.92	100	0.38	9,8	1.21	31	0.60	15	1-1/16	2.98	76



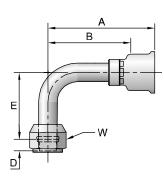
В

D

#### 15L26

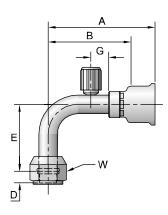
Female Tube-O - Swivel - 90° Elbow - Long Pilot

# Pai			············	Hose I.D.	Α			)	E	<u> </u>	$\bigcirc$	E	3
Num	ber	i	nch	inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
15L26-	8-8	1/2	3/4x16	13/32	2.14	54	0.38	9,8	1.46	37	7/8	1.28	33



#### 15L26-PB

Female Tube-O - Swivel - 90° Elbow - Long Pilot With High Pressure Charge Port for R134a

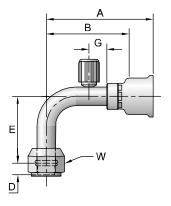


# Part		······································	Hose I.D.	Д		D		E		G		$\bigcirc$	E	3
Number	i	nch	inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	inch	mm
15L26-6-6-PB	3/8	5/8x18	5/16	2.50	64	0.28	7,1	1.22	31	0.50	13	3/4	1.64	42
15L26-8-8-PB	1/2	3/4x16	13/32	2.80	71	0.38	9,8	1.46	37	0.60	15	7/8	1.94	49
15L26-10-12-PB	5/8	7/8x14	5/8	2.80	71	0.38	9,8	1.46	37	0.60	15	1-1/16	1.94	49

#### 15L26-PT

Female Tube-O - Swivel - 90° Elbow - Long Pilot With Low Pressure Charge Port for R134a

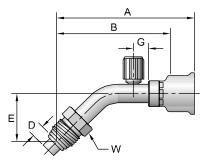
# Part	-	·/···································	Hose I.D.	A		D	)	E		G	1	$\bigcirc$	Е	3
Number		inch	inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	inch	mm
15L26-10-10-PT	5/8	7/8X14	1/2	2.95	75	0.38	9,8	2.25	57	0.60	15	1-1/16	2.00	51
15L26-10-12-PT	5/8	7/8x14	5/8	3.25	83	0.38	9,8	2.25	57	0.60	15	1-1/16	2.31	59
15L26-12-12-PT	3/4	1-1/16x14	5/8	3.58	91	0.38	9,8	2.66	68	0.60	15	1-1/4	2.64	67



#### 15P26-PT

Male Tube-O - Swivel - 45° Elbow - Long Pilot With Low Pressure Charge Port for R134a

# Part		Hose I.D.	4			)	E		G	à	$\bigcirc$	E	3
Number	inch	inch	inch	mm	inch	mm	inch	mm	inch	mm	inch	inch	mm
15P26-10-12-PT	5/8 7/8x18	5/8	3.81	97	0.38	9,8	1.21	31	0.60	15	7/8	2.87	73

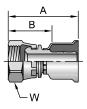


#### 17B26

Female Air Brake Jounce Line - Swivel

# Part			Hose	Å	<b>A</b>	$\bigvee_{\mathbf{W}}$	B		
Number	i	nch	inch	inch	mm	inch	inch	mm	
17B26-8-6BA	1/2	3/4x20	5/16	1.75	44	11/16	0.89	23	
17B26-8-8BA	1/2	3/4x20	13/32	1.75	44	11/16	0.89	23	

B-21



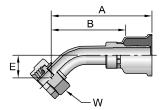
В

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#### 15V26

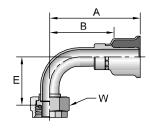
#### Female Compressor - Swivel - 45° Elbow



# Part	//////// Thread	Hose I.D.	4	<b>.</b>	E		$\bigcirc$	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
15V26-12-8	1x14	13/32	2.72	69	0.75	19	1-1/8	1.86	47
15V26-12-12	1x14	5/8	3.39	86	0.76	19	1-1/8	2.45	62

#### 15W26

#### Female Compressor - Swivel - 90° Elbow



В

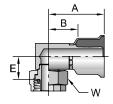
C

D

# Part	//////// Thread	Hose I.D.			,	=	$\left  \bigcirc \atop \mathbf{w} \right $	F	
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
15W26-12-8	1x14	13/32	2.24	57	1.25	32	1.125	1.38	35
15W26-12-12	1x14	5/8	3.04	77	1.63	41	1.125	2.10	53

#### 15**Z**26

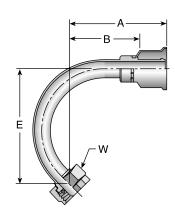
#### Female Compressor - Swivel - 90° Elbow - Block Type



# Part	//////// Thread	Hose I.D.	A		E		$\bigcirc$	В	
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
15Z26-12-8	1X14	0.40625	1.79	45	0.80	20	1.125	0.93	24
15Z26-12-12	1X14	0.625	1.87	47	0.80	20	1.125	0.93	24

#### 1RV26

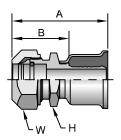
#### Female Compressor - Swivel - 135° Elbow



# Part	Hose I.D.	A	١	E		$\bigcirc$	E	3
Number	inch	inch	mm	inch	mm	inch	inch	mm
1RV26-12-8	13/32	3.24	82	3.21	82	1-1/8	2.38	60
1RV26-12-12	5/8	2.32	59	3.21	82	1-1/8	1.38	35

# **1T126**Male Refrigerant Tube Mender (with Nut and Ferrule)

# Part		······································	Hose I.D.		<b>A</b>	H	ı	3
Number	iı	nch	inch	inch	mm	inch	inch	mm
1T126-6-6	3/8	5/8x18	5/16	1.96	50	11/16	1.10	28
1T126-8-8	1/2	3/4x16	13/32	2.07	53	13/16	1.21	31
1T126-10-10	5/8	7/8x14	1/2	2.28	58	15/16	1.33	34
1T126-10-12	5/8	7/8x14	5/8	2.27	58	15/16	1.33	34
1T126-12-12	3/4	1-1/16x14	5/8	2.33	59	1-1/8	1.39	35



1T126 Assembly instructions on page B-24

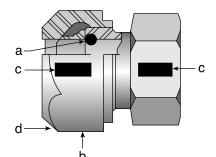
#### 1T126

#### **Fitting Installation Instructions**

- 1. Cut the tube off squarely next to the hose fitting. At least 7/8" straight length is required and the outside diameter of the tube should be smooth and free from deep lengthwise scratches.
- 2. To prevent cutting the inside of the O-Ring, smoothly chamfer the outside diameter of the cut end 15° to 30°. Deburr the inside diameter.
- 3. Remove the nut, compression sleeve, and O-Ring from the fitting and lubricate the O-Ring with a lubricant that is compatible with the refrigerant used in the system.
- 4. Place the lubricated O-Ring in the counterbore of the fitting.
- 5. Slip the compression sleeve, small end, into the nut and assemble the nut on the fitting fingertight. Make sure the compression sleeve is not cocked in the nut. Back the nut off 1/6 to 1/3 turn (one to two hex flats).
- 6. Insert the chamfered tube end through the nut into the fitting. If high resistance is felt when the end of the tube contacts the O-Ring, remove the tube. The end of the tube may require a large chamfer and/or the O-Ring may require more lubrication on the inside diameter. Repeat the previous steps.
- 7. (a) Make sure the tube is bottomed in the fitting
  - (b) Tighten the nut finger tight
  - (c) Mark the fitting and nut hex indicating the starting point (see illustration) and
  - (d) Wrench tighten the nut 1 to 1-1/6 turns (6 to 7 hex flats).
- 8. Later, if it is ever necessary to loosen the connection, re-assemble the nut 1/6 turn (one hex flat) after finger tight.

IF YOU HAVE QUESTIONS CONCERNING THE PRODUCTS OR APPLICATION OF THE PRODUCTS CONTAINED IN THIS CATALOG, PLEASE CALL:
PARKER HOSE PRODUCTS DIVISION TECHNICAL SERVICES DEPARTMENT

PHONE: 440 / 943-5700 FAX: 440 / 943-3129 http://www.parkerhose.com





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E



		I	T	I	
	10143 B-27	11343 B-27	11L43 B-28	10243 B-28	1S243 B-28
NPTF/					
NPSM Pipe					
1.750			Male - Swivel		
	Male - Rigid	Male - Swivel	90° Elbow	Female - Rigid	Female - Swivel
10743 B-29		10543 B-29	10G43 B-29	10L43 B-30	
	Straight				
	Thread O-Ring				JIC 37°
_	0-Hing			Male - Swivel	
Female - Swivel		Male - Rigid	Male - Swivel	90° Elbow	
10343 B-30	1LB43 B-31	10643 B-31	13743 B-32		13943 B-33
				THE THE	
			Famous Carinas	Samuela Octival	Famala Cuinal
Male - Rigid	Male - Bulkhead	Female - Swivel	Female - Swivel 45° Elbow - Short	Female - Swivel 45° Elbow - Medium	Female - Swivel 90° Elbow - Short
1L943 B-33	14143 B-34	14V43 B-34		10443 B-34	10843 B-34
			SAE 45°		
Female - Swivel 90° Elbow - Medium	Female - Swivel 90° Elbow - Long	Female - Swivel 150° Elbow		Male - Rigid	Female - Swivel
17743 B-35	17943 B-35		11143 B-35	_	1GJ43 B-36
	THE THE PERSON NAMED IN COLUMN 1				
		Flareless			
Female - Swivel	Female - Swivel 90° Elbow		Male - Rigid	Female - Swivel	Female - Rigid
45° Elbow		16743 B-37	16943 B-37	. c.ma.c c.m.c.	11543 B-37
Inverted				Code 61	
Flare				Flange	
	Mala Cominal	Male - Swivel	Male - Swivel		Floresties
11643 B-38	<i>Male - Swivel</i> 12643 B-38	45° Elbow 11743 B-38	90° Elbow 12743 B-39	11843 B-39	Flange Head 11943 B-39
	12040 5-36			11043 B-39	11943 B-39
00.4/0° 5"	223 54	45° 5"	20% 5#	67.4/0° Flb	22° 5″
22-1/2° Elbow	30° Elbow	45° Elbow 16F43 B-40	60° Elbow 16N43 B-40	67-1/2° Elbow	90° Elbow
	16A43 B-40	101 70 10-40	16N43 B-40		1J043 B-41
Code 62				Seal-Lok® (O-Ring	
Flange				Face Seal)	
	_	450 500			Male - Rigid
1	Flange Head	45° Elbow	90° Elbow		w/O-Ring

B-25



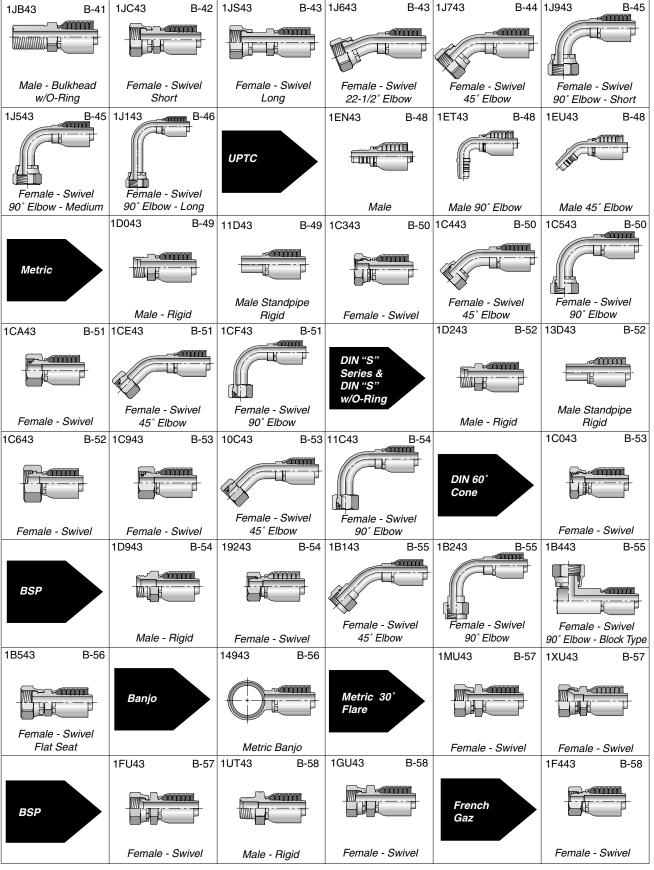
В

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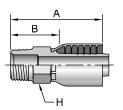
В





#### 10143 Male NPTF Pipe - Rigid

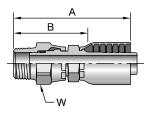
#		•						Additional Material
Part	Thread	Hose I.D.	/	4	Н	В		Stainless
Number	inch	inch	inch	mm	inch	inch	mm	Steel (C)
10143-2-4	1/8x27	1/4	1.80	46	9/16	1.05	27	
10143-4-4	1/4x18	1/4	2.01	51	9/16	1.26	32	•
10143-4-5	1/4x18	5/16	1.94	49	11/16	1.19	30	
10143-4-6	1/4x18	3/8	2.28	58	3/4	1.25	32	
10143-6-4	3/8x18	1/4	1.86	47	11/16	1.11	28	
10143-6-5	3/8x18	5/16	1.94	49	11/16	1.19	30	
10143-6-6	3/8x18	3/8	2.37	60	3/4	1.34	34	•
10143-6-8	3/8x18	1/2	2.59	66	7/8	1.33	34	
10143-6-10	3/8x18	5/8	2.61	66	15/16	1.17	30	
10143-8-4	1/2x14	1/4	2.13	54	7/8	1.38	35	
10143-8-6	1/2x14	3/8	2.39	61	7/8	1.36	35	
10143-8-8	1/2x14	1/2	2.84	72	7/8	1.58	40	•
10143-8-10	1/2x14	5/8	3.04	77	15/16	1.59	40	
10143-8-12	1/2x14	3/4	3.04	77	1-1/16	1.60	41	
10143-12-8	3/4x14	1/2	2.68	68	1-1/16	1.42	36	
10143-12-10	3/4x14	5/8	2.87	73	1-1/16	1.43	36	
10143-12-12	3/4x14	3/4	3.09	78	1-1/16	1.65	42	•
10143-12-16	3/4x14	1	3.40	86	1-3/8	1.78	45	
10143-16-12	1x11-1/2	3/4	3.09	78	1-3/8	1.65	42	
10143-16-16	1x11-1/2	1	2.59	66	1-3/8	1.97	50	•
10143-20-20	1-1/4x11-1/2	1-1/4	4.08	104	1-3/4	2.39	61	•
10143-24-24	1-1/2x11-1/2	1-1/2	3.50	89	2	2.13	54	
10143-32-32	2x11-1/2	2	4.05	103	2-1/2	2.27	58	



Stainless steel fittings must be assembled with Karrykrimp 2, PHastkrimp, Superkrimp or Parkrimp 2. See CrimpSource for more information.

#### 11343 Male NPTF Pipe - Swivel

#							
Part	Thread	Hose I.D.		<b>A</b>	W	ı	3
Number	inch	inch	inch	mm	inch	inch	mm
11343-2-4	1/8x27	1/4	2.94	75	5/8	2.19	56
11343-4-4	1/4x18	1/4	2.68	68	5/8	1.93	49
11343-4-6	1/4x18	3/8	3.01	76	5/8	1.98	50
11343-6-4	3/8x18	1/4	2.81	71	3/4	2.06	52
11343-6-6	3/8x18	3/8	3.08	78	3/4	2.05	52
11343-6-8	3/8x18	1/2	3.30	84	3/4	2.04	52
11343-8-6	1/2x14	3/8	3.30	84	7/8	2.27	58
11343-8-8	1/2x14	1/2	3.52	89	7/8	2.26	57
11343-12-12	3/4x14	3/4	3.93	100	1-1/4	2.49	63
11343-16-16	1x11-1/2	1	4.52	115	1-1/2	2.90	74



O-Ring not compatible with Phosphate Ester fluids.

Fitting allows minor movement under pressure to relieve stress on hose but is not to be used on continuous or extensive swiveling.

B-27



В

C

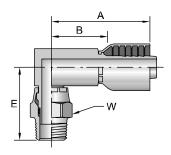
D

В

D

#### 11L43

#### Male NPTF Pipe - Swivel - 90° Elbow



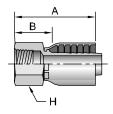
# Part		Hose I.D.	4	۱	E	•	$\bigcirc$	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11L43-4-4	1/4x18	1/4	2.23	57	1.79	45	5/8	1.48	38
11L43-4-6	1/4x18	3/8	2.53	64	1.85	47	5/8	1.50	38
11L43-6-6	3/8x18	3/8	2.53	64	1.94	49	3/4	1.50	38
11L43-8-6	1/2x14	3/8	2.66	68	2.17	55	7/8	1.63	41
11L43-8-8	1/2x14	1/2	2.96	75	2.17	55	7/8	1.70	43
11L43-12-12	3/4x14	3/4	3.32	84	2.46	62	1-1/4	1.88	48

O-Ring not compatible with Phosphate Ester fluids.

Fitting allows minor movement under pressure to relieve stress on hose but is not to be used on continuous or extensive swiveling.

#### 10243

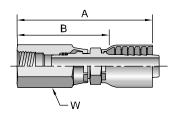
#### Female NPTF Pipe - Rigid



# Part		Hose I.D.		Ą	H		В
Number	inch	inch	inch	mm	inch	inch	mm
10243-2-4	1/8x27	1/4	1.68	43	5/8	0.93	24
10243-4-4	1/4x18	1/4	1.78	45	11/16	1.03	26
10243-4-6	1/4x18	3/8	2.05	52	3/4	1.02	26
10243-6-4	3/8x18	1/4	2.05	52	7/8	1.30	33
10243-6-6	3/8x18	3/8	2.32	59	7/8	1.29	33
10243-8-6	1/2x14	3/8	2.40	61	1-1/8	1.37	35
10243-8-8	1/2x14	1/2	2.62	67	1-1/8	1.36	35
10243-12-12	3/4x14	3/4	2.72	69	1-1/4	1.28	33

#### **1S243**

#### Female NPTF Pipe - Swivel

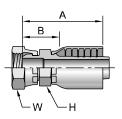


# Part	Thread	Hose I.D.		١	W		В
Number	inch	inch	inch	mm	inch	inch	mm
1S243-4-4	1/4x18	1/4	3.33	85	3/4	2.58	66



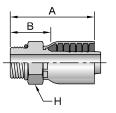
## **10743** Female NPSM Pipe - Swivel - (60° Cone)

# Part	Thread	Hose I.D.		Δ		$\bigcirc$		В
Number	inch	inch	inch	mm	inch	inch	inch	mm
10743-2-4	1/8x27	1/4	1.69	43	9/16	9/16	0.94	24
10743-4-4	1/4x18	1/4	1.74	44	9/16	11/16	0.99	25
10743-6-6	3/8x18	3/8	2.09	53	11/16	7/8	1.06	27
10743-8-8	1/2x14	1/2	2.32	59	15/16	1	1.06	27
10743-12-12	3/4x14	3/4	2.70	69	1-1/16	1-1/4	1.47	37
10743-16-16	1x11-1/2	1	3.09	78	1-3/8	1-1/2	1.47	37
10743-20-20	1-1/4x11-1/2	1-1/4	3.28	83	1-7/8	1-7/8	1.59	40



## **10543**Male SAE Straight Thread with O-Ring - Rigid

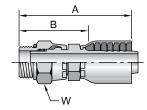
#	<u>~~</u>	·····						
Part	TH	nread	Hose I.D.		١	Н		В
Number	i	nch	inch	inch	mm	inch	inch	mm
10543-4-4	1/4	7/16x20	1/4	1.64	42	9/16	0.89	23
10543-5-4	5/16	1/2x20	1/4	1.80	46	5/8	1.05	27
10543-6-4	3/8	9/16x18	1/4	1.67	42	11/16	0.92	23
10543-6-6	3/8 9/16x18		3/8	2.10	53	11/16	1.07	27
10543-6-8	3/8 9/16x18		1/2	2.32	59	13/16	1.06	27
10543-8-6	1/2	3/4x16	3/8	2.11	54	7/8	1.08	27
10543-8-8	1/2	3/4x16	1/2	2.46	62	7/8	1.20	30
10543-8-10	1/2	3/4x16	5/8	2.63	67	1	1.19	30
10543-10-6	5/8	7/8x14	3/8	2.13	54	1	1.10	28
10543-10-8	5/8	7/8x14	1/2	2.35	60	1	1.09	28
10543-10-10	5/8	7/8x14	5/8	2.77	70	1	1.33	34
10543-12-8	3/4	1-1/16x12	1/2	2.61	66	1-1/4	1.35	34
10543-12-10	3/4	1-1/16x12	5/8	2.80	71	1-1/4	1.36	35
10543-12-12	3/4	1-1/16x12	3/4	2.81	71	1-1/4	1.37	35
10543-16-12	1	1-5/16x12	3/4	2.81	71	1-1/2	1.37	35
10543-16-16	1	1-5/16x12	1	3.37	86	1-1/2	1.75	44
10543-20-20	1-1/4	1-5/8x12	1-1/4	3.69	94	1-7/8	2.00	51



В

## **10G43**Male SAE Straight Thread with O-Ring - Swivel

# Part	Thread		Hose I.D.	A	Ą			В
Number	in	ch	inch	inch	mm	inch	inch	mm
10G43-5-4	5/16	1/2x20	1/4	2.98	76	3/4	2.23	57
10G43-6-4	3/8	9/16x18	1/4	2.98	76	3/4	2.23	57
10G43-6-6	3/8	9/16x18	3/8	3.25	83	3/4	2.22	56
10G43-8-6	1/2	3/4x16	3/8	3.06	78	7/8	2.06	52
10G43-8-8	1/2	3/4x16	1/2	3.21	82	7/8	1.95	50
10G43-10-6	5/8	7/8x14	3/8	3.01	76	1	2.01	51
10G43-10-8	5/8	7/8x14	1/2	3.27	83	1	2.01	51
10G43-12-12	3/4	1-1/16x12	3/4	3.78	96	1-1/4	2.34	59



O-Ring not compatible with Phosphate Ester fluids.

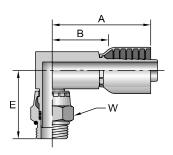
Fitting allows minor movement under pressure to relieve stress on hose but is not to be used on continuous or extensive swiveling.



В

D

## **10L43**Male SAE Straight Thread with O-Ring - Swivel - 90° Elbow



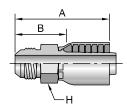
# Part		······································	Hose I.D.	Į.	<b>A</b>	E		$\bigcirc$	ļ	В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
10L43-6-6	3/8	9/16x18	3/8	2.53	64	2.10	53	3/4	1.50	38
10L43-8-6	1/2	3/4x16	3/8	2.66	68	1.86	47	7/8	1.63	41
10L43-8-8	1/2	3/4x16	1/2	2.96	75	1.87	47	7/8	1.70	43
10L43-10-8	5/8	7/8x14	1/2	2.96	75	1.92	49	1	1.70	43
10L43-12-12	3/4	1-1/16x12	3/4	3.22	82	2.30	58	1-1/4	1.88	48

O-Ring not compatible with Phosphate Ester fluids.

See Technical Section for pressure limitations.

Fitting allows minor movement under pressure to relieve stress on hose but is not to be used on continuous or extensive swiveling.

## **10343 Male JIC 37° - Rigid**ISO 12151-5



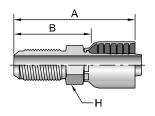
#		····						
Part	Th	read	Hose I.D.	l A	4	н		В
Number	ir	nch	inch	inch	mm	inch	inch	mm
10343-4-4	1/4	7/16x20	1/4	1.99	51	9/16	1.24	31
10343-5-4	5/16	1/2x20	1/4	1.83	46	9/16	1.08	27
10343-5-6	5/16	1/2x20	3/8	2.26	57	3/4	1.23	31
10343-6-4	3/8	9/16x18	1/4	1.84	47	11/16	1.09	28
10343-6-6	3/8	9/16x18	3/8	2.36	60	3/4	1.33	34
10343-8-6	1/2	3/4x16	3/8	2.30	58	7/8	1.27	32
10343-8-8	1/2	3/4x16	1/2	2.68	68	7/8	1.42	36
10343-8-10	1/2	3/4x16	5/8	2.85	72	7/8	1.41	36
10343-10-6	5/8	7/8x14	3/8	2.40	61	15/16	1.37	35
10343-10-8	5/8	7/8x14	1/2	2.62	67	15/16	1.36	35
10343-10-10	5/8	7/8x14	5/8	3.03	77	15/16	1.59	40
10343-12-8	3/4	1-1/16x12	1/2	2.76	70	1-1/8	1.50	38
10343-12-10	3/4	1-1/16x12	5/8	3.07	78	1-1/8	1.63	41
10343-12-12	3/4	1-1/16x12	3/4	3.19	81	1-1/8	1.75	44
10343-14-12	7/8	1-3/16x12	3/4	3.11	79	1-1/4	1.67	42
10343-16-12	1	1-5/16x12	3/4	3.04	77	1-3/8	1.60	41
10343-16-16	1	1-5/16x12	1	3.63	92	1-3/8	2.01	51
10343-20-20	1-1/4	1-5/8x12	1-1/4	3.96	101	1-7/8	2.27	58
10343-24-20	1-1/2	1-7/8x12	1-1/4	3.71	94	2	2.02	51

#### 1LB43

#### Male JIC 37° - Bulkhead without Locknut

ISO 12151-5

# Part		vvvvv	Hose I.D.	A	<b>1</b>	H		В
Number	i	nch	inch	inch	mm	inch	inch	mm
1LB43-4-4	1/4	7/16x20	1/4	2.64	67	9/16	1.89	48
1LB43-6-6	3/8	9/16x18	3/8	3.08	78	3/4	2.05	52
1LB43-8-8	1/2	3/4x16	1/2	3.46	88	7/8	2.20	56
1LB43-10-10	5/8	7/8x14	5/8	3.85	98	15/16	2.41	61
1LB43-12-12	3/4	1-1/16x12	3/4	4.08	104	1-1/8	2.64	67



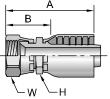
Fittings are stocked less locknut (part no. WLN). Locknuts are manufactured by the Parker Tube Fittings Division and must be ordered separately.

#### 10643

#### Female JIC 37° - Swivel

ISO 12151-5

# Part		······································	Hose I.D.		<b>4</b>	H	$\bigvee_{\mathbf{W}}$	E	ī	Additional Material Stainless
Number	4/4	inch	inch	inch	mm	inch	inch	inch	mm	Steel (C)
10643-4-4	1/4	7/16x20	1/4	1.94	49	9/16	9/16	1.19	30	•
10643-4-6	1/4	7/16x20	3/8	2.20	56	11/16	9/16	1.17	30	
10643-5-4	5/16	1/2x20	1/4	2.03	52	9/16	5/8	1.28	33	
10643-5-5	5/16	1/2x20	5/16	2.08	53	11/16	5/8	1.33	34	
10643-5-6	5/16	1/2x20	3/8	2.26	57	11/16	5/8	1.23	31	
10643-6-4	3/8	9/16x18	1/4	2.05	52	9/16	11/16	1.30	33	
10643-6-5	3/8	9/16x18	5/16	2.10	53	11/16	11/16	1.35	34	
10643-6-6	3/8	9/16x18	3/8	2.29	58	11/16	11/16	1.26	32	•
10643-6-8	3/8	9/16x18	1/2	2.51	64	13/16	11/16	1.25	32	
10643-8-6	1/2	3/4x16	3/8	2.49	63	11/16	7/8	1.46	37	•
10643-8-8	1/2	3/4x16	1/2	2.77	67	13/16	7/8	1.51	35	•
10643-8-10	1/2	3/4x16	5/8	2.82	72	15/16	7/8	1.38	35	
10643-8-12	1/2	3/4x16	3/4	2.83	72	1-1/16	7/8	1.39	35	
10643-10-6	5/8	7/8x14	3/8	2.51	64	7/8	1	1.48	38	
10643-10-8	5/8	7/8x14	1/2	2.85	72	7/8	1	1.59	40	
10643-10-10	5/8	7/8x14	5/8	2.93	74	15/16	1	1.49	38	•
10643-10-12	5/8	7/8x14	3/4	2.93	74	1-1/16	1	1.49	38	
10643-12-8	3/4	1-1/16x12	1/2	2.78	71	1-1/16	1-1/4	1.52	39	
10643-12-10	3/4	1-1/16x12	5/8	3.10	79	1-1/16	1-1/4	1.66	42	
10643-12-12	3/4	1-1/16x12	3/4	3.17	81	1-1/16	1-1/4	1.73	44	•
10643-12-16	3/4	1-1/16x12	1	3.29	84	1-3/8	1-1/4	1.67	42	
10643-14-12	7/8	1-3/16x12	3/4	3.18	81	1-1/4	1-3/8	1.74	44	
10643-16-12	1	1-5/16x12	3/4	3.31	84	1-1/4	1-1/2	1.87	47	
10643-16-16	1	1-5/16x12	1	3.62	92	1-3/8	1-1/2	2.00	51	•
10643-20-16	1-1/4	1-5/8x12	1	3.81	97	1-5/8	2	2.19	56	
10643-20-20	1-1/4	1-5/8x12	1-1/4	3.94	100	1-7/8	2	2.25	57	•
10643-24-24	1-1/2	1-7/8x12	1-1/2	3.84	98	2-1/8	2-1/4	2.47	63	
10643-32-32	2	2-1/2x12	2	4.73	120	2-1/2	2-7/8	2.95	75	



В

Stainless steel fittings must be assembled with Karrykrimp 2, PHastkrimp, Superkrimp or Parkrimp 2. See CrimpSource for more information.



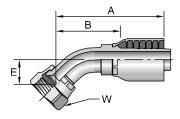
В

C

D

#### 13743

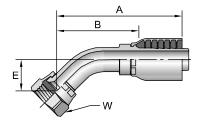
## Female JIC 37 $^{\circ}$ - Swivel - 45 $^{\circ}$ Elbow - Short Drop ISO 12151-5



#		······								
Part	Т	hread	Hose I.D.	Α	1	E		W		В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
13743-4-4	1/4	7/16x20	1/4	1.96	50	0.39	10	9/16	1.21	31
13743-5-4	5/16	1/2x20	1/4	2.19	56	0.39	10	5/8	1.44	37
13743-6-4	3/8	9/16x18	1/4	2.23	57	0.39	10	11/16	1.48	38
13743-6-6	3/8	9/16x18	3/8	2.39	61	0.39	10	11/16	1.39	35
13743-8-6	1/2	3/4x16	3/8	2.74	70	0.55	14	7/8	1.74	44
13743-8-8	1/2	3/4x16	1/2	2.83	72	0.55	14	7/8	1.57	40
13743-10-8	5/8	7/8x14	1/2	2.93	74	0.63	16	1	1.67	42
13743-10-10	5/8	7/8x14	5/8	3.17	81	0.63	16	1	1.73	44
13743-12-10	3/4	1-1/16x12	5/8	3.62	92	0.83	21	1-1/4	2.08	53
13743-12-12	3/4	1-1/16x12	3/4	3.63	92	0.78	20	1-1/4	2.19	56
13743-16-16	1	1-5/16x12	1	4.34	110	0.95	24	1-1/2	2.72	69
13743-20-20	1-1/4	1-5/8x12	1-1/4	4.59	117	1.19	30	2	2.82	72
13743-24-24	1-1/2	1-7/8x12	1-1/2	5.50	140	1.47	37	2-1/4	4.18	106

#### 1L743

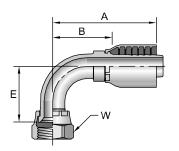
## Female JIC 37 $^{\circ}$ - Swivel - 45 $^{\circ}$ Elbow - Medium Drop ISO 12151-5



# Part	_	////// Γhread	Hose I.D.	Į.	<b>\</b>	E	<b>.</b>	<b>s</b>		В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1L743-6-6	3/8	9/16x18	3/8	2.66	62	0.59	15	11/16	1.63	41
1L743-8-8	1/2	3/4x16	1/2	3.17	80	0.72	18	7/8	1.91	49
1L743-12-12	3/4	1-1/16x12	3/4	4.23	107	1.06	27	1-1/4	2.79	71
1L743-16-16	1	1-5/16x12	1	4.51	115	1.07	27	1-1/2	2.89	73

13943 Female JIC 37° - Swivel - 90° Elbow - Short Drop ISO 12151-5

#		^^								
Part	Т	hread	Hose I.D.	1	4	E		W	ı	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
13943-4-4	1/4	7/16x20	1/4	1.78	45	0.83	21	9/16	1.03	26
13943-4-6	1/4	7/16x20	3/8	2.11	54	0.83	21	9/16	1.08	27
13943-5-4	5/16	1/2x20	1/4	1.88	48	0.83	21	5/8	1.13	29
13943-5-5	5/16	1/2x20	5/16	1.96	50	0.83	21	5/8	1.21	31
13943-6-4	3/8	9/16x18	1/4	2.12	54	0.85	22	11/16	1.37	35
13943-6-6	3/8	9/16x18	3/8	2.21	56	0.91	23	11/16	1.18	30
13943-6-8	3/8	9/16x18	1/2	2.51	64	0.85	22	11/16	1.25	32
13943-8-6	1/2	3/4x16	3/8	2.52	64	1.09	28	7/8	1.49	38
13943-8-8	1/2	3/4x16	1/2	2.62	67	1.14	29	7/8	1.36	35
13943-10-8	5/8	7/8x14	1/2	2.74	70	1.26	32	1	1.48	38
13943-10-10	5/8	7/8x14	5/8	2.97	75	1.26	32	1	1.69	39
13943-12-8	3/4	1-1/16x12	1/2	3.25	83	1.83	46	1-1/4	1.99	51
13943-12-10	3/4	1-1/16x12	5/8	3.07	78	1.89	48	1-1/4	1.63	41
13943-12-12	3/4	1-1/16x12	3/4	3.49	89	1.89	48	1-1/4	2.05	52
13943-16-12	1	1-5/16x12	3/4	3.49	89	2.00	51	1-1/2	2.05	52
13943-16-16	1	1-5/16x12	1	4.28	109	2.20	56	1-1/2	2.66	68
13943-20-20	1-1/4	1-5/8x12	1-1/4	4.43	113	2.59	66	2	2.74	70
13943-24-24	1-1/2	1-7/8x12	1-1/2	5.50	140	3.81	81	2-1/4	4.13	105
13943-32-32	2	2-1/2x12	2	6.75	171,4	4.62	117	2-7/8	4.97	126,2

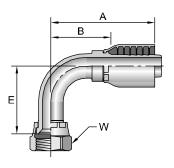


#### 1L943

## Female JIC 37 $^{\circ}$ - Swivel - 90 $^{\circ}$ Elbow - Medium Drop ISO 12151-5

# Part			Part Th		Hose I.D.		١	E		$\bigcirc$		В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm		
1L943-4-4	1/4	7/16x20	1/4	1.84	47	1.26	32	9/16	1.09	28		
1L943-6-4	3/8	9/16x18	1/4	2.12	54	1.50	38	11/16	1.37	35		
1L943-6-6	3/8	9/16x18	3/8	2.29	58	1.50	38	11/16	1.26	32		
1L943-8-6	1/2	3/4x16	3/8	2.51	64	1.61	41	7/8	1.48	38		
1L943-8-8	1/2	3/4x16	1/2	2.64	67	1.61	41	7/8	1.38	35		
1L943-10-8	5/8	7/8x14	1/2	3.25	83	1.75	44	1	1.99	51		
1L943-12-12	3/4	1-1/16x12	3/4	3.49	89	2.28	58	1-1/4	2.05	52		
1L943-16-16	1	1-5/16x12	1	4.44	113	2.50	64	1-1/2	2.82	72		

B-33



A

В

5

D

Ξ

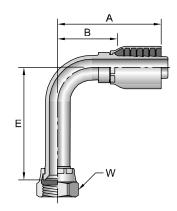


В

D

#### 14143

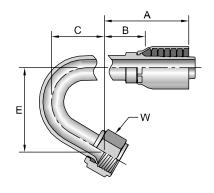
Female JIC 37° - Swivel - 90° Elbow - Long Drop ISO 12151-5



#		·····								
Part	Т	hread	Hose I.D.	<i></i>	4	E	=	W		3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
14143-4-4	1/4	7/16x20	1/4	1.96	50	1.81	46	9/16	1.21	31
14143-5-4	5/16	1/2x20	1/4	1.93	49	1.80	46	5/8	1.18	30
14143-6-6	3/8	9/16x18	3/8	2.27	58	2.18	55	11/16	1.27	32
14143-8-6	1/2	3/4x16	3/8	2.56	65	2.43	62	7/8	1.56	40
14143-8-8	1/2	3/4x16	1/2	2.62	67	2.52	64	7/8	1.36	35
14143-10-8	5/8	7/8x14	1/2	2.78	71	2.58	66	1	1.52	39
14143-10-10	5/8	7/8x14	5/8	3.16	80	2.58	66	1	1.75	44
14143-12-12	3/4	1-1/16x12	3/4	3.49	89	3.74	95	1-1/4	2.05	52
14143-14-12	7/8	1-3/16x12	3/4	3.38	86	3.93	100	1-3/8	1.95	50
14143-16-16	1	1-5/16x12	1	3.90	99	4.32	110	1-1/2	2.31	59
14143-20-20	1-1/4	1-5/8x12	1-1/4	4.39	112	5.28	134	2	2.73	69

#### 14V43

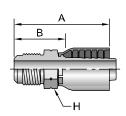
Female JIC 37° - Swivel - 150° Elbow ISO 12151-5



#		·····										
Part	Part Thread		Hose I.D.	Α	<b>\</b>	(	Ç	E		W	Į.	В
Number	inch		inch	inch	mm	inch	mm	inch	mm	inch	inch	mm
14V43-6-4	3/8	9/16x18	1/4	2.89	73	1.36	11/16	1.97	50	11/16	2.16	55

#### 10443

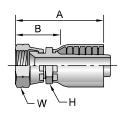
Male SAE 45° - Rigid



# Part	Part Thread		Hose I.D.	,	Ą	H	ļ	В
Number		inch	inch	inch	mm	inch	inch	mm
10443-6-6	3/8	5/8x18	3/8	2.21	56	3/4	1.21	31
10443-12-12	3/4 1-1/16x14		3/4	3.20	81	1-1/8	1.77	45

#### 10843

Female SAE 45° - Swivel



# Part		······································	Hose I.D.	,	<b>\</b>	H	$\bigcirc$		В
Number		inch	inch	inch	mm	inch	inch	inch	mm
10843-6-4	3/8	5/8x18	1/4	2.11	54	3/4	3/4	1.36	35
10843-6-6	3/8	5/8x18	3/8	2.38	60	3/4	3/4	1.35	34
10843-12-12	3/4	1-1/16x14	3/4	3.17	81	1-1/16	1-1/4	1.73	44

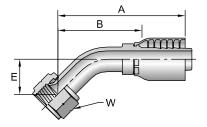
Notch on nut signifies SAE 45  $\!^{\circ}$  flare.



#### 17743

#### Female SAE 45° - Swivel - 45° Elbow

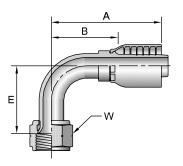
# Part		······································	Hose I.D.	4	<b>.</b>	E	<u> </u>	$\bigcirc$	ļ	В
Number	i	inch	inch	inch	mm	inch	mm	inch	inch	mm
17743-4-6	1/4	7/16x20	3/8	2.28	58	0.33	8	9/16	1.25	32



#### 17943

#### Female SAE 45° - Swivel - 90° Elbow

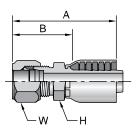
#		····								,
Part	Th	read	Hose I.D.		•	L L		W		В
Number	it	nch	inch	inch	mm	inch	mm	inch	inch	mm
17943-6-6	3/8	5/8x18	3/8	2.13	54	0.85	22	3/4	1.13	29



#### 11143

## Male Ferulok Flareless - Rigid (24° Cone with Nut and Ferrule)

# Part		/////\\	Hose I.D.		A H		$\bigcirc$		В
Number		inch	inch	inch	mm	inch	inch	inch	mm
11143-4-4	1/4	7/16x20	1/4	2.13	54	9/16	9/16	1.40	36
11143-4-6	1/4	7/16x20	3/8	2.44	62	3/4	9/16	1.44	37
11143-5-4	5/16	1/2x20	1/4	2.13	54	9/16	5/8	1.40	36
11143-5-6	5/16	1/2x20	3/8	2.44	62	3/4	5/8	1.44	37
11143-6-6	3/8	9/16x18	3/8	2.50	64	3/4	11/16	1.50	38
11143-8-8	1/2	3/4x16	1/2	2.93	74	7/8	7/8	1.68	43
11143-10-8	5/8	7/8x14	1/2	3.07	78	15/16	1	1.82	46
11143-12-12	3/4	1-1/16x12	3/4	3.39	86	1-1/8	1-1/4	1.96	50
11143-16-16	1	1-5/16x12	1	3.80	97	1-3/8	1-1/2	2.18	55



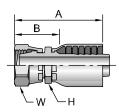
The Parker Ferrul-Fix fitting makes it possible to salvage the bent tube section from a hose assembly for quick, easy on-the-job repairs. For additional information see Ferrule-Fix installation instructions in the Technical Section.

В

Notch on nut signifies SAE 45° flare.

#### 11243

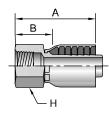
Female Ferulok Flareless - Swivel - (24° Cone)



#			•						
Part	Thread		Hose I.D.	À		Н	W	E	3
Number	inch		inch	inch	mm	inch	inch	inch	mm
11243-6-6	3/8	9/16x18	3/8	2.51	64	11/16	11/16	1.48	38
11243-8-6	1/2	3/4x16	3/8	2.67	68	7/8	7/8	1.64	42
11243-8-8	1/2	3/4x16	1/2	2.89	73	7/8	7/8	1.63	41

#### 1GJ43

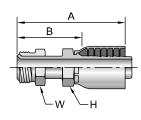
Female Grease Connection - SPL - PTF Taper Thread Rigid - 1/2 x 27



#							
Part	Thread	Hose I.D.	A		Н	l l	В
Number	inch	inch	inch	mm	inch	inch	mm
1GJ43-4-4	1/2x27	1/4	1.79	45	3/4	1.04	26
1GJ43-4-6	1/2x27	3/8	2.05	52	3/4	1.02	26

#### 12843

Male Inverted SAE 45° - Swivel



# Part			Hose I.D.	4	<b>1</b>	H	$\bigcirc$		В
Number	in	ch	inch	inch	mm	inch	inch	inch	mm
12843-4-4	1/4	7/16x24	1/4	2.32	59	9/16	7/16	1.57	40
12843-4-6	1/4	7/16x24	3/8	2.65	67	11/16	7/16	1.62	41
12843-5-4	5/16	1/2x20	1/4	2.60	66	9/16	1/2	1.85	47
12843-5-6	5/16	1/2x20	3/8	2.74	70	11/16	1/2	1.71	43
12843-6-6	3/8	5/8x18	3/8	2.86	73	11/16	5/8	1.83	46
12843-7-6	7/16	11/16x18	3/8	2.95	75	11/16	11/16	1.92	49
12843-8-8	1/2	3/4x18	1/2	3.11	79	13/16	3/4	1.85	47
12843-10-10	5/8	7/8x18	5/8	3.55	90	3/4	7/8	2.11	54

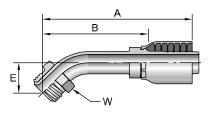
D

A

В

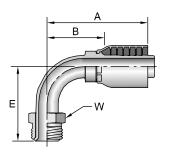
#### 16743 Male Inverted SAE 45° - Swivel - 45° Elbow

# Part		·············	Hose I.D.	4	4	E		$\bigcirc$	E	3
Number	i	inch	inch	inch	mm	inch	mm	inch	inch	mm
16743-4-4	1/4	7/16x24	1/4	2.09	53	0.63	16	7/16	1.34	34
16743-4-6	1/4	7/16x24	3/8	2.42	61	0.63	16	7/16	1.39	35
16743-5-4	5/16	1/2x20	1/4	2.34	59	0.70	18	1/2	1.59	40
16743-5-6	5/16	1/2x20	3/8	2.48	63	0.70	18	1/2	1.45	37
16743-6-6	3/8	5/8x18	3/8	2.93	74	0.94	24	5/8	1.90	48
16743-8-8	1/2	3/4x18	1/2	3.23	82	1.09	28	3/4	1.97	50



#### 16943 Male Inverted SAE 45° - Swivel - 90° Elbow

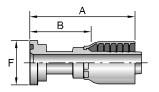
# Part		vvvvv hread	Hose I.D.	Į.	<b>A</b>	E	<b>.</b>	$\left  \bigcirc_{\mathbf{w}} \right $	ļ	В
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
16943-4-4	1/4	7/16x24	1/4	2.16	55	1.56	40	7/16	1.41	36
16943-4-6	1/4	7/16x24	3/8	2.49	63	1.56	40	7/16	1.46	37
16943-5-4	5/16	1/2x20	1/4	2.41	61	1.65	42	1/2	1.66	42
16943-5-6	5/16	1/2x20	3/8	2.59	66	1.65	42	1/2	1.56	40
16943-6-6	3/8	5/8x18	3/8	2.61	66	1.69	43	5/8	1.58	40
16943-7-6	7/16	11/16x18	3/8	2.53	64	1.72	44	11/16	1.50	38
16943-8-8	1/2	3/4x18	1/2	2.81	71	1.88	48	3/4	1.55	39



#### 11543 **SAE Code 61 Flange Head** ISO 12151-3 - S - L

#							
Part	Flange	Hose I.D.	A	<b>\</b>	F	В	3
Number	inch	inch	inch	mm	inch	inch	mm
11543-8-8	1/2	1/2	3.48	88	1-3/16	2.22	56
11543-10-10	5/8	5/8	3.78	96,0	1-11/32	2.34	59,4
11543-12-8	3/4	1/2	2.46	62,5	1-1/2	1.20	30,5
11543-12-12	3/4	3/4	3.54	90	1-1/2	2.42	61,5
11543-16-12	1	3/4	2.74	70	1-3/4	1.30	33
11543-16-16	1	1	4.25	108	1-3/4	2.63	67
11543-20-16	1-1/4	1	3.19	81	2	1.57	40
11543-20-20	1-1/4	1-1/4	4.70	119	2	3.01	76
11543-24-20	1-1/2	1-1/4	3.22	82	2-3/8	1.53	39
11543-24-24	1-1/2	1-1/2	4.59	117	2-3/8	3.22	82
11543-24-32	1-1/2	2	5.65	144	2-7/8	3.87	98
11543-32-20	2	1-1/4	4.29	109	2-13/16	2.60	66
11543-32-24	2	1-1/2	3.14	80	2-7/8	1.77	45
11543-32-32	2	2	4.99	127	2-13/16	3.21	82

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See Accessories Section for O-Rings and Flange Kits.



В

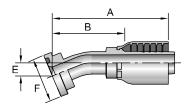
В

D

#### 11643

#### SAE Code 61 Flange Head - 22-1/2° Elbow

ISO 12151-3 - E22M - L

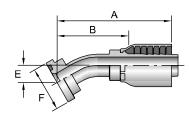


# Part	Flange	Hose I.D.	A	<b>1</b>	E		Ø F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11643-12-12	3/4	3/4	3.90	99	0.44	11	1-1/2	2.47	63
11643-16-12	1	3/4	3.89	99	0.44	11	1-3/4	2.46	62
11643-16-16	1	1 1	4.25	108	0.44	11	1-3/4	2.66	68
11643-20-16	1-1/4	1	4.25	108	0.44	11	2	2.66	68
11643-20-20	1-1/4	1-1/4	4.65	118	0.50	13	2	3.00	76
11643-24-20	1-1/2	1-1/4	4.66	118	0.51	13	2-3/8	3.01	76

#### 12643

#### SAE Code 61 Flange Head - 30° Elbow

ISO 12151-3 - E30S - L (1 Piece: ISO 12151-3 - E30M - L)



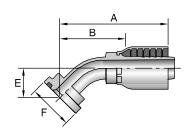
# Part	Flange	Hose I.D.	A	١	E		Ø F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
12643-12-12	3/4	3/4	3.90	99	0.59	15	1-1/2	2.46	62
12643-16-16	1	1	4.38	111	0.62	16	1-3/4	2.76	70
12643-20-16	1-1/4	1	4.38	111	0.62	16	2	2.76	70
12643-20-20	1-1/4	1-1/4	4.39	112	0.72	18	2	2.70	69

#### 11743

#### SAE Code 61 Flange Head - 45° Elbow

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ISO 12151-3 - E45S - L (1 Piece: ISO 12151-3 - E45M - L)



#			A						
Part	Flange	Hose I.D.	ļ ,	À	E		F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11743-8-8	1/2	1/2	3.28	83	0.77	20	1-3/16	2.02	51
11743-10-10	5/8	5/8	4.63	118	0.94	24	1-11/32	3.19	81
11743-12-8	3/4	1/2	3.32	84	0.81	21	1-1/2	2.06	52
11743-12-12	3/4	3/4	3.85	98	1.02	26	1-1/2	2.41	61
11743-16-12	1	3/4	3.85	98	1.02	26	1-3/4	2.41	61
11743-16-16	1	1	4.76	121	1.26	32	1-3/4	3.14	80
11743-20-16	1-1/4	1	4.76	121	1.26	32	2	3.14	80
11743-20-20	1-1/4	1-1/4	5.61	142	1.50	38	2	3.92	100
11743-20-24	1-1/4	1-1/2	5.45	138	1.38	35	2	4.08	104
11743-24-20	1-1/2	1-1/4	5.55	141	1.496	38	2-3/8	3.86	98
11743-24-24	1-1/2	1-1/2	5.50	140	1.43	36	2-3/8	4.13	105
11743-32-24	2	1-1/2	5.49	139	1.42	36	2-13/16	4.12	105
11743-32-32	2	2	7.23	184	1.98	50	2-13/16	5.45	138

See Accessories Section for O-Rings and Flange Kits.

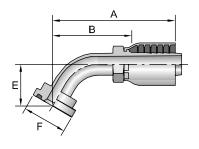


#### 12743

#### SAE Code 61 Flange Head - 60° Elbow

ISO 12151-3 - E60S - L (1 Piece: ISO 12151-3 - E60M - L)

# Part	Flange	Hose I.D.	A E		Ø F	В			
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
12743-12-12	3/4	3/4	4.16	105	1.43	36	1-1/2	2.72	69
12743-16-12	1	3/4	4.15	105	1.39	35	1-3/4	2.71	69
12743-16-16	1	1	4.45	113	1.50	38	1-3/4	2.83	72
12743-20-20	1-1/4	1-1/4	5.09	129	1.69	43	2	3.40	86

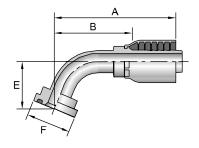


#### 11843

#### SAE Code 61 Flange Head - 67-1/2° Elbow

ISO 12151-3 - E67S - L (1 Piece: ISO 12151-3 - E67M - L)

# Part	Flange	Hose I.D.	A	١	E			ļ	В
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11843-12-12	3/4	3/4	4.09	104	1.60	41	1-1/2	2.66	68
11843-16-16	1	1	4.66	118	1.75	44	1-3/4	3.07	78
11843-20-20	1-1/4	1-1/4	5.04	128	1.94	49	2	3.37	86



В

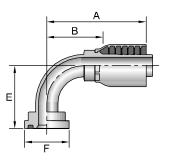
#### 11943

#### SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3 - E90S - L (1 Piece: ISO 12151-3 - E90M - L)

#							Ø		
Part	Flange	Hose I.D.	Δ	1	E	=	F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11943-8-8	1/2	1/2	2.93	74	1.60	41	1-3/16	1.67	42
11943-10-10	5/8	5/8	3.71	94	2.10	53	1-11/32	2.27	58
11943-12-8	3/4	1/2	2.93	74	1.66	42	1-1/2	1.67	42
11943-12-10	3/4	5/8	3.71	94	2.10	53	1-1/2	2.27	58
11943-12-12	3/4	3/4	3.51	89	2.28	58	1-1/2	2.07	53
11943-16-8	1	1/2	2.91	74	2.03	52	1-3/4	1.65	42
11943-16-12	1	3/4	3.59	91	2.24	57	1-3/4	2.15	55
11943-16-16	1	1	4.28	109	2.78	71	1-3/4	2.66	68
11943-20-16	1-1/4	1	4.25	108	2.76	70	2	2.63	67
11943-20-20	1-1/4	1-1/4	5.12	130	3.54	90	2	3.43	87
11943-24-20	1-1/2	1-1/4	5.09	129	3.54	90	2-3/8	3.40	86
11943-20-24	1-1/4	1-1/2	4.19	106	2.49	63	2	2.82	72
11943-24-24	1-1/2	1-1/2	5.50	140	3.11	79	2-3/8	4.13	105
11943-32-24	2	1-1/2	5.48	139	3.10	79	2-13/16	4.11	104
11943-32-32	2	2	6.75	171	4.48	114	2-13/16	4.97	126

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See Accessories Section for O-Rings and Flange Kits.



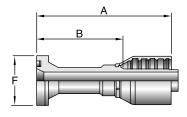
В

D

#### 16A43

#### **SAE Code 62 Flange Head**

ISO 12151-3 - S - S

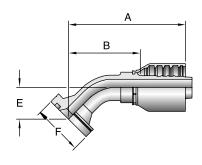


# Part	Flange	Hose I.D.			E	3	Ø
Number	inch	inch	inch	mm	inch	mm	inch
16A43-12-12	3/4	3/4	4.12	104,6	2.68	68,0	1-5/8
16A43-16-12	1	3/4	3.10	78,7	1.66	42,2	1-7/8
16A43-16-16	1	1	4.81	122,2	3.19	81,0	1-7/8
16A43-20-16	1-1/4	1	3.61	91,7	1.99	50,5	2-1/8
16A43-20-20	1-1/4	1-1/4	5.01	127,3	3.32	84,3	2-1/8

#### 16F43

#### SAE Code 62 Flange Head - 45° Elbow

ISO 12151-3 - E45S - S (1 Piece 12151-3-E45M-S)



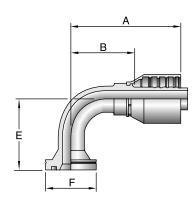
# Part	Flange	Hose I.D.	,	4	E	3	F	E	<u> </u>
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16F43-12-12	3/4	3/4	3.82	97,0	2.38	60,5	1-5/8	1.02	25,9
16F43-16-16	1	1	4.66	118,4	3.04	77,2	1-7/8	1.26	32,0
16F43-20-16	1-1/4	1	4.57	116,1	2.95	74,9	2-1/8	1.06	26,9

#### 16N43

#### SAE Code 62 Flange Head - 90° Elbow

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ISO 12151-3 - E90S - S (1 Piece 12151-3-E90M-S)



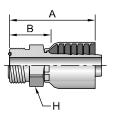
# Part	Flange	Hose I.D.	,	,	Е	3	<b>J</b>	E	<b>.</b>
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16N43-12-12	3/4	3/4	3.51	89,2	2.07	52,6	1-5/8	2.28	57,9
16N43-16-12	1	3/4	3.49	88,6	2.05	52,1	1-7/8	2.28	57,9
16N43-16-16	1	1	4.28	108,7	2.66	67,6	1-7/8	2.76	70,1
16N43-20-16	1-1/4	1	4.28	108,7	2.66	67,6	2-1/8	2.76	70,1
16N43-20-20	1-1/4	1-1/4	5.09	129,3	3.40	86,4	2-1/8	3.54	90,0

#### 1J043

#### Male Seal-Lok® - Rigid - (with O-Ring)

ISO 12151-1 - S

#		·····						
Part	Т	hread	Hose I.D.		A	H		В
Number		inch	inch	inch	mm	inch	inch	mm
1J043-4-4	1/4	9/16x18	1/4	1.73	44	5/8	0.98	25
1J043-6-6	3/8	11/16x16	3/8	2.08	53	3/4	1.05	27
1J043-8-6	1/2	13/16x16	3/8	2.20	56	7/8	1.17	30
1J043-8-8	1/2	13/16x16	1/2	2.42	61	7/8	1.17	30
1J043-10-8	5/8	1x14	1/2	2.61	66	1-1/16	1.35	34
1J043-10-10	5/8	1x14	5/8	2.73	69	1-1/16	1.34	34
1J043-12-10	3/4	1-3/16x12	5/8	2.89	73	1-1/4	1.45	37
1J043-12-12	3/4	1-3/16x12	3/4	2.90	74	1-1/4	1.46	37
1J043-16-12	1	1-7/16x12	3/4	2.93	74	1-1/2	1.49	38
1J043-16-16	1	1-7/16x12	1	3.29	84	1-1/2	1.67	42
1J043-20-20	1-1/4	1-11/16x12	1-1/4	3.32	84	1-3/4	1.63	41

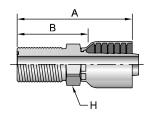


#### 1JB43

#### Male Seal-Lok® - Bulkhead without Locknut - (with O-Ring)

End Connection per ISO 8434-3-BH

# Part	Thread		Hose I.D.	,	Ą	H	E	3
Number	1		inch	inch	mm	inch	inch	mm
1JB43-4-4	1/4	9/16x18	1/4	2.58	66	5/8	1.83	46
1JB43-6-6	3/8	11/16x16	3/8	2.98	76	3/4	1.95	50
1JB43-8-6	1/2	13/16x16	3/8	3.41	87	7/8	2.38	60
1JB43-8-8	1/2	13/16x16	1/2	3.36	85	7/8	2.10	53
1JB43-10-8	5/8	1x14	1/2	3.58	91	1-1/16	2.32	59
1JB43-10-10	5/8	1x14	5/8	3.77	96	1-1/16	2.33	59
1JB43-12-12	3/4	1-3/16x12	3/4	3.87	98	1-1/4	2.43	62



Fittings are stocked less locknut (part no. WLNL). Locknuts are manufactured by the Parker Tube Fittings Division and must be ordered separately.

B-41

See Accessories Section for O-Rings and Flange Kits.



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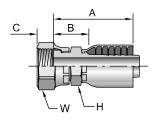
В



#### 1JC43

#### Female Seal-Lok® - Swivel - Short

ISO 12151-1 - SWSA



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В

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# Part	_	······································	Hose I.D.		$\overline{}$			н	w	В		Additional Material Stainless
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	mm	Steel (C)
1JC43-4-4	1/4	9/16x18	1/4	1.63	41	0.32	8	9/16	11/16	0.88	22	•
1JC43-4-4-SM	1/4	9/16x18	1/4	1.63	41	0.32	8	17 mm	17 mm	0.88	22	
1JC43-4-6	1/4	9/16x18	3/8	1.90	48	0.32	8	11/16	11/16	0.87	22	
1JC43-6-4	3/8	11/16x16	1/4	1.67	42	0.32	8	11/16	13/16	0.92	23	
1JC43-6-4-SM	3/8	11/16x16	1/4	1.67	42	0.32	8	17 mm	22 mm	0.92	23	
1JC43-6-5	3/8	11/16x16	5/16	1.65	42	0.32	8	11/16	13/16	0.90	23	
1JC43-6-6	3/8	11/16x16	3/8	1.94	49	0.32	8	11/16	13/16	0.91	23	•
1JC43-6-6-SM	3/8	11/16x16	3/8	1.94	49	0.32	8	19 mm	22 mm	0.91	23	
1JC43-8-6	1/2	13/16x16	3/8	2.00	51	0.43	11	13/16	15/16	0.97	25	
1JC43-8-6-SM	1/2	13/16x16	3/8	2.00	51	0.43	11	19 mm	24 mm	0.97	25	
1JC43-8-8	1/2	13/16x16	1/2	2.22	56	0.43	11	13/16	15/16	0.96	24	•
1JC43-8-8-SM	1/2	13/16x16	1/2	2.22	56	0.43	11	22 mm	24 mm	0.96	24	
1JC43-10-8	5/8	1x14	1/2	2.30	58	0.53	13	15/16	1-1/8	1.04	26	
1JC43-10-8-SM	5/8	1x14	1/2	2.30	58	0.53	13	24 mm	30 mm	1.04	26	
1JC43-10-10	5/8	1x14	5/8	2.49	63	0.53	13	15/16	1-1/8	1.05	27	•
1JC43-10-10-SM	5/8	1x14	5/8	2.49	63	0.53	13	24 mm	30 mm	1.05	27	
1JC43-12-8	3/4	1-3/16x12	1/2	2.48	63	0.57	14	1-1/8	1-3/8	1.22	31	
1JC43-12-10	3/4	1-3/16x12	5/8	2.67	68	0.57	14	1-1/8	1-3/8	1.23	31	
1JC43-12-10-SM	3/4	1-3/16x12	5/8	2.67	68	0.57	14	32 mm	36 mm	1.23	31	
1JC43-12-12	3/4	1-3/16x12	3/4	2.68	68	0.57	14	1-1/8	1-3/8	1.24	31	•
1JC43-12-12-SM	3/4	1-3/16x12	3/4	2.68	68	0.57	14	32 mm	36 mm	1.24	31	
1JC43-12-16	3/4	1-3/16x12	1	2.99	76	0.57	14	1-5/16	1-3/8	1.37	35	
1JC43-16-12	1	1-7/16x12	3/4	2.83	72	0.58	15	1-3/8	1-5/8	1.39	35	
1JC43-16-16	1	1-7/16x12	1	3.14	80	0.58	15	1-3/8	1-5/8	1.52	39	•
1JC43-20-20	1-1/4	1-11/16x12	1-1/4	3.27	83	0.59	15	1-7/8	1-7/8	1.58	40	•

When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance. Stainless steel fittings must be assembled with Karrykrimp 2, PHastkrimp, Superkrimp or Parkrimp 2. See CrimpSource for more information.

See Accessories Section for O-Rings.

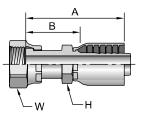


# **1JS43**

# Female Seal-Lok® - Swivel - Long

ISO 12151-1 SWSB

#		·····							
Part	Т	hread	Hose I.D.		4	H	W	E	3
Number		inch	inch	inch	mm	inch	inch	inch	mm
1JS43-4-4	1/4	9/16x18	1/4	2.07	53	9/16	11/16	1.32	34
1JS43-4-6	1/4	9/16x18	3/8	2.21	56	11/16	11/16	1.18	30
1JS43-6-4	3/8	11/16x16	1/4	2.14	54	9/16	13/16	1.39	35
1JS43-6-6	3/8	11/16x16	3/8	2.28	58	11/16	13/16	1.25	32
1JS43-6-8	3/8	11/16x16	1/2	2.50	64	13/16	13/16	1.24	31
1JS43-8-4	1/2	13/16x16	1/4	2.26	57	11/16	15/16	1.51	38
1JS43-8-6	1/2	13/16x16	3/8	2.53	64	11/16	15/16	1.50	38
1JS43-8-8	1/2	13/16x16	1/2	2.65	67	13/16	15/16	1.39	35
1JS43-8-10	1/2	13/16x16	5/8	2.82	72	15/16	15/16	1.38	35
1JS43-10-6	5/8	1x14	3/8	2.63	67	11/16	1-1/8	1.62	41
1JS43-10-8	5/8	1x14	1/2	2.89	73	13/16	1-1/8	1.63	41
1JS43-10-10	5/8	1x14	5/8	3.07	78	15/16	1-1/8	1.66	42
1JS43-10-12	5/8	1x14	3/4	3.08	78	1-1/16	1-1/8	1.64	42
1JS43-12-8	3/4	1-3/16x12	1/2	2.90	74	15/16	1-3/8	1.64	42
1JS43-12-10	3/4	1-3/16x12	5/8	3.19	81	1-1/8	1-3/8	1.75	44
1JS43-12-12	3/4	1-3/16x12	3/4	3.31	84	1-1/8	1-3/8	1.87	47
1JS43-12-16	3/4	1-3/16x12	1	3.53	90	1-5/16	1-3/8	1.91	49
1JS43-16-12	1	1-7/16x12	3/4	3.37	86	1-3/8	1-5/8	1.93	49
1JS43-16-16	1	1-7/16x12	1	3.62	92	1-3/8	1-5/8	2.00	51
1JS43-16-20	1	1-7/16x12	1-1/4	3.77	96	1-3/4	1-5/8	2.08	53
1JS43-20-16	1-1/4	1-11/16x12	1	3.64	92	1-3/8	1-7/8	2.02	51
1JS43-20-20	1-1/4	1-11/16x12	1-1/4	3.77	96	1-3/4	1-7/8	2.15	53
1JS43-24-20	1-1/2	2x12	1-1/4	3.88	99	1-3/4	2-1/4	2.23	57
1JS43-24-24	1-1/2	2x12	1-1/2	3.91	99	1-7/8	2-1/4	2.26	65



В

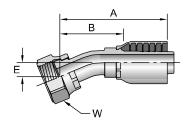
C

# **1J643**

#### Female Seal-Lok® - Swivel - 22-1/2° Elbow

End Connection per ISO 8434-3-SWE

# Part		Hose I.D.		Ą	E	<b>=</b>	$\bigcirc$	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1J643-8-8	1/2 13/16x16	1/2	3.06	78	0.39	10	15/16	1.80	46



F

See Accessories Section for O-Rings.



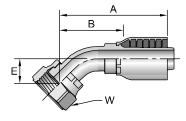
В

D

# 1**J**743

# Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1 - SWE45



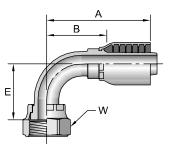
#		······								
Part	-	Thread	Hose I.D.		4	E		w	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J743-4-4	1/4	9/16x18	1/4	1.97	50	0.39	10	11/16	1.22	31
1J743-4-4-SM	1/4	9/16x18	1/4	1.97	50	0.39	10	17 mm	1.22	31
1J743-4-6	1/4	9/16x18	3/8	2.23	57	0.39	10	11/16	1.20	30
1J743-6-4	3/8	11/16x16	1/4	2.08	53	0.43	11	13/16	1.33	34
1J743-6-4-SM	3/8	11/16x16	1/4	2.08	53	0.43	11	22 mm	1.33	34
1J743-6-5	3/8	11/16x16	5/16	2.37	60	0.43	11	13/16	1.62	41
1J743-6-6	3/8	11/16x16	3/8	2.34	59	0.43	11	13/16	1.31	33
1J743-6-8	3/8	11/16x16	1/2	2.66	68	0.43	11	13/16	1.41	36
1J743-8-4	1/2	13/16x16	1/4	2.56	65	0.59	15	15/16	1.81	46
1J743-8-6	1/2	13/16x16	3/8	2.53	64	0.59	15	15/16	1.50	38
1J743-8-6-SM	1/2	13/16x16	3/8	2.53	64	0.59	15	24 mm	1.50	38
1J743-8-8	1/2	13/16x16	1/2	2.83	72	0.59	15	15/16	1.57	40
1J743-8-8-SM	1/2	13/16x16	1/2	2.83	72	0.59	15	24 mm	1.57	40
1J743-8-10	1/2	13/16x16	5/8	3.09	78	0.59	15	15/16	1.65	42
1J743-10-8	5/8	1x14	1/2	2.93	74	0.63	16	1-1/8	1.67	42
1J743-10-10	5/8	1x14	5/8	3.17	81	0.63	16	1-1/8	1.73	44
1J743-10-10-SM	5/8	1x14	5/8	3.17	81	0.63	16	30 mm	1.73	44
1J743-10-12	5/8	1x14	3/4	3.36	85	0.65	16	1-1/8	1.93	49
1J743-12-8	3/4	1-3/16x12	1/2	3.57	91	0.82	21	1-3/8	2.31	59
1J743-12-10	3/4	1-3/16x12	5/8	3.62	92	0.83	21	1-3/8	2.18	55
1J743-12-12	3/4	1-3/16x12	3/4	3.63	92	0.83	21	1-3/8	2.19	56
1J743-12-12-SM	3/4	1-3/16x12	3/4	3.63	92	0.83	21	36 mm	2.19	56
1J743-12-16	3/4	1-3/16x12	1	3.67	93	0.81	21	1-3/8	2.05	52
1J743-16-12	1	1-7/16x12	3/4	4.02	102	0.94	24	1-5/8	2.59	66
1J743-16-16	1	1-7/16x12	1	4.38	111	0.94	24	1-5/8	2.76	70
1J743-16-20	1	1-7/16x12	1-1/4	4.59	117	0.94	24	1-5/8	2.94	75
1J743-20-16	1-1/4	1-11/16x12	1	4.52	115	1.00	25	1-7/8	2.93	74
1J743-20-20	1-1/4	1-11/16x12	1-1/4	4.78	121	1.00	25	1-7/8	3.09	78
1J743-24-20	1-1/2	2x12	1-1/4	4.99	127	1.11	28	2-1/4	3.30	84
1J743-24-24	1-1/2	2x12	1-1/2	4.70	119	1.07	27	2-1/4	3.33	85

See Accessories Section for O-Rings.



# **1J943**Female Seal-Lok® - Swivel - 90° Elbow - Short Drop ISO 12151-1 - SWES90

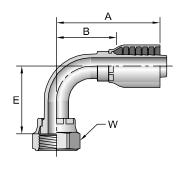
#		·····								
Part	1	hread	Hose I.D.	4	١	Е		w	В	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J943-4-4	1/4	9/16x18	1/4	1.78	45	0.83	21	11/16	1.03	26
1J943-4-6	1/4	9/16x18	3/8	2.05	52	0.83	21	11/16	1.02	26
1J943-6-4	3/8	11/16x16	1/4	1.93	49	0.91	23	13/16	1.18	30
1J943-6-5	3/8	11/16x16	5/16	2.25	57	0.90	23	13/16	1.50	38
1J943-6-6	3/8	11/16x16	3/8	2.21	56	0.91	23	13/16	1.18	30
1J943-6-8	3/8	11/16x16	1/2	2.53	64	0.90	23	13/16	1.27	32
1J943-8-4	1/2	13/16x16	1/4	2.28	58	1.15	29	15/16	1.53	39
1J943-8-6	1/2	13/16x16	3/8	2.28	58	1.14	29	15/16	1.25	32
1J943-8-8	1/2	13/16x16	1/2	2.59	66	1.14	29	15/16	1.33	34
1J943-8-8-SM	1/2	13/16x16	1/2	2.59	66	1.14	29	24 mm	1.33	34
1J943-8-10	1/2	13/16x16	5/8	2.81	71	1.15	29	15/16	1.37	35
1J943-10-8	5/8	1x14	1/2	2.74	70	1.26	32	1-1/8	1.48	38
1J943-10-10	5/8	1x14	5/8	2.97	75	1.26	32	1-1/8	1.53	39
1J943-10-10-SM	5/8	1x14	5/8	2.97	75	1.26	32	30 mm	1.53	39
1J943-10-12	5/8	1x14	3/4	3.08	78	1.27	32	1-1/8	1.64	42
1J943-12-8	3/4	1-3/16x12	1/2	3.21	82	1.89	48	1-3/8	1.95	50
1J943-12-10	3/4	1-3/16x12	5/8	3.49	89	1.89	48	1-3/8	2.05	52
1J943-12-12	3/4	1-3/16x12	3/4	3.06	78	1.89	48	1-3/8	2.05	52
1J943-12-16	3/4	1-3/16x12	1	3.88	99	1.89	48	1-3/8	2.26	57
1J943-16-12	1	1-7/16x12	3/4	4.06	103	2.22	56	1-5/8	2.62	67
1J943-16-16	1	1-7/16x12	1	4.31	109	2.20	56	1-5/8	2.69	68
1J943-16-20	1	1-7/16x12	1-1/4	4.56	116	2.21	56	1-5/8	2.87	73
1J943-20-16	1-1/4	1-11/16x12	1	4.64	118	2.54	65	1-7/8	3.02	80
1J943-20-20	1-1/4	1-11/16x12	1-1/4	4.88	124	2.51	64	1-7/8	3.19	81
1J943-24-20	1-1/2	2x12	1-1/4	4.97	126	2.70	69	2-1/4	3.32	84
1J943-24-24	1-1/2	2x12	1-1/2	5.50	140	2.68	68	2-1/4	4.13	105



# 1J543 Female Seal-Lok® - Swivel - 90° Elbow - Medium Drop ISO 12151-1 - SWEM90

#	~	·····								
Part	Т	hread	Hose I.D.	Ą		Ę		W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J543-4-4	1/4	9/16x18	1/4	2.07	53	1.26	32	11/16	1.32	34
1J543-6-4	3/8	11/16x16	1/4	2.12	54	1.50	38	13/16	1.37	35
1J543-6-6	3/8	11/16x16	3/8	2.40	61	1.50	38	13/16	1.37	35
1J543-6-6-SM	3/8	11/16x16	3/8	2.40	61	1.50	38	22 mm	1.37	35
1J543-8-6	1/2	13/16x16	3/8	2.48	63	1.61	41	15/16	1.45	37
1J543-8-8	1/2	13/16x16	1/2	2.59	66	1.61	41	15/16	1.33	34
1J543-10-8	5/8	1x14	1/2	2.74	70	1.85	47	1-1/8	1.48	38
1J543-10-10	5/8	1x14	5/8	2.97	75	1.85	47	1-1/8	1.53	39
1J543-10-12	5/8	1x14	3/4	3.12	79	1.88	48	1-1/8	1.68	43
1J543-12-12	3/4	1-3/16x12	3/4	3.49	89	2.28	58	1-3/8	2.05	52
1J543-16-16	1	1-7/16x12	1	4.86	123	2.78	71	1-5/8	3.27	83
1J543-20-20	1-1/4	1-11/16x12	1-1/4	4.89	124	3.09	78	1-7/8	3.20	81

B-45



See Accessories Section for O-Rings.



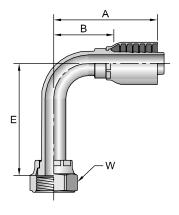
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# 1J143

Female Seal-Lok® - Swivel - 90° Elbow - Long Drop

ISO 12151-1 - SWEL90



#	_^	·····								
Part		Thread	Hose I.D.	l A	4	E		W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J143-4-4	1/4	9/16x18	1/4	2.02	51	1.81	46	11/16	1.27	32
1J143-6-4	3/8	11/16x16	1/4	2.26	57	2.13	54	13/16	1.51	38
1J143-6-6	3/8	11/16x16	3/8	2.39	61	2.13	54	13/16	1.36	35
1J143-8-6	1/2	13/16x16	3/8	2.45	62	2.52	64	15/16	1.42	36
1J143-8-8	1/2	13/16x16	1/2	2.59	66	2.52	64	15/16	1.33	34
1J143-8-8-SM	1/2	13/16x16	1/2	2.59	66	2.52	64	24 mm	1.33	34
1J143-10-8	5/8	1x14	1/2	2.74	70	2.79	71	1-1/8	1.48	38
1J143-10-10	5/8	1x14	5/8	2.97	75	2.76	70	1-1/8	1.53	39
1J143-10-12	5/8	1x14	3/4	3.15	80	2.76	70	1-1/8	1.73	44
1J143-12-12	3/4	1-3/16x12	3/4	3.49	89	3.78	96	1-3/8	2.05	52
1J143-16-16	1	1-7/16x12	1	4.28	109	4.49	114	1-5/8	2.66	68
1J143-20-20	1-1/4	1-11/16x12	1-1/4	4.84	123	5.09	129	1-7/8	3.15	80
1,1143-24-20	1-1/2	2x12	1-1/4	4.77	121	5.54	141	2-1/4	3.12	79

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A

D



# Universal Push-to-Connect (UPTC) Introduction

Traditionally, the fluid power industry has used threaded connectors to make a leak free connection. The speed of making connections is slow and the reliability of the connection is dependent on proper assembly procedures. Parker's UPTC connectors rely on a mechanical retaining mechanism (other than threads) to create a seal.

Tools are not required for assembly, and the reliability and speed of making connections with the UPTC design is greatly improved compared to traditional threaded connections.

#### **Features**

- Available in sizes 1/4", 3/8", 1/2", 5/8", and 3/4"
- Uses standard Seal-Lok adapters for a wide variety of configurations, as well as excellent field serviceability
- Meets or exceeds SAE 100R2 pressure ratings (see Fig. 2)
- Includes visual and tactile installation indicators
- Seal-aligning nipple eliminates hose twist during assembly
- No special tooling required for disassembly
- Uses elastomeric seals, including Parker's patented Trap-Seal

# **Design and Construction**

UPTC Seal-Lok consists of a base Seal-Lok ORFS fitting, a UPTC nut (including internal sealing and retaining elements), a dust O-Ring, and a UPTC hose assembly or rigid tube, as shown in figure 1. The base ORFS fitting is a highly reliable and widely available off-the-shelf standard SAE J1453 adapter. The sealing O-Ring is supported by a pressure energized anti-extrusion ring that prevents O-Ring extrusion and ensures tight sealing even under high pressure.

Once fully engaged, the retaining element is positively trapped between the male and UPTC nut. The dust O-Ring keeps contamination out and serves as a full engagement visual indicator. A clear tactile feeling at the end of the push indicates a proper connection. Once a proper connection is made, the dust O-Ring is covered by the UPTC nut. This also serves as a positive visual indicator of full engagement for easy inspection and quality control.

Once connected, the UPTC nut is permanently attached to the UPTC hose end similar to a traditional swivel nut. To disconnect, just use a wrench to unscrew the UPTC nut from the base adapter. Re-connect is possible by tightening the UPTC nut back to the base adapter, if the connection is not damaged. If the hose or tube is damaged, they can be replaced by installing a new UPTC assembly or a readily available standard Seal-Lok ORFS hose or tube assembly.

B-47



Fig. 1a

Fig. 1b

Fig. 1a — This is a Tube Fittings
Division part. Information can
be found in Catalog 4300.

#### **UPTC Pressure Ratings**

Size	Pressure (psi)	Pressure (Bar)
-4	5800	400
-6	5000	345
-8	4250	293
-10	4000	276
-12	3125	216



В





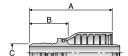


В

C

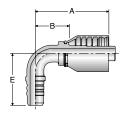
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# 1EN43 UPTC Male



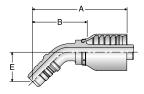
Part	Hose End Size	A	В	C Nominal Connection Size	
Number	inch	inch	inch	inch	mm
1EN43-8-4	1/4	1.83	1.08	0.31	8
1EN43-12-6	3/8	2.15	1.12	0.47	12
1EN43-15-8	1/2	2.51	1.25	0.59	15
1EN43-18-10	5/8	2.78	1.34	0.71	18
1EN43-22-12	3/4	2.81	1.37	0.87	22

# **1ET43**UPTC Male 90° Elbow



Part	Hose End Size	A	В	C Nom Conne Siz	E	
Number	inch	inch	inch	inch	mm	inch
1ET43-8-4	1/4	1.78	1.03	0.31	8	1.54
1ET43-12-6	3/8	2.21	1.18	0.47	12	1.54
1ET43-15-8	1/2	2.51	1.25	0.59	15	1.77
1ET43-18-10	5/8	2.97	1.53	0.71	18	2.24
1ET43-22-12	3/4	3.43	1.99	0.87	22	2.50

# **1EU43**UPTC Male 45° Elbow



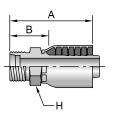
Part	Hose End Size	A	В		c ninal ection ze	E
Number	inch	inch	inch	inch	mm	inch
1EU43-8-4	1/4	2.48	1.73	0.31	8	0.91
1EU43-12-6	3/8	2.83	1.80	0.47	12	0.91
1EU43-15-8	1/2	3.17	1.91	0.59	15	0.99
1EU43-18-10	5/8	3.68	2.24	0.71	18	1.26
1EU43-22-12	3/4	3.76	2.32	0.87	22	1.30

# 1D043

# Male Metric L - Rigid - (24° Cone)

ISO 12151-2

# Part		·······	Hose I.D.		<b>1</b>	→     H		В
Number	1	mm	inch	inch	mm	mm	inch	mm
1D043-6-4	6	M12x1,5	1/4	1.73	44	14	0.93	24
1D043-8-4	8	M14x1,5	1/4	1.61	41	14	0.93	24
1D043-10-5	10	M16x1,5	5/16	1.97	50	19	0.83	21
1D043-10-6	10	M16x1,5	3/8	1.97	50	19	0.83	21
1D043-12-5	12	M18x1,5	5/16	1.89	48	19	0.94	24
1D043-12-6	12	M18x1,5	3/8	1.97	50	19	0.83	21
1D043-15-6	15	M22x1,5	3/8	1.93	49	22	1.02	26
1D043-15-8	15	M22x1,5	1/2	2.28	58	22	0.94	24
1D043-18-10	18	M26x1,5	5/8	2.68	68	27	1.14	29
1D043-18-12	18	M26x1,5	3/4	2.68	68	27	1.14	29
1D043-22-12	22	M30x2	3/4	2.72	69	30	1.22	31
1D043-28-16	28	M36x2	1	3.11	79	36	1.30	33
1D043-35-20	35	M45x2	1-1/4	3.35	85	46	1.50	38

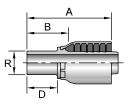


# 11D43

# Male Standpipe Metric L - Rigid End Connection per ISO 8434-1-SDS

#	Ø							
Part	R	Hose I.D.	Ą		D		B	
Number	mm	inch	inch	mm	inch	mm	inch	mm
11D43-6-4	6	1/4	2.03	52	0.87	22	1.28	33
11D43-10-5	10	5/16	2.36	60	0.91	23	1.45	37
11D43-10-6	10	3/8	2.28	58	0.91	23	1.14	29
11D43-12-4	12	1/4	2.17	55	0.91	23	1.22	31
11D43-15-8	15	1/2	2.56	65	0.98	25	1.22	31
11D43-18-10	18	5/8	2.99	76	1.02	26	1.48	38
11D43-18-12	18	3/4	2.80	71	1.02	26	1.22	31
11D43-22-12	22	3/4	2.87	73	1.10	28	1.26	32
11D43-28-16	28	1	3.31	84	1.18	30	1.46	37

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Metric L: Mates with EO "L" Series Fittings. See Accessories Section for O-Rings.



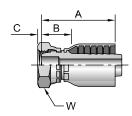
В

В

D

# 1C343

#### Female Metric L - Swivel - (Ball Nose)

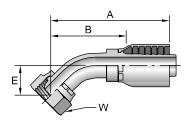


#	~	·····								
Part	Т	hread	Hose I.D.	1	4			W	ı	В
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1C343-6-4	6	M12x1,5	1/4	1.75	44	0.09	2	14	1.16	29
1C343-8-4	8	M14x1,5	1/4	1.77	45	0.11	3	17	1.16	29
1C343-10-5	10	M16x1,5	5/16	2.01	51	0.06	2	19	1.20	30
1C343-10-6	10	M16x1,5	3/8	2.06	52	0.06	2	19	1.10	28
1C343-12-5	12	M18x1,5	5/16	1.87	47	0.10	3	22	0.70	18
1C343-12-6	12	M18x1,5	3/8	2.23	57	0.10	3	22	1.18	30
1C343-15-6	6	M22x1,5	3/8	1.85	47	0.16	4	27	0.71	18
1C343-15-8	15	M22x1,5	1/2	2.42	61	0.17	4	27	1.29	33
1C343-18-10	18	M26x1,5	5/8	2.65	67	0.10	3	32	1.23	31
1C343-18-12	18	M26x1,5	3/4	2.80	71	0.10	3	32	1.37	35
1C343-22-12	22	M30x2	3/4	2.87	73	0.18	5	36	1.42	36
1C343-28-16	28	M36x2	1	3.35	85	0.22	6	46	1.76	45

When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.

# 1C443

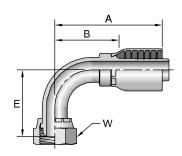
#### Female Metric L - Swivel - 45° Elbow - (Ball Nose)



# Part	_	······································	Hose I.D.	A	4	E	<u> </u>	$\bigcirc$		В
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1C443-8-4	8	M14x1,5	1/4	2.40	61	0.59	15	17	1.50	38
1C443-10-5	10	M16x1,5	5/16	2.60	66	0.67	17	19	1.61	41
1C443-10-6	10	M16x1,5	3/8	2.76	70	0.67	17	19	1.61	41
1C443-12-6	12	M18x1,5	3/8	2.76	70	0.67	17	22	1.61	41
1C443-15-8	15	M22x1,5	1/2	3.35	85	0.79	20	27	1.97	50
1C443-18-10	18	M26x1,5	5/8	4.09	104	1.14	29	32	2.52	64
1C443-22-12	22	M30x2	3/4	3.78	96	0.91	23	36	2.20	56
1C443-28-16	28	M36x2	1	4.53	115	1.10	28	46	2.81	71

# 1C543

# Female Metric L - Swivel - 90° Elbow - (Ball Nose)



# Part		//////hread	Hose I.D.	Į.	<b>\</b>	E	<b>.</b>	$\bigcirc$	E	3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1C543-8-4	8	M14x1,5	1/4	2.05	52	1.10	28	17	1.18	30
1C543-10-5	10	M16x1,5	5/16	2.20	56	1.18	30	19	1.22	31
1C543-10-6	10	M16x1,5	3/8	2.40	61	1.18	30	19	1.40	36
1C543-12-6	12	M18x1,5	3/8	2.40	61	1.22	31	22	1.40	36
1C543-15-8	15	M22x1,5	1/2	2.95	75	1.57	40	27	1.57	40
1C543-18-10	18	M26x1,5	5/8	3.58	91	2.36	60	32	2.05	52
1C543-22-12	22	M30x2	3/4	3.58	91	1.97	50	36	2.00	51
1C543-28-16	28	M36x2	1	4.33	110	2.48	63	46	2.56	65

Metric L: Mates with EO "L" Series Fittings.

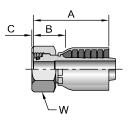


# 1CA43

#### Female Metric L - Swivel - (24° Cone with O-Ring)

ISO 12151-2 - SWS

#	<u>~~</u>	·····							
Part	TI	hread	Hose I.D.	Ą		С	W	E	3
Number		mm	inch	inch	mm	inch	mm	inch	mm
1CA43-6-4	6	M12x1,5	1/4	1.73	44	-0.02	14	0.88	22
1CA43-8-4	8	M14x1,5	1/4	1.73	44	-0.01	17	0.88	22
1CA43-8-5	8	M14x1,5	5/16	1.97	50	0.00	17	1.02	26
1CA43-10-4	10	M16x1,5	1/4	1.81	46	0.04	19	0.87	22
1CA43-10-5	10	M16x1,5	5/16	1.81	46	0.04	19	0.87	22
1CA43-12-5	12	M18x1,5	5/16	1.81	46	0.04	22	0.91	23
1CA43-12-6	12	M18x1,5	3/8	1.89	48	0.03	22	0.75	19
1CA43-15-8	15	M22x1,5	1/2	2.20	56	0.07	27	0.82	21
1CA43-18-10	18	M26x1,5	5/8	2.44	62	0.02	32	0.87	22
1CA43-18-12	18	M26x1,5	3/4	2.56	65	0.02	32	1.02	26
1CA43-22-12	22	M30x2	3/4	2.48	63	0.13	36	1.05	24
1CA43-28-16	28	M36x2	1	3.07	78	0.14	41	1.30	33
1CA43-35-20	35	M45x2	1-1/4	3.23	82	0.00	50	1.38	35

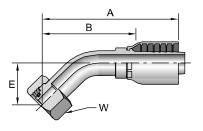


When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.

# 1CE43

# Female Metric L - Swivel - 45° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE45

# Part	Thread Hos		Hose I.D.	ose I.D. A		E		$\bigcirc$	ı	3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1CE43-6-4	6 M12x1,5		1/4	2.68	68	0.75	19	14	1.77	45
1CE43-8-4	8	M14x1,5	1/4	2.32	59	0.63	16	17	1.38	35
1CE43-10-5	10	M16x1,5	5/16	2.64	67	0.59	15	19	1.69	43
1CE43-10-6	10	M16x1,5	3/8	2.95	75	0.75	19	19	1.85	47
1CE43-12-6	12	M18x1,5	3/8	2.72	69	0.75	19	22	1.53	39
1CE43-15-8	15	M22x1,5	1/2	3.19	81	0.87	22	27	1.81	46
1CE43-18-10	18 M26x1,5		5/8	3.50	89	0.91	23	32	1.93	49
1CE43-22-12	22 M30x2		3/4	3.86	98	1.02	26	36	2.28	58

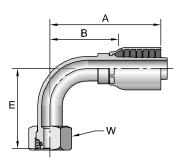


# 1CF43

# Female Metric L - Swivel - 90° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE

#		·····		A		E		$\bigcirc$	E	2
Part	ı	hread	Hose I.D.						l <sup>-</sup>	
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1CF43-8-4	8	M14x1,5	1/4	2.01	51	1.14	29	17	1.10	28
1CF43-10-4	10	M16x1,5	1/4	2.05	52	1.14	29	19	1.10	28
1CF43-10-5	10	M16x1,5	5/16	2.40	61	1.16	29	19	1.46	37
1CF43-10-6	10	M16x1,5	3/8	2.56	65	1.38	35	19	1.46	37
1CF43-12-5	12	M18x1,5	5/16	2.40	61	1.18	30	22	1.46	37
1CF43-12-6	12	M18x1,5	3/8	2.52	64	1.42	36	22	1.38	35
1CF43-15-8	15	M22x1,5	1/2	2.80	71	1.69	43	27	1.46	37
1CF43-18-10	18	M26x1.5	5/8	3.17	81	1.77	45	32	1.61	41
1CF43-22-12	22 M30x2		3/4	3.50	89	2.17	55	36	1.93	49
1CF43-35-20	35	M45x2	1-1/4	5.12	130	3.11	79	50	3.27	83

B-51



Metric L: Mates with EO "L" Series Fittings.



В

D

F

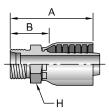
В

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# 1D243

#### Male Metric S - Rigid - (24° Cone)

ISO 12151-2

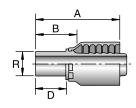


# Part		///// read	Hose I.D.		<u> </u>	→     H	F	3
Number		nm	inch	inch	mm	mm	inch	mm
1D243-8-4	8	M16x1,5	1/4	1.73	44	17	0.87	22
1D243-10-4	10	M18x1,5	1/4	1.73	44	19	0.87	22
1D243-12-5	12	M20x1,5	5/16	2.20	56	22	1.29	33
1D243-12-6	12	M20x1,5	3/8	1.97	50	22	1.02	26
1D243-14-6	14	M22x1,5	3/8	2.17	55	22	0.98	25
1D243-16-8	16	M24x1,5	1/2	2.36	60	24	1.17	30
1D243-20-10	20	M30x2	5/8	2.95	75	30	1.44	37
1D243-25-12	25	M36x2	3/4	2.87	73	36	1.30	33
1D243-30-16	30	M42x2	1	3.39	86	46	1.54	39

#### 13D43

#### Male Standpipe Metric S - Rigid

End Connection per ISO 8434-1-SDS

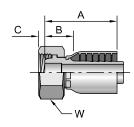


# Part	Ø R	Hose I.D.	A		D		В	
Number	mm	inch	inch	mm	inch	mm	inch	mm
13D43-10-4	10	1/4	2.13	54	1.02	26	1.26	32
13D43-12-5	12	5/16	2.52	64	1.02	26	1.61	41
13D43-14-6	14	3/8	2.52	64	1.14	29	1.38	35
13D43-16-8	16	1/2	2.68	68	1.18	30	1.42	36
13D43-20-10	20	5/8	3.39	86	1.42	36	1.88	48
13D43-20-12	20	3/4	3.19	81	1.42	36	1.57	40
13D43-25-12	25	3/4	3.35	85	1.57	40	1.73	44
13D43-30-16	30	1	3.82	97	1.73	44	2.01	51

Light Series 11D43-6-4, 11D43-8-4 and 11D43-12-6 are used in place of their Heavy Series equivalent size and accept the EO Heavy "S" Series ferrules and nuts.

# 1C643

#### Female Metric S - Swivel - (Ball Nose)



#										
Part	Thread		Hose I.D.	Ą		Ç		W	E	3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1C643-8-4	8	M16x1,5	1/4	1.57	40	0.15	4	19	1.20	30
1C643-10-4	10	M18x1,5	1/4	1.63	41	0.10	3	22	1.20	30
1C643-12-5	12	M20x1,5	5/16	1.87	47	0.08	2	24	1.20	30
1C643-12-6	12	M20x1,5	3/8	1.76	45	0.08	2	24	1.32	34
1C643-12-8	12	M20x1,5	1/2	2.18	55	0.08	2	24	1.30	33
1C643-14-6	14	M22x1,5	3/8	1.94	49	0.17	4	27	1.32	34
1C643-16-8	16	M24x1,5	1/2	2.13	54	0.19	5	30	1.39	35
1C643-20-10	20	M30x2	5/8	2.38	60	0.21	5	36	1.39	35
1C643-20-12	20	M30x2	3/4	2.46	62	0.21	5	40	1.03	37
1C643-25-12	25	M36x2	3/4	2.48	63	0.28	7	46	1.56	40
1C643-30-16	30	M42x2	1	2.89	73	0.37	9	50	1.95	50

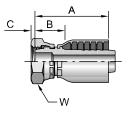
Metric L: Mates with EO "L" Series Fittings. Metric S: Mates with EO "S" Series Fittings.



# 1C043

#### Female Metric - Swivel - (Ball Nose)

# Part	_	·····································	Hose I.D.	£	À.	C	<b>;</b>	<b>⊘w</b>	E	3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1C043-20-12	20	M30x1,5	3/4	2.48	63	0.21	5	36	0.94	24
1C043-25-16	25	M38x1,5	1	2.99	76	0.28	7	46	1.14	29

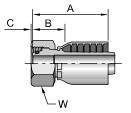


# 1C943

#### Female Metric S - Swivel - (24° Cone with O-Ring)

ISO 12151-2 - SWS

#	_^	······								
Part	1	Γhread	Hose I.D.		4	(		W	E	3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1C943-6-4	6	M14x1,5	1/4	1.89	48	0.01	0	17	1.02	26
1C943-8-4	8	M16x1,5	1/4	1.77	45	0.01	0	19	0.91	23
1C943-10-4	10	M18x1,5	1/4	1.81	46	0.01	0	22	0.87	22
1C943-10-5	10	M18x1,5	5/16	1.85	47	0.01	0	22	0.87	22
1C943-10-6	10	M18x1,5	3/8	1.97	50	0.01	0	22	0.83	21
1C943-12-5	12	M20x1,5	5/16	1.89	48	0.03	1	24	0.94	24
1C943-12-6	12	M20x1,5	3/8	2.05	52	0.03	1	24	0.87	22
1C943-14-6	14	M22x1,5	3/8	1.97	50	0.03	1	27	0.83	21
1C943-16-8	16	M24x1,5	1/2	2.33	59	0.09	2	30	0.94	24
1C943-20-10	20	M30x2	5/8	2.59	66	0.05	1	36	1.06	27
1C943-20-12	20	M30x2	3/4	2.59	66	0.05	1	36	1.06	27
1C943-25-12	25	M36x2	3/4	2.67	68	0.10	3	46	1.10	28
1C943-25-16	25	M36x2	1	3.07	78	0.08	2	46	1.30	33
1C943-30-16	30	M42x2	1	3.03	77	0.19	5	50	1.26	32
1C943-38-20	38	M52x2	1-1/4	3.15	80	0.23	6	60	1.30	33



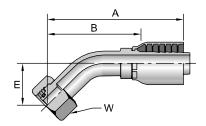
В

# 10C43

# Female Metric S - Swivel - 45° Elbow - (24° Cone with O-Ring)

ISO 12151-2 - SWE45

#										
Part	Thread		Hose I.D.	A		Ę		W		В
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
10C43-8-4	8	M16x1,5	1/4	2.32	59	0.63	16	19	1.38	35
10C43-12-5	12	M20x1,5	5/16	2.80	71	0.67	17	24	1.85	47
10C43-12-6	12	M20x1,5	3/8	2.72	69	0.79	20	24	1.57	40
10C43-16-8	16	M24x1,5	1/2	3.23	82	0.94	24	30	1.89	48
10C43-20-10	20	M30x2	5/8	3.58	91	0.98	25	36	2.05	52
10C43-20-12	20	M30x2	3/4	3.94	100	1.14	29	36	2.36	60
10C43-25-12	25	M36x2	3/4	3.97	101	1.18	30	46	2.40	61
10C43-30-16	30	M42x2	1	4.96	126	1.42	36	50	3.11	79
10C43-38-20^^	38	M52x2	1-1/4	5.59	142	1.50	38	60	3.74	95





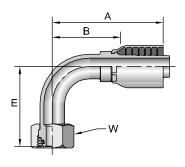
<sup>^</sup>Must be assembled with Die Part No. 83C-A20H in a Superkrimp or Parkrimp 2.

В

D

# 11C43

# Female Metric S - Swivel - 90° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE



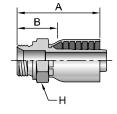
#										
Part	7	Thread	Hose I.D.	1	4	E		W		В
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
11C43-8-4	8	M16x1,5	1/4	1.89	48	1.14	29	19	1.02	26
11C43-10-4	10	M18x1,5	1/4	1.97	50	1.14	29	22	1.02	26
11C43-12-5	12	M20x1,5	5/16	2.36	60	1.26	32	24	1.42	36
11C43-12-6	12	M20x1,5	3/8	2.56	65	1.46	37	24	1.38	35
11C43-14-6	14	M22x1,5	3/8	2.56	65	1.46	37	27	1.38	35
11C43-16-8	16	M24x1,5	1/2	2.83	72	1.77	45	30	1.46	37
11C43-20-10	20	M30x2	5/8	3.11	79	1.89	48	36	1.57	40
11C43-25-12	25	M36x2	3/4	3.50	89	2.32	59	46	1.93	49
11C43-30-16	30	M42x2	1	4.53	115	2.99	76	50	2.68	68
11C43-38-20^^	38	M52x2	1-1/4	5.12	130	3.15	80	60	3.27	83

<sup>^</sup>Must be assembled with Die Part No. 83C-A20H in a Superkrimp or Parkrimp 2.

# 1D943

# Male BSP Parallel Pipe - Rigid - (60° Cone)

ISO 12151-6



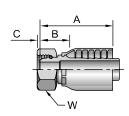
# Part		Hose I.D.	,	<b>A</b>	H		3
Number	inch	inch	inch	mm	mm	inch	mm
1D943-4-4	1/4x19	1/4	1.77	45	19	0.91	23
1D943-6-5	3/8x19	5/16	2.13	54	22	1.22	31
1D943-6-6	3/8x19	3/8	2.13	54	22	1.22	31
1D943-8-6	1/2x14	3/8	2.36	60	27	1.22	31
1D943-8-8	1/2x14	1/2	2.44	62	27	1.10	28
1D943-12-12	3/4x14	3/4	2.76	70	32	1.18	30
1D943-16-16	1x11	1	3.23	82	41	1.38	35

When used in a port, a bonded seal must be used. See Accessories Section for more information.

# 19243

#### Female BSP Parallel Pipe - Swivel - (60° Cone)

ISO 12151-6



#							$\bigcirc$		
Part	Thread	Hose I.D.	Δ	1	С		w	E	3
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
19243-2-4	1/8x28	1/4	1.61	41	0.20	5	14	0.67	17
19243-4-4	1/4x19	1/4	1.95	50	0.22	6	19	1.20	30
19243-6-4	3/8x19	1/4	1.73	44	0.26	7	22	0.79	20
19243-6-6	3/8x19	3/8	2.35	60	0.26	7	22	1.32	34
19243-6-8	3/8x19	1/2	2.17	55	0.26	7	22	0.79	20
19243-8-6	1/2x14	3/8	2.01	51	0.28	7	27	0.87	22
19243-8-8	1/2x14	1/2	2.72	69	0.28	7	27	1.46	37
19243-10-8	5/8x14	1/2	2.80	71	0.37	9	30	1.54	39
19243-10-10	5/8x14	5/8	2.99	76	0.37	9	30	1.55	39
19243-12-10	3/4x14	5/8	3.11	79	0.35	9	36	1.67	42
19243-12-12	3/4x14	3/4	3.19	81	0.35	9	36	1.75	44
19243-16-16	1x11	1	3.67	93	0.44	11	41	2.05	52
19243-20-20	1-1/4x11	1-1/4	3.11	79	0.41	11	50	1.26	32

When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.

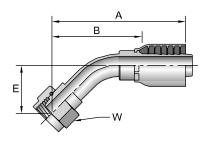


#### 1B143

# Female BSP Parallel Pipe - Swivel - 45° Elbow - (60° Cone)

ISO 12151-6

#		•							
Part	Thread	Hose I.D.		4	E	=	W	E	3
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
1B143-4-4	1/4x19	1/4	2.26	57	0.61	15	19	1.51	38
1B143-6-6	3/8x19	3/8	2.61	66	0.67	17	22	1.59	40
1B143-8-8	1/2x14	1/2	3.10	78	0.79	20	27	1.85	46
1B143-10-10	5/8x14	5/8	3.53	89	0.91	23	30	2.08	52
1B143-12-10	3/4x14	5/8	3.47	88	0.87	22	32	2.02	51
1B143-12-12	3/4x14	3/4	3.77	95	0.98	24	32	2.34	59
1B143-16-16	1x11	1	4.72	119	1.22	30	41	3.10	78

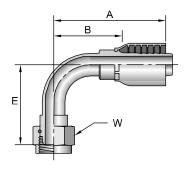


# 1B243

# Female BSP Parallel Pipe - Swivel - 90° Elbow - (60° Cone)

ISO 12151-6

#									
Part	Thread	Hose I.D.	<i> </i>	4	E	Ξ	W	B	
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
1B243-2-4	1/8x28	1/4	1.97	50	1.10	28	14	1.02	26
1B243-4-4	1/4x19	1/4	1.83	46	1.12	28	19	1.08	27
1B243-6-6	3/8x19	3/8	2.32	59	1.46	37	22	1.32	34
1B243-8-6	1/2x14	3/8	2.60	66	1.38	35	27	1.46	37
1B243-8-8	1/2x14	1/2	2.95	75	1.57	40	27	1.57	40
1B243-10-8	5/8x14	1/2	2.91	74	1.57	40	30	1.54	39
1B243-10-10	5/8x14	5/8	3.13	80	1.57	40	30	1.72	44
1B243-12-10	3/4x14	5/8	3.62	92	2.32	59	32	2.05	52
1B243-12-12	3/4x14	3/4	3.58	91	2.32	59	32	2.00	51
1B243-16-16	1x11	1	4.33	110	2.48	63	41	2.56	65
1B243-20-20	1-1/4x11	1-1/4	4.72	120	2.99	76	50	2.87	73



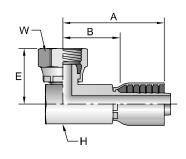
#### 1B443

Female BSP Parallel Pipe - Swivel - 90°

Elbow - Block Type - (60° Cone)

ISO 228-1

# Part	//////// Thread	Hose I.D.		<b>A</b>	E	<u> </u>	Н	W	E	3
Number	inch	inch	inch	mm	inch	mm	mm	mm	inch	mm
1B443-4-4	1/4x19	1/4	2.40	61	1.14	29	17	19	1.40	36
1B443-6-6	3/8x19	3/8	2.76	70	1.02	26	19	22	1.42	36
1B443-8-8	1/2x14	1/2	3.19	81	1.02	26	22	27	1.57	40
1B443-12-12	3/4x14	3/4	3.30	84	1.30	33	23	32	0.98	25



Metric S: Mates with EO "S" Series Fittings.

When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.

B-55



В



Ξ

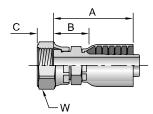
В

D

# 1B543

#### Female BSP Parallel Pipe - Swivel - (Flat Seat)

ISO 228-1

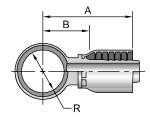


# Part		Hose I.D.	Α		c		W	E	3
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
1B543-6-6	3/8x19	3/8	1.93	49	0.35	9	22	0.79	20
1B543-8-6	1/2x14	3/8	1.89	48	0.43	11	27	0.75	19
1B543-8-8	1/2x14	1/2	2.28	58	0.43	11	27	0.94	24
1B543-12-12	3/4x14	3/4	2.28	58	0.33	8	32	0.94	24

When measuring overall length to the end of the nut, B+C dimensions must be used to calculate  ${\it cut}$ -off allowance.

# 14943

#### **DIN Metric Banjo**



#	Ø					
Part	R	Hose I.D.	A		E	3
Number	mm	inch	inch	mm	inch	mm
14943-10-4	10	1/4	1.85	47	0.94	24
14943-12-4	12	1/4	1.85	47	0.98	25
14943-14-5	14	5/16	2.01	51	1.06	27
14943-16-6	16	3/8	2.28	58	1.14	29
14943-18-8	18	1/2	2.60	66	1.22	31
14943-22-10	22	5/8	2.91	74	1.38	35
14943-26-12	26	3/4	3.07	78	1.54	39

#### AM Banjo Bolt w/DIN Metric Thread



# Part Number			H mm	Copper Washer 2
AM-03	8	M8x1	12	853009-8
AM-04	10	M10x1	14	853009-10
AM-06	12	M12x1,5	17	853009-12
AM-08	14	M14x1,5	19	853009-14
AM-10	16	M16x1,5	22	853009-16
AM-13	18	M18x1,5	24	853009-18
AM-16	22	M22x1,5	27	853009-22
AM-20	26	M26x1,5	32	853009-26
AM-30	30	M30x1,5	36	853009-30

Two (2) copper washers per bolt must be ordered separately.

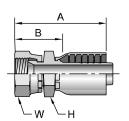
Metric S: Mates with EO "S" Series Fittings.



#### **1MU43**

# Female Metric - Swivel - (30° Flare)

# Part		Hose I.D.	,	Ą	H	$\bigvee_{\mathbf{W}}$	В	
Number	mm	inch	inch	mm	mm	mm	inch	mm
1MU43-4-4	M14x1,5	1/4	2.07	53	19	19	1.32	34
1MU43-6-4	M18x1,5	1/4	2.18	55	24	24	1.43	36
1MU43-6-6	M18x1,5	3/8	2.45	62	24	24	1.42	36
1MU43-8-8	M22x1,5	1/2	2.84	72	27	27	1.58	40

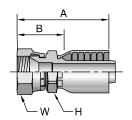


Japanese Fittings - Female Swivel 30° Flare with Metric Threads. All 30° flared fitting sizes are available by combining the 1MU43 fittings in sizes up to -8 with the 1XU43 fittings in sizes -10 and larger.

# 1XU43

#### Female Metric - Swivel - (30° Flare)

# Part	Thread	Hose I.D.	Ą		H	$\bigcirc$	E	3
Number	mm	inch	inch	mm	mm	mm	inch	mm
1XU43-10-10	M24x1,5	5/8	3.25	83	30	32	1.81	46
1XU43-12-12	M30x1,5	3/4	3.40	86	32	36	1.96	50
1XU43-16-16	M33x1,5	1	4.03	102	36	41	2.41	61
1XU43-20-20	M36x1,5	1-1/4	4.19	106	46	46	2.50	64
1XU43-24-24	M42x1,5	1-1/2	4.12	105	50	55	2.75	70



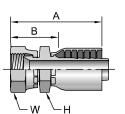
Japanese Fittings - Female Swivel 30° Flare with Metric Threads. All 30° flared fitting sizes are available by combining the 1MU43 fittings in sizes up to -8 with the 1XU43 fittings in sizes -10 and larger.

# 1FU43

#### Female BSP Parallel Pipe - Swivel - (30° Flare)

B8363 Code F

# Part	Thread	Hose I.D.	A		H	$\bigcirc$	ı	3
Number	inch	inch	inch	mm	mm	mm	inch	mm
1FU43-4-4	1/4x19	1/4	1.90	48	19	19	1.15	29
1FU43-6-6	3/8x19	3/8	2.32	59	22	22	1.29	33
1FU43-8-8	1/2x14	1/2	2.66	68	27	27	1.40	36
1FU43-12-12	3/4x14	3/4	3.06	78	36	36	1.62	41
1FU43-16-16	1x11	1	3.53	90	41	41	1.91	49
1FU43-20-20	1-1/4x11	1-1/4	3.87	98	50	50	2.18	55



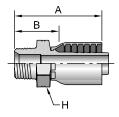




# **1UT43**

#### Male BSP Taper Pipe - Rigid - (60° Cone)

B8363 Code R

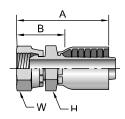


# Part	//////// Thread	Hose I.D.	A	4	H	E	3
Number	inch	inch	inch	mm	mm	inch	mm
1UT43-4-4	1/4x19	1/4	1.92	49	19	1.17	30
1UT43-6-6	3/8x19	3/8	2.25	57	22	1.22	31
1UT43-8-8	1/2x14	1/2	2.68	68	27	1.42	36
1UT43-12-12	3/4x14	3/4	2.96	75	36	1.53	39
1UT43-16-16	1x11	1	3.48	88	41	1.86	47
1UT43-20-20	1-1/4x11	1-1/4	3.75	95	50	2.10	53

# 1GU43

#### Female BSP Parallel Pipe - Swivel - (60° Cone)

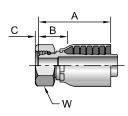
B8363 Code C



# Part		Hose I.D.		Ą	H	$\bigvee_{\mathbf{W}}$	E	3
Number	inch	inch	inch	mm	mm	mm	inch	mm
1GU43-4-4	1/4x19	1/4	2.08	53	19	19	1.33	34
1GU43-6-6	3/8x19	3/8	2.45	62	22	22	1.42	36
1GU43-8-8	1/2x14	1/2	2.81	71	27	27	1.56	40
1GU43-12-12	3/4x14	3/4	3.24	82	36	36	1.81	46
1GU43-16-16	1x11	1	3.74	95	41	41	2.12	54
1GU43-20-20	1-1/4x11	1-1/4	4.07	103	50	50	2.38	60

# 1F443

#### Female French Gaz Series - Swivel - (Ball Nose)



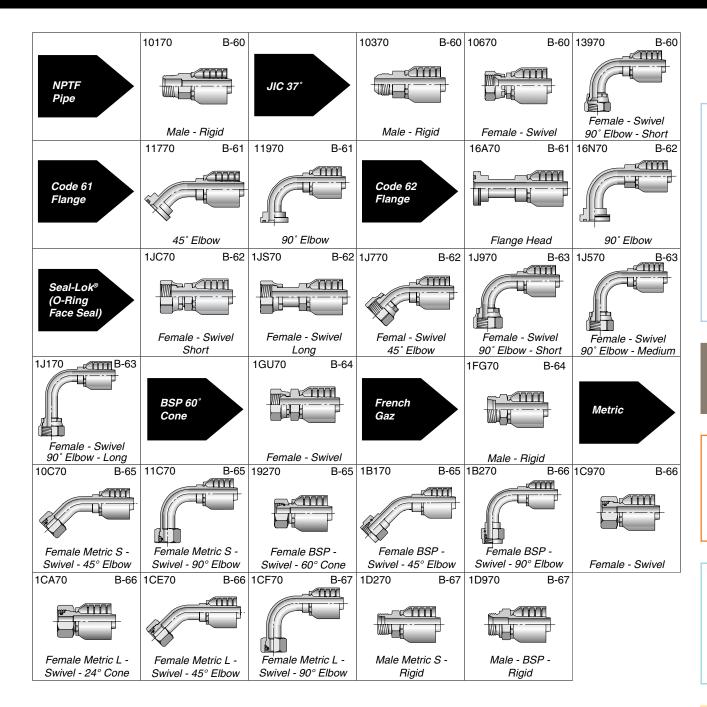
# Part		hread	Hose I.D.	. , 4	4	, c		W	. E	Till and the second
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1F443-27-12	27	M36x1,5	3/4	3	76	0.14	4	55	1.14	29

When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.

D

A

В



В

C

D



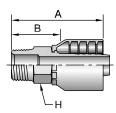
В

C

D

# 10170

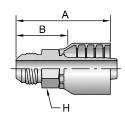
## Male NPTF Pipe - Rigid



# Part		Hose I.D.	Ą		H	В	
Number	inch	inch	inch	mm	inch	inch	mm
10170-6-6	3/8x18	3/8	2.37	60	3/4	1.47	37
10170-8-8	1/2x14	1/2	2.84	72	7/8	1.40	36

# 10370

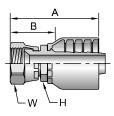
#### Male JIC 37° - Rigid



# Part		······································	Hose I.D.	4	١			3
Number	•	inch	inch	inch   mm		inch	inch	mm
10370-8-8	1/2	3/4x16	1/2	2.68	68	7/8	1.47	37
10370-10-8	5/8	7/8x14	1/2	2.62	66	15/16	1.41	36

# 10670

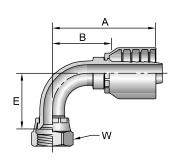
# Female JIC 37° - Swivel



	# Part		vvvvv hread	Hose I.D.	A		$\bigcirc$	$\bigcirc$	В	
N	lumber	inch		inch	inch	mm	inch	inch	inch	mm
106	70-6-6	3/8	9/16x18	3/8	2.29	58	11/16	11/16	1.39	35
106	70-8-8	1/2	3/4x16	1/2	2.62	67	13/16	7/8	1.41	36
106	70-10-8	5/8	7/8x14	1/2	2.85	72	7/8	1	1.64	42
106	70-10-10	5/8	7/8x14	5/8	2.84	72	15/16	1	1.59	40

# 13970

#### Female JIC 37° - Swivel - 90° Elbow - Short Drop



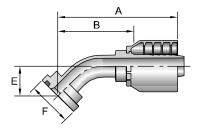
	# Downt		<u>/////</u>							F	2
	Part Number		<b>hread</b> inch	Hose I.D. inch	inch	mm	inch	mm	inch	inch	mm
1	3970-8-8	1/2	3/4x16	1/2	2.62	67	1.14	29	7/8	1.41	36

# 11770

#### SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3 - 45S - L

#				A		E		E	3
Part Number	Flange inch	Hose I.D.	inch	mm	inch	mm	inch	inch	mm
11770-8-8	1/2	1/2	3.28	83	0.77	20	1-3/16	2.07	53
11770-12-10	3/4	5/8	3.37	86	0.76	19	1-1/2	2.12	54

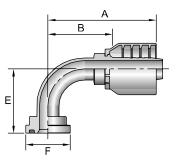


# 11970

#### SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3 - E90S - L

#		•		A			Ø		
Part	Flange	Hose I.D.	_	Ī	E		F	E	
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11970-8-8	1/2	1/2	2.93	74	1.60	41	1-3/16	1.72	44
11970-12-10	3/4	5/8	3.54	90	2.02	51	1-1/2	2.29	58

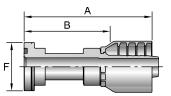


# 16A70

# **SAE Code 62 Flange Head**

ISO 12151-3 - S - S

#					Ø		
Part	Flange	Hose I.D.	•	4	F	E	3
Number	inch	inch	inch	mm	inch	inch	mm
16A70-8-8	1/2	1/2	3.50	88,9	1-1/4	2.29	56,9



4

В

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D

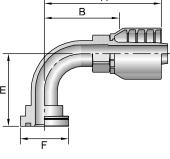


See Accessories Section for O-Rings and Flange Kits.

#### 16N70

**SAE Code 62 Flange Head - 90° Elbow** ISO 12151-3 - E90S - S ( 1 Piece: ISO 12151-3 - E90M - S)

#							$\bigcirc$		
Part	Flange	Hose I.D.	<i>F</i>	<b>A</b>	E	=	F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16N70-8-8	1/2	1/2	2.60	66	1.61	41	1-1/4	1.34	34

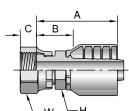


# **1JC70**

Female Seal-Lok® - Swivel - Short

ISO 12151-1-SWSA

# Part	_	·····································	Hose I.D.	Į.	<b>1</b>	C		H	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	mm
1JC70-6-6	3/8	11/16x16	3/8	1.94	49	0.34	9	11/16	13/16	1.04	26
1JC70-8-6	1/2	13/16x16	3/8	2.00	51	0.43	11	13/16	15/16	1.10	28
1JC70-8-8	1/2	13/16x16	1/2	2.22	56	0.43	11	13/16	15/16	1.01	26
1JC70-10-10	5/8	1x14	5/8	2.40	61	0.53	13	15/16	1-1/8	1.15	29



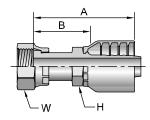
В

D

# **1JS70**

#### Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB



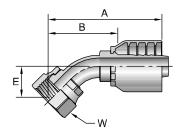
# Part	_	////// Thread	Hose I.D.	Į.	<b>4</b>	H	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	inch	inch	mm
1JS70-6-6	3/8	11/16x16	3/8	2.28	58	11/16	13/16	1.38	35
1JS70-8-8	1/2	13/16x16	1/2	2.65	67	13/16	15/16	1.44	37
1JS70-12-8	3/4	1-3/16x12	1/2	2.90	74	1-1/8	1-3/8	1.69	43
1JS70-12-10	3/4	1-3/16x12	5/8	3.10	79	1-1/8	1-3/8	1.85	47

# 1J770

#### Female Seal-Lok® - Swivel - 45° Elbow

B-62

ISO 12151-1 - SWE45



# Part	Thread inch		Hose I.D.		<b>1</b>	E		<b>s</b>	E	3
Number	i	nch	inch	inch	mm	inch	mm	inch	inch	mm
1J770-10-10	5/8	1x14	5/8	3.08	78	0.63	16	1-1/8	1.83	46

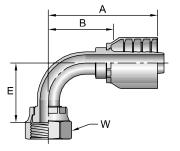
See Accessories Section for O-Rings and Flange Kits.



# 1J970

Female Seal-Lok® - Swivel - 90° Elbow - Short Drop ISO 12151-1 - SWES90

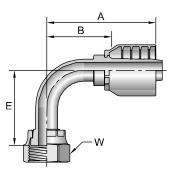
#		·····	•							
Part	Т	hread	Hose I.D.	ļ <i>1</i>	4	E	=	W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J970-8-8	1/2	13/16x16	1/2	2.59	66	1.14	29	15/16	1.38	35
1J970-12-8	3/4	1-3/16x12	1/2	3.21	82	1.88	48	1-3/8	2.00	51



# 1J570

Female Seal-Lok® - Swivel - 90° Elbow - Medium Drop ISO 12151-1 - SWEM90

# Part		·····································	Hose I.D.	Ą		Ē		W	<b>B</b> -	
Number		inch	inch	inch	mm	Inch	mm	inch	inch	mm
1J570-10-	0 5/8	1x14	5/8	2.88	73	1.85	47	1-1/8	1.63	41

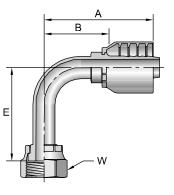


# **1J170**

Female Seal-Lok® - Swivel - 90° Elbow - Long Drop ISO 12151-1 - SWEL90

	# //// Part Thread			Hose I.D.	A	4	E	<b>.</b>	$\bigcirc$	E	3
Num	ber		inch	inch	inch	mm	Inch	mm	inch	inch	mm
1J170-	8-8	1/2	13/16x16	1/2	2.59	66	2.52	65	15/16	1.38	35
1J170-	10-10	5/8	1x14	5/8	2.88	73	2.76	70	1-1/8	1.63	41

B-63



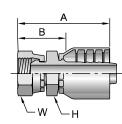
В

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# 1GU70

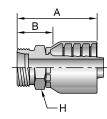
Female BSP Parallel Pipe - Swivel - (60° Cone)



#		•						
Part	Thread	Hose I.D.	<i>,</i>	4	Н	W	E	3
Number	Inch	inch	inch	mm	mm	inch	inch	mm
1GU70-6-6	3/8x19	3/8	2.45	62	22	NA	1.55	39
1GU70-8-8	1/2x14	1/2	2.82	72	27	NA	1.61	41

# 1FG70

Male French Gaz Series - Rigid - (24° Cone)



# Part		·····································	Hose I.D.	A	4	·	<b>1</b>	ı	3
Number		mm	inch	inch	mm	inch	mm	inch	mm
1FG70-21-10	21	M30x1.5	5/8	2.87	73	1.18	30	1.62	41

\_

В

A

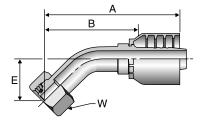
D

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#### 10C70

# Female Metric S - Swivel - 45° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE45

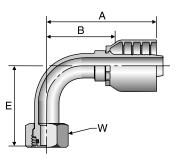
# Part		·//··/	Hose I.D.	Α		E		$\bigcirc$	E	3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
10C70-12-6	12	M20x1,5	3/8	2.72	69	0.79	20	24	1.57	40
10C70-16-8	16	M24x1,5	1/2	3.27	83	0.94	24	30	1.89	48
10C70-20-10	20	M30x2	5/8	3.58	91	0.98	25	36	2.05	52



## 11C70

# Female Metric S - Swivel - 90° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE

# Part		·····································	Hose I.D.		A	E	<b>.</b>	$\bigcirc$	E	3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
11C70-12-6	12	M20X1,5	3/8	2.64	67	1.46	37	24	1.50	38
11C70-20-10	20	M30X2	5/8	3.11	79	1.89	48	36	1.57	40



В

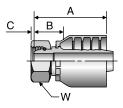
C

D

#### 19270

# Female BSP Parallel Pipe - Swivel - (60° Cone) ISO 228-1

# Part		Hose I.D.	A	١	C	<b>-</b>	W	E	3
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
19270-6-6	3/8x19	3/8	1.93	49	0.28	7	22	0.79	20
19270-8-8	1/2x14	1/2	2.24	57	0.28	7	27	0.87	22
19270-10-10	5/8x14	5/8	2.24	57	0.35	9	30	0.83	21
19270-12-10	3/4x14	5/8	2.40	61	0.35	9	32	0.87	22

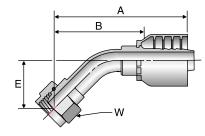


#### 1B170

# Female BSP Parallel pipe - Swivel- $45^{\circ}$ Elbow - (60° Cone)

ISO 228-1

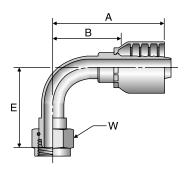
	1	1							
#									
Part	Thread	Hose I.D.	1	Ą			W	E	3
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
1B170-8-8	1/2x14	1/2	3.11	79	0.79	20	27	1.77	45



# 1B270

Female BSP Parallel Pipe - Swivel - 90° Elbow - (60° Cone) ISO 228-1

# Part	///////// Thread	Hose I.D.	4				$\bigcirc$	E	
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
1B270-8-8	1/2x14	1/2	2.76	70	1.54	39	27	1.38	35
1B270-10-10	5/8x14	5/8	3.07	78	1.81	46	30	1.61	41
1B270-12-10	3/4x14	5/8	3.19	81	1.65	42	32	1.61	41



В

D

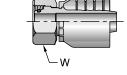
#### 1C970

Female Metric S - Swivel - (24° Cone with O-Ring)

# Part		······································	Hose I.D.		<b>4</b>	C	;	$\bigcirc$	E	3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1C970-12-6	12	M20x1,5	3/8	2.03	52	0.03	1	24	1.13	29
1C970-16-8	16	M24x1,5	1/2	2.31	59	0.09	2	30	1.10	28
1C970-20-10	20	M30x2	5/8	2.51	64	0.05	1	36	1.26	32

When measuring overall length to end of nut, B + C dimensions must be used to calculate cut-off allowance.

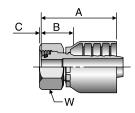
B-66



#### 1CA70

# Female Metric L - Swivel - (24° Cone with O-Ring)

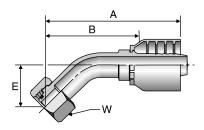
ISO 12151-2 - SWS



#		·····								
Part		Thread	Hose I.D.		1		, I	W		<b>3</b>
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1CA70-12-6	12	M18x1,5	3/8	2.09	53	0.04	1	22	0.94	24
1CA70-15-8	15	M22x1,5	1/2	2.09	62	0.07	2	22	0.94	27
1CA70-18-10	18	M26x1,5	5/8	2.44	62	0.02	0.5	32	1.02	26

# 1CE70

# Female Metric L - Swivel - 45° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE45



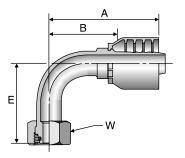
# Part			Hose I.D.	A		E		$\bigcirc_{\mathbf{W}}$	E	8
Number	mm		inch	inch	mm	inch	mm	mm	inch	mm
1CE70-18-10	18 M26x1,5		5/8	3.58	91	0.98	25	32	2.05	52

# 1CF70

#### Female Metric L - Swivel - 90° Elbow - (24° Cone with O-Ring)

ISO 12151-2 - SWE

# Part	Part Thread		Hose I.D.	A	<b>\</b>	E	<u> </u>	W	Е	<b>.</b>
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1CF70-15-8	15	M22x1,5	1/2	2.91	74	1.77	45	27	1.54	39
1CF70-18-10	18	M26x1,5	5/8	3.11	79	1.93	49	32	1.65	42

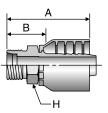


#### 1D270

#### Male Metric S - Rigid - (24° Cone )

ISO 12151-2

# Part		WWW	Hose I.D.			→     H	В	
Number		mm	inch	inch	mm	mm	inch	mm
1D270-16-8	16	M24x1,5	1/2	2.44	62	24	1.10	28
1D270-20-10	20	M30x2	5/8	2.95	75	30	1.26	32

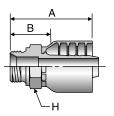


# 1D970

# Male BSP Parellel Pipe - Rigid - (60° Cone)

ISO 228-1

#		•					
Part	Thread	Hose I.D.	Ą		H		3
Number	inch	inch	inch	mm	mm	inch	mm
1D970-8-8	1/2x14	1/2	2.44	62	27	1.10	28









В

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	10171 B-70		10571 B-70		10371 B-70
NPTF		SAE		JIC	
Pipe		UAL		SIC .	
	Male - Rigid		Male - Rigid		Male - Rigid
10671 B-71	13771 B-71	13971 B-72	1L971 B-72	14171 B-72	
					Code 61 Flange
Female - Swiyel	Female - Swivel	Female - Swivel	Female - Swivel 90° Elbow - Medium	Female - Swivel	
11571 B-73					11871 B-75
11371	11071 6-73	120/1	D-74	12771 0-74	11071 B-73
Flange	22-1/2° Elbow	30° Elbow	45° Elbow	60° Elbow	67-1/2° Elbow
11971 B-75	18971 B-76	12U71 B-76		16A71 B-76	16F71 B-76
			Code 62 Flange		
90° Elbow	90° Elbow-Long	110° Elbow		Flange	45° Elbow
16N71 B-77	Seal-Lok® (O-Ring Face Seal)	1J071 B-77		1JS71 B-78  Female - Swivel	
90° Elbow 1J971 B-79	4 I574 D 70	Male - Rigid	Short	=0.1.9	
			Metric "S"	1D271 B-80	1C971 B-80
Female - Swivel 90° Elbow - Short	Female - Swivel 90° Elbow - Medium	Female - Swivel 90° Elbow - Long		Male - Rigid	Female - Swivel
	1UT71 B-80	1GU71 B-80	1FU71 B-81	<u> </u>	1MU71 B-81
BSP				Metric	
	Male - Rigid	Female - Swivel	Female - Swivel		Female - Swivel
1XU71 B-81					

B-69



Female - Swivel

A

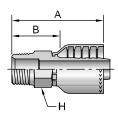
В

C

D

10171

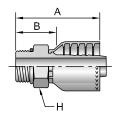
# Male NPTF Pipe - Rigid



#			_				
Part	Thread	Hose I.D	/	<b>A</b>	Н	E	3
Number	inch	inch	inch	mm	inch	inch	mm
10171-6-6	3/8x18	3/8	2.36	60	3/4	1.47	37
10171-8-8	1/2x14	1/2	2.82	72	7/8	1.63	41
10171-12-8	3/4x14	1/2	2.67	68	1-1/16	1.47	37
10171-12-12	3/4x14	3/4	3.08	78	1-1/16	1.71	43
10171-16-12	1x11-1/2	3/4	3.08	78	1-3/8	1.72	44
10171-16-16	1x11-1/2	1	3.63	92	1-3/8	2.04	52
10171-20-16	1-1/4x11-1/2	1	3.49	89	1-11/16	1.90	48
10171-20-20	1-1/4x11-1/2	1-1/4	4.06	103	1-3/4	2.39	61
10171-24-20	1-1/2x11-1/2	1-1/4	3.77	96	2	2.10	53
10171-24-24	1-1/2x11-1/2	1-1/2	4.32	110	2	2.19	56
10171-32-32	2x11-1/2	2	4.72	118	2-1/2	2.52	64

# 10571

#### Male SAE Straight Thread with O-Ring - Rigid

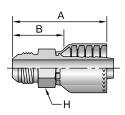


# Part	_			Å	<b>1</b>	Н	E	3
Number		inch	inch	inch	mm	inch	inch	mm
10571-8-8	1/2	3/4x16	1/2	2.44	62	7/8	1.25	32
10571-12-12	3/4	1-1/16x12	3/4	2.79	71	1-1/4	1.43	36
10571-16-16	1	1-5/16x12	1	3.42	87	1-1/2	1.77	45
10571-20-20	1-1/4	1-5/8x12	1-1/4	3.67	93	1-7/8	2.00	51

# 10371

# Male JIC 37° - Rigid

B-70



#						$\bigcirc$		
Part	Т	hread	Hose I.D.	A		Н	E	3
Number		inch	inch	inch	mm	inch	inch	mm
10371-6-6	3/8	9/16x18	3/8	2.44	62	3/4	1.55	39
10371-8-6	1/2	3/4x16	3/8	2.29	58	7/8	1.40	36
10371-8-8	1/2	3/4x16	1/2	2.66	68	7/8	1.41	36
10371-10-8	5/8	7/8x14	1/2	2.60	66	15/16	1.41	36
10371-10-10	5/8	7/8x14	5/8	2.93	74	15/16	1.69	43
10371-12-12	3/4	1-1/16x12	3/4	3.17	80	1-1/8	1.81	46
10371-14-12	7/8	1-3/16x12	3/4	3.09	78	1-1/4	1.73	44
10371-16-12	1	1-5/16x12	3/4	3.02	77	1-3/8	1.66	42
10371-16-16	1	1-5/16x12	1	3.68	93	1-3/8	2.03	52
10371-20-16	1-1/4	1-5/8x12	1	3.43	87	1-7/8	1.84	47
10371-20-20	1-1/4	1-5/8x12	1-1/4	3.94	100	1-7/8	2.27	58

D

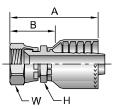
A

В

10671

#### Female JIC 37° - Swivel

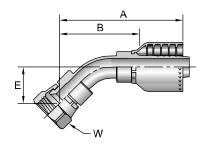
# Part	_	······································	Hose I.D.	A	<b>\</b>	$\bigcirc$	$\bigcirc$	В		Additional Material Stainless
Number		inch	inch	inch	mm	inch	inch	inch	mm	Steel (C)
10671-6-6	3/8	9/16x18	3/8	2.28	58	11/16	11/16	1.39	35	
10671-8-6	1/2	3/4x16	3/8	2.47	63	11/16	7/8	1.58	40	
10671-8-8	1/2	3/4x16	1/2	2.61	66	13/16	7/8	1.41	36	•
10671-10-8	5/8	7/8x14	1/2	2.84	72	7/8	1	1.64	42	
10671-10-10	5/8	7/8x14	5/8	2.83	72	15/16	1	1.58	40	
10671-10-12	5/8	7/8x14	3/4	2.92	74	1-1/16	1	1.54	39	
10671-12-8	3/4	1-1/16x12	1/2	2.75	70	1-1/16	1-1/4	1.58	40	
10671-12-10	3/4	1-1/16x12	5/8	3.00	76	1-1/16	1-1/4	1.75	44	
10671-12-12	3/4	1-1/16x12	3/4	2.96	75	1-1/16	1-1/4	1.60	41	•
10671-12-16	3/4	1-1/16x12	1	3.37	86	1-3/8	1-1/4	1.67	42	
10671-14-12	7/8	1-3/16x12	3/4	3.01	76	1-1/4	1-3/8	1.61	41	
10671-16-12	1	1-5/16x12	3/4	3.28	83	1-1/4	1-1/2	1.92	49	
10671-16-16	1	1-5/16x12	1	3.60	91	1-3/8	1-1/2	2.01	51	•
10671-20-16	1-1/4	1-5/8x12	1	3.80	97	1-5/8	2	2.21	56	
10671-20-20	1-1/4	1-5/8x12	1-1/4	3.92	100	1-7/8	2	2.25	57	•
10671-24-20	1-1/2	1-7/8x12	1-1/4	4.10	104	2-1/8	2-1/4	2.43	62	
10671-24-24	1-1/2	1-7/8x12	1-1/2	4.69	119	2-1/8	2-1/4	2.50	64	•
10671-32-32	2	2-1/2x12	2	5.39	137	2-1/2	2-7/8	3.19	81	



# 13771

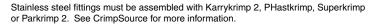
#### Female JIC 37° - Swivel - 45° Elbow - Short Drop

# Part	Thread		Hose I.D.	A	4	E	Ī.	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
13771-6-6	3/8	9/16x18	3/8	2.34	59	0.43	11	11/16	1.44	37
13771-8-8	1/2	3/4x16	1/2	2.83	72	0.59	15	7/8	1.62	41
13771-10-8	5/8	7/8x14	1/2	2.93	74	0.63	16	1	1.72	44
13771-10-10	5/8	7/8x14	5/8	3.08	78	0.63	16	1	1.83	46
13771-12-12	3/4	1-1/16x12	3/4	3.64	92	0.83	21	1-1/4	2.26	57
13771-16-16	1	1-5/16x12	1	4.20	107	0.90	23	1-1/2	2.61	66
13771-20-20	1-1/4	1-5/8x12	1-1/4	5.22	133	1.69	43	2	3.53	90



В

D





13971

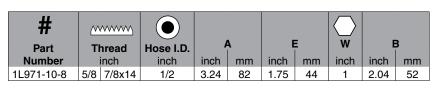
Female JIC 37° - Swivel - 90° Elbow - Short Drop

ĺ	Α
	В
E	
	<u></u>
	W

#			•							
Part	Thread		Hose I.D.	<i>F</i>	<b>L</b>	E	<u> </u>	W	E	
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
13971-6-6	3/8	9/16x18	3/8	2.21	56	0.91	23	11/16	1.31	33
13971-8-8	1/2	3/4x16	1/2	2.62	67	1.14	29	7/8	1.41	36
13971-10-8	5/8	7/8x14	1/2	2.74	70	1.26	32	1	1.53	39
13971-10-10	5/8	7/8x14	5/8	2.88	73	1.26	32	1	1.63	41
13971-12-10	3/4	1-1/16x12	5/8	2.98	76	1.89	48	1-1/4	1.73	44
13971-12-12	3/4	1-1/16x12	3/4	3.50	89	1.89	48	1-1/4	2.11	54
13971-16-16	1	1-5/16x12	1	4.36	111	2.20	56	1-1/2	2.58	66
13971-20-20	1-1/4	1-5/8x12	1-1/4	4.78	121	3.33	85	2	3.11	79
13971-24-24	1-1/2	1-7/8x12	1-1/2	6.33	161	3.98	101	2-1/4	4.14	105

# 1L971

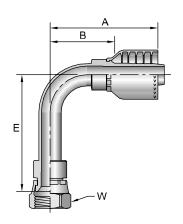
Female JIC 37° - Swivel - 90° Elbow - Medium Drop



# 14171

Female JIC 37° - Swivel - 90° Elbow - Long Drop

B-72



	#		<u>~~~~~</u>		Δ		F		$\bigcirc$ w	В	
	Part Number	Thread inch		Hose I.D.	inch	mm	inch	mm	inch	inch	mm
ĺ	14171-6-6	3/8	9/16x18	3/8	2.34	59	2.13	54	11/16	1.44	37
	14171-8-8	1/2	3/4x16	1/2	2.58	66	2.52	64	7/8	1.37	35
	14171-12-12	3/4	1-1/16x14	3/4	3.49	89	3.78	96	1-1/4	2.11	54
	14171-16-16	1	1-5/16x12	1	4.36	111	4.32	110	1-1/2	2.58	66

D

A

В

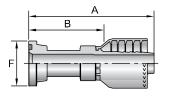
Ε

11571

#### **SAE Code 61 Flange Head**

ISO 12151-3 - S - L

#							
Part	Flange	Hose I.D.		<b>A</b>	F	E	3
Number	inch	inch	inch	mm	inch	inch	mm
11571-8-8	1/2	1/2	3.48	88	1-3/16	2.27	58
11571-10-10	5/8	5/8	3.69	93,7	1-11/32	2.44	62,0
11571-12-8	3/4	1/2	2.46	62,5	1-1/2	1.26	32,0
11571-12-12	3/4	3/4	3.86	98	1-1/2	2.48	63
11571-16-12	1	3/4	2.74	70	1-3/4	1.36	35
11571-16-16	1	1	4.32	110	1-3/4	2.55	65
11571-20-12	1-1/4	3/4	3.90	99	2	2.54	65
11571-20-16	1-1/4	1	3.27	83	2	1.58	40
11571-20-20	1-1/4	1-1/4	4.70	119	2	3.01	76
11571-20-24	1-1/4	1-1/2	5.41	137	2	3.22	82
11571-24-16	1-1/2	1	3.41	86,6	2-3/8	1.63	41,4
11571-24-20	1-1/2	1-1/4	3.48	104	2-3/8	1.36	61
11571-24-24	1-1/2	1-1/2	5.46	139	2-3/8	3.27	83
11571-24-32	1-1/2	2	5.65	144	2-3/8	3.45	88
11571-32-20	2	1-1/4	4.29	109,0	2-13/16	2.60	66,0
11571-32-24	2	1-1/2	4.01	102	2-13/16	1.82	46
11571-32-32	2	2	5.65	144	2-13/16	3.45	88
11571-40-32	2-1/2	2	4.51	115	3-5/16	2.31	59

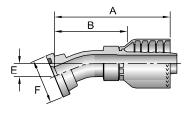


# 11671

#### SAE Code 61 Flange Head - 22-1/2° Elbow

ISO 12151-3 - E22M - L

#				١		<u> </u>		E	3
Part Number	Flange inch	Hose I.D.	inch		inch	Ī	inch	inch	
	-	-		mm	_	mm			mm
11671-12-12	3/4	3/4	3.90	99	0.44	11	1-1/2	2.54	65
11671-16-12	1	3/4	3.89	99	0.44	11	1-3/4	2.53	64
11671-16-16	1	1	4.26	108	0.44	11	1-3/4	2.67	68
11671-20-16	1-1/4	1	4.36	111	0.47	12	2	2.77	70
11671-20-20	1-1/4	1-1/4	4.67	119	0.50	13	2	3.00	76
11671-24-20	1-1/2	1-1/4	4.68	119	0.53	13	2-3/8	3.01	76
11671-24-24	1-1/2	1-1/2	5.88	149	0.63	16	2-3/8	3.69	94
11671-32-32	2	2	7.37	187	0.88	22	2-13/16	5.22	133



В

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D

F



See Accessories Section for O-Rings and Flange Kits.

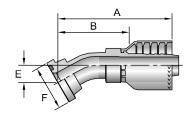
В

D

12671

#### SAE Code 61 Flange Head - 30° Elbow

ISO 12151-3 - E30S - L (1 Piece: ISO 12151-3 - E30M - L)

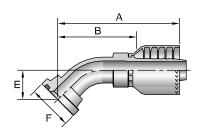


# Part	Flange	Hose I.D.	Ą		Ę			E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
12671-12-12	3/4	3/4	3.90	99	0.59	15	1-1/2	2.52	64
12671-16-16	1	1	4.46	113	0.62	16	1-3/4	2.68	68
12671-20-16	1-1/4	1	4.46	113	0.62	16	2	2.68	68
12671-20-20	1-1/4	1-1/4	4.87	124	0.72	18	2	3.18	81
12671-24-24	1-1/2	1-1/2	6.01	153	0.88	22	2-3/8	3.82	97
12671-32-24	2	1-1/2	6.01	153	0.88	22	2-13/16	3.82	97
12671-32-32	2	2	7.60	193	1.25	32	2-13/16	5.40	137

# 11771

#### SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3 - E45S - L (1 Piece: ISO 12151-3 - E45M - L)

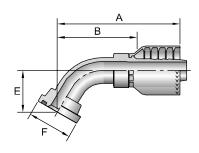


#										
Part	Flange	Hose I.D.	F	A	E		F	E	3	
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm	
11771-10-10	5/8	5/8	4.54	115	0.94	24	1-11/32	3.29	84	
11771-12-8	3/4	1/2	3.27	83	0.84	21	1-1/2	2.07	53	
11771-12-10	3/4	5/8	3.94	100	0.76	19	1-1/2	2.70	69	
11771-12-12	3/4	3/4	3.85	98	1.02	26	1-1/2	2.47	63	
11771-16-12	1	3/4	3.85	98	1.02	26	1-3/4	2.47	63	
11771-16-16	1	1	4.84	123	1.26	32	1-3/4	3.06	78	
11771-20-16	1-1/4	1	4.84	123	1.02	26	2	3.06	78	
11771-20-20	1-1/4	1-1/4	5.61	142	1.50	38	2	3.92	100	
11771-20-24	1-1/4	1-1/2	6.22	158	1.12	28	2	4.03	102	
11771-24-20	1-1/2	1-1/4	5.55	141	1.50	38	2-3/8	3.86	98	
11771-24-24	1-1/2	1-1/2	6.22	158	1.41	36	2-3/8	4.03	102	
11771-32-24	2	1-1/2	6.19	157	1.41	36	2-13/16	4.00	102	
11771-32-32	2	2	7.94	202	2.03	52	2-13/16	5.74	146	
11771-40-32	2-1/2	2	7.83	199	2.03	52	3-5/16	5.62	143	

#### 12771

# SAE Code 61 Flange Head - 60° Elbow

ISO 12151-3 - E60S - L (1 Piece: ISO 12151-3 - E60M - L)



#			,		E				3
Part	Flange	Hose I.D.	P	L I					<b>)</b>
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
12771-12-12	3/4	3/4	4.16	106	1.43	36	1-1/2	2.78	71
12771-16-12	1	3/4	4.15	105	1.39	35	1-3/4	2.77	70
12771-16-16	1	1	4.74	120	1.49	38	1-3/4	3.36	85
12771-20-20	1-1/4	1-1/4	5.10	130	1.69	43	2	3.41	87
12771-24-20	1-1/2	1-1/4	5.12	130	1.70	43	2-3/8	3.43	87
12771-24-24	1-1/2	1-1/2	6.25	159	2.03	52	2-3/8	4.06	103
12771-32-32	2	2	7.93	201	2.88	73	2-13/16	5.73	146

See Accessories Section for O-Rings and Flange Kits.

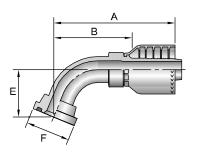


11871

#### SAE Code 61 Flange Head - 67-1/2° Elbow

ISO 12151-3 - E67S - L (1 Piece: ISO 12151-3 - E67M - L)

#							Ø		
Part	Flange	Hose I.D.	· · · · ·	A			F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11871-12-12	3/4	3/4	4.12	105	1.62	41	1-1/2	2.74	70
11871-16-12	1	3/4	4.11	104	1.59	40	1-3/4	2.73	69
11871-16-16	1	1	4.76	121	1.75	44	1-3/4	2.98	76
11871-20-20	1-1/4	1-1/4	5.08	129	1.94	49	2	3.39	86
11871-24-20	1-1/2	1-1/4	5.07	129	1.95	50	2-3/8	3.38	86
11871-24-24	1-1/2	1-1/2	6.20	157	2.31	59	2-3/8	4.01	102
11871-32-24	2	1-1/2	6.20	157	2.31	59	2-13/16	4.01	102
11871-32-32	2	2	7.89	200	3.31	84	2-13/16	5.69	145



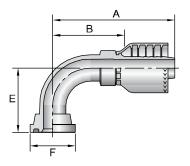
# 11971

# SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3 - E90S - L (1 Piece: ISO 12151-3 - E90M - L)

#		•				_			
Part	Flange	Hose I.D.	A	<b>L</b>	E	_	-	E	5
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11971-8-8	1/2	1/2	2.93	74	1.6	41	1-3/16	1.72	44
11971-10-10	5/8	5/8	3.62	92	2.10	53	1-11/32	2.37	60
11971-12-8	3/4	1/2	2.93	74	1.66	42	1-1/2	1.72	44
11971-12-10	3/4	5/8	3.62	92	2.10	53	1-1/2	2.37	60
11971-12-12	3/4	3/4	3.48	88	2.28	58	1-1/2	2.10	53
11971-16-12	1	3/4	3.52	89	2.28	58	1-3/4	2.14	54
11971-16-16	1	1	4.36	111	2.76	70	1-3/4	2.58	66
11971-16-20	1	1-1/4	4.53	115	2.39	61	1-3/4	2.75	70
11971-20-12	1-1/4	3/4	3.81	97	2.13	54	2	2.45	62
11971-20-16	1-1/4	1	4.33	110	2.76	70	2	2.55	65
11971-20-20	1-1/4	1-1/4	5.12	130	3.54	90	2	3.43	87
11971-20-24	1-1/4	1-1/2	6.33	161	3.00	76	2	4.14	105
11971-24-16	1-1/2	1	4.53	115	2.39	61	2-3/8	2.75	70
11971-24-20	1-1/2	1-1/4	5.09	129	3.54	90	2-3/8	3.40	86
11971-24-24	1-1/2	1-1/2	6.34	161	4.09	104	2-3/8	4.15	105
11971-32-24	2	1-1/2	6.98	148	4.09	79	2-13/16	4.36	93
11971-32-32	2	2	7.75	197	5.43	138	2-13/16	5.55	141
11971-40-32	2-1/2	2	7.43	189	4.5	114	3-5/16	5.23	133

B-75



See Accessories Section for O-Rings and Flange Kits.



D

В

В

В

A









# 18971

SAE Code 61 Flange Head - 90° Elbow - Long Drop

# Part	Flange	Hose I.D.	ı	<b>A</b>	E		F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
18971-12-12	3/4	3/4	3.49	89	3.03	77	1-1/2	2.11	54
18971-16-16	1	1	4.52	115	4.60	117	1-3/4	2.74	70
18971-20-16	1-1/4	1	4.53	115	4.60	117	2	2.75	70

# 12U71

SAE Code 61 Flange Head - 110° Elbow

#							Ø		
Part	Flange	Hose I.D.	<b>A</b>		Ę		F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
12U71-16-16	1	1	4.49	114	3.69	94	1-3/4	2.71	69

#### 16A71

**SAE Code 62 Flange Head** 

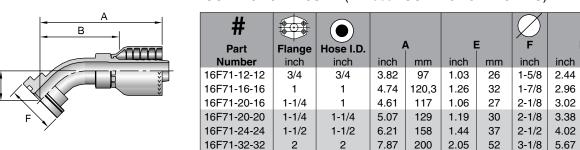
ISO 12151-3 - S - S

# Part	Flange	Hose I.D.		<b>4</b>	Ø F	В		
Number	inch	inch	inch	mm	inch	inch	mm	
16A71-12-12	3/4	3/4	4.31	109	1-5/8	2.93	74	
16A71-16-12	1	3/4	3.10	78,7	1-7/8	1.72	43,7	
16A71-16-16	1	1 1	4.89	124	1-7/8	3.11	79	
16A71-20-16	1-1/4	1	3.69	93,7	2-1/8	1.91	48,5	
16A71-20-20	1-1/4	1-1/4	5.01	127,3	2-1/8	3.32	84,3	
16A71-24-24	1-1/2	1-1/2	6.34	161,0	2-1/2	4.15	105,4	
16A71-32-32	2	2	7.16	182	3-1/8	4.96	126	

# 16F71

SAE Code 62 Flange Head - 45° Elbow

ISO 12151-3 - E45S - L (1 Piece: ISO 12151-3 - E45M - S)



See Accessories Section for O-Rings and Flange Kits.



В

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102

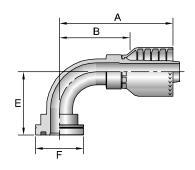
144

# 16N71

#### SAE Code 62 Flange Head - 90° Elbow

ISO 12151-3 - E90S - L (1 Piece: ISO 12151-3 - E90M - S)

#							$ \emptyset $			
Part	Flange	Hose I.D.	A		Ę		F   B		3	
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm	
16N71-12-12	3/4	3/4	3.51	89	2.28	58	1-5/8	2.13	54	
16N71-16-12	1	3/4	3.49	89	2.29	58	1-7/8	2.11	54	
16N71-16-16	1	1	4.36	111	2.76	70	1-7/8	2.58	66	
16N71-20-16	1-1/4	1	4.36	111	2.76	70	2-1/8	2.58	66	
16N71-20-20	1-1/4	1-1/4	5.09	129	3.54	90	2-1/8	3.40	86	
16N71-24-24	1-1/2	1-1/2	6.73	171	4.09	104	2-1/2	4.54	115	
16N71-32-32	2	2	7.73	196	4.50	114	3-1/8	5.53	140	

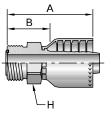


# 1J071

#### Male Seal-Lok® - Rigid - (with O-Ring)

ISO 12151-1 - S

#								
Part	Thread		Hose I.D.	Ą		H		3
Number		inch	inch	inch	mm	inch	inch	mm
1J071-8-8	1/2	13/16x16	1/2	2.40	61	7/8	1.20	30
1J071-10-8	5/8	1x14	1/2	2.61	66	1-1/16	1.41	36
1J071-10-10	5/8	1x14	5/8	2.69	68	1-1/16	1.44	37
1J071-12-10	3/4	1-3/16x12	5/8	2.79	71	1-1/4	1.55	39
1J071-12-12	3/4	1-3/16x12	3/4	2.87	73	1-1/4	1.51	38
1J071-16-12	1	1-7/16x12	3/4	2.91	74	1-1/2	1.53	39
1J071-16-16	1	1-7/16x12	1	3.27	83	1-1/2	1.68	43
1J071-20-20	1-1/4	1-11/16x12	1-1/4	3.31	84	1-3/4	1.64	42
1J071-24-24	1-1/2	2x12	1-1/2	4.02	102	2-1/8	1.83	46

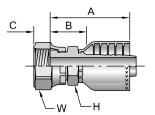


# **1JC71**

#### Female Seal-Lok® - Swivel - Short

ISO 12151-1 - SWSA

	#								A		C		H	$\bigcirc$	E	
Р	art	Thread		Hose I.D.	^		Ŭ		•••	**	-	ĺ				
Nui	mber		inch	inch	inch	mm	inch	mm	inch	inch	inch	mm				
1JC7	1-8-8	1/2	13/16x16	1/2	2.22	56	0.43	11	13/16	15/16	1.01	26				
1JC7	1-10-10	5/8	1x14	5/8	2.40	61	0.48	12	15/16	1-1/8	1.15	29				
1JC7	1-12-12	3/4	1-3/16x12	3/4	2.68	68	0.55	14	1-1/8	1-3/8	1.30	33				
1JC7	1-16-16	1	1-7/16x12	1	3.22	82	0.56	14	1-3/8	1-5/8	1.44	37				
1JC7	1-20-16	1-1/4	1-11/16x12	1	3.16	80	0.59	15	1-5/8	1-7/8	1.38	35				



When measuring overall length to end of nut, B+C dimensions must be used to calculate cut-off

See Accessories Section for O-Rings and Flange Kits.



1 Refer to Pressure Rating of Hose End Connections Chart on page E-45.







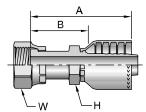
В

D

# **1JS71**

Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB

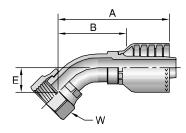


#			0			$\bigcirc$			
Part	Thread		Hose I.D.	A		Н	W	E	3
Number		inch	inch	inch	mm	inch	inch	inch	mm
1JS71-6-6	3/8	11/16x16	3/8	2.80	58	11/16	13/16	1.38	35
1JS71-6-8	3/8	11/16x16	1/2	2.50	64	13/16	13/16	1.29	33
1JS71-8-8	1/2	13/16x16	1/2	2.64	67	13/16	15/16	1.44	37
1JS71-10-8	5/8	1x14	1/2	2.89	23	13/16	1-1/8	1.69	43
1JS71-10-10	5/8	1x14	5/8	3.00	76	15/16	1-1/8	1.75	44
1JS71-10-12	5/8	1x14	3/4	3.08	78	1-1/16	1-1/8	1.70	43
1JS71-12-10	3/4	1-3/16x12	5/8	3.10	79	1-1/8	1-3/8	1.85	47
1JS71-12-12	3/4	1-3/16x12	3/4	3.31	84	1-1/16	1-3/8	1.93	49
1JS71-16-12	1	1-7/16x12	3/4	3.37	86	1-5/16	1-5/8	1.99	51
1JS71-16-16	1	1-7/16x12	1	3.70	94	1-5/16	1-5/8	1.92	49
1JS71-20-16	1-1/4	1-11/16x12	1	3.64	92	1-3/4	1-7/8	1.94	49
1JS71-20-20	1-1/4	1-11/16x12	1-1/4	3.77	96	1-3/4	1-7/8	2.08	53
1JS71-24-24	1-1/2	2x12	1-1/2	4.51	114,6	2	2-1/4	2.32	58,9

# 1J771

Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1 - SWE45



# Part	_	······································	Hose I.D.	A	<b>\</b>	E		$\bigcirc$	Е	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J771-6-6	3/8	11/16x16	3/8	2.34	59	0.43	11	13/16	1.44	37
1J771-8-8	1/2	13/16x16	1/2	2.83	72	0.59	15	15/16	1.62	41
1J771-10-8	5/8	1x14	1/2	2.93	74	0.63	16	1-1/8	1.72	44
1J771-10-10	5/8	1x14	5/8	3.08	78	0.63	16	1-1/8	1.83	46
1J771-12-12	3/4	1-3/16x12	3/4	3.63	92	0.83	21	1-3/8	2.25	57
1J771-16-16	1	1-7/16x12	1	4.46	113	0.94	24	1-5/8	2.68	68
1J771-20-20	1-1/4	1-11/16x12	1-1/4	4.75	121	1.00	25	1-7/8	3.08	78
1J771-24-24	1-1/2	2x12	1-1/2	5.43	138	1.07	27	2-1/4	3.23	82

See Accessories Section for O-Rings.

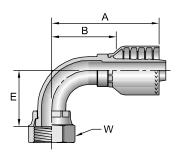


1J971

# Female Seal-Lok® - Swivel - 90° Elbow - Short Drop

ISO 12151-1 - SWES90

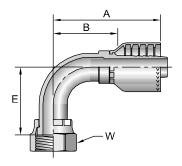
#				_		_				
Part	1	Thread	Hose I.D.	Ą		Ę		W	Е	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J971-6-6	3/8	11/16x16	3/8	2.21	56	0.91	23	13/16	1.31	33
1J971-8-8	1/2	13/16x16	1/2	2.59	66	1.14	29	15/16	1.38	35
1J971-10-8	5/8	1x14	1/2	2.74	70	1.26	32	1-1/8	1.53	39
1J971-10-10	5/8	1x14	5/8	2.88	73	1.26	32	1-1/8	1.63	41
1J971-10-12	5/8	1x14	3/4	3.07	78	1.27	32	1-1/8	1.70	43
1J971-12-10	3/4	1-3/16x12	5/8	3.40	86	1.89	48	1-3/8	2.15	55
1J971-12-12	3/4	1-3/16x12	3/4	3.49	89	1.89	48	1-3/8	2.11	54
1J971-16-16	1	1-7/16x12	1	4.36	111	2.20	56	1-5/8	2.58	66
1J971-20-20	1-1/4	1-11/16x12	1-1/4	4.86	123	2.51	64	1-7/8	3.19	81
1J971-24-24	1-1/2	2x12	1-1/2	6.22	158	2.68	68	2-1/4	4.03	102



# 1J571

# Female Seal-Lok® - Swivel - 90° Elbow - Medium Drop ISO 12151-1 - SWEM90

#	Thread Heart D						$\bigcirc$	E		
Part		Thread	Hose I.D.	Α	ì	-		VV		
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J571-8-8	1/2	13/16x16	1/2	2.59	66	1.61	41	15/16	1.38	35
1J571-10-10	5/8	1x14	5/8	2.88	73	1.85	47	1-1/8	1.63	41
1J571-12-12	3/4	1-3/16x12	3/4	3.49	89	2.28	58	1-3/8	2.11	54

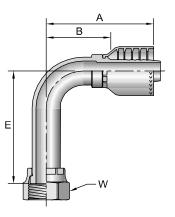


# 1J171

# Female Seal-Lok® - Swivel - 90° Elbow - Long Drop ISO 12151-1 - SWEL90

# Part	_	·····································	Hose I.D.	A	<b>\</b>	E		$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J171-6-6	3/8	11/16x16	3/8	2.39	61	2.13	54	13/16	1.49	38
1J171-8-8	1/2	13/16x16	1/2	2.59	66	2.52	64	15/16	1.38	35
1J171-10-10	5/8	1x14	5/8	2.88	73	2.76	70	1-1/8	1.63	41
1J171-12-12	3/4	1-3/16x12	3/4	3.49	89	3.78	96	1-3/8	2.11	54
1J171-16-12	1	1-7/16x12	3/4	4.07	103	4.50	114	1-5/8	2.69	68
1J171-16-16	1	1-7/16x12	1	4.36	111	4.49	114	1-5/8	2.58	66
1J171-20-20	1-1/4	1-11/16x12	1-1/4	4.88	124	5.09	129	1-7/8	3.19	81
1J171-24-24	1-1/2	2x12	1-1/2	5.83	148	5.54	141	2-1/4	3.64	92

B-79



See Accessories Section for O-Rings.



В

A



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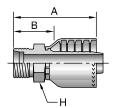
В

D

#### 1D271

Male Metric S - Rigid - (24° Cone)

ISO 12151-2

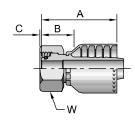


# Part		······································	Hose I.D.	ı	<b>\</b>	$\bigcirc$	E	3
Number		mm	inch	inch	mm	mm	inch	mm
1D271-25-12	25	M36x2	3/4	2.90	74	36	1.52	39
1D271-30-16	30	M42x2	1	3.45	88	46	1.67	42

## 1C971

Female Metric S - Swivel - (24° Cone with O-Ring)

ISO 12151-2 - SWS - S

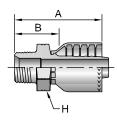


# Part	Thread		Hose I.D.	<b>A</b>		Ç		W		3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1C971-12-6	12	M20x1,5	3/8	2.05	52	0.03	1	24	0.87	22
1C971-16-8	16	M24x1,5	1/2	2.33	59	0.09	2	30	0.94	24
1C971-20-10	20	M30x2	5/8	2.60	66	0.05	1	36	1.06	27
1C971-25-12	25	M36x2	3/4	2.68	68	0.10	3	46	1.10	28
1C971-30-16	30	M42x2	1	3.07	78	0.19	5	50	1.30	33
1C971-38-20	38	M52x2	1-1/4	3.15	80	0.23	6	60	1.30	33

When measuring overall length to end of nut, B+C dimensions must be used to calculate cut-off allowance.

# 1UT71

Male BSP Taper Pipe - Rigid - (60° Cone)

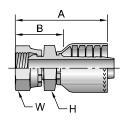


# Part	Hose I.D.		<b>4</b>	H	E	3
Number	inch	inch	mm	mm	inch	mm
1UT71-8-8	1/2	2.66	68	27	1.46	37
1UT71-12-12	3/4	2.95	75	36	1.59	40

# 1GU71

Female BSP Parallel Pipe - Swivel - (60° Cone)

B-80



# Part			Hose I.D.	4	Ą	H	$\bigcirc$	E	3
Number		inch	inch	inch	mm	mm	mm	inch	mm
1GU71-6-6	3/8	3/8x19	3/8	2.45	62	22	22	1.55	39
1GU71-8-8	1/2	1/2x14	1/2	2.81	71	27	27	1.61	41
1GU71-12-12	3/4	3/4x14	3/4	3.24	82	36	36	1.86	47
1GU71-16-16	1	1x11	1	3.82	97	41	41	2.04	52
1GU71-20-20	1-1/4	1-1/4x11	1-1/4	4.07	103	50	50	2.38	60
1GU71-24-24	1-1/2	1-1/2x11	1-1/2	4.81	122	60	60	2.62	67
1GU71-32-32	2	2x11	2	5.17	131	70	70	2.97	75

Metric S: Mates with EO "S" Series Fittings.

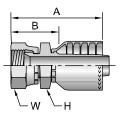
^ Must be assembled with Die Part No. 83C-D20H in a Superkrimp or Parkrimp 2.
See Accessories Section for O-Rings and Flange Kits.



# 1FU71

#### Female BSP Parallel Pipe - Swivel - (30° Flare)

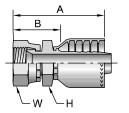
# Part		Hose I.D.	A		H	$\bigvee_{\mathbf{W}}$	E	3
Number	inch	inch	inch	mm	mm	mm	inch	mm
1FU71-6-6	3/8x19	3/8	2.39	61	24	22	1.50	38
1FU71-8-8	1/2x14	1/2	2.71	69	27	27	1.51	38
1FU71-12-12	3/4x14	3/4	3.10	79	36	36	1.74	44
1FU71-16-16	1x11	1	3.52	89	41	41	1.93	49
1FU71-20-20	1-1/4x11	1-1/4	3.87	98	50	50	2.20	56
1FU71-24-24	1-1/2x11	1-1/2	4.66	118	60	60	2.53	64



# **1MU71**

#### Female Metric - Swivel - (30° Flare)

# Part		Hose I.D.	A		$\left  \begin{array}{c c} \\ \\ \\ \\ \end{array} \right  \left  \begin{array}{c} \\ \\ \\ \end{array} \right $		В	
Number	inch	inch	inch	mm	mm	mm	inch	mm
1MU71-6-6	M18x1,5	3/8	2.45	62	24	24	1.56	40
1MU71-8-8	M22x1,5	1/2	2.83	72	27	27	1.45	37

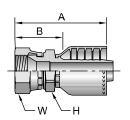


Japanese Fittings - Female Swivel 30° Flare with Metric Threads. All 30° flared fitting sizes are available by combining 1MU71 fittings in sizes up to 1/2 with 1XU71 fittings in sizes 5/8 inch and larger.

# 1XU71

#### Female Metric - Swivel - (30° Flare)

# Part Number	Thread inch	Hose I.D.	inch	A mm	H	W mm	E inch	3   <sub>mm</sub>
1XU71-10-10	M24x1,5	5/8	3.16	80	30	32	1.91	49
1XU71-12-12	M30x1,5	3/4	3.40	86	32	36	2.02	51
1XU71-16-16	M33x1,5	1	4.11	104	36	41	2.33	59
1XU71-20-20	M36x1,5	1-1/4	4.19	106	46	46	2.50	64
1XU71-24-24	M42x1,5	1-1/2	5.00	127	50	55	2.80	71



D

Japanese Fittings - Female Swivel  $30^\circ$  Flare with Metric Threads. All  $30^\circ$  flared fitting sizes are available by combining 1MU71 fittings in sizes up to 1/2 with 1XU71 fittings in sizes 5/8 inch and larger.

B-81



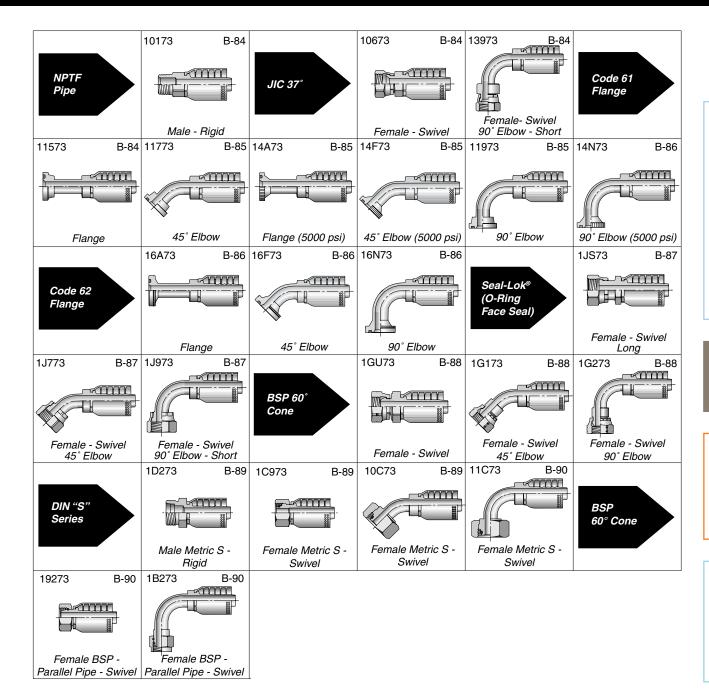
В

C

D

E





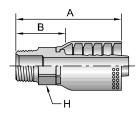
В

C

D

# 10173

# Male NPTF Pipe - Rigid

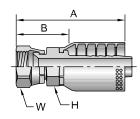


# Part		Hose I.D.		<b>A</b>	H	E	3
Number	inch	inch	inch	mm	inch	inch	mm
10173-12-12	3/4x14	3/4	3.56	90	1-1/8	1.75	44
10173-16-16	1x11-1/2	1	3.94	100	1-3/8	2.00	51
10173-20-20	1-1/4x11-1/2	1-1/4	4.92	125	1-3/4	2.43	62
10173-24-24	1-1/2x11-1/2	1-1/2	4.88	124	2	2.57	65
10173-32-32	2x11-1/2	2	5.57	141	2-1/2	2.87	73

Note: All sizes of 10173 fittings are rated at 5,000 psi working pressure.

# 10673

#### Female JIC 37° - Swivel



В

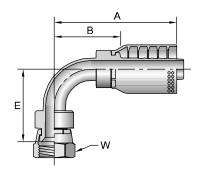
D

# Part	_	············· hread	Hose I.D.	A	<b>A</b>	H	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	inch	inch	mm
10673-12-12	3/4	1-1/16x12	3/4	3.66	93	1-1/8	1-1/4	1.85	47
10673-16-12	1	1-5/16x12	3/4	3.90	99	1-3/8	1-1/2	2.09	53
10673-16-16	1	1-5/16x12	1	4.03	102	1-3/8	1-1/2	2.09	53
10673-20-20	1-1/4	1-5/8x12	1-1/4	4.93	125	1-3/4	2	2.44	62
10673-24-24	1-1/2	1-7/8x12	1-1/2	5.04	128	2	2-1/4	2.73	69
10673-32-32	2	2-1/2x12	2	5.91	150	2-1/2	2-7/8	3.21	82

Note: All sizes of 10673 fittings are rated at 5,000 psi working pressure.

# 13973

#### Female JIC 37° - Swivel - 90° Elbow - Short Drop



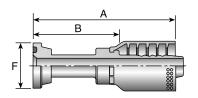
# Part	Thread Hose I.D.		Ą		Ę		<b>«</b>	B		
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
13973-12-12	3/4 1	-1/16x12	3/4	4.12	105	2.44	62	1-1/4	2.31	59
13973-16-16	1 1	-5/16x12	1	4.71	120	2.93	74	1-1/2	2.77	70

Note: All sizes of 13973 fittings are rated at 5,000 psi working pressure.

# 11573

#### **SAE Code 61 Flange Head**

ISO 12151-3 - S - L



# Part	Fla	inge	Hose I.D.	,	4	Ø	E	3
Number		nch	inch	inch	mm	inch	inch	mm
11573-12-1	2 3	3/4	3/4	4.34	110,2	1-1/2	2.53	64,3
11573-16-1	6	1	1	4.59	117	1-3/4	2.65	67

See Accessories Section for O-Rings and Flange Kits.

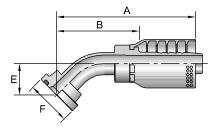


#### 11773

#### SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3 - E450S - L (1 Piece: ISO 12151-3 - E45M - L)

# Part	Flange	Hose I.D.		A		E		E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11773-12-12	3/4	3/4	4.31	109	1.02	26	1-1/2	2.50	64
11773-16-16	1	1	5.01	127	1.26	32	1-3/4	3.07	78

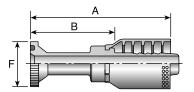


#### 14A73

#### SAE Code 61 Flange Head - 5000 psi

ISO 12151-3 - S - L

# Part	Flange	Hose I.D.	Д		Ø	E	3
Number	inch	inch	inch	mm	inch	inch	mm
14A73-20-20	1-1/4	1-1/4	5.54	141	2	3.05	77
14A73-24-24	1-1/2	1-1/2	6.53	166	2-3/8	4.22	107
14A73-32-32	2	2	6.14	156	2-13/16	3.44	87

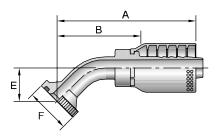


#### 14F73

# SAE Code 61 Flange Head - 45° Elbow - 5000 psi

ISO 12151-3 - E45S - L (1 Piece: ISO 12151-3 - E45M - L)

# Part	Flange	Hose I.D.	ı	4	E			E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
14F73-20-20	1-1/4	1-1/4	6.39	162	150	38	2	3.90	99
14F73-24-24	1-1/2	1-1/2	6.99	178	1.73	44	2-3/8	4.68	119
14F73-32-32	2	2	8.40	214	2.21	56	2-13/16	5.71	145



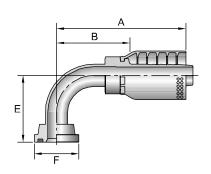
#### 11973

#### SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3 - E90S - L (1 Piece: ISO 12151-3 - E90M - L)

#			,			=			3
Part	Flange					<u> </u>			
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11973-12-12	3/4	3/4	3.97	101	2.28	58	1-1/2	2.16	55
11973-16-12	1	3/4	4.00	102	2.28	58	1-3/4	2.19	56
11973-16-16	1	1 1	4.63	118	2.76	70	1-3/4	2.69	68

B-85









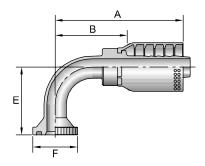




В

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D



#### 14N73

SAE Code 61 Flange Head - 90° Elbow - 5000 psi

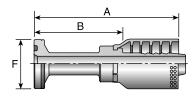
ISO 12151-3 - E90S - L (1 Piece: ISO 12151-3 - E90M - L)

#									
Part	Flange	Hose I.D.	•	<b>,</b>	l t	=	F	t	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
14N73-20-20	1-1/4	1-1/4	6.09	155	3.54	90	2	3.60	91
14N73-24-24	1-1/2	1-1/2	6.52	166	4.09	104	2-3/8	4.21	107
14N73-32-32	2	2	7.82	199	5.43	138	2-13/16	5.12	130

# 16A73

**SAE Code 62 Flange Head** 

ISO 12151-3 - S - S

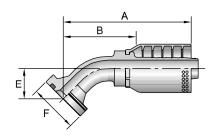


# Part	Flange	Hose I.D.		<b>A</b>	<b>∑</b> F	E	3
Number	inch	inch	inch	mm	inch	inch	mm
16A73-12-12	3/4	3/4	4.60	117	1-5/8	2.79	71
16A73-16-16	1	1	5.16	131	1-7/8	3.22	82
16A73-20-16	1-1/4	1	3.95	100	2-1/8	2.01	51
16A73-20-20	1-1/4	1-1/4	5.85	149	2-1/8	3.36	85
16A73-24-24	1-1/2	1-1/2	6.54	166	2-1/2	4.23	107
16A73-32-32	2	2	7.63	194	3-1/8	4.93	125

# 16F73

SAE Code 62 Flange Head - 45° Elbow

ISO 12151-3 - E45S - S (1 Piece: ISO 12151-3 - E45M - S)



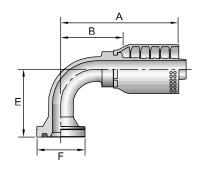
#							$\bigcirc$		
Part	Flange	Hose I.D.	<i>,</i>	١.	E		F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16F73-12-12	3/4	3/4	4.31	109	1.02	26	1-5/8	2.50	64
16F73-16-16	1	1	5.01	127	1.26	32	1-7/8	3.07	78
16F73-20-20	1-1/4	1-1/4	6.39	162	1.50	38	2-1/8	3.90	99

# 16N73

SAE Code 62 Flange Head - 90° Elbow

B-86

ISO 12151-3 - E90S - S (1 Piece: ISO 12151-3 - E90M - S)



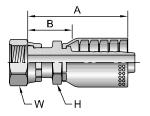
#			4			_			3
Part	Flange	Hose I.D.		1	-	<u>-</u>		-	) 
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16N73-12-12	3/4	3/4	3.97	101	2.28	58	1-5/8	2.16	55
16N73-16-16	1	1	4.63	118	2.76	70	1-7/8	2.69	68
16N73-20-20	1-1/4	1-1/4	6.09	151	3.54	90	2-1/8	3.60	91
16N73-24-24	1-1/2	1-1/2	6.52	166	4.09	104	2-1/2	4.21	107
16N73-32-32	2	2	7.82	199	5.43	138	3-1/8	5.12	130

# **1JS73**

#### Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB

#					<u> </u>			В	
Part Number		Γ <b>hread</b> inch	Hose I.D.	inch	mm	inch	inch	inch	mm
1JS73-12-12	3/4	1-3/16x12	3/4	3.70	94	1-1/8	1-3/8	1.89	48
1JS73-16-12	1	1-7/16x12	3/4	3.78	96	1-3/8	1-5/8	1.97	50
1JS73-16-16	1	1-7/16x12	1	4.03	102	1-3/8	1-5/8	2.09	53
1JS73-20-20	1-1/4	1-11/16x12	1-1/4	4.62	132	1-3/4	1-7/8	2.13	69

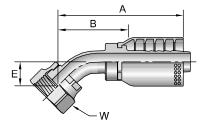


# **1J773**

#### Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1 - SWE45

# Part			Hose I.D.	A		Ę		w ○	Ę	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J773-12-12	3/4	1-3/16x12	3/4	4.11	104	0.81	21	1-3/8	2.30	58
1J773-16-16	1	1-7/16x12	1	4.69	119	0.94	24	1-5/8	2.75	70
1J773-20-20	1-1/4	1-11/16x12	1-1/4	5.78	147	0.98	25	1-7/8	3.29	84

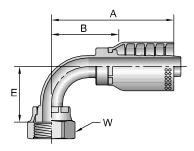


# 1J973

# Female Seal-Lok® - Swivel - 90° Elbow - Short Drop

ISO 12151-1 - SWES90

# Part	_	······································	Hose I.D.	A		E		$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J973-12-12	3/4	1-3/16x12	3/4	3.97	100	1.89	48	1-3/8	2.16	55
1J973-16-16	1	1-7/16x12	1	4.62	117	2.20	56	1-5/8	2.68	68
1J973-20-20	1-1/4	1-11/16x12	1-1/4	5.82	148	2.52	64	1-7/8	3.33	85



В

D

E



Metric S: Mates with EO "S" Series Fittings.

# 1G173

Female BSP Parallel Pipe - Swivel - 45° Elbow - (60° Cone)

#		•				_	$\bigcirc$		
Part	Thread	Hose I.D.	4	A		=	W	E	5
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
1G173-12-12	3/4x14	3/4	4.77	121,2	1.35	34,4	36	2.96	75,2
1G173-16-16	1x11	1	5.36	136,1	1.52	38,7	41	3.42	86,9

# 1G273

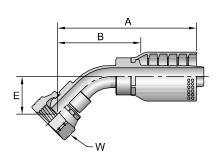
Female BSP Parallel Pipe - Swivel - 90° Elbow - (60° Cone)

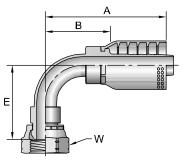
# Part		Hose I.D.	A		Ę		$\bigcirc$	В	
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
1G273-12-12	3/4x14	3/4	4.12	104,6	2.62	66,6	36	2.31	58,7
1G273-16-16	1x11	1	4.71	119,6	3.04	77,2	41	2.77	70,4

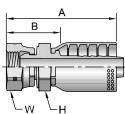
# 1GU73

Female BSP Parallel Pipe - Swivel - (60° Cone)

#								
Part	Thread	Hose I.D.	/	<b>A</b>	Н	W	E	3
Number	inch	inch	inch	mm	mm	mm	inch	mm
1GU73-12-12	3/4x14	3/4	3.76	95,5	36	36	1.95	49,5
1GU73-16-16	1x11	1	4.14	105	41	41	2.20	56







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Metric S: Mates with EO "S" Series Fittings

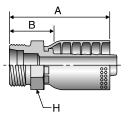


# 1D273

Male Metric S - Rigid - (24° Cone)

ISO 12151-2

# Part	_	///// Γhread	Hose I.D.	Ą		H	E	3
Number		mm	inch	inch	mm	mm	inch	mm
1D273-20-12	20	M30x2	3/4	3.31	84	30	1.42	36
1D273-25-12	25	M36x2	3/4	3.39	86	36	1.50	38
1D273-30-16	30	M42x2	1	3.70	94	46	1.73	44
1D273-38-20	38	M52x2	1-1/4	4.41	112	55	1.89	48

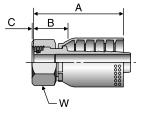


# 1C973

Female Metric S - Swivel - (24° Cone with O-Ring)

ISO 12151-2 - SWS

# Part	_	······································	Hose I.D.	A		(		$\bigcirc$ w	Е	
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
1C973-20-12	20	M30x2	3/4	3.19	81	0.05	1.3	36	1.30	33
1C973-25-12	25	M36x2	3/4	3.15	80	0.09	2.3	46	1.26	32
1C973-25-16	25	M36x2	1	3.43	87	0.09	2.3	46	1.42	36
1C973-30-16	30	M42x2	1	3.43	87	0.19	4.8	50	1.42	36
1C973-30-20	30	M42x2	1-1/4	4.17	106	0.19	4.8	50	1.65	42
1C973-38-20	38	M52x2	1-1/4	4.02	102	0.23	5.8	60	1.38	35

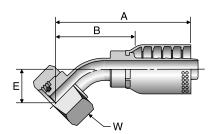


# 10C73

Female Metric S - Swivel - 45° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE45 - S

# Part		Thread Hose I.D.		A.		E		$\bigcirc$	E	3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
10C73-20-12	20	M30x2	3/4	4.41	112	1.10	28	36	2.52	64
10C73-25-12	25	M36x2	3/4	4.45	113	1.14	29	46	2.56	65
10C73-30-16	30	M42x2	1	5.16	131	1.34	34	50	3.19	81

B-89









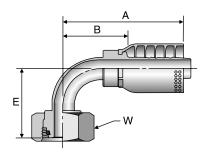
В

C

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# 11C73

Female Metric S - Swivel - 90° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE - S

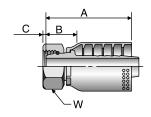


# Part		·//··/	Hose I.D.	A		E		$\bigvee_{\mathbf{W}}$	E	3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
11C73-20-12	20	M30X2	3/4	3.98	101	2.24	57	36	2.09	53
11C73-25-12	25	M36X2	3/4	3.98	101	2.32	59	46	2.05	52
11C73-25-16	25	M36X2	1	4.80	122	2.76	70	46	2.80	71
11C73-30-16	30	M42X2	1	4.80	122	2.87	73	50	2.83	72
11C73-38-20	38	M52X2	1-1/4	5.94	151	3.07	78	60	3.43	87

# 19273

Female BSP Parallel Pipe - Swivel - (60° Cone)

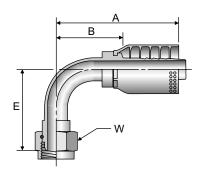
ISO 228-1



#									
Part	Thread	Hose I.D.		1		;	W	I	3
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
19273-12-12	3/4x14	3/4	3.03	77	0.46	11.7	32	1.14	29
19273-16-16	1x11	1	3.50	89	0.44	11.2	41	1.50	38
19273-20-20	1-1/4x11	1-1/4	3.98	101	0.52	13.2	50	1.46	37

#### 1B273

Female BSP Parallel Pipe - Swivel -  $90^{\circ}$  Elbow -  $(60^{\circ}$  Cone) ISO 228-1



# Part	Thread	Hose I.D.	,		F		$\bigcirc_{\mathbf{w}}$	F	3
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
1B273-12-12	3/4x14	3/4	4.17	106	2.17	55	32	2.28	58
1B273-16-16	1x11	1	4.76	121	2.99	76	41	2.76	70
1B273-20-20	1-1/4x11	1-1/4	5.94	151	3.15	80	50	3.43	87

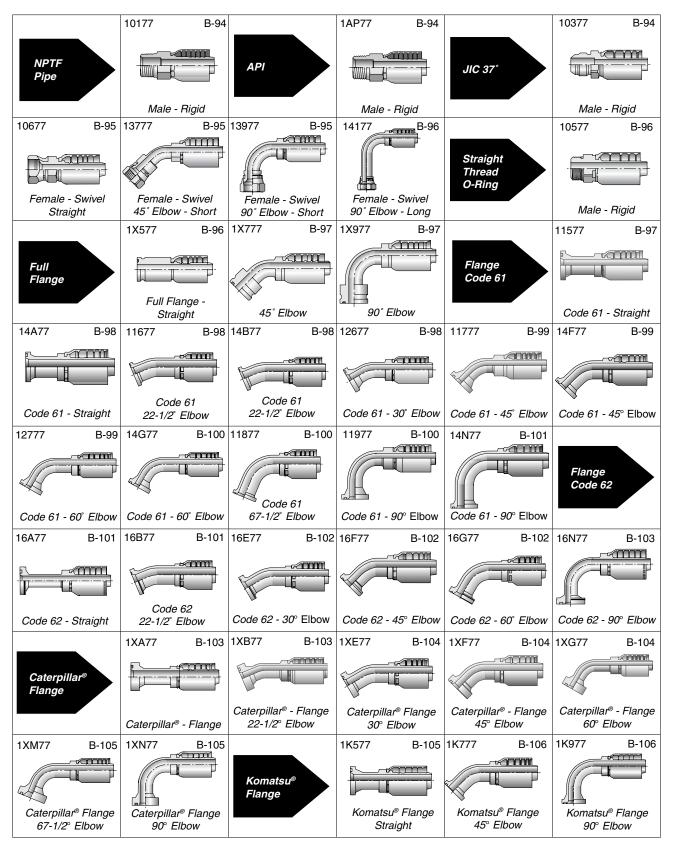
4

В

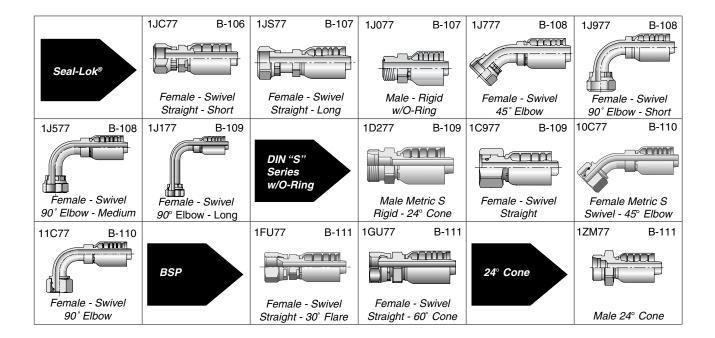
C

D









В

C

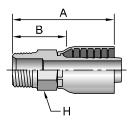
D



В

D

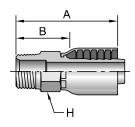
10177 Male NPTF Pipe - Rigid - Straight



#							3
Part Number	Thread inch	Hose I.D.	inch	mm	mm	inch	mm
10177-8-8	1/2x14	1/2	2.72	69.2	22	1.50	38,2
10177-8-12	1/2x14	3/4	3.43	87,1	30	1.79	45,5
10177-12-12	3/4x14	3/4	3.43	87,1	30	1.79	45,5
10177-16-16	1x11-1/2	1	4.04	102,6	36	2.09	53,1
10177-20-20	1-1/4x11-1/2	1-1/4	4.57	116,1	46	2.30	58,4
10177-24-24	1-1/2x11-1/2		4.89	124,2	50	2.50	63,5
10177-32-32	2x11-1/2	2	5.64	143,1	65	2.88	73,2

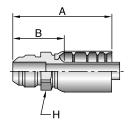
# 1AP77

Male API Pipe - Rigid - Straight



#							
Part	Thread	Hose I.D.	/	<b>4</b>	Н	E	3
Number	inch	inch	inch	mm	mm	inch	mm
1AP77-24-24	1-1/2x11-1/2	1-1/2	5.16	131,1	50	2.77	70,4
1AP77-32-32	2x11-1/2	2	6.32	160,4	65	3.56	90,4

# 10377 Male JIC 37° - Rigid - Straight



#				_				
Part	Т	hread	Hose I.D.		<b>A</b>	Н	ı	3
Number		inch	inch	inch	mm	mm	inch	mm
10377-8-8	1/2	3/4x16	1/2	2.61	66,4	22	1.39	35,4
10377-10-8	5/8	7/8x14	1/2	2.71	68,9	24	1.49	37,9
10377-10-10	5/8	7/8x14	5/8	3.01	76,4	24	1.66	42,2
10377-12-10	3/4	1-1/16x12	5/8	3.22	81,8	30	1.87	47,5
10377-12-12	3/4	1-1/16x12	3/4	3.53	89,6	30	1.89	48,1
10377-16-12	1	1-5/16x12	3/4	3.69	93,6	36	2.05	52,2
10377-16-16	1	1-5/16x12	1	3.99	101,3	36	2.04	51,8
10377-20-16	1-1/4	1-5/8x12	1	4.33	109,9	50	2.38	60,5
10377-20-20	1-1/4	1-5/8x12	1-1/4	4.66	118,4	50	2.39	60,7
10377-32-32	2	2-1/2x12	2	5.83	148,0	65	3.07	78,0

All sizes of 10377 are rated at 5,000 psi working pressure.



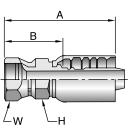
1 Refer to Pressure Rating of Hose End Connections Chart on page E-45.



10677

#### Female JIC 37° - Swivel - Straight

#		···········							
Part	-	Thread	Hose I.D.		<b>4</b>	H	W	i	3
Number		inch	inch	inch	mm	mm	mm	inch	mm
10677-8-8	1/2	3/4x16	1/2	2.79	71,1	22	22	1.58	40,1
10677-10-8	5/8	7/8x14	1/2	2.91	74,0	22	27	1.69	43,0
10677-10-10	5/8	7/8x14	5/8	3.18	80,7	24	27	1.83	46,5
10677-10-12	5/8	7/8x14	3/4	3.62	91,8	30	27	1.98	50,3
10677-12-8	3/4	1-1/16x12	1/2	3.17	80,4	30	32	1.95	49,5
10677-12-10	3/4	1-1/16x12	5/8	3.30	83,9	30	32	1.95	49,6
10677-12-12	3/4	1-1/16x12	3/4	3.68	93,5	30	32	2.05	52,0
10677-12-16	3/4	1-1/16x12	1	4.12	104,7	36	32	2.17	55,2
10677-14-12	7/8	1-3/16x12	3/4	3.88	98,5	36	36	2.24	56,9
10677-16-12	1	1-5/16x12	3/4	3.89	98,7	36	41	2.25	57,3
10677-16-16	1	1-5/16x12	1	4.16	105,7	36	41	2.21	56,2
10677-20-16	1-1/4	1-5/8x12	1	4.29	109,1	41	50	2.34	59,5
10677-20-20	1-1/4	1-5/8x12	1-1/4	4.86	123,5	46	50	2.59	65,8
10677-24-20	1-1/2	1-7/8x12	1-1/4	4.98	126,5	50	60	2.71	68,6
10677-24-24	1-1/2	1-7/8x12	1-1/2	5.34	135,7	50	60	2.95	75,0
10677-32-32	2	2-1/2x12	2	6.29	159.8	65	75	3.54	89.9

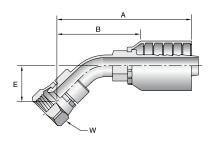


All sizes of 10677 fittings are rated at 5,000 psi working pressure.

#### 13777

#### Female JIC 37° - Swivel - 45° Elbow - Short Drop

# Part	//////// Thread		Hose I.D.		<b>A</b>	E		$\bigvee_{\mathbf{w}}$	E	3
Number		inch	inch	inch	mm	inch	mm	mm	inch	mm
13777-8-8	1/2	3/4x16	1/2	2.86	72,7	0.59	15	22	1.64	41,8
13777-10-8	5/8	7/8x14	1/2	3.06	77,8	0.63	16	27	1.84	46,8
13777-10-10	5/8	7/8x14	5/8	3.40	86,3	0.63	16	27	2.05	52,1
13777-12-12	3/4	1-1/16x12	3/4	4.37	110,9	0.83	21	32	2.73	69,4
13777-16-12	1	1-5/16x12	3/4	4.49	114,0	0.94	24	41	2.85	72,5
13777-16-16	1	1-5/16x12	1	4.79	121,7	0.94	24	41	2.84	72,2
13777-20-20	1-1/4	1-5/8x12	1-1/4	6.03	153,2	1.26	32	50	3.76	95,5



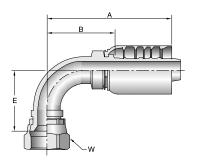
В

All sizes of 13777 fittings are rated at 5,000 psi working pressure.

# **13977**Female JIC 37° - Swivel - 90° Elbow - Short Drop

#	۵	······								
Part	1	hread	Hose I.D.		A	Ę		W	E	3
Number		inch	inch	inch	mm	inch	mm	mm	inch	mm
13977-8-8	1/2	3/4x16	1/2	2.78	70,7	1.14	29,0	22	1.56	39,7
13977-10-8	5/8	7/8x14	1/2	2.77	70,5	1.26	32,0	27	1.55	39,5
13977-10-10	5/8	7/8x14	5/8	3.21	81,5	1.26	32,0	27	1.86	47,3
13977-12-10	3/4	1-1/16x12	5/8	3.21	81,5	1.89	48,0	32	1.86	47,3
13977-12-12	3/4	1-1/16x12	3/4	4.23	107,4	1.89	48,0	32	2.60	66,0
13977-16-12	1	1-5/16x12	3/4	4.23	107,4	2.93	74,5	41	2.59	65,9
13977-16-16	1	1-5/16x12	1	4.72	119,9	2.93	74,4	41	2.77	70,4
13977-20-20	1-1/4	1-5/8x12	1-1/4	5.81	147,6	3.07	78,0	50	3.54	90,0
13977-24-24	1-1/2	1-7/8x12	1-1/2	6.68	169,7	3.39	86,0	60	4.29	109,0
13977-32-32	2	2-1/2x12	2	8.12	206,1	5.51	140,0	75	5.36	136,2

B-95



All sizes of 13977 fittings are rated at 5,000 psi working pressure.

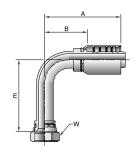


В

D

14177

Female JIC 37° - Swivel - 90° Elbow - Long Drop ISO 12151-5

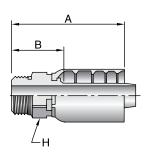


	#			0		A			$\bigcirc$	E	2
	Part Number	1	Γ <b>hread</b> inch	Hose I.D.	inch	mm	inch	mm	mm	inch	mm
ľ	14177-8-8	1/2	3/4x16	1/2	2.78	70,7	2.52	64	22	1.56	39.7
	14177-12-12	3/4	1-1/16x12	3/4	4.24	107,6	3.78	96	32	2.60	66,1
	14177-16-16	1	1-5/16x12	1	4.72	119,9	4.49	114	41	2.77	70,4

All sizes of 14177 fittings are rated at 5,000 psi working pressure.

# 10577

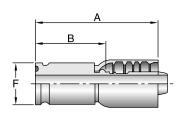
# Male SAE Straight Thread with O-Ring - Rigid - Straight



#								
Part	Т	hread	Hose I.D.	,	<b>A</b>	Н	t	3
Number		inch	inch	inch	mm	mm	inch	mm
10577-8-8	1/2	3/4x16	1/2	2.39	60,8	22	1.17	29,8
10577-12-12	3/4	1-1/16x12	3/4	3.17	80,5	32	1.53	38,9
10577-16-16	1	1-5/16x12	1	3.73	94,7	41	1.78	45,2
10577-20-20	1-1/4	1-5/8x12	1-1/4	4.17	105,9	50	1.90	48,2

# 1X577

#### Full Flange - Straight - Code 61/62



#					Ø		
Part	Flange	Hose I.D.		4	F	ı	3
Number	inch	inch	inch	mm	inch	inch	mm
1X577-8-8	1/2	1/2	2.44	62,1	1.02	1.22	31,1
1X577-12-12	3/4	3/4	4.06	103,0	1.37	2.42	61,6
1X577-16-12	1	3/4	4.06	103,0	1.54	2.42	61,6
1X577-16-16	1	1	4.45	113,0	1.54	2.50	63,5
1X577-16-20	1	1-1/4	4.73	120,2	1.54	2.46	62,5
1X577-20-16	1-1/4	1	4.45	113,0	1.81	2.50	63,5
1X577-20-20	1-1/4	1-1/4	4.73	120,2	1.81	2.46	62,5
1X577-24-20	1-1/2	1-1/4	4.85	123,2	2.21	2.58	65,5
1X577-24-24	1-1/2	1-1/2	5.07	128,8	2.21	2.68	68,1

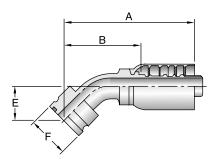
See Accessories Section for O-Rings and Flange Kits.



# 1X777

#### Full Flange - 45° Elbow - Code 61/62

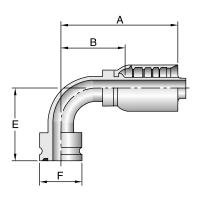
#							Ø		
Part	Flange	Hose I.D.		A	E		F	ı	В
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1X777-12-12	3/4	3/4	4.67	118,5	1.12	28,5	1.37	3.03	77,0
1X777-16-12	1	3/4	4.66	118,3	1.12	28,5	1.54	3.02	76,8
1X777-16-16	1	1	5.11	129,8	1.26	32,0	1.54	3.16	80,3
1X777-16-20	1	1-1/4	5.74	145,8	1.50	38,0	1.54	3.47	88,1
1X777-20-16	1-1/4	1	5.35	135,9	1.50	38,0	1.81	3.40	86,4
1X777-20-20	1-1/4	1-1/4	6.27	159,3	1.50	38,0	1.81	4.00	101,6
1X777-24-20	1-1/2	1-1/4	6.51	165,4	1.73	44,0	2.21	4.24	107,7
1X777-24-24	1-1/2	1-1/2	7.15	181,6	1.73	44,0	2.21	4.76	120,9



# 1X977

# Full Flange - 90° Elbow - Code 61/62

# Part	Flange	Hose I.D.	A		E		Ø F		3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1X977-8-8	1/2	1/2	3.14	79,8	1.69	43,0	1.02	1.92	48,9
1X977-12-12	3/4	3/4	4.24	107,6	2.38	60,5	1.37	2.60	66,1
1X977-12-16	3/4	1	4.33	109,9	2.76	70,0	1.37	2.38	60,5
1X977-16-12	1	3/4	4.24	107,6	2.38	60,5	1.54	2.60	66,1
1X977-16-16	1	1	4.73	120,1	2.76	70,0	1.54	2.78	70,6
1X977-16-20	1	1-1/4	5.12	130,1	3.54	90,0	1.54	2.85	72,4
1X977-20-16	1-1/4	1	4.73	120,1	2.76	70,0	1.81	2.78	70,6
1X977-20-20	1-1/4	1-1/4	5.81	147,6	3.54	90,0	1.81	3.54	90,0
1X977-24-20	1-1/2	1-1/4	5.81	147,6	3.54	90,0	2.21	3.54	90,0
1X977-24-24	1-1/2	1-1/2	6.68	169,7	4.09	104,0	2.21	4.29	109,0



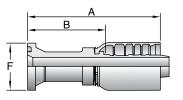
# 11577

#### **SAE Code 61 Flange Head**

ISO 12151-3-S-L

#					Ø		
Part	Flange	Hose I.D.	<i>P</i>	1	F		В
Number	inch	inch	inch	mm	inch	inch	mm
11577-8-8	1/2	1/2	3.52	89,6	1-3/16	2.30	58,6
11577-10-10	5/8	5/8	3.90	99,0	1-11/32	2.55	64,8
11577-12-8	3/4	1/2	2.65	67,3	1-1/2	1.43	36,3
11577-12-10	3/4	5/8	2.95	74,9	1-1/2	1.60	40,7
11577-12-12	3/4	3/4	4.23	107,4	1-1/2	2.59	65,9
11577-16-12	1	3/4	3.27	82,9	1-3/4	1.63	41,5
11577-16-16	1	1	4.70	119,4	1-3/4	2.75	69,9
11577-32-32	2	2	6.43	163,2	2-13/16	3.67	93,2

B-97



See Accessories Section for O-Rings and Flange Kits.



В

C



В

D

# 14A77

#### SAE Code 61 Special Flange Head - Straight - 5,000 psi

ISO 12151-3-S-L (5,000 psi)

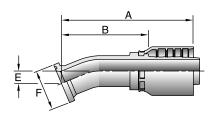
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<u></u>		
<u> </u>		

# Part	Flange	Hose I.D.		Ą	F	i	3
Number	inch	inch	inch	mm	inch	inch	mm
14A77-20-16	1-1/4	1	3.54	89,9	2	1.59	40,4
14A77-20-20	1-1/4	1-1/4	5.42	137,7	2	3.15	80,0
14A77-24-20	1-1/2	1-1/4	3.94	100,1	2-3/8	1.67	42,4
14A77-24-24	1-1/2	1-1/2	5.52	140,2	2-3/8	3.13	79,6
14A77-32-24	2	1-1/2	4.59	116,6	2-13/16	2.20	55,9
14A77-32-32	2	2	6.43	163,3	2-13/16	3.67	93,2

#### 11677

#### SAE Code 61 Flange Head - 22-1/2° Elbow

ISO 12151-3-E22M-L

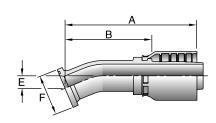


#							Ø		
Part	Flange	Hose I.D.	4	<b>A</b>		E	F		3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11677-16-16	1	1	5.44	138,1	0.55	14,0	1-3/4	3.49	88,6
11677-20-20	1-1/4	1-1/4	6.68	169,6	0.59	15,0	2	4.41	111,9
11677-24-24	1-1/2	1-1/2	7.60	193,0	0.87	22,0	2-3/8	5.21	132,4
11677-32-32	2	2	8.90	225,9	0.87	22,0	2-13/16	6.14	156,0

#### 14B77

#### SAE Code 61 Flange Head - 22-1/2° Elbow

ISO 12151-3-E22M-L (5000 psi)



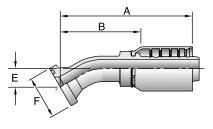
	#						_	Ž		
	Part	Flange	Hose I.D.		<b>A</b>		=	F	t	3
	Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
	14B77-20-20	1-1/4	1-1/4	6.68	169,6	0.59	15,0	2	4.41	111,9
	14B77-24-24	1-1/2	1-1/2	7.60	193,0	0.71	18,0	2-3/8	5.21	132,4
Ŀ	14B77-32-32	2	2	8.90	225,9	0.87	22,0	2-13/16	6.14	156,0

#### 12677

#### SAE Code 61 Flange Head - 30° Elbow

B-98

ISO 12151-3-E30M-L



#							$ \emptyset $		
Part	Flange	Hose I.D.	4	<b>A</b>		Ξ	F	ı	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
12677-16-16	1	1	5.36	136,1	0.75	19,0	1-3/4	3.41	86,6
12677-20-20	1-1/4	1-1/4	6.58	167,2	0.87	22,0	2	4.31	109,5
12677-32-32	2	2	8.76	222,6	1.26	32,0	2-13/16	6.01	152,7

See Accessories Section for O-Rings and Flange Kits.

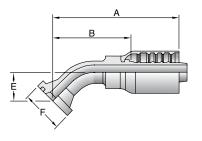


# 11777

#### SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3-E45M-L

# Part	Flange	Hose I.D.	ı	Ą	ı	<b>.</b>	Ø F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11777-8-8	1/2	1/2	3.11	79,0	0.79	20,0	1-3/16	1.89	48,0
11777-12-12	3/4	3/4	4.57	116,0	1.02	26,0	1-1/2	2.93	74,5
11777-16-12	1	3/4	4.57	116,0	1.02	26,0	1-3/4	2.93	74,5
11777-16-16	1	1	5.11	129,8	1.26	32,0	1-3/4	3.16	80,3
11777-32-32	2	2	8.31	210,9	2.20	56,0	2-13/16	5.55	141,0

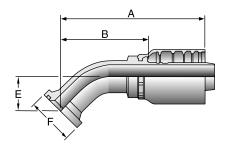


#### 14F77

#### SAE Code 61 5000 psi Flange Head - 45°

ISO 12151-3-E45M-L

# Part	Flange	Hose I.D.		A	E		F		В
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
14F77-20-16	1-1/4	1	5.11	129,8	1.26	32,0	2	3.16	80,3
14F77-20-20	1-1/4	1-1/4	6.27	159,3	1.50	38,0	2	4.00	101,6
14F77-24-20	1-1/2	1-1/4	6.27	159,3	1.50	38,0	2-3/8	4.00	101,6
14F77-24-24	1-1/2	1-1/2	7.15	181,6	1.73	44,0	2-3/8	4.76	120,9
14F77-32-24	2	1-1/2	7.15	181,6	1.73	44,0	2-13/16	4.76	120,9
14F77-32-32	2	2	8.31	210,9	2.20	56,0	2-13/16	5.55	141,0



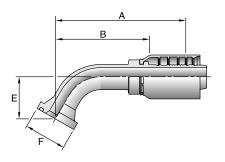
# 12777

#### SAE Code 61 Flange Head - 60° Elbow

ISO 12151-3-E60M-L

# Part	Flange	Hose I.D.		<b>A</b>		E	Ø	ı	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
12777-12-12	3/4	3/4	5.27	133,8	1.46	37,0	1-1/2	3.63	92,3
12777-16-12	1	3/4	5.27	133,8	1.46	37,0	1-3/4	3.63	92,3
12777-16-16	1	1	5.96	151,4	1.73	44,0	1-3/4	4.01	101,9
12777-32-32	2	2	8.44	214,2	3.27	83,0	2-13/16	5.68	144,3

B-99



See Accessories Section for O-Rings and Flange Kits.



В



В

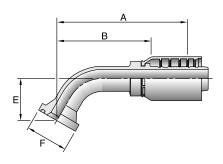
D

# 14G77

#### SAE Code 61 Flange Head - 60° Elbow

ISO 12151-3-E60M-L

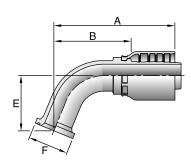
#		•		^		=			3
Part Number	Flange inch	Hose I.D.	inch	mm	inch	mm	inch	inch	mm
14G77-20-16	1-1/4	1	5.97	151,6	1.73	44,0	2	4.02	102,1
14G77-32-32	2	2	8.44	214,2	3.27	83,0	2-13/16	5.68	144,3



# 11877

#### SAE Code 61 Flange Head - 67-1/2° Elbow

ISO 12151-3-E67M-L

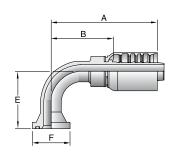


#							Ň		
Part	Flange	Hose I.D.	4	4		E	F	'	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11877-16-16	1	1	5.68	144.3	2.05	52,0	1-3/4	3.73	94,8
11877-32-32	2	2	8.39	213,0	3.82	97,0	2-13/16	5.63	143,0

# 11977

#### SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3-E90M-L



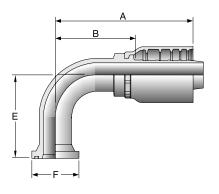
#			A				Ø		
Part	Flange	Hose I.D.				E	F		3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11977-8-8	1/2	1/2	2.99	76,0	1.61	41,0	1-3/16	1.77	45,0
11977-12-8	3/4	1/2	2.77	70,5	1.61	41,0	1-1/2	1.55	39,5
11977-12-12	3/4	3/4	4.24	107,6	2.28	58,0	1-1/2	2.60	66,1
11977-16-10	1	5/8	3.21	81,5	2.09	53,0	1-3/4	1.86	47,3
11977-16-12	1	3/4	4.24	107,6	2.28	58,0	1-3/4	2.60	66,1
11977-16-16	1	1	4.72	119,9	2.76	70,0	1-3/4	2.77	70,4
11977-20-20	1-1/4	1-1/4	5.81	147,6	3.54	90,0	2	3.54	90,0
11977-24-24	1-1/2	1-1/2	6.68	169,7	4.09	104,0	2-3/8	4.29	109,0
11977-32-32	2	2	8.12	206,1	5.43	138,0	2-13/16	5.36	136,2

# 14N77

#### SAE Code 61 Flange Head - 90°

ISO 12151-3-E90M-L

# Part	Flange	Hose I.D.		<b>A</b>	E	<u> </u>	Ø F	1	В
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
14N77-20-16	1-1/4	1	4.72	119,9	2.76	70,0	2	2.77	70,3
14N77-20-20	1-1/4	1-1/4	5.81	147,6	3.54	90,0	2	3.54	90,0
14N77-24-20	1-1/2	1-1/4	5.81	147,6	3.54	90,0	2-3/8	3.54	89,9
14N77-24-24	1-1/2	1-1/2	6.68	169,7	4.09	104,0	2-3/8	4.29	109,0
14N77-32-24	2	1-1/2	6.68	169,7	4.09	104,0	2-13/16	4.29	109,0
14N77-32-32	2	2	8.12	206,1	5.43	138,0	2-13/16	5.36	136,2

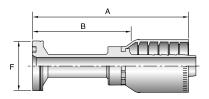


# 16A77

#### SAE Code 62 Flange Head - Straight

ISO 12151-3-S-S

#					Ø		
Part	Flange	Hose I.D.		4	F		В
Number	inch	inch	inch	mm	inch	inch	mm
16A77-8-8	1/2	1/2	3.51	89,3	1-1/4	2.29	58,3
16A77-12-10	3/4	5/8	2.95	74,9	1-5/8	1.60	40,7
16A77-12-12	3/4	3/4	4.49	113,9	1-5/8	2.85	72,5
16A77-12-16	3/4	1	4.96	126,0	1-5/8	3.01	76,5
16A77-16-12	1	3/4	3.47	88,1	1-7/8	1.83	46,6
16A77-16-16	1	1	5.26	133,6	1-7/8	3.31	84,1
16A77-16-20	1	1-1/4	5.66	143,8	1-7/8	3.39	86,1
16A77-20-16	1-1/4	1	4.05	102,9	2-1/8	2.10	53,4
16A77-20-20	1-1/4	1-1/4	5.73	145,6	2-1/8	3.46	87,8
16A77-20-24	1-1/4	1-1/2	6.06	153,9	2-1/8	3.67	93,2
16A77-24-16	1-1/2	1	4.25	108,0	2-1/2	2.30	58,4
16A77-24-20	1-1/2	1-1/4	4.65	118,1	2-1/2	2.38	60,4
16A77-24-24	1-1/2	1-1/2	6.39	162,3	2-1/2	4.00	101,6
16A77-32-24	2	1-1/2	5.23	132,8	3-1/8	2.84	72,2
16A77-32-32	2	2	7.17	182,1	3-1/8	4.41	112,0



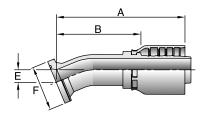
# 16B77

#### SAE Code 62 Flange Head - 22-1/2° Elbow

ISO 12151-3-E22M-S

Flange	Hose I.D.	,	4	ļ	E		ı	3
inch	inch	inch	mm	inch	mm	inch	inch	mm
3/4	3/4	4.84	122,9	0.43	11,0	1-5/8	3.20	81,4
1	3/4	4.85	123,1	0.43	11,0	1-7/8	3.21	81,6
1	1	5.44	138,2	0.55	14,0	1-7/8	3.49	88,7
1-1/4	1-1/4	6.67	169,4	0.59	15,0	2-1/8	4.40	111,7
1-1/2	1-1/2	7.60	193,0	0.71	18,0	2-1/2	5.21	132,4
2	2	8.90	225,9	0.87	22,0	3-1/8	6.14	156,0
F	3/4 1 1 1-1/4 1-1/2	Flange inch 3/4 3/4 1 1 1-1/4 1-1/2 1-1/2	Flange Hose I.D. inch 3/4 3/4 4.84 1 3/4 4.85 1 1 5.44 1-1/4 1-1/4 6.67 1-1/2 7.60	Flange inch inch inch inch mm  3/4 3/4 4.84 122,9  1 3/4 4.85 123,1  1 1 5.44 138,2  1-1/4 1-1/4 6.67 169,4  1-1/2 1-1/2 7.60 193,0	Flange inch inch inch mm inch 3/4 3/4 4.84 122,9 0.43 1 3/4 4.85 123,1 0.43 1 1 5.44 138,2 0.55 1-1/4 1-1/4 6.67 169,4 0.59 1-1/2 7.60 193,0 0.71	Flange inch inch inch mm inch mm  3/4 3/4 4.84 122,9 0.43 11,0 1 3/4 4.85 123,1 0.43 11,0 1 1 5.44 138,2 0.55 14,0 1-1/4 1-1/4 6.67 169,4 0.59 15,0 1-1/2 1-1/2 7.60 193,0 0.71 18,0	Flange inch inch inch mm inch mm inch 3/4 3/4 4.84 122,9 0.43 11,0 1-5/8 1 3/4 4.85 123,1 0.43 11,0 1-7/8 1 1 1 5.44 138,2 0.55 14,0 1-7/8 1-1/4 1-1/4 6.67 169,4 0.59 15,0 2-1/8 1-1/2 1-1/2 7.60 193,0 0.71 18,0 2-1/2	Flange inch inch inch mm inch mm inch inch inch 3/4 3/4 4.84 122,9 0.43 11,0 1-5/8 3.20 1 3/4 4.85 123,1 0.43 11,0 1-7/8 3.21 1 1 5.44 138,2 0.55 14,0 1-7/8 3.49 1-1/4 1-1/4 6.67 169,4 0.59 15,0 2-1/8 4.40 1-1/2 1-1/2 7.60 193,0 0.71 18,0 2-1/2 5.21

B-101





В



# 16E77

#### SAE Code 62 Flange Head - 30° Elbow

ISO 12151-3-E30M-S

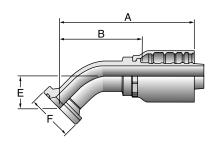
	A
	- B
+	
E	
F	Th.

# Part	Flange	Hose I.D.	,	<b>A</b>	ı	E	Ø	ı	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16E77-12-12	3/4	3/4	4.77	121,1	0.63	16,0	1-5/8	3.13	79,6
16E77-16-16	1	1	5.36	136,1	0.75	19,0	1-7/8	3.41	86,6
16E77-20-20	1-1/4	1-1/4	6.58	167,2	0.87	22,0	2-1/8	4.31	109,4
16E77-24-24	1-1/2	1-1/2	7.45	189,2	1.18	30,0	2-1/2	5.06	128,5
16E77-32-32	2	2	8.76	222,6	1.26	32,0	3-1/8	6.01	152,7

# 16F77

#### SAE Code 62 Flange Head - 45° Elbow

ISO 12151-3-E45M-S



В

D

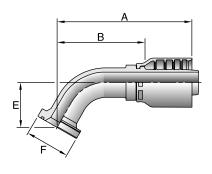
#							Ø		
Part	Flange	Hose I.D.		A	ı		F	- 1	В
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16F77-8-8	1/2	1/2	3.11	79,0	0.75	19,0	1-1/4	1.89	48,0
16F77-12-10	3/4	5/8	3.77	95,7	1.00	25,5	1-5/8	2.42	61,5
16F77-12-12	3/4	3/4	4.57	116,0	1.02	26,0	1-5/8	2.93	74,5
16F77-12-16	3/4	1	4.98	126,5	1.26	32,0	1-5/8	3.03	77,0
16F77-16-12	1	3/4	4.57	116,0	1.02	26,0	1-7/8	2.93	74,5
16F77-16-16	1	1	5.11	129,8	1.26	32,0	1-7/8	3.16	80,3
16F77-16-20	1	1-1/4	5.74	145,8	1.50	38,0	1-7/8	3.47	88,1
16F77-20-16	1-1/4	1	5.11	129,8	1.26	32,0	2-1/8	3.16	80,3
16F77-20-20	1-1/4	1-1/4	6.27	159,3	1.50	38,0	2-1/8	4.00	101,6
16F77-20-24	1-1/4	1-1/2	6.84	173,7	1.73	44,0	2-1/8	4.45	113,1
16F77-24-20	1-1/2	1-1/4	6.27	159,3	1.50	38,0	2-1/2	4.00	101,6
16F77-24-24	1-1/2	1-1/2	7.15	181,6	1.73	44,0	2-1/2	4.76	120,9
16F77-32-32	2	2	8.31	210,9	2.20	56,0	3-1/8	5.55	141,0

# 16G77

#### SAE Code 62 Flange Head - 60° Elbow

B-102

ISO 12151-3-E60M-S



# Part	Flange	Hose I.D.	A		E		Ø	ı	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16G77-12-12	3/4	3/4	5.27	133,8	1.46	37,0	1-5/8	3.63	92,3
16G77-16-16	1	1	5.96	151,4	1.73	44,0	1-7/8	4.01	101,9
16G77-20-20	1-1/4	1-1/4	7.49	190,3	2.17	55,0	2-1/8	5.22	132,6
16G77-24-24	1-1/2	1-1/2	7.54	191,5	2.52	64,0	2-1/2	5.15	130,8
16G77-32-32	2	2	8.43	214,2	3.27	83,0	3-1/8	5.68	144,3

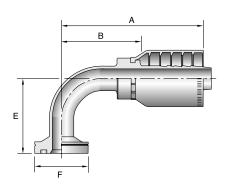


# 16N77

# SAE Code 62 Flange Head - 90° Elbow

ISO 12151-3 - E90M - S

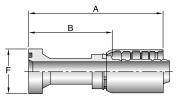
#									
Part	Flange	Hose I.D.		Α	I	<b>=</b>	F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16N77-8-8	1/2	1/2	2.77	70,5	1.61	41,0	1-1/4	1.55	39,5
16N77-8-10	1/2	5/8	3.09	78,5	2.13	54,0	1-1/4	1.74	44,2
16N77-12-10	3/4	5/8	3.62	91,8	2.13	54,0	1-5/8	2.27	57,6
16N77-12-12	3/4	3/4	4.24	107,6	2.28	58,0	1-5/8	2.60	66,1
16N77-12-16	3/4	1	4.41	112,0	2.76	70,0	1-5/8	2.46	62.5
16N77-16-12	1	3/4	4.24	107,6	2.28	58,0	1-7/8	2.60	66,1
16N77-16-16	1	1	4.72	119,9	2.76	70,0	1-7/8	2.77	70,4
16N77-16-20	1	1-1/4	5.12	130,1	3.54	90,0	1-7/8	2.85	72,4
16N77-20-16	1-1/4	1	4.72	119.9	2.76	70,0	2-1/8	2.77	70,4
16N77-20-20	1-1/4	1-1/4	5.81	147,6	3.54	90,0	2-1/8	3.54	90,0
16N77-20-24	1-1/4	1-1/2	6.15	156,2	4.09	104,0	2-1/8	3.76	95,5
16N77-24-20	1-1/2	1-1/4	5.81	147,6	3.54	90,0	2-1/2	3.54	90,0
16N77-24-24	1-1/2	1-1/2	6.68	169,7	4.09	104,0	2-1/2	4.29	109,0
16N77-32-24	2	1-1/2	6.68	169,7	4.09	104,0	3-1/8	4.29	109,0
16N77-32-32	2	2	8.75	222,1	5.43	138,0	3-1/8	5.99	152,2



# 1XA77

#### Caterpillar® Flange Head - Straight

#					Ø		
Part	Flange	Hose I.D.	A		F		В
Number	inch	inch	inch	mm	inch	inch	mm
1XA77-12-12	3/4	3/4	4.48	113,7	1-5/8	2.84	72,2
1XA77-12-16	3/4	1	4.96	126,0	1-5/8	3.01	76,5
1XA77-16-12	1	3/4	3.47	88,1	1-7/8	1.83	46,6
1XA77-16-16	1	1	5.54	140,7	1-7/8	3.59	91,2
1XA77-20-16	1-1/4	1	4.10	104,1	2-1/8	2.15	54,6
1XA77-20-20	1-1/4	1-1/4	5.98	151,9	2-1/8	3.71	94,2
1XA77-20-24	1-1/4	1-1/2	6.32	160,5	2-1/8	3.93	99,8
1XA77-24-20	1-1/2	1-1/4	4.65	118,1	2-1/2	2.38	60,4
1XA77-24-24	1-1/2	1-1/2	6.94	176,3	2-1/2	4.55	115,6
1XA77-32-24	2	1-1/2	5.24	133,1	3-1/8	2.85	72,4
1XA77-32-32	2	2	7.56	191,9	3-1/8	4.80	121,9

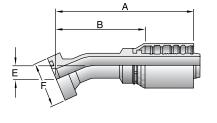


# 1XB77

# Caterpillar® Flange Head - 22-1/2° Elbow

#							Ø		
Part	Flange	Hose I.D.	4	A	E	-	F	1	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1XB77-12-12	3/4	3/4	5.09	129,2	0.55	14,0	1-5/8	3.45	87,7
1XB77-16-12	1	3/4	5.09	129,2	0.55	14,0	1-7/8	3.45	87,7
1XB77-16-16	1	1	5.66	143,8	0.55	14,0	1-7/8	3.71	94,2
1XB77-20-16	1-1/4	1	5.66	143,8	0.55	14,0	2-1/8	3.71	94,3
1XB77-20-20	1-1/4	1-1/4	6.60	167,7	0.58	14,7	2-1/8	4.33	109,9
1XB77-24-20	1-1/2	1-1/4	6.56	166,6	0.75	19,1	2-1/2	4.29	108,9
1XB77-24-24	1-1/2	1-1/2	7.66	194,6	0.71	18,0	2-1/2	5.27	133,9

B-103





В

D

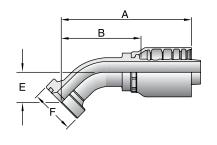
1XE77 Caterpillar® Flange Head - 30° Elbow

B B

# Part	Flange	Hose I.D.	,	<b>A</b>	ı	E	Ø	ı	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1XE77-12-12	3/4	3/4	4.99	126,9	0.83	21,0	1-5/8	3.36	85,4
1XE77-16-12	1	3/4	5.02	127,4	0.75	19,0	1-7/8	3.38	86,0
1XE77-16-16	1	1	5.59	142,0	0.75	19,0	1-7/8	3.64	92,5
1XE77-20-16	1-1/4	1	5.55	141,0	0.87	22,0	2-1/8	3.60	91,5
1XE77-20-20	1-1/4	1-1/4	6.50	165,1	0.94	24,0	2-1/8	4.23	107,4
1XE77-24-20	1-1/2	1-1/4	6.50	165,1	0.94	24,0	2-1/2	4.23	107,4
1XE77-24-24	1-1/2	1-1/2	7.52	191,0	1.18	30,0	2-1/2	5.13	130,3

# 1XF77

#### Caterpillar® Flange Head - 45° Elbow



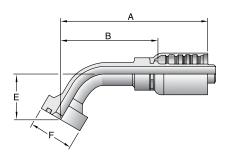
В

D

#		0					Ø		_
Part	Flange	Hose I.D.		4	E		F		В
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1XF77-12-12	3/4	3/4	4.76	120,8	1.22	31,0	1-5/8	3.12	79,3
1XF77-16-12	1	3/4	4.76	120,8	1.22	31,0	1-7/8	3.12	79,3
1XF77-16-16	1	1	5.26	133,6	1.42	36,0	1-7/8	3.31	84,1
1XF77-20-16	1-1/4	1	5.26	133,6	1.42	36,0	2-1/8	3.31	84,1
1XF77-20-20	1-1/4	1-1/4	6.23	158,2	1.46	37,0	2-1/8	3.96	100,6
1XF77-24-20	1-1/2	1-1/4	6.23	158,2	1.46	37,0	2-1/2	3.96	100,6
1XF77-24-24	1-1/2	1-1/2	7.19	182,6	1.77	45,0	2-1/2	4.80	121,9

# 1XG77

#### Caterpillar® Flange Head - 60° Elbow



	#							$\emptyset$		
	Part	Flange	Hose I.D.		A	E		F		В
	Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1	XG77-12-12	3/4	3/4	5.35	135,8	1.65	42,0	1-5/8	3.71	94,3
1	XG77-16-12	1	3/4	5.35	135,8	1.65	42,0	1-7/8	3.71	94,3
1	IXG77-16-16	1	1	5.98	151,9	1.97	50,0	1-7/8	4.03	102,4
1	IXG77-20-16	1-1/4	1	6.12	155,4	1.73	44,0	2-1/8	4.17	105,9
1	IXG77-20-20	1-1/4	1-1/4	7.74	196,6	2.01	51,0	2-1/8	5.47	138,9
1	IXG77-24-20	1-1/2	1-1/4	7.07	179,6	2.01	51,0	2-1/2	4.80	121,9
1	IXG77-24-24	1-1/2	1-1/2	7.52	191,0	2.56	65,0	2-1/2	5.13	130,3

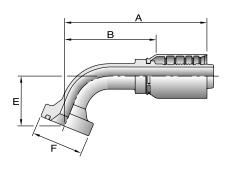
See Accessories Section for O-Rings and Flange Kits.



# 1XM77

# Caterpillar® Flange - 67-1/2° Elbow

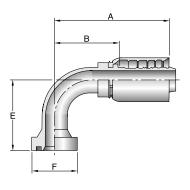
# Part	Flange	Hose I.D.	A		E		A E F		ı	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm	
1XM77-12-12	3/4	3/4	5.27	131,2	1.77	45,0	1-5/8	3.53	90,8	
1XM77-16-12	1	3/4	4.98	126,6	1.77	45,0	1-7/8	3.35	85,1	
1XM77-16-16	1	1	3.44	87,3	2.05	52,0	1-7/8	1.49	37.8	
1XM77-20-16	1-1/4	1	5.84	148,3	2.05	52,1	2-1/8	3.89	98,8	
1XM77-20-20	1-1/4	1-1/4	7.63	193,9	2.05	52,0	2-1/8	5.36	136,2	
1XM77-24-20	1-1/2	1-1/4	6.96	176,8	2.05	52,0	2-1/2	4.69	119,1	



# 1XN77

#### Caterpillar® Flange Head - 90° Elbow

#					2			7		
Part	Flange	Hose I.D.		A	E	=	F		В	
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm	
1XN77-12-12	3/4	3/4	4.23	107,4	2.48	63,0	1-5/8	2.59	65,9	
1XN77-16-12	1	3/4	4.23	107,4	2.48	63,0	1-7/8	2.59	65,9	
1XN77-16-16	1	1	4.73	120,1	2.91	74,0	1-7/8	2.78	70,5	
1XN77-20-16	1-1/4	1	4.73	120,1	2.91	74,0	2-1/8	2.78	70,5	
1XN77-20-20	1-1/4	1-1/4	5.81	147,6	3.70	94,0	2-1/8	3.54	90,0	
1XN77-20-24	1-1/4	1-1/2	6.15	156,2	4.17	105,9	2-1/8	3.76	95,5	
1XN77-24-20	1-1/2	1-1/4	5.81	147,6	3.03	77,0	2-1/2	3.54	90,0	
1XN77-24-24	1-1/2	1-1/2	6.68	169,7	4.16	105,6	2-1/2	4.29	109,0	
1XN77-32-24	2	1-1/2	6.68	169,7	4.16	105,6	3-1/8	4.29	109,0	

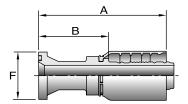


# 1K577

# Komatsu® Flange Head - Straight

#				_	$ \emptyset $	_	
Part	Flange	Hose I.D.		<b>A</b>	F	E	3
Number	inch	inch	inch	mm	inch	inch	mm
1K577-16-16	1	1	4.70	119,4	1-3/4	2.75	69,9

B-105



See Accessories Section for O-Rings and Flange Kits.



В

C

D

Ξ

# 1K777

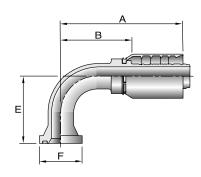
#### Komatsu® Flange Head - 45° Elbow

	- A
	В
E	
F	

# Part	Flange	Hose I.D.		A		E	Ø	ı	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1K777-12-12	3/4	3/4	4.57	116,0	1.02	26,0	1-1/2	2.93	74,5
1K777-16-16	1	1	4.95	125,7	1.10	28,0	1-3/4	3.00	76,2
1K777-20-20	1-1/4	1-1/4	6.27	159,3	1.50	38,0	2	4.00	101,6

# 1K977

#### Komatsu® Flange Head - 90° Elbow



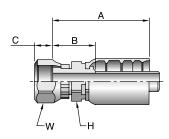
В

D

#		•		^		=	Ø		3
Part	Flange	Hose I.D.		<b>A</b> 	'	-			
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1K977-12-12	3/4	3/4	4.23	107,4	2.28	58,0	1-1/2	2.59	65,9
1K977-16-16	1	1	5.00	127,0	2.76	70,0	1-3/4	3.05	77,5
1K977-20-20	1-1/4	1-1/4	5.81	147,6	3.54	90,0	2	3.54	89,9

# **1JC77**

#### Female Seal-Lok® - Swivel - Straight - Short ISO 12151-1-SWSA



#	~	·····	0								
Part	T	hread	Hose I.D.	4	A		ز ا	Н	W	E	5
Number		inch	inch	inch	mm	inch	mm	mm	mm	inch	mm
1JC77-8-8	1/2	13/16x16	1/2	2.35	59,8	0.43	11,0	22	24	1.13	28,8
1JC77-10-10	5/8	1x14	5/8	2.75	69,8	0.48	12,0	24	30	1.40	35,6
1JC77-12-12	3/4	1-3/16x12	3/4	3.16	80,2	0.55	12,0	30	36	1.52	38,7
1JC77-16-12	1	1-7/16x12	3/4	3.35	85,0	0.57	14,5	36	41	1.71	43,5
1JC77-16-16	1	1-7/16x12	1	3.59	91,2	0.57	14,5	36	41	1.64	41,7
1JC77-20-16	1-1/4	1-11/16x12	1	3.74	95,0	0.59	15,0	41	50	1.79	45,5
1JC77-32-32	2	2-1/2X12	2	5.64	143,1	0.73	18,4	65	75	2.88	73,2

-32 size rated to 3,000 psi



1 Refer to Pressure Rating of Hose End Connections Chart on page E-45.

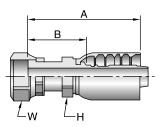


**1JS77** 

#### Female Seal-Lok® - Swivel - Straight - Long

ISO 12151-1-SWSB

#	۸	······							
Part	Т	hread	Hose I.D.	A		Н	W	E	3
Number		inch	inch	inch	mm	mm	mm	inch	mm
1JS77-6-8	3/8	11/16x16	1/2	2.67	67,8	22	22	1.45	36,8
1JS77-8-8	1/2	13/16x16	1/2	2.80	71,2	22	24	1.58	40,2
1JS77-10-8	5/8	1x14	1/2	2.95	75,0	24	30	1.73	44,0
1JS77-10-10	5/8	1x14	5/8	3.21	81,5	24	30	1.86	47,3
1JS77-12-8	3/4	1-3/16x12	1/2	3.15	80,1	30	36	1.93	49,1
1JS77-12-10	3/4	1-3/16x12	5/8	3.35	85,1	30	36	2.00	50,8
1JS77-12-12	3/4	1-3/16x12	3/4	3.68	93,4	30	36	2.04	51,9
1JS77-12-16	3/4	1-3/16x12	1	4.18	106,2	36	36	2.23	56,7
1JS77-16-12	1	1-7/16x12	3/4	3.90	99,0	36	41	2.26	57,5
1JS77-16-16	1	1-7/16x12	1	4.19	106,4	36	41	2.24	56,9
1JS77-16-20	1	1-7/16x12	1-1/4	4.71	119,7	46	41	2.44	62,0
1JS77-20-16	1-1/4	1-11/16x12	1	4.29	108,9	41	50	2.34	59,5
1JS77-20-20	1-1/4	1-11/16x12	1-1/4	4.78	121,4	46	50	2.51	63,8
1JS77-24-24	1-1/2	2x12	1-1/2	5.12	130,0	60	60	2.73	69,4
1JS77-32-32	2	2-1/2x12	2	6.28	159,5	65	75	3.52	89,4



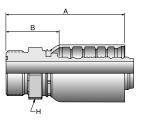
-32 size rated to 3,000 psi

# 1J077

# Male Seal-Lok® - Rigid - Straight - (with O-Ring)

ISO 12151-1-S

#		•		Λ			3
Part Number	Thread inch	Hose I.D. inch	inch	A   mm	mm	inch	mm
1J077-8-8	13/16x16	1/2	2.46	62,6	22	1.24	31,6
1J077-10-8	1x14	1/2	2.67	67,9	27	1.45	36,9
1J077-10-10	1x14	5/8	2.86	72,6	27	1.51	38,4
1J077-12-10	1-3/16x12	5/8	2.97	75,4	30	1.62	41,2
1J077-12-12	1-3/16x12	3/4	3.27	82,9	32	1.63	41,5
1J077-16-12	1-7/16x12	3/4	3.32	84,3	41	1.68	42,8
1J077-16-16	1-7/16x12	1	3.74	95,0	41	1.79	45,5
1J077-20-16	1-11/16x12	1	3.82	97,0	50	1.87	47,5
1J077-20-20	1-11/16x12	1-1/4	4.31	109,5	50	2.04	51,8
1J077-24-20	2x12	1-1/4	4.56	115,8	60	2.29	58,1



1 Refer to Pressure Rating of Hose End Connections Chart on page E-45.

B-107



В

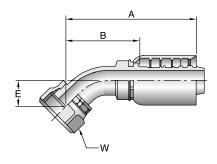
В

D

# **1J777**

#### Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1-SWE45

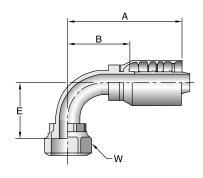


# Part		······································	Hose I.D.		Ą	E	<b>.</b>	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	mm	inch	mm
1J777-8-8	1/2	13/16x16	1/2	2.86	72,7	0.59	15	24	1.64	41,8
1J777-10-8	5/8	1x14	1/2	2.97	75,5	0.63	16	30	1.75	44,6
1J777-10-10	5/8	1x14	5/8	3.28	83,3	0.63	16	30	1.93	49,0
1J777-12-12	3/4	1-3/16x12	3/4	4.39	111,4	0.83	21	36	2.75	69,9
1J777-16-16	1	1-7/16x12	1	4.79	121,7	0.94	24	41	2.84	72,2
1J777-20-20	1-1/4	1-11/16x12	1-1/4	5.69	144,6	0.98	25	50	3.42	86,8
1J777-24-20	1-1/2	2x12	1-1/4	5.80	147,3	1.06	27	60	3.53	89,6
1J777-24-24	1-1/2	2x12	1-1/2	6.91	175,5	1.64	42	60	4.52	114,8

# 1J977

Female Seal-Lok® - Swivel - 90° Elbow - Short Drop

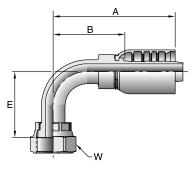
ISO 12151-1-SWES90



#			0			_				
Part	Т	hread	Hose I.D.	F	<b>.</b>	Ę		W	E	<b>5</b>
Number		inch	inch	inch	mm	inch	mm	mm	inch	mm
1J977-8-8	1/2	13/16x16	1/2	2.78	70,7	1.14	29	24	1.56	39,7
1J977-10-8	5/8	1x14	1/2	2.77	70,5	1.26	32	30	1.55	39,5
1J977-10-10	5/8	1x14	5/8	3.21	81,5	1.26	32	30	1.86	47,3
1J977-12-8	3/4	1-3/16x12	1/2	2.77	70,5	1.89	48	36	1.55	39,5
1J977-12-10	3/4	1-3/16x12	5/8	3.21	81,5	1.89	48	36	1.86	47,3
1J977-12-12	3/4	1-3/16x12	3/4	4.23	107,5	1.89	48	36	2.60	66,0
1J977-16-12	1	1-7/16x12	3/4	4.23	107,4	2.20	56	41	2.59	65,9
1J977-16-16	1	1-7/16x12	1	4.73	120,1	2.20	56	41	2.78	70,6
1J977-16-20	1	1-7/16x12	1-1/4	5.12	130,1	2.20	56	41	2.85	72,4
1J977-20-16	1-1/4	1-11/16x12	1	4.72	119,9	2.52	64	50	2.77	70,4
1J977-24-20	1-1/4	1-11/16x12	1-1/4	5.73	145,5	2.52	64	50	3.46	87,9

# **1J577**

Female Seal-Lok® - Swivel - 90° Elbow - Medium Drop ISO 12151-1 - SWEM90



# Part		////// Γhread	Hose I.D.	,	<b>A</b>	E		$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	mm	inch	mm
1J577-8-8	1/2	13/16x16	1/2	2.77	70,5	1.61	41	24	1.55	39,5
1J577-10-10	5/8	1x14	5/8	4.11	104,4	1.85	57	30	2.76	70,1
1J577-12-12	3/4	1-3/16x12	3/4	4.24	107,6	2.28	58	36	2.60	66,1
1J577-16-12	1	1-7/16x12	3/4	4.23	107,4	2.80	71	56	2.59	65,9
1J577-16-16	1	1-7/16x12	1	4.72	119,9	2.80	71	56	2.77	70,4
1J577-20-20	1-1/4	1-11/16x12	1-1/4	5.73	145,6	3.07	78	64	3.46	87,9

See Accessories Section for O-Rings and Flange Kits.



1 Refer to Pressure Rating of Hose End Connections Chart on page E-45.

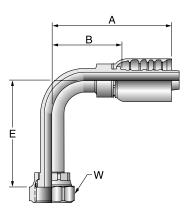


#### **1J177**

#### Female Seal-Lok® - Swivel - 90° Elbow - Long Drop

ISO 12151-1-SWEL90

# Part		Hose I.D.	A	<b>1</b>	E		$\bigcirc$	E	3
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
1J177-8-8	13/16x16	1/2	2.77	70,5	2.52	64	24	1.55	39,5
1J177-10-10	1x14	5/8	3.21	81,5	2.76	70	30	1.86	47,3
1J177-12-10	1-3/16x12	5/8	3.64	92,4	3.78	96	36	2.29	58,2
1J177-12-12	1-3/16x12	3/4	4.23	107,4	3.78	96	36	2.59	65,9
1J177-16-12	1-7/16x12	3/4	4.23	107,4	4.49	114	41	2.60	66,1
1J177-16-16	1-7/16x12	1	4.73	120,1	4.49	114	41	2.78	70,6
1J177-20-16	1-11/16x12	1	4.73	120,1	5.08	129	50	2.78	70,6
1J177-20-20	1-11/16x12	1-1/4	5.73	145,6	5.08	129	50	3.46	87,9

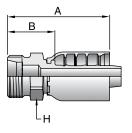


# 1D277

#### Male Metric S - Rigid - (24° Cone)

End Connection per ISO 8434-1-BHS

# Part		Hose I.D.	A	4	H		В
Number	mm	inch	inch	mm	mm	inch	mm
1D277-16-8	M24x1,5	1/2	2.53	64,4	24	1.31	33,4
1D277-20-10	M30x2	5/8	2.85	72,4	30	1.50	38,1
1D277-20-12	M30x2	3/4	3.31	84,1	30	1.68	42,6
1D277-25-12	M36x2	3/4	3.39	86,3	36	1.76	44,8
1D277-25-16	M36x2	1	3.78	95,9	36	1.83	46,4
1D277-30-16	M42x2	1	3.91	99,3	46	1.96	49,8
1D277-38-20	M52x2	1-1/4	4.50	114,3	55	2.23	56,6
1D277-38-24	M52x2	1-1/2	4.75	120,5	55	2.36	59,9



# 1C977

#### Female Metric S - Swivel - Straight (24° Cone with O-Ring) ISO 12151-2-SWS

#		////////									1
Part		Thread	Hose I.D.		<b>A</b>		}	W	E	3	1
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm	
1C977-16-8	16	M24x1,5	1/2	2.34	59,5	0.09	2,0	30	1.12	28,5	
1C977-16-10	16	M24x1,5	5/8	2.64	67,0	0.09	2,0	30	1.29	32,8	
1C977-20-10	20	M30x2	5/8	2.64	67,0	0.05	1,3	36	1.29	32,8	
1C977-20-12	20	M30x2	3/4	2.99	76,0	0.05	1,3	36	1.34	34,0	
1C977-25-12	25	M36x2	3/4	3.00	76,5	0.10	2,6	46	1.37	35,0	
1C977-25-16	25	M36x2	1	3.51	89,2	0.10	2,6	46	1.56	39,6	
1C977-30-12	30	M42x2	3/4	3.17	80,4	0.19	5,0	50	1.53	39,0	
1C977-30-16	30	M42x2	1	3.50	89,0	0.19	5,0	50	1.55	39,5	

4.09 | 103,9 | 0.19 | 5,0

0.27

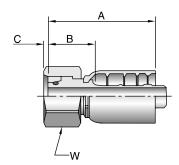
0.24

6,9

6,0

98,0

103,7



When measuring overall length to end of nut, B + C dimensions must be used to calculate cut-off allowance.

3.86

4.08

1-1/4

1-1/4

1-1/2

See Accessories Section for O-Rings and Flange Kits.

M42x2

M52x2

M52x2



Pressure Rating of Hose End Connections Chart on page E-45.

B-109

50

1.82 | 46,2

35,0

43,1

1.38

1.69



1C977-30-20 30

1C977-38-20 38

В





# В

# 10C77

Female Metric S - Swivel - 45° Elbow - (24° Cone with O-Ring) ISO 12151-2-SWE-45

# Part			Hose I.D.		A	E		$\bigcirc$		В
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
10C77-16-8	16	M24x1,5	1/2	3.26	82,9	0.93	23,5	30	2.04	51,9
10C77-20-10	20	M30x2	5/8	4.21	106,9	1.10	28,0	36	2.86	72,7
10C77-20-12	20	M30x2	3/4	4.73	120,1	1.18	30,0	36	3.09	78,6
10C77-25-12	25	M36x2	3/4	4.69	119,0	1.14	29,0	46	3.05	77,6
10C77-30-16	30	M42x2	1	5.59	142,0	1.30	33,0	50	3.64	92,5
10C77-38-20	38	M52x2	1-1/4	6.33	160,8	1.44	36,5	60	4.06	103,1
10C77-38-24	38	M52x2	1-1/2	7.33	186,2	1.93	49,0	60	4.94	125,5

В





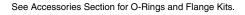




# 11C77

Female Metric S - Swivel - 90° Elbow - (24° Cone with O-Ring) ISO 12151-2-SWE

#				4	F		$\bigcirc$		3
Part	Thread	Hose I.D.		1	_		VV		
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
11C77-16-8	M24x1,5	1/2	3.03	77,0	1.77	45	30	1.65	45,0
11C77-20-10	M30x2	5/8	3.30	83,8	2.09	53	36	1.95	49,6
11C77-20-12	M30x2	3/4	4.25	108,0	2.36	60	36	2.44	62,0
11C77-25-12	M36x2	3/4	4.25	108,0	2.32	59	46	2.44	62,0
11C77-25-16	M36x2	1	5.16	131,1	2.75	70	46	3.21	81,6
11C77-30-16	M42x2	1	5.16	131,0	2.72	69	50	3.20	81,3
11C77-38-20	M52x2	1-1/4	5.94	151,0	3.07	78	60	3.42	87,0
11C77-38-24	M52x2	1-1/2	6.69	169,9	3.98	101	60	4.30	109,2



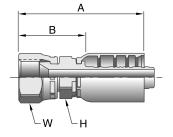


# 1FU77

#### Female BSP Parallel Pipe - Swivel - (30° Flare)

B8363 Code F

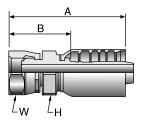
# Part		Hose I.D.		A	H	W B		
Number	mm	inch	inch	mm	mm	mm	inch	mm
1FU77-8-8	1/2x14	1/2	2.41	61,1	22	27	1.19	30,1
1FU77-12-12	3/4x14	3/4	3.71	94,1	32	36	2.07	52,6
1FU77-16-16	1x11	1	3.72	94,5	41	41	1.77	45,0
1FU77-20-20	1-1/4x11	1-1/4	4.26	108,2	50	50	1.99	50,5



# 1**GU77**

#### Female BSP Parallel Pipe - Swivel - Straight (60° Cone)

# Part	///////// Thread	Hose I.D.	A	<b>\</b>	H	W	В	<b>.</b>
Number	inch	inch	inch	mm	mm	mm	inch	mm
1GU77-8-8	1/2x14	1/2	2.97	75,5	27	27	1.75	44,5
1GU77-12-12	3/4x14	3/4	3.74	94,9	36	36	2.10	53,4
1GU77-16-16	1x11	1	4.33	110,0	41	41	2.38	60,5
1GU77-20-20	1-1/4x11	1-1/4	4.91	124,7	46	50	2.64	67,0

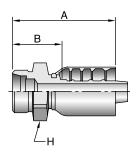


# 1ZM77

#### Male 24° Cone Metric - Rigid - Straight

# Part	//////// Thread	Hose I.D.	Į.	<b>\</b>	H		В
Number	mm	inch	inch	mm	mm	inch	mm
1ZM77-22-10	M30x1,5	5/8	2.83	71,8	36	1.48	37,6
1ZM77-22-12	M30x1,5	3/4	3.17	80,4	36	1.53	39,0
1ZM77-28-12	M36x1,5	3/4	3.38	85,8	41	1.74	44,3
1ZM77-28-16	M36x1,5	1	3.77	95,8	41	1.82	46,2
1ZM77-35-16	M45x1,5	1	3.85	97,8	50	1.90	48,3

B-111



В

В

C

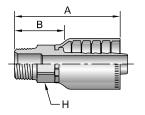
D



#### 10178

#### Male NPTF Pipe - Rigid

# Part	Thread	Hose I.D.		<b>A</b>	H	E	3
Number	inch	inch	inch	mm	inch	inch	mm
10178-12-12	3/4x14	3/4	3.56	90	1-1/8	1.80	46
10178-16-16	1x11-1/2	1	3.94	100	1-3/8	2.09	53
10178-20-20	1-1/4x11-1/2	1-1/4	4.92	125	1-3/4	2.53	64
10178-24-24	1-1/2x11-1/2	1-1/2	4.88	124	2	2.67	68

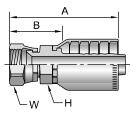


All sizes of 10178 fittings are rated at 5,000 psi working pressure.

# 10678

#### Female JIC 37° - Swivel

# Part	_	·····································	Hose I.D.	I	4	H	$\bigcirc$	·   ī		Additional Material Stainless
Number		inch	inch	inch	mm	inch	inch	inch	mm	Steel (C)
10678-12-12	3/4	1-1/16x12	3/4	3.66	93	1-1/8	1-1/4	1.90	48	•
10678-16-12	1	1-5/16x12	3/4	3.90	99	1-3/8	1-1/2	2.14	54	
10678-16-16	1	1-5/16x12	1	4.03	102	1-3/8	1-1/2	2.18	55	•
10678-20-20	1-1/4	1-5/8x12	1-1/4	4.93	125	1-3/4	2	2.54	65	•
10678-24-24	1-1/2	1-7/8x12	1-1/2	5.04	128	2	2-1/4	2.83	72	•



В

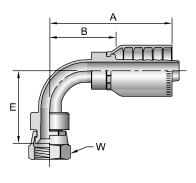
All sizes of 10678 fittings are rated at 5,000 psi working pressure.

# 13978

#### Female JIC 37° - Swivel - 90° Elbow - Short Drop

# Part		//////hread	Hose I.D.	A	<b>A</b>		<b>E</b>		E	В	
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm	
13978-12-12	3/4	1-1/16x12	3/4	4.12	105	2.44	62	1-1/2	2.36	60	
13978-16-16	1	1-5/16x12	1	4.71	120	2.93	74	1-1/2	2.86	73	
13978-20-20	1-1/4	1-5/8x12	1-1/4	5.67	144	3.35	85	2	3.28	83	

All sizes of 13978 fittings are rated at 5,000 psi working pressure.



#### 11578

#### **SAE Code 61 Flange Head**

ISO 12151-3 - S - L

# Part Flange		Hose I.D.	A		F		В	
Number	inch	inch	inch	mm	inch	inch	mm	
11578-12-12	3/4	3/4	4.34	110	1-1/2	2.58	66	
11578-16-16	1	1	4.59	117	1-3/4	2.74	70	

В

See Accessories Section for O-Rings and Flange Kits.



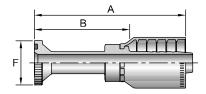
Refer to Pressure Rating of Hose End Connections Chart on page E-45.

B-113



#### SAE Code 61 Special Flange Head - 5,000 psi

ISO 12151-3 - S - L (5000 psi)

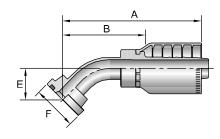


#		•			Ž		
Part	Flange	Hose I.D.	•	<b>4</b> 	F	E	5
Number	inch	inch	inch	mm	inch	inch	mm
14A78-20-20	1-1/4	1-1/4	5.54	141	2	3.15	80
14A78-24-24	1-1/2	1-1/2	6.53	166	2-3/8	4.32	110
14A78-32-24	2	1-1/2	4.68	119	2-13/16	2.47	63

# 11778

#### SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3 - E45S - L (1 Piece: ISO 12151-3 - E45M - L)



В

C

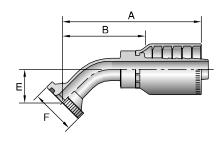
D

#							No.		
Part	Flange	Hose I.D.	<i>,</i>	1	E		F		В
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11778-12-12	3/4	3/4	4.67	119	1.06	27	1-1/2	2.91	74
11778-16-16	1	1	5.01	127	1.26	32	1-3/4	3.16	80

#### 14F78

# SAE Code 61 Flange Head - 45° Elbow - 5,000 psi

ISO 12151-3 - E45S - L (1 Piece: ISO 12151-3 - E45M - L) (5000 psi)

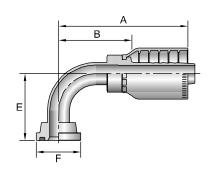


#		•					Ø		
Part	Flange	Hose I.D.	A		Ę		F	B	
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
14F78-20-20	1-1/4	1-1/4	6.39	162	1.50	38	2	4.00	102
14F78-24-24	1-1/2	1-1/2	6.99	178	1.73	44	2-3/8	4.78	121

# 11978

#### SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3 - E90S - L (1 Piece: ISO 12151-3 - E90M - L)



# Part	Flange	Hose I.D.	A		Ę		<b>J</b>	В	
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11978-12-12	3/4	3/4	4.35	110	2.25	57	1-1/2	2.59	66
11978-16-16	1	1	4.67	119	2.76	70	1-3/4	2.82	72

See Accessories Section for O-Rings and Flange Kits.

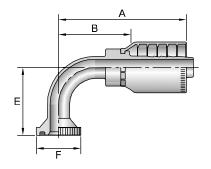


#### 14N78

#### SAE Code 61 Flange Head - 90° Elbow - 5,000 psi

ISO 12151-3 - E90S - L (1 Piece: ISO 12151-3 - E90M - L) (5000 psi)

#		•				_	Ø	F	
Part	Flange	Hose I.D.	•	•		=	F	_	•
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
14N78-20-16	1-1/4	1	4.63	118	2.76	70	2	2.78	71
14N78-20-20	1-1/4	1-1/4	6.09	155	3.54	90	2	3.70	94
14N78-24-24	1-1/2	1-1/2	6.52	166	4.09	104	2-3/8	4.31	109

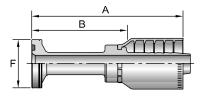


#### 16A78

#### **SAE Code 62 Flange Head**

ISO 12151-3 - S - S

# Part	Flange	Hose I.D.	A	<b>1</b>	Ø	E	3
Number	inch	inch	inch	mm	inch	inch	mm
16A78-12-12	3/4	3/4	4.60	117	1-5/8	2.84	72
16A78-16-12	1	3/4	3.57	91	1-7/8	1.81	46
16A78-16-16	1	1	5.16	131	1-7/8	3.31	84
16A78-20-16	1-1/4	1	3.95	100	2-1/8	2.10	53
16A78-20-20	1-1/4	1-1/4	5.85	149	2-1/8	3.46	88
16A78-24-20	1-1/2	1-1/4	4.77	121	2-1/2	2.38	60
16A78-24-24	1-1/2	1-1/2	6.54	166	2-1/2	4.33	110
16A78-32-24	2	1-1/2	5.07	129	3-1/8	2.86	73

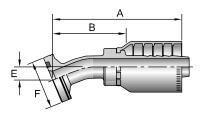


#### 16B78

#### SAE Code 62 Flange Head - 22-1/2° Elbow

ISO 12151-3 - E22M - S

# Part	Flange	Hose I.D.	A		E		Ø	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16B78-16-16	1	1	4.57	116	0.46	12	1-7/8	2.72	60



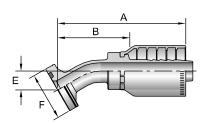
#### 16E78

#### SAE Code 62 Flange Head - 30° Elbow

ISO 12151-3 - E30S - S (1 Piece: ISO 12151-3 - E30M - S)

#		•					Ž		
Part	Flange	Hose I.D.	<i>,</i>	1	E	=	F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16E78-20-20	1-1/4	1-1/4	6.71	170	0.87	22	2-1/8	4.32	110
16E78-24-24	1-1/2	1-1/2	7.10	180	1.12	28	2-1/2	4.89	124

B-115



See Accessories Section for O-Rings and Flange Kits.

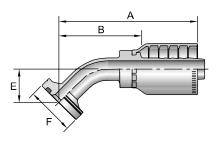


В

#### 16F78

#### SAE Code 62 Flange Head - 45° Elbow

ISO 12151-3 - E45S - S (1 Piece: ISO 12151-3 - E45M - S)

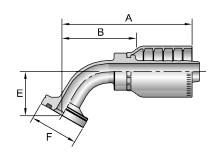


#									
Part	Flange	Hose I.D.		4	E		F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16F78-12-12	3/4	3/4	4.31	109	1.02	26	1-5/8	2.55	65
16F78-16-12	1	3/4	4.83	123	1.22	31	1-7/8	3.07	78
16F78-16-16	1	1	5.04	128	1.26	32	1-7/8	3.19	81
16F78-20-16	1-1/4	1	5.01	127	1.26	32	2-1/8	3.16	80
16F78-20-20	1-1/4	1-1/4	6.39	162	1.50	38	2-1/8	4.00	102
16F78-24-20	1-1/2	1-1/4	6.39	162	1.50	38	2-1/2	4.00	102
16F78-24-24	1-1/2	1-1/2	6.99	178	1.73	44	2-1/2	4.78	121

#### 16G78

#### SAE Code 62 Flange Head - 60° Elbow

ISO 12151-3 - E60S - S (1 Piece: ISO 12151-3 - E60M - S)



В

C

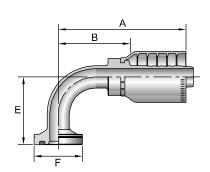
D

# Part	Flange	Hose I.D.	A	<b>A</b>	E		F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16G78-16-16	1	1	5.85	149	1.73	44	1-7/8	4.00	102
16G78-20-20	1-1/4	1-1/4	7.72	196	2.17	55	2-1/8	5.33	135
16G78-24-24	1-1/2	1-1/2	8.41	214	2.52	64	2-1/2	6.20	157

#### 16N78

#### SAE Code 62 Flange Head - 90° Elbow

ISO 12151-3 - E90S - S (1 Piece: ISO 12151-3 - E90M - S)



# Part	Flange	Hose I.D.		4	E		Ø	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16N78-12-12	3/4	3/4	4.00	102	2.28	58	1-5/8	2.24	57
16N78-16-12	1	3/4	3.97	101	2.28	58	1-7/8	2.21	56
16N78-16-16	1	1	4.63	118	2.76	70	1-7/8	2.78	71
16N78-20-16	1-1/4	1	4.63	118	2.76	70	2-1/8	2.78	71
16N78-20-20	1-1/4	1-1/4	6.09	155	3.54	90	2-1/8	3.70	94
16N78-24-16	1-1/2	1	5.04	126	2.70	69	2-1/2	3.19	81
16N78-24-20	1-1/2	1-1/4	6.09	155	3.54	90	2-1/2	3.70	94
16N78-24-24	1-1/2	1-1/2	6.52	166	4.09	104	2-1/2	4.31	109
16N78-32-24	2	1-1/2	6.52	166	4.09	104	3-1/8	4.31	109

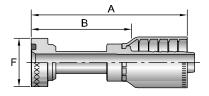
See Accessories Section for O-Rings and Flange Kits.



#### **1XA78**

#### Caterpillar® Flange Head

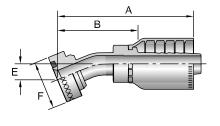
# Part	Flange	Hose I.D.	,	Ą	F	E	3
Number	inch	inch	inch	mm	inch	inch	mm
1XA78-12-12	3/4	3/4	4.85	123,2	1-5/8	3.09	78,5
1XA78-16-12	1	3/4	5.29	134,4	1-7/8	3.53	89,7
1XA78-16-16	1	1	5.44	138,2	1-7/8	3.59	91,2
1XA78-20-16	1-1/4	1	5.65	143,5	2-1/8	3.80	96,5
1XA78-20-20	1-1/4	1-1/4	6.10	154,9	2-1/8	3.71	94,2
1XA78-24-20	1-1/2	1-1/4	6.35	161,3	2-1/2	3.96	100,6
1XA78-24-24	1-1/2	1-1/2	6.78	172,2	2-1/2	4.57	116,1



#### 1XB78

#### Caterpillar® Flange Head - 22-1/2° Elbow

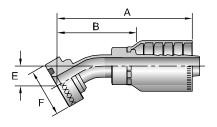
# Part	Flange	Hose I.D.	A	4	E		F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1XB78-12-12	3/4	3/4	4.59	117	0.54	14	1-5/8	2.83	72
1XB78-16-16	1	1	4.66	118	0.50	13	1-7/8	2.81	71
1XB78-20-16	1-1/4	1	4.66	118	0.50	13	2-1/8	2.81	71
1XB78-20-20	1-1/4	1-1/4	7.21	183	0.80	20	2-1/8	4.82	122
1XB78-24-20	1-1/2	1-1/4	7.21	183	0.80	20	2-1/2	4.82	122
1XB78-24-24	1-1/2	1-1/2	7.08	180	0.73	19	2-1/2	4.87	124



#### 1XE78

#### Caterpillar® Flange Head - 30° Elbow

# Part	Flange	Hose I.D.	Į.	<b>1</b>	E		F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1XE78-16-16	1	1	5.08	129	0.79	20	1-7/8	3.23	82
1XE78-20-16	1-1/4	1	5.10	128	0.80	20	2-1/8	3.25	83
1XE78-20-20	1-1/4	1-1/4	6.38	162	0.93	24	2-1/8	3.99	101
1XE78-24-20	1-1/2	1-1/4	6.38	162	0.93	24	2-1/2	3.99	101
1XE78-24-24	1-1/2	1-1/2	7.10	180	1.14	29	2-1/2	4.89	124



Caterpillar® style fittings conform to the bolt hole patterns of SAE Code 62 and require special flange halves and seals. The Caterpillar® style flange heads are thicker than SAE Code 62 and measure to a .560' thickness in all sizes.

B-117

See Accessories Section for O-Rings and Flange Kits.

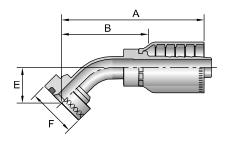


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T

## 1XF78

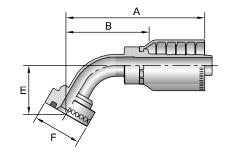
#### Caterpillar® Flange Head - 45° Elbow



#									
Part	Flange	Hose I.D.		4	E	<u> </u>	F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1XF78-12-12	3/4	3/4	4.82	122	1.21	31	1-5/8	3.06	78
1XF78-16-12	1	3/4	4.81	120	1.20	30	1-7/8	3.05	77
1XF78-16-16	1	1	5.46	139	1.43	36	1-7/8	3.61	92
1XF78-20-16	1-1/4	1	5.46	139	1.43	36	2-1/8	3.61	92
1XF78-20-20	1-1/4	1-1/4	6.38	162	1.44	37	2-1/8	3.99	101
1XF78-24-20	1-1/2	1-1/4	6.38	162	1.44	37	2-1/2	3.99	101
1XF78-24-24	1-1/2	1-1/2	6.89	175	1.54	39	2-1/2	4.68	119

#### 1XG78

#### Caterpillar® Flange Head - 60° Elbow



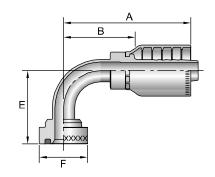
В

D

# Part	Flange	Hose I.D.	Å	<b>A</b>	E	<u> </u>	Ø	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1XG78-16-16	1	1	5.13	130	1.96	50	1-7/8	3.28	83
1XG78-20-20	1-1/4	1-1/4	6.72	171	2.02	51	2-1/8	4.33	110
1XG78-24-24	1-1/2	1-1/2	6.87	174	2.04	52	2-1/2	4.67	119

#### 1XN78

#### Caterpillar® Flange Head - 90° Elbow



#			A				Ø	E	3
Part Number	Flange inch	Hose I.D.	inch	mm	inch	mm	inch	inch	mm
1XN78-12-12	3/4	3/4	4.35	110	2.46	62	1-5/8	2.59	66
1XN78-12-16	3/4	1	4.58	116	2.46	62	1-5/8	2.73	69
1XN78-16-12	1	3/4	4.35	110	2.44	62	1-7/8	2.59	66
1XN78-16-16	1	1	5.04	128	2.90	74	1-7/8	3.19	81
1XN78-20-16	1-1/4	1	5.04	128	2.90	74	2-1/8	3.19	81
1XN78-20-20	1-1/4	1-1/4	6.75	171	3.02	77	2-1/8	4.36	111
1XN78-24-20	1-1/2	1-1/4	6.75	171	3.02	77	2-1/2	4.36	111
1XN78-24-24	1-1/2	1-1/2	5.85	149	3.41	87	2-1/2	3.64	92

Caterpillar® style fittings conform to the bolt hole patterns of SAE Code 62 and require special flange halves and seals. The Caterpillar® style flange heads are thicker than SAE Code 62 and measure to a .560' thickness in all sizes.

See Accessories Section for O-Rings and Flange Kits.

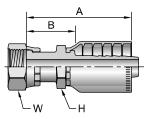


#### **1JS78**

#### Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB

# Part		////// hread	Hose I.D.	,	Ą	$\bigcirc$	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	inch	inch	mm
1JS78-12-12	3/4	1-3/16x12	3/4	3.70	94	1-1/8	1-3/8	1.94	49
1JS78-16-16	1	1-7/16x12	1	4.03	102	1-3/8	1-5/8	2.18	55
1JS78-20-16	1-1/4	1-11/16x12	1	3.99	101	1-3/4	1-7/8	2.14	54
1JS78-20-20	1-1/4	1-11/16x12	1-1/4	4.62	117	1-3/4	1-7/8	2.23	57
1JS78-24-24	1-1/2	2x12	1-1/2	4.70	119,4	2	2-1/4	2.49	63,2

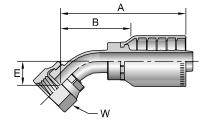


#### **1J778**

#### Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1 - SWE45

	# art	_	·····································	Hose I.D.	A		E		$\bigcirc$	ļ	В
Nui	mber		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J778	8-12-12	3/4	1-3/16x12	3/4	4.11	104	0.81	21	1-3/8	2.35	60
1J778	3-16-16	1	1-7/16x12	1	4.69	119	0.94	24	1-5/8	2.84	72
1J778	8-20-20	1-1/4	1-11/16x12	1-1/4	5.78	147	0.98	25	1-7/8	3.29	84
1J778	8-24-24	1-1/2	2x12	1-1/2	6.91	176	1.56	40	2-1/4	4.70	119

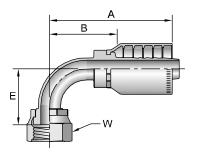


#### **1J978**

#### Female Seal-Lok® - Swivel - 90° Elbow - Short Drop

ISO 12151-1 - SWES90

# Part		////// Thread	Hose I.D.	A		<b>.</b> .		$\bigcirc$	В	<b>B</b>
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J978-12-12	3/4	1-3/16x12	3/4	3.97	100	1.89	48	1-3/8	2.21	56
1J978-16-16	1	1-7/16x12	1	4.62	117	2.21	56	1-5/8	2.77	70
1J978-20-20	1-1/4	1-11/16x12	1-1/4	5.82	148	2.52	64	1-7/8	3.43	87
1J978-24-24	1-1/2	2x12	1-1/2	6.58	167	2.70	69	2-1/4	4.37	111



See Accessories Section for O-Rings and Flange Kits.



1 Refer to Pressure Rating of Hose End Connections Chart on page E-45.

B-119



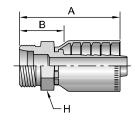






#### 1D278

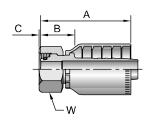
Male Metric S - Rigid - (24° Cone)



#	#					$\bigcirc$		
Part			Hose I.D.	F	Ą		E	3
Number	mm		inch	inch mm		mm	inch	mm
1D278-25-12	25	M36x2	3/4	3.38	3.38 86		1.62	41
1D278-30-16	30	M42x2	1	3.72	94	46	1.87	47
1D278-38-20	38	M52x2	1-1/4	4.42	112	55	2.03	52

#### 1C978

Female Metric S - Swivel - (24° Cone with O-Ring)

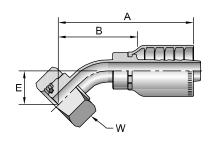


	# Part			Hose I.D.	Į.	<b>A</b>	C		$\bigcirc$	E	3
	Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
10	C978-25-12	25	M36x2	3/4	3.12	79	0.10	3	46	1.36	35
10	C978-30-16	30	M42x2	1	3.40	86	0.19	5	50	1.55	39
1	C978-38-20	38	M52x2	1-1/4	3.98	101	0.23	6	60	1.59	40

When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cutoff allowance

#### 10C78

Female Metric S - Swivel - 45° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE45 - S



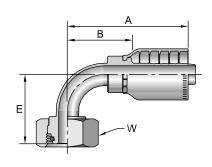
В

D

# Part			Hose I.D.	A	<b>A</b>	E	<u> </u>	$\bigvee_{\mathbf{w}}$	E	3
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
10C78-25-12	25	M36x2	3/4	4.45	113	1.14	29	46	2.56	65
10C78-30-16	30	M42x2	1	5.16	131	1.34	34	50	3.19	81
10C78-38-20	38	M52x2	1-1/4	6.44	164	1.50	38	60	4.05	103

#### 11C78

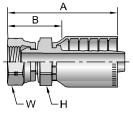
Female Metric S - Swivel - 90° Elbow - (24° Cone with O-Ring) ISO 12151-2 - SWE - S



#	~~	·····								
Part	TI	hread	Hose I.D.	<i>,</i>	•	_ F	-	W		В
Number		mm	inch	inch	mm	inch	mm	mm	inch	mm
11C78-25-12	25	M36x2	3/4	4.12	105	2.32	59	46	2.36	60
11C78-30-16	30	M42x2	1	4.71	120	2.68	68	50	2.86	73
11C78-38-20	38	M52x2	1-1/4	5.67	144	2.86	73	60	3.28	83

#### 1GU78

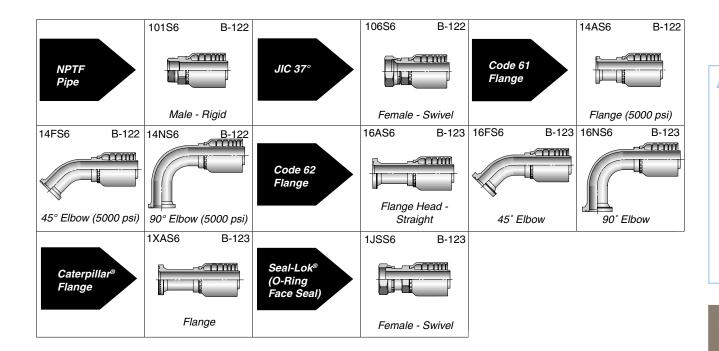
Female BSP Parallel Pipe - Swivel - (60° Cone)



·····							
Thread	Hose I.D.	<i>P</i>	4	Н	W	E	}
inch	inch	inch	mm	mm	mm	inch	mm
3/4x14	3/4	3.76	96	36	36	2.00	51
1x11	1	4.14	105	41	41	2.29	58
	Thread inch 3/4x14	Thread Hose I.D. inch 3/4x14 3/4	Thread inch inch inch 3/4x14 3/4 3.76	Thread inch inch inch mm 3/4x14 3/4 3.76 96	Thread inch inch inch mm mm 3/4x14 3/4 3.76 96 36	Thread inch inch inch mm mm mm 3/4x14 3/4 3.76 96 36 36	Thread inch inch inch mm mm mm inch 3/4x14 3/4 3.76 96 36 36 2.00

Metric S: Mates with EO "S" Series Fittings. See Accessories Section for O-Rings and Flange Kits.





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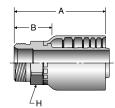


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#### **101S6**

#### Male NPTF Pipe - Rigid

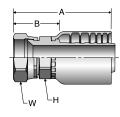


	# Part		Hose I.D.	,	<b>A</b>	→     H	I	В
Nu	ımber	inch	inch	inch	mm	mm	inch	mm
1018	6-32-32	2 x 11 1/2	2	5.88	149,5	2-1/2	2.44	61,9

101S6 is rated at 5,000 psi working pressure.

#### **106S6**

#### Female JIC 37° - Swivel



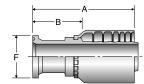
#	<u> </u>						
Part	Thread	Hose I.D.	A		н		3
Number	inch	inch	inch	mm	inch	inch	mm
106S6-32-32	2 1/2 x 12	2	6.52 165,7		2.5	3.08	78,2

106S6 is rated at 5,000 psi working pressure.

#### 14AS6

#### SAE Code 61 Flange Head - 5,000 psi

ISO 12151-3-S-L (5,000 psi)

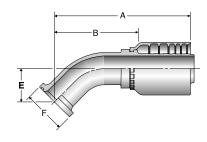


#		0	A		F	В		E	
Part	Flange	Hose I.D.			-				
Number	inch	inch	inch	mm	inch	inch	mm	inch	mm
14AS6-32-32	2	2	6.72	170,8	2-13/16	3.28	83,3	-	-

#### 14FS6

#### SAE Code 61 Flange Head - 45° Elbow - 5,000 psi

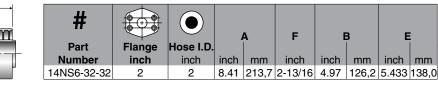
ISO 12151-3-E-45S-L (1 Piece: ISO 12151-3-E45M-L) (5,000 psi)

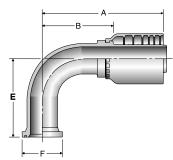


#			A		F	В		E	
Part	Flange	Hose I.D.					Ī		
Number	inch	inch	inch	mm	inch	inch	mm	inch	mm
14FS6-32-32	2	2	8.70	221,1	2-13/16	5.26	133,6	2.205	56,0

#### 14**NS**6

## **SAE Code 61 Flange Head - 90° Elbow - 5,000 psi** ISO 12151-3-E-90S-L (1 Piece: ISO 12151-3-E90M-L) (5,000 psi)



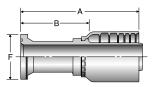


#### 16AS6

#### **SAE Code 62 Flange Head**

ISO 12151-3-S-S

#		● A		F B		E			
Part	Flange	Hose I.D.					Ī		
Number	inch	inch	inch	mm	inch	inch	mm	inch	mm
16AS6-32-32	2	2	8.21	208,6	3-1/8	4.77	121,1	-	-

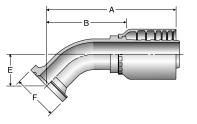


#### 16FS6

#### **SAE Code 62 Flange Head - 45° Elbow**

ISO 12151-3-E45S-S (1 Piece: ISO 1251-3-E45-M-S)

#			A		F	В		E	
Part	Flange	Hose I.D.					Ī		
Number	inch	inch	inch	mm	inch	inch	mm	inch	mm
16FS6-32-32	2	2	8.70	221,1	3-1/8	5.26	133,6	2.205	56,0



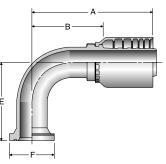
В

#### 16NS6

#### SAE Code 62 Flange Head - 90° Elbow

ISO 12151-3-E90S-S (1 Piece: ISO 1251-3-E90M-S)

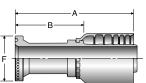
#		•		A		A		A F B		E	
Part	Flange	Hose I.D.			•	_			Ī		
Number	inch	inch	inch	mm	inch	inch	mm	inch	mm		
16NS6-32-32	2	2	8.41	213,7	3-1/8	4.97	126,2	5.43	138,0		



#### **1XAS6**

#### Caterpillar® Flange Head

#		0	• A		F	E	3
Part	Flange	Hose I.D.					
Number	inch	inch	inch	mm	inch	inch	mm
IXAS6-32-32	2	2	8.21	208,6	3-1/8	4.77	121



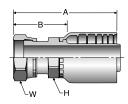
#### **1JSS6**

#### Female Seal-Lok - Swivel - Long

ISO 12151-1-SWSB

#			•				$\bigcirc$		В
Part		Thread	Hose I.D.	•	1		VV		
Number		inch	inch	inch	mm	inch	inch	inch	mm
1JSS6-32-32	2	2-1/2X12	2	6.46	164,2	2.5	2-7/8	3.02	76,7

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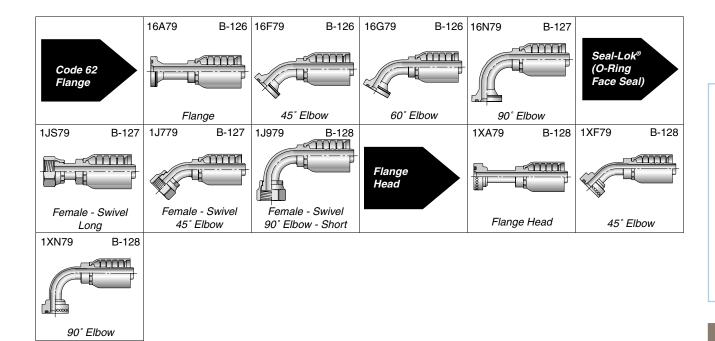
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#### 16A79

#### **SAE Code 62 Flange Head**

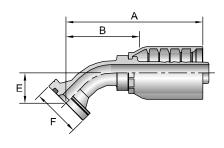
ISO 12151-3 - S - S

L	Α
	В
1 2	
F   +	

# Part	Flange	Hose I.D	A		F	E	3
Number	inch	inch	inch	mm	inch	inch	mm
16A79-12-12	3/4	3/4	4.90	124	1-5/8	2.84	72
16A79-16-12	1	3/4	3.88	99	1-7/8	1.82	46
16A79-16-16	1	1	5.48	139	1-7/8	3.31	84
16A79-20-16	1-1/4	1	4.28	109	2-1/8	2.11	54
16A79-20-20	1-1/4	1-1/4	6.09	155	2-1/8	3.41	87
16A79-24-24	1-1/2	1-1/2	7.11	181	1-1/2	4.07	103

#### 16F79

**SAE Code 62 Flange Head - 45° Elbow** ISO 12151-3 - E45S - S (1 Piece: ISO 12151-3 - E45M - S)



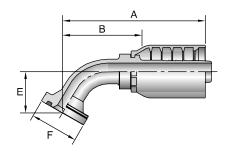
# Part	Flange	Hose I.D.	Ą		E –		F		3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16F79-12-12	3/4	3/4	4.61	117	1.02	26	1-5/8	2.55	65
16F79-16-16	1	1	5.33	135	1.26	32	1-7/8	3.16	80
16F79-16-20	1	1-1/4	6.25	159	1.50	38	1-7/8	3.57	91
16F79-20-16	1-1/4	1	5.33	135	1.26	32	2-1/8	3.16	80
16F79-20-20	1-1/4	1-1/4	6.77	1/2	1.50	38	2-1/8	4.09	104
16F79-24-24	1-1/2	1-1/2	7.96	202	1.73	44	2-1/2	4.07	103

#### 16G79

#### SAE Code 62 Flange Head - 60° Elbow

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ISO 12151-3 - E60S - S (1 Piece: ISO 12151-3 - E60M - S)



#	Flance	O Hassa I D	A		E		F		В	
Part Number	Flange inch	Hose I.D. inch	inch	mm	inch	mm	inch	inch	mm	
16G79-16-16	1	1	6.18	157	1.73	44	1-7/8	4.01	102	

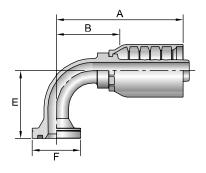
See Accessories Section for O-Rings and Flange Kits.



#### 16N79

**SAE Code 62 Flange Head - 90° Elbow** ISO 12151-3 - E90S - S (1 Piece: ISO 12151-3 - E90M - S)

# Part	Flange	Hose I.D.	Į.	<b>A</b>	E		F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
16N79-12-12	3/4	3/4	4.27	108	2.28	58	1-5/8	2.21	56
16N79-16-12	1	3/4	4.27	108	2.28	58	1-7/8	2.21	56
16N79-16-16	1	1	4.95	126	2.76	70	1-7/8	2.78	71
16N79-20-16	1-1/4	1	4.95	126	2.76	70	2-1/8	2.78	71
16N79-20-20	1-1/4	1-1/4	6.31	160	3.54	90	2-1/8	3.63	92
16N79-24-24	1-1/2	1-1/2	7.50	190	4.09	104	2-1/2	4.46	113

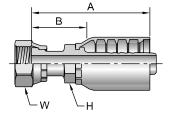


#### **1JS79**

#### Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB

# Part	<u>////////</u> Thread		Hose I.D.	A	<b>A</b>	H	$\bigcirc$	E	3
Number	inch		inch	inch	mm	inch	inch	inch	mm
1JS79-12-12	3/4	1-3/16x12	3/4	3.99	101	1-1/8	1-3/8	1.93	49
1JS79-16-12	1	1-7/16x12	3/4	4.26	108	1-3/8	1-5/8	2.20	56
1JS79-16-16	1	1-7/16x12	1	4.45	113	1-3/8	1-5/8	2.28	58
1JS79-20-16	1-1/4	1-11/16x12	1	4.32	110	1-3/4	1-7/8	2.15	55
1JS79-20-20	1-1/4	1-11/16x12	1-1/4	5.00	127	1-3/4	1-7/8	2.32	59
1JS79-24-24	1-1/2	2x12	1-1/2	5.28	134	2	2-1/4	2.24	57



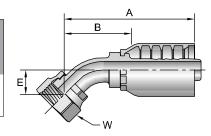
В

#### 1J779

#### Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1 - SWE45

# Part	_	·····································	Hose I.D.	A		E		$\bigcirc$	W B	
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J779-12-12	3/4	1-3/16x12	3/4	4.40	112	0.83	21	1-3/8	2.34	59
1J779-16-16	1	1-7/16x12	1	5.01	127	0.94	24	1-5/8	2.84	72
1J779-20-20	1-1/4	1-11/16x12	1-1/4	6.15	156	1.00	25	1-7/8	3.49	89



See Accessories Section for O-Rings and Flange Kits.



1 Refer to Pressure Rating of Hose End Connections Chart on page E-45.

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## **1J979**

Female Seal-Lok® - Swivel - 90° Elbow - Short Drop

ISO - 12151-1 - SWES90

# Part			Hose I.D.	A		E		$\bigcirc$	W	
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
1J979-12-12	3/4	1-3/16x12	3/4	4.27	108	1.88	48	1-3/8	2.21	56
1J979-16-16	1	1-7/16x12	1	4.95	126	2.21	56	1-5/8	2.78	71
1J979-20-20	1-1/4	1-11/16x12	1-1/4	6.20	157	2.52	64	1-7/8	3.52	89

## 1XA79

# Part	Flange	Hose I.D		<b>1</b>	F	В	
Number	inch	inch	inch	mm	inch	inch	mm
1XA79-12-12	3/4	3/4	4.89	124	1-5/8	2.83	72
1XA79-16-16	1	1	5.75	146	1-7/8	3.59	91
1XA79-20-16	1-1/4	1	4.32	110	2-1/8	2.15	55
1XA79-20-20	1-1/4	1-1/4	6.25	159	2-1/8	3.57	91
1XA79-24-24	1-1/2	1-1/2	7.17	182	2-1/2	4.13	105

#### Caterpillar® Flange Head

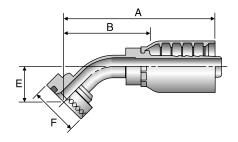
	^
	В
1	
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В

#### 1XF79

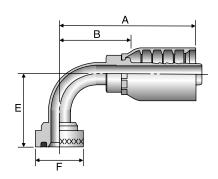
#### Caterpillar® Flange Head - 45° Elbow

# Part	Flange	Hose I.D	A	<b>\</b>	Е		F	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1XF79-12-12	3/4	3/4	4.80	122	1.22	31	1-5/8	2.74	70
1XF79-16-16	1	1	5.49	139	1.42	36	1-7/8	3.32	84
1XF79-20-16	1-1/4	1	5.49	139	1.42	36	2-1/8	3.32	84
1XF79-20-20	1-1/4	1-1/4	6.72	171	1.44	37	2-1/8	4.04	103



#### 1XN79

#### Caterpillar® Flange Head - 90° Elbow



# Part Number	Flange	Hose I.D	inch	<b>\</b>   mm	E inch	mm	<b>F</b>	E inch	3 mm
	-	-						_	
1XN79-12-12	3/4	3/4	4.27	108	2.48	63	1-5/8	2.21	56
1XN79-16-16	1	1	4.94	125	2.91	74	1-7/8	2.78	71
1XN79-20-16	1-1/4	1	4.94	125	2.91	74	2-1/8	2.78	71
1XN79-20-20	1-1/4	1-1/4	6.31	160	3.70	94	2-1/8	3.63	92
1XN79-24-24	1-1/2	1-1/2	7.50	191	4.16	106	2-1/2	4.46	113

See Accessories Section for O-Rings and Flange Kits.

1 Refer to Pressure Rating of Hose End Connections Chart on page E-45.



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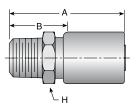
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**101HY**Male NPTF Pipe - Rigid

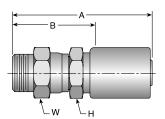
# Part		Hose I.D.		4	H	Е	3	Additional Material Stainless
Number	inch	inch	inch	mm	inch	inch	mm	Steel (C303)
101HY-2-4	1/8x27	1/4	2.34	59	5/8	1.00	25	, ,
101HY-4-4	1/4x18	1/4	2.53	64	9/16	1.19	30	
101HY-4-5	1/4x18	5/16	2.56	65	11/16	1.22	31	
101HY-4-6	1/4x18	3/8	2.55	65	11/16	1.19	30	
101HY-6-4	3/8x18	1/4	2.53	64	3/4	1.19	30	
101HY-6-5	3/8x18	5/16	2.56	65	3/4	1.22	31	
101HY-6-6	3/8x18	3/8	2.55	65	3/4	1.19	30	•
101HY-6-8	3/8x18	1/2	2.72	69	7/8	1.38	35	
101HY-8-4	1/2x14	1/4	2.72	69	7/8	1.38	35	
101HY-8-6	1/2x14	3/8	2.73	69	7/8	1.38	35	
101HY-8-8	1/2x14	1/2	2.91	74	7/8	1.41	40	•
101HY-8-10	1/2x14	5/8	2.94	75	1-1/8	1.59	40	
101HY-8-12	1/2x14	3/4	3.08	78	1-1/4	1.50	38	
101HY-12-8	3/4x14	1/2	2.91	74	1-1/16	1.56	40	
101HY-12-10	3/4x14	5/8	2.98	76	1-1/8	1.59	40	
101HY-12-12	3/4x14	3/4	3.08	78	1-1/4	1.50	38	•
101HY-12-16	3/4x14	1	3.23	82	1-3/8	1.63	41	
101HY-16-12	1x11-1/2	3/4	3.27	83	1-3/8	1.69	43	
101HY-16-14	1x11-1/2	7/8	3.27	83	1-3/8	1.78	43	
101HY-16-16	1x11-1/2	1	3.42	87	1-3/8	1.81	46	•
101HY-20-20	1-1/4x11-1/2	1-1/4	3.84	98	1-3/4	2.00	51	



 $Stainless\ steel\ fittings\ must\ be\ assembled\ with\ Karrykrimp\ 2,\ Phastkrimp,\ Superkrimp\ or\ Parkrimp\ 2.$  See CrimpSource for more information.

#### 113HY Male NPTF Pipe - Swivel

#								
Part	Thread	Hose I.D.	Ą		н	w	E	3
Number	inch	inch	inch	mm	inch	inch	inch	mm
113HY-2-4	1/8x27	1/4	2.97	75	9/16	5/8	1.63	41
113HY-4-4	1/4x18	1/4	3.06	78	9/16	5/8	1.72	44
113HY-4-6	1/4x18	3/8	3.17	81	11/16	11/16	1.81	46
113HY-6-4	3/8x18	1/4	3.13	80	5/8	11/16	1.78	45
113HY-6-6	3/8x18	3/8	3.11	79	11/16	11/16	1.75	44
113HY-6-8	3/8x18	1/2	3.31	84	7/8	7/8	1.97	50
113HY-8-6	1/2x14	3/8	3.38	86	7/8	7/8	2.03	52
113HY-8-8	1/2x14	1/2	3.50	89	7/8	7/8	2.16	55
113HY-12-12	3/4x14	3/4	3.95	100	1-1/4	1-1/4	2.38	60
113HY-16-16	1x11-1/2	1	4.23	107	1-1/2	1-1/2	2.63	67



Fitting allows minor movement under pressure to relieve stress on hose but is not to be used for continuous swiveling.

B-131

See Technical Section for Pressure Limitations.



В

3



Ξ

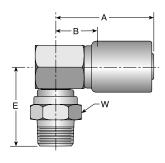
В

C

D

#### 11LHY

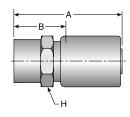
#### Male NPTF Pipe - Swivel - 90° Elbow



#							$\bigcirc$		
Part	Thread	Hose I.D.	ļ <i>F</i>	1	E		VV	E	•
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
11LHY-2-4	1/8x27	1/4	2.31	59	1.50	38	5/8	0.97	25
11LHY-4-4	1/4x18	1/4	2.31	59	1.69	43	11/16	0.97	25
11LHY-4-6	1/4x18	3/8	2.33	59	1.69	43	11/16	0.97	25
11LHY-6-4	3/8x18	1/4	2.31	59	1.63	41	11/16	0.97	25
11LHY-6-6	3/8x8	3/8	2.33	59	1.63	41	11/16	0.97	25
11LHY-8-6	1/2x14	3/8	2.73	69	1.88	48	7/8	0.97	25
11LHY-8-8	1/2x14	1/2	3.00	76	1.93	49	7/8	1.09	28

#### 102HY

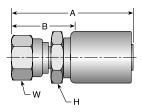
#### Female NPTF Pipe - Rigid



#							
Part	Thread	Hose I.D.	4	Α		E	3
Number	inch	inch	inch	mm	inch	inch	mm
102HY-2-4	1/8x27	1/4	2.34	59	5/8	1.00	25
102HY-4-4	1/4x18	1/4	2.47	63	11/16	1.13	29
102HY-4-6	1/4x18	3/8	2.48	63	11/16	1.13	29
102HY-6-4	3/8x18	1/4	2.47	63	7/8	1.13	29
102HY-6-6	3/8x18	3/8	2.48	63	7/8	1.13	29
102HY-8-6	1/2x14	3/8	2.75	70	1	1.41	36
102HY-8-8	1/2x14	1/2	2.84	72	1	1.50	38
102HY-12-12	3/4x14	3/4	2.83	72	1-1/4	1.25	32
102HY-16-16	1x11-1/2	1	3.27	83	1-1/2	1.66	42

#### **107HY**

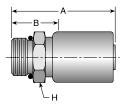
#### Female NPSM Pipe - Swivel - (60° Cone)



#								
Part	Thread	Hose I.D.		4	Н	W	E	3
Number	inch	inch	inch	mm	inch	inch	inch	mm
107HY-4-4	1/4x18	1/4	2.66	68	9/16	11/16	1.31	33
107HY-6-4	3/8x18	1/4	2.72	69	3/4	7/8	1.38	35
107HY-6-6	3/8x18	3/8	2.55	65	3/4	7/8	1.19	30
107HY-8-8	1/2x14	1/2	2.91	74	1	1	1.56	40
107HY-12-8	3/4x14	1/2	3.05	77	1-1/4	1-1/4	1.69	43
107HY-12-12	3/4x14	3/4	3.22	82	1-1/4	1-1/4	1.66	42
107HY-16-16	1x11-1/2	1	3.39	86	1-3/8	1-1/2	1.78	45

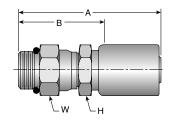
# **105HY**Male SAE Straight Thread with O-Ring - Rigid

#							
Part	Thread	Hose I.D.		A	Н	E	3
Number	inch	inch	inch	mm	inch	inch	mm
105HY-4-4	7/16x20	1/4	2.33	59	9/16	0.97	25
105HY-5-4	1/2x20	1/4	2.33	59	5/8	0.97	25
105HY-6-4	9/16x18	1/4	2.42	61	11/16	1.06	27
105HY-6-6	9/16x18	3/8	2.38	60	11/16	1.03	26
105HY-8-6	3/4x16	3/8	2.42	61	7/8	1.06	27
105HY-8-8	3/4x16	1/2	2.59	66	7/8	1.25	32
105HY-10-6	7/8x14	3/8	2.55	65	1	1.19	30
105HY-10-8	7/8x14	1/2	2.66	68	1	1.31	33
105HY-10-10	7/8x14	5/8	2.80	71	1-1/8	1.41	36
105HY-12-8	1-1/16x12	1/2	2.81	71	1-1/4	1.47	37
105HY-12-10	1-1/16x12	5/8	2.83	72	1-1/4	1.44	37
105HY-12-12	1-1/16x12	3/4	2.92	74	1-1/4	1.34	34
105HY-16-12	1-5/16x12	3/4	2.92	74	1-1/2	1.34	34
105HY-16-16	1-5/16x12	1	3.08	78	1-1/2	1.47	37



# **10GHY**Male SAE Straight Thread with O-Ring - Swivel

#								
Part	Thread	Hose I.D.		A	Н	W	E	3
Number	inch	inch	inch	mm	inch	inch	inch	mm
10GHY-4-4	7/16x20	1/4	3.00	76	9/16	5/8	1.66	42
10GHY-5-4	1/2x20	1/4	3.00	76	9/16	5/8	1.66	42
10GHY-6-4	9/16x18	1/4	3.16	80	5/8	11/16	1.81	46
10GHY-6-6	9/16x18	3/8	3.14	80	11/16	11/16	1.78	45
10GHY-8-6	3/4x16	3/8	3.24	82	13/16	7/8	1.88	48
10GHY-8-8	3/4x16	1/2	3.36	85	7/8	7/8	2.00	51
10GHY-10-8	7/8x14	1/2	3.44	87	1	1	2.09	53
10GHY-12-8	1-1/16x12	1/2	3.66	93	1-1/4	1-1/4	2.31	59
10GHY-12-12	1-1/16x12	3/4	3.89	99	1-1/4	1-1/4	2.31	59
10GHY-16-16	1-5/16x12	1	3.95	100	1-3/8	1-1/2	2.34	59



Fitting allows minor movement under pressure to relieve stress on hose but is not to be used on extensive or continuous swiveling.

E

В

O-Ring not compatible with Phosphate Ester fluids.



В

**10LHY**Male SAE Straight Thread with O-Ring - Swivel - 90° Elbow

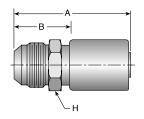
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Î E	
-	w
*	

# Part		Hose I.D.		4	E	<b>.</b>	$\bigcirc$	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
10LHY-4-4	7/16x20	1/4	2.31	59	1.63	41	11/16	0.97	25
10LHY-6-4	9/16x18	1/4	2.31	59	1.66	42	7/8	0.97	25
10LHY-6-6	9/16x18	3/8	2.33	59	1.66	42	11/16	0.97	25
10LHY-8-4	3/4x16	1/4	2.31	59	1.75	44	7/8	0.94	24
10LHY-8-6	3/4x16	3/8	2.33	59	1.73	44	7/8	0.97	25
10LHY-8-8	3/4x16	1/2	3.00	76	1.80	46	7/8	1.09	28
10LHY-10-8	7/8x14	1/2	3.00	76	1.88	48	1	1.09	28
10LHY-12-12	1-1/16x12	3/4	2.77	70	2.23	57	1-1/4	1.19	30

Fitting allows minor movement under pressure to relieve stress on hose but is not to be used on extensive or continuous swiveling.

# **103HY**Male JIC 37° - Rigid

B-134

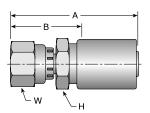


#	///////						
Part	Thread	Hose I.D.	l A	A	H	E	3
Number	inch	inch	inch	mm	inch	inch	mm
103HY-4-4	7/16x20	1/4	2.52	64	5/8	1.19	30
103HY-5-4	1/2x20	1/4	2.52	64	5/8	1.19	30
103HY-6-4	9/16x18	1/4	2.53	64	11/16	1.19	30
103HY-6-5	9/16x18	5/16	2.56	65	11/16	1.22	31
103HY-6-6	9/16x18	3/8	2.54	65	11/16	1.19	30
103HY-6-8	9/16x18	1/2	2.72	69	7/8	1.38	35
103HY-8-6	3/4x16	3/8	2.64	67	13/16	1.28	33
103HY-8-8	3/4x16	1/2	2.81	71	7/8	1.47	37
103HY-10-6	7/8x14	3/8	2.81	71	1	1.47	37
103HY-10-8	7/8x14	1/2	2.91	74	1	1.56	40
103HY-10-10	7/8x14	5/8	2.98	76	1-1/8	1.59	40
103HY-10-12	7/8x14	3/4	3.08	78	1-1/4	1.50	38
103HY-12-8	1-1/16x12	1/2	3.02	77	1-1/8	1.66	42
103HY-12-10	1-1/16x12	5/8	3.09	78	1-1/8	1.72	44
103HY-12-12	1-1/16x12	3/4	3.19	81	1-1/4	1.63	41
103HY-14-12	1-3/16x12	3/4	3.19	81	1-1/4	1.63	41
103HY-16-12	1-5/16x12	3/4	3.23	82	1-3/8	1.66	42
103HY-16-16	1-5/16x12	1	3.39	86	1-3/8	1.78	45
103HY-20-16	1-5/8x12	1	3.44	87	1-3/4	1.81	46
103HY-20-20	1-5/8x12	1-1/4	3.83	97	1-3/4	2.00	51

#### Female JIC 37° - Swivel

# Part	Thread	Hose I.D.	A		→     H	$\bigcirc$	E	3	Additional Material Stainless
Number	inch	inch	inch	mm	inch	inch	inch	mm	Steel (C303)
106HY-3-4	3/8x24	1/4	2.58	66	9/16	1/2	1.22	31	
106HY-4-4	7/16x20	1/4	2.60	66	9/16	9/16	1.25	32	•
106HY-4-6	7/16x20	3/8	2.67	68	3/4	9/16	1.31	33	
106HY-5-4	1/2x20	1/4	2.65	67	9/16	5/8	1.31	33	
106HY-5-5	1/2x20	5/16	2.69	68	5/8	5/8	1.34	34	
106HY-5-6	1/2x20	3/8	2.73	69	3/4	5/8	1.38	35	
106HY-6-4	9/16x18	1/4	2.67	68	9/16	11/16	1.31	33	
106HY-6-5	9/16x18	5/16	2.70	69	5/8	11/16	1.34	34	
106HY-6-6	9/16x18	3/8	2.69	68	11/16	11/16	1.34	34	•
106HY-8-6	3/4x16	3/8	2.72	69	7/8	7/8	1.38	35	
106HY-8-8	3/4x16	1/2	2.90	74	7/8	7/8	1.41	40	•
106HY-8-10	3/4x16	5/8	2.98	76	1-1/8	7/8	1.59	40	
106HY-8-12	3/4x16	3/4	3.08	78	1-1/4	7/8	1.53	39	
106HY-10-6	7/8x14	3/8	2.81	71	7/8	1	1.47	37	
106HY-10-8	7/8x14	1/2	2.98	76	1	1	1.63	41	
106HY-10-10	7/8x14	5/8	3.06	78	1-1/8	1	1.69	43	
106HY-10-12	7/8x14	3/4	3.16	80	1-1/4	1	1.59	40	
106HY-12-6	1-1/16x12	3/8	3.00	76	1-1/8	1-1/4	1.66	42	
106HY-12-8	1-1/16x12	1/2	3.05	77	1-1/8	1-1/4	1.69	43	
106HY-12-10	1-1/16x12	5/8	3.12	79	1-1/8	1-1/4	1.75	44	
106HY-12-12	1-1/16x12	3/4	3.22	82	1-1/4	1-1/4	1.66	42	•
106HY-12-16	1-1/16x12	1	3.38	86	1-3/8	1-1/4	1.75	44	
106HY-14-12	1-3/16x12	3/4	3.23	82	1-1/4	1 3/8	1.66	42	
106HY-16-12	1-5/16x12	3/4	3.30	84	1-3/8	1-1/2	1.72	44	
106HY-16-14	1-5/16x12	7/8	3.30	84	1-3/8	1-1/2	1.72	44	
106HY-16-16	1-5/16x12	1	3.45	88	1-3/8	1-1/2	1.84	47	•
106HY-16-20	1-5/16x12	1-1/4	3.84	98	1-3/4	1-1/2	2.00	51	
106HY-20-16	1-5/8x12	1	3.70	94	1-3/4	2	2.09	53	
106HY-20-20	1-5/8x12	1-1/4	4.09	104	2	2	2.25	57	

Stainless steel fittings must be assembled with Karrykrimp 2, PHastkrimp, Superkrimp or Parkrimp 2. See CrimpSource for more information.



В

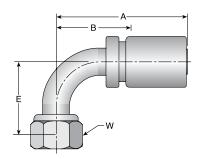
7

**137HY**Female JIC 37° - Swivel - 45° Elbow - Short Drop

B
-w

#									
Part	Thread	Hose I.D.	1	4	E		W	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
137HY-4-4	7/16x20	1/4	2.59	66	0.39	10	9/16	1.32	34
137HY-5-4	1/2x20	1/4	3.27	83	0.36	9	5/8	1.91	49
137HY-6-4	9/16x18	1/4	2.70	69	0.43	10	3/4	1.43	36
137HY-6-5	9/16x18	5/16	3.34	85	0.39	11	11/16	2.00	51
137HY-6-6	9/16x18	3/8	2.72	69	0.43	11	11/16	1.44	37
137HY-8-6	3/4x16	3/8	2.88	73	0.58	15	7/8	1.60	41
137HY-8-8	3/4x16	1/2	3.10	79	0.59	15	7/8	1.81	46
137HY-10-8	7/8x14	1/2	3.20	81	0.63	16	1	1.91	49
137HY-10-10	7/8x14	5/8	3.29	84	0.63	16	1	1.93	49
137HY-12-10	1-1/16x12	5/8	3.94	100	0.77	20	1-1/8	2.56	65
137HY-12-12	1-1/16x12	3/4	3.82	97	0.83	21	1-1/4	2.29	58
137HY-16-12	1-5/16x12	3/4	4.35	110	0.89	23	1-1/2	2.78	71
137HY-16-16	1-5/16x12	1	4.31	109	0.89	23	1-1/2	2.69	68

Female JIC 37° - Swivel - 90° Elbow - Short Drop



В

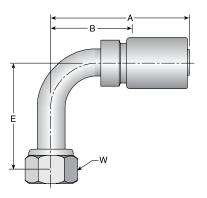
C

#									
Part	Thread	Hose I.D.	/	4	E		W	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
139HY-4-4	7/16x20	1/4	2.40	61	0.83	21	9/16	1.13	29
139HY-5-4	1/2x20	1/4	2.50	64	0.83	21	5/8	1.23	31
139HY-6-4	9/16x18	1/4	2.65	67	0.91	23	3/4	1.38	35
139HY-6-5	9/16x18	5/16	3.25	83	0.86	22	11/16	1.91	49
139HY-6-6	9/16x18	3/8	2.57	65	0.91	23	11/16	1.29	33
139HY-6-8	9/16x18	1/2	3.41	87	0.86	22	11/16	2.06	52
139HY-8-6	3/4x16	3/8	2.64	67	1.14	29	7/8	1.37	35
139HY-8-8	3/4x16	1/2	2.85	72	1.14	29	7/8	1.56	40
139HY-10-8	7/8x14	1/2	3.01	76	1.26	32	1	1.72	44
139HY-10-10	7/8x14	5/8	3.09	78	1.26	32	1	1.73	44
139HY-10-12	7/8x14	3/4	3.25	83	1.23	31	1	1.69	43
139HY-12-8	1-1/16x12	1/2	3.61	92	1.83	46	1-1/4	2.25	57
139HY-12-10	1-1/16x12	5/8	3.61	92	1.89	48	1-1/4	2.25	57
139HY-12-12	1-1/16x12	3/4	3.68	93	1.89	48	1-1/4	2.15	55
139HY-16-12	1-5/16x12	3/4	4.33	110	2.14	54	1-1/2	2.78	71
139HY-16-16	1-5/16x12	1	4.31	109	2.31	59	1-1/2	2.69	68

141HY

#### Female JIC 37° - Swivel - 90° Elbow - Long Drop

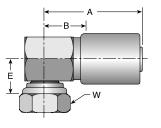
# Part	Thread	Hose I.D.					$\bigcirc$	E	2
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
141HY-4-4	7/16x20	1/4	2.68	68	1.81	46	9/16	1.41	36
141HY-5-4	1/2x20	1/4	3.16	80	1.77	45	5/8	1.81	46
141HY-6-4	9/16x18	1/4	2.89	73	2.13	54	11/16	1.62	41
141HY-6-6	9/16x18	3/8	2.76	70	2.13	54	11/16	1.49	39
141HY-8-6	3/4x16	3/8	2.85	72	2.52	64	7/8	1.58	40
141HY-8-8	3/4x16	1/2	2.89	73	2.52	64	7/8	1.60	41
141HY-10-8	7/8x14	1/2	3.01	76	2.76	70	1	1.72	44
141HY-12-12	1-1/16x12	3/4	3.59	91	3.73	95	1-1/4	2.03	52
141HY-16-16	1-5/16x12	1	4.56	116	4.33	110	1-1/2	2.94	75



#### 193HY

#### Female JIC 37° - Swivel - 90° Elbow - (Block Type)

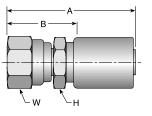
# Part	Thread	Hose I.D.		4	E	<b>.</b>	$\bigcirc$	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
193HY-6-6	9/16x18	3/8	2.33	59	0.78	20	11/16	0.97	25
193HY-8-6	3/4x16	3/8	2.33	59	0.82	21	7/8	0.97	25
193HY-8-8	3/4x16	1/2	3.00	76	0.85	22	7/8	1.09	28
193HY-12-12	1-1/16x12	3/4	3.33	85	0.99	25	1-1/4	1.19	30



#### 108HY

#### Female SAE 45° - Swivel

#								
Part	Thread	Hose I.D.		A	Н	W	E	3
Number	inch	inch	inch	mm	inch	inch	inch	mm
108HY-4-4	7/16x20	1/4	2.60	66	9/16	9/16	1.26	32
108HY-5-4	1/2x20	1/4	2.66	68	9/16	5/8	1.31	33
108HY-5-5	1/2x20	5/16	2.68	68	5/8	5/8	1.34	34
108HY-6-4	5/8x18	1/4	2.73	69	11/16	3/4	1.38	35
108HY-6-5	5/8x18	5/16	2.76	70	5/8	3/4	1.41	36
108HY-6-6	5/8x18	3/8	2.75	70	11/16	3/4	1.41	36
108HY-8-6	3/4x16	3/8	2.73	69	13/16	7/8	1.38	35
108HY-8-8	3/4x16	1/2	2.90	74	7/8	7/8	1.56	40
108HY-8-12	3/4x16	3/4	3.17	81	1-1/4	7/8	1.59	40
108HY-10-8	7/8x14	1/2	2.98	76	1	1	1.63	41
108HY-10-10	7/8x14	5/8	3.06	78	1-1/8	1	1.69	43
108HY-12-10	1-1/16x12	5/8	3.33	85	1-1/8	1-1/4	1.94	49
108HY-12-12	1-1/16x12	3/4	3.41	87	1-1/4	1-1/4	1.84	47



В

C

D

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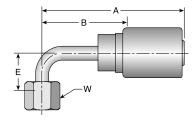
Female SAE 45° - Swivel - 45° Elbow

<del></del>	A ————————————————————————————————————
€	
W	

# Part		Hassin						E	
Number	Thread inch	Hose I.D. inch	inch	mm	inch	mm	inch	inch	mm
177HY-6-6	5/8x18	3/8	3.33	85	0.39	10	3/4	1.97	50
177HY-12-12	1-1/16x14	3/4	4.03	102	0.77	20	1-1/4	2.44	62

#### 179HY

Female SAE 45° - Swivel - 90° Elbow

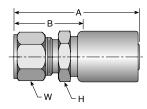


В

# Part	//////// Thread	Hose I.D.	4	١	E	<b>.</b>	$\left  \bigcirc_{\mathbf{w}} \right $	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
179HY-6-5	5/8x18	5/16	3.25	83	0.86	22	3/4	1.91	49
179HY-6-6	5/8x18	3/8	3.23	82	0.86	22	3/4	1.88	48
179HY-12-12	1-1/16x14	3/4	3.98	101	1.83	46	1-1/4	2.39	61

#### **111HY**

Male Ferulok Flareless - Rigid (24° Cone w/Nut and Ferrule)

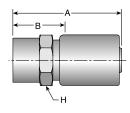


# Part	//////// Thread	Hose I.D.		4	→     H	$\bigcirc$	E	2
Number	inch	inch	inch	mm	inch	inch	inch	mm
111HY-4-4	7/16x20	1/4	2.42	61	9/16	9/16	1.06	27
111HY-4-6	7/16x20	3/8	2.44	62	3/4	9/16	1.09	28
111HY-5-6	1/2x20	3/8	2.44	62	3/4	5/8	1.09	28
111HY-6-4	9/16x18	1/4	2.44	62	5/8	11/16	1.09	28
111HY-6-6	9/16x18	3/8	2.45	62	11/16	11/16	1.09	28
111HY-8-6	3/4x16	3/8	2.61	66	7/8	7/8	1.25	32
111HY-8-8	3/4x16	1/2	2.72	69	7/8	7/8	1.38	35
111HY-10-8	7/8x14	1/2	2.78	71	1	1	1.44	37
111HY-12-12	1-1/16x12	3/4	3.02	77	1-1/4	1-1/4	1.44	37

The Parker Ferrule-Fix fitting makes it possible to salvage the bent tube section from a hose assembly for quick, easy on the job repairs. For additional information see Ferrule-Fix installation instructions in the Technical Section.

#### 1GJHY

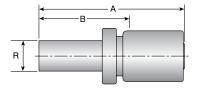
Female Grease Connection - SPL - PTF Taper Thread - Rigid - 1/2x27



Thread	Hose I.D.		4	Н	E	3
inch	inch	inch	mm	inch	inch	mm
1/2x27	1/4	2.41	61	3/4	1.06	27
	Thread inch	Thread Hose I.D. inch	Thread Hose I.D. inch inch	Thread Hose I.D. A inch inch mm	Thread Hose I.D. A H inch inch inch	Thread Hose I.D. A H inch inch inch

#### Male Standpipe - Rigid - (Inch Size Tube O.D.)

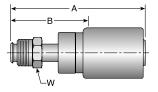
# Part	R	Hose I.D.	A	4	E	3
Number	inch	inch	inch	mm	inch	mm
134HY-6-6	3/8	3/8	3.17	81	1.81	46
134HY-8-6	1/2	3/8	3.33	85	1.97	50
134HY-12-12	3/4	3/4	3.89	99	2.31	59



#### **128HY**

#### Male Inverted SAE 45° - Swivel

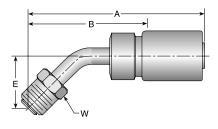
#							
Part	Thread	Hose I.D.		A	W	E	3
Number	inch	inch	inch	mm	inch	inch	mm
128HY-3-4	3/8x24	1/4	3.09	78	3/8	1.75	44
128HY-4-4	7/16x24	1/4	3.28	83	7/16	1.94	49
128HY-5-4	1/2x20	1/4	3.34	85	1/2	2.00	51
128HY-5-6	1/2x20	3/8	3.17	81	1/2	1.81	46
128HY-6-5	5/8x18	5/16	3.75	95	5/8	2.41	61
128HY-6-6	5/8x18	3/8	3.73	95	5/8	2.38	60
128HY-7-6	11/16x18	3/8	3.73	95	11/16	2.38	60
128HY-8-6	3/4x18	3/8	3.42	87	3/4	2.06	52
128HY-8-8	3/4x18	1/2	3.66	93	3/4	2.31	59



#### **167HY**

#### Male Inverted SAE 45° - Swivel - 45° Elbow

# Part		Hose I.D.	A	4	E	=	$\bigcirc$	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
167HY-4-4	7/16x24	1/4	3.31	84	0.78	20	7/16	1.97	50
167HY-5-4	1/2x20	1/4	3.55	90	0.88	22	1/2	2.19	56
167HY-5-6	1/2x20	3/8	3.38	86	0.88	22	1/2	2.03	52
167HY-6-6	5/8x18	3/8	4.16	106	0.94	24	5/8	2.81	71
167HY-8-8	3/4x18	1/2	4.22	107	1.06	27	3/4	2.88	73



В



Male Inverted SAE 45° - Swivel - 90° Elbow

<b>←</b> A → A → A → A → A → A → A → A → A → A	-
	1
E	
<b>—</b>	

A

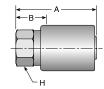
В

D

# Part	//////// Thread	Hose I.D.		<b>A</b>	E	<u> </u>	$\bigcirc$	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
169HY-3-4	3/8x24	1/4	3.09	78	1.38	35	3/8	1.75	44
169HY-4-4	7/16x24	1/4	3.28	83	1.47	37	7/16	1.94	49
169HY-4-6	7/16x24	3/8	3.11	79	1.47	37	7/16	1.75	44
169HY-5-4	1/2x20	1/4	3.52	89	1.66	42	1/2	2.16	55
169HY-5-6	1/2x20	3/8	3.34	85	1.66	42	1/2	2.00	51
169HY-6-5	5/8x18	5/16	4.05	103	1.69	43	5/8	2.69	68
169HY-6-6	5/8x18	3/8	4.03	102	1.69	43	5/8	2.69	68
169HY-7-6	11/16x18	3/8	4.16	106	1.69	43	11/16	2.81	71
169HY-8-8	3/4x18	1/2	4.09	104	1.88	48	3/4	2.75	70

#### 129**HY**

Female Inverted SAE 45° - Rigid

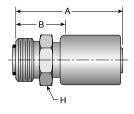


#							
Part	Thread	Hose I.D.	,	1	Н	E	5
Number	inch	inch	inch	mm	inch	inch	mm
129HY-5-4	1/2x20	1/4	2.25	57	5/8	0.91	23
129HY-6-6	5/8x18	3/8	2.25	57	7/8	0.91	23

#### **1J0HY**

Male Seal-Lok® - Rigid - (with O-Ring)

ISO 12151-1 - S

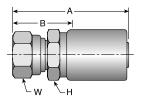


# Part	//////// Thread	Hose I.D.	Į.	4	H	E	3
Number	inch	inch	inch	mm	inch	inch	mm
1J0HY-4-4	9/16x18	1/4	2.36	60	5/8	1.00	25
1J0HY-6-6	11/16x16	3/8	2.49	63	3/4	1.13	29
1J0HY-8-8	13/16x16	1/2	2.69	68	7/8	1.34	34
1J0HY-12-8	1-3/16x12	1/2	2.91	74	1-1/4	1.56	40

#### 1JCHY

Female Seal-Lok® - Swivel - Short

ISO 12151-1 - SWSA



# Part	//////// Thread	Hose I.D.	,	<b>A</b>	H	$\bigcirc$	į	3
Number	inch	inch	inch	mm	inch	inch	inch	mm
1JCHY-4-4	9/16x18	1/4	2.61	66	9/16	11/16	0.94	24
1JCHY-6-6	11/16x16	3/8	2.69	68	11/16	13/16	0.94	24
1JCHY-8-8	13/16x16	1/2	2.91	74	7/8	15/16	1.13	29
1JCHY-12-12	1-3/16x12	3/4	3.31	84	1-1/4	1-3/8	1.13	29

See Accessories Section for O-Rings.

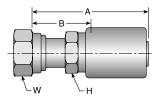


#### 1JSHY

#### Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB

#								
Part	Thread	Hose I.D.		4	Н	W	В	3
Number	inch	inch	inch	mm	inch	inch	inch	mm
1JSHY-4-4	9/16x18	1/4	2.59	66	9/16	11/16	1.25	32
1JSHY-6-4	11/16x16	1/4	2.67	68	5/8	13/16	1.31	33
1JSHY-6-5	11/16x16	5/16	2.70	69	5/8	13/16	1.34	34
1JSHY-6-6	11/16x16	3/8	2.75	70	11/16	13/16	1.34	34
1JSHY-8-6	13/16x16	3/8	2.84	72	7/8	15/16	1.50	38
1JSHY-8-8	13/16x16	1/2	2.95	75	7/8	15/16	1.59	40
1JSHY-10-8	1x14	1/2	3.16	80	15/16	1-1/8	1.81	46
1JSHY-10-10	1x14	5/8	3.17	81	1-1/8	1-1/8	1.78	45
1JSHY-10-12	1x14	3/4	3.27	83	1-1/4	1-1/8	1.69	43
1JSHY-12-10	1-3/16x12	5/8	3.20	81	1-1/8	1-3/8	1.81	46
1JSHY-12-12	1-3/16x12	3/4	3.30	84	1-1/4	1-3/8	1.72	44
1JSHY-16-12	1-7/16x12	3/4	3.44	87	1-3/8	1-5/8	1.88	48
1JSHY-16-16	1-7/16x12	1	3.59	91	1-3/8	1-5/8	1.97	50
1JSHY-20-16	1-11/16x12	1	3.47	88	1-5/8	1-7/8	1.75	59
1JSHY-20-20	1-11/16x12	1-1/4	3.98	101	1-3/4	1-7/8	2.16	55



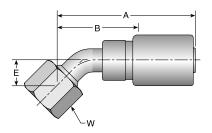
#### **1J7HY**

#### Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1 - SWE45

#									
Part	Thread	Hose I.D.	4	4	E		W	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1J7HY-4-4	9/16x18	1/4	2.59	66	0.39	10	11/16	1.32	34
1J7HY-6-4	11/16x16	1/4	2.70	69	0.43	11	13/16	1.43	36
1J7HY-6-6	11/16x16	3/8	2.72	69	0.43	11	13/16	1.44	37
1J7HY-6-8	11/16x16	1/2	3.41	87	0.44	11	13/16	2.06	52
1J7HY-8-4	13/16x16	1/4	2.95	75	0.59	15	15/16	1.68	43
1J7HY-8-6	13/16x16	3/8	2.89	73	0.59	15	15/16	1.62	41
1J7HY-8-8	13/16x16	1/2	3.10	79	0.59	15	15/16	1.81	46
1J7HY-10-8	1x14	1/2	3.20	81	0.63	16	1-1/8	1.91	49
1J7HY-10-10	1x14	5/8	3.29	84	0.63	16	1-1/8	1.93	49
1J7HY-10-12	1x14	3/4	3.69	94	0.69	18	1-1/8	2.13	54
1J7HY-12-10	1-3/16x12	5/8	3.74	104	0.83	21	1-3/8	2.38	60
1J7HY-12-12	1-3/16x12	3/4	3.82	97	0.83	21	1-3/8	2.29	58
1J7HY-16-12	1-7/16x12	3/4	4.39	112	0.97	25	1-5/8	2.84	72
1J7HY-16-16	1-7/16x12	1	4.55	116	0.97	25	1-5/8	2.94	75

B-141



A

В

**1J9HY** 

Female Seal-Lok® - Swivel - 90° Elbow - Short Drop ISO 12151-1 - SWES90

← A → A → A → A → A → A → A → A → A → A
E W

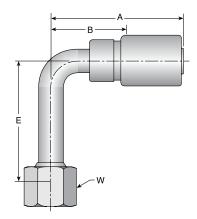
В

D

#	///////								
Part	Thread	Hose I.D.		4	E	Ę		E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1J9HY-4-4	9/16x18	1/4	2.40	61	0.83	21	11/16	1.13	29
1J9HY-4-6	9/16x18	3/8	3.08	78	0.83	21	11/16	1.72	44
1J9HY-6-4	11/16x16	1/4	2.65	67	0.91	23	13/16	1.38	35
1J9HY-6-5	11/16x16	5/16	3/14	80		23	13/16	1.72	44
1J9HY-6-6	11/16x16	3/8	2.57	65	0.91	23	13/16	1.29	33
1J9HY-6-8	11/16x16	1/2	2.77	70	0.91	23	13/16	1.48	38
1J9HY-8-6	13/16x16	3/8	2.64	67	1.14	29	15/16	1.37	35
1J9HY-8-8	13/16x16	1/2	2.85	72	1.14	29	15/16	1.56	40
1J9HY-10-8	1x14	1/2	3.01	76	1.26	32	1-1/8	1.72	44
1J9HY-10-10	1x14	5/8	3.09	78	1.26	32	1-1/8	1.73	44
1J9HY-10-12	1x14	3/4	3.52	89	1.33	34	1-1/8	1.97	50
1J9HY-12-8	1-3/16x12	1/2	3.84	98	1.89	48	1-3/8	2.39	61
1J9HY-12-10	1-3/16x12	5/8	3.61	92	1.89	48	1-3/8	2.25	57
1J9HY-12-12	1-3/16x12	3/4	3.68	93	1.89	48	1-3/8	2.15	55
1J9HY-16-12	1-7/16x12	3/4	4.27	108	2.25	57	1-5/8	2.69	68
1J9HY-16-16	1-7/16x12	1	4.45	113	2.25	57	1-5/8	2.84	72
1J9HY-20-16	1-11/16x12	1	4.77	121	2.51	64	1-7/8	3.16	80

#### **1J1HY**

Female Seal-Lok® - Swivel - 90° Elbow - Long Drop ISO 12151-1 - SWEL90



# Part		Hose I.D.							3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1J1HY-4-4	9/16x18	1/4	2.68	68	1.81	46	11/16	1.41	36
1J1HY-6-4	11/16x16	1/4	2.89	73	2.13	54	13/16	1.62	41
1J1HY-6-6	11/16x16	3/8	2.76	70	2.13	54	13/16	1.49	38
1J1HY-8-6	13/16x16	3/8	2.85	72	2.52	64	15/16	1.58	40
1J1HY-8-8	13/16x16	1/2	2.94	75	2.52	64	15/16	1.65	42
1J1HY-10-8	1x14	1/2	3.01	76	2.76	70	1-1/8	1.72	44
1J1HY-10-10	1x14	5/8	3.42	87	2.76	70	1-1/8	2.03	52
1J1HY-12-12	1-3/16x12	3/4	3.68	93	3.78	96	1-3/8	2.15	55
1J1HY-16-16	1-7/16x12	1	4.45	113	4.50	114	1-5/8	2.84	72

See Accessories Section for O-Rings.

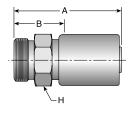


#### 1D0HY

#### Male Metric L - Rigid - (24° Cone)

ISO 12151-2

#			•					
Part	Thr	Thread		*	7	Н	E	3
Number	m	m	inch	inch	mm	mm	inch	mm
1D0HY-6-4	6	M12x1.5	1/4	2.36	60	14	1.00	25
1D0HY-8-4	8	M14x1.5	1/4	2.36	60	17	1.00	25
1D0HY-10-4	10	M16x1.5	1/4	2.40	61	19	1.03	26
1D0HY-10-6	10	M16x1.5	3/8	2.42	61	19	1.06	27
1D0HY-12-6	12	M18x1.5	3/8	2.42	61	22	1.06	27
1D0HY-15-6	15	M22x1.5	3/8	2.52	64	24	1.16	29
1D0HY-15-8	15	M22x1.5	1/2	2.63	67	24	1.28	33
1D0HY-18-10	18	M26x1.5	5/8	2.71	69	27	1.31	33

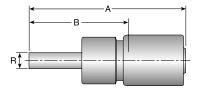


#### **13DHY**

#### Male Standpipe Metric S - Rigid

End Connection per ISO 8434-1-SDS

#	Ø	•				
Part	R	Hose I.D.	A		A   B	
Number	mm	inch	inch	mm	inch	mm
13DHY-16-8	16	1/2	3.53	90	2.16	55
13DHY-30-16	30	1	4.15	105	2.53	64



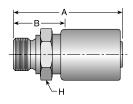
В

#### **1D9HY**

#### Male BSP Parallel Pipe - Rigid - (60° Cone)

ISO 228-1

# Part		Hose I.D.	,	<b>A</b>	H	E	3
Number	inch	inch	inch	mm	inch	inch	mm
1D9HY-4-4	1/4x19	1/4	2.40	61	13/16	1.03	26
1D9HY-6-6	3/8x19	3/8	2.55	65	7/8	1.19	30
1D9HY-8-6	1/2x14	3/8	2.65	67	1-1/16	1.28	33
1D9HY-8-8	1/2x14	1/2	2.83	72	1-1/16	1.47	37



When used in a port, a bonded seal must be used. See Accessories Section for more information.

B-143

Metric L: Mates with EO "L" Series Fittings. Mertic S: Mates with EO "S" Series Fittings.

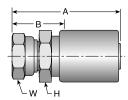


В

D

#### **1GUHY**

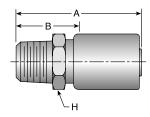
Female BSP Parallel Pipe - Swivel - (60° Cone) ISO 228-1



# Part	//////// Thread	Hose I.D.	A	<b>A</b>	H	$\bigcirc$	E	3
Number	inch	inch	inch	mm	inch	inch	inch	mm
1GUHY-4-4	1/4x19	1/4	2.62	67	9/16	11/16	1.28	33
1GUHY-6-4	3/8x19	1/4	2.69	68	3/4	7/8	1.34	34
1GUHY-6-6	3/8x19	3/8	2.70	69	3/4	7/8	1.34	34
1GUHY-8-6	1/2x14	3/8	2.84	72	7/8	1	1.50	38
1GUHY-8-8	1/2x14	1/2	3.02	77	7/8	1	1.66	42
1GUHY-12-12	3/4x14	3/4	3.25	83	1-1/4	1-1/4	1.69	43
1GUHY-16-16	1x11	1	3.45	88	1-3/8	1-1/2	1.84	47

#### **1UTHY**

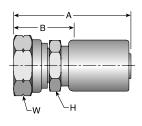
Male BSP Taper Pipe - Rigid - (60° Cone)



# Part	//////// Thread	Hose I.D.	4	<b>\</b>	H	E	3
Number	inch	inch	inch	mm	inch	inch	mm
1UTHY-2-4	1/8x28	1/4	2.34	59	9/16	1.00	25
1UTHY-4-4	1/4x19	1/4	2.53	64	9/16	1.19	30

#### **1XUHY**

Female Metric Swivel - (30° Flare)



# Part		////// hread	Hose I.D.	,	<b>A</b>	H	$\bigcirc_{\mathbf{W}}$	E	3
Number		mm	inch	inch	mm	mm	mm	inch	mm
1XUHY-24-8	24	M24x1.5	1/2	3.14	80	22	30	1.72	44
1XUHY-24-10	24	M24x1.5	5/8	3.22	82	30	30	1.84	47
1XUHY-30-12	30	M30x1.5	3/4	3.31	84	32	38	1.75	44
1XUHY-33-16	33	M33x1.5	1	3.62	92	36	41	2.00	51

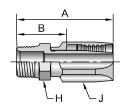
	20120 B-1	46	20320 B-146	20620 B-147	23720 B-147
NOTE					
NPTF Pine		JIC 37°			
Pipe					
					Female - Swivel
	Male - Rigid		Male - Rigid	Female - Swivel	45° Elbow - Short
23920 B-148	24120 B-1	48	20420 B-148	20820 B-149	27720 B-149
		SAE 45°			H
Female - Swivel	Female - Swive		Male - Rigid	Female - Swivel	Female - Swivel 45° Elbow
90° Elbow - Short 27920 B-149	28120 B-1		21120 B-150		22820 B-150
27920 B-149	20120 D-1		21120 6-150	<u> </u>	22020 B-130
		Flareless		Inverted	
	l Jill	T lareless		Flare	
Female - Swivel	Female - Swive	·			
90° Elbow	90° Elbow - Lon	g	Male - Rigid		Male - Swivel
26720 B-150	26920 B-1	51	23220 B-151		26120 B-151
		PTT 30°		Compression	
Male - Swivel	Male - Swivel				Male
45° Elbow	90° Elbow		Female - Swivel		(without Nut or Sleeve)
10 =1001	21520 B-1	51 21720 B-152	21920 B-152		2JS20 B-152
	]				
			Linnon	Seal-Lok®	
Code 61				(O-Ring	
Flange				Face Seal)	
		45° 515	90° Elbow		Female - Swivel
0.1700 D.450	Flange	45° Elbow		000 : 0154	Long
2J720 B-152	2J920 B-1	53 2J120 B-153		20 Series B-154	
				Assembly Instructions	
ALL HISTORY		4	Assembly	in ou double	
			Instructions		
Female - Swivel	Female - Swive				
45° Elbow	90° Elbow - Shoi	t 90° Elbow - Long			

В

C

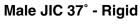


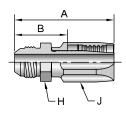
20120 Male NPTF Pipe - Rigid



#		•							Additional
Part	Thread	Hose I.D.	Δ		Н	J	В		Material
Number	inch	inch	inch	mm	inch	inch	inch	mm	Brass (B)
20120-2-4	1/8x27	3/16	1.72	44	7/16	5/8	0.94	24	
20120-2-5	1/8x27	1/4	1.82	46	1/2	11/16	0.99	25	
20120-4-4	1/4x18	3/16	1.93	49	9/16	5/8	1.15	29	
20120-4-5	1/4x18	1/4	2.01	51	9/16	11/16	1.18	30	
20120-4-6	1/4x18	5/16	2.11	54	9/16	13/16	1.19	30	
20120-6-6	3/8x18	5/16	2.20	56	3/4	13/16	1.28	33	
20120-6-8	3/8x18	13/32	2.48	63	3/4	15/16	1.39	35	
20120-8-8	1/2x14	13/32	2.73	69	7/8	15/16	1.64	42	
20120-8-10	1/2x14	1/2	2.88	73	7/8	1-1/8	1.66	42	
20120-12-10	3/4x14	1/2	2.95	75	1-1/16	1-1/8	1.73	44	
20120-12-12	3/4x14	5/8	3.25	83	1-1/16	1-1/4	1.75	44	
20120-12-16	3/4x14	7/8	2.81	71	1-3/8	1-7/16	1.62	41	
20120-16-16	1x11-1/2	7/8	2.99	76	1-3/8	1-7/16	1.80	46	•
20120-20-20	1-1/4x11-1/2	1-1/8	3.24	82	1-3/4	1-3/4	1.96	50	•
20120-24-24	1-1/2x11-1/2	1-3/8	3.50	89	2	2	2.13	54	•
20120-32-32	2 x11-1/2	1-13/16	4.05	103	2-1/2	2-1/2	2.31	59	•

#### 20320 Male JIC 37°





#									
Part	1	Γhread	Hose I.D.	-	Ą	Н	J	E	3
Number	inch		inch	inch	mm	inch	inch	inch	mm
20320-4-4	1/4	7/16x20	3/16	1.83	46	1/2	5/8	1.05	27
20320-5-5	5/16	1/2x20	1/4	1.94	49	9/16	11/16	1.11	28
20320-6-6	3/8	9/16x18	5/16	2.11	54	5/8	13/16	1.19	30
20320-8-8	1/2	3/4x16	13/32	2.57	65	13/16	15/16	1.48	38
20320-10-10	5/8	7/8x14	1/2	2.88	73	15/16	1-1/8	1.66	42
20320-12-12	3/4	1-1/16x12	5/8	3.35	85	1-1/8	1-1/4	1.85	47
20320-16-16	1	1-5/16x12	7/8	2.95	75	1-3/8	1-7/16	1.76	45

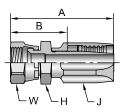
В

C

20620

#### Female JIC 37° - Swivel

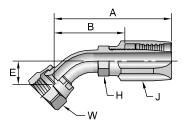
#		······									Additional Material
Part	Т	hread	Hose I.D.	Δ	<u> </u>	Н	J	W	E	3	Stainless
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm	Steel (C)
20620-4-4	1/4	7/16x20	3/16	1.94	49	9/16	5/8	9/16	1.16	29	•
20620-4-5	1/4	7/16x20	1/4	2.04	52	9/16	11/16	9/16	1.21	31	
20620-5-5	5/16	1/2x20	1/4	2.12	54	5/8	11/16	5/8	1.29	33	
20620-6-5	3/8	9/16x18	1/4	2.19	56	11/16	11/16	11/16	1.36	35	
20620-6-6	3/8	9/16x18	5/16	2.32	59	11/16	13/16	11/16	1.40	36	•
20620-8-6	1/2	3/4x16	5/16	2.44	62	7/8	13/16	7/8	1.52	39	
20620-8-8	1/2	3/4x16	13/32	2.79	71	7/8	15/16	7/8	1.70	43	•
20620-8-10	1/2	3/4x16	1/2	2.99	76	7/8	1-1/8	7/8	1.77	45	
20620-10-8	5/8	7/8x14	13/32	2.94	75	7/8	15/16	1	1.85	47	
20620-10-10	5/8	7/8x14	1/2	3.10	79	1	1-1/8	1	1.88	48	•
20620-10-12	5/8	7/8x14	5/8	3.40	86	1	1-1/4	1	1.90	48	
20620-12-12	3/4	1-1/16x12	5/8	3.49	89	1-1/4	1-1/4	1-1/4	1.99	51	•
20620-16-16	1	1-5/16x12	7/8	3.20	81	1-1/2	1-7/16	1-1/2	2.01	51	•
20620-20-20	1-1/4	1-5/8x12	1-1/8	3.56	90	2	1-3/4	2	2.28	58	
20620-24-24	1-1/2	1-7/8x12	1-3/8	3.95	100	2-1/4	2	2-1/4	2.58	66	
20620-32-32	2	2-1/2x12	1-13/16	4.71	120	2-7/8	2-1/2	2-7/8	2.97	75	



#### 23720

#### Female JIC 37° - Swivel - 45° Elbow - Short Drop

#		^^	•									
Part	Т	hread	Hose I.D.	Α	١	E		Н	J	W	В	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
23720-4-4	1/4	7/16x20	3/16	2.08	53	0.33	8	3/8	5/8	9/16	1.30	33
23720-5-5	5/16	1/2x20	1/4	2.30	58	0.36	9	7/16	11/16	5/8	1.47	37
23720-6-6	3/8	9/16x18	5/16	2.45	62	0.39	10	1/2	13/16	11/16	1.53	39
23720-8-6	1/2	3/4x16	5/16	2.77	70	0.55	14	5/8	13/16	7/8	1.85	47
23720-10-10	5/8	7/8x14	1/2	3.36	85	0.65	17	3/4	1-1/8	1	2.14	54
23720-12-12	3/4	1-1/16x12	5/8	3.94	100	0.79	20	7/8	1-1/4	1-1/4	2.44	62
23720-16-16	1	1-5/16x12	7/8	3.73	95	0.90	23	1-1/8	1-7/16	1-1/2	2.54	65
23720-20-20	1-1/4	1-5/8x12	1-1/8	4.17	106	1.19	30	1-1/2	1-3/4	2	2.89	73



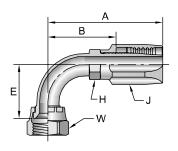
В

3



### 23920

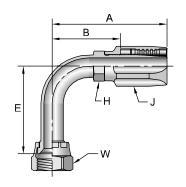
#### Female JIC 37° - Swivel - 90° Elbow - Short Drop



#	_^	·····										
Part	Т	hread	Hose I.D.		4	E	=	Н	J	W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
23920-4-4	1/4	7/16x20	3/16	1.91	49	0.83	21	3/8	5/8	9/16	1.13	29
23920-5-5	5/16	1/2x20	1/4	2.30	58	0.77	20	7/16	11/16	5/8	1.47	37
23920-6-6	3/8	9/16x18	5/16	2.35	60	0.90	23	1/2	13/16	11/16	1.43	36
23920-8-8	1/2	3/4x16	13/32	2.88	73	1.09	28	5/8	15/16	7/8	1.79	45
23920-10-10	5/8	7/8x14	1/2	3.20	81	1.24	31	3/4	1-1/8	1	1.98	50
23920-12-12	3/4	1-1/16x12	5/8	3.86	98	1.82	46	7/8	1-1/4	1-1/4	2.36	60
23920-16-16	1	1-5/16x12	7/8	3.69	94	2.14	54	1-1/8	1-7/16	1-1/2	2.50	64
23920-20-20	1-1/4	1-5/8x12	1-1/8	4.01	102	2.59	66	1-1/2	1-3/4	2	2.73	69
23920-24-24	1-1/2	1-7/8x12	1-3/8	4.43	113	2.82	72	1-3/4	2	2-1/4	3.06	78

#### 24120

#### Female JIC 37° - Swivel - 90° Elbow - Long Drop

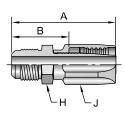


# Part	_	WWW	Hose I.D.	A		E		( <u></u>	J	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
24120-4-4	1/4	7/16x20	3/16	2.08	53	1.80	46	3/8	5/8	9/16	1.30	33
24120-6-6	3/8	9/16x18	5/16	2.34	59	2.18	55	1/2	13/16	11/16	1.42	36
24120-8-8	1/2	3/4x16	13/32	2.95	75	2.43	62	5/8	15/16	7/8	1.86	47
24120-10-10	5/8	7/8x14	1/2	3.26	83	2.58	66	3/4	1-1/8	1	2.04	52
24120-12-12	3/4	1-1/16x12	5/8	3.78	96	3.74	95	7/8	1-1/4	1-1/4	2.28	58

#### 20420

#### Male SAE 45° - Rigid

B-148



# Part	_	······································	Hose I.D.	Ą		H		В	
Number		inch	inch	inch	mm	inch	inch	inch	mm
20420-4-4	1/4	7/16x20	3/16	1.80	46	1/2	5/8	1.02	26
20420-5-5	5/16	1/2x20	1/4	1.94	49	9/16	11/16	1.11	28
20420-6-6	3/8	5/8x18	5/16	2.17	55	11/16	13/16	1.25	32
20420-8-8	1/2	3/4x16	13/32	2.67	68	13/16	15/16	1.58	40
20420-10-10	5/8	7/8x14	1/2	3.00	76	15/16	1-1/8	1.78	45
20420-12-12	3/4	1-1/16x14	5/8	3.50	89	1-1/8	1-1/4	2.00	51

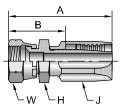
В

C

#### 20820

#### Female SAE 45° - Swivel

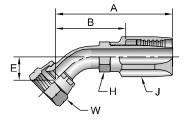
#	٥	······								
Part	1	Thread	Hose I.D.	A	À	Н	J	W	E	3
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
20820-4-4	1/4	7/16x20	3/16	1.94	49	9/16	5/8	9/16	1.16	29
20820-4-5	1/4	7/16x20	1/4	2.04	52	9/16	11-16	9/16	1.21	31
20820-5-5	5/16	1/2x20	1/4	2.12	54	5/8	11-16	5/8	1.29	33
20820-6-6	3/8	5/8x18	5/16	2.36	60	3/4	13/16	3/4	1.44	37
20820-8-8	1/2	3/4x16	13/32	2.79	71	7/8	15/16	7/8	1.70	43
20820-8-10	1/2	3/4x16	1/2	2.99	76	7/8	1-1/8	7/8	1.77	45
20820-10-10	5/8	7/8x14	1/2	3.10	79	1	1-1/8	1	1.88	48
20820-12-12	3/4	1-1/16x14	5/8	3.49	89	1-1/4	1-1/4	1-1/4	1.99	51



#### 27720

#### Female SAE 45° - Swivel - 45° Elbow

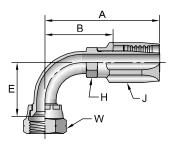
# Part		·············	Hose I.D.	Δ		E		<u>H</u>		$\bigcirc$	Ę	3
Number	i	nch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
27720-6-6	3/8	5/8X18	5/16	2.45	62	0.39	10	1/2	13/16	3/4	1.53	39
27720-8-6	1/2	3/4x16	5/16	2.77	71	0.55	14	5/8	13/16	7/8	1.86	47
27720-8-8	1/2	3/4x16	13/32	3.09	78	0.55	14	5/8	15/16	7/8	2.00	51
27720-10-10	5/8	7/8x14	1/2	3.35	85	0.65	17	3/4	1-1/8	1	2.13	54



#### 27920

#### Female SAE 45° - Swivel - 90° Elbow

#	_	·····		,				(h	J	$\bigcirc$	E	,
Part		Thread	Hose I.D.		Ī						_	) 
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
27920-4-4	1/4	7/16x20	3/16	1.91	49	0.83	21	3/8	5/8	9/16	1.13	29
27920-5-5	5/16	1/2x20	1/4	2.30	58	0.77	20	7/16	11/16	5/8	1.47	37
27920-6-6	3/8	5/8x18	5/16	2.33	59	0.85	22	1/2	13/16	3/4	1.41	36
27920-8-8	1/2	3/4x16	13/32	2.86	73	1.09	28	5/8	15/16	7/8	1.77	45
27920-10-10	5/8	7/8x14	1/2	3.20	81	1.24	31	3/4	1-1/8	1	1.98	50
27920-12-12	3/4	1-1/16x14	5/8	3.87	98	1.82	46	7/8	1-1/4	1-1/4	2.37	60



В



Notch in nut signifies 45° flare.

# E W

#### 28120

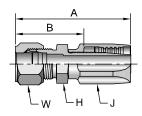
#### Female SAE 45° - Swivel - 90° Elbow - Long Drop

#		^^^	0						<u> </u>	⟨ w	E	
Part		hread	Hose I.D.		•	_		п	J	VV		•
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
28120-6-6	3/8	5/8x18	5/16	2.34	59	2.18	55	1/2	13/16	3/4	1.42	36
28120-8-8	1/2	3/4x16	13/32	2.95	75	2.43	62	5/8	15/16	7/8	1.86	47

Notch in nut signifies 45° flare.

#### 21120

## Male Ferulok Flareless - Rigid (24° Cone with Nut and Ferrule)



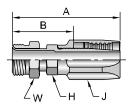
В

#		<u>~~~~</u>								
Part			Hose I.D.	F	1	Н	J	W	E	3
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
21120-6-6	3/8	9/16x18	5/16	2.05	52	5/8	13/16	11/16	1.13	29
21120-8-8	1/2	3/4x16	13/32	2.52	64	13/16	15/16	7/8	1.43	36

The Parker Ferrule-Fix fitting makes it possible to salvage the bent tube section from a hose assembly for quick, easy on the job repairs. For additional information see Ferrule-Fix installation instructions in the Technical Section.

#### 22820

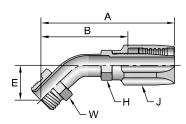
#### Male Inverted SAE 45° - Swivel



#			•							
Part	Thread		Hose I.D.	Ą		Н	J	W	B	
Number	inch		inch	inch	mm	inch	inch	inch	inch	mm
22820-4-4	1/4	7/16x24	3/16	2.45	62	3/8	5/8	7/16	1.67	42
22820-5-5	5/16	1/2x20	1/4	2.70	69	7/16	11/16	1/2	1.87	47
22820-6-6	3/8	5/8x18	5/16	2.95	75	1/2	13/16	5/8	2.03	52
22820-8-8	1/2	3/4x18	13/32	3.36	85	5/8	15/16	3/4	2.27	58
22820-10-10	5/8	7/8x18	1/2	3.64	92	3/4	1-1/8	7/8	2.42	61

#### 26720

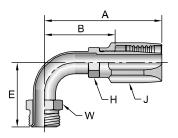
#### Male Inverted SAE 45° - Swivel - 45° Elbow



	#	Thread inch						_		$\bigcirc$ $\bigcirc$			
ı	Part Number			Hose I.D.	inch mm		inch mm		H inch	inch	Winch	inch mm	
н					ILICLI	1111111	IIICII	111111			ITICIT	IIICII	
	26720-4-4	1/4	7/16x24	3/16	2.21	56	0.62	16	3/8	5/8	7/16	1.43	36
	26720-5-5	5/16	1/2x20	1/4	2.44	62	0.70	18	7/16	11/16	1/2	1.61	41
	26720-6-6	3/8	5/8x18	5/16	3.00	76	0.94	24	1/2	13/16	5/8	2.08	53
	26720-8-8	1/2	3/4x18	13/32	3.51	89	1.09	28	5/8	15/16	3/4	2.42	61

#### Male Inverted SAE 45° - Swivel - 90° Elbow

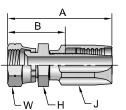
#		·····	•					$\bigcirc$		$\bigcirc$		
Part	Tł	read	Hose I.D.	<b>P</b>	1	E		Н	J	W	E	3
Number	į	inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
26920-4-4	1/4	7/16x24	3/16	2.29	58	1.56	40	3/8	5/8	7/16	1.51	38
26920-5-5	5/16	1/2x20	1/4	2.55	65	1.65	42	7/16	11/16	1/2	1.72	44
26920-5-6	5/16	1/2x20	5/16	2.63	67	1.65	42	1/2	13/16	1/2	1.71	43
26920-6-6	3/8	5/8x18	5/16	2.67	68	1.69	43	1/2	13/16	5/8	1.75	44
26920-8-8	1/2	3/4x18	13/32	3.09	78	1.88	48	5/8	15/16	3/4	2.00	51



# 23220

#### Female PTT 30° - Swivel

#		·····						$\bigcirc$		
Part		Thread	Hose I.D.	Δ	1	Н	J	W	В	3
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
23220-16-16	1	1-5/16x14	7/8	2.98	76	1-1/2	1-7/16	1-1/2	1.79	45

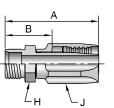


# 26120

# **Male SAE Compression Seat**

(without Nut or Sleeve)

#						$\bigcirc$		
Part	Thread	Hose I.D.	<i>F</i>	1	Н	J		5
Number	inch	inch	inch	mm	inch	inch	inch	mm
26120-10-10	5/8 13/16x18	1/2	2.64	67	7/8	1-1/8	1.42	36



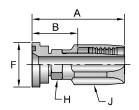
# 21520

#### **SAE Code 61 Flange Head**

ISO 12151-3-S-L

#					Ø				
Part	Flange	Hose I.D.	P	<b>\</b>	F	Н	J	E	
Number	inch	inch	inch	mm	inch	inch	inch	inch	mm
21520-20-20	1-1/4	1-1/8	3.58	91	2	1-1/2	1-3/4	2.30	58
21520-40-40	2-1/2	2-3/8	5.22	133	3-5/16	2-3/4	3-1/8	3.41	87
See Accesories S	Section for C	O-Rings and	Flange k	Kits.					

B-151





В

#### SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3- E45S - L (1 Piece: ISO 12151-3- E45M - L)

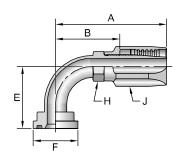
ı	Α
	В
E	
F	∠H ✓
F	LH J

#							$\varnothing$				
Part	Flange	Hose I.D.	1	4	E		F	Н	J	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
21720-20-20	1-1/4	1-1/8	4.10	104	1.12	28	2	1-1/2	1-3/4	2.82	72
21720-40-40	2-1/2	2-3/8	5.83	148	1.41	36	3-5/16	2-3/4	3-1/8	4.02	102

# 21920

#### SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3- E90S - L (1 Piece: ISO 12151-3- E90M - L)



В

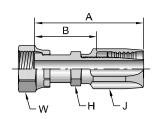
C

#							$\varnothing$				
Part	Flange	Hose I.D.	Į.	4	E		F	Н	J	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
21920-8-8	1/2	13/32	2.95	75	1.62	41	1-3/16	5/8	15/16	1.86	47
21920-32-32	2	1-13/16	5.44	138	3.19	81	2-13/16	2-1/4	2-1/2	3.70	94
21920-40-40	2-1/2	2-3/8	6.18	157	3.75	95	3-5/16	2-3/4	3-1/8	4.37	111

# **2JS20**

#### Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB

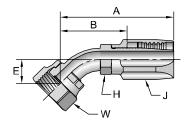


#	_	<u> </u>					$\bigcirc$			
Part		Thread	Hose I.D.	A	1	Н	J	W	Е	5
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
2JS20-4-4	1/4	9/16x18	3/16	2.07	53	9/16	5/8	11/16	1.29	33
2JS20-6-6	3/8	11/16x16	5/16	2.36	60	1/2	13/16	13/16	1.44	37
2JS20-8-8	1/2	13/16x16	13/32	2.92	74	5/8	15/16	15/16	1.83	46
2JS20-10-10	5/8	1x14	1/2	3.15	80	3/4	1-1/8	1-1/8	1.93	49
2JS20-12-12	3/4	1-3/16x12	5/8	3.66	93	1-1/8	1-1/4	1-3/8	2.16	55

### **2J720**

# Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1 - SWE45



# Part					Hose I.D.	Δ		E		<u>H</u>	$\bigcirc$	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm		
2J720-4-4	1/4	9/16x18	3/16	2.24	57	0.41	10	7/16	5/8	11/16	1.46	37		
2J720-6-6	3/8	11/16x16	5/16	2.52	64	0.43	11	1/2	13/16	13/16	1.60	41		
2J720-8-8	1/2	13/16x16	13/32	3.19	81	0.59	15	5/8	15/16	15/16	2.10	53		
2J720-10-10	5/8	1x14	1/2	3.46	88	0.65	17	3/4	1-1/8	1-1/8	2.24	57		

See Accessories Section for O-Rings and Flange Kits.

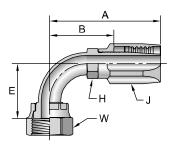


# **2J920**

# Female Seal-Lok® - Swivel 90° Elbow - Short Drop

ISO 12151-1 - SWE90

# Part	_	·//··/···	Hose I.D.	A		E		<b>○ H</b>	<b>L</b>	<b>«</b>	В	
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
2J920-4-4	1/4	9/16x18	3/16	2.22	56	0.82	21	7/16	5/8	11/16	1.44	37
2J920-6-6	3/8	11/16x16	5/16	2.39	61	0.90	23	1/2	13/16	13/16	1.47	37
2J920-8-8	1/2	13/16x16	13/32	2.91	74	1.15	29	5/8	15/16	15/16	1.82	46
2J920-10-10	5/8	1x14	1/2	3.16	80	1.27	32	3/4	1-1/8	1-1/8	1.94	49
2J920-12-12	3/4	1-3/16x12	5/8	3.74	95	1.85	47	7/8	1-1/4	1-3/8	2.24	57

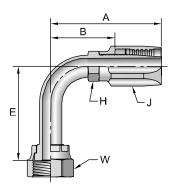


# **2J120**

# Female Seal-Lok® - Swivel - 90° Elbow - Long Drop

ISO 12151-1 - SWEL90

#			•					$\bigcirc$		$\bigcirc$		
Part	Thread		Hose I.D.	<b>A</b>	1	E		Н	J	W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
2J120-4-4	1/4	9/16x18	3/16	2.01	51	1.80	46	7/16	5/8	11/16	1.23	31
2J120-6-6	3/8	11/16x16	5/16	2.48	63	2.13	54	1/2	13/16	13/16	1.56	40
2J120-8-8	1/2	13/16x16	13/32	2.96	75	2.51	64	5/8	15/16	15/16	1.87	47



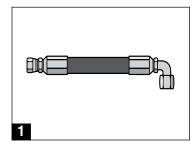
В

C

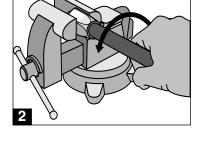
D



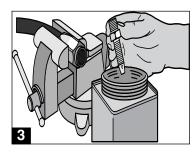
See Accessories Section for O-Rings.



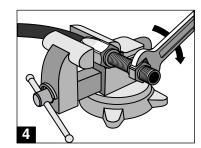
# В



# C



#### D



# 20 Series Hose Assembly Instructions

- Identify over all length (OAL) of hose assembly and the cut off allowance (COA) length of fitting(s) on hose ends by use of the fitting data table. Properly measure, mark and cut hose to desired length using fine tooth hacksaw or cutoff machine. Care should be taken to ensure a square, clean cut is obtained.
- Air or solvent flush cut end of hose as necessary to produce a clean hose ID prior to assembly. Place socket in vice and screw in hose counter clockwise until hose bottoms. Back hose out ½ turn.
- 3. Oil inside of hose and nipple threads liberally with Hose-Oil. (See Section C). Do not oil hose cover.
- 4. Screw nipple assembly into socket using a wrench on the nipple hex until the nipple hex shoulders against the socket. A 1/32" to 1/16" gap between the nipple hex and socket is allowed for displacement angle adjustment when two elbow fittings are used.

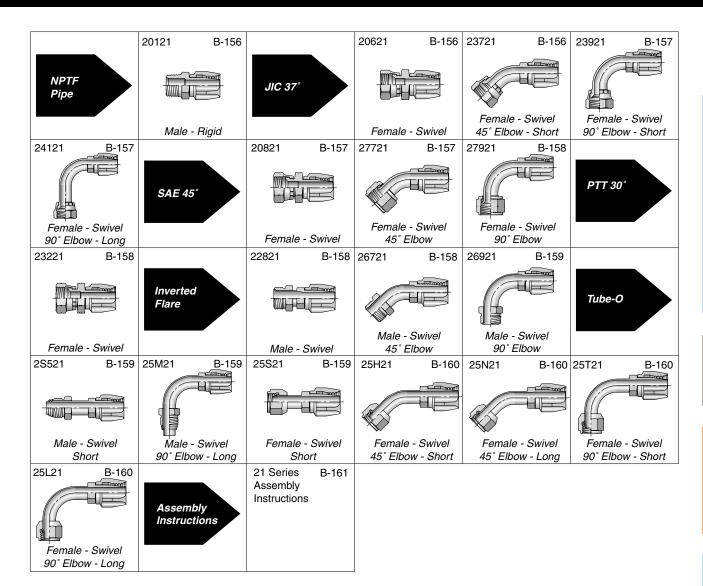
**Inspection.** Examine hose assembly internally for cut or bulged tube, obstructions and cleanliness. Clean ID of hose as necessary. Swivel nuts should turn freely. Check the layline of the hose to be sure the assembly is not twisted. Cap the ends of the assembly to keep clean.

Special Instructions for stainless steel fittings. When assembling fittings made with 316 stainless steel, lubricate the threads of both the socket and nipple with Accrolube High Efficiency Lubricant (see Section C) or equivalent metal assembly lubricant.

#### Note: DISASSEMBLE IN REVERSE ORDER

IF YOU HAVE QUESTIONS CONCERNING THE PRODUCTS OR APPLICATION OF THE PRODUCTS CONTAINED IN THIS CATALOG, PLEASE CALL: PARKER HOSE PRODUCTS DIVISION - TECHNICAL SERVICES DEPARTMENT PHONE: 440/943-5700

FAX: 440/943-3129 http://www.parkerhose.com



B-155

A

В

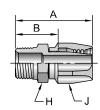


В

C

D

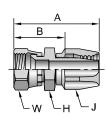
20121 Male NPTF Pipe - Rigid



#		0						
Part	Thread	Hose I.D.	A	<b>A</b>		J	E	3
Number	inch	inch	inch	mm	inch	inch	inch	mm
20121-2-4	1/8x27	3/16	1.55	39	7/16	9/16	0.88	22
20121-4-4	1/4x18	3/16	1.77	45	9/16	9/16	1.10	28
20121-4-5	1/4x18	1/4	1.79	45	9/16	5/8	1.05	27
20121-4-6	1/4x18	5/16	1.92	49	9/16	3/4	1.14	29
20121-6-6	3/8x18	5/16	1.95	50	11/16	3/4	1.17	30
20121-6-8	3/8x18	13/32	2.10	53	11/16	7/8	1.18	30
20121-8-8	1/2x14	13/32	2.34	59	7/8	7/8	1.42	36
20121-8-10	1/2x14	1/2	2.44	62	7/8	1-1/16	1.44	37
20121-12-12	3/4x14	5/8	2.58	66	1-1/8	1-1/4	1.50	38
20121-12-16	3/4x14	7/8	2.50	64	1-1/4	1-7/16	1.51	38
20121-16-16	1x11-1/2	7/8	2.69	68	1-3/8	1-7/16	1.70	43
20121-20-20	1-1/4x11-1/2	1-1/8	2.91	74	1-11/16	1-3/4	1.87	47
20121-24-24	1-1/2x11-1/2	1-3/8	3.02	77	2	2	1.92	49

# 20621

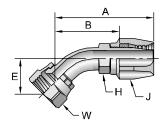
Female JIC 37° - Swivel



#	Thread					H	$\bigcirc$	$\bigcirc$	E	3
Part	_		Hose I.D.							Ī I
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
20621-4-4	1/4	7/16x20	3/16	1.83	46	9/16	9/16	9/16	1.16	29
20621-5-5	5/16	1/2x20	1/4	1.92	49	5/8	5/8	5/8	1.18	30
20621-6-6	3/8	9/16x18	5/16	2.09	53	11/16	3/4	11/16	1.31	33
20621-8-8	1/2	3/4x16	13/32	2.46	62	7/8	7/8	7/8	1.54	39
20621-8-10	1/2	3/4x16	1/2	2.56	65	1	1-1/16	7/8	1.56	40
20621-10-10	5/8	7/8x14	1/2	2.65	67	1	1-1/16	1	1.65	42
20621-12-12	3/4	1-1/16x12	5/8	2.85	72	1-1/4	1-1/4	1-1/4	1.77	45
20621-16-16	1	1-5/16x12	7/8	2.94	75	1-1/2	1-7/16	1-1/2	1.95	50
20621-20-20	1-1/4	1-5/8x12	1-1/8	3.16	80	2	1-3/4	2	2.12	54

# 23721

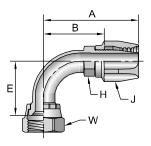
Female JIC 37° - Swivel - 45° Elbow - Short Drop



#	~	·····						$\bigcirc$				
Part	Т	hread	Hose I.D.		4	E		Н	J	W	В	
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
23721-4-4	1/4	7/16x20	3/16	2.11	54	0.39	10	3/8	9/16	9/16	1.43	36
23721-6-6	3/8	9/16x18	5/16	2.26	57	0.40	10	1/2	3/4	11/16	1.48	38
23721-8-8	1/2	3/4x16	13/32	2.73	69	0.55	14	5/8	7/8	7/8	1.81	46
23721-10-10	5/8	7/8x14	1/2	2.97	75	0.64	16	3/4	1-1/16	1	1.97	50
23721-12-12	3/4	1-1/16x12	5/8	3.30	84	0.83	21	7/8	1-1/4	1-1/4	2.22	56
23721-16-16	1	1-5/16x12	7/8	3.44	87	0.90	23	1-1/8	1-7/16	1-1/2	2.45	62
23721-20-20	1-1/4	1-5/8x12	1-1/8	3.80	97	1.19	30	1-3/8	1-3/4	2	2.76	70

#### Female JIC 37° - Swivel - 90° Elbow - Short Drop

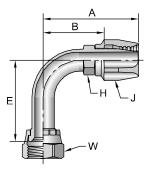
#		······							$\bigcirc$			
Part	-	Thread	Hose I.D.	<i>F</i>	1	E		Н	J	W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
23921-4-4	1/4	7/16 x 20	3/16	1.88	48	0.83	21	3/8	9/16	9/16	1.20	30
23921-4-6	1/4	7/16 x 20	5/16	1.95	50	0.83	21	1/2	3/4	9/16	1.17	30
23921-5-5	5/16	1/2 x 20	1/4	2.07	53	0.77	20	7/16	5/8	5/8	1.33	34
23921-6-6	3/8	9/16x18	5/16	2.15	55	0.85	22	1/2	3/4	11/16	1.37	35
23921-8-8	1/2	3/4 x 16	13/32	2.49	63	1.09	28	5/8	7/8	7/8	1.57	40
23921-10-10	5/8	7/8 x 14	1/2	2.69	68	1.23	31	3/4	1-1/16	1	1.69	43
23921-12-12	3/4	1-1/16 x 12	5/8	2.88	73	1.89	48	7/8	1-1/4	1-1/4	1.80	46
23921-16-16	1	1-5/16 x 12	7/8	3.40	86	2.14	54	1-1/8	1-7/16	1-1/2	2.41	61
23921-20-20	1-1/4	1-5/8 x 12	1-1/8	3.64	92	2.59	66	1-3/8	1-3/4	2	2.60	66



# 24121

### Female JIC 37° - Swivel - 90° Elbow - Long Drop

# Part			Hose I.D.	A	<b>\</b>	E	<u> </u>	H	J	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
24121-4-4	1/4	7/16x20	3/16	1.88	48	2.52	64	3/8	9/16	9/16	1.20	30
24121-6-6	3/8	9/16x18	5/16	2.14	54	2.18	55	1/2	3/4	11/16	1.36	35
24121-8-8	1/2	3/4x16	13/32	2.45	62	2.52	64	5/8	7/8	7/8	1.53	39
24121-10-10	5/8	7/8x14	1/2	2.91	74	2.57	65	3/4	1-1/16	1	1.91	49
24121-20-20	1-1/4	1-5/8x12	1-1/8	3.63	92	5.28	134	1-3/8	1-3/4	2	2.59	66



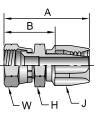
В

D

# 20821

#### Female SAE 45° - Swivel

# Part	Thread inch		Hose I.D.	Į.	<b>\</b>	H	J	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
20821-4-4	1/4	7/16x20	3/16	1.83	46	9/16	9/16	9/16	1.16	29
20821-5-5	5/16	1/2x20	1/4	1.91	49	5/8	5/8	5/8	1.17	30
20821-6-6	3/8	5/8x18	5/16	2.12	54	3/4	3/4	3/4	1.34	34
20821-8-8	1/2	3/4x16	13/32	2.46	62	7/8	7/8	7/8	1.54	39
20821-10-10	5/8	7/8x14	1/2	2.65	67	1	1-1/16	1	1.65	42
20821-12-12	3/4	1-1/16x14	5/8	2.85	72	1-1/4	1-1/4	1-1/4	1.77	45

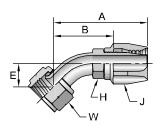


# 27721

#### Female SAE 45° - Swivel - 45° Elbow

# Part		<u>///////</u> Thread	Hose I.D.	4	١	E		H	J	$\bigcirc$	E	3
Number		inch		inch	mm	inch	mm	inch	inch	inch	inch	mm
27721-6-6	3/8	5/8x18	5/16	2.26	57	0.40	10	1/2	3/4	3/4	1.48	38
27721-12-12	3/4	1-1/16x14	5/8	3.30	84	0.83	21	7/8	1-1/4	1-1/4	2.22	56

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Notch in nut signifies 45° flare.

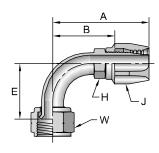


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#### Female SAE 45° - Swivel - 90° Elbow

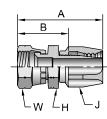


۵	·····	•						$\bigcirc$			,
	Γhread	Hose I.D.	<i></i>	1			п	J	VV		)
	inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
3/8	5/8x18	5/16	2.15	55	0.85	22	1/2	3/4	3/4	1.37	35
3/4	1-1/16x14	5/8	2.88	73	1.89	48	7/8	1-1/4	1-1/4	1.89	46
	3/8		Thread inch 3/8 5/8x18 5/16	Thread inch inch inch 3/8 5/8x18 5/16 2.15	Thread inch inch inch inch mm 5/16 2.15 55	Thread inch inch inch inch inch 3/8 5/8x18 5/16 2.15 55 0.85	Thread inch inch inch inch inch inch inch inch	Thread inch inch inch inch inch inch 5/16 2.15 55 0.85 22 1/2	Thread inch inch inch inch inch inch inch 3/8 5/8x18 5/16 2.15 55 0.85 22 1/2 3/4	Thread inch inch inch inch inch inch inch inch	Thread inch inch inch inch inch inch inch inch

Notch in nut signifies 45° flare.

### 23221

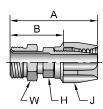
#### Female PTT 30° - Swivel



#		<u>~~~~~</u>								
Part	T	hread	Hose I.D.	F	1	Н	J	W	E	3
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
23221-16-16	1	1-5/16x14	7/8	2.70	69	1-1/2	1-7/16	1-1/2	1.71	43

### 22821

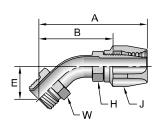
#### Male Inverted SAE 45° - Swivel



# Part			Hose I.D.	Å	<b>\</b>	H	<b>L</b>	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
22821-4-4	1/4	7/16x24	3/16	2.36	60	3/8	9/16	7/16	1.68	43
22821-5-4	5/16	1/2x20	3/16	2.32	59	7/16	9/16	1/2	1.64	42
22821-5-5	5/16	1/2x20	1/4	2.34	59	7/16	5/8	1/2	1.60	41
22821-5-6	5/16	1/2x20	5/16	2.47	63	1/2	3/4	1/2	1.69	43
22821-6-6	3/8	5/8x18	5/16	2.45	62	1/2	3/4	5/8	1.67	42
22821-8-8	1/2	3/4x18	13/32	2.84	72	5/8	7/8	3/4	1.92	49
22821-10-10	5/8	7/8x18	1/2	2.91	74	3/4	1-1/16	7/8	1.91	49

### 26721

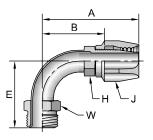
#### Male Inverted SAE 45° - Swivel - 45° Elbow



# Part	Thread		Hose I.D.	4	4	E		<b>H</b>	<u></u>	$\bigcirc$	В	<b>3</b>
Number	inch		inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
26721-4-4	1/4	7/16x24	3/16	2.35	60	0.62	16	3/8	9/16	7/16	1.67	42
26721-5-5	5/16	1/2x20	1/4	2.59	66	0.94	24	7/16	5/8	1/2	1.85	47
26721-6-6	3/8	5/8x18	5/16	2.73	69	0.94	24	1/2	3/4	5/8	1.95	50
26721-8-8	1/2	3/4x18	13/32	3.05	77	0.94	24	5/8	7/8	3/4	2.13	54

#### Male Inverted SAE 45° - Swivel - 90° Elbow

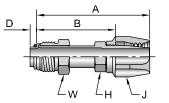
# Part		···········	Hose I.D.	A		E	<u> </u>	H	C	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
26921-4-4	1/4	7/16x24	3/16	2.45	62	1.56	40	3/8	9/16	7/16	1.77	45
26921-5-5	5/16	1/2x20	1/4	2.25	57	1.65	42	7/16	5/8	1/2	1.51	38
26921-5-6	5/16	1/2x20	5/16	2.38	60	1.65	42	1/2	3/4	1/2	1.60	41
26921-6-6	3/8	5/8x18	5/16	2.37	60	1.63	41	1/2	3/4	5/8	1.59	40
26921-8-8	1/2	3/4x18	13/32	2.63	67	1.78	45	5/8	7/8	3/4	1.71	43
26921-10-10	5/8	7/8x18	1/2	2.96	75	2.17	55	3/4	1-1/16	7/8	1.96	50



# **2S521**

#### Male Tube-O - Swivel - Short Pilot

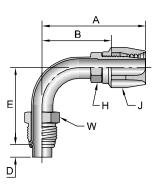
#			•						$\bigcirc$			
Part	TI	read	Hose I.D.	•	١.	L	ַ ו	н	J	W	E	3
Number	i	nch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
2S521-6-6	3/8	5/8x18	5/16	2.64	67	0.18	4,7	1/2	3/4	5/8	1.86	47



### 25M21

# Male Tube-O - Swivel - 90° Elbow - Long Pilot

#		Thread Head D		A D						Ò				
Part	TI	hread	Hose I.D.	P	1	L		-		п	J	W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	mm	inch	inch	inch	inch	mm
25M21-8-8	1/2	3/4x18	13/32	2.49	63	0.38	9,8	2.12	54	5/8	7/8	3/4	1.57	40
25M21-10-10	5/8	7/8x18	1/2	3.27	83	0.38	9,8	1.95	50	3/4	1-1/16	7/8	2.27	58

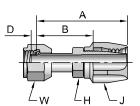


# **25S21**

#### Female Tube-O - Swivel - Short Pilot

# Part		···········	Hose I.D.	I	<b>A</b>	Ę	)	H		$\bigcirc$	E	3
Number	i	nch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
25S21-6-6	3/8	5/8x18	5/16	2.66	68	0.18	4,7	1/2	3/4	3/4	1.88	48
25S21-8-8	1/2	3/4x16	13/32	2.86	73	0.18	4,7	5/8	7/8	7/8	1.94	49

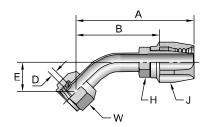
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### 25H21

#### Female Tube-O - Swivel - 45° Elbow - Short Pilot

# Part		······	Hose I.D.	Į.	<b>1</b>		)	E		<b>H</b>	$\bigcirc$	$\bigcirc$	E	3
Number	i	inch	inch	inch	mm	inch	mm	inch	mm	inch	inch	inch	inch	mm
25H21-8-8	1/2	3/4x16	13/32	2.74	70	0.18	4,7	0.60	15	5/8	7/8	7/8	1.82	46

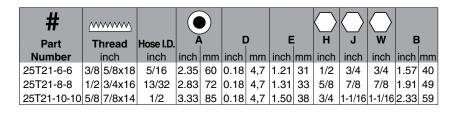
# 25N21

#### Female Tube-O - Swivel - 45° Elbow - Long Pilot

#		0							$\bigcirc$	$\bigcirc$		_	
Part	Thread	Hose I.D.	<i>F</i>	1	L	<b>'</b>	_ E		Н	J	W	_ E	<b>5</b>
Number	inch	inch	inch	mm	inch	mm	inch	mm	inch	inch	inch	inch	mm
25N21-8-8	1/2 3/4x16	13/32	3.24	82	0.38	9,8	0.98	25	5/8	7/8	7/8	2.32	59

#### 25T21

#### Female Tube-O - Swivel - 90° Elbow - Short Pilot



# 25L21

#### Female Tube-O - Swivel - 90° Elbow - Long Pilot

# Part	Thread Hose I.D.		L	A D		ī		H			E	3		
Number		inch	inch	inch	mm	inch	mm	inch	mm	inch	inch	inch	inch	mm
25L21-6-6	3/8	5/8x18	5/16	2.28	58	0.28	7,1	1.43	36	1/2	3/4	3/4	1.50	38
25L21-8-8	1/2	3/4x16	13/32	2.50	64	0.38	9,8	1.46	37	5/8	7/8	7/8	1.58	40
25L21-10-10	5/8	7/8x14	1/2	2.83	72	0.38	9,8	1.75	44	3/4	1-1/16	1-1/16	1.83	46



### 21 Series

#### **Hose Assembly Instructions**

- Identify over all length (OAL) of hose assembly and the cut off allowance (COA) length of fitting(s) on hose ends by use of the fitting data table. Properly measure, mark and cut hose to desired length using fine tooth hacksaw or a cutoff machine. Care should be taken to ensure a square, clean cut is obtained.
- Air or solvent flush cut end of hose as necessary to produce a clean hose ID prior to assembly. Place socket in vice and screw in hose counter clockwise until hose bottoms. Back hose out ½ turn.
- 3. Oil inside of hose and nipple threads liberally with Hose-Oil. (See Section C). Do not oil hose cover.
- 4. Screw nipple assembly into socket using a wrench on the nipple hex until the nipple hex shoulders against the socket. A 1/32" to 1/16" gap between the nipple hex and socket is allowed for displacement angle adustment when elbow fittings are used.

**Inspection.** Examine hose assembly internally for cut or bulged tube, obstructions and cleanliness. Clean ID of hose as necessary. Swivel nuts should turn freely. Check the layline of the hose to be sure the assembly is not twisted. Cap the ends of the assembly to keep clean.

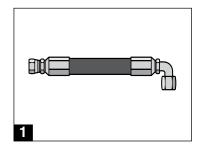
Special instructions for stainless steel fittings. When assembling fittings made with 316 stainless steel, lubricate the threads of both the socket and nipple with Accrolube High Efficiency Lubricant (see Section C) or equivalent metal assembly lubricant.

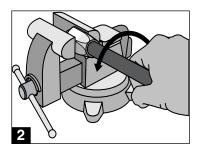
Note: Disassemble in reverse order.

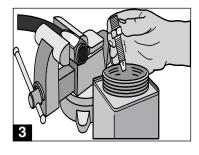
IF YOU HAVE QUESTIONS CONCERNING THE PRODUCTS OR APPLICATION OF THE PRODUCTS CONTAINED IN THIS CATALOG, PLEASE CALL: PARKER HOSE PRODUCTS DIVISION - TECHNICAL SERVICES DEPARTMENT PHONE: 440 / 943-5700

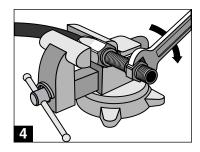
FAX: 440 / 943-3129 http://www.parkerhose.com

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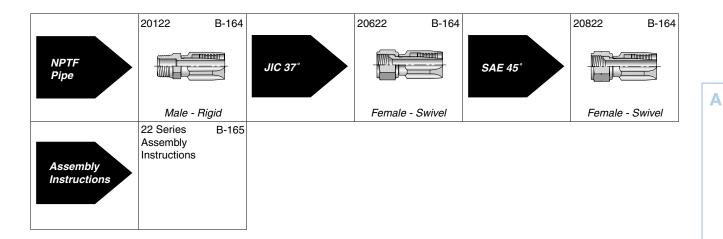
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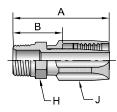


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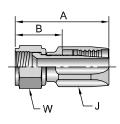
#### Male NPTF Pipe - Rigid



# Part		Hose I.D.	,		H	<u></u>	Е		Additional Material
Number	inch	inch	inch	mm	inch	inch	inch	mm	Brass (B)
20122-2-4	1/8x27	3/16	1.72	44	7/16	5/8	0.94	24	
20122-4-4	1/4x18	3/16	1.92	49	9/16	5/8	1.92	29	•
20122-4-5	1/4x18	1/4	2.01	51	9/16	11/16	1.18	30	•
20122-4-6	1/4x18	5/16	2.11	54	9/16	13/16	1.19	30	•
20122-6-8	3/8x18	13/32	2.49	63	3/4	15/16	1.40	36	•
20122-12-12	3/4x14	5/8	3.25	83	1-1/16	1-1/4	1.75	44	•

# 20622

#### Female JIC 37° - Swivel



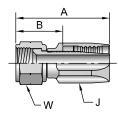
В

# Part		////// hread	Hose I.D.	Į.	<b>A</b>		$\bigcirc$	E	3	Additional Material
Number		inch	inch	inch	mm	inch	inch	inch	mm	Brass (B)
20622-4-4~	1/4	7/16x20	3/16	1.74	44	5/8	9/16	0.96	24	•
20622-5-5~	5/16	1/2x20	1/4	1.91	49	11/16	5/8	1.08	27	•
20622-6-6	3/8	9/16x18	5/16	2.05	52	13/16	11/16	1.13	29	•
20622-8-8~	1/2	3/4x16	13/32	2.55	65	15/16	7/8	1.46	37	•
20622-10-10~	5/8	7/8x14	1/2	2.80	71	1-1/8	1	1.58	40	•
20622-12-12	3/4	1-1/16x12	5/8	3.15	80	1-1/4	1-1/8	1.65	42	•
20622-16-16	1	1-5/16x12	7/8	2.84	72	1-7/16	1-1/2	1.65	42	•
20622-20-20	1-1/4	1-5/8x12	1-1/8	3.00	76	1-3/4	2	1.72	44	•
20622-24-24	1-1/2	1-7/8x12	1-3/8	3.30	84	2	2-1/4	1.93	49	•
20622-32-32	2	2-1/2x12	1-13/16	4.05	103	2-1/2	2-7/8	2.31	59	•
20622-40-40	2-1/2	3x12	2-3/8	4.17	106	3-1/8	3-3/8	2.36	60	

 $<sup>\</sup>sim$ These 20622 fittings contain a dual seat that accepts both the JIC (37°) and SAE (45°) male configurations. The -6 and -12 SAE (45°) swivel fittings are shown under part number 20822.

# 20822

#### Female SAE 45° - Swivel



# Part		·····································	Hose I.D.	<b>A</b>		J	$\bigcirc$	E	3	Additional Material
Number		inch	inch	inch	mm	inch	inch	inch	mm	Brass (B)
20822-4-4	1/4	7/16x20	3/16	1.74	44	5/8	9/16	0.96	24	•
20822-5-5	5/16	1/2x20	1/4	1.91	49	11/16	5/8	1.08	27	•
20822-6-6	3/8	5/8x18	5/16	2.08	53	13/16	3/4	1.16	29	•
20822-8-8	1/2	3/4x16	13/32	2.45	62	15/16	7/8	1.36	35	•
20822-10-10	5/8	7/8x14	1/2	2.80	71	1-1/8	1	1.58	40	•
20822-12-12	3/4	1-1/16x14	5/8	3.10	79	1-1/4	1-1/4	1.60	41	•

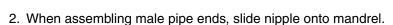
Notch in nut for SAE (45°) flare.



#### 22 Series

#### **Mandrel Assembly Instructions**

1. Identify over all length (OAL) of hose assembly and the cut off allowance (COA) length of fitting(s) on hose ends by use of the fitting data table. Properly measure, mark and cut hose to desired length using fine tooth hacksaw or a cutoff machine. Care should be taken to ensure a square, clean cut is obtained. Air or solvent flush cut end of hose as necessary to produce a clean hose ID prior to assembly. Place socket in vice and screw in hose counter clockwise until hose bottoms. Back hose out ½ turn.



- 3. When assembling swivel ends, slide swivel nut over nipple. Slide nut and nipple onto mandrel. Screw mandrel threads into nipple and wrench tighten.
- 4. Oil inside of hose and nipple threads liberally with Hose-Oil. (See Section C). **Do not oil hose cover.**
- 5. Push nipple into socket.
  - Male ends: Thread nipple in until it bottoms against socket.
  - Swivel ends: Thread nipple into socket using hex on assembly mandrel. Leave clearance of approximately 1/32" (.784mm) between nut and socket to allow nut to swivel. Remove mandrel.

Note: Disassemble in reverse order.

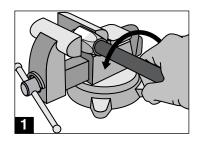
Caution: Do Not Attempt to Assemble These Fittings to the Hose Without Using a Mandrel.

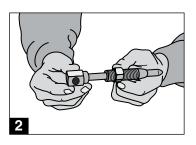
**Inspection.** Examine hose assembly internally for cut or bulged tube, obstructions and cleanliness. Clean ID of hose as necessary. Swivel nuts should turn freely. Check the layline of the hose to be sure the assembly is not twisted. Cap the ends of the assembly to keep clean.

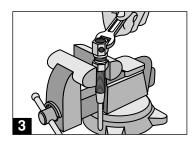
**Special Instructions for Refrigerant Hose.** Oil inside of hose and nipple threads liberally with the same oil used in refrigeration system. **Do not oil hose cover.** Do not allow hose to contact any petroleum base fluids.

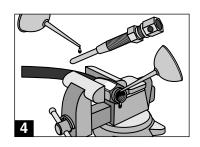
IF YOU HAVE QUESTIONS CONCERNING THE PRODUCTS OR APPLICATION OF THE PRODUCTS CONTAINED IN THIS CATALOG, PLEASE CALL: PARKER HOSE PRODUCTS DIVISION TECHNICAL SERVICES DEPARTMENT PHONE: 440 / 943-5700

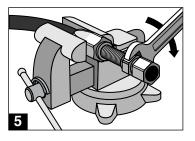
> FAX: 440 / 943-3129 http://www.parkerhose.com













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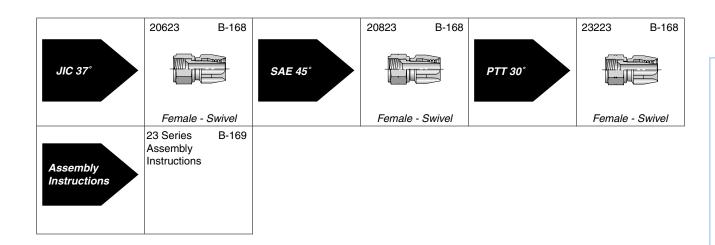
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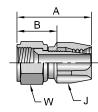


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# 20623

#### Female JIC 37° - Swivel

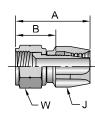


#		·····							
Part	Th	read	Hose I.D.	l A	4	J	W	E	3
Number	i	nch	inch	inch	mm	inch	inch	inch	mm
20623-4-4~	1/4	7/16x20	3/16	1.63	41	9/16	9/16	0.96	24
20623-5-5~	5/16	1/2x20	1/4	1.70	43	5/8	5/8	0.96	24
20623-6-6	3/8	9/16x18	5/16	1.91	49	3/4	11/16	1.13	29
20623-8-8~	1/2	3/4x16	13/32	2.16	55	7/8	7/8	1.24	31
20623-10-10~	5/8	7/8x14	1/2	2.37	60	1-1/16	1	1.37	35
20623-12-12	3/4	1-1/16x12	5/8	2.51	64	1-1/4	1-1/4	1.43	36
20623-16-16	1	1-5/16x12	7/8	2.50	64	1-7/16	1-1/2	1.51	38
20623-20-20	1-1/4	1-5/8x12	1-1/8	2.75	70	1-3/4	2	1.71	43
20623-24-24	1-1/2	1-7/8x12	1-3/8	3.00	76	2	2-1/4	1.90	48
20623-32-32	2	2-1/2x12	1-13/16	3.57	91	2-3/8	2-7/8	2.28	58

 $<sup>\</sup>sim$  These 20623 fittings contain a dual seat that accepts both the JIC (37°) and SAE (45°) male configurations. The -6 and -12 SAE (45°) swivel fittings are shown under part number 20823.

# 20823

#### Female SAE 45° - Swivel



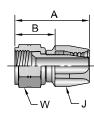
# Part			Hose I.D.	<b>A</b>		$\bigcirc$	$\bigcirc$	E	3	Additional Material
Number		inch	inch	inch	mm	inch	inch	inch	mm	Brass (B)
20823-4-4	1/4	7/16x20	3/16	1.68	43	9/16	9/16	1.01	26	•
20823-6-6	3/8	5/8x18	5/16	1.94	49	3/4	3/4	1.16	29	•
20823-8-8	1/2	3/4x16	13/32	2.08	53	7/8	7/8	1.16	29	•
20823-10-10	5/8	7/8x14	1/2	2.33	59	1-1/16	1	1.33	34	•
20823-12-12	3/4	1-1/16x14	5/8	2.47	63	1-1/4	1-1/4	1.39	35	•

Notch on nut signifies SAE 45° flared fitting.

# 23223

#### Female PTT 30° - Swivel

B-168

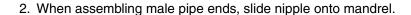


# Part			Hose I.D.	A	4	J	$\bigcirc$	ı	3
Number	i	nch	inch	inch	mm	inch	inch	inch	mm
23223-16-16	1	1-5/16x14	7/8	2.29	58	1-7/16	1-1/2	1.30	33
23223-20-20	1-1/4	1-5/8x14	1-1/8	2.62	67	1-3/4	2	1.58	40

### 23 Series

#### **Mandrel Assembly Instructions**

1. Identify over all length (OAL) of hose assembly and the cut off allowance (COA) length of fitting(s) on hose ends by use of the fitting data table. Properly measure, mark and cut hose to desired length using fine tooth hacksaw or a cutoff machine. Care should be taken to ensure a square, clean cut is obtained. Air or solvent flush cut end of hose as necessary to produce a clean hose ID prior to assembly. Place socket in vice and screw in hose counter clockwise until hose bottoms. Back hose out ½ turn.



- 3. When assembling swivel ends, slide swivel nut over nipple. Slide nut and nipple onto mandrel. Screw mandrel threads into nipple and wrench tighten.
- 4. Oil inside of hose and nipple threads liberally with Hose-Oil. (See Section C). **Do not oil hose cover.**
- 5. Push nipple into socket.
  - Male ends: Thread nipple in until it bottoms against socket.
  - Swivel ends: Thread nipple into socket using hex on assembly mandrel. Leave clearance of approximately 1/32" (.784mm) between nut and socket to allow nut to swivel. Remove mandrel.

Note: Disassemble in reverse order.

Caution: Do Not Attempt to Assemble These Fittings to the Hose Without Using a Mandrel.

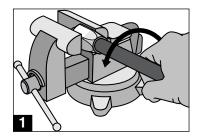
**Inspection.** Examine hose assembly internally for cut or bulged tube, obstructions and cleanliness. Clean ID of hose as necessary. Swivel nuts should turn freely. Check the layline of the hose to be sure the assembly is not twisted. Cap the ends of the assembly to keep clean.

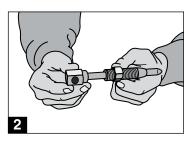
**Special Instructions for Refrigerant Hose.** Oil inside of hose and nipple threads liberally with the same oil used in refrigeration system. **Do not oil hose cover.** Do not allow hose to contact any petroleum base fluids.

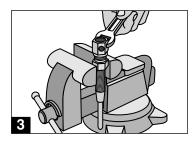
IF YOU HAVE QUESTIONS CONCERNING THE PRODUCTS OR APPLICATION OF THE PRODUCTS CONTAINED IN THIS CATALOG, PLEASE CALL: PARKER HOSE PRODUCTS DIVISION TECHNICAL SERVICES DEPARTMENT PHONE: 440 / 943-5700

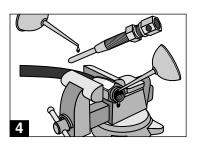
> FAX: 440 / 943-3129 http://www.parkerhose.com

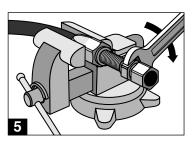
> > B-169























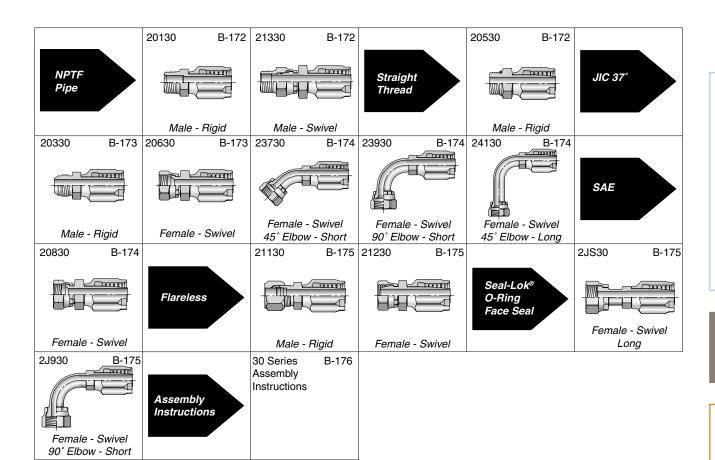
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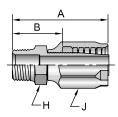


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20130

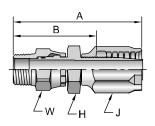
### Male NPTF Pipe - Rigid



#								
Part	Thread	Hose I.D.	<b>A</b>		Н	J	E	3
Number	inch	inch	inch	mm	inch	inch	inch	mm
20130-2-3	1/8x27	3/16	2.01	51	1/2	3/4	1.23	31
20130-2-4	1/8x27	1/4	2.19	56	9/16	3/4	1.23	31
20130-4-4	1/4x18	1/4	2.38	60	9/16	3/4	1.42	36
20130-4-6	1/4x18	3/8	2.58	66	11/16	15/16	1.44	37
20130-6-4	3/8x18	1/4	2.38	60	3/4	3/4	1.41	36
20130-6-6	3/8x18	3/8	2.58	66	3/4	15/16	1.44	37
20130-6-8	3/8x18	1/2	2.92	74	7/8	1-1/16	1.58	40
20130-8-6	1/2x14	3/8	2.77	70	7/8	15/16	1.63	41
20130-8-8	1/2x14	1/2	3.11	79	7/8	1-1/16	1.77	45
20130-12-12	3/4x14	3/4	3.20	81	1-1/8	1-3/8	1.77	45
20130-16-16	1x11-1/2	1	3.74	95	1-3/8	1-3/4	2.03	52
20130-20-20	1-1/4x11-1/2	1-1/4	4.59	117	1-3/4	2-1/4	2.46	62

# 21330

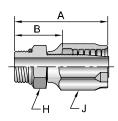
### Male NPTF Pipe - Swivel



# Part		Hose I.D.	4	<b>A</b>	H	ر ا	$\bigcirc$		В
Number	inch	inch	inch	mm	inch	inch	inch	inch	mm
21330-4-4	1/4x18	1/4	3.42	87	9/16	3/4	5/8	2.46	62
21330-6-6	3/8x18	3/8	3.67	93	7/8	15/16	3/4	2.53	64
21330-8-8	1/2x14	1/2	4.20	107	1	1-1/16	7/8	2.86	73
21330-12-12	3/4x14	3/4	4.30	109	1	1-3/8	1	2.87	73
21330-16-16	1x11-1/2	1	4.93	125	1-1/2	1-3/4	1-1/2	3.22	82

# 20530

# Male SAE Straight Thread with O-Ring - Rigid



# Part		vvvvv	Hose I.D.	ı	A.	H		E	3
Number	inch		inch	inch	mm	inch	inch	inch	mm
20530-4-4	1/4	7/16x20	1/4	2.22	56	9/16	3/4	1.26	32
20530-6-6	3/8	9/16x18	3/8	2.45	62	11/16	15/16	1.31	33
20530-8-8	1/2	3/4x16	1/2	2.87	73	7/8	1-1/16	1.53	39

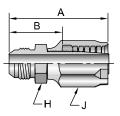
O-Rings are not compatible with Phosphate Ester fluids.



20330

# Male JIC 37° - Rigid

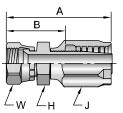
#		·····							
Part	TI	nread	Hose I.D.		<b>A</b>	Н	J	I	3
Number		inch	inch	inch	mm	inch	inch	inch	mm
20330-4-4	1/4	7/16x20	1/4	2.37	60	9/16	3/4	1.41	36
20330-5-4	5/16	1/2x20	1/4	2.37	60	9/16	3/4	1.41	36
20330-6-4	3/8	9/16x18	1/4	2.38	60	5/8	3/4	1.42	36
20330-6-6	3/8	9/16x18	3/8	2.58	66	3/4	15/16	1.44	37
20330-8-6	1/2	3/4x16	3/8	2.68	68	13/16	15/16	1.54	39
20330-8-8	1/2	3/4x16	1/2	3.02	77	7/8	1-1/16	1.68	43
20330-10-8	5/8	7/8x14	1/2	3.12	79	15/16	1-1/16	1.78	45
20330-10-10	5/8	7/8x14	5/8	3.29	84	15/16	1-1/4	1.83	46
20330-12-12	3/4	1-1/16x12	3/4	3.31	84	1-1/8	1-3/8	1.88	48
20330-16-16	1	1-5/16x12	1	3.71	94	1-3/8	1-3/4	2	51



# 20630

# Female JIC 37° - Swivel

#	۵	·····					$\bigcirc$				Additional Material
Part	Т		Hose I.D.			H	J	W	В		Stainless
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm	Steel (C)
20630-4-3	1/4	7/16x20	3/16	2.27	58	9/16	3/4	9/16	1.49	38	
20630-4-4	1/4	7/16x20	1/4	2.45	62	9/16	3/4	9/16	1.49	38	•
20630-5-4	5/16	1/2x20	1/4	2.52	64	5/8	3/4	5/8	1.56	40	
20630-6-4	3/8	9/16x18	1/4	2.54	65	11/16	3/4	11/16	1.58	40	•
20630-6-6	3/8	9/16x18	3/8	2.74	70	11/16	15/16	11/16	1.60	41	•
20630-8-6	1/2	3/4x16	3/8	2.86	73	7/8	15/16	7/8	1.72	44	•
20630-8-8	1/2	3/4x16	1/2	3.20	81	7/8	1-1/16	7/8	1.86	47	•
20630-10-8	5/8	7/8x14	1/2	3.30	84	1	1-1/16	1	1.96	50	
20630-10-10	5/8	7/8x14	5/8	3.54	90	1	1-1/4	1	2.08	53	
20630-10-12	5/8	7/8x14	3/4	3.40	86	1-1/8	1-3/8	1	1.97	50	
20630-12-8	3/4	1-1/16x12	1/2	3.47	88	1-1/4	1-1/16	1-1/4	2.13	54	
20630-12-10	3/4	1-1/16x12	5/8	3.64	92	1-1/4	1-1/4	1-1/4	2.18	55	
20630-12-12	3/4	1-1/16x12	3/4	3.50	89	1-1/4	1-3/8	1-1/4	2.07	53	•
20630-14-12	7/8	1-3/16x12	3/4	3.50	89	1-3/8	1-3/8	1-3/8	2.07	53	
20630-16-12	1	1-5/16x12	3/4	3.59	91	1-1/2	1-3/4	1-1/2	2.16	55	
20630-16-16	1	1-5/16x12	1	3.94	100	1-1/2	1-3/4	1-1/2	2.23	57	
20630-20-16	1-1/4	1-5/8x12	1	4.17	106	2	1-3/4	2	2.46	62	
20630-20-20	1-1/4	1-5/8x12	1-1/4	4.96	126	2	2-1/4	2	2.83	72	
20630-24-24	1-1/2	1-7/8x12	1-1/2	5.26	134	2-1/4	2-1/2	2-1/4	3.05	77	
20630-32-32	2	2-1/2x12	2	6.42	163	2-7/8	3	2-7/8	3.92	100	



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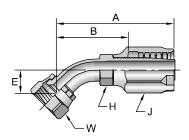


В

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23730

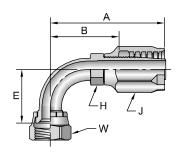
### Female JIC 37° - Swivel - 45° Elbow - Short Drop



# Part		·····································	Hose I.D.	A	<b>A</b>		E		-   ''				В	}
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm		
23730-4-4	1/4	7/16x20	1/4	2.70	69	0.33	8	7/16	3/4	9/16	1.74	44		
23730-6-6	3/8	9/16x18	3/8	3.01	76	0.39	10	9/16	15/16	11/16	1.87	47		
23730-8-8	1/2	3/4x16	1/2	3.55	90	0.55	14	11/16	1-1/16	7/8	2.21	56		
23730-10-8	5/8	7/8x14	1/2	3.61	92	0.65	17	13/16	1-1/16	1	2.27	58		
23730-12-12	3/4	1-1/16x12	3/4	3.93	100	0.79	20	15/16	1-3/8	1-1/4	2.50	64		
23730-16-16	1	1-5/16x12	1	4.51	115	0.90	23	1-1/4	1-3/4	1-1/2	2.80	71		

# 23930

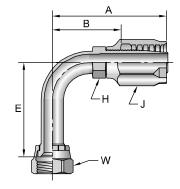
#### Female JIC 37° - Swivel - 90° Elbow - Short Drop



# Part	_	·›››› Thread	Hose I.D.	Δ	<b>\</b>	E		H	$\bigcirc$	$\bigcirc$	В	
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
23930-4-4	1/4	7/16x20	1/4	2.52	64	0.83	21	7/16	3/4	9/16	1.56	40
23930-6-6	3/8	9/16x18	3/8	2.91	74	0.85	22	9/16	15/16	11/16	1.77	45
23930-8-6	1/2	3/4x16	3/8	3.04	77	1.09	28	11/16	15/16	7/8	1.90	48
23930-8-8	1/2	3/4x16	1/2	3.32	84	1.09	28	11/16	1-1/16	7/8	1.98	50
23930-10-8	5/8	7/8x14	1/2	3.46	88	1.24	31	13/16	1-1/16	1	2.12	54
23930-12-12	3/4	1-1/16x12	3/4	3.86	98	1.81	46	15/16	1-3/8	1-1/4	2.43	62
23930-16-16	1	1-5/16x12	1	4.48	114	2.14	54	1-1/4	1-3/4	1-1/2	2.77	70

# 24130

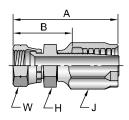
# Female JIC $37^{\circ}$ - Swivel - $90^{\circ}$ Elbow - Long Drop



#	۵	^^				_			$\bigcirc$			
Part	1	Thread	Hose I.D.	A	ì		i	Н	J	W	В	1
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
24130-6-6	3/8	9/16x18	3/8	2.90	74	2.18	55	9/16	15/16	11/16	1.76	45
24130-8-8	1/2	3/4x16	1/2	3.39	86	2.43	62	11/16	1-1/16	7/8	2.05	52

# 20830

#### Female SAE 45° - Swivel



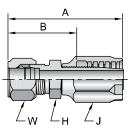
# Part	Thread inch		Hose I.D.	,	Ą			$\bigcirc$	E	3
Number			inch	inch	mm	inch	inch	inch	inch	mm
20830-6-6	3/8	5/8x18	3/8	2.81	71	3/4	15/16	3/4	1.67	42

Notch on nut signifies SAE  $45^{\circ}$  flare.

# Male Ferulok Flareless - Rigid - (24° Cone with Nut and Ferrule)

# Part		······································	Hose I.D.	A	<b>.</b>	→     H	J	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
21130-16-16	1	1-5/16x12	1	4.15	105	1-3/8	1-3/4	1-1/2	2.44	62

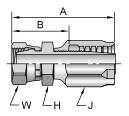
The Parker Ferrul-Fix fitting makes it possible to salvage the bent tube section from a hose assembly for quick, easy on-the-job repairs. For additional information see Ferrule-Fix installation instructions in the Technical Section.



#### 21230

#### Female Ferulok Flareless - Swivel - (24° Cone)

# Part	_	······································	Hose I.D.	Į.	١	Н	$\bigcirc$	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
21230-4-4	1/4	7/16x20	1/4	2.62	67	9/16	3/4	9/16	1.66	42
21230-6-6	3/8	9/16x18	3/8	2.94	75	11/16	15/16	11/16	1.80	46
21230-8-6	1/2	3/4x16	3/8	3.16	80	7/8	15/16	7/8	2.02	51
21230-8-8	1/2	3/4x16	1/2	3.44	87	7/8	1-1/16	7/8	2.10	53
21230-12-12	3/4	1-1/16x12	3/4	3.86	98	1-1/4	1-3/8	1-1/4	2.43	62

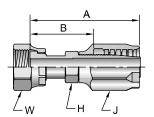


# **2JS30**

#### Female Seal-Lok® - Swivel - Long

ISO 12151-1 - SWSB

# Part	_	······································	Hose I.D.	ı	<b>1</b>	H		$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
2JS30-4-4	1/4	9/16x18	1/4	2.62	67	9/16	3/4	11/16	1.66	42
2JS30-6-6	3/8	11/16x16	3/8	2.89	73	9/16	15/16	13/16	1.75	44
2JS30-8-8	1/2	13/16x16	1/2	3.32	84	11/16	1-1/16	15/16	1.98	50
2JS30-12-12	3/4	1-3/16x12	3/4	3.65	93	15/16	1-3/8	1-3/8	2.22	56



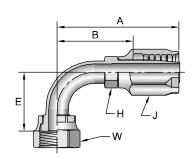
# **2J930**

# Female Seal-Lok $^{\mbox{\tiny 8}}$ - Swivel - 90 $^{\circ}$ Elbow - Short Drop

ISO 12151-1 - SWES90

# Part		·····································	Hose I.D.	Α		E		H	$\bigcirc$	$\bigcirc$	Е	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
2J930-4-4	1/4	9/16x18	1/4	2.83	72	0.82	21	7/16	3/4	11/16	1.87	47
2J930-6-6	3/8	11/16x16	3/8	2.91	74	0.90	23	9/16	15/16	13/16	1.77	45
2J930-8-8	1/2	13/16x16	1/2	3.31	84	1.15	29	11/16	1-1/16	15/16	1.97	50
2J930-10-10	5/8	1x14	5/8	3.57	91	1.27	32	7/8	1-1/4	1-1/8	2.11	54
2J930-12-12	3/4	1-3/16x12	3/4	3.71	94	1.85	47	15/16	1-3/8	1-3/8	2.28	58

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See Accessories Section for O-Rings.



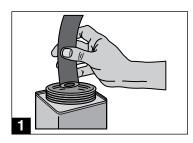
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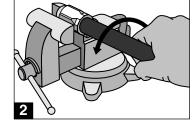
C

D

E



# В



# C



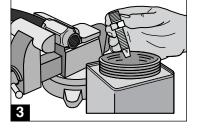


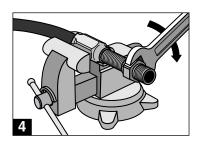
### 30 Series

#### **Hose Assembly Instructions**

- Identify over all length (OAL) of hose assembly and the cut off allowance (COA) length of fitting(s) on hose ends by use of the fitting data table. Properly measure, mark and cut hose to desired length using fine tooth hacksaw or a cutoff machine. Dip hose end into Hose-Oil (See Section C) or heavy oil.
- 2. Place socket in vice and screw in hose counter-clockwise until hose bottoms. Back hose out 1/2 turn.
- Dip hose end of nipple into Hose-Oil or other heavy oil up to the hex. When assembling fittings of 316 stainless steel lubricate the threads of both the socket and nipple with Dow Corning Molykote G-n or equivalent metal assembly lubricant.
- 4. Screw nipple assembly into socket using wrench on nipple hex until nipple hex shoulders against socket.

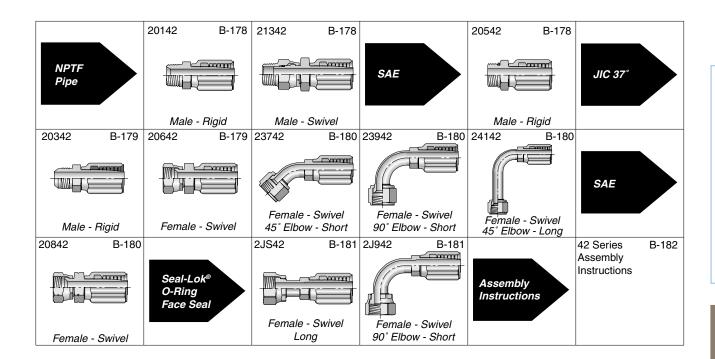
**Note:** Disassemble in reverse order.





IF YOU HAVE QUESTIONS CONCERNING THE PRODUCTS OR APPLICATION OF THE PRODUCTS CONTAINED IN THIS CATALOG, PLEASE CALL: PARKER HOSE PRODUCTS DIVISION TECHNICAL SERVICES DEPARTMENT

PHONE: 440 / 943-5700 FAX: 440 / 943-3129 http://www.parkerhose.com



Α

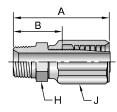
В

C



20142

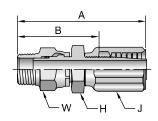
# Male NPTF Pipe - Rigid



# Part		Hose I.D.		١	H	Ç	E	3
Number	inch	inch	inch	mm	inch	inch	inch	mm
20142-2-3	1/8x27	3/16	2.09	53	1/2	5/8	1.31	33
20142-2-4	1/8x27	1/4	2.17	55	9/16	11/16	1.25	32
20142-4-3	1/4x18	3/16	2.28	58	9/16	5/8	1.50	38
20142-4-4	1/4x18	1/4	2.36	60	9/16	11/16	1.44	37
20142-4-5	1/4x18	5/16	2.39	61	9/16	13/16	1.44	37
20142-4-6	1/4x18	3/8	2.60	66	11/16	7/8	1.45	37
20142-6-6	3/8x18	3/8	2.60	66	3/4	7/8	1.45	37
20142-8-8	1/2x14	1/2	3.02	77	7/8	1	1.69	43
20142-8-10	1/2x14	5/8	3.29	84	15/16	1-1/8	1.87	47
20142-12-12	3/4x14	3/4	3.23	82	1-1/8	1-3/8	1.75	44
20142-16-16	1x11-1/2	1	3.61	92	1-3/8	1-5/8	2.07	53

# 21342

# Male NPTF Pipe - Swivel



В

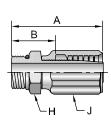
D

#			,				$\bigcirc$	E	
Part Number	Thread inch	Hose I.D.	inch	mm	inch	inch	inch	inch	mm
21342-4-4	1/4x18	1/4	3.40	86	9/16	11/16	5/8	2.48	63
21342-6-6	3/8x18	3/8	3.69	94	7/8	7/8	3/4	2.54	65

# 20542

#### Male SAE Straight Thread with O-Ring - Rigid

B-178



# Part		·····································	Hose I.D.	A	<b>A</b>	H		E	3
Number		inch	inch	inch	mm	inch	inch	inch	mm
20542-4-4	1/4	7/16X20	1/4	2.2	56	9/16	11/16	1.28	33
20542-6-6	3/8	9/16x18	3/8	2.47	63	11/16	7/8	1.32	34
20542-8-8	1/2	3/4X16	1/2	2.78	71	7/8	1	1.45	37

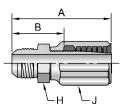
 $\mbox{O-Rings}$  are not compatible with Phosphate Ester fluids.



20342

# Male JIC 37° - Rigid

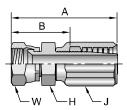
#	(	······							
Part		Thread	Hose I.D.	P	1	Н	J	E	3
Number		inch	inch	inch	mm	inch	inch	inch	mm
20342-4-4	1/4	7/16x20	1/4	2.35	60	9/16	11/16	1.43	36
20342-6-4	3/8	9/16x18	1/4	2.36	60	5/8	11/16	1.44	36
20342-6-5	3/8	9/16x18	5/16	2.39	61	5/8	13/16	1.43	36
20342-6-6	3/8	9/16x18	3/8	2.60	66	3/4	7/8	1.45	37
20342-8-6	1/2	3/4x16	3/8	2.70	69	13/16	7/8	1.55	39
20342-8-8	1/2	3/4x16	1/2	2.93	74	7/8	1	1.60	41
20342-10-10	5/8	7/8x14	5/8	3.24	82	15/16	1-1/8	1.82	46
20342-12-12	3/4	1-1/16x12	3/4	3.34	85	1-1/8	1-3/8	1.86	47
20342-16-16	1	1-5/16x12	1	3.58	91	1-3/8	1-5/8	2.04	52



# 20642

#### Female JIC 37° - Swivel

# Part		vvvvvv hread	Hose I.D.	A		→     H	$\bigcirc$	$\bigcirc$	Е		Additional Material Stainless
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm	Steel (C)
20642-4-3	1/4	7/16x20	3/16	2.34	59	9/16	5/8	9/16	1.56	40	
20642-4-4	1/4	7/16x20	1/4	2.43	62	9/16	11/16	9/16	1.51	38	
20642-5-4	5/16	1/2x20	1/4	2.50	64	5/8	11/16	5/8	1.58	40	
20642-6-4	3/8	9/16x18	1/4	2.52	64	11/16	11/16	11/16	1.60	41	
20642-6-5	3/8	9/16x18	5/16	2.55	65	11/16	13/16	11/16	1.60	41	
20642-6-6	3/8	9/16x18	3/8	2.76	70	11/16	7/8	11/16	1.61	41	•
20642-8-6	1/2	3/4x16	3/8	2.88	73	7/8	7/8	7/8	1.73	44	
20642-8-8	1/2	3/4x16	1/2	3.11	79	7/8	1	7/8	1.78	45	•
20642-10-8	5/8	7/8x14	1/2	3.21	82	1	1	1	1.88	48	
20642-10-10	5/8	7/8x14	5/8	3.49	89	1	1-1/8	1	2.07	53	
20642-10-12	5/8	7/8x14	3/4	3.43	87	1-1/8	1-3/8	1	1.95	50	
20642-12-12	3/4	1-1/16x12	3/4	3.53	90	1-1/4	1-3/8	1-1/4	2.05	52	
20642-16-12	1	1-5/16x12	3/4	3.62	92	1-1/2	1-3/8	1-1/2	2.14	54	
20642-16-16	1	1-5/16x12	1	3.81	97	1-1/2	1-5/8	1-1/2	2.27	58	
20642-20-16	1-1/4	1-5/8x12	1	4.04	103	2	1-5/8	2	2.50	64	



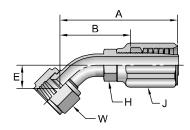
В

C



B-179

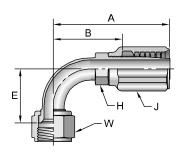
### Female JIC 37° - Swivel - 45° Elbow - Short Drop



# Part	<u> </u>	·//··/···	Hose I.D.	Į.	<b>1</b>	E		Н	$\bigcirc$	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
23742-4-4	1/4	7/16x20	1/4	2.68	68	0.33	8	7/16	11/16	9/16	1.76	45
23742-6-6	3/8	9/16x18	3/8	3.03	77	0.39	10	9/16	7/8	11/16	1.88	48
23742-8-8	1/2	3/4x16	1/2	3.46	88	0.55	14	11/16	1	7/8	2.13	54
23742-16-16	1	1-5/16x12	1	4.38	111	0.90	23	1-1/4	1-5/8	1-1/2	2.84	72

# 23942

### Female JIC 37° - Swivel - 90° Elbow - Short Drop



В

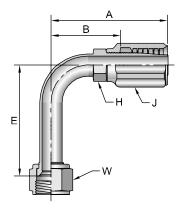
C

D

#	۵	·····							$\bigcirc$			
Part		Thread	Hose I.D.		1	E	<b>=</b>	Н	J	W	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
23942-4-4	1/4	7/16x20	1/4	2.50	64	0.83	21	7/16	11/16	9/16	1.58	40
23942-6-6	3/8	9/16x18	3/8	2.93	74	0.85	22	9/16	7/8	11/16	1.78	45
23942-8-6	1/2	3/4x16	3/8	3.06	78	1.09	28	11/16	7/8	7/8	1.91	49
23942-8-8	1/2	3/4x16	1/2	3.22	82	1.09	28	11/16	1	7/8	1.90	48
23942-10-8	5/8	7/8x14	1/2	3.37	86	1.24	31	13/16	1	1	2.04	52
23942-12-12	3/4	1-1/16x12	3/4	3.89	99	1.81	46	15/16	1-3/8	1-1/4	2.41	61
23942-16-16	1	1-5/16x12	1	4.35	110	2.14	54	1-1/4	1-5/8	1-1/2	2.81	71

# 24142

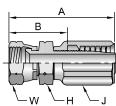
# Female JIC 37° - Swivel - 90° Elbow - Long Drop



# Part		//////hread	Hose I.D.	A		E		H	J	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	inch	mm
24142-6-6	3/8	9/16x18	3/8	2.92	74	2.18	55	9/16	7/8	11/16	1.77	45
24142-8-8	1/2	3/4x16	1/2	3.30	84	2.43	62	11/16	1	7/8	1.97	50
24142-10-8	5/8	7/8x14	1/2	3.44	87	2.57	65	13/16	1	1	2.11	54

# 20842

#### Female SAE 45° - Swivel



#		·····	0				$\bigcirc$			
Part	TI	hread	Hose I.D.	,	<b>.</b>	Н	J	W	E	3
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
20842-6-6	3/8	5/8x18	3/8	2.82	72	3/4	7/8	3/4	1.67	42

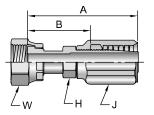
Notch on nut signifies SAE 45  $^{\circ}$  flare.

# **2JS42**

#### Female Seal-Lok® - Swivel - Long

ISO - 12151-1 - SWSB

# Part	_	/////// Thread	Hose I.D.	A	<b>\</b>	H	$\bigcirc$	$\bigcirc$	Е	3
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
2JS42-4-4	1/4	9/16-18	1/4	2.60	66	9/16	11/16	11/16	1.68	43
2JS42-6-6	3/8	11/16x16	3/8	2.91	74	9/16	7/8	13/16	1.76	45
2JS42-8-8	1/2	13/16x16	1/2	3.23	82	11/16	1	15/16	1.90	48

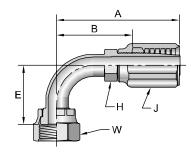


# **2J942**

# Female Seal-Lok® - Swivel - 90° Elbow - Short Drop

ISO 12151-1 - SWES90

#	_	······		Δ		F		H	$\bigcirc$	$\bigcirc$	E	3
Part Number		Thread inch	Hose I.D. inch		Ī	inch	mm		inch		i ī	Ī
2J942-4-4	1/4	9/16x18	1/4	2.81	71	0.78	20	7/16	11/16	11/16	1.89	48
2J942-6-6	3/8	11/16x16	3/8	2.93	74	0.90	23	9/16	7/8	13/16	1.78	45
2J942-8-8	1/2	13/16x16	1/2	3.22	82	1.15	29	11/16	1	15/16	1.89	48



В

D

Metric L: Mates with EO "L" Series Fittings. See Accessories Section for O-Rings.



B-181

# **42 Series**

#### **Hose Assembly Instructions**

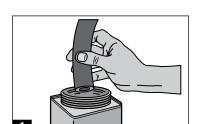
- Identify over all length (OAL) of hose assembly and the cut off allowance (COA) length of fitting(s) on hose ends by use of the fitting data table. Properly measure, mark and cut hose to desired length using fine tooth hacksaw or a cutoff machine. Dip hose end into Hose-Oil (See Section C) or heavy oil.
- 2. Place socket in vice and screw in hose counter-clockwise until hose bottoms. Back hose out 1/2 turn.
- Dip hose end of nipple into Hose-Oil or other heavy oil up to the hex. When assembling fittings of 316 stainless steel lubricate the threads of both the socket and nipple with Dow Corning Molykote G-n or equivalent metal assembly lubricant.
- 4. Screw assembly into socket using wrench on nipple hex until nipple hex shoulders against socket.

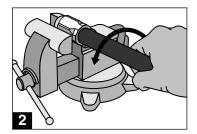
**Note:** Disassemble in reverse order.

IF YOU HAVE QUESTIONS CONCERNING THE PRODUCTS
OR APPLICATION OF THE PRODUCTS CONTAINED IN THIS
CATALOG, PLEASE CALL:
PARKER HOSE PRODUCTS DIVISION

TECHNICAL SERVICES DEPARTMENT PHONE: 440 / 943-5700

FAX: 440 / 943-3129 http://www.parkerhose.com

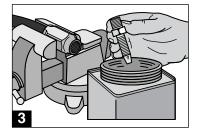


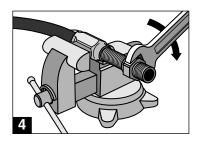


В

C

D





В

C

7



В

D



Push-Lok B-197 Kits  Push-Lok Hose and Fitting Kits	Push-Lok B-198 Merchandiser  Push-Lok Hose and Fitting Display Case	Assembly Instructions	82 Series Assembly Instructions	B-199
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Α

В

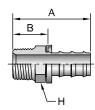
C

D

В

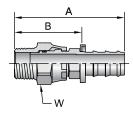
D

**30182**Male NPTF Pipe - Rigid



#								Additional Material	
Part	Thread	Hose I.D.	ا مام ماد		H	_	3	D (D)	Stainless
Number	inch	inch	inch	mm	inch	inch	mm	Brass (B)	Steel (C)
30182-2-4	1/8x27	1/4	1.39	35	7/16	0.64	16	•	•
30182-4-4	1/4x18	1/4	1.57	40	9/16	0.82	21	•	•
30182-4-6	1/4x18	3/8	1.78	45	9/16	0.88	22	•	•
30182-4-8	1/4x18	1/2	1.93	49	5/8	0.88	22	•	
30182-6-6	3/8x18	3/8	1.78	45	11/16	0.88	22	•	•
30182-6-8	3/8x18	1/2	1.93	49	11/16	0.88	22	•	
30182-8-6	1/2x14	3/8	2.03	52	7/8	1.13	29	•	•
30182-8-8	1/2x14	1/2	2.18	55	7/8	1.13	29	•	•
30182-8-10	1/2x14	5/8	2.58	66	7/8	1.13	29	•	
30182-8-12	1/2x14	3/4	2.58	66	7/8	1.13	29	•	
30182-12-8	3/4x14	1/2	2.21	56	3/4	1.16	29	•	
30182-12-10	3/4x14	5/8	2.61	66	1-1/16	1.16	29	•	
30182-12-12	3/4x14	3/4	2.61	66	1-1/16	1.16	29	•	•
30182-16-16	1x11-1/2	1	3.06	78	1-3/8	1.61	41	•	•

# 31382 Male NPTF Pipe - Swivel



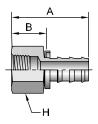
# Part		Hose I.D.	). A		$\bigvee_{\mathbf{w}}$	В		Additional Material
Number	inch	inch	inch	mm	inch	inch	mm	Brass (B)
31382-4-4	1/4x18	1/4	1.60	41	9/16	0.85	22	
31382-6-6	3/8x18	3/8	1.79	45	11/16	0.89	23	
31382-8-8	1/2x14	1/2	2.20	56	7/8	1.15	29	
31382-8-10	1/2x14	5/8	3.50	90	7/8	2.05	52	•
31382-12-12	3/4x14	3/4	3.70	94	1-1/4	2.25	57	

O-Ring not compatible with Phosphate Ester fluids.

# 30282

#### **Female NPTF Pipe - Rigid**

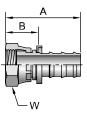
# Part	///////// Thread	Hose I.D.	Δ	L	H	В	ı	Additional Material
Number	inch	inch	inch	mm	inch	inch	mm	Brass (B)
30282-4-4	1/4x18	1/4	1.56	40	3/4	0.81	21	•
30282-6-6	3/8x18	3/8	1.82	46	7/8	0.92	23	•
30282-8-8	1/2x14	1/2	2.16	55	1-1/16	1.11	28	•



# 37G82

#### Female NPSM Pipe - Gasket Joint - Swivel

# Part			Hose I.D.	<b>A</b>		W	E	3
Number	Gasket	inch	inch	inch	mm	inch	inch	mm
37G82-4-4	07G-4	1/4x18	1/4	1.55	39	11/16	0.80	20
37G82-4-6	07G-4	1/4x18	3/8	1.70	43	11/16	0.80	20
37G82-6-6	07G-6	3/8x18	3/8	1.75	44	7/8	0.85	22
37G82-8-8	07G-8	1/2x14	1/2	2.07	53	1	1.02	26
37G82-8-10	07G-8	1/2x14	5/8	2.47	63	1	1.02	26
37G82-12-12	07G-12	3/4x14	3/4	2.54	65	1-1/4	1.09	28



В

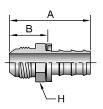
C

Textile gasket included with fitting.

# 30382

#### Male JIC 37° - Rigid

# Part			Hose I.D.	A		Н В			Additional Material
Number		inch	inch	inch	mm	inch	inch	mm	Brass (B)
30382-4-4	1/4	7/16x20	1/4	1.56	40	1/2	0.81	21	
30382-5-4	5/16	1/2x20	1/4	1.59	40	9/16	0.84	21	
30382-6-6	3/8	9/16x18	3/8	1.78	45	5/8	0.88	22	•
30382-8-8	1/2	3/4x16	1/2	2.06	52	3/4	1.01	26	
30382-10-10	5/8	7/8x14	5/8	2.62	67	7/8	1.17	30	
30382-12-12	3/4	1-1/16x12	3/4	2.72	69	1-1/8	1.27	32	



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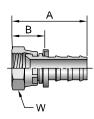
В

C

D

# 30682

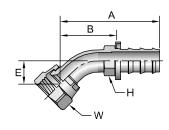
Female JIC 37° - Swivel



#	_~	·····	•							itional terial
Part Number	7	Γ <b>hread</b> inch	Hose I.D. inch	inch		inch	inch	mm	Brass (B)	Stainless Steel (C)
30682-4-4	1/4	7/16x20	1/4	1.52	39	9/16	0.77	20	•	•
30682-5-4	5/16	1/2x20	1/4	1.58	40	5/8	0.83	21	•	
30682-5-6	5/16	1/2x20	3/8	1.72	44	5/8	0.82	21	•	
30682-6-4	3/8	9/16x18	1/4	1.61	41	11/16	0.86	22	•	
30682-6-6	3/8	9/16x18	3/8	1.75	44	11/16	0.85	22	•	•
30682-6-8	3/8	9/16x18	1/2	1.90	48	11/16	0.85	22	•	
30682-8-6	1/2	3/4x16	3/8	1.87	47	7/8	0.97	25	•	
30682-8-8	1/2	3/4x16	1/2	2.02	51	7/8	0.97	25	•	•
30682-10-8	5/8	7/8x14	1/2	2.14	54	1	1.09	28	•	
30682-10-10	5/8	7/8x14	5/8	2.54	65	1	1.09	28	•	•
30682-12-12	3/4	1-1/16x12	3/4	2.65	67	1-1/4	1.20	30	•	•
30682-16-16	1	1-5/16X12	1	2.77	70	1-1/2	1.32	34	•	

# 33782

Female JIC 37° - Swivel - 45° Elbow - Short Drop



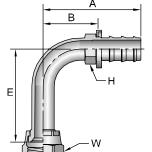
# Part		www.	Hose I.D.	A		E		H	$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	mm
33782-4-4	1/4	7/16x20	1/4	1.74	44	0.39	10	7/16	9/16	0.99	25
33782-6-6	3/8	9/16x18	3/8	1.99	51	0.43	11	1/2	11/16	1.09	28
33782-8-8	1/2	3/4x16	1/2	2.58	66	0.55	14	5/8	7/8	1.53	39
33782-10-10	5/8	7/8x14	5/8	3.03	77	0.65	17	3/4	1	1.58	40

# 33982

Female JIC 37° - Swivel - 90° Elbow - Short Drop

, ·	
-	
<u></u> -H	
- W	

	# Part		······································	Hose I.D.	A		Ę		HW		В	
1	Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	mm
	33982-4-4	1/4	7/16x20	1/4	1.55	39	0.83	21		9/16	0.80	20
	33982-6-6	3/8	9/16x18	3/8	1.86	47	0.91	23		11/16	0.95	24
	33982-8-8	1/2	3/4x16	1/2	2.16	55	1.14	29	5/8	7/8	1.11	28
	33982-10-10	5/8	7/8x14	5/8	2.76	70	1.26	32	3/4	1	1.31	33
	33982-12-12	3/4	1-1/16x12	3/4	3.27	83	1.89	48	7/8	1-1/4	1.82	46



# 34182

Female JIC 37° - Swivel - 90° Elbow - Long Drop

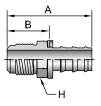
# Part	Thread		Hose I.D.	A		Ę		Он	<b>⊘w</b>	В	
Number	inch		inch	inch	mm	inch	mm	inch	inch	inch	mm
34182-4-4	1/4	7/16x20	1/4	1.79	45	1.80	46	7/16	9/16	1.04	26
34182-6-6	3/8	9/16x18	3/8	1.97	50	2.18	55	1/2	11/16	1.07	27



# 30482

## Male SAE 45° - Rigid

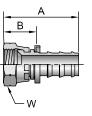
# Part	Thread		Hose I.D.	A		H	E	3
Number	inch		inch	inch mm		inch	inch	mm
30482-4-4B	1/4	7/16x20	1/4	1.51	38	7/16	0.76	19
30482-5-4B	5/16	1/2x20	1/4	1.61	41	9/16	0.86	22
30482-6-6B	3/8	5/8x18	3/8	1.84	47	5/8	0.94	24
30482-8-8B	1/2	3/4x16	1/2	2.15	55	3/4	1.10	28



# 30882

#### Female SAE 45° - Swivel

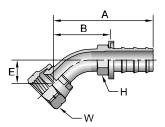
# Part			Hose I.D.	Δ	<b>A</b>		E	3	Additional Material
Number		inch	inch	inch	mm	inch	inch	mm	Brass (B)
30882-4-4	1/4	7/16x20	1/4	1.52	39	9/16	0.77	20	•
30882-5-4	5/16	1/2x20	1/4	1.58	40	5/8	0.83	21	•
30882-6-6	3/8	5/8x18	3/8	1.81	46	3/4	0.91	23	•
30882-8-6	1/2	3/4x16	3/8	1.87	47	7/8	0.97	25	•
30882-8-8	1/2	3/4x16	1/2	2.02	51	7/8	0.97	25	•
30882-10-10	5/8	7/8x14	5/8	2.54	65	1	1.09	28	•
30882-12-12	3/4	1-1/16x14	3/4	2.65	67	1-1/4	1.20	30	•



# 37782

#### Female SAE 45° - Swivel - 45° Elbow

# Part		//////	Hose I.D.	A		E		$\bigcirc$	$\bigcirc$	E	3
Number	ľ	inch	inch	inch	mm	inch	mm	inch	inch	inch	mm
37782-4-4	1/4	7/16x20	1/4	1.79	45	0.33	8	7/16	9/16	1.04	26
37782-6-6	3/8	5/8x18	3/8	2.08	53	0.39	10	1/2	3/4	1.18	30
37782-8-8	1/2	3/4x16	1/2	2.58	66	0.55	14	5/8	7/8	1.53	39

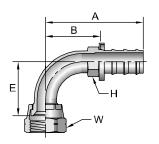


# 37982

#### Female SAE 45° - Swivel - 90° Elbow

# Part	Thread		Hose I.D.	A		E		H	$\bigcirc$	E	3
Number	inch		inch	inch	mm	inch	mm	inch	inch	inch	mm
37982-4-4	1/4	7/16x20	1/4	1.60	41	0.83	21	7/16	9/16	0.85	22
37982-6-6	3/8	5/8x18	3/8	1.98	50	0.85	22	1/2	3/4	1.08	27
37982-8-8	1/2	3/4x16	1/2	2.33	59	1.09	28	5/8	7/8	1.28	33

B-189



Notch in nut signifies 45° flare.



В

C

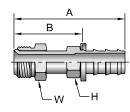
П

В

D

# 32882

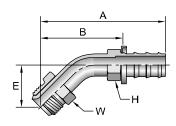
#### Male Inverted SAE 45°- Swivel



# Part			Hose I.D.	,	<b>A</b>	H	$\bigvee_{\mathbf{W}}$	ı	3
Number	i	inch	inch	inch	mm	inch	inch	inch	mm
32882-3-4	3/16	3/8x24	1/4	2.15	55	3/8	3/8	1.40	36
32882-4-4	1/4	7/16x24	1/4	2.15	55	7/16	7/16	1.40	36
32882-5-4	5/16	1/2x20	1/4	2.31	59	7/16	1/2	1.56	40
32882-6-6	3/8	5/8x18	3/8	2.58	66	1/2	5/8	1.68	43
32882-8-8	1/2	3/4x18	1/2	2.82	72	5/8	3/4	1.77	45
32882-10-10	5/8	7/8x18	5/8	3.34	85	3/4	7/8	1.89	48

# 36782

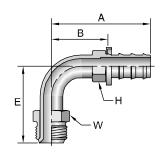
#### Male Inverted SAE 45°- Swivel - 45° Elbow



#		<u>~~~~~</u>		A		_			$\bigcirc$	_	
Part	Т	hread	Hose I.D.	_	ì	_	i	•••	**	_	í
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	mm
36782-4-4	1/4	7/16x24	1/4	1.92	49	0.63	16	7/16	7/16	1.17	30
36782-6-6	3/8	5/8x18	3/8	2.64	67	0.94	24	1/2	5/8	1.74	44

# 36982

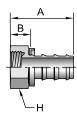
#### Male Inverted SAE 45° - Swivel - 90° Elbow



# Part		··········	Hose I.D.	Ą		E		$\left  \begin{array}{c c} \\ \mathbf{H} \end{array} \right  \begin{array}{c c} \\ \mathbf{W} \end{array}$		В	
Number	inch		inch	inch	mm	inch	mm	inch	inch	inch	mm
36982-4-4	1/4	7/16x24	1/4	1.99	51	1.56	40	7/16	7/16	1.24	31
36982-5-4	5/16	1/2x20	1/4	2.17	55	1.65	42	7/16	1/2	1.42	36
36982-6-6	3/8	5/8x18	3/8	2.30	58	1.69	43	1/2	5/8	1.40	36

# 32982

#### Female Inverted SAE 45° - Rigid



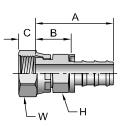
#		<u>~~~~</u>		_		$\bigcap_{\mathbf{H}}$		3
Part Number		<b>iread</b> nch	Hose I.D.	inch	mm	inch	inch	mm
32982-4-4B	1/4	7/16x24	1/4	1.19	30	1/2	0.44	11
32982-5-4B	5/16	1/2x20	1/4	1.25	32	9/16	0.50	13
32982-6-6B	3/8	5/8x18	3/8	1.44	37	3/4	0.54	14
32982-8-8B	1/2	3/4x18	1/2	1.62	41	7/8	0.57	14

#### **3JC82**

#### Female Seal-Lok® - Swivel - Short

ISO 12151-1 - SWSA

#			Hose I D								Additional Material		
Part	•	Thread	Hose I.D.	A	1	С		H W		E	3	Brass	Stainless
Number		inch	inch	inch	mm	nm inch mm		inch	inch	inch mm		(B)	Steel (C)
3JC82-4-4	1/4	9/16x18	1/4	1.40	36	0.32	8	9/16	11/16	0.65	17		•
3JC82-6-6	3/8	11/16x16	3/8	1.59	40	0.38	10	11/16	13/16	0.69	18		•
3JC82-6-6SM	3/8	11/16x16	3/8	1.59	40	0.38	10	19mm	22mm	0.69	18		
3JC82-8-6	1/2	13/16x16	3/8	1.65	42	0.38	10	13/16	15/16	0.76	19		
3JC82-8-8	1/2	13/16x16	1/2	1.80	46	0.43	11	13/16	15/16	0.75	19		•
3JC82-10-10	5/8	1x14	5/8	2.40	61	0.53	13	15/16	1-1/8	0.95	24		
3JC82-12-12	3/4	1-3/16x12	3/4	2.63	67	0.57	14	1-1/8	1-3/8	1.18	30		•
3JC82-16-16	1 1-7/16x12		1	2.61	66	0.58	15	1-3/8	1-5/8	1.16	29	•	•



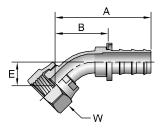
When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.

#### **3J782**

#### Female Seal-Lok® - Swivel - 45° Elbow

ISO 12151-1 - SWE45

# Part			Hose I.D.	Д	A E		$\bigcirc$	Е		
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
3J782-4-4	1/4	9/16x18	1/4	1.74	44	0.39	10	11/16	0.99	25
3J782-6-6	3/8	11/16x16	3/8	1.99	51	0.43	11	13/16	1.09	28
3J782-8-8	1/2	13/16x16	1/2	2.41	61	0.59	15	15/16	1.36	35

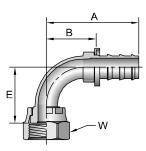


#### **3J982**

# Female Seal-Lok® - Swivel - 90° Elbow - Short Drop

ISO 12151-1 - SWES90

# Part	_	////// Thread	Hose I.D.	A	\ \	E		$\bigcirc$	Е	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
3J982-4-4	1/4	9/16x18	1/4	1.55	39	0.83	21	11/16	0.80	20
3J982-6-6	3/8	11/16x16	3/8	1.85	47	0.91	23	13/16	0.95	24
3J982-6-8	3/8	11/16x16	1/2	2.09	53	0.91	23	13/16	1.04	26
3J982-8-6	1/2	13/16x16	3/8	1.94	49	1.14	29	15/16	1.04	26
3J982-8-8	1/2	13/16x16	1/2	2.16	55	1.14	29	15/16	1.11	28
3J982-10-10	5/8	1x14	5/8	2.76	70	1.26	32	1-1/8	1.31	33
3J982-12-12	3/4	1-3/6x12	3/4	3.27	83	1.89	48	1-3/8	1.82	46



# 3J182

# Female Seal-Lok® - Swivel - 90° Elbow - Long Drop

ISO 12151-1 - SWEL90

# Part	Thread		Hose I.D.	A <sub>I</sub>		Ę		$\bigcirc$	В	
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
3J182-6-6	3/8	11/16x16	3/8	1.85	47	2.13	54	13/16	0.95	24
3J182-8-8	1/2	13/16x16	1/2	2.16	55	2.52	64	15/16	1.11	28

B-191

E W

See Accessories Section for O-Rings.



В

C





33482

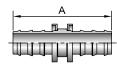
Male Standpipe - Rigid - (Inch Size Tube O.D.)

	_ A _
	В
R.	
'\_	
	' D '

# Part	Ø	Hose I.D.	A	\ \		)	В			ditional aterial Stainless
Number	inch	inch	inch	mm	inch	mm	inch	mm	(B)	Steel (C)
33482-4-4	1/4	1/4	1.89	48	1.02	26	1.14	29	•	•
33482-5-4	5/16	1/4	1.93	49	1.08	27	1.18	30	•	
33482-6-6	3/8	3/8	2.23	57	1.22	31	1.33	34	•	•
33482-8-8	1/2	1/2	2.16	55	0.97	25	1.11	28	•	•
33482-10-10	5/8	5/8	2.62	67	1.00	25	1.17	30	•	
33482-12-12	3/4	3/4	2.62	67	1.00	25	1.17	30	•	•

# 38282

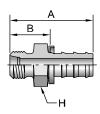
**Push-Lok Union** 



# Part	Hose I.D.	A	<b>\</b>	Additional Material
Number	inch	inch	mm	Brass (B)
38282-4-4	1/4	1.80	46	•
38282-6-6	3/8	2.15	55	•
38282-8-8	1/2	2.51	64	•
38282-10-10	5/8	3.31	84	•
38282-12-12	3/4	3.31	84	•
38282-16-16	1	3.31	84	•

# 3D082

Male Metric L - Rigid - (24° Cone)



# Part		······································	Hose I.D.	<b>A</b>		Н	E	3
Number		mm	inch	inch	mm	mm	inch	mm
3D082-6-4	6	M12x1,5	1/4	1.34	34	12	0.55	14
3D082-8-4	8	M14x1,5	1/4	1.38	35	14	0.59	15
3D082-10-6	10	M16x1,5	3/8	1.57	40	17	0.63	16
3D082-12-6	12	M18x1,5	3/8	1.61	41	19	0.67	17

D

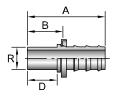
A

В

#### 31D82

#### Male Standpipe Metric L - Rigid

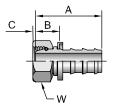
# Part	R	Hose I.D.	,	<b>A</b>	ı	)		В
Number	mm	inch	inch	mm	inch	mm	inch	mm
31D82-6-4	6	1/4	1.73	44	0.87	22	0.98	25
31D82-8-4	8	1/4	1.73	44	0.87	22	0.98	25
31D82-10-6	10	3/8	1.93	49	0.91	23	1.02	26
31D82-12-6	12	3/8	1.93	49	0.91	23	1.06	27
31D82-15-8	15	1/2	2.17	55	0.98	25	1.10	28
31D82-18-10	18	5/8	2.64	67	1.02	26	1.10	28
31D82-22-12	22	3/4	2.72	69	1.10	28	1.22	31



# 39282

#### Female BSP Parallel Pipe - Swivel - (60° Cone)

# Part	Thread	Hose I.D.	A	<b>A</b>	C	;	$\bigcirc$	В	}	Additional Material
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm	Brass (B)
39282-4-4	1/4x19	1/4	1.34	34	0.22	6	17	0.55	14	
39282-6-6	3/8x19	3/8	1.50	38	0.26	7	19	0.55	14	•
39282-8-8	1/2x14	1/2	1.77	45	0.28	7	27	1.06	27	
39282-12-12	3/4x14	3/4	2.13	54	0.35	9	36	1.42	36	

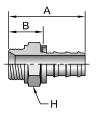


When measuring overall length to the end of the nut, B + C dimensions must be used to calculate cut-off allowances.

# 3D982

#### Male BSP Parallel Pipe - Rigid - (60° Cone)

# Part	Hose I.D.		<b>A</b>	H	E	3
Number	inch	inch	mm	mm	inch	mm
3D982-2-4	1/4	1.42	36	14	0.63	16
3D982-4-4	1/4	1.61	41	19	0.83	21
3D982-4-6	3/8	1.77	45	19	0.83	21
3D982-6-6	3/8	1.77	45	22	0.87	22
3D982-8-8	1/2	2.09	53	27	0.98	25
3D982-8-10	5/8	2.44	62	27	0.94	24
3D982-12-12	3/4	2.56	65	32	1.06	27



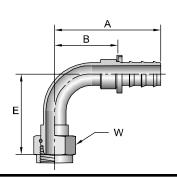
Bonded seal required if fitting is used directly in a port. See Accessories Section.

# 3B282

#### Female BSP Parallel Pipe - Swivel - 90° Elbow - (60° Cone)

# Part	//////// Thread	Hose I.D.	,	<b>A</b>		E	W	E	3
Number	inch	inch	inch	mm	inch	mm	mm	inch	mm
3B282-4-4	1/4x19	1/4	1.65	42	1.02	26	17	1.02	26
3B282-6-6	3/8x19	3/8	2.09	53	1.18	30	19	1.18	30
3B282-8-8	1/2x14	1/2	2.56	65	1.57	40	27	1.57	40
3B282-10-10	5/8x14	5/8	2.99	76	1.57	40	30	1.57	40

B-193





Hose Products Division Parker Hannifin Corporation Wickliffe, Ohio www.parkerhose.com



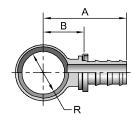




В

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34982 DIN Metric Banjo



#	Ø				_	
Part	R	Hose I.D.	, , , , , , , , , , , , , , , , , , ,	4	E	3
Number	mm	inch	inch	mm	inch	mm
34982-8-4	8	1/4	1.42	36	0.63	16
34982-10-4	10	1/4	1.50	38	0.71	18
34982-12-4	12	1/4	1.57	40	0.79	20
34982-12-6	12	3/8	1.73	44	0.79	20
34982-14-4	14	1/4	1.65	42	0.87	22
34982-14-6	14	3/8	1.85	47	0.91	23
34982-16-6	16	3/8	1.93	49	0.98	25
34982-18-8	18	1/2	2.17	55	1.06	27

**AM**Banjo Bolt with DIN Metric Thread



#			$\bigcirc$	
Part		R Thread	н	Copper Washer
Number		mm	mm	(2)
AM-03	8	M8x1	12	853009-8
AM-04	10	M10x1	14	853009-10
AM-06	12	M12x1.5	17	853009-12
AM-08	14	M14x1.5	19	853009-14
AM-10	16	M16x1.5	22	853009-16
AM-13	18	M18x1.5	24	853009-18
AM-16	22	M22x1.5	27	853009-22
AM-20	26	M26x1.5	32	853009-26
AM-30	30	M30x1.5	36	853009-30

Two (2) copper washers per bolt must be ordered separately.

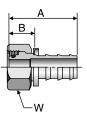


# 3CA82

#### Female Metric L - Swivel - (24° Cone with O-Ring)

ISO 12151-2 - SWS

# Part	Thread		Hose I.D.	A	A		E	<b>.</b>
Number		inch	inch	inch	mm	mm	inch	mm
3CA82-8-4	8	M14x1,5	1/4	1.42	36	17	0.67	17
3CA82-10-6	10	M16x1,5	3/8	1.57	40	19	0.67	17
3CA82-10-6B	10	M16x1,5	3/8	1.57	40	19	0.67	17
3CA82-12-6	12	M18x1,5	3/8	1.57	40	22	0.67	17
3CA82-15-8	15	M22x1,5	1/2	1.73	44	27	0.71	18
3CA82-22-12	22	M30x2	3/4	2.28	58	36	0.83	21

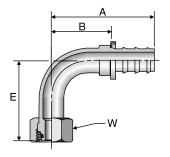


# 3CF82

# Female Metric L - Swivel - 90° Elbow - (24° Cone with O-Ring)

ISO 12151-2 - SWE

# Part	//////// Thread		Hose I.D.	,	<b>A</b>	E		$\bigcirc$	ı	3
Number		inch	inch	inch	mm	inch	mm	mm	inch	mm
3CF82-8-4	8	M14x1,5	1/4	1.65	42	1.26	32	17	0.91	23
3CF82-10-6	10	M16x1,5	3/8	1.93	49	1.38	35	19	1.06	27
3CF82-10-6B	10	M16x1,5	3/8	1.93	49	1.38	35	19	1.06	27
3CF82-12-6	12	M18x1,5	3/8	1.93	49	1.42	36	22	1.06	27
3CF82-15-8	15	M22x1,5	1/2	2.28	58	1.61	41	27	1.26	32
3CF82-22-12	22	M30x2	3/4	3.46	88	2.17	55	36	2.01	51

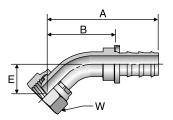


# 3C482

#### Female Metric L - Swivel - 45° Elbow - (Ball Nose)

End Connection per ISO 8434-1-SWOE

# Part			# Part Thread Hose I.D. A			E		$\bigcirc$	W B		
Number	•	inch	inch	inch	mm	inch	mm	mm	inch	mm	
3C482-8-4B	8	M14x1,5	1/4	2.01	51	0.63	16	17	1.26	32	
3C482-10-6B	10	M16x1,5	3/8	2.28	58	0.71	18	19	1.38	35	
3C482-15-8B	15	M22x1,5	1/2	2.68	68	0.75	19	27	1.61	41	
3C482-22-12	22	M30x2	3/4	3.46	88	0.91	23	36	2.05	52	







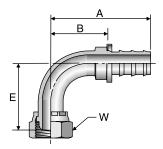


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# 3C582

#### Female Metric L - Swivel - 90° Elbow - (Ball Nose)

End Connection per ISO 8434-1-SWOE

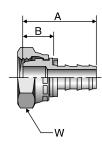


# Part	_	······································	Hose I.D.	A		E		$\bigcirc$	В	
Number		inch	inch	inch	mm	inch	mm	mm	inch	mm
3C582-8-4B	8	M14x1,5	1/4	1.65	42	1.14	29	17	0.91	23
3C582-10-6B	10	M16x1,5	3/8	1.93	49	1.30	33	19	1.06	27
3C582-15-8B	15	M22x1,5	1/2	2.36	60	1.54	39	27	1.34	34
3C582-22-12B	22	M30x2	3/4	3.46	88	1.97	50	36	2.01	51

# 3C382

#### Female Metric L - Swivel - (Ball Nose)

End Connection per ISO 8434-1-SWOS



#			•					
Part		Thread	Hose I.D.	P	1	W		B
Number		inch	inch	inch	mm	mm	inch	mm
3C382-8-4B	8	M14x1,5	1/4	1.42	36	19	0.63	16
3C382-10-6B	10	M16x1,5	3/8	1.50	38	19	0.59	15
3C382-15-8B	15	M22x1,5	1/2	1.65	42	27	0.59	15
3C382-22-12B	22	M30x2	3/4	2.09	53	36	0.67	17

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# Parker Push-Lok® Kits

Parker Push-Lok Kits are for industrial and automotive maintenance and repair shops. They provide a low-cost inventory of Push-Lok hose and fittings packaged in a sturdy metal container. They save time and money on hose line replacements for water, air lubricating oils, anti-freeze solutions and vacuum applications.



Part No. 46-83A

Kit Contents	Quantity	Kit Contents	Quantity
Hose		Male Inverted Swivel	
831-4 (1/4" I.D.)	24 ft.	32882-3-4	3
831-6 (3/8" I.D.)	24 ft.	32882-4-4	5
Male Pipe		32882-5-4	5
30182-2-4B	8	32882-6-6	3
30182-4-4B	5	Female Inverted Rigid	
30182-4-6B	5	32982-3-4B	3
30182-6-6B	6	32982-4-4B	3
Male SAE 45°		32982-5-4B	5
30482-4-4B	2	32982-6-6B	3
30482-6-6B	3	Hose Union	
SAE (JIC) 37° Female Swivel		38282-4-4B	4
30682-6-6B	5	38282-6-6B	2
SAE 45° Swivel			
30882-4-4B	5		
30882-5-4B	5		

30882-6-6B

# Parker Push-Lok® Merchandiser

PLM-1 (801 Multi-Purpose Hose)

The Push-Lok® Merchandiser is an ideal method of displaying Push-Lok in will-call areas, maintenance shops, or other areas where air lines are fabricated.

#### **Features**

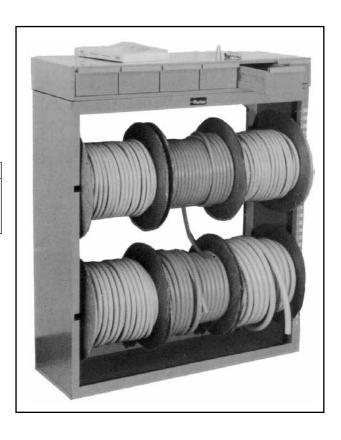
#### • PLM -1

Hose	Quantity	Size
801-4	300 Feet	1/4" I.D.
801-6	375 Feet	3/8" I.D.
801-8	100 Feet	1/2" I.D.

• 25 each of the following fittings:

30182-4-4B	30682-4-4B	30882-6-6B
30182-6-6B	30682-6-6B	
30182-8-8B	30682-8-8B	

- Fitting drawers to store up to 18 different styles/ sizes of fittings.
- TH11-1 hand held hose cutter.

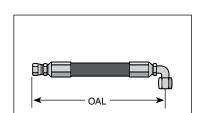


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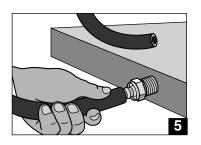
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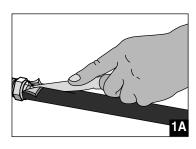
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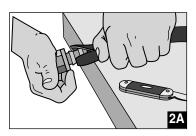
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OAL : Straight to 90° Elbow







#### 82 Series

#### **Assembly Instructions**

- Identify over all length (OAL) of hose assembly and the cut off allowance (COA) length of fitting(s) on hose ends by use of the fitting data table.
- 2. Properly measure and mark hose. Cut hose squarely with a Parker Push-Lok cut-off tool or a sharp knife.
- 3. Lubricate the Push-Lok fitting, hose I.D., or both with light oil or soapy water only DO NOT USE HEAVY OIL OR GREASE.
- 4. Insert fitting into hose until first barb is in the hose.
- Place end fitting against a flat object such as a work bench or wall. Grip hose approximately one inch from end and push with a steady force until the end of the hose is covered by the yellow plastic cap.

#### **Disassembly Instructions**

- 1A. Leave fitting in place, and cut hose approximately one inch lengthwise from the yellow plastic cap. IMPORTANT: Be careful not to nick barbs when cutting hose.
- 2A. Grip hose firmly and give it a sharp downward tug away from the fitting for disassembly.

**Caution:** Insert the Push-Lok fitting all the way into the Push-Lok hose until the cut end is concealed by the yellow plastic cap.

**Caution:** Sealing integrity may be damaged by use of exterior clamps.

IF YOU HAVE QUESTIONS CONCERNING THE PRODUCTS
OR APPLICATION OF THE PRODUCTS CONTAINED IN THIS
CATALOG, PLEASE CALL:
PARKER HOSE PRODUCTS DIVISION
TECHNICAL SERVICES DEPARTMENT
PHONE: 440 / 943-5700

FAX: 440 / 943-3129 http://www.parkerhose.com В

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NPTF   Pipe   Male - Rigid   Male						
NPTF   Pipe   Male - Rigid   Male		0188 B-20	2 3188 B-202	2188 B-202		0588 B-202
Male - Rigid   Male						
Male - Rigid   Male	NPTF				Straight	
Male - Rigid   45° Elbow   90° Elbow   1588   B-203     1588   B-203     1588   B-203     1588   B-203     1588   B-203     1588   B-204     1588   B-204     1588   B-205     1588   B-205   1588   B-205   1588   B-205     1588   1588   B-205     1588   B-205     1588   B-205     1588   B-205						
Male - Rigid   45° Elbow   90° Elbow   1588   B-203     1588   B-203     1588   B-203     1588   B-203     1588   B-203     1588   B-204     1588   B-204     1588   B-205     1588   B-205   1588   B-205   1588   B-205     1588   1588   B-205     1588   B-205     1588   B-205     1588   B-205			All Mark			
1588   B-203   3788   B-203   3988   B-203   B-203   B-203   B-203   B-204   B-205		Male - Rigid		Male - Rigid		Male - Rigid
Female - Swivel   Short						
Female - Swivel   Seal-Loke		0000 520	5700 B-203	0300 B-200		1000 1000
Female - Swivel   Seal   Female - Swivel   Short   Female - Swivel   Short   Female - Swivel   Short						F
1788   B-204   1988   B-204     Seal-Lok® O-Ring Face Seal   Female - Swivel Long   Female - Swivel Short   Seal-Lok® O-Ring Face Seal   Female - Swivel Long   Short   Shor	JIC 37°				Flange	
1788   B-204   1988   B-204     Seal-Lok® O-Ring Face Seal   Female - Swivel Long   Female - Swivel Short   Seal-Lok® O-Ring Face Seal   Female - Swivel Long   Short   Shor						
1788   B-204   1988   B-204     Seal-Lok® O-Ring Face Seal   Female - Swivel Long   Short   Female - Swivel Short						
Seal-Lok O-Ring Face Seal  Female - Swivel Long  Seal-Lok O-Ring Face Seal  Female - Swivel Long  Short  Sh						_
John Pemale - Swivel Long Female - Swivel Short Female - Swivel Short Female - Swivel Long Short Female - Swivel A5° Elbow  8888 B-206 81 Series consists of a 10081 crimp shell and is completed by adding any 88 Series fittings.  81 Series Crimp Shell Show Short Shell and is completed by adding any 88 Series fittings.  81 Series Crimp Shell Show Shell Short Shell and is completed by adding any 88 Series fittings.  81 Series Crimp Shell Short Shell Short Shell Short Shell Short Shell Short Short Short Short Short Shell Short Short Shell Short Shell Short Shell Short Shell Short Shell Short Short Short Shell Short Short Short Shell Short Shell Short	1788 B-204	1988 B-204	ļ.	JS88 B-204	JC88 B-205	J788 B-205
John Pemale - Swivel Long Female - Swivel Short Female - Swivel Short Female - Swivel Long Short Female - Swivel A5° Elbow  8888 B-206 81 Series consists of a 10081 crimp shell and is completed by adding any 88 Series fittings.  81 Series Crimp Shell Show Short Shell and is completed by adding any 88 Series fittings.  81 Series Crimp Shell Show Shell Short Shell and is completed by adding any 88 Series fittings.  81 Series Crimp Shell Short Shell Short Shell Short Shell Short Shell Short Short Short Short Short Shell Short Short Shell Short Shell Short Shell Short Shell Short Shell Short Short Short Shell Short Short Short Shell Short Shell Short			C11-10			
Female - Swivel Long  Short  Short  Female - Swivel Short						
J988 B-205  Union  8888 B-206  81 Series consists of a 10081 crimp shell and is completed by adding any 88 Series fittings.  81 Series consists of a 10081 crimp shell and is completed by adding any 88 Series fittings.  81 Series crimp Shell  Assembly  Assembly  Assembly						
J988 B-205  Union  8888 B-206  81 Series consists of a 10081 crimp shell and is completed by adding any 88 Series fittings.  81 Series consists of a 10081 crimp shell and is completed by adding any 88 Series fittings.  81 Series Crimp Shell  Assembly  88 Series B-207  Assembly	•			Female - Swivel	Female - Swivel	Female - Swivel
Female - Swivel 90° Elbow  88HC  B-206  88HC-H  B-206  88HC-H  B-206  88BDB  B-206  Assembly  Assembly  a 10081 crimp shell and is completed by adding any 88 Series fittings.  81 Series Crimp Shell  Assembly  Assembly	45° Elbow	90° Elbow		1		
Female - Swivel 90° Elbow  81 Series Crimp Shell  Union  Union  81 Series Crimp Shell  Union  81 Series Series fittings.  81 Series Crimp Shell  88 Series B-207  Assembly  Assembly	J988 B-205		8888 B-206			10081 B-206
Female - Swivel 90° Elbow  88HC  B-206  88HC-H  B-206  88HC-H  B-206  88BDB  B-206  Assembly  Assembly  Assembly  Assembly						
Female - Swivel 90° Elbow  88HC  B-206  88HC-H  B-206  88BDB  B-206  Assembly  Assembly  Fittings.  81 Series Crimp Shell  88 Series B-207  Assembly  Instructions					adding any 88 Series	
Union Crimp Shell  88HC B-206 88HC-H B-206 88DB B-206  Assembly  Assembly		Union		Crimp Shell		
Union Crimp Shell  88HC B-206 88HC-H B-206 88DB B-206  Assembly  Assembly						91 Sorios
88HC B-206 88HC-H B-206 88DB B-206 88 Series B-207 Assembly Instructions			Union			
Assembly Instructions	JO LIDOW	88HC B-200		88DB B-206		
a Assembly		П П				Assembly
Hose Clamp Instructions					Assembly	Instructions
	Hose Clamp				Instructions	
				,, 5, 0,		
Hose Clamp Hose-Clamp Heavy Duty Clamp		ноѕе Сіатр	ноse-Сіатр	неаvy Duty Clamp		
81 Series						
Assembly	Instructions -					
Instructions -	See Section C for					
Instructions -	See Section C for					

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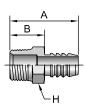
crimping instructions.

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# 0188

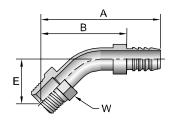
#### Male NPTF Pipe - Rigid



# Part	/////// Thread	Hose I.D.	4	<b>4</b>	H	E	3
Number	inch	inch	inch	mm	inch	inch	mm
0188-12-12	3/4x14	3/4	2.25	57	1-1/8	1.13	29
0188-16-16	1x11-1/2	1	2.75	70	1-3/8	1.37	35
0188-20-20	1-1/4x11-1/2	1-1/4	3.05	77	1-3/4	1.47	37
0188-20-24	1-1/4x11-1/2	1-1/2	3.21	82	1-3/4	1.47	37
0188-24-24	1-1/2x11-1/2	1-1/2	3.24	82	2	1.50	38
0188-32-32	2x11-1/2	2	3.49	89	2-1/2	1.66	42
0188-40-40	2-1/2x8	2-1/2	4.10	104	3	2.27	58

#### 3188

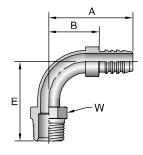
#### Male NPTF Pipe - Rigid - 45° Elbow



#			,			=	$\bigvee_{\mathbf{w}}$		,
Part	Thread	Hose I.D.	•	1		_	VV		
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
3188-16-16	1x11-1/2	1	4.12	105	1.63	41	1-3/8	2.74	70
3188-20-20	1-1/4x11-1/2	1-1/4	4.54	115	1.77	45	1-3/4	2.96	75

## 2188

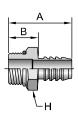
#### Male NPTF Pipe - Rigid - 90° Elbow



# Part		Hose I.D.	Á	4	E		$\bigcirc$	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
2188-12-12	3/4x14	3/4	2.83	72	2.67	68	1-1/8	1.70	43
2188-16-16	1x11-1/2	1	3.35	85	3.18	81	1-3/8	1.97	50
2188-20-20	1-1/4x11-1/2	1-1/4	3.80	97	3.41	87	1-3/4	2.21	56
2188-24-24	1-1/2x11-1/2	1-1/2	4.20	107	3.61	92	2	2.46	62
2188-32-32	2x11-1/2	2	4.86	123	4.23	107	2-1/2	3.03	77

# 0588

#### Male SAE Straight Thread with O-Ring - Rigid



#				Δ	H		2
Part Number	Thread inch	Hose I.D. inch	inch	mm	inch	inch	mm
0588-12-12	1-1/16x12	3/4	2.13	54	1-1/4	1	25
0588-16-16	1-5/16x12	1	2.38	60	1-1/2	1	25
0588-20-20	1-5/8x12	1-1/4	2.59	66	1-7/8	1	25

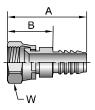
See page B-206 for 81 Series crimp shells and clamps for 88 Series fittings. See Equipment Section for assembly and crimping instructions. See Accessories Section for O-Rings and Flange Kits.



# 0688

#### Female JIC 37° - Swivel

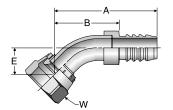
# Part			Hose I.D.	A		$\bigcirc$	E	3
Number	i	nch	inch	inch	mm	inch	inch	mm
0688-12-12	3/4	1-1/16x12	3/4	2.66	68	1-1/4	1.53	39
0688-16-12	1	1-5/16x12	3/4	1.86	47	1-1/2	1.38	35
0688-16-16	1	1-5/16x12	1	2.72	69	1-1/2	1.34	34
0688-20-20	1-1/4	1-5/8x12	1-1/4	3.34	85	2	1.75	44
0688-24-24	1-1/2	1-7/8x12	1-1/2	3.67	93	2-1/4	1.93	49
0688-32-32	2	2-1/2x12	2	4.14	105	2-7/8	2.31	59



# 3788

#### Female JIC 37° - Swivel

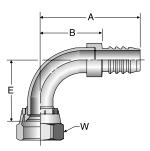
# Part	_	······································	Hose I.D.	4	A		Ę		<b>B</b>	
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
3788-12-12	3/4	1-1/16x12	3/4	3.07	78	0.79	20	1-1/4	1.94	49
3788-16-16	1	1-5/16x12	1	3.51	89	0.90	23	1-1/2	2.13	54
3788-20-20	1-1/4	1-5/8x12	1-1/4	3.97	101	1.19	30	2	2.38	60



#### 3988

#### Female JIC 37° - Swivel

# Part	_	·//·//	Hose I.D.	Δ		E		$\bigcirc$	E	3
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
3988-12-12	3/4	1-1/16x12	3/4	2.98	76	1.82	46	1-1/4	1.85	47
3988-16-16	1	1-5/16x12	1	3.48	88	2.14	54	1-1/2	2.10	53
3988-20-20	1-1/4	1-5/8x12	1-1/4	3.81	97	2.59	66	2	2.22	56
3988-24-24	1-1/2	1-7/8x12	1-1/2	4.21	107	2.81	71	2-1/4	2.47	63



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#### 1588

#### SAE Code 61 Flange Head

ISO 12151-3 - S - L

# Part	Flange	Hose I.D.	,	<b>A</b>	Ø	E	3
Number	inch	inch	inch	mm	inch	inch	mm
1588-16-16	1	1	2.57	65	1-3/4	1.19	30
1588-20-20	1-1/4	1-1/4	3.37	86	2	1.78	4
1588-24-24	1-1/2	1-1/2	3.78	96	2-3/8	2.04	52
1588-32-32	2	2	4.32	110	2-13/16	2.49	63
1588-40-40	2-1/2	2-1/2	4.56	116	3-5/16	2.73	69
1588-48-40	3	2-1/2	4.62	117	4	2.79	71



See page B-206 for 81 Series crimp shells and clamps for 88 Series fittings. See Equipment Section for assembly and crimping instructions.
See Accessories Section for O-Rings and Flange Kits.



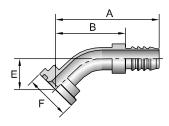
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# 1788

#### SAE Code 61 Flange Head - 45° Elbow

ISO 12151-3 - E45S - L (1 Piece: ISO 12151-3 - E45M - L)

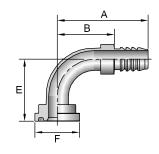


# Part	Flange	Hose I.D.	,	<b>1</b>	E	<u> </u>	Ø F		3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1788-16-16	1	1	3.55	90	1.06	27	1-3/4	2.17	55
1788-20-20	1-1/4	1-1/4	3.90	99	1.13	29	2	2.31	59
1788-24-24	1-1/2	1-1/2	4.15	105	1.11	28	2-3/8	2.41	61
1788-32-32	2	2	4.58	116	1.25	32	2-13/16	2.75	70
1788-40-40	2-1/2	2-1/2	5.17	131	1.41	36	3-5/16	3.34	85
1788-48-40	3	2-1/2	5.21	132	1.45	37	4	3.38	86

# 1988

#### SAE Code 61 Flange Head - 90° Elbow

ISO 12151-3 - E90S - L (1 Piece: ISO 12151-3 - E90M - L)

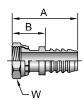


#						=			В
Part	Flange	Hose I.D.	•	1		<u>-</u> 			•
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
1988-16-16	1	1	3.35	85	2.37	60	1-3/4	1.97	50
1988-20-20	1-1/4	1-1/4	3.80	97	2.50	64	2	2.21	56
1988-24-24	1-1/2	1-1/2	4.20	107	2.74	70	2-3/8	2.46	62
1988-32-32	2	2	4.86	123	3.19	81	2-13/16	3.03	77
1988-40-40	2-1/2	2-1/2	5.52	140	3.75	95	3-5/16	3.69	94
1988-48-40	3	2-1/2	5.52	140	3.81	97	4	3.69	94

# **JS88**

#### Female Seal-Lok® - Swivel - Long

ISO - 12151-1 - SWSB



#	~	<u> </u>			`	<b>s</b>	E	
Part	T	hread	Hose I.D.	Î			Ī	
Number		inch	inch	inch	mm	inch	inch	mm
JS88-20-20	1-1/4	1-11/16x12	1-1/4	3.21	82	1-7/8	1.15	29
JS88-24-24	1-1/2	2x12	1-1/2	3.47	88	2-1/4	1.73	44

See page B-206 for 81 Series crimp shells and clamps for 88 Series fittings. See Equipment Section for assembly and crimping instructions. See Accessories Section for O-Rings and Flange Kits.

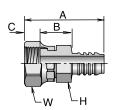


# **JC88**

#### Female Seal-Lok - Swivel - Short

ISO 12151-1-SWSA

#		·······	0	A	١	С	H	$\bigcirc$	E	3
Part		Thread	Hose I.D.							
Number		inch	inch	inch	mm	inch	inch	inch	inch	mm
JC88-12-12	3/4	1-3/16x12	3/4	2.80	71	0.57	1-1/8	1-3/8	1.70	43
JC88-16-12	1	1-7/16x12	3/4	2.82	72	0.58	1-3/8	1-5/8	1.69	43
JC88-16-16	1	1-7/16x12	1	3.07	78	0.59	1-3/8	1-5/8	1.69	43
JC88-20-16	1-1/4	1-11/16x12	1	3.08	78	0.59	1-7/8	1-5/8	1.70	43
JC88-20-20	1-1/4	1-11/16x12	1-1/4	3.29	84	0.59	1-7/8	1-7/8	1.70	43

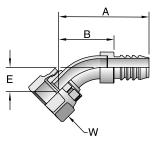


When measuring overall length to the end of the nut, B+C dimensions must be used to calculate cut-off allowance.

#### **J788**

#### Female Seal-Lok - Swivel - 45° Elbow

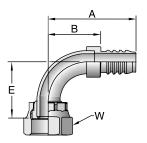
#		·····	0	Α		E		W	E	3
Part		Thread	Hose I.D.							
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
J788-12-12	3/4	1-3/16x12	3/4	2.92	74	0.79	20	1-3/8	1.79	45
J788-16-16	1	1-7/16x12	1	3.79	96	0.94	24	1-5/8	2.41	61
J788-20-20	1-1/4	1-11/16x12	1-1/4	3.71	94	0.94	24	1-7/8	2.12	54



# **J988**Female Seal-Lok - Swivel - 90° Elbow - Short Drop

#	(	·····	0	Δ		E		$\bigvee_{\mathbf{W}}$	E	3
Part		Thread	Hose I.D.	_	Ī	_	Ī		_	
Number		inch	inch	inch	mm	inch	mm	inch	inch	mm
J988-12-12	3/4	1-3/16x12	3/4	2.85	72	1.83	46	1-3/8	1.72	44
J988-16-16	1	1-7/16x12	1	3.74	95	2.19	56	1-5/8	2.36	60
J988-16-16C	1	1-7/16x12	1	3.75	95	2.22	56	1-5/8	2.37	60
J988-20-20	1-1/4	1-11/16x12	1-1/4	4.26	108	2.51	64	1-7/8	2.67	68
J988-24-24	1-1/2	2x12	1-1/2	5.27	134	2.68	68	2-1/4	3.53	90

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# 8888

# **Union (Hose Splicer)**

# Part	Hose I.D.	A			
Number	inch	inch	mm		
8888-12-12	3/4	2.70	67		
8888-16-16	1	3.21	82		
8888-20-20	1-1/4	3.61	92		
8888-24-24	1-1/2	3.92	100		
8888-32-32	2	4.04	103		



#### **88HC**

#### **Hose Clamp (Worm Gear)**

#	
Part	Hose I.D.
Number	inch
88HC-12	3/4
88HC-16	1
88HC-20	1-1/4
88HC-24	1-1/2
88HC-32	2



**88HC-H** 

#### Hose Clamp (High Torque Worm Gear)

#	
Part	Hose I.D.
Number	inch
88HC-16C	3/4
88HC-16H	1
88HC-20H	1-1/4
88HC-24H	1-1/2
88HC-32H	2



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# 10081

# Crimp Shell

#	•
Part	Hose I.D.
Number	inch
10081-12	3/4
10081-16	1
10081-20	1-1/4
10081-24	1-1/2
10081-32	2

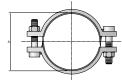


81 Series consists of a 10081 crimp shell and is completed by adding any 88 Series Fittings. See Equipment Section for complete 81 Series Assembly and Crimping instructions.

#### **88DB**

# Heavy Hose Clamp (Double Bolt)

#	
Part	Hose I.D.
Number	inch
88DB-12	3/4
88DB-16	1
88DB-20	1-1/4
88DB-24	1-1/2
88DB-32	2



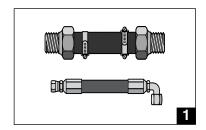
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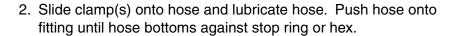
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# 88 Series

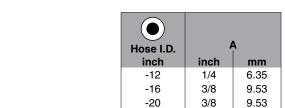
#### **Hose Assembly Instructions**

1. Identify Over All Length (OAL) of hose assembly and the Cut Off Allowance (COA) length of fitting(s) by use of the fitting data table. Properly measure and mark hose. Cut hose cleanly and squarely to length. Trim any exposed wire reinforcement to prevent injury in service.



- 3. Position hose clamp(s) as shown and secure with a screwdriver or wrench. Maintain "A" dimensions as shown below for proper clamp positioning of both HC clamps and HC-H clamps.
- 3A. Evenly attach double bolt clamps for maximum grip.

Hose I.D.	Å	<b>A</b>
inch	inch	mm
-12	1/4	6.35
-16	3/8	9.53
-20	3/8	9.53
-24	1/2	12.70
-32	1/2	12.70

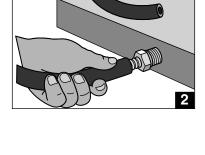


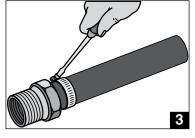
Note: For permanent installation of 88 Series Fittings, an 81 Series Crimp Shell must be added. See Equipment Section for assembly and crimping instructions.

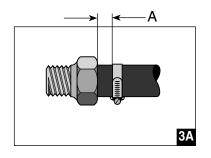
IF YOU HAVE QUESTIONS CONCERNING THE PRODUCTS OR APPLICATION OF THE PRODUCTS CONTAINED IN THIS CATALOG, PLEASE CALL:

> PARKER HOSE PRODUCTS DIVISION TECHNICAL SERVICES DEPARTMENT PHONE: 440-943-5700 FAX: 440-943-3129 http://www.parkerhose.com

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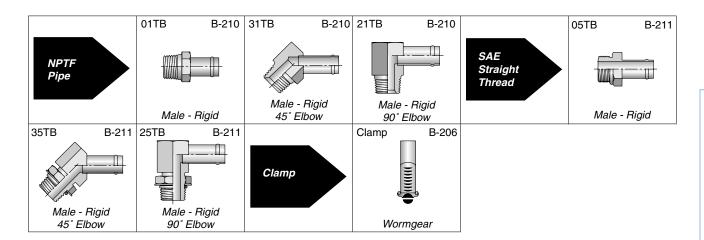
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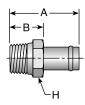
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# **01TB**

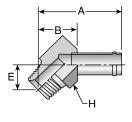
#### Male NPTF Pipe - Rigid



#			A		→     H	F	2
Part Number	Thread inch	Hose I.D. inch	inch	mm	inch	inch	mm
01TB-4-6	1/4x18	3/8	2.09	53	5/8	0.96	24
01TB-4-0	3/8x18	1/2	2.12	54	3/4	0.96	24
01TB-8-10	1/2x14	5/8	2.12	59	7/8	1.15	29
01TB-8-12	1/2x14	3/4	2.31	59	1	1.15	29
01TB-12-12	3/4x14	3/4	2.31	54	1-1/8	1.15	24
01TB-16-16	1x11-1/2	1	2.69	68	1-3/8	1.53	39
01TB-20-20		1-1/4	2.84	72	1-3/4	1.34	34
01TB-24-24		1-1/2	3.25	83	2	1.50	38
01TB-32-32	2x11-1/2	2	3.53	90	2-5/8	1.78	45

# **31TB**

# Male NPTF Pipe - Rigid - 45° Elbow

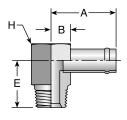


# Part		Hose I.D.	A		E		H	E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
31TB-6-8	3/8x18	1/2	2.54	65	0.69	18	7/8	1.04	26
31TB-8-10	1/2x14	5/8	2.68	68	0.82	21	1	1.18	30
31TB-8-12	1/2x14	3/4	2.78	71	0.82	21	1-1/4	1.28	33
31TB-12-12	3/4x14	3/4	2.82	72	0.86	22	1-1/4	1.32	34
31TB-12-16	3/4x14	1	3.01	76	0.86	22	1-1/2	1.38	35
31TB-16-16	1x11-1/2	1	3.19	81	1.04	26	1-1/2	1.56	40
31TB-20-20	1-1/4x11-1/2	1-1/4	3.26	83	0.99	25	1-7/8	1.59	40

# **21TB**

# Male NPTF Pipe - Rigid - 90° Elbow

B-210



# Part	//////// Thread	Hose I.D.	A		E	E		E	3
Number	inch	inch	inch	mm	inch	mm	inch	inch	mm
21TB-6-8	3/8x18	1/2	1.94	49	1.22	31	7/8	0.44	11
21TB-8-10	1/2x14	5/8	2.03	52	1.47	37	1-1/16	0.53	13
21TB-8-12	1/2x14	3/4	2.16	55	1.59	40	1-5/16	0.66	17
21TB-12-12	3/4x14	3/4	2.16	55	1.59	40	1-5/16	0.66	17
21TB-12-16	3/4x14	1	2.44	62	1.59	40	1-5/8	0.81	21
21TB-16-14	1x11-1/2	7/8	2.31	59	1.97	50	1-5/8	0.81	21
21TB-16-16	1x11-1/2	1	2.44	62	1.97	50	1-5/8	0.81	21

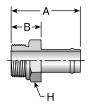
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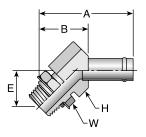
**05TB**Male SAE Straight Thread with O-Ring - Rigid

#							
Part	Thread	Hose I.D.	<i>P</i>	<b>A</b>	Н	E	3
Number	inch	inch	inch	mm	inch	inch	mm
05TB-6-6	9/16x18	3/8	1.94	49	11/16	0.69	18
05TB-8-8	3/4x16	1/2	2.00	51	7/8	0.75	19
05TB-8-10	3/4x16	5/8	2.00	51	7/8	0.75	19
05TB-10-10	7/8x14	5/8	2.06	52	1	0.81	21
05TB-12-12	1-1/16x12	3/4	2.25	57	1-1/4	1.00	25
05TB-16-16	1-5/16x12	1	2.38	60	1-1/2	1.00	25
05TB-20-20	1-5/8x12	1-1/4	2.50	64	1-7/8	1.00	25



# **35TB**Male SAE Straight Thread with O-Ring - Rigid - 45° Elbow

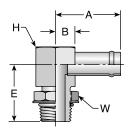
# Part			Hose I.D.	, A		Ę		Н	w $\bigcirc$	E	3
Number	·	inch	inch	inch	mm	inch	mm	inch	inch	inch	mm
35TB-8-8	1/2	3/4x16	1/2	2.79	71	0.93	24	7/8	7/8	1.29	33
35TB-10-10	5/8	7/8x14	5/8	2.80	71	0.93	24	1	1	1.28	33
35TB-12-12	3/4	1-1/16x12	3/4	3.18	81	1.22	31	1-1/4	1-1/4	1.68	43
35TB-16-16	1	1-5/16x12	1	3.45	88	1.30	33	1-1/2	1-1/2	1.82	46



# **25TB**Male SAE Straight Thread with O-Ring - Rigid - 90° Elbow

# Part					E		H	$\bigcirc$	E	3	
Number		inch	inch	inch	mm	inch	mm	inch	inch	inch	mm
25TB-8-8	1/2	3/4x16	1/2	1.94	49	1.44	37	7/8	7/8	0.44	11
25TB-10-10	5/8	7/8x14	5/8	2.03	52	1.69	43	1-1/16	1	0.53	13
25TB-10-12	5/8	7/8x14	3/4	2.16	55	1.69	43	1-5/16	1	0.66	17
25TB-12-12	3/4	1-1/16x12	3/4	2.16	55	1.92	49	1-5/16	1-1/4	0.66	17
25TB-16-12	1	1-5/16x12	3/4	2.31	59	2.03	52	1-5/8	1-1/2	0.81	21
25TB-16-16	1	1-5/16x12	1	2.44	62	2.03	52	1-5/8	1-1/2	0.81	21
25TB-20-16	1-1/4	1-5/8x12	1	2.57	65	2.34	59	1-7/8	1-7/8	0.94	24
25TB-20-20	1-1/4	1-5/8x12	1-1/4	2.61	66	2.34	59	1-7/8	1-7/8	0.94	24

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Visit Crimpsource at **www.parker.com/crimpsource**, your online resource for hose crimp specifications.

# **Equipment**

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C-10

C-15













239 and 339







C-21

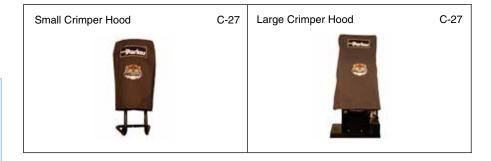


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# Hose Assemblies Are Easy With the Parkrimp System.

Since its introduction in 1980, the Parkrimp family of crimping machines has led the industry in ease of use and rugged durability.

When it comes to hose assemblies, no one puts it all together like Parker. From high-volume productivity to portable on-site assembly, we offer a variety of crimping machines, No-Skive hoses, and No-Skive fittings to meet your needs.

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With Parkrimp equipment, anyone can make factoryquality hose assemblies quickly, easily, and cost effectively. Parkrimp machines are simple to operate and they're built to provide years of dependable service. Seven Parkrimp models - an entire family of crimpers - are available to meet your benchmounted or portable needs, crimping straight or bent-stem fittings from 1/4" to 2" in diameter. Just use our No-Skive hoses and fittings to create leak-free hose assemblies whenever and wherever you need them.

The complete system from one source: No-Skive hose, No-Skive fittings, and crimping machines with worldwide availability and service.



Our linked crimp dies Eight segment crimp dies keep die seaments provide a smooth, even, together. No loose 360-degree crimp. parts to mismatch or misplace. Dies are color-coded by size for easy identification and reduced set-up time. Bottom-loading operation makes it easy to handle long hose assemblies. Parker's exclusive Parkalian™ feature positions the fitting in the dies perfectly every time.

Be sure to check www.parker.com/crimpsource for the most up to date information and crimp specifications.

C-6

# Selecting the right die.

Once the proper Parker Hose and Fitting is selected that meets your application requirements, you will need to select the proper die to assemble them together.

Based on the hose size and approved fitting, select the proper color coded die, as called out in the chart below.

#### Example:

Hose	451TC-4
Fitting	43 Series
Die Body Color	Silver
Die Cavity Color (-4)	RED

Based on the Parkrimp machine being used to assemble the hose and fitting, individual die part numbers and tooling selection for your assembly can be found in Section C of this catalog.

For general hose assembly instructions for all Parkrimp machines, please turn to pages C-16 and C-17. (An instructional video is a standard part of each Parkrimp machine shipped from the manufacturer.)

**Parker Hose Products** Division also offers a full line of crimping accessories, including conversion kits, cabinets, cut-off saws, push-on tables, die racks, and mandrel tool kits.

es ly		Hose Dash Size	Die Cavity Color	HY Series Die Body Color
			Code	Silver
		-4	BROWN	
		-5	BROWN	
		-6	BROWN	
		-8	BROWN	
		-10	BROWN	
		-12	BROWN	
		-16	BROWN	
	•			

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Hose Dash Size	Die Cavity Color	43 Series Die Body Color	70, 71 & 77 Series Die Body Color	73, 78, S6 & 79 Series Die Body Color	76 Series Die Body Color	25 Series Die Body Color	26 Series Die Body Color	81 Series Die Body Color
Size	Code	Silver	Black	Olive Drab	Silver	Silver	Silver	Silver
-4	RED		N/A	N/A	N/A	N/A		N/A
-5	PURPLE		N/A	N/A	N/A	N/A		N/A
-6	YELLOW			N/A	N/A			N/A
-8	BLUE		<b>E</b>	N/A	N/A	35		N/A
-10	ORANGE			N/A	N/A	N/A		N/A
-12	GREEN					N/A		
-16	BLACK				N. S.	N/A		
-20	WHITE	36	1	6	N/A	N/A	36	36
-24	RED				N/A	N/A		
-32	GREEN				N/A	N/A		

Reference pages C-8 through C-14 for specific tool information regarding hose, fitting, and crimper combinations.

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# Karrykrimp

The Karrykrimp is now available in a modular design with all the familiar Parkrimp System advantages.

The same unit now offers portability and bench mountability.



#### Capability

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- Up to 1-1/4" ID 2 wire braided hose
- Up to 5/8" ID 4 wire spiral hose
- · Only steel fittings

#### **Features**

- · Portable, compact rugged design
- Numerous portable power unit options available
- Pivoting pusher design for easy die change out
- Increased height enables longer bent tube fittings to be crimped
- For use with 25, 26, 43, 81, and HY Series fittings

#### **Specifications**

Dimensions: 15" wide, 12" deep, 30" highWeight: 70 lbs (without power unit)

• Rating: 30 ton force @ 10,000 psi maximum
• Full Cycle Time: 30 seconds 82C-0EP power unit

(1/2" 43 Series)

Reference page C-14 for information on available power units

#### **Standard Equipment**

P	art Numbe	er	Description	Individual
82C-CHD	82C-061L	82C-KKB	Description	Part Number
	• • •		Crimp Head	82C-CHD
		•	Bench Power Unit Assembly	*85C-ZMS
	• • •		Silver Die Ring	82C-R01
		•	Black Die Ring	82C-R02
			Hose Assembly	85C-00L
•			Stand Assembly	85C-STD
		•	Hose Assembly	85C-03L

# Karrykrimp Bench Mount



#### Capability

- Up to 1-1/4" ID 2 wire braided hose
- Up to 5/8" ID 4 wire spiral hose
- · Only steel fittings

#### **Features**

- · Faster cycle times on bench mounted units
- · Pivoting pusher design for easy die change out
- Compact bench mount design
- Increased height enables longer bent tube fittings to be crimped
- For use with 25, 26, 43, 81, and HY Series fittings

#### **Specifications**

• Dimensions: 19" wide, 23" deep, 27-1/2" high

Weight: 220 lbs

• Rating: 30 ton force @ 10,000 psi maximum

• Full Cycle Time: 8 seconds (1/2" 43 Series)

· Hydraulic Fluid: Enerpac Oil

 This unit is designed to make about 200 crimps per day and is not designed to be a production crimper. Exceeding these suggested production amounts will significantly reduce the the expectancy of the crimper components.

\*Note: Power unit is factory wired to operate at 115 volt. A 20 amp dedicated circuit is required to operate at this voltage.

The electric motor is dual voltage, 50/60 HZ, suitable for 208-230/115 volt. The motor and control circuit can be rewired by a qualified electrician to operate at alternate voltage. See motor name plate and wiring diagrams.

#### **Optional Tooling**

 Die Kit 43K-KDA (Includes 43 Series dies in sizes 1/4", 3/8", 1/2", 3/4", 1" and1-1/4" only)

#### Note:

- For crimp instructions, see pages C-16 and C-17.
- · Hose assemblies must be inspected for cleanliness and free of all foreign particles.
- Parker Hannifin will not accept responsibility for the operation of, or provide warranty coverage for, a crimper that is operated by a power unit other than equipment supplied by Parker Hannifin for the express purpose of operating the crimper.



	Parker Hannifin Corp Hose Products Divis 30240 Lakeland Blvd Wickliffe, Ohio 44092	on I.	Hose Die Selection Chart							nt
Fitting Series	HOSE	-4 RED	-5 PUR	-6 YEL	-8 BLU	-10 ORG	-12 GRN	-16 BLK	-20 WHT	Die Ring
43 Series	Die Part Number	C   0.010	0.710 0.730 0.750 0.770	0.825 0.845 0.865 0.885	0.945 0.965 0.985 1.005	1.060 1.080 1.100 1.120	1.245 1.265 1.285 1.305	1.590 1.610 1.630 1.650	1.970 1.990 2.010 2.030	SILVER
25 Series	Die Part Number 271			80C-Y06 0.680 0.700	80C-Y08 0.825 0.845					SILVER
	Die Part Number	80C-E04	80C-E05	80C-E06	80C-E08	80C-E10	80C-E12	80C-E16		
26 Series	213 285 293	0.460 0.480	0.520 0.540	0.575 0.595	0.670 0.690	0.805 0.825	0.915 0.935	1.175 1.195		SILVER
0)	201 225 266 206 226 SS25UL 221FR 244	0.500 0.520	0.560 0.580	0.615 0.635	0.710 0.730	0.845 0.865	0.955 0.975	1.215 1.235		BLACK
S	Die Part Number						80C-V12	80C-V16	80C-V20	
81 Series	811 811HT 881						1.155 1.175	1.450 1.470	1.740 1.760	SILVER
	Die Part Number	80C-H585		80C-H735	80C-H840	80C-H970	80C-H1120			
	AX	0.575 0.595		0.725 0.745	0.830 0.850	0.960 0.980	1.110 1.130			SILVER
	Die Part Number	80C-H605		80C-H775	80C-H885	80C-H1010	80C-H1170			
	вхх	0.635 0.655		0.805 0.825	0.915 0.935	1.040 1.060	1.200 1.220			BLACK
v	Die Part Number	80C-H595		80C-H735	80C-H860	80C-H1015	80C-H1170			
HY Series	611HT	0.575 0.595		0.720 0.740	0.860 0.880	0.995 1.015	1.140 1.160			SILVER
	Die Part Number	80C-H595				80C-H1015	80C-H1170	80C-H1365		
	801 836	0.575 0.595				0.995 1.015	1.140 1.160	1.350 1.370		SILVER
	Die Part Number			80C-H735	80C-H860					
	801 836			0.755 0.775	0.890 0.910					BLACK
	i: Read the operations and technical manual be rate this machine without guard in place. Keep le.						not use this -20 or any			341-20,
specifi	Information on this decal is subject to change without notice. For the most current crimp specifications, please visit Crimpsource at www.parker.com/crimpsource. New decals can be ordered at Parker website parkercatalogs.mediaex.com.									













# Karrykrimp 2

The Karrykrimp 2 is now available in a modular design with all the familiar Parkrimp System advantages.

The same unit now offers portability and bench mountability.



#### Capability

- Up to 1-1/4" ID 2 wire braided hose
- Up to 1-1/4" ID 4 wire spiral hose
- Up to 1" ID 6 wire spiral hose

#### **Features**

B

- Portable, compact rugged design
- Numerous portable power unit options available
- · Pivoting pusher design for easy die change out
- For use with 25,26, 43, 70, 71, 73, 77, 78, 81, and HY Series fittings

#### **Specifications**

Dimensions: 14" wide, 14" deep, 31-1/2" highWeight: 120 lbs (without power unit)

Rating: 60 ton force @ 10,000 psi maximum
Full Cycle Time: 15 seconds with 85C-0EP power unit

(1/2" 43 series)

 Reference page C-14 for information on available power units

#### **Standard Equipment**

Pa	art Numbe	er	Description	Individual
85C-CHD	85C-061L	85C-KKB	Description	Part Number
			Crimp Head	85C-CHD
			Bench Power Unit Assembly	*85C-ZMS
			Silver Die Ring	85C-R01
			Black Die Ring	85C-R02
	•		Hose Assembly	85C-00L
	•		Stand Assembly	85C-STD
			Hose Assembly	85C-03L
		•	Hose Assembly	85C-03L

# **Karrykrimp 2 Bench Mount**



#### Capability

- Up to 1-1/4" ID 2 wire braided hose
- Up to 1-1/4" ID 4 wire spiral hose
- Up to 1" ID 6 wire spiral hose

#### **Features**

- Faster cycle times on bench mounted units
- Pivoting pusher design for easy die change out
- · Compact bench mount design
- For use with 25, 26, 43, 70, 71, 73, 77, 78, 81, and HY Series fittings

#### **Specifications**

• Dimensions: 19" wide, 24" deep, 28" high

• Weight: 265 lbs

Rating: 60 ton force @ 10,000 psi maximum

- Full Cycle Time: 15 seconds (1/2" 43 series)
- · Hydraulic Fluid: Enerpac Oil
- This unit is designed to make about 200 crimps per day and is not designed to be a production crimper. Exceeding these suggested production amounts will significantly reduce the the expectancy of the crimper components.

\*Note: Power unit is factory wired to operate at 115 volt. A 20 amp dedicated circuit is required to operate at this voltage.

The electric motor is dual voltage, 50/60 HZ, suitable for 208-230/115 volt. The motor and control circuit can be rewired by a qualified electrician to operate at alternate voltage. See motor name plate and wiring diagrams.

#### **Optional Tooling**

• Die Kit KK2-KDA (Includes 43 Series dies in sizes 1/4", 3/8", 1/2", 3/4", 1" and 1-1/4" and 77 Series dies in sizes 1/2", 5/8", 3/4" and 1" only.

#### Note:

- For crimp instructions, see pages C-16 and C-17.
- · Hose assemblies must be inspected for cleanliness and free of all foreign particles.
- Parker Hannifin will not accept responsibility for the operation of, or provide warranty coverage for, a crimper that is operated by a power unit other than equipment supplied by Parker Hannifin for the express purpose of operating the crimper.



	<b>P</b> arko	Parker H Hose Pro 30240 L Wickliffe	ion d.		•	•	•	rykrimp 2 Bench Mount on Chart					
Fitting Series		HOSE		-4 RED	-5 PUR	-6 YEL	-8 BLU	-10 ORG	-12 GRN	-16 BLK	-20 WHT	Die Ring	
43 Series	351ST/TC 426 422 424 387/387ST/TC (-4 THRU -1 421WC 301LT 302 304 387/387ST/TC (-20	341 601 381 722/72	472TC/LT 482ST/TC (-4 THRU -12 ONLY) 604 881 2ST/TC/LT /TC (-16 ONLY)	0.645 0.665 0.685 0.705	0.710 0.730 0.750 0.770	0.825 0.845 0.865 0.885	0.945 0.965 0.985 1.005	1.060 1.080 1.100 1.120	1.245 1.265 1.285 1.305	80C-A16 1.590 1.610 1.630 1.650	1.970 1.990 2.010 2.030	SILVER	
70 Series		701 F42 (-8 Only)				83C-D06 0.990 1.010	83C-D08 1.140 1.160	83C-D10 1.260 1.280				BLACK	
71 Series		Die Part Number IST 772LT ITC 772ST	772TC 774	MACHINE TO ANY 71 SE	USE THIS D ASSEMBLE ERIES SIZE SS FITTINGS	83C-D06 0.950 0.970	1.100 1.120	1.220 1.240	1.355 1.375	83C-D16 1.695 1.715	2.025 2.045	SILVER	
73 Series		731							1.420 1.440	80C-L16 1.730 1.750		SILVER	
77 Series	Die Part Number  797 797ST 797TC						0.930 0.950 80C-CS08	1.057 1.077 80C-CS10	1.245 1.265 80C-CS12	80C-CS16		BLACK	
	787	787ST  Die Part Number	787TC	ASSEME	USE THIS MAI BLE ANY 77 SEF TAINLESS FIT	RIES SIZE	0.930 0.950	1.057 1.077	1.245 1.265 80C-L12	1.541 1.571 80C-L16		BLACK	
78 Series	781	782TC  Die Part Number	782ST			80C-Y06	80C-Y08		1.420 1.440	1.730 1.750		SILVER	
25 Series		271		80C-E04	80C-E05	0.680 0.700 80C-E06	0.825 0.845	000 510	00C F10	80C-E16		SILVER	
26 Series	213 201	285	293 266	0.460 0.480 0.500	0.520 0.540 0.560	0.575 0.595 0.615	0.670 0.690 0.710	0.805 0.825 0.845	0.915 0.935 0.955	1.175 1.195 1.215		SILVER	
es	206 221FR	226 244 Die Part Number	SS25UL	0.520	0.580	0.635	0.730	0.865	0.975 80C-V12	1.235 80C-V16	80C-V20	BLACK	
81 Series	811 C	811HT Die Part Number	881	80C-H585		80C-H735	80C-H840	80C-H970	1.155 1.175 80C-H1120	1.450 1.470 80C-H1365	1.740 1.760	SILVER	
	С	AX Die Part Number		0.575 0.595 80C-H605		0.725 0.745 80C-H775	0.830 0.850 80C-H885	0.960 0.980 80C-H1010	1.110 1.130 80C-H1170	1.355 1.375 80C-H1465	80C-H1880	SILVER	
		BXX Die Part Number		0.635 0.655 80C-H595		0.805 0.825 80C-H735	0.915 0.935 80C-H860	1.040 1.060 80C-H1015	1.200 1.220 80C-H1170	1.495 1.515	1.910 1.930	BLACK	
HY Series		611HT  Die Part Number		0.575 0.595		0.720 0.740	0.860 0.880	0.995 1.015	1.140 1.160 80C-H1170	000 11100		SILVER	
	8	801 836		0.575 0.595				0.995 1.015	1.140 1.160	1.350 1.370		SILVER	
		Die Part Number 301 836				0.755 0.775	0.890 0.910					BLACK	
Do not	n: Read the opera operate this maching machine.					rate this m	achine.			crimp diam ole listings.	neters can		
crimp	nation on this de specifications, p s can be ordered	olease visit Cri	mpsource a	t www.pai	rker.com/	crimpsour		1	rt Numbe MPDECA				













#### Parkrimp 2

A

В

C

D







#### Capability

- Up to 2" ID 2 wire braided hose
- Up to 2" ID 4/6 wire spiral hose

#### **Features**

- Easy to use vertical design
- Crimps full range of Parker hoses from 1/4" through 2" I.D.
- Crimps both steel and stainless steel fittings
- For use with 25, 26, 43, 70, 71, 73, 76, 77, 78, 79, 81, S6 and HY Series fittings

#### **Specifications**

Dimensions: 31" wide, 24" deep, 77" high
Weight: 842 lbs (Head is 558 lbs and base is 284 lbs)

• Rating: 125 ton force @ 5,000 psi maximum

• Full Cycle Time: 30 seconds without adapter bowl

20 seconds with adapter bowl

· Hydraulic oil: Enerpac oil

#### **Standard Equipment**

Part N	umber	Description	Individual		
83C-081	83C-082	Description	Part Number		
		Parkrimp 2 Crimper Head Assembly	83C-080		
		Parkrimp 2 Stand Assembly with 230/460 volt, 3 phase, 50/60 Hz power unit (wired for 230 volt)	83C-S40		
	•	Parkrimp 2 Stand Assembly with 230 volt, 1 phase, 50/60 Hz power unit	83C-S20		
•	•	Adapter Bowl	83C-OCB		
	•	Spacer Ring	83C-R02		
•	•	Spacer Plate	83C-R02H		

<sup>\*</sup>Can crimp 77 Series stainless steel fittings up to 1-1/2"

#### **Optional Tooling**

- Die Kit PK2-KDA (Includes 43 Series dies in sizes 1/4", 3/8", 1/2", 3/4", 1", 1-1/4" and 77 Series dies in sizes 1/2", 5/8", 3/4", 1", 1-1/4", 1-1/2" and 2" only)
- Die Kit 77K-KDA (Includes 77 Series dies in sizes 1/2", 5/8", 1", 1-1/4", 1-1/2" and 2" only)

#### Note:

- For crimp instructions, see pages C-16 and C-17.
- Hose assemblies must be inspected for cleanliness and free of all foreign particles.
- Parker Hannifin will not accept responsibility for the operation of, or provide warranty coverage for, a crimper that is operated by a power unit other than equipment supplied by Parker Hannifin for the express purpose of operating the crimper.



В

		Parker Hannifin Corpo Hose Products Divisior 30240 Lakeland Blvd. Wickliffe, Ohio 44092	1	Parkrimp 2 Hose Die Selection Chart							tion Char	rt	
Fitting		HOSE Die Part Number		-4 RED 80C-A04	-5 PUR 80C-A05	-6 YEL 80C-A06	-8 BLU 80C-A08	-10 ORG 80C-A10	-12 GRN 80C-A12	-16 BLK 80C-A16	-20 WHT 80C-A20	-24 RED 83C-A24	-32 GRN 83C-A3
	351ST/TC 422 424	426 451ST/TC 431 471ST/TC 436 472LT 487ST/TC (-4 THRU -16 ON 87ST/TC (-4 THRU -12 ON	472TC 482ST/TC	0.645 0.665	0.710 0.730	0.825 0.845	0.945 0.965	1.060 1.080	1.245 1.265	83C-A16H 1.590	83C-A20H 1.970	2.290 2.310	2.735 2.755
ies	487/4	Tooling Required	iliy)	0.003	0.730	0.043	0.903	1.000	1.203	1.610	1.990	2.510	2.755
Series	421WC 302 301LT	304 341 381 20 ONLY) 487/487ST 2ST/TC/LT (-6 THRU -20 C	601 604 881	0.685	0.750	0.865	0.985	1.100	1.285	1.630	2.010	2.330	2.775
	387/387ST/TC (- 722/72	20 ONLY) 487/487ST 2ST/TC/LT (-6 THRU -20 C Tooling Required	/TC (-16 ONLY) INLY)	0.705	0.770	0.885	1.005	1.120	1.305	1.650	2.030	2.350	2.795
s		Die Part Number 701				83C-D06 0.990	83C-D08 1.140	83C-D10 1.260					_
Series		F42 (-8 Only) Tooling Required				1.010	1.160	1.280	0				
		Die Part Number				83C-D06	83C-D08	83C-D10	83C-D12	83C-D16 83C-D16H	83C-D20 83C-D20H	83C-D24	83C-D3
71 Series	711 721 721TC 722/72	721ST 772LT 2ST/TC/LT (-24 AND -32 C	772TC 772ST 774 (NLY)			0.950 0.970	1.100 1.120	1.220 1.240	1.355 1.375	1.695 1.715	2.025 2.045	2.290 2.310	2.775 2.795
Ø		Tooling Required					17	9				46	
se		Die Part Number 731							1.420 1.440	1.730	2.140	83C-L24 2.440 2.460	3.025
Series		Tooling Required							1.440	1.750	2.160	2.460	3.045
Se		Die Part Number 761							83C-U12 1.540	83C-U16 1.865			
Series		Tooling Required							1.560	1.885			
	787/787ST/TC	Die Part Number	797/797ST/TC				80C-CS08 0.930	80C-CS10 1.057	80C-CS12 1.245	83C-CS16 1.541	83C-CS20 1.970	83C-CS24 2.320	83C-CS: 2.865
// Series	387/3 487/4	87ST/TC (-20, -24, -32 ON 87ST/TC (-20, -24, -32 ON	LY) LY)				0.950	1.077	1.265	1.561	1.990	2.340	2.885 2.885 2.1S FOR
		Tooling Required  Die Part Number					46	e	83C-L12	83C-L16	83C-L20		TG'S ONLY
Series	P35	781 782TC	782ST						1.420 1.440	1.730 1.750	2.140 2.160	2.440 2.460	3.025 3.045
. 0,		Tooling Required		Si	6 Series Fitting	s are used on F	P35-32 Hose C	nly	000 140	000 140	000100	1	
Series	791TC 792LT	Die Part Number 792TC F42	792ST						1.420 1.440	83C-L16 1.730 1.750	2.140 2.160	2.440 2.460	
Se		Tooling Required							1.440	1.730	2.100	100	
se		Die Part Number 271				80C-Y06 0.680	80C-Y08 0.825						
Series		Tooling Required				0.700	0.845						
	010	Die Part Number		80C-E04 0.460	80C-E05 0.520	80C-E06 0.575	80C-E08 0.670	80C-E10 0.805	80C-E12 0.915	80C-E16 1.175	83C-E20 1.420	83C-E24 1.670	83C-E3 2.160
ø	213	285 Tooling Required	293	0.480	0.540	0.595	0.690	0.825	0.935	1.195	1.440	1.690	2.180
Series	201 206	225 226	266 SS25UL	0.500	0.560	0.615	0.710	0.845	0.955	1.215	1.460	1.710	2.200
	221FR	244 Tooling Required	SS23CG	0.520	0.580	0.635	0.730	0.865	0.975	1.235	1.480	1.730	2.220
		Die Part Number					N.P.	_	80C-V12 1.155	80C-V16 1.450	80C-V20 1.740	83C-V24 2.010	83C-V3 2.430
Series	811	811HT	881				die	-	1.175	1.470	1.760	2.030	2.450
		Tooling Required  Die Part Number		80C-H585		80C-H735	80C-H840	80C-H970	80C-H1120	80C-H1365		Ab	
		AX		0.575 0.595		0.725 0.745	0.830 0.850	0.960 0.980	1.110 1.130	1.355 1.375			
		Tooling Required		90C H60E		90C H775	90C H995	90C H1010	80C H1170	90C H146E	80C-H1880		
		Die Part Number BXX		0.635 0.655		80C-H775 0.805 0.825	0.915 0.935	1.040 1.060	1.200 1.220	1.495 1.515	1.910 1.930		
		Tooling Required					1	9	0	1.010	1.000		
		Die Part Number 611HT		80C-H595 0.575		80C-H735 0.720	0.860	0.995	80C-H1170 1.140				
		Tooling Required		0.595		0.740	0.880	1.015	1.160				
Series		Die Part Number		80C-H595 0.575				80C-H1015 0.995	80C-H1170 1.140	80C-H1365 1.350			
Š		801 836		0.595			(F)	1.015	1.160	1.370			
		Tooling Required  Die Part Number				80C-H735	80C-H860	8					
		Die Part Number 801 836				0.755 0.765	0.890 0.910						
		Tooling Required				0.700	0.910	9	0				
		rations and technic vithout guard in place					. Do not			np diameters e lubricant to			ter than
	83C-R12 Splir is used for all	Die ring	IOC-xxx/83C-x liesand 83C-O	xx small	83	BC-R02 Spac	er Ring oter bowl	83C dies	-xxx Large used on s-16 thru -32	_	83C-R02H S	Spacer Plate called out abo	ove



#### **Hand Pump**

Part No. 82C-0HP



**Hand Pump** Part No. 85C-0HP



(for use with the Minikrimp, Karrykrimp and Karrykrimp 2) Ease of operation hand pump delivers 10,000 psi

Length: 23" Width: 4" 5" Height: Port Size: 3/8" NPTF

Weight: 9 lbs Hydraulic Fluid: Enerpac oil

(for use with the Minikrimp, Karrykrimp and Karrykrimp 2) Ease of operation hand pump delivers 10,000 psi

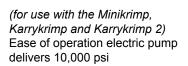
Length: 29" Width: 13" Height: 11"

Port Size: 3/8" NPTF Weight: 61 lbs Hydraulic Fluid: Enerpac oil

#### **Electric Pump**

Part No. 82C-0EP

B



Length: 13" Width: 13" Height: 15" 3/8" NPTF Port Size: Weight: 31 lbs Hydraulic Fluid: Enerpac oil

Power Source: 115 volt, 1 phase, 50/60 Hz, 9 amp

#### **Electric Pump**

Part No. 85C-0EP



(for use with the Minikrimp, Karrykrimp and Karrykrimp 2) Heavy duty electric pump delivers 10,000 psi at a faster

cycle time

Length: 19" Width: 11" Height: 17" 3/8" NPTF Port Size: Weight: 59 lbs Hydraulic Fluid: Enerpac oil

Power Source: 115 volt, 1 phase, 50/60 Hz, 20 amp

#### Air/Hydraulic Pump

Part No. 82C-0AP



Vehicle Battery-**Powered Pump** 

Part No. 85C-12V



(for use with the Minikrimp, Karrykrimp and Karrykrimp 2) Lightweight pump operates with 80-110 psi shop air pressure and delivers 10,000 psi

Length: 15" Width: 6" 6" Height:

Intake Port Size: 1/4" NPTF Output Port Size: 3/8" NPTF Weight: 14 lbs Hydraulic Fluid: Enerpac oil

(for use with the Minikrimp, Karrykrimp and Karrykrimp 2) Ideal unit for Parker Mobile Hose Replacement Service, Delivering 10,000 psi.

Length: 12" Width: 8" Height: 19.5" Weight: 67 lbs Hydraulic Fluid: ISO-46

#### **Enerpac Warranty Statement**

Energiac products are warranted to be free of defects in materials and workmanship. Any product that does not conform to specification will be repaired or replaced at Energiac's expense, anywhere in the world; simple as that! This warranty does not cover ordinary wear and tear, abuse, misuse, alterations, or the use of improper fluids. Determination of the authenticity of a warranty claim will be made only by Enerpac or its Authorized Service Centers.

C-14



#### www.parker.com/crimpsource

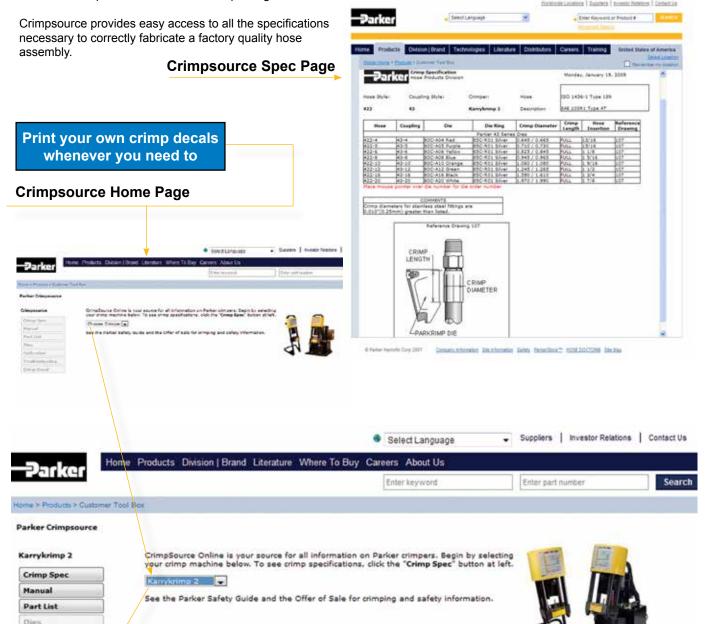
Crimpsource is the industry's most complete resource for crimper technical information. It contains all of the crimp specifications approved for Parker's rubber, industrial and thermoplastic hose:

- · Crimp specs
- PDFs of technical manuals for easy downloading
- Parts lists
- · Troubleshooting advice
- · PDFs of crimper decals for immediate printing

A series of dropdown menus enables users to find what they need quickly and easily.

Choose your crimper, and then select the hose, fittings and current specifications needed to make hose assemblies.

You can also print a simple-to-follow data specification sheet or crimper decal.



C-15



Troubleshooting Crimp Decal











### Crimping using Minikrimp, Karrykrimp, Karrykrimp Bench Mount, Karrykrimp 2 and Karrykrimp 2 Bench Mount

Parkrimp Fittings Series 25, 26, 43, 70, 71, 73, 76, 78, S6, 81, HY

#### Mark insertion depth and push on fitting



Mark the hose insertion depth and push hose into fitting until the mark on the hose is even with the end of the shell. Lubricate hose if necessary, however, **DO NOT lubricate if using spiral hose.** See Hose Insertion Depth table below.

#### For 81 Series Shells with 88 Series Fittings



Place shell onto end of hose and make sure the end of the shell lines up with the Insertion Depth mark.



stop ring or hex.

Lubricate hose if

necessary.

#### 💋 Insert unitized die train



Pull pin at the top of pusher to swing it back. Place unitized die-train into base plate. See decal on crimper for proper die set.

Note: Parkrimp 1 does not have a pin at the top of the pusher.

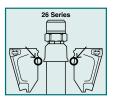
Important:
Lubricate the
crimper's die bowl
using a premium
quality lithiumbase grease.

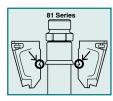
#### Position the fitting

B

D







Position the hose and fitting in dies from below.

Rest bottom of coupling on die step using the PARKALIGN® feature.

#### Place die ring and crimp



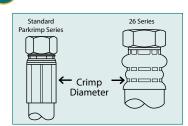
Place correct die ring on top of the dies. See decal on crimper for proper die ring.



Position pusher by replacing the pin and operate pump until the die ring bottoms out. Release pressure within the pump — remove finished assembly.

Note: Minikrimp, Karrykrimp & Karrykrimp 2 have several types of power sources, all of which are separate units from the crimping machine.

#### Measure crimp diameter



Measure crimp diameter on the flat surfaces of the crimped shell, referenced in the illustration to the left. Reference decal on crimper for crimp diameters. Never use hose assemblies with incorrect crimp diameters.

**Important:** Hose assemblies must be inspected for cleanliness and free of all foreign particles.

#### Hose insertion depths

Fitting	Fitting Series																							
Size	2	25	26	;	43	3	70		71		73		7	7	78		S	6	79		81		HY	7
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
-4	_	_	13/16	21	13/16	21	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	1-7/16	37
-5	_	_	13/16	21	15/16	24	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
-6	7/8	22	13/16	21	1-1/8	29	1-1/16	27	1-1/16	27	_	_	_	_	_	_	_	_	_	_	_	_	1-1/2	40
-8	7/8	22	13/16	21	1-5/16	33	1-5/16	33	1-1/4	32	_	_	1.36	34.6	_	_	_	_		_	_	_	1-9/16	40
-10	_	_	7/8	22	1-9/16	40	1-3/8	35	1-5/16	33	_	_	1.53	38.9	1-7/8	47		_	_	_	_	_	1-9/16	40
-12	_	_	7/8	22	1-1/2	38	1-1/2	38	1-7/16	37	1-7/8	48	1.78	45.2	1-7/8	48	_	_	2-3/16	56	1-1/8	29	1-5/8	40
-16	_	_	1	25	1-3/4	44	1-13/16	46	1-3/4	44	2	51	2.13	54.1	2	51	_	_	2-5/16	59	1-1/4	32	1-3/4	43
-20	_	_	1	25	1-7/8	48	1-3/4	44	1-13/16	46	2-1/2	64	2.51	63.8	2-1/2	64		_	2-13/16	71	1-5/16	33	_	_
-24	_	_	1-1/16	27	1-7/16	37	_	_	2-5/16	59	2-7/16	62	_	_	2-7/16	62	_	_	_	_	1-5/16	33	_	_
-32	_	_	1-1/4	32	1-13/16	46	_	_	2-7/16	62	2-13/16	71	_	_	_	_	3-1/2	88		_	1-11/16	43	_	_

C-16

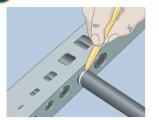
For specific information on crimping, visit Crimpsource™ online at www.parker.com/crimpsource.



#### Crimping using Superkrimp and Parkrimp 2

Parkrimp Fittings Series 25, 26, 43, 70, 71, 73, 76, 78, S6, 81, HY

#### Mark insertion depth and push on fitting



Mark the hose insertion depth and push hose into fitting until the mark on the hose is even with the end of the shell. Lubricate hose if necessary, however, DO NOT lubricate if using spiral hose. See Hose Insertion Depth table on previous page.

For 81 Series Shells with 88 Series Fittings



Place 81 Series Shell onto end of hose and make sure the end of the shell lines up with the Insertion Depth



88 Series fitting until the shell bottoms against the fitting's stop ring or hex. Lubricate hose if necessary.

#### If using large two-piece dies

Insert the proper die set into the die bowl. (The die sets are in two halves of four dies each. Place one half in the back and one half in the front to accommodate bent tube fittings.) Reference decal on crimper for proper tool selection.



A

B

#### If using small unitized dies



With the pusher in the full up position, lift the back half of the split die ring. Lock it in the up position by pushing the slide pin in. (The slide pin is located inside the pusher at the back.)



Lubricate die bowl using a premium quality lithiumbase grease. Carefully insert the adapter bowl, 83C-OCB, into the base bowl. The adapter bowl must be tilted toward the back of the crimper during insertion.



Lubricate die bowl using a premium quality lithium-base grease. Place unitized dietrain into the adapter bowl. Select die and die ring by hose size and type. See decal on crimper for proper die set.

Note: Die sets have color-coded cavities indicating size and have the fitting series and dash size stamped on the top.





If required, place spacer ring on locating step of adapter bowl. Reference decal on crimper for tool selection.

#### Position the split die ring



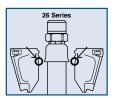
Lower the back half of the split die ring onto the dies by pulling the slide pin forward.

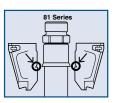


Insert the front half of the split die ring aligning the pins in the back half with the hole in the front half.

#### Position the fitting







Position the hose and fitting in dies from below. Rest bottom of coupling on die step using the PARKALIGN® feature.

Crimp hose

Turn on the pump by pressing the "ON" switch. Pull the valve handle forward to bring the pusher down for crimping. When the split die ring contacts the base plate, the crimp is complete. Push the valve handle back to lift the pusher, open the dies, and release the finished assembly.

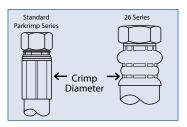
Note: You do not have to remove any tooling to insert or remove straight fittings. The front half of the split die ring and the front die train must be removed to insert and remove bent tube fittings.



C-17

#### Measure crimp diameter

Measure crimp diameter on the flat surfaces of the crimped shell, referenced in the illustration to the right. Reference decal on crimper for crimp diameters. Never use hose assemblies with incorrect crimp diameters.



Important: Hose assemblies must be inspected for cleanliness and free of all foreign particles.



#### Assembling Twin Tough Rubber Hose

#### Required Equipment:

Twin Tough hose, fittings, knife, tape measure, heat shrink sleeve, scissors, grease pencil, heat gun, and calipers.



Set-up:
Position the
bonded rubber
hose so that it
lies flat on a work
surface without
tendency to twist
or turn.

B

Measure hose tear back length: Measure and mark the length that the hoses are to be separated. A minimum of 12 inches is required for crimping the hose ends. A 24 inch tear back is recommended for use with hydraulic tools.



Note: If length of separation/tear back is specified from the threaded or swivel nut end of the coupling, then deduct the cut off allowance dimension for the specific style of coupling used. The cutoff allowance can be obtained from the hose fitting tables in the 4400 Catalog "B" dimension, or can be calculated by subtracting the insertion depth of the shell from the overall coupling length.

#### Cut hose tear back to length:

Press the bonded hose assembly firmly and flat against the work surface with your free hand so that it does not move.

A.) Using a sharp blade, pierce the center of the valley (web) formed by the hoses.



B.) To start the cut, place the blade in the center of that valley (web) drawing the knife with constant pressure.



C.) Once you have a 1 to 2 inch starter cut, firmly pull each hose end apart to your required separation length.



Note: It is important that the knife blade be perpendicular to the hose during this procedure so the blade cuts only the centerline of the valley (web). EXTREME CARE MUST BE TAKEN TO AVOID CUTTING THROUGH THE COVER OF THE HOSES AND THEREBY EXPOSING THE HOSE REINFORCEMENT. If this occurs, the hose assembly must be discarded.

C-18

Measure Separation: It is suggested that the separation length be at least 12 inches, so the crimping operation can be accomplished without risk of kinking the hoses.



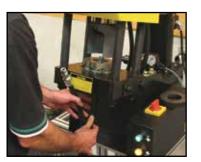
Stopping Separation: Parker recommends installing a heat shrink sleeve of at least 2 inches in length at the termination of the separated hose to provide protection against tearing of the valley (web) or hose covers. This heat shrink sleeve should be placed on the hose assembly prior to the crimping of the hose fittings. Once you have your heat shrink sleeve in place, use a heat gun to shrink the sleeve in place.



Note: EXTREME CARE MUST BE TAKEN TO AVOID EXPOSING THE HOSE ASSEMBLY TO THE DIRECT HIGH TEMPERATURES OF THE HEAT GUN WHILE INSTALLING THE HEAT SHRINK SLEEVE. LONG EXPOSURE FROM A HEAT GUN MAY ADVERSLEY AFFECT THE HOSE INNERTUBE OR ITS COVER.

**Crimping Fittings:** All of your crimping information can be found on Crimpsource (www.parker.com/crimpsource).

First, place your fittings onto each hose end making sure that both have been installed to the correct hose insertion depth. Choose the correct die and die ring. Place half of your hose assembly through the bottom of your Parkrimp crimper. Rest the bottom of the fitting on the die step using the Parkalign system. While lightly holding the hose assembly, operate your crimper pump so that the pusher on the crimper comes down in contact with the die ring until it bottoms out on the crimper base. Then release the pressure within the pump and remove the first half of your finished assembly. Always measure your hose assemblies for the correct crimp diameter. Now, repeat the crimping process on the other fitting.



Note: EXTREME CARE MUST BE TAKEN TO AVOID KINKING THE HOSE THAT IS NOT BEING CRIMPED DURING THIS PROCESS.

C-19















#### **Hydraulic Press Kit**

Part No. 8PC-001

For use with 26, 43, 81 and HY Series Fitting ONLY

#### **Specifications**

- Required Height from Press Base to Press Ram: 10 inches
- Required Width of Bowl Diameter: 5 inches
- Bowl Rating: 30 tons force maximum
- Minimum Required Press Capacity: Hose Size 1/4" to 1/2" needs a 20 ton press Hose size 5/8" to 1-1/4" needs a 30 ton press

#### **Standard Equipment**

Part Number 8PC-001	Description	Individual Part Number
•	Bowl Assembly	8PC-030
•	Pusher	8PC-00P
•	Silver Die Ring	81C-R01
•	Black Die Ring	81C-R02
•	43 Series dies in 1/4", 3/8", 1/2", 3/4" and 1"	80C-Axx

#### Weatherhead Conversion Kit

Part No. 8WC-001

For use with 26, 43, 81 and HY Series Fitting ONLY

Convert Weatherhead T-400 crimper to utilize Parker Parkrimp No-Skive fittings.



Part Number 8WC-001	Description	Individual Part Number
•	Bowl Assembly	8PC-030
•	Pusher	8WC-00P
•	Silver Die Ring	81C-R01
•	Black Die Ring	81C-R02
•	43 Series Dies in 1/4", 3/8", 1/2" and 3/4"	80C-Axx

#### **Gates Conversion Kit**

Part No. 8GC-002

For use with 26, 43, 81 and HY Series Fitting ONLY

C-20

Convert Gates 701, 703 and 707 bottom loading crimpers to utilize Parker Parkrimp No-Skive fittings.

#### **Standard Equipment**

Part Number 8GC-002	Description	Individual Part Number
•	Bowl Assembly	8PC-030
•	Silver Die Ring	81C-R01
•	Black Die Ring	81C-R02
•	43 Series Dies in 1/4", 3/8", 1/2", 3/4" and 1"	80C-Axx

- For additional information and operating instructions, visit the Parker Hose Products Division website at www.parkerhose.com.
- For crimping instructions, see pages C-16 and C-17.
  Hose assemblies must be inspected for cleanliness and free of all foreign particles.







Notes:

B

Hose Cut-Off Machine Karrykut

Part No. 631075

#### **Features**

- · Portable saw for cutting on the job
- Unique clamp system spreads hose as it cuts to prevent blade binding
- Cuts multi-braided wire reinforced hose including 4 spiral construction up to 1-1/4" I.D.

#### **Specifications**

- Dimensions: 16" wide x 12" long x 19" high
- Shipping Weight: 58 lbs.

#### **Standard Equipment**

Part Number		Individual
631075	Description	Part Number
	Power saw with 115volt (13 amp) universal AC motor	631140
•	Universal clamp attachment (can be used with any portable power saw unit having a 5/8" arbor, 7" blade capacity)	631076
•	Cutting blade (7" with 5/8" arbor size)	621102

#### **Hose Cut-Off Machine**

Part No. 332T-115V



#### **Features**

- For quick, easy cutting of spiral reinforced hose up to 1-1/4" I.D.
- · Moving parts shielded by guards

#### **Specifications**

- Dimensions: 13" wide x 26" long x 22" high
- · Shipping Weight: 71 lbs.

#### **Standard Equipment**

Part Number 332T-115V	Description	Individual Part Number
•	Hose Cut-Off Machine with 1-1/2 HP, 3450 RPM, 115/230V single phase electric motor wired for 115V	
•	Scallop Cutting Blade (8" with 5/8" arbor size)	24398

#### **Optional Equipment**

• Smooth Cutting Blade (580661)

#### **Hose Cut-Off Machine**

Part No. 239 and 339



C-21

#### **Features**

- · Designed for heavy duty use
- Cuts multi-braided wire reinforced hose including 6 spiral construction up to 2" I.D.

#### **Specifications**

- Dimensions: 22" wide x 42" long x 24" high
- Shipping Weight: 115 lbs.

#### **Standard Equipment**

Part N	lumber		Individual
239	339	Description	Part Number
•		Hose Cut-Off Machine with 230V single phase motor	
	•	Hose Cut-Off Machine with 3 HP motor 230V, 3 phase, 60 cycle	
•	•	Scallop Cutting Blade (10" with 3/4" arbor size)	24248

#### **Optional Equipment**

• Smooth Cutting Blade (15960)



A





#### **Ultra Clean Hose Cleaning Supplies**



Part No. TH6-10-HL-9-2

#### **Features**

B

- Capable of cleaning 1/4" through 2" hose, tube or pipe
- The launcher is supplied with a Full-Flow Quick Release Coupling and unique 360° Rotary Plug for proper air flow and non-fatigue operator use
- Unique Safety Release Bar that locks the faceplate into a closed position for firing Ultra Clean projectiles

#### **Projectile and Nozzle Part Numbers**

End Type	Size	Nozzle Part Number	Projectile Part Number	Projectile Quantity		
Hose	3/16"	TH6-10-H06	TH6-10-P06	100		
Hose	1/4"	TH6-10-H06	TH6-10-P10	100		
JIC	1/4	TH6-10-J06	TH6-10-P06	100		
Hose	3/8"	TH6-10-H10	TH6-10-P14	100		
JIC	3/6	TH6-10-J10	TH6-10-P12	100		
Hose	1/2"	TH6-10-H13	TH6-10-P18	100		
JIC	1/2	TH6-10-J13 TH6-10-P16		100		
Hose	F (0)"	TH6-10-H16	TH6-10-P22	50		
JIC	5/8"	TH6-10-J16	10-10-22	50		
Hose	3/4"	TH6-10-H19	TH6-10-P26	50		
JIC	3/4	TH6-10-J19	10-10-20	50		
Hose	1"	TH6-10-H25	TH6-10-P33	40		
JIC	] '	TH6-10-J25	1 110-10-23	40		
Hose	1-1/4"	TH6-10-H32	TH6-10-P40	30		
JIC	1-1/4	TH6-10-J32	10-10-240	30		
Hose	1 1/0"	TH6-10-H38	TH6-10-P50	20		
JIC	1-1/2"	TH6-10-J38	1 110-10-20	20		
Hose	2"	TH6-10-H50	TUE 40 Dec	15		
JIC		TH6-10-J50	TH6-10-P60	15		

Note: Additional nozzles for JIC, Code 61 and Code 62 flanges, and ORFS are also available if required

#### **Economy Hose Cleaning Supplies**



Part No. TH6-10-EL-7

#### **Features**

- Capable of cleaning 1/4" through 1-1/4" hose, tube or pipe
- Has a quarter-turn locking ring for easy nozzle change and projectile loading
- The launcher is constructed of durable brass and aluminum internals, strong plastic handle, and anodized aluminum firing head and locking ring.
- Ideal for mobile and job site applications because of its size and portability





#### **Air Requirements**

- 80 PSI (5.5 Bar) minimum to 110 PSI (7.5 Bar) maximum
- 1/2" I.D. air hose
- 5 micron filter and regulator with gauge are strongly suggested
- Requires a 1/2" I.D. air hose with 80 PSI (minimum) / 110 PSI (maximum), and it is strongly recommended that you use a 5 micron filter and regulator with a gauge.



#### Parker Clean Seal

Parker's Clean Seal cap is a simple, easy and clean alternative to cap your hose and fitting assemblies. The Clean Seal cap enables a secure fit due to an easy to use heat shrink system. Reduce your cap complexity as one Clean Seal cap will seal multiple end configurations and sizes, eliminating many unique traditional caps.

The Clean Seal process utilizes heat shrink technology to cover the end of a hose assembly. The heat shrink technology eliminates problems due to re-contamination issues. When traditional caps and plugs are forced onto assemblies, plastic debris and particles shred off into your hose, ultimately causing re-contamination.

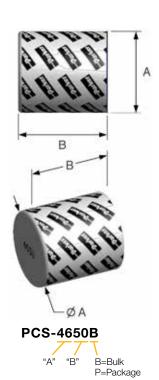
#### **Product Features:**

- For use on fittings up to -24 (1-1/2")
- Fits straight and elbow fittings
- · Easy pull tab removal
- · Reduced environmental impact compared to traditional caps
  - · Less plastic used
  - · More crushable
- · Multiple hoses can be capped at one time



#### **Cap Part Numbers**

Packa	ged	Вι	ılk	Si	zing
Parker P/N (Package)	Package Quantity	Parker P/N (Bulk)	Bulk Quantity	Hex Sizes Coverd (in mm)	Hex Sizes Covered (in inches)
PCS-2023P	810	PCS-2023B	23,400	12mm to 18mm	.47" to .71"
PCS-2030P	810	PCS-2030B	23,400	12mm to 18mm	.47" to .71"
PCS-2224P	810	PCS-2224B	23,500	16mm to 21mm	.63" to .83"
PCS-2527P	800	PCS-2527B	17,600	18mm to 23mm	.71" to .91"
PCS-2540P	800	PCS-2540B	17,600	18mm to 23mm	.71" to .91"
PCS-2840P	720	PCS-2840B	15,200	22mm to 26mm	.87" to 1.02"
PCS-3133P	640	PCS-3133B	12,240	24mm to 29mm	.94" to 1.14"
PCS-3140P	640	PCS-3140B	12,240	24mm to 29mm	.94" to 1.14"
PCS-3440P	640	PCS-3440B	10,240	27mm to 32mm	1.07" to 1.26"
PCS-3840P	560	PCS-3840B	7,800	30mm to 36mm	1.09" to 1.42"
PCS-4345P	480	PCS-4345B	6,240	32mm to 41mm	1.26" to 1.61"
PCS-4650P	480	PCS-4650B	5,760	34mm to 44mm	1.34" to 1.73"
PCS-5260P	400	PCS-5260B	4,400	41mm to 50mm	1.62" to 1.97"
PCS-5860P	400	PCS-5860B	3,600	49mm to 56mm	1.93" to 2.20"
PCS-6760P	320	PCS-6760B	2,560	55mm to 65mm	2.16" to 2.56"



"A" and "B" dimensions in mm. Shorter length capsules recommended for elbow/bent fittings.

#### **Equipment Part Numbers**

UC-CSS-230V	UC-HL1910E	UC-HG-STAND	UC-1.5HD	
Production Heat Shrink machine with timer	Electric heat gun with case	Flex vacuum pumpstand for heat gun	95mm diffuser for 1-1/2" heat gun connection	

C-23



A

В

C

D

E

#### **Hose Cut-Off Tool - Handykut**

Part No. 871522



#### **Features**

- · Portable tool for efficient cutting of hose
- Can be positioned onto a flat surface by clamps or by locking it in a vise, properly align the hose in a radius and cut it with a hacksaw

#### **Specifications**

B

D

- Dimensions: 6" wide x 18" long x 6" high
- Shipping Weight: 10 lbs.

### Push-Lok Cut-Off & Assembly Tool

Part No. 881540



#### **Features**

• Combined hose cutter and toggle action press that cuts and assembles Parker Push-Lok in sizes 1/4" through 3/4" I.D.

#### **Specifications**

- Dimensions: 16" long
- Shipping Weight: 4 lbs.

#### **Hose Insertion Depth Blocks**

Part No. TH9-1-XXX



#### **Features**

- · For quick easy marking of hose insertion depth
- · Ensures accuracy and increased productivity

#### **Available Blocks**

Part Number	Description
TH9-1-26A	26 Series -4 through -10
TH9-1-26B	26 Series -12 through -32
TH9-1-43A	43 Series -4 through -10
TH9-1-43B	43 Series -12 through -32
TH9-1-70	70 Series -6 through -20
TH9-1-71	71 Series -6 through -32
TH9-1-73	73 Series -12 through -32
TH9-1-77	77 Series -8 through -32
TH9-1-78	78 Series -12 through -32
TH9-1-79	79 Series -12 through -24
TH9-1-HY	HY Series -4 through -16

#### **Hose Cut-Off Tool**

Part No. TH11-1



#### **Features**

- Designed for quick, easy cutting of textile reinforced hose.
- Squarely cuts Push-Lok hose in sizes 1/4" through 3/4" I.D.

#### **Specifications**

• Dimensions: 8" long

C-24

Shipping Weight: 0.3 lbs.



#### Hozembler

Part No. 432-115V



#### **Features**

- Power machine to facilitate the attachment of field attachable fittings
- Handles all hose and fittings up to 4 spiral wire, in sizes 3/16" through 2" I.D., including bent tube elbows
- Comes with vise, all adapters, foot switch and safety guard with 115V, 30 amp, universal AC motor

#### **Specifications**

• Shipping Weight: 141 lbs.

#### **Optional Parts**

• Mounting stand (662451)

#### **Die Storage Racks**

Part No. 80C-0DR and 83C-0DR



#### **Features**

- Modular die rack designed to hold small and large Parkrimp dies
- Can be bolted together to a work bench horizontally or vertically

#### Standard Equipment

Part Number		
80C-0DR	83C-0DR	Description
		Storage of three sets of small dies
	•	Storage of two sets of large dies

#### **Swivel Die Rack**

Part No. 80C-SDR-XXXX



#### **Features**

- · Holds up to 30 Parkrimp dies of any size
- Powder-coated, heavy-duty steel construction
- Consists of a base unit and up to five circular holders
- · Floor or bench mounted

#### **Standard Equipment**

Part Number	Description
80C-SDR-SM	Swivel Die Rack and Small Die Holder
80C-SDR-LG	Swivel Die Rack and Large Die Holder
80C-SDR-BASE	Swivel Die Rack Base

**Fitting Push-On Stand** 

Part No. TH2-7



#### **Features**

- · Quickly and easily pushes fittings onto hose
- Boosts productivity and quality
- Eliminates the need of rubber mallets and oils to get fittings onto the end of the hose for crimping
- Standard with straight tooling required for sizes 1/4" through 2" for all crimped fittings, 82 Series Push-Lok and 88 Series field attachable fittings

#### **Specifications**

- Requires a minimum of 80 psi
- Shipping Weight: 200 lbs.

#### **Optional Tooling**

C-25

Elbow Pusher Set (TH2-7-ELS)



A

В

C

D

\_

#### Mandrel Tool Kit - 22 Series

Part No. 652200



#### **Features**

- For assembly of Parker 22 Series field attachable fittings
- One of each part listed below is included in the kit

#### **Standard Equipment**

Hose I.D.	Dash Size	SAE (JIC) 37°	SAE 45°
3/16	-4	•	•
1/4	-5	•	•
5/16	-6	•	•
13/32	-8	•	•
1/2	-10	•	•
5/8	-12	•	•

#### Mandrel Tool Kit - 23 Series

Part No. 2727 and 2726



#### **Features**

- For assembly of Parker 23 Series field attachable fittings
- Part No. 2727 is for JIC 37° flared fittings
- Part No. 2726 is for SAE 45° and PTT 30° flared fittings

#### Standard Equipment

Hose I.D.	Dash Size	2727	2726
3/16	-4	•	•
1/4	-5	•	•
5/16	-6	•	•
13/32	-8	•	•
1/2	-10	•	•
5/8	-12	•	•
7/8	-16	•	•

#### Mandrels - 25 Series

(For 271 Transportation Hose) Part No. TH2-7M25-6 and TH2-7M25-8



### Assembly Tools - 22/23 Series Part No. 652201



#### **Features**

C-26

- For assembly of Parker 22/23 Series field attachable fittings
- One of each part listed below is included in the kit

#### **Standard Equipment**

Hose I.D.	Dash Size	SAE (JIC) 37°	SAE 45°
7/8	-16	•	•
1-1/8	-20	•	•
1-3/8	-24	•	•
1-13/16	-32	•	



#### **Hose Perforator**

Part No. 601069



#### **Features**

- Small hand tool to prick minute holes in the rubber cover
- To be used in gaseous applications where the pressure exceeds 250 psi
- Driven into the cover every few inches of length either striking the hose or by a rolling action over the hose cover
- Not generally necessary to perforate the hose on all sides

#### **Specifications**

· Shipping Weight: 2 lbs.

#### **Hose Oil**

Part No. Hose Oil



#### **Features**

- Reduces torque and eliminates waste lubrication
- · Use hose oil with the recommended hose assembly instructions

#### Accrolube

Part No. Accrolube



#### **Features**

- · High efficiency lubricant used for stainless steel field attachable fittings
- · Contains PTFE to reduce the wear between metal surfaces, protects against corrosion and ultimately eliminates galling

#### **Small Crimper Hood**

Part No. 82C-CVR

#### **Features**

- Water repellant
- · UV protected
- · Perfect for indoor and outdoor applications

#### **Fits**

 Karrykrimp, Parkrimp Karrykrimp2, Minikrimp



### **Large Crimper Hood** Part No. 83C-CVR

#### **Features**

- Water repellant
- UV protected
- · Perfect for indoor and outdoor applications

#### **Fits**

C-27

· PHastkrimp, Superkrimp Parkrimp2







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More of what you need to work smarter, faster, and better. Visit **www.parkerhose.com** for up-to-the-minute accessory selections.

### **Accessories**

D



A

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D-2



Hose	Partek Defense D-19	Partek Wrap D-20	Partek Sleeve D-21	PolyGuard (HG) D-22	ParKoil™ (PG) D-22
Guards	Mar Partek Delay	A STATE OF THE STA	Poster 19 8 2		
Spring Guard (SG) D-23 Armor Guard (AG)	Polyguard D-23 Strain Reliever	Hose Whip D-24 Restraint		FSC Clamp D-28	Assembly Instructions
		O	Parker #57-16 AS-1015-18	Q	PSS Freddown Sonlart
CL Clamp D-30	HC Clamp D-31	88HC-H D-31 Wormgear	88DB Clamp D-31	Protection D-32 Shields	
		( )			Hose Assembly Workstations
Hose Assembly D-33 Workstations	HoseFab Table D-34	Rotary D-34 Reel Rack	Saw Table D-34	3/4 Reel Rack D-34	Parker Kart D-35
	100 100 100				
72B-Cabinet D-35	HR6 Hose Bin D-35		1		

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#### SAE/NPT/Metric Hose Adapters



O-Ring Face-Seal Seal-Lok™

Sizes: 6 mm - 38 mm Materials: Steel, Stainless Steel Pressures: Up to 9200 psi



O-Ring Face-Seal Metric Seal-Lok™

Sizes: 1/4" - 2" Materials: Steel, Stainless Steel Pressures: Up to 9200 psi



37° Flare Fittings Triple-Lok®

Sizes: 1/8" - 2" Materials: Steel, Stainless Steel, Brass Pressures: Up to 9000 psi



37° Flare Metric Triple-Lok®

Sizes: 6 mm - 38 mm Materials: Steel. Stainless Steel Pressures: Up to 7200 psi



Pipe Fittings and **Port Adapters** 

Sizes: 1/8" - 2" Materials: Steel, Stainless Steel, Brass Pressures: Up to 7200 psi



Conversion **Adapters** 

Sizes: 1/4" - 1-1/2" Materials: Steel, Stainless Steel Pressures: Up to 7700 psi

B











**Pipe Swivels** 

Sizes: 1/8" - 2" Materials: Steel, Stainless Steel Pressures: Up to 5000 psi



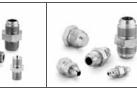
**Hydraulic Flange** and Flange **Adapters** 

Sizes: 3/4" - 3" Materials: Steel, Stainless Steel Pressures: Up to 6000 psi



**Japanese** Industrial Standard JIS

Sizes: 1/4" - 1" Materials: Steel Pressures: Up to 5000 psi



30° Flare Komatsu Style

Sizes: M14 x 1.5 - M33 x 1.5 Materials: Steel Pressures: Up to 4000 psi



60° Cone BSPP K4

Sizes: 1/8" - 2" Materials: Steel Pressures: Up to 5000 psi

#### **How to Order Parker Hose Adapters**

When ordering Parker Adapters, please state the Catalogued Number of each type of adapter desired. Be sure to double check tube and hose sizes of items required.

To select proper seal materials for specific applications, refer to Media Compatibility Chart in Tube Fitting Catalog 4300, or contact your Parker Tube Fitting Distributor.

If in doubt about which type or size of fitting to specify, consult your Parker Tube Fitting Distributor. In addition Parker Field Sales, Technical Services, the Tube Fitting Division and your local Parker Service Center will help you find answers to all your issues.

Phone: (614) 279-7070 Fax: (614) 279-7685

Web: http://www.parker.com/tfd Note: Refer to Parker Catalog 4300 for more detailed application information.

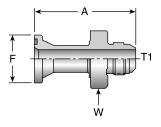
CALL TOLL-FREE 1-800-C PARKER (1-800-272-7537)

Parker Information Center for catalogs, literature or additional information.



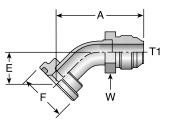
**15T3**SAE (Code 61) Flange – Male SAE (JIC) 37° Flare

# Part	Flange	Flange Thread A				$\bigvee_{\mathbf{W}}$	F
Number	inch		T1	inch	mm	inch	inch
15T3-8-8	1/2	1/2	3/4x16	2.80	71	1-1/4	1-3/16
15T3-12-12	3/4	3/4	1-1/16x12	3.20	81	1-9/16	1-1/2
15T3-16-12	1	3/4	1-1/16x12	2.68	47	1-1/8	1-3/4
15T3-16-16	1	1	1-5/16x12	3.22	82	1-7/8	1-3/4
15T3-20-16	1-1/4	1	1-5/16x12	2.76	51	1-3/8	2
15T3-20-20	1-1/4	1-1/4	1-5/8x12	3.69	94	2-1/4	2
15T3-24-24	1-1/2	1-1/2	1-7/8x12	4.04	103	2-1/2	2-3/8
15T3-32-32	2	2	2-1/2x12	4.44	113	2-7/8	2-13/16



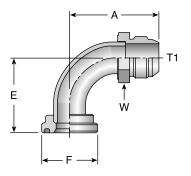
17T3
SAE (Code 61) Flange – Male SAE (JIC) 37° Flare - 45° Elbow

#									Ø
Part	Flange	1	hread	Α		E		W	F
Number	inch		T1	inch	mm	inch	mm	inch	inch
17T3-8-8	1/2	1/2	3/4x16	2.54	65	0.78	20	13/16	1-3/16
17T3-12-12	3/4	3/4	1-1/16x12	2.76	70	1.00	25	1-9/16	1-1/2
17T3-16-12	1	3/4	1-1/16x12	2.76	70	1.00	25	1-1/8	1-3/4
17T3-16-16	1	1	1-5/16x12	2.99	76	1.06	27	1-3/8	1-3/4
17T3-20-16	1-1/4	1	1-5/16x12	2.99	76	1.06	27	1-7/8	2
17T3-20-20	1-1/4	1-1/4	1-5/8x12	3.22	82	1.12	28	1-11/16	2
17T3-24-20	1-1/2	1-1/4	1-5/8x12	3.26	83	1.17	30	1-11/16	2-3/8
17T3-24-24	1-1/2	1-1/2	1-7/8x12	3.43	87	1.12	28	2	2-3/8
17T3-32-32	2	2	2-1/2x12	4.02	102	1.25	32	2-5/8	2-13/16



**19T3**SAE (Code 61) Flange – Male SAE (JIC) 37° Flare - 90° Elbow

#									Ø
Part	Flange	T	hread	Į.	A	ı	<b>=</b>	W	F
Number	inch		T1	inch	mm	inch	mm	inch	inch
19T3-8-8	1/2	1/2	3/4x16	1.92	49	1.62	41	13/16	1-13/16
19T3-12-12	3/4	3/4	1-1/16x12	2.46	62	2.12	54	1-1/8	1-1/2
19T3-16-12	1	3/4	1-1/16x12	2.46	62	2.12	54	1-3/8	1-3/4
19T3-20-12	1-1/4	3/4	1-1/16x12	2.46	62	2.12	54	1-3/8	2
19T3-16-16	1	1	1-5/16x12	2.79	71	2.37	60	1-3/8	1-3/4
19T3-20-16	1-1/4	1	1-5/16x12	2.79	71	2.37	60	1-3/8	2
19T3-24-16	1-1/2	1	1-5/16x12	2.79	71	2.44	62	1-11/16	2-3/8
19T3-20-20	1-1/4	1-1/4	1-5/8x12	3.12	79	2.50	64	1-11/16	2
19T3-24-20	1-1/2	1-1/4	1-5/8x12	3.12	79	2.56	65	1-11/16	2-3/8
19T3-20-24	1-1/4	1-1/2	1-7/8x12	3.48	88	2.69	68	2	2
19T3-24-24	1-1/2	1-1/2	1-7/8x12	3.48	88	2.75	70	2	2-3/8
19T3-32-24	2	1-1/2	1-7/8x12	3.48	88	2.75	70	2	2-13/16
19T3-32-32	2	2	2-1/2x12	5.61	142	4.50	114	2-5/8	2-13/16



 $\textbf{Caution:} \ \ \text{Do not use the T3 flange to tube or swivel nut to tube adapter in hose assembly applications in which pressures exceed the SAE100R2 working pressure range.}$ 

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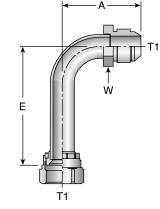
39T3 Male - Female Swivel - SAE (JIC) 37° - 90° Elbow

	<b> </b> ←──A →
	T1
$\uparrow$	T1
E 	∯ v
<u> </u>	
	T1

# Part			A			$\bigvee_{\mathbf{W}}$	
Number		T1		mm	inch	mm	inch
39T3-6-6	3/8	9/16x18	1.61	41	0.85	22	5/8
39T3-8-8	1/2	3/4x16	1.86	47	1.09	28	13/16
39T3-10-10	5/8	7/8x14	2.13	54	1.24	31	15/16
39T3-12-12	3/4	1-1/16x12	2.62	67	1.81	46	1-1/8
39T3-16-16	1	1-5/16x12	2.94	75	2.14	54	1-3/8
39T3-20-20	1-1/4	1-5/8x12	3.12	79	2.59	66	1-11/16

#### 41T3

#### Male - Female Swivel - SAE (JIC) 37° - 90° Elbow - Long



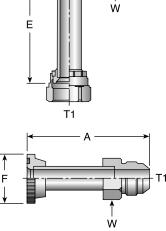
B

# Part				١	E	W	
Number	T1		inch	mm	inch	mm	inch
41T3-8-8	1/2	3/4x16	1.94	49	2.43	62	13/16
41T3-10-10	5/8	7/8x14	2.20	56	2.57	65	15/16
41T3-12-12	3/4	1-1/16x12	2.50	64	3.74	95	1-1/8
41T3-16-16	1	1-5/16x12	2.79	71	4.23	107	1-3/8

#### **4AH3**

#### SAE Code 61 Flange - Male SAE (JIC) 37° Flare - 5000 psi

#			^^^^				Ø
Part	Flange		Thread	ļ <i>1</i>	4	W	F
Number	inch		T1	inch	mm	inch	inch
4AH3-12-12	3/4	3/4	1-1/16x12	3.82	97	1-1/8	1-1/2
4AH3-16-16	1	1	1-5/16x12	4.09	104	1-3/8	1-3/4
4AH3-20-20	1-1/4	1-1/4	1-5/8x12	4.16	106	1-3/4	2
4AH3-24-24	1-1/2	1-1/2	1-7/8x12	4.97	126	2	2-3/8



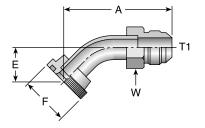
Caution: Do not use the T3 flange to tube or swivel nut to tube adapter in hose assembly applications in which pressures exceed the SAE100R2 working pressure range.



**4FH3** 

SAE Code 61 Flange - Male SAE (JIC) 37° Flare - 5000 psi - 45° Flbow

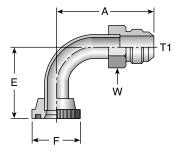
# Part	Flange			Ą		Ę		$\bigcirc$	F
Number	inch	T1		inch	mm	inch	mm	inch	inch
4FH3-12-12	3/4	3/4	1-16x12	3.39	86	1.06	27	1-1/8	1-1/2
4FH3-16-16	1	1	1-5/16x12	3.85	98	1.27	32	1-3/8	1-3/4
4FH3-20-20	1-1/4	1-1/4	1-5/8x12	4.22	107	1.36	35	1-3/4	2



#### **4NH3**

SAE Code 61 Flange - Male SAE (JIC)  $37^{\circ}$  Flare - 5000 psi -  $90^{\circ}$  Elbow

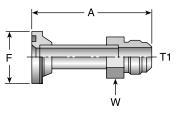
# Part	Flange	Thread		A	Ą			$\bigcirc_{\mathbf{W}}$	Ø
Number	inch		T1	inch	mm	inch	mm	inch	inch
4NH3-8-8	1/2	1/2	3/4x16	1.93	49	1.68	43	13/16	1-13/16
4NH3-12-12	3/4	3/4	1-1/16x12	3.07	78	2.24	57	1-1/8	1-1/2
4NH3-16-16	1	1	1-5/16x12	3.25	83	2.48	63	1-3/8	1-3/4
4NH3-20-20	1-1/4	1-1/4	1-5/8x12	4.68	119	2.99	76	1-3/4	2
4NH3-24-24	1-1/2	1-1/2	1-7/8x12	3.92	100	3.64	92	2	2-3/8



#### **6AH3**

SAE Code 62 Flange - Male SAE (JIC) 37° Flare

# Part	Flange				<b>1</b>	W	Ø
Number	inch	T1		inch	mm	inch	inch
6AH3-12-12	3/4	3/4	1-1/16x12	3.82	97	1-1/8	1-5/8
6AH3-16-16	1	1	1-5/16x12	4.09	104	1-3/8	1-7/8
6AH3-20-20	1-1/4	1-1/4	1-5/8x12	4.16	106	1-3/4	2-1/8
6AH3-24-24	1-1/2	1-1/2	1-7/8x12	4.97	126	2	2-1/2

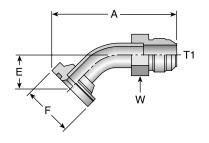


#### 6FH3

SAE Code 62 Flange - Male SAE (JIC) 37° Flare - 45° Elbow

Flange			A		E		W	Ø
inch		T1	inch	mm	inch	mm	inch	inch
3/4	3/4	1-1/16x12	3.40	86	1.06	27	1-1/8	1-5/8
1	1	1-5/16x12	3.85	98	1.28	33	1-3/8	1-7/8
1-1/4	1-1/4	1-5/8x12	4.22	107	1.36	35	1-3/4	2-1/8
1-1/2	1-1/2	1-7/8x12	5.13	130	1.71	43	2	2-1/2
	3/4 1 1-1/4	Flange inch 3/4 3/4 1 1 1-1/4 1-1/4	Flange inch T1 3/4 3/4 1-1/16x12 1 1 1-5/16x12 1-1/4 1-1/4 1-5/8x12	Flange inch T1 inch 3/4 3/4 1-1/16x12 3.40 1 1-5/16x12 3.85 1-1/4 1-1/4 1-5/8x12 4.22	Flange inch         Thread inch         A inch         mm           3/4         3/4         1-1/16x12         3.40         86           1         1         1-5/16x12         3.85         98           1-1/4         1-1/4         1-5/8x12         4.22         107	Flange inch         Thread         A inch inch inch inch         Imminish         Inch inch inch inch inch         Mm inch inch inch           3/4         3/4         1-1/16x12         3.40         86         1.06           1         1         1-5/16x12         3.85         98         1.28           1-1/4         1-1/4         1-5/8x12         4.22         107         1.36	Flange inch         Thread         A inch inch inch inch inch inch inch inch	Flange inch         Thread         A         E         W           3/4         3/4         1-1/16x12         3.40         86         1.06         27         1-1/8           1         1         1-5/16x12         3.85         98         1.28         33         1-3/8           1-1/4         1-1/4         1-5/8x12         4.22         107         1.36         35         1-3/4

D-7





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В

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#### **6NH3**

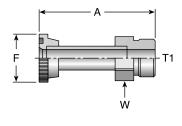
SAE Code 62 Flange - Male SAE (JIC) 37° Flare - 90° Elbow

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<u>↓</u>			
	<b>←</b> [	= →	

# Part	Flange			<b>A</b>		i	<u> </u>	W	F
Number	inch		T1	inch	mm	inch	mm	inch	inch
6NH3-12-12	3/4	3/4	1-1/16x12	3.07	78	2.24	57	1-1/8	1-5/8
6NH3-16-16	1	1	1-5/16x12	3.58	91	2.81	71	1-3/8	1-7/8
6NH3-20-20	1-1/4	1-1/4	1-5/8x12	4.68	119	2.99	76	1-3/4	2-1/8
6NH3-24-24	1-1/2	1-1/2	1-7/8x12	3.92	100	3.64	92	2	2-1/2

#### **4AJM**

Code 61 Flange - Male Seal-Lok



B

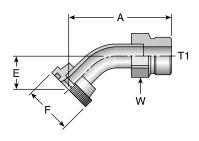
C

D

# Part	Flange		A		$\bigvee_{\mathbf{w}}$	F
Number	inch	T1	inch	mm	inch	inch
4AJM-12-12	3/4	1-3/16x12	3.65	93	1-1/4	1-1/2
4AJM-16-16	1	1-7/16x12	3.90	99	1-1/2	1-3/4
4AJM-20-20	1-1/4	1-11/16x12	3.92	100	1-3/4	2

#### 4FJM

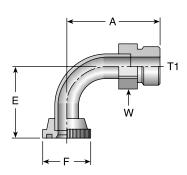
Code 61 Flange - Male Seal-Lok - 45° Elbow



# Part	Flange	///////// Thread	Δ.	<u> </u>	E		$\bigcirc_{\mathbf{w}}$	F
Number	inch	T1	inch	mm	inch	mm	inch	inch
4FJM-12-12	3/4	1-3/16x12	3.22	82	1.06	27	1-1/4	1-1/2
4FJM-16-16	1	1-7/16x12	3.64	92	1.27	33	1-1/2	1-3/4
4FJM-20-20	1-1/4	1-11/16x12	3.99	101	1.36	35	1-3/4	2

#### **4NJM**

Code 61 Flange - Male Seal-Lok - 90° Elbow



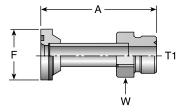
# Part	Flange			4	E		₩ \	F
Number	inch	T1	inch	mm	inch	mm	inch	inch
4NJM-12-12	3/4	1-3/16x12	2.90	74	2.24	57	1-1/4	1-1/2
4NJM-16-16	1	1-7/16x12	3.38	86	2.81	71	1-1/2	1-3/4
4NJM-20-20	1-1/4	1-11/16x12	4.44	113	2.99	76	1-3/4	2



#### 6AJM

#### Code 62 Flange - Male Seal-Lok

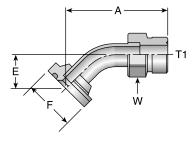
# Part	Flange			A	W	F
Number	inch	T1	inch	mm	inch	inch
6AJM-12-12	3/4	1-3/16x12	3.65	93	1-1/4	1-5/8
6AJM-16-16	1	1-7/16x12	3.90	99	1-1/2	1-7/8
6AJM-20-20	1-1/4	1-11/16x12	3.92	100	1-3/4	2-1/8



#### 6FJM

#### Code 62 Flange - Male Seal-Lok - 45° Elbow

#								Ø
Part	Flange	Thread	<i>F</i>	4			W	F
Number	inch	T1	inch	mm	inch	mm	inch	inch
6FJM-12-12	3/4	1-3/16x12	3.22	82	1.06	27	1-1/4	1-5/8
6FJM-16-16	1	1-7/16x12	3.64	92	1.27	33	1-1/2	1-7/8
6FJM-20-20	1-1/4	1-11/16x12	3.99	101	1.36	35	1-3/4	2-1/8



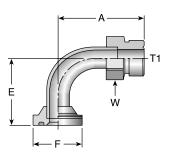
#### **6NJM**

#### Code 62 Flange - Male Seal-Lok - 90° Elbow

# Part	Flange		A		E		$\bigcirc$	Ø F
Number	inch	T1	in	mm	in	mm	inch	inch
6NJM-12-12	3/4	1-3/16x12	2.90	74	2.24	57	1-1/4	1-5/8
6NJM-16-16	1	1-7/16x12	3.38	86	2.81	71	1-1/2	1-7/8
6NJM-20-20	1-1/4	1-11/16x12	4.44	113	2.99	76	1-3/4	2-1/8

D-9

6NJM does not include O-rings. Order separately.

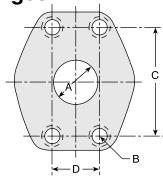


B

There are two non-interchangeable SAE split flanges:

- a: Standard or Code 61 is for 3,000psi to 5,000psi maximum, depending on size.
- b. High Pressure or Code 62 is for 6,000psi maximum, regardless of size. The flange head is "V" notched for identification.

Consult these tables to determine flange halves and flange kits specifications.



#### **Standard Pressure (Code 61)**

Nor	ninal	Flange Dash	D	A ia ax	B Thread	±0.010	±0,25	±0.010	±0,25	Wor	mum king sure
	inge	Size	inch	mm	inch	inch	mm	inch	mm	psi	MPa
1	1/2	-8	0.50	13	5/16x18	1.50	38,10	0.68	17,47	5,000	34,5
3	3/4	-12	0.75	19	3/8x16	1.88	47,63	0.87	22,22	5,000	34,5
	1	-16	1.00	25	3/8x16	2.06	52,37	1.03	26,18	5,000	34,5
1	1/4	-20	1.25	32	7/16x14	2.31	58,72	1.18	30,17	4,000*	27,6
1	1/2	-24	1.50	38	1/2x13	2.75	69,85	1.40	35,71	3,000*	20,7
	2	-32	2.00	51	1/2x13	3.06	77,77	1.68	42,87	3,000*	20,7

Note: \*5000 psi with 4A, 4F and 4N Fittings and 50H Flange Halves.

#### **High Pressure (Code 62)**

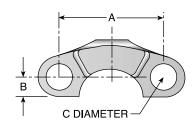
B

Nominal	Flange Dash	D M	ia	B Thread	±0.010	±0,25	±0.010	±0,25	Wor	mum king ssure
Flange	Size	inch	mm	inch	inch	mm	inch	mm	psi	MPa
3/4	-12	0.75	19	3/8x16	2.00	47,75	0.88	22,35	6,000	41,4
1	-16	1.00	25	7/16x14	2.25	57,15	1.09	27,76	6,000	41,4
1-1/4	-20	1.25	32	1/2x13	2.63	66,67	1.25	31,75	6,000	41,4
1-1/2	-24	1.50	38	5/8x11	3.13	79,37	1.43	36,49	6,000	41,4
2	-32	2.00	51	3/4x10	3.81	96,82	1.75	44,45	6,000	41,4

### **50H** 5000 psi Flange Half (Code 61)

# Part	SAE Flange Size	A	В	С	Maximum Working Pressure
Number	inch	inch	inch	inch	psi
50H-20	1-1/4	2.31	0.55	0.47	5,000
50H-24	1-1/2	2.75	0.66	0.53	5,000
50H-32	2	3.06	0.80	0.53	5,000

Note: For use with 4A, 4F and 4N Flanges.





#### 5050HK

#### 5000 psi Flange Kit (Code 61)

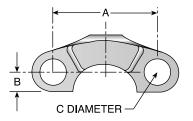
#	SAE Flange	Maximum Working	(2) Flange		(4) Bolts Grade 8		(4)
Part	Size	Pressure	Halves	O-Ring	Thread	Length	Washers
Number	inch	(psi)			inch	inch	
5050HK-20	1-1/4	5,000	50H-20	711510-3	7/16x14	1-1/2	7/16
5050HK-24	1-1/2	5,000	50H-24	711510-2	1/2x13	1-1/2	1/2
5050HK-32	2	5,000	50H-32	711510-1	1/2x13	1-1/2	1/2

Note: For use with 4A, 4F and 4N Flanges.



### **51H** SAE Flange Half (Code 61)

# Part	SAE Flange Size	A	В	С	Maximum Working Pressure
Number	inch	inch	inch	inch	psi
51H-8	1/2	1.50	0.31	0.34	5,000
51H-12	3/4	1.88	0.40	0.41	5,000
51H-16	1	2.06	0.48	0.41	5,000
51H-20	1-1/4	2.31	0.56	0.47	4,000
51H-24	1-1/2	2.75	0.67	0.53	3,000
51H-32	2	3.06	0.81	0.53	3,000
51H-40	2-1/2	3.50	0.96	0.53	2,500
51H-48	3	4.19	1.18	0.66	2,000



#### 5151HK

#### **SAE Flange Kit (Code 61)**

#	SAE Flange	Maximum Working	(2) Flange		(4) Bolts Grade 8		(4)
Part	Size	Pressure	Halves	O-Ring	Thread	Length	Washers
Number	inch	(psi)			inch	inch	
5151HK-8	1/2	5,000	51H-8	711510-6	5/16x18	1-1/4	5/16
5151HK-12	3/4	5,000	51H-12	711510-5	3/8x16	1-1/4	3/8
5151HK-16	1	5,000	51H-16	711510-4	3/8x16	1-1/4	3/8
5151HK-20	1-1/4	4,000	51H-20	711510-3	7/16x14	1-1/2	7/16
5151HK-24	1-1/2	3,000	51H-24	711510-2	1/2x13	1-1/2	1/2
5151HK-32	2	3,000	51H-32	711510-1	1/2x13	1-1/2	1/2
5151HK-40	2-1/2	2,500	51H-40	711510-7	1/2x13	1-3/4	1/2
5151HK-48	3	2,000	51H-48	711510-8	5/8-11	1-3/4	5/8

D-11

Note: High pressure applications also require the use of Code 61 Flange End hose fittings.











#### A

В

C

D

# B C DIAMETER

#### **HFH**

#### **SAE Flange Half (Code 62)**

# Part	SAE Flange Size	A	B	C	Maximum Working Pressure
Number	inch	inch	inch	inch	psi
HFH-12	3/4	2.00	0.43	0.41	6,000
HFH-16	1	2.25	0.51	0.47	6,000
HFH-20	1 1/4	2.62	0.59	0.53	6,000
HFH-24	1 1/2	3.12	0.68	0.66	6,000
HFH-32	2	3.81	0.84	0.78	6,000

#### **HFHFHK**

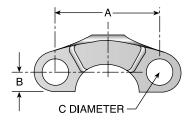
#### **SAE Flange Kit (Code 62)**



#	SAE Flange	Maximum Working	(2) Flange		(4) Bolts Grade 8		(4)
Part	Size	Pressure	Halves	O-Ring	Thread	Length	Washers
Number	inch	psi			inch	inch	
HFHFHK-12	3/4	6,000	HFH-12	711510-5	3/8x16	1-1/2	3/8
HFHFHK-16	1	6,000	HFH-16	711510-4	7/16x14	1-3/4	7/16
HFHFHK-20	1-1/4	6,000	HFH-20	711510-3	1/2x13	1-3/4	1/2
HFHFHK-24	1-1/2	6,000	HFH-24	711510-2	5/8x11	2-1/4	5/8
HFHFHK-32	2	6,000	HFH-32	711510-1	3/4x10	2-3/4	3/4

#### 8FH

#### Flange Half (8000 psi)

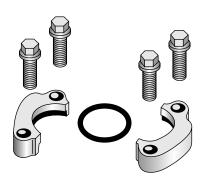


# Part	SAE Flange Size	A	В	С	Maximum Working Pressure
Number	inch	inch	inch	inch	psi
8FH-12	3/4	2.00	0.43	0.41	8,000
8FH-16	1	2.25	0.51	0.47	8,000

#### **8FHFHK**

#### Flange Kit (8000 psi)

D-12



#	SAE Flange	Maximum Working	(2) Flange		(4) Bolts Grade 8		(4)
Part	Size	Pressure	Halves	D-Ring	Thread	Length	Washers
Number	inch	psi			inch	inch	
8FHFHK-12	3/4	8,000	8FH-12	8ARG-12	3/8-16	1-3/4	3/8
8FHFHK-16	1	8,000	8FH-16	8ARG-16	7/16-14	1-3/4	7/16

### Full Flange System SAE J1518 Code 61 or Code 62

Parker's Hose Products Division introduces a one-piece flange option for Code 61 and Code 62 connections. The patent-pending design enables the flange to be attached to the hose after the hose fitting has been crimped to the hose. Once the fitting is crimped, an SAE J1518 Code 61 or a Code 62 full flange can be attached using the high tensile stainless steel retaining ring. The versatile fitting design enables greater flexibility by reducing the number of potential hose fittings in your inventory.

#### **Product Features**

- One-piece full flange connection
- The full flange system is designed to work with all Parkrimp crimpers
- Fittings are compatible for both Code 61 and Code 62 flanges
- All Code 61 sizes rated to 5000 psi



#### Flange Kits:

#### Code 61 Flange Kit - All sizes rated for 5000 psi

#	SAE Flange	Maximum Working				(4) Bolts Grade 8	
Part	Size	Pressure			Retaining	Thread	Length
Number	inch	psi	Flange	Seal	Ring	inch	inch
FFK61-12	3/4	5,000	R312-35-CFX	XRG-12	R12X	UNC 3/8 - 16	1-1/2
FFK61-16	1	5,000	R316-CFX	XRG-16	R16X	UNC 3/8 - 16	1-1/2
FFK61-20	1 1/4	5,000	R320-12.5-CFX	XRG-20	R20X	UNC 7/16 - 14	1-1/2
FFK61-24	1 1/2	5,000	R324-CFX	XRG-24	R24X	UNC 1/2 - 13	1-3/4
FFK61-32	2	5,000	R332-CFX	XRG-32	R32X	UNC 1/2 - 13	1-3/4

#### Code 62 Flange Kit

#	SAE Flange	Maximum Working				(4) Bolts Grade 8	
Part	Size	Pressure			Retaining	Thread	Length
Number	inch	psi	Flange	Seal	Ring	inch	inch
FFK62-12	3/4	6,000	R612-35-CFX	XRG-12	R12X	UNC 3/8 - 16	1-1/2
FFK62-16	1	6,000	R616-CFX	XRG-16	R16X	UNC 7/16 - 14	1-1/2
FFK62-20	1 1/4	6,000	R620-CFX	XRG-20	R20X	UNC 1/2 - 13	1-3/4
FFK62-24	1 1/2	6,000	R624-CFX	XRG-24	R24X	UNC 5/8 - 11	2-1/4
FFK62-32	2	6,000	R632-CFX	XRG-32	R32X	UNC 3/4 - 10	2-3/4

Kit Part Number	Retaining Ring	O-ring
RK-12	R12X	XRG-12
RK-16	R16X	XRG-16
RK-20	R20X	XRG-20
RK-24	R24X	XRG-24
RK-32	R32X	XRG-32

The stainless steel retaining rings and O-rings are recommended for one-time use. Order additional ring kits using the part numbers shown.

D-13



4

В

C

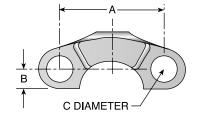
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#### **DIN and ISO Metric Ports**

DIN (German) and ISO (International Organization for Standardization) flange heads are the same as SAE flange heads. By comparison, the ports have the same configuration except that the DIN and ISO Type I ports accept metric bolts. This requires special flange halves in most sizes.

SAE J518	DIN 20078	ISO 6162 Type I
Code 61	Form R	3,5 to 35 MPa Series
Code 62	Form S	35 to 40 MPa Series

#### M1H DIN (ISO) Flange Half



B

C

# Part	DIN Flange	ISO Flange	A	В	С	Maximum Working Pressure	
Number	Size	Size	mm	mm	mm	psi	MPa
M1H-8	8	13	38	8	9	5,000	34,5
M1H-12	12	19	48	10	11	5,000	34,5
M1H-16	16	25	52	12	11	5,000	34,5
M1H-20	20	32	59	14	11	4,000	27,6
M1H-24	24	38	70	17	13.5	3,000	20,7
M1H-32	32	51	78	21	13.5	3,000	20,7
M1H-40	40	64	89	24	13.5	2,500	17,2

Note: High pressure applications also require the use of Code 62 Flange End hose fittings.

#### M1M1HK

DIN (ISO) Flange Kit (Code 61)

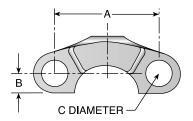
D-14



#	DIN	ISO			(2) Flange	Flange		(4) Bolts	
Part	Flange	Flange	Pres	sure	Halves	O-Ring	Thread	Length	Washers
Number	Size	Size	psi	MPa			mm	mm	
M1M1HK-8	8	13	5,000	34,5	M1H-8	711510-6	M8x1.25	30	10
M1M1HK-12	12	19	5,000	34,5	M1H-12	711510-5	M10x1.50	30	10
M1M1HK-16	16	25	5,000	34,5	M1H-16	711510-4	M10x1.50	30	10
M1M1HK-20	20	32	4,000	27,6	M1H-20	711510-3	M10x1.50	40	10
M1M1HK-24	24	38	3,000	20,7	M1H-24	711510-2	M12x1.75	40	12
M1M1HK-32	32	51	3,000	20,7	M1H-32	711510-1	M12x1.75	40	12
M1M1HK-40	40	64	2,500	17,2	M1H-40	711510-7	M12x1.75	45	12

M2H DIN (ISO) Flange Half (Code 62)

# Part	DIN Flange Size	ISO Flange Size	A	В	С	Maximum Working Pressure	
Number			mm	mm	mm	psi	MPa
M2H-8	8	13	41	8	9	6,000	41,5
M2H-12	12	19	51	11	11	6,000	41,5
M2H-16	16	25	57	13	13,5	6,000	41,5
M2H-20	20	32	67	15	15	6,000	41,5
M2H-24	24	38	79	17	17,5	6,000	41,5
M2H-32	32	51	97	21	22	6,000	41,5



#### M2M2HK

DIN (ISO) Flange Kit (Code 62)

# Part	DIN Flange Size	ISO Flange Size	Maxir Work Press	king	(2) Flange Halves	O-Ring	(4) HF Thread		(4) Washers
Number			psi	MPa			mm	mm	
M2M2HK-8	8	13	6,000	41,5	M2H-8	711510-6	M8x1.25	30	8
M2M2HK-12	12	19	6,000	41,5	M2H-12	711510-5	M10x1.50	35	10
M2M2HK-16	16	25	6,000	41,5	M2H-16	711510-4	M12x1.75	45	12
M2M2HK-20	20	32	6,000	41,5	M2H-20	711510-3	M12x1.75	45	12
M2M2HK-24	24	38	6,000	41,5	M2H-24	711510-2	M16x2.00	55	16
M2M2HK-32	32	51	6,000	41,5	M2H-32	711510-1	M20x2.50	70	20



#### **XCXCHK**

Caterpillar® Flange Kits

#	С	Maximum Working		(4) Bolts	(4)	
Part	Diameter	Pressure		Thread	Length	Washers
Number	inch	psi	O-Ring	mm	mm	
XCXCHK-12	0.406	6,000	XARG-12	3/8-16	1.75	3/8
XCXCHK-16	0.469	6,000	XARG-16	7/16-14	1.75	7/16
XCXCHK-20	0.531	6,000	XARG-20	1/2-13	2.00	1/2
XCXCHK-24	0.656	6,000	XARG-24	5/8-11	2.50	5/8
XCXCHK-32	0.827	6,000	XARG-32	3/4-10	2.75	3/4



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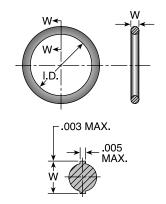
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#### 711509

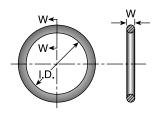
#### O-Rings - SAE Thread (Compound N552-90)\*



# Part	Tube Dash	Tube O.D.	SAE Thread	w		I,D.		
Number	Size	inch	inch	inch	mm	inch	mm	
711509-1	-4	1/4	7/16x20	0.072	1,83	0.351	8,92	
711509-2	-5	5/16	1/2x20	0.072	1,83	0.414	10,52	
711509-3	-6	3/8	9/16x20	0.078	1,98	0.468	11,89	
711509-4	-8	1/2	3/4x16	0.087	2,21	0.644	16,36	
711509-5	-10	5/8	7/8x14	0.097	2,46	0.755	19,18	
711509-6	-12	3/4	1-1/16x12	0.116	2,95	0.924	74,93	
711509-7	-16	1	1-5/16x12	0.116	2,95	1.171	29,74	
711509-8	-20	1-1/4	1-5/8x12	0.118	3,00	1.475	37,47	
711509-9	-24	1-1/2	1-7/8x12	0.118	3,00	1.720	43,69	
711509-10	-32	2	2-1/2x12	0.118	3,00	2.337	59,36	

#### 711510

#### O-Rings - Code 61 and Code 62 Flanges (Compound N552-90)\*



# Part	Flange Dash	Flange Size	w		I.D.		
Number	Size	inch	inch	mm	inch	mm	
711510-6	-8	1/2	0.14	3,53	0.73	18,64	
711510-9*	-10	5/8	0.14	3,53	0.79	20,20	
711510-5	-12	3/4	0.14	3,53	0.98	25,00	
711510-4	-16	1	0.14	3,53	1.29	32,92	
711510-3	-20	1-1/4	0.14	3,53	1.48	37,69	
711510-2	-24	1-1/2	0.14	3,53	1.85	47,22	
711510-1	-32	2	0.14	3,53	2.23	56,74	
711510-7	-40	2-1/2	0.14	3,53	2.73	69,44	
711510-8	-48	3	0.14	3,53	3.35	85,32	

\*Note: For use with petroleum base fluids, other compounds available for Phosphate Ester fluids.

Please contact The Parker Hannifin Seal Group/O-Ring Division (1-800-C-PARKER) for additional information.

## C9RG O-Rings for CA, CE, CF Metric

B

# Part Number	<b>W</b> mm	I.D.
C9RG-8	1,5	6,0
C9RG-10	1,5	7,5
C9RG-12	1,5	9,0
CARG-15	2,0	12,0
CARG-18	2,0	15,0
CARG-22	2,0	20,0
CARG-28	2,0	26,0

# **C9RG**O-Rings for C9, OC, 1C Metric Swivels

# Part Number	W mm	I.D.
C9RG-8	1,5	6,0
	· '	·
C9RG-10	1,5	7,5
C9RG-12	1,5	9,0
C9RG-14	2,0	10,0
C9RG-20	2,4	16,3
C9RG-25	2,4	20,3
C9RG-30	2,4	25,3
C9RG-38	2,5	33,0

# **D9DT**Bonded Seal for BSPP Port Fittings

# Part	I.D.		O.D.	
Number	Inch	mm	Inch	mm
D9DT-4	0.54	13,7	0.81	20,6
D9DT-6	0.68	17,3	0.94	23,9
D9DT-8	0.85	21,6	1.13	28,7
D9DT-10	0.93	23,6	1.25	31,8
D9DT-12	1.06	27,0	1.38	35,1
D9DT-16	1.33	33,8	1.68	42,7

\*Note: D9DT must be ordered from the Tube Fittings Division. Please contact TFD for additional size and product information.



#### **JORG**

#### O-Rings - Seal-Lok®

# Part	Tube Dash	Tube O.D.	SAE Thread		<b>D.</b>		D.
Number	Size	Inch	Inch	Inch	mm	Inch	mm
J0RG-4	-4	1/4	9/16x18	0.301	7,65	0.070	1,78
J0RG-6	-6	3/8	11/16x16	0.364	9,25	0.070	1,78
J0RG-8	-8	1/2	13/16x16	0.489	12,42	0.070	1,78
J0RG-10	-10	5/8	1x14	0.614	15,59	0.070	1,78
J0RG-12	-12	3/4	1-3/16x12	0.739	18,77	0.070	1,78
J0RG-16	-16	1	1-7/16x12	0.926	23,52	0.070	1,78
J0RG-20	-20	1-1/4	1-11/16x12	1.176	29,87	0.070	1,78
J0RG-24	-24	1-1/2	2x12	1.489	37,82	0.070	1,78

Note: O-Rings for use in Seal-Lok® connections are illustrated in actual size. Part numbers for O-Rings used in Seal-Lok® and in SAE port connections are also listed in the table. O-Rings are supplied in Nitrile NBR compound, 90 durometer hardness.

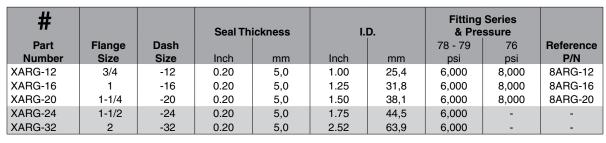


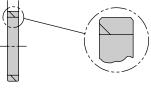


Photo shows an actual comparison between an SAE port O-Ring (top) and a Seal-Lok® O-Ring (bottom). They differ in both diameter and cross section.

#### **XARG**

#### Flange "D" Rings Caterpillar® Style Flanges





B

E



#### 59RG

A

B

D

### O-Rings for Tube O-Ring Fittings and Compressor Fittings

# Part Number	Tube O.D. Inch	Tube Dash Size	Parker Seal Number
59RG-6	3/8	-6	2-011
59RG-8	1/2	-8	2-013
59RG-10	5/8	-10	2-015
59RG-12	3/4	-12	2-017

**Note:** The above O-Rings (RG) have HNBR compound number N1195-70 (green).

#### T1RG

### O-Rings for Compression Fittings (1T126)

# Part Number	Tube O.D. Inch	Tube Dash Size	Parker Seal Number
T1RG-6	3/8	-6	2-012
T1RG-8	1/2	-8	2-014
T1RG-10	5/8	-10	2-016
T1RG-12	3/4	-12	2-018

#### Charge Ports Caps R134a

# Part	Fitting	Port Fitting Fitting Type		
Number	Size	Shape	Flow	Side
940199	-6 & -8	Straight	High	High
940200	-10 & -12	Straight	High	Low
940188	-6 & -8	Elbows	Standard	High
940189	-10 & -12	Elbows	Standard	Low

#### **R12**

# Part Number	Thread
940249	7/16x20

#### **CORG**

#### **Captive O-Ring Assembly Tools**

Parker's new CORG Assembly Tools are designed to facilitate the installation of the O-Ring into the half-dovetail groove of the O-Ring face seal fitting.

Fitting Size	Hand Type Part Number	Bench Type Part Number
-4	CORG-4	CORG-AT04 Bench
-6	CORG-6	CORG-AT06 Bench
-8	CORG-8	CORG-AT08 Bench
-10	CORG-10	CORG-AT10 Bench
-12	CORG-12	CORG-AT12 Bench
-16	CORG-16	CORG-AT16 Bench
-20	CORG-20	CORG-AT20 Bench
-24	CORG-24	CORG-AT24 Bench
-32	CORG-32	





Hand Type

Note: CORG Assembly Tools must be ordered from the Tube Fittings Division (614) 279-7070.

Note: O-Rings listed are for use with petroleum base fluids. Other compounds are available for Phosphate Ester fluids by special order. For Viton® or other O-Ring compounds, consult Parker Hannifin, Seal/O-Rings Products Division (1-800-C-PARKER.)

#### **Partek Defense**

# Reliable, Long-Lasting Protection

Partek Defense is the newest addition to the Partek line of hose sleeving products. Partek Defense is designed to provide protection to personnel and equipment in the event of a hose burst by containing the energy of the burst.

Partek Defense features a multi-layered construction that contains and then dissipates the energy and media within the hose assembly.

Partek Defense can be applied in any hose application but is most valuable in industries such as mining, construction and agriculture where operators are in close proximity to high-pressure hose.

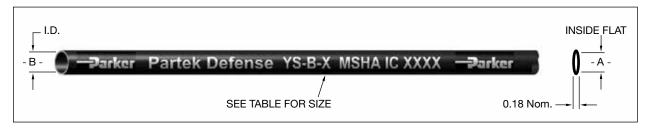


#### **Product Features**

- Contains hose bursts up to 12,000 psi
- · MSHA rated
- Meets ISO 3457, ISO 4413, EN414, MDG41
- Made of high-performance materials and a proprietary weave pattern for reliable, long-lasting protection
- · Easy to assemble

- Packaged in 50-ft. reels for easy storage and access.
- Flexible, does not restrict hose routings
- Specially coated fibers protect against deterioration due to sunlight, ozone and other environmental elements
- Secured to hose shell using hose band and clamps

### **Partek Defense Hose Sleeve**



# Part	Hose Size	Sleeve F	at ID "A"	Sleeve Round ID "B"					
Number	ID*	inch	mm	inch	mm				
YS-B-17	-4	1.92	49	1.22	31				
YS-B-19	-6	2.12	54	1.35	34				
YS-B-22	-8	2.24	57	1.45	36				
YS-B-27	-10	2.55	65	1.63	41				
YS-B-33	-12	2.85	72	1.81	46				

<sup>\*</sup>Approved with 43, 70, 71, 73, 77, 78 and 79 Series fittings.



Hose Products Division Parker Hannifin Corporation Wickliffe, Ohio www.parkerhose.com 4











# **Partek Wrap**

The need for a protective hose sleeve is not always considered while designing for a hose's application. Many hose assembly installations would benefit from a sleeve, but it is not obvious until all the other hoses and components are in place. Parker's Partek Wrap enables the hose sleeve to be installed after the hose assemblies have been positioned and secured in place. The Partek Wrap can be used as extra abrasion protection or to wrap multiple hoses or cables together.

#### **Product Features**

- · Post assembly installation
- · Light weight and highly flexible
- Urethane-coated 1050 Ballistic Nylon
- Ambient temperature range of -60°F to +200°F
- Fast and easy installation
- MSHA Certified for use in underground mines



# Partek Wrap

# Part Number	Bundle O.D.	Circumference inch	Open Width (+/- 0.375) inch	Roll Length	Color
PS-BV-200	2	6.30	7.75	50	Black
PS-BV-300	3	9.40	10.90	50	Black
PS-BV-400	4	12.50	14.00	50	Black
PS-BV-500	5	15.75	17.25	50	Black
PS-BV-700	7	22.00	23.50	50	Black

Other sizes available upon request with minimum order.







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# Accessory Selection Guide – Partek Sleeve (AS-B, AS-Y or PS)

Parker's Partek Nylon Protective Sleeving gives you tough hose abrasion protection two ways. First, per the ISO 6945 specification, Partek has a unique tubular weave nylon construction, Partek "AS" is strong enough to withstand greater than 200,000 abrasion cycles without wearing through the fabric at any location. Partek "PS" can withstand greater than 50,000 abrasion cycles. In addition, this weave also gives an exceptionally smooth interior wall, allowing rubber hose to move freely inside the sleeve. This provides easy installation and prevents any internal abrasion problems. Partek sleeving is available in either black or yellow and in sizes to fit most hydraulic hose. Partek, the quick and easy solution to hose protection in high-abrasion areas.

I.D. "B"

Parker PS-B-X Parker PS-B-X Parker

See table for size

O.18 Nom.

Note: The inside flat "A" dimension corresponds with the inside diameter "B" dimension. For example, AS-Y-13 flat surface "A" is 1.34 in. This offers a .86 in. inside diameter "B". Hose with a smaller O.D. can be specified for this size sleeve. Parker 201-5 hose has a .58 in. O.D. and can easily be inserted in the Partek AS-Y-13 Sleeve.

**Temperature Range:** -67°F to +248°F (-53°C to +120°C)

· MSHA Certified for use in underground mines



**Partek Sleeve** 



Partek "PS" Sleeve

### Partek Sleeve Application - Hose Type/Size

Partek Sleeve Black Part Number	Partek Sleeve Yellow Part Number	Partek PS Sleeve Black Part Number		side neter	SS25UL 201, 206 221FR 225, 235 244 266	213 271 285 293	BXX 302 301LT 304 381 421WC	AX, MX 351TC, 351ST 422, 424 426, 431 436, 451TC 451ST, 471TC 471ST, 472LT, 472TC 482TC, 482ST	273	601 604 636 646	701, 711 721, 721TC 721ST, 722LT 722LT, 722TC 772TC 772ST, 774 787TC, 797TC	731, 781 782TC 782ST 791TC 792LT 792TC 792ST F42, P35	801 804 821 821FR 831 836	811 811HT 881	275	761	Twin Line
AS-B-11			1.07	0.69	-4	-4		-3,-4		0.0	10110,10110	,	-4				
AS-B-13	AS-Y-13	PS-B-13	1.34	0.86	-5,-6	-5,-6	-4,-5	-5,-6	-4	-4,-5			-5,-6				
AS-B-15	AS-Y-15	PS-B-15	1.66	1.06	-8	-8,-10	-6	-8	-6	-6	-6		-8				
AS-B-17	AS-Y-17	PS-B-17	1.92	1.22	-10	-12	-8,-10	-10	-8	-8	-8		-10		-10		
	AS-Y-19		2.12	1.35	-12			-12	-10	-10	-10	-8	-12		-12	-10	
AS-B-22	AS-Y-22	PS-B-22	2.24	1.42	-16	-16	-12			-12	-12	-10	-16	-12	-16		
AS-B-27			2.55	1.63				-16				-12				-12	6-6,8-8
AS-B-33		PS-B-33		1.81	-20	-20	-16			-16	-16	-16		-16		-16	8-8
		PS-B-35		2.19	-24	-24		-20						-20	-20	-20	
AS-B-37	AS-Y-37	PS-B-37		2.38			-20	-24			-20	-20			-24		
		PS-B-39		2.63	-32	-32	-24				-24	-24		-24			
		PS-B-45		2.88	40		-32	-32				-32		-32			
10 5 50		PS-B-47	4.90	3.13	-40	-40					-32			40			
AS-B-58			5.69	3.63	-48	-48								-48			
AS-B-64			6.18	4.00													

Note: 1. The dimensions shown are related to the hose outside diameter and may not fit over the fitting. For over the fitting applications, a larger size sleeve may be required.

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<sup>2.</sup> Cut lengths are available. Contact your local distributor for prices (www.parkerhose.com).



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# **Accessory Selection Guide – PolyGuard (HG)**

- Shield hose from abrasion and cuts
- · Minimize kinking
- · Cannot rust or corrode

Heavy-duty polyethylene provides protection in rugged operating conditions. Great for bundling high-pressure hose lines.

Cut edges can be smoothed by applying heat.

CAUTION: This material will support combustion.

Color: Black

Temperature Range: 0°F to +200°F (-17°C to +93°C)

Lower-cost protection for applications that call for a tighter bend radius and are less demanding.

Cut edges can be smoothed by applying heat. CAUTION: This material will support combustion.

Color: Black

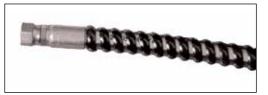
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Temperature Range: 0°F to +200°F (-17°C to +93°C)

- Resist water, oil, gasoline, hydraulic fluid, and most solvents
- Ideal for bundling plastic tubing or hose lines
- · Easy to install without removing hose lines; no clamps needed



PolyGuard



Parkoil™

### PolyGuard (HG), ParKoil (PG) Application - Hose Type/Size

Poly Guard Part Number		Inside Dia.	SS25UL 201, 206 221FR 225, 235 244 266	213 271 285 293	BXX 302 301LT 304 381 421WC	AX, MX 351TC, 351ST 422, 424 426, 431 436, 451TC 451ST, 471TC 471ST, 472LT, 472TC 482TC, 482ST		601 604 636 646	701, 711 721, 721TC 721ST, 722LT 722LT, 722TC 772TC 772ST, 774 787TC, 797TC	792TC 792ST	801 804 821 821FR 831 836	811 811HT 881	275	761	Twin Line
HG-075		0.75	-8,-10	-8,-10	-6,-8	-8,-10	-6,-8	-6,-8	-4,-6		-8,-10		-10		
HG-100		1.00	-12	-12	-10,-12	-12	-10	-10	-8,-10		-12	-12	-12	-10	
HG-125		1.25	-16	-16		-16		-12	-12	-12	-16		-16	-12	
HG-150		1.50	-20,-24	-20,-24	-16,-20	-20		-16,-20	-16	-16,-20		-16,-20	-20	-16	
HG-200		2.00	-32,-40	-32,-40	-24,-32	-2432			-20,-24,-32	-24,-32		-24,-32,-40	-24	-20	
HG-350		3.50	-48	-48								-48			
	PG-038	0.38		-4		-3									
	PG-050	0.50	-4,-5	-5	-3,-4	-4,-5	-4	-4			-4				
	PG-062	0.62	-6	-6,-8	-5	-6					-6				
	PG-075	0.75	-8	-10	-6	-8	-6	-6	-6		-8				
	PG-088	0.88	-10	-12	-8	-10	-8	-8	-8		-10				
	PG-100	1.00	-12		-10,-12	-12	-10	-10	-10	-10	-12		-10	-10	
	PG-138	1.19	-16	-16				-12	-12	-12	-16	-12	-12		
	PG-138	1.38	-20,-24	-20,-24	-16	-16,-20		-16	-16,-20	-16		-16,-20	-16,-20	-12,-16	6-6,6-8
	PG-188	1.88	-32,-40,-48	-32,-40,-48	-20,-24,-32	-24,-32			-24,-32	-20,-24,-32		-24,-32	-24	-20	8-8

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# **Accessory Selection Guide – Spring Guard and Armor Guard**

Parker Spring Guard and Armor Guard are two products that prolong the life of hose lines that are exposed to rugged operating conditions. They distribute bending radii to avoid kinking in hose lines and protect hose from abrasion and deep cuts. Guards are constructed of steel wire and plated to resist rust.



Spring Guard (SG)



Armor Guard (AG)

#### Spring Guard/Armor Guard Application - Hose Type/Size

Spring Guard Part Number		Inside Dia.	SS25UL 201, 261, 206 221FR 225 244 266	213 285 293	275	302 301LT 304 341 381 421WC	273	351TC, 351ST 424, 431 436, 451TC 451ST, 471TC 471ST, 472LT, 482TC, 482ST	601 604 636 646	701, 711 721, 721TC 721ST, 722LT 722TC, 722ST 772TC, 772ST 774	731, 733 782TC 782ST 792LT 792TC 792ST 4240	787TC 797TC	801 804 821 821FR 831 836	811 811HT 881
SG-050		0.50		-4				-3						
SG-060			-4	-5		-3		-4	-3,-4				-4,-5	
SG-066		0.66	-5	-6		-4	-4	-5						
SG-072		0.72	-6			-5	_	-6	-5				-6	
SG-084			-8	-8		-6	-6	-8	-6	-4,-6	-4		-8	
SG-097		0.97	-10	-10		-8	-8	-10	-8	-8	-6	-8	-10	
SG-104		1.04										-10		
SG-106		1.06		-12	-10	-10					-8			
SG-113		1.13	-12		10	40	-10	-12	-10	-10	40	40	-12	
SG-122	-	1.22	4.0	40	-12	-12			40	10	-10	-12	40	40
SG-131		1.31	-16	-16	-16				-12	-12	-12		-16	-12
SG-144 SG-155		1.44	-20	-20	-10	-16		-16	-16	-16		-16		-16
SG-155		1.55	-20	-20	-20	-10		-16	-10	-16	-16	-16		-16
SG-182		1.82	-24	-24	-20			-20	-20		-10			-20
SG-102			-24	-24	-24	-20		-20	-20	-20	-20	-20		-20
SG-209				-32	-24	-20		-24		-20	-20	-20 -24		-24
SG-232			-32	-32		-24				-24	-24	-24		-24
SG-292		2.92	-40	-40		-32		-32		-32	-32	-32		
SG-319			70	70		32		32		32	32	32		-40
			40	40										-
SG-369			-48	-48										-48

<sup>\*</sup>SG-182 for size -20 hose is only for 787TC and 797TC.

Note: Spring Guard and Armor Guard are packaged in 10 ft. pieces.

# **Polyguard Strain Reliever**

Temperature Range: -40°F to +225°F

Material: Flexible PVD

Color: Black (check for availability of other colors)

Part Number	<b>Length</b> inches	Hose O.D.
4PG	7	0.53
6PG	7	0.63
7PG	7	0.69
8PG	7	0.84



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# **Hose Whip Restraint**

#### Safety restraining system for pressure hoses

Parker's Hose Whip Restraint System is designed to prevent whipping of a pressurized hose in the event of the hose separating from its fitting. The Hose Whip Restraint System provides an additional level of safety and helps prevent damage to nearby equipment or injury to operators near the failed hose by limiting the whip or travel of the pressurized hose after it breaks free from its hose fitting. Serious damage or injury can occur from whipping hoses, especially at higher pressures.

The system is comprised of two parts – a hose collar and a cable assembly. The hose collar (WRCxxxx) is selected based

on the outside diameter of the hose, and the cable assembly is selected based on the type of hose connection. Two types of cable assemblies are available – one for flange-type connections (WRFxxx), and the other for port adapters (WRAxxx).

The Hose Whip Restraint is not to be used in place of proper hose crimping procedures as outlined in HPD Catalog 4400. Exceeding the maximum operating pressure of the hose jeopardizes the proper operation of the Hose Whip Restraint System.



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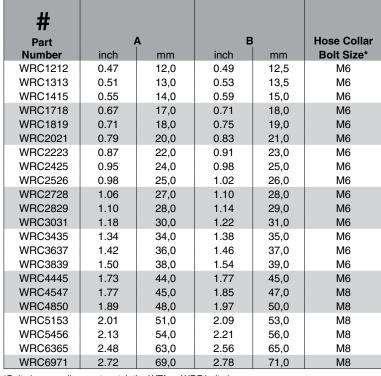
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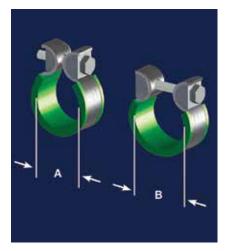
### **Hose collars for Hose Whip Restraint System**

Hose Bands for Hose Restraint System









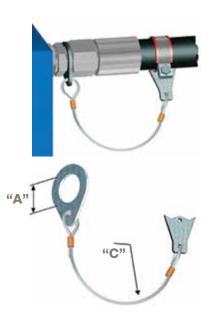


<sup>\*</sup>Bolt size on collar must match the WTA or WRF bolt size.

# Hose Whip Restraint Cable Assemblies for hoses attached with port adapters

#### Retaining system for hose fittings or adapters

#					
Part	A		(	Grip Plate	
Number	inch	mm	inch	mm	Bolt Size*
WRA145	0.57	14,5	11.81	300	M6
WRA170	0.67	17,0	11.81	300	M6
WRA185	0.73	18,5	11.81	300	M6
WRA205	0.81	20,5	11.81	300	M6
WRA225	0.89	22,5	11.81	300	M6
WRA245	0.96	24,5	11.81	300	M6
WRA265	1.04	26,5	11.81	300	M6
WRA305	1.20	30,5	11.81	300	M6
WRA340	1.34	34,0	17.72	450	M8
WRA365	1.44	36,5	17.72	450	M8
WRA425	1.67	42,5	17.72	450	M8
WRA455	1.79	45,5	17.72	450	M8
WRA490	1.93	49,0	17.72	450	M8
WRA525	2.07	52,5	17.72	450	M8
WRA600	2.36	60,0	17.72	450	M8



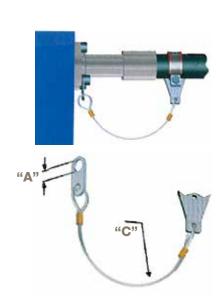
# Hose Whip Restraint Cable Assemblies for hoses using flange-style connections

#### Retaining system for Code 61 and Code 62 flanges

# Part	A			?	Grip Plate
Number	inch	mm	inch	mm	Bolt Size*
WRF085	0.33	8,5	17.72	450	M6
WRF105	0.41	10,5	17.72	450	M8
WRF125	0.49	12,5	17.72	450	M8
WRF145	0.57	14,5	17.72	450	M8
WRF165	0.65	16,5	17.72	450	M8
WRF205	0.81	20,5	17.72	450	M8



The Hose Whip Restraint System has been tested to the operating pressures of the hoses listed in HPD Catalog 4400. The Hose Whip Restraint is not designed to increase the hose rated pressure or to add incremental pressure rating to the hose/fitting combination. Your hose / fitting / whip restraint system is rated to the pressure of the lowest rated component of the system.



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# **Hose Whip Restraint Selection Guide Collar**

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#	4	<b>\</b>	В		201, 221FR, 206, 225,	213,	302, 301LT, 304, 341,	351TC/ST, 422, 424, 431, 436, 451TC/ST, 471TC/ST,			701, 721, 721TC/ST,	731, P35, 781, 782TC/ST,		801, 804, 821, 821FR,	811,	
Part Number	inch	mm	inch	mm	244, 266	285, 293	421WC, BXX	482TC/ST, 472TC/ST	601	692	772TC/ST, 722LT, 774	791TC, 792TC/ST	F42	831, 836	881, 811HT	787TC 797TC
WRC1212	0.47	12,0	0.492	12,5		-4			-3					-4		
WRC1313	0.51	13,0	0.531	13,5	-4		-3	-4								
WRC1415	0.55	14,0	0.591	15,0	-5	-5, -6	-4	-5	-4	-6				-5, -6		
WRC1718	0.67	17,0	0.709	18,0	-6			-6	-5							
WRC1819	0.71	18,0	0.748	19,0	-8	-8	-6		-6			-4		-8		
WRC2021	0.79	20,0	0.827	21,0				-8		-8	-6					-8
WRC2223	0.87	22,0	0.906	23,0	-10	-10	-8		-8	-10	-8	-6		-10		-10
WRC2425	0.95	24,0	0.984	25,0		-12		-10					-8			
WRC2526	0.98	-,-	1.024	26,0			-10		-10			-8		-12		
WRC2728	1.06	27,0	1.102	28,0	-12			-12			-10					-12
WRC2829	1.10	· '	1.142	29,0			-12					-10				
WRC3031	1.18		1.220	31,0	-16	-16			-12		-12	-12	-12	-16	-12	
WRC3435	1.34	- ,-		35,0				-16								-16
WRC3637	1.42	1 1	1.457	37,0		-20			-16		-16				-16	
WRC3839	1.50	38,0	1.535	39,0	-20		-16					-16	-16			
WRC4445	1.73	44,0		45,0	-24	-24			-20						-20	
WRC4547	1.77	· '	1.850	47,0			-20	-20			-20					-20
WRC4850	1.89	48,0	1.969	50,0				-24				-20	-20			
WRC5153	2.01	51,0		53,0							-24				-24	-24
WRC5456		1 1	2.205	56,0	-32	-32	-24					-24				
WRC6365	2.48		2.559	65,0				-32			-32				-32	
WRC6971	2.72	69,0	2.795	71,0								-32				-32



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# **Hose Whip Restraint Selection Guide Adapter**

# Part Number	inch	Mm	JIC 37° Fittings 103XX, 106XX, 137XX, 1L7XX, 139XX, 1L9XX, 141XX, 14VXX Port End	Seal Lok (O-Ring Face Seal) 1JOXX, 1JBXX, 1JCXX, 1JSXX, 1J6XX, 1J7XX, 1J9XX, 1J5XX, 1J1XX Port End	NPTF / NPSM 101XX, 113XX, 11LXX, 102XX, 1S2XX Port End	BSPP / BSP 1D9XX, 192XX, 1B1XX, 1B2XX, 1B4XX, 1B5XX, 1FUXX, 1UTXX, 1GUXX Port End
WRA145	0.57	14,5		-4	-4	-4
WRA170	0.67	17,0				-6
WRA185	0.73	18,5		-6	-6	
WRA205	0.81	20,5	-8			
WRA225	0.89	22,5	-10	-8	-8	-8
WRA245	0.96	24,5				-10
WRA265	1.04	26,5		-10		
WRA305	1.20	30,5	-12, -14	-12	-12	-12
WRA340	1.34	34,0	-16		-16	-16
WRA365	1.44	36,5				
WRA425	1.67	42,5	-20	-16	-20	-20
WRA455	1.79	45,5		-20		
WRA490	1.93	49,0	-24		-24	-24
WRA525	2.07	52,5		-24		
WRA600	2.36	60,0				

<sup>-4</sup> and -6 JIC fittings not recommended for use with Hose Whip Restraint System. Contact HPD for other style fittings.

### **Flange**

# Part Number	inch	<b>\</b> mm	5050HK	5151HK	НЕНЕНК	8ҒНҒНК	м1м1нк	M2M2HK	FFK61	FFK62
WRF085	0.33	8,5		-8						
WRF105	0.41	10,5		-12, -16	-12	-12	-8, -12, -16, -20	-8, -12	-12, -16	-12
WRF125	0.49	12,5	-20	-20	-16	-16	-24, -32, -40	-16, -20	-20	-16
WRF145	0.57	14,5	-24, -32	-24, -32, -40	-20				-24, -32	-20
WRF165	0.65	16,5		-48	-24			-24		-24
WRF205	0.81	20,5			-32			-32		-32

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5



# **Accessory Selection Guide – Firesleeve (FS-F)**

Parker Firesleeve is a flame resistant sheath that protects the hose from extreme temperature conditions. Firesleeve easily slides over hoses and readily expands over fitting. It can be assembled with Parker FSC or properly sized wormgear clamp.

**Construction:** Braided fiberglass sleeve and an orange, bonded and seamless silicone rubber cover.

**Specifications:** Conforms to SAE Aerospace Standard 1072A Type 2A.

Temperature Range: -54°C to +260°C (-65°F to +500°F).





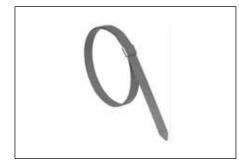
Note: The Firesleeve inside dimension (I.D.) must exceed the outside diameter (O.D.) of the hose and offer an allowance for easy hose insertion. For example, 201-16 has a 1.23 in.O.D. FS-S-24, with an I.D. of 1.46 in., is the suggested Firesleeve.

Note: Parker FSC Clamp fits all hoses up to 2 in, O.D.

**Note:** Parker HC Clamps (wormgear) are listed on page D-31.



Firesleeve (FS-F)



**FSC Clamp** 

Part Number: FSC (One size fits all hoses up to 2 inch O.D.)

### Proudly offering the following certifications and specifications

• UL 1441 Certified

B

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- VW1 Flame Test Certified
- MSHA Certified for use in underground mines
- SAE AS1072E
- GL Germanischer Lloyd Certified for 800°C for 30 minutes
- BS EN 373 Molten Splash Tested
- BS EN 388 Abrasion Tested

- BS EN ISO 6940 Flame Resistance Tested
- BS EN ISO 6530 Oil Resistance Tested
- BS 2576 Tensile Strength Tested
- DIN 54837 / 5510-2 Rail Vehicle Certified for Resistance to Combustibility
- DIN 5659-2 /5510-2 Rail Vehicle Certified for Toxicity
- ASTM C177 Thermal Conductivity

### "FS - F" Application - Hose Type/Size

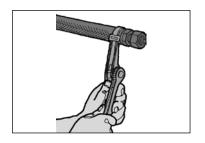
# Part Number	Inside Dia.	SS25UL 201, 206 221FR 225, 235 244 266	213 271 285 293	BXX 302 301LT 304 381 421WC	AX, MX 351TC, 351ST 422, 424 426, 431 436, 451TC 451ST, 471TC 471ST, 472LT, 472TC 482TC, 482ST	273	604 636	701, 711 721, 721TC 721ST, 722LT 722TC, 722ST 772TC, 772ST 774 787TC, 797TC	731, 781 782TC 782ST 791TC 792LT 792TC 792ST F42, P35	801 804 821 821FR 831 836	811 811HT 881	275	761	Twin Line
FS-F-10	0.58	-4	-4	-3	-3,-4		-3	, , , , , ,		-4				
FS-F-11	0.65	-5	-5	-4	-5	-4	-4							
FS-F-12	0.71		-6	-5						-6				
FS-F-14	0.84	-6,-8	-8	-6	-6	-6	-5,-6			-8	-6			
FS-F-16	0.96		-10		-8	-8		-6	-4					
FS-F-18	1.08	-10	-12	-8,-10	-10		-8	-8		-10	-8			
FS-F-20	1.21	-12		-12	-12	-10	-10	-10	-8	-12	-10	-10		
FS-F-22	1.34							-12						
FS-F-24	1.46	-16	-16		-16				-12	-16	-12	-12	-10	6-6,6-8
FS-F-30	1.84	-24	-24					-16	-16		-16	-20	-16	8-8
FS-F-38	2.34	-32	-32	-20,-24	-24			-20,-24	-20		-24	-24	-20	
FS-F-40	2.46								-24					

D-28

Note: See Page D-29 for Firesleeve assembly instructions.

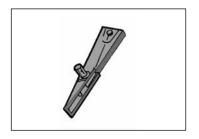


# **Accessory Selection Guide – Firesleeve (cont.)**



**FSC Clamp** 

Used to attach firesleeve around socket on hose sizes with a 2" maximum O.D.



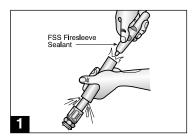
**FST Clamp Tool** 

Part Number: FST-711617 Used to secure FSC clamp.

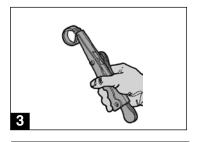


**FSS Firesleeve Sealant** 

Keeps end of firesleeve from fraying for neater, longer lasting installation.



# 2





# **Firesleeve**

#### **Assembly Instructions**

- Assemble one end fitting on hose. Cut firesleeve to same length as hose. Cover approximately 1" of each end of firesleeve with FSS sealant and allow to dry.
- Push firesleeve back from cut end of hose and assemble the second end fitting. Then pull firesleeve completely over both sockets.
- 3. Insert tail of FSC clamp into FST clamping tool.
- Position clamp around middle of socket and tighten with tool. Bend end of band back over buckle. Repeat on other end. Repair any scuffs or abrasions in firesleeve with FSS sealant.

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# **Accessory Selection Guide - CL Clamp**

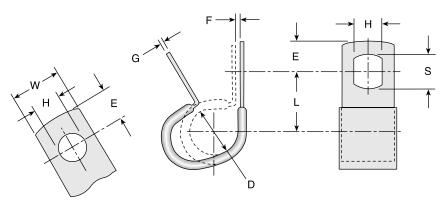
Vinyl coated steel clamps provide hose support where long lengths are used. Provides neater installation of hose lines, minimizes hose chafing and prevents damage to hose.

Material: CR Steel with Zinc Plating

Coating: Black Vinyl Plastisol - 0,8 mm (0.03 inch) thick.

Temperature Range: -40°C to +107°C (-40°F to +225°F).





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Part	±0,8	±0.031	±0,1	±0.005	±0,8	±0.031	±0,25	±0.01	±0,4	±0.015	±0,8	±0.031	±0,1	±0.004	±0,5	±0.020
Number	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)
CL-6	7,90	0.312	10,30	0.406	17,45	0.687	19,05	0.750	11,10	0.437	0,80	0.031	0,80	0.032	12,70	0.500
CL-7	9,50	0.375	10,30	0.406	18,25	0.718	19,05	0.750	11,10	0.437	1,55	0.062	0,80	0.032	12,70	0.500
CL-8+	11,10	0.437	10,30	0.406	19,05	0.750	19,05	0.750	11,10	0.437	1,55	0.062	1,20	0.048	12,70	0.500
CL-9	12,70	0.500	10,30	0.406	19,85	0.781	19,05	0.750	11,10	0.437	1,55	0.062	1,20	0.048	12,70	0.500
CL-10+	14,25	0.562	10,30	0.406	20,60	0.812	19,05	0.750	11,10	0.437	1,55	0.062	1,20	0.048	12,70	0.500
CL-11	15,90	0.625	10,30	0.406	21,40	0.843	19,05	0.750	11,10	0.437	1,55	0.062	1,20	0.048	12,70	0.500
CL-12	17,45	0.687	10,30	0.406	22,20	0.875	19,05	0.750	11,10	0.437	1,55	0.062	1,20	0.048	12,70	0.500
CL-13	19,05	0.750	10,30	0.406	23,00	0.906	19,05	0.750	11,10	0.437	1,55	0.062	1,20	0.048	12,70	0.500
CL-14	20,60	0.812	10,30	0.406	23,80	0.937	19,05	0.750	11,10	0.437	1,55	0.062	1,20	0.048	12,70	0.500
CL-15+	22,20	0.875	10,30	0.406	24,60	0.968	19,05	0.750	11,10	0.437	1,55	0.062	1,20	0.048	12,70	0.500
CL-16	23,80	0.937	10,30	0.406	25,40	1.000	19,05	0.750	11,10	0.437	1,55	0.062	1,20	0.048	12,70	0.500
CL-17	25,40	1.000	10,30	0.406	26,20	1.031	19,05	0.750	11,10	0.437	1,55	0.062	1,20	0.048	12,70	0.500
CL-18+	26,95	1.062	10,30	0.406	26,95	1.062	19,05	0.750	11,10	0.437	1,55	0.062	1,20	0.048	12,70	0.500
CL-19	28,60	1.125	10,30	0.406	27,75	1.093	19,05	0.750	11,10	0.437	1,55	0.062	1,20	0.048	12,70	0.500
CL-20+	30,20	1.188	13,50	0.531	31,75	1.250	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-21	31,75	1.250	13,50	0.531	32,55	1.281	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-22+	33,30	1.312	13,50	0.531	33,30	1.312	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-23	34,90	1.375	13,50	0.531	34,10	1.343	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-24+	36,50	1.437	13,50	0.531	34,90	1.375	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-25	38,10	1.500	13,50	0.531	35,70	1.406	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-26+	39,65	1.562	13,50	0.531	36,50	1.437	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-27+	41,25	1.625	13,50	0.531	37,30	1.468	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-29	44,45	1.750	13,50	0.531	38,90	1.531	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-31+	47,65	1.875	13,50	0.531	40,45	1.593	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-33	50,80	2.000	13,50	0.531	42,85	1.687	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-36+	55,55	2.187	13,50	0.531	46,00	1.812	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-37	57,15	2.250	13,50	0.531	46,00	1.812	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-38+	58,70	2.312	13,50	0.531	49,20	1.937	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-41+	63,50	2.500	13,50	0.531	50,80	2.000	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625
CL-43	66,65	2.625	13,50	0.531	58,70	2.312	25,40	1.000	14,25	0.562	1,55	0.062	1,20	0.048	15,90	0.625

D-30

+Non-standard. Please contact Parker Hannifin Hose Products Division.



B







# Accessory Selection Guide - HC, 88HC-H and 88DB Clamp

The Parker HC Clamp is a stainless steel worm gear clamp designed for low pressure industrial hose applications.

Material: Stainless steel

Specifications: SAE J1508, Type F and Type HD

# **HC Hose Clamp Table**

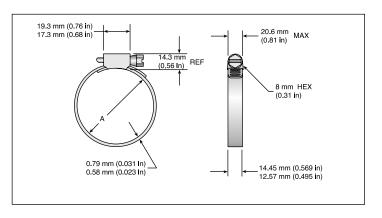
#		"A" Clamp Diameter							
Part	Size	Minir	num	Maximum					
Number	(SAE)	mm	inch	mm	inch				
HC-6	-8	12	0.48	25	1.00				
HC-8	-10	13	0.50	28	1.12				
HC-10	-12	13	0.50	32	1.25				
88HC-12	-16	19	0.75	38	1.50				
88HC-16	-20	19	0.75	44	1.75				
88HC-20	-24	25	1.00	51	2.00				
88HC-24	-28	33	1.31	57	2.25				

# **88HC-H**Series Hose Clamp (High Torque Wormgear)

#	
Part	Hose I.D.
Number	inch
88HC-16C	3/4
88HC-16H	1
88HC-20H	1-1/4
88HC-24H	1-1/2
88HC-32H	2



**Note:** See 88 Series Assembly Instructions for proper 88HC-H clamp attachment.

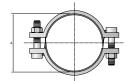


# 88DB

Series Heavy Duty Hose Clamp (Double Bolt Hose Clamp)

#						
Part	Hose I.D.					
Number	inch					
88DB-12	3/4					
88DB-16	1					
88DB-20	1-1/4					
88DB-24	1-1/2					
88DB-32	2					

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B

# Accessory Selection Guide – Protection Shields (HP, HT, and HP-B)

Prevent hose abrasion while extending your hose life. Parker Hose Protection Shields extend hose life by protecting the hose from abrasion that occurs when hose rubs against other hose, metal or concrete. Parker hose shields are resistant to oil, lubricants, gasoline, most solvents and can withstand ambient temperatures from -40° to +300° F. Easily installed and secured by cable ties without disconnecting any hose lines. Use with hose from 1/4" to 2" I.D.

- Eliminate hose abrasion on concrete, metal or any rough surface.
- Guard against hose deterioration on mobile hydraulic equipment.
- Let Parker fill all your hydraulic and pneumatic hose product needs.

Hose Protector Shields are a fast and extremely cost effective way to isolate fluid lines from direct contact with other lines, components or structural members. They're available in 4-inch, 6-inch and 8-inch lengths and the width can be trimmed to satisfy a variety of situations.

These flexible protectors simply clamp around the hose and are securely held in place by nylon cable ties which are included. The cable ties are recessed in molded grooves to protect them from abrasion. You don't need to disconnect a line to install a Parker Hose Protector Shield the way you do with a continuous tubular sleeve. Just wait until the installation is up and running to see exactly where contact needs to be prevented.

Parker Hose Protector Shields are available in bulk quantities and in convenient assortments in 4", 6" and 8" sizes. Cable ties are included with all protectors and are also available in bulk.

Hose Shields		Tie Wraps	
HP-B-13X18-KIT	2 ea. HP-B-13 RFL	HT-12-KIT	30 ea. HT-12 Tie Wraps
	2 ea. HP-B-15 RFL	HT-16-KIT	30 ea. HT-16 Tie Wraps
	4 ea. HP-B-18 RFL	HT-22-KIT	15 ea. HT-22 Tie Wraps

20 Hose Protectors and 60 Tie Wraps for each size are in point of purchase display box.

HP-B-13-RFL	10 ea. HP-B-13 Hose Protectors (	4").

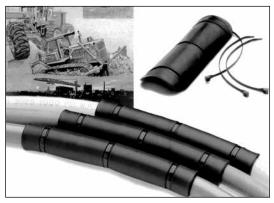
30 ea. HT-12 Tie Wraps in a sealed plastic bag.

HP-B-15-RFL 10 ea. HP-B-15 Hose Protectors (6").

30 ea. HT-16 Tie Wraps in a sealed plastic bag.

HP-B-18-RFL 5 ea. HP-B-18 Hose Protectors (8").

15 ea. HT-22 Tie Wraps in a sealed plastic bag.





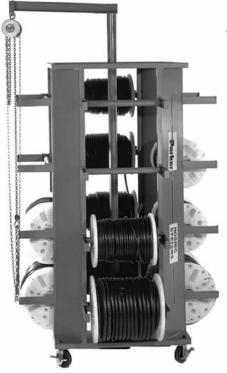
Contact your authorized Parker Hose Products Distributor for pricing and delivery information.

**Note:** Parker Hose Protector Shield products are intended to prevent damage. They are not suitable as patches or repairs for lines which are already damaged or worn beyond safe use standards.

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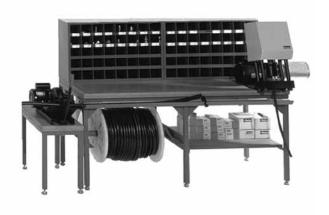
### **HPD Hose Assembly Workstations**



Hose Products Division has set up an agreement to enable our customers to purchase directly from our vendor, Safety Step.

Safety Step's contact information is:

Safety Step Jeff Lewis 888-448-4237 jlewis@safetystep.net



#### The complete on-site complete hose assembly workstation design (above) includes:

- TH7-5-C-6' table with 1 hose reel and 1 bottom shelf
- TH7-6—16 hose reel system, with rotating base
- TH7-7—15" wide table set up for Parker 239 or 339 Cut-Off Saw

#### Specifications: HoseFab Table (heavy duty)

- · Laminated wood table top
- 1-1/2" square tubing structure
- Gussetted corner braces
- 6-leg design
- · All legs have adjustable feet
- · Hose reel/shelf combinations
- 40B-Cabinet or 72B-Cabinet for fitting storage
- Optional: Hose trough for measurement of hose
  - Calibrated to line up to Saw Table
  - · Adjustable stop for standard length cuts
  - Built-in tape measure

- (2) 40B-Cabinet 40 openings 4·1/2" x 4·1/2" x 12" in size
- TH7-6-C—Optional overhead crane
- TH7-5-HT—Optional 6' measured hose trough with adiustable hose stop

#### Specifications: Rotary Reel Rack (TH7-6)

- 16 Hose reel capacity
- Compact design
- Rotates for 1 man use
- · Center post bolts to floor in 4 places
- Optional: Overhead crane

#### Specifications: Saw Table (TH7-7)

- Calibrated to line up to Hose trough
- Adjustable feet
- Mounts to 6-foot bench

#### Specifications: 3 or 4 Reel Rack

- Free standing 3 reel rack (TH7-8)
- · Bolts to floor
- Optional: 4th reel capacity with wall mounts (TH7-8-F)



Pictured left is a complete on-site hose assembly workstation, the Parker Kart:

The **Parker Kart, TH7-4**, is a portable all-in-one unit designed to hold a Minikrimp, Karrykrimp, Karrykrimp 2, or Parkrimp 1; a 332T-115V Cut-off Saw; 4 reels of hose; and has a 40 bin cabinet with 3 drawers for tools. The TH7-4 can be customized to fit your specific hose assembly needs. Contact Parker HPD or your Parker Hose distributor for details.

Note: Part number TH7-4 does not include hose, fittings or equipment.

See Safety Step contact information at the top of this page

 $\textbf{Note:} \ \ \textbf{Part number and specifications of components for both work stations are listed on the following pages.}$ 

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Hose Products Division Parker Hannifin Corporation Wickliffe, Ohio www.parkerhose.com 4

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### HoseFab Table

#### Features

Heavy duty constructed table for mounting Minikrimp, Karrykrimp, Karrykrimp 2, or Parkrimp 1. HoseFab Table is available in 3 versions to meet your requirements. Options include two 40B-Cabinets or 72B-Cabinets for fitting storage.

Part Number	Description
-------------	-------------

TH7-5-R 6' table with 2 hose reels
TH7-5-S 6' table with 2 bottom shelves

TH7-5-C 6' table with 1 hose reel and 1 bottom shelf

TH7-5-HT Optional 6' measured hose trough with adjustable hose stop

40B-Cabinet 40 openings - 4·1/2" x 4·1/2" x 12" in size 72B-Cabinet 72 openings - 4·1/2" x 4·1/2" x 12" in size

#### Table measurements:

Height - 31-3/4" Width - 29" Length - 72"

# **Rotary Reel Rack**

#### Features

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16 Hose reel capacity that fits in a compact area. Supplied with heavy duty casters which allow for ease of turning, even when fully loaded. Optional overhead crane available.

#### Part Number Description

TH7-6 16 hose reel system, with rotating base

TH7-6-C Optional overhead crane

#### Rack measurements:

Height - 104" (120" with optional overhead crane)

Width - 67" Length - 67"

### **Saw Table**

#### **Features**

The Saw Table, specially designed for Parker 239 or 339 Hose Cut-Off Saw, attaches directly to the HoseFab Table.

#### Part Number Description

TH7-7 15" wide table set up for Parker 239 or 339 Cut-Off Saw

Table measurements:

Height - 18" Width - 28" Length - 14"

### 3/4 Reel Rack

#### **Features**

Compact in its design, the standard version will hold 3 reels of hose. Optional 4th reel capacity designed with wall anchor mounts.

#### Part Number Description

TH7-8 Upright 3 hose reel rack

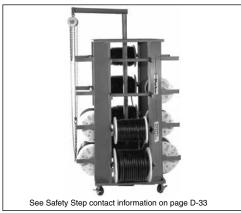
TH7-8-F Optional extension with wall anchor for 4th reel

#### Rack measurements:

Height - 59" (82·1/2" with 4th reel option)

Width - 27·3/4" Length - 27·1/2"













### Parker Kart Part No. TH7-4

Parker Kart organizes and stores all your necessary Parker hoses, fittings, power and hand tools - everything you need to make fast hose assemblies on site. As a valued addition to any facility, Parker Kart will save on downtime and labor costs, as well as eliminate errors in cutting and fitting attachment. With Parker Kart, you'll always have the materials you need, right when and where you need them.

- Easy one-man movement
- Eight-inch urethane casters with brakes
- Forklift carry tubes
- · Electric receptacle with cord
- Fitting bins and drawers
- Large tool drawer
- Four hose reel holders
- Choice of Parker crimping equipment
- Optional accessories available

Parker Kart can be customized to fit specific hose assembly needs. Parker Kart does not include hose, fittings or equipment.



# Fitting Stock Bins 72B-Cabinet

36" wide, 43" high, 12" deep, with 72 openings each 4-1/2" x 4-1/2" x 12", heavy duty steel, all welded construction. Product bin labels are available.



# Hose Stock Bins HR6-Hose-Bin

Rugged metal cabinet for stocking coils of Parker hose 36" wide, 28" high, 20" deep, with upright separators to provide 6 compartments varying in width from 4" to 8".

Provides suitable base on which to place the fittings stock bin (top measures 36" x 20", bottom of fittings bin measures 36" x 12".)

Yellow with black "Parker Hose" lettering.

D-35



4

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A

В

C

D

E





Comprehensive information that helps you connect with the right hose and fittings. Visit **www.parkerhose.com** for the latest technical data.

# **Technical**



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### Flow Capacities at **Recommended Flow Velocities**

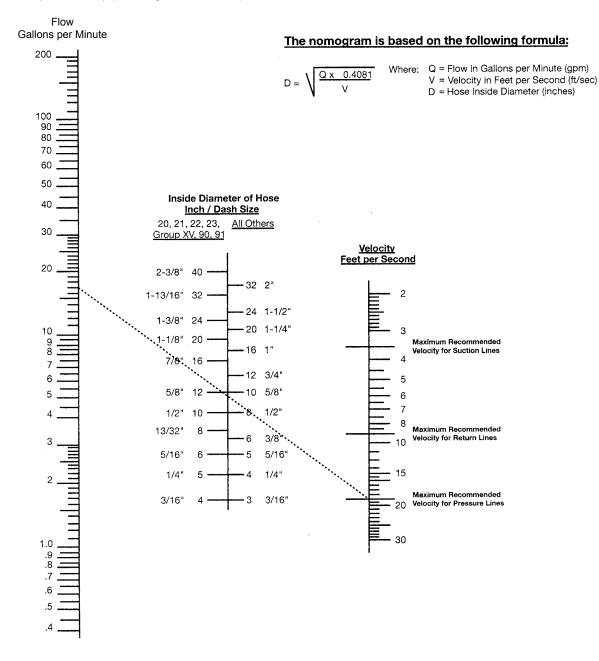
The nomogram below is provided as an aid in determining the correct hose size.

How to use the nomogram: Determine the proper flow rate your system requires, then connect a straight edge from the selected flow rate to the recommended velocity range. The required hose I.D. will appear at the intersection of the straight edge and the center column. If the straight edge passes through the scale between sizes listed, use the next larger I.D. hose.

Example: Locate 16 gallons per minute in the left-hand column and 20 feet per second (fps) in the right-hand column (the maximum

recommended velocity range for pressure lines). Lay a straight edge across these two points. The inside diameter required is shown in the center column at or above the straight edge. In this case, we need a hose I.D. of 0.625 (5/8") inch (or larger).

Use the same procedure for suction of return lines, except utilizing their respective maximum recommend velocities.



E-3



B



# **Hose Flow Capacities Pressure Drop**

Α	
A	
	I

В

C

D

Ē

Hose Dash Size Hose I.D. (Inches)		-04		-04 -05		-06		-08		-10		-12		-16		-20		-24		-32		-40	-4
		0.19	0.25	0.25	0.31	0.31	0.38	0.41	0.50	0.50	0.63	0.63	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.81	2.00	2.38	3.0
	0.25	10.0	3.1	3.1																			Г
•	0.5	19.0	6.0	6.0	2.7	2.7																	Г
	1	40.0	12.0	12.0	5.5	5.5	2.4																H
	2	95.0	24.0	24.0	10.0	10.0	4.8	3.5															t
	3	185.0	46.0	46.0	17.0	17.0	7.0	5.0	2.2	2.2													r
	4		78.0	78.0	29.0	29.0	12.0	8.0	3.0	3.0	1.2	1.2											r
	5		120.0	120.0	44.0	44.0	18.0	12.0	4.5	4.5	1.6	1.6	0.7										t
	8				95.0	95.0	39.0	26.0	10.0	10.0	3.6	3.6	1.4	0.6									t
	10						59.0	40.0	15.0	15.0	5.7	5.7	2.0	1.0	0.6								t
	12						80.0	52.0	20.0	20.0	7.2	7.2	2.6	1.5	0.8	0.4							t
	15							75.0	30.0	30.0	10.0	10.0	4.2	2.2	1.2	0.7	0.4						r
	18							107.0	40.0	40.0	15.0	15.0	6.3	3.0	1.5	0.7	0.6	0.4					r
	20								49.0	49.0	19.0	19.0	8.0	3.4	2.0	1.1	0.7	0.4	0.3				r
	25								72.0	72.0	26.0	26.0	11.0	5.5	3.0	1.6	1.0	0.6	0.4	0.2			T
	30										34.0	34.0	14.0	7.0	3.6	2.2	1.3	0.8	0.5	0.2	0.1		T
	35										47.0	47.0	19.0	9.5	5.0	2.8	1.7	1.1	0.7	0.3	0.2		Γ
	40												25.0	12.0	6.5	3.4	2.2	1.4	0.9	0.4	0.2		Γ
	50												36.0	17.0	9.0	5.3	3.3	2.0	1.3	0.5	0.4	0.2	Γ
	60												50.0	23.0	12.0	7.5	4.4	2.8	1.8	0.8	0.5	0.2	Γ
	70													31.0	17.0	9.3	6.0	3.8	2.4	1.0	0.7	0.3	Γ
	80													38.0	21.0	12.0	7.1	4.6	3.0	1.2	0.8	0.3	Γ
	90													49.0	27.0	15.0	9.0	5.9	3.8	1.5	1.0	0.5	
	100														33.0	19.0	12.0	7.0	4.7	1.9	1.3	0.6	Г
	150														60.0	36.0	22.0	13.0	8.5	3.4	2.2	1.0	
	200																36.0	23.0	15.0	6.0	3.9	1.7	
	250																54.0	33.0	22.0	8.5	5.3	2.5	
	300																	45.0	29.0	12.0	7.5	4.0	
	400																		51.0	21.0	14.0	6.5	
	500																			32.0	20.0	10.0	
	800																					18.0	
	1000																						ŀ

Pressure drop in psi (pounds per square inch) per 10 feet of hose (smooth bore) without fittings.

Fluid specification: Specific gravity = 0.85; Viscosity = v = 20 centistokes (C.S.), (20 C.S. = 97 S.S.U.)

Pressure drop values listed are typical of many petroleum based hydraulic oils at approximately +100°F (+38°C). Differences in fluids, fluid temperature and viscosity can increase or decrease actual pressure drop compared to the values listed.





# Temperature / Pressure Chart - 201, 206, 213, and 266 Hose

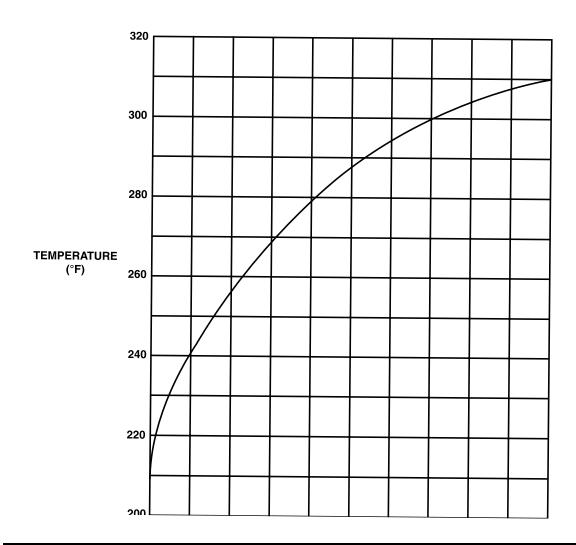
The Temperature / Pressure Chart identifies the effects temperature change has on the maximum working pressure of specific hoses.

#### How to use the chart:

- 1st Identify the Maximum Working Pressure of selected hose.
- 2nd Identify the maximum working temperature of the application.
- 3rd Locate point where temperature and Percent of Maximum Working Pressure intersect on the chart.
- 4th Based on percentage figure, calculate Maximum Working Pressue of the application.

Example: 201-8 hose to be used a 250°F (121°C)

Maximum Working Pressure up to 212°F (100°C)	x	(Multiplier from chart)	Maximum = Working Pressure at 250°F (121°C)		
2,000 psi	х	(85%)	=	1,700 psi	



E-5



4

В

D

B



# Minimum/Maximum Temperature

(Page 1 of 4)

Hose	Petroleum base hydraulic fluids and lubricating oils	Antifreeze solutions	Diesel fuels	SAE J1942 Marine lube oil and diesel fuel systems (Application Code F)**
201*	-40°C to +150°C (-40°F to +302°F)	-40°C to +150°C (-40°F to +302°F)	-40°C to +150°C (-40°F to +302°F)	x
206*	-48°C to +150°C (-55°F to +302°F)	-48°C to +150°C (-55°F to +302°F)	-48°C to +150°C (-55°F to +302°F)	x
213*	-45°C to +150°C (-50°F to +302°F)	-45°C to +150°C (-50°F to +302°F)	-45°C to +150°C (-50°F to +302°F)	x
221FR	-20°C to +100°C (-4°F to +212°F)	х	-20°C to +100°C (-4°F to +212°F)	-20°C to +100°C (-4°F to +212°F)
266*	-48°C to +150°C (-55°F to +302°F)	-48°C to +150°C (-55°F to +302°F)	-48°C to +150°C (-55°F to +302°F)	x
271	x	X	X	x
293	-50°C to +150°C (-58°F to +302°F)	-50°C to +150°C (-58°F to +302°F)	-50°C to +150°C (-58°F to +302°F)	x
302	-40°C to +100°C (-40°F to +212°F)	X	X	-40°C to +100°C (-40°F to +212°F)
304	x	X	X	×
351TC/ST	-40°C to +100°C (-40°F to +212°F)	x	x	x
422	-40°C to +100°C (-40°F to +212°F)	x	×	-40°C to +100°C (-40°F to +212°F)
424	x	x	×	x
426	-46°C to +150°C (-50°F to +302°F)	x	x	-46°C to +150°C (-50°F to +302°F)
431	-40°C to +125°C (-40°F to +257°F)	×	×	×
436	-48°C to +150°C (-55°F to +302°F)	×	×	×
451TC/ST	-40°C to +100°C (-40°F to +212°F)	x	x	x
471TC/ST	-40°C to +100°C (-40°F to +212°F)	x	×	x
472LT	-57°C to +100°C (-70°F to +212°F)	x	x	x
472TC	-40°C to +100°C (-40°F to +212°F)	Х	х	x
482TC/ST	-40°C to +100°C (-40°F to +212°F)	×	x	×
611HT	-48°C to +150°C (-55°F to +302°F)	-45°C to +150°C (-55°F to +302°F)	-45°C to +150°C (-55°F to +302°F)	×
701	-40°C to +100°C (-40°F to +212°F)	X	Х	x
711	-40°C to +100°C (-40°F to +212°F)	х	X	x
721	-40°C to +125°C (-40°F to +257°F)	x	x	x
721TC/ST	-40°C to +125°C (-40°F to +257°F)	Х	х	x
722LT	-57°C to +100°C (-70°F to +212°F)	×	x	×
772LT	-57°C to +100°C (-70°F to +212°F)	×	x	×
722TC	-40°C to +125°C (-40°F to +257°F)	x	х	x
792LT	-57°C to +100°C (-70°F to +212°F)	x	х	x
787TC	-40°C to +125°C (-40°F to +257°F)	x	x	x
797TC	-40°C to +125°C (-40°F to +257°F)	X	X	x
F42	x	X	x	×
301LT	-55°C to +100°C (-67°F to +212°F)	×	X	×

<sup>\*</sup> The maximum working pressures for these hoses are reduced at temperatures above +212°F (+100°C). Consult the pressure/temperature curve on E-5 for the reduced maximum working pressure.

\*\* Maximum service pressure for lube oil and fuel systems applications (Code F) may be less than maximum service pressure for other systems applications, e.g.,



<sup>\*\*</sup> Maximum service pressure for lube oil and fuel systems applications (Code F) may be less than maximum service pressure for other systems applications, e.g. Code H. Refer to individual hose listings in Section A and Hose Assemblies List, SAE J1942-1 or HPD Approval Bulletin #APR-004.

# emperature

# Minimum/Maximum Temperature

(Page 2 of 4)

Hose	Petroleum base hydraulic fluids and lubricating oils	Antifreeze solutions	Diesel fuels	SAE J1942 Marine lube oil and diesel fuel systems (Application Code F)**
731	-40°C to +100°C (-40°F to +212°F)	х	х	x
761	-40°C to +125°C (-40°F to +257°F)	x	x	x
772TC/ST	-40°C to +125°C (-40°F to +257°F)	X	x	x
772LT	-50°C to +100°C (-70°F to +212°F)	х	x	x
774	x	х	х	x
787TC	-40°C to +125°C (-40°F to +257°F)	х	x	x
781	-40°C to +125°C (-40°F to +257°F)	х	х	x
782TC/ST	-40°C to +125°C (-40°F to +257°F)	x	x	×
P35	-40°C to +125°C (-40°F to +257°F)	x	x	×
791TC	-40°C to +125°C (-40°F to +257°F)	x	x	x
792TC/ST	-40°C to +125°C (-40°F to +257°F)	X	x	x
797TC	-40°C to +125°C (-40°F to +257°F)	X	x	x
801	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	x	x
804	x	×	×	×
811	-40°C to +100°C (-40°F to +212°F)	X	x	×
821	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	X	x
821FR	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	X	×
836	-48°C to +150°C (-55°F to +302°F)	-48°C to +150°C (-55°F to +302°F)	X	x
881	-40°C to +125°C (-40°F to +257°F)	Х	x	x
AX	-40°C to +100°C (-40°F to +212°F)	x	x	×
BXX	-40°C to +100°C (-40°F to +212°F)	x	x	×
JK	-40°C to +49°C (-40°F to +120°F)	X	х	x
SS23CG	X	X	x	×
SS25UL	X	X	x	×
811HT	-46°C to +125°C (-50°F to +257°F)	Х	x	x

<sup>\*</sup> The maximum working pressures for these hoses are reduced at temperatures above +212°F (+100°C). Consult the pressure/temperature curve on E-5 for the



B

D



reduced maximum working pressure.

\*\* Maximum service pressure for lube oil and fuel systems applications (Code F) may be less than maximum service pressure for other systems applications, e.g., Code H. Refer to individual hose listings in Section A and Hose Assemblies List, SAE J1942/1 or HPD Approval Bulletin #APR-004.

B



# Minimum/Maximum Temperature

(Page 3 of 4)

Hose	Air	Water, water/oil emulsion	Water/glycol hydraulic	Water	Phosphate ester fluids	Polyol ester fluids
201*	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	х	x
206*	+100°C (+212°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
213*	+100°C (+212°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
221FR	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
266*	+93°C (+200°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
271	100°C (212°F)	x	x	x	x	x
293	+93°C (+200°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
302	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
304	+70°C (+158°F)	x	+85°C (+185°F)	+85°C (+185°F)	-40°C to +80°C (-40°F to +176°F)	x
351TC/ST	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
422	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
424	+70°C (+158°F)	x	+85°C (+185°F)	+85°C (+185°F)	-40°C to +80°C (-40°F to +176°F)	x
426	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
431	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
436	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
451TC/ST	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
471TC/ST	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
472LT	+70°C (+157°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	
472TC	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
482TC/ST	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
611HT	+100°C (+212°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
701	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
772LT	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
722LT	x	х	x	x	x	x
722TC	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	х	x
792LT	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
787TC	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
797TC	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
F42	+70°C (+158°F)	x	+85°C (+185°F)	+85°C (+185°F)	-40°C to +80°C (-40°F to +176°F)	x
301LT	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x

<sup>\*</sup> The maximum working pressures for these hoses are reduced at temperatures above +212°F (+100°C). Consult the pressure/temperature curve on E-5 for the



<sup>\*\*</sup> Maximum service pressure for lube oil and fuel systems applications (Code F) may be less than maximum service pressure for other systems applications, e.g., Code H. Refer to individual hose listings in Section A and Hose Assemblies List, SAE J1942/1 or HPD Approval Bulletin #APR-004.

# emperature

# Minimum/Maximum Temperature

(Page 4 of 4)

Hose	Air	Water, water/oil emulsion	Water/glycol hydraulic	Water	Phosphate ester fluids	Polyol ester fluids
711	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	х
721	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
721TC/ST	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
731	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
761	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
772TC/ST	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
772LT	x	x	x	x	x	х
774	+70°C (+158°F)	x	+85°C (+185°F)	+85°C (+185°F)	-40°C to +80°C (-40°F to +176°F)	х
787TC	x	x	x	x	x	x
781	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	х	х
782TC/ST	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
P35	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	х
797TC	x	x	x	x	x	х
791TC	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
792TC/ST	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
801	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	X	х
804	+70°C (+158°F)	×	+93°C (+200°F)	+93°C (+200°F)	+80°C (+176°F)	x
811	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
821	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	х
821FR	+100°C (+212°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
836	+100°C (+212°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
881	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	х
AX	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	X	x
BXX	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	X	х
JK	x	×	x	x	x	х
SS23CG	x	x	x	x	x	x
SS25UL	x	x	x	x	x	x
811HT	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	х

<sup>\*</sup> The maximum working pressures for these hoses are reduced at temperatures above +212°F (+100°C). Consult the pressure/temperature curve on E-5 for the reduced maximum working pressure.



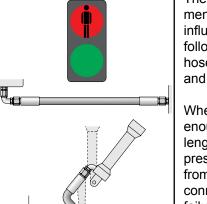
В

<sup>\*\*</sup> Maximum service pressure for lube oil and fuel systems applications (Code F) may be less than maximum service pressure for other systems applications, e.g., Code H. Refer to individual hose listings in Section A and Hose Assemblies List, SAE J1942/1 or HPD Approval Bulletin #APR-004.

# pplication

# **Hose Installation Tips**

#### wrong



The routing of the hose assembly and the environment in which the hose assembly operates directly influence the service life of the hose assembly. The following diagrams indicate the correct routing of hose assemblies that will maximise its service life and assure a safe working functionality.

When hose installation is straight, there must be enough slack in the hose to allow for changes in length that occur when pressure is applied. When pressurized, hose that is too short may pull loose from its hose fittings or stress the hose fitting connections, causing premature metallic or seal failures.

The hose length must be determined so that the hose assembly has enough slack to allow the system components to move or vibrate without creating tension in the hose.

However, do not to allow too much slack and therefore introduce the risk of the hose snagging on other equipment or rubbing on other components.

Mechanical straining of the hoses needs to be avoided, so the hose must not be bent below its minimum bend radius or twisted during installation. The minimum bending radii for each hose is stated in the hose tables in the catalogue.

The plane of movement must also be considered and the hose routing selected accordingly.

Hose routing also plays an important role on the selection of the hose fittings, as the correct fittings can avoid straining the hoses, unnecessary hose length or multiple threaded joints.



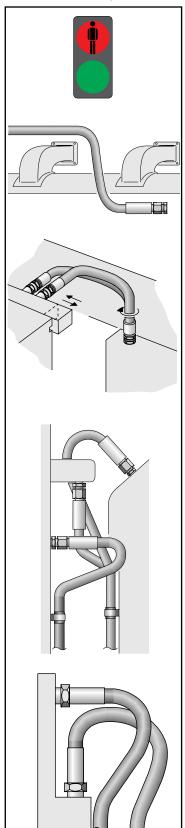




B



#### wrong



Correct clamping (holding/supporting) of the hose should be exercised to securely route the hose or to avoid the hose contacting surfaces that will cause the hose damage. It is however, vital that the hose be allowed to keep its functionality as a "flexible-pipe" and not be restricted from changing in length when under pressure.

It should also be noted that hoses for high- and low-pressure lines shall not be crossed or clamped together, as the difference in changes in length could wear the hose covers.

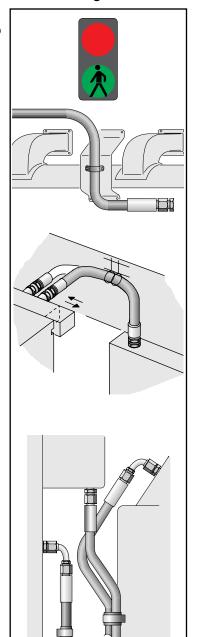
Hose should not be bent in more than one plane. If hose follows a compound bend, it shall be coupled into separate segments or clamped into segments that each flex in only one plane.

Hoses should be kept away from hot parts as high ambient temperatures shorten hose life. Protective insulation may need to be used in unusually high ambient temperature areas.

While the importance of the functionality is primary, the aesthetics and practicality of the installation should also be considered in the design.

Maintenance might be necessary at some point in the future, so prohibitive design routings should be avoided.

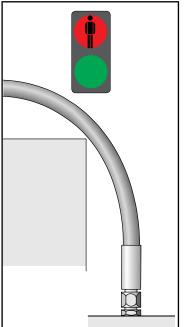
#### right





B

#### wrong

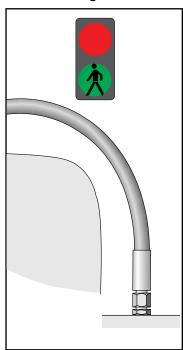


#### **Abrasive influences**

In general care should be taken so that the hose is not exposed to direct surface contact that will cause abrasive wearing of the outer cover (either hose to object or hose to hose contact). If however, the application is such that this cannot be avoided, either a hose with a higher abrasion resistant hose cover or a protective sleeve need to be used.

Parker **TOUGH** COVER (TC) or SUPER **TOUGH** (ST) covers offer 80 times or respectively 450 times the abrasion resistance of standard rubber covers.

### right



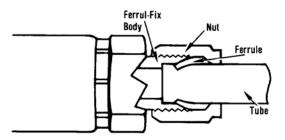
C

В





#### Ferrule-Fix



#### Fast, on-the-job repair for ruptured bent tube hose assemblies and power steering lines.

The life of the combination tube-hose assembly is often limited to the service life of the hose alone. A replacement assembly may not be available, some equipment dealers are unable to stock all of the many odd tube configurations.

Parker FERRUL-FIX, a field attachable, reusable hose end fitting, now makes it possible to salvage the bent tube section of the original assembly for replacement. Most important, it gets you back into operation FAST!

- · Gets you back in operation fast No costly delays while replacement assemblies are rushed from the factory.
- · Lets you reuse expensive bent tube ends with Parker Hose fittings - You can replace the hose at a fraction of the cost of complete assembly.

· Eliminates the need for emergency brazing or welding in the field - Ferrul-Fix can be assembled without special tools or equipment when using Parker Reusable Hose fittings.

3-Piece Design - Body, nut and ferrule. Wedging action of fer rule, when drawn down by nut, forms seal between body and ferrule, while cutting edge of ferrule "bites" into tube wall forming another positive seal

Visible Bite - Extent of bite at cutting edge of ferrule is completely visible when fitting is dis-assembled, an important safety feature. Self-centering action assures even bite around circumference of tube.

Parkerized Finish - Ferrul-Lok fittings have the Parkerized black finish, providing "built-in" lubrication which reduces wrench torque required.

### **Ferrul-Fix Installation Instructions**







E-13





- 1. Cut the formed tube off squarely next to the permanent hose fitting. Lightly deburr the end of the tube internally and externally.
- 2. Disassemble the Ferrul-Fix fitting, and lubricate threads and both ends of the ferrule with Parker Ferulube.
- 3. Slide nut and ferrule onto tubing, with the long, straight end of the ferrule pointing toward the tube end.
- 4. Insert tube end into the Ferrul-Fix body until it bottoms against the shoulder. Slide ferrule inside body, and screw nut down finger
- Wrench nut down 1-3/4 turns to preset the ferrule.
- Disconnect nut and inspect lead edge of ferrule to make certain that the biting edge has turned up a shoulder to a height of at least 50% of the ferrule and completely around the tube.
- 7. Assemble Ferrul-Fix fitting to hose. Refer to assembly instructions listed in appropriate fittings section. Do not assemble to hose before steps 1-6.
- Reassemble tubing into Ferrul-Fix end and turn nut down easily until a sudden increase in force is evident. Turn bent tube to proper position if required. Using two wrenches, one on the fitting nipple hex and the other on the nut tighten nut an additional 1/6 turn (one wrench flat).



B

C



B

# **Performance Standards and Specifications**

Hose	SAE J517	SAE Other	DOT FMVSS 106	USCG MTH (1)	ISO	DNV (2)	EN	MSHA (3)	German Lloyd	ABS	UL-21 LPG	BV	Other
AX		J1942		Н				х					
BXX		J1942		н				X					
F42													
JK	100R2AT				ISO 1436-1 Type 2SN		EN 853 Type 2 SN	X					1J100, NFPA 1936
MX	100R1AT	J1942		Н				X					
P35	100R13	J1942		HF	ISO 3862-1 Type R13	X	EN 853 Type R13	X		X		X	
SS23CG											х		CAN/CGA-8.1- M86 Type III, ECE 110 Class 1
SS25UL											x		AGA - AS/NZS 1869D
201	100R5	J1402 AII	AII										
206	100R5	J1402 AII	AII										
213		J1402 AI	Al										
221FR (4)		J1527 R3, J1942, USCG A1		H, HF	ISO 7840			X	Х	х			ABYC
244		J2064 Type B											
266		J1402 AII	AII										
285		J2064 Type C											
293		J1402 AI	Al										
301LT		J1942		HF		X				X			
302	100R2AT	J1942		HF	ISO 1436-1 Type 2SN	X	EN 853 Type 2 SN			X		X	
304													
351ST	100R19							х					
351TC	100R19							х					
422	100R1AT	J1942		HF	ISO 1436-1 Type 1SN	Х	EN 853 Type 1SN			Х			
424													
426	100R1AT	J1942		HF 				X		X			
431		J1942		Н				X		.,			
436	100017	J1942		HF				X		X			
451ST	100R17	J1942		HF				X		 			
451TC 471ST	100R17	31942		HE	ISO 11237-1		EN857	X		X			
4/151					Type 2SC		Type 2SC	^					
471TC		J1942		HF	ISO 11237-1 Type 2SC	Х	EN857 Type 2SC	X		Х		X	
472LT							EN857 Type 2SC						
472TC		J1942		HF	ISO 11237-1 Type 2SC	х	EN857 Type 2SC	x		x			
482ST	100R1AT				ISO 1436-1 Type 1SN		EN853 Type 1SN	х					

#### KEY TO UNDERSTANDING AGENCY APPROVALS FOR BUILDING HOSE ASSEMBLIES

ABS Approved assemblies can be manufactured at any location with Parker's permission. No restrictions.

DNV Approved assemblies can only be manufactured in a Parker approved location that demonstrates a quality system and management program is in place and must be audited by DNV. Each location must be granted a "license" issued by Parker HPD for building hose assemblies. Three exist today; Davenport lowa Grimsby Canada, and Yangsan Korea. Iowa, Grimsby Canada, and Yangsan Korea.

BV Approved assemblies can only be produced in a BV approved location that demonstrates a quality system and management program is in place. Each location must have an initial audit performed by BV before the "license" can be issued. Additionally, ongoing audits setup by BV will be required at each approved location. Davenport lowa is our only approved assembler.

UL "Listed" Assemblies must be made at Davenport lowa

CSA/CGA Assemblies must be made at Davenport lowa



# pplication

# **Performance Standards and Specifications**

Continued from previous page

Hose	SAE J517	SAE Other	DOT FMVSS 106	USCG MTH (1)	ISO	DNV (2)	EN	MSHA (3)	German Lloyd	ABS	UL-21 LPG	BV
482TC	100R1AT	J1942		Н	ISO 1436-1 Type 1SN		EN853 Type 1SN	х				
611HT	100R6				.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		EN854	X				
701		J1942		H, HF	ISO 3862-1 Type 4SP		EN856- Type 4SP			х		
711		J1942		HF		Х		X		Х		
721	100R12				ISO 3862-1 Type R12		EN856- Type R12	X				
721ST	100R12				ISO 3862		EN856	х				
721TC	100R12	J1942		HF	ISO 3862-1 Type R12	X	EN856- Type R12	X		Х		
722LT	100R12				ISO 3862-1 Type R12		EN856- Type R12					
722TC		J1942		HF		Х		Х		Х		
731		J1942		HF		X	EN856- Type 4SH			X		
761 772LT								Х				
772ST	100R12				ISO 3862-1 Type R12		EN856- Type R12	x				
772TC	100R12	J1942		HF	ISO 3862-1 Type R12	x	EN856- Type R12	x		x		
774												
781	100R13	J1942		HF	ISO 3862-1 Type R13	X	EN856- Type R13	X		X		
782ST	100R13				ISO 3862-1 Type R13		EN856- Type R13	X				
782TC	100R13	J1942		HF	ISO 3862-1 Type R13	х	EN856- Type R13	×		x		х
787TC		J1754, J1942		HF	ISO18752- DC	Х		х		х		
791TC	100R15	J1942		HF	ISO 3862-1 Type R15	х		x		Х		
792ST	100R15				ISO 3862-1 Type R15			x				
792TC	100R15	J1942		HF	ISO 3862-1 Type R15	X		Х		Х		
797TC		J1754, J1942		HF	ISO18752- DC	Х		X		Х		
801								Х				
804												
811HT with 81		J1942		HF								
821												
821FR								,,				
836 881		J1942		H, HF				X X				
001		J1942		П, ПГ				^				

(1) U.S.C.G./MTH (Marine Technical & Hazardous Materials Branch) hoses, hose assemblies and appropriate fittings meet 46CFR56.60-25(c) for use on commercial vessels. Hoses and hose assemblies meet the requirements of SAE J1942. Hose fittings meet the requirements of SAE J19475.

F = Fuel and lube systems.

H = Hydraulic Systems.

H = Hydraulic Systems.

\*Some hoses are accepted for different pressures for F and H. Also, not all sizes are accepted for all applications. See HPD approval bulletin #APR-004 or consult the Parker Hose Products Division, Technical Services Department, for details. The Canadian Coast Guard accepts all hoses accepted by the U.S. Coast Guard.

(2) Det Norske Veritas (DnV) approvals are with permanent (crimp) type fittings only. See HPD Approval Bulletin #APR-006 or consult the Parker Hose Products Division, Technical Services Department, for details.

(3) Hose with MSHA (Mine Safety and Health Administration) approved flame resistant cover will be marked accordingly on the layline.

(4) 221FR is type accepted by Lloyd's Register. It meets the requirements of the American Boat and Yacht council. 221FR is certified to meet the EC Directive 94/25/EC in accordance with ISO 7840.

For questions on standards and specifications please contact the Hose Products' Technical Services Department at (440) 943-5700.



B



# **Standards and Specifications**

#### JIS - Adapters

JIS B8363 Code	Parker Part Number	Mates with End Configuration
A1	F3T4	FU
A2	F3P4	GU
A3	F63P4	UT
E1	C3T4	FU
E2	C3P4	GU
E3	V3T4	FU
E4	V3P4	GU

Note: See website at www.Parker/tfd.com, Catalog 4300 or call (614) 279-7070 for additional information.

#### JIS - Hose Fittings

JIS B8363 Code	Parker End Configeration Code	Fitting Series 43	Fitting Series 70	Fitting Series 71	Fitting Series 73	Fitting Series 78	Fitting Series 79
R	UT	Χ		X			
F	FU	Χ		X			
С	GU	Χ	X	X	X	X	
MF	MU	Χ		X			
S	15	Χ	X	X	X	X	
4S	17	Χ	X	X	X	X	
98	19	Χ	X	X	X	X	
н	6A		X	X	X	X	X
4H	6F			X	X	X	X
9H	6N		X	Х	Х	X	X

E-16

Note: Parker Hose Standards are listed on page E-14 and E-15



B



# **Assembly Methods**

#### JIC 37° and SAE 45° Flare

Parker's recommended assembly method for JIC 37° flare and SAE 45° flare is the Flats From Wrench Resistance (FFWR) method. This includes steel as well as other materials.

The torque values assigned by size are for reference only, and are only applicable to Parker system components using the FFWR method with trivalent chromate passivation on zinc plating of carbon steel components without lubrication.

	Flats From	Swivel N	ut Torque
Dash Size	Wrench Resistance (FFWR)	Newton Meters (Ref)	Pound Feet (Ref)
-4	2	18	13
-5	2	23	17
-6	1-1/2	30	22
-8	1-1/2	57	42
-10	1-1/2	81	60
-12	1-1/4	114	84
-16	1	160	118
-20	1	228	168
-24	1	265	195
-32	1	360	265

#### Seal-Lok®

Parker's recommended assembly method for Seal-Lok® connections is the torque method.

Dash	Swivel Nut To	orque	Flats From
Size	Newton Meters (+10% / -0)	Pound Feet (+10% / -0)	Wrench Resistance (FFWR)
-4	25	18	1/2 - 3/4
-6	40	30	1/2 - 3/4
-8	55	40	1/2 - 3/4
-10	80	60	1/2 - 3/4
-12	115	85	1/3 - 1/2
-16	150	110	1/3 - 1/2
-20	205	150	1/3 - 1/2
-24	315	230	1/3 - 1/2
-32	-	-	-

Note: The assembly torques listed are higher than the test torques published in SAE J1453.

#### **Torque Conversion Equivalents**

Torque Conversion Equivalents									
Pound Inch - Pound Foot - Newton Meter									
Pound Foot x 12	=	Pound Inch							
Pound Foot x 1.356	=	Newton Meter							
Newton Meter x 8.850	=	Pound Inch							
Newton Meter x 0.737	=	Pound Foot							
Pound Inch x .083	=	Pound Foot							
Pound Inch x 0.113	=	Newton Meter							

The torque values for other materials are as follows:

- Brass fittings and adapters 65% of the torque value for steel.
- Stainless steel, and Monel Use 5% higher than listed for steel.
   Threads to be lubricated for these materials.

E-17

- Dissimilar metals use torque value designated for the lower of the two metals.
- · All fittings are dry except as noted above.

The Flats From Wrench Resistance (FFWR) and torque values listed above are consistent with the values recommended by Parker Tube Fittings Division (614) 279-7070 or www.parker.com/tfd).











# **Identifying Fitting Types**

In general fittings can be identified by their visual appearance, their sealing surface/sealing type or by their thread type/form. Viewing the following pages, the visual identification will be self explanatory. The sealing mechanism and the method of thread identification, however, needs further explanation

# Determining Sealing Mechanisms:

- · Thread interface
- O-ring
- Matching angle or metal-to-metal joint
- Mated angle with O-ring

#### **Thread Interface**

The sealing is assured by the flattening of the edges of the threads when the male is screwed into the female fitting. Typically the front of the male fittings is narrower than the back of the fittings – often referred to as tapered threads.



B

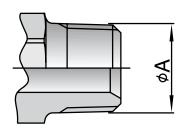
C

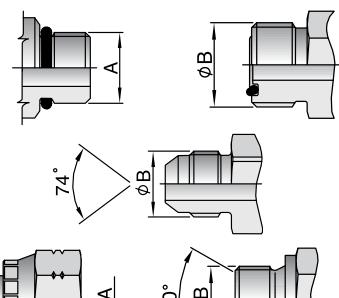
D

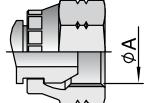
The O-ring on the male is compressed against the corresponding female and assures the seal. This type of sealing mechanism should be the preferred choice for high-pressure applications.

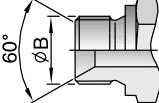
#### Matching Angle or Metal-to-Metal Joint

Sealing takes place where the two angled faces of the male and corresponding female meet and are wedged into one another by the tightening of the threaded nut. The sealing surfaces can either be convex or concave (seat) on the male or in the head of the pipe of the female as shown.





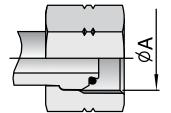


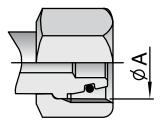




### Matching Angle with O-ring

These fittings combine the functionality of both the matching angle seal with the O-ring. The O-ring is in the angled sealing surface of the fitting so that when the threaded male and female are screwed together the sealing surfaces wedge together and at the same time deform the O-ring between them.





## **Determining the Thread Type**

In general of the threads of various fittings look similar and hinder the easy identification of the thread. To assure the correct identification, the threads must be measured and compared to the tables listed in the following section.

### Thread Gauge

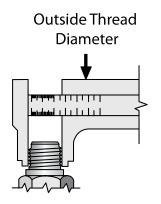
Using a thread gauge, the number of threads per inch can be determined.

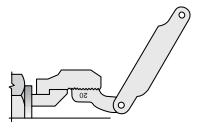
Holding the gauge and coupling threads in front of a lighted background helps to obtain an accurate measurement.

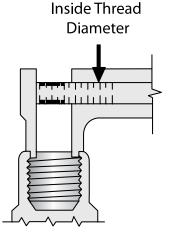
### **Caliper Measure**

A vernier caliper should be used to measure the thread diameter of the largest point. (Outside diameter (O.D.) of male threads – Inside Diameter (I.D.) of female threads.)













### **German DIN Hose Fittings**

Often referred to as metric fittings, these fittings seal using the angled sealing surfaces (metal-to-metal) or the combination of metal-to-metal with O-rings.

They are available in very light (LL), light (L) or heavy series (S).

The sealing face angles are either 24° with or without O-rings, or 24°/60° universal cones.

Identification is made by measuring the thread size and also the tube outside diameter.

### **DIN Very Light Series (LL)**

The male 60° cone will mate with the female 60° cone only. The male has a 60° sealing angle (seat) and straight metric thread. The female has a 60° seat and straight metric thread.

Standard

DIN 20078 Part 3 1)

Parker end configurations

CU

A

B

D

# DIN Light (L) and Heavy Series (S) without O-ring

The male 24° cone will mate with the female universal 24° or 60° cone only.

The male has a 60° sealing angle (seat) and straight metric threads. The female has a 24° and 60° universal seat and straight metric threads.

Standard

DIN 20078 Part 2 1)

(previously known as DIN 20078 A, D & E)

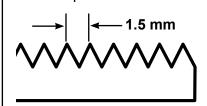
Parker end configurations

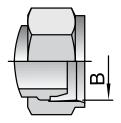
light series

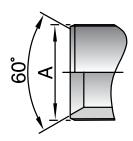
C3, C4, C5, C6

(Often also referred to as "Ball nose cones")

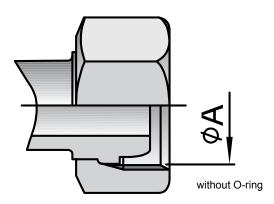
Defined by the outside diameter and the pitch (distance between 2 crests of the thread) example: M22x1.5 - pitch of 1.5mm.







Tube O.D. (DN)	Thread metric	ØA (mm)	ØB (mm)
20	M30x1.5	30.00	28.50
25	M38x1.5	38.00	36.50
32	M45x1.5	45.00	43.50
40	M52x1.5	52.00	50.50
50	M65x2	65.00	63.00





<sup>1)</sup> obsolete standard, no exact replacement

### DIN 24° Light (L) and Heavy Series (S) with O-ring

The male has a 24° sealing angle cone seat with straight metric threads.

The female has a 24° convex cone with O-ring and a swivel straight metric threaded nut.

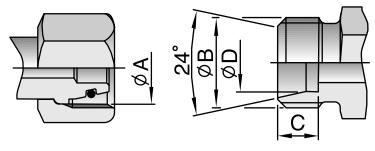
### Standard

ISO 12151-2 / ISO 8434-1 & ISO 8434-4

(Previously DIN 20 078 Part 4, 5, 8, 9) Parker end configurations light series

**CA, CE, CF, D0**Parker end configurations heavy series

C9, 0C, 1C, D2



with O-ring

Tube O.D. (mm)	Spec.	Thread metric	ØA (mm)	ØB (mm)	C (mm)	ØD (mm)
6.00	6L	M12X1.5	10.50	12.00	7.00	6.20
6.00	6S	M14X1.5	12.50	14.00	7.00	6.20
8.00	8L	M14x1.5	12.50	14.00	7.00	8.20
8.00	8S	M16x1.5	14.50	16.00	7.00	8.20
10.00	10L	M16x1.5	14.50	16.00	7.00	10.20
10.00	10S	M18x1.5	16.50	18.00	7.50	10.20
12.00	12L	M18x1.5	16.50	18.00	7.00	12.20
12.00	12S	M20x1.5	18.50	20.00	7.50	12.20
14.00	14S	M22x1.5	20.50	22.00	8.00	14.20
15.00	15L	M22x1.5	20.50	22.00	7.00	15.20
16.00	16S	M24x1.5	22.50	24.00	8.50	16.20
18.00	18L	M26x1.5	24.50	26.00	7.50	18.20
20.00	20S	M30x2	27.90	30.00	10.50	20.20
22.00	22L	M30x2	27.90	30.00	7.50	22.20
25.00	25S	M36x2	33.90	36.00	12.00	25.20
28.00	28L	M36x2	33.90	36.00	7.50	28.20
30.00	30S	M42x2	39.90	42.00	13.50	30.20
35.00	35L	M45x2	42.90	45.00	10.50	35.30
38.00	38S	M52x2	49.90	52.00	16.00	38.30
42.00	42L	M52x2	49.90	52.00	11.00	42.30













## **British Standard Pipe (BSP)**

Also referred to as Whitworth threads, the BSP thread type fittings seal use metal-to-metal angled surfaces or a combination of metal-to-metal and an O-ring.

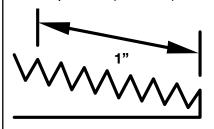
The angle of the sealing surfaces is 60° for both forms.

There are two popular thread forms:

British Standard Pipe Parallel (BSPP) and

British Standard Pipe Tapered (BSPT).

Identification is made by measuring the outside diameter of the thread and the number of threads per inch (25.4 mm)



BSPP
BS5200
Parker end configurations
92. B1. B2. B4. D9

### **BSPP**

B

C

D

metal-to-metal with O-ring Standard

### ISO 12151-6

Some Parker end configurations may be non-standard parts.

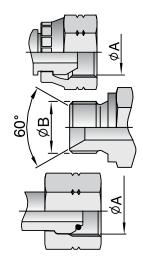
### **BSPT**

fittings seal through the thread interface mechanism. Care should be taken not to confuse the BSPT fitting with the NPTF male fitting. BSPT has a 55° thread angle. NPTF has 60° thread angle.

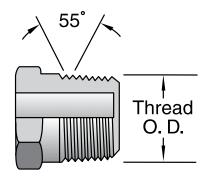
Parker end configuration **91** 

### **BSP Flat Seal**

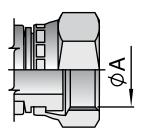
These fittings have BSP parallel threads but the sealing surface is flat. The seal is made when the composite seal is compressed against the female flat face. Some Parker end configurations may be non-standard parts.



Tube I.D./O.D. (mm)	Size	Thread BSP	ØA (mm)	ØB (mm)
6/10	-2	1/8x28	8.60	9.70
8/13	-4	1/4x19	11.50	13.20
12/17	-6	3/8x19	14.90	16.70
15/21	-8	1/2x14	18.60	20.90
18/23	-10	5/8x14	20.60	22.90
20/27	-12	3/4x14	24.10	26.40
26/34	-16	1x11	30.30	33.20
33/42	-20	1-1/4x11	38.90	41.90
40/49	-24	1-1/2x11	44.90	47.80
50/60	-32	2x11	56.70	59.60



Tube I.D./O.D. (mm)	Size	Thread BSP	ØA (mm)
5/10	-2	1/8x28	9.73
8/13	-4	1/4x19	13.16
12/17	-6	3/8x19	16.66
15/21	-8	1/2x14	20.96
20/27	-12	3/4x14	26.44
26/34	-16	1x11	33.25
33/42	-20	1-1/4x11	41.91
40/49	-24	1-1/2x11	47.80
50/60	-32	2x11	59.61



Tube I.D./O.D. (mm)	Size	Thread BSP	ØA (mm)
6/10	-2	1/8x28	8.6
8/13	-4	1/4x19	11.5
12/17	-6	3/8x19	14.9
15/21	-8	1/2x14	18.6
18/23	-10	5/8x14	20.6
20/27	-12	3/4x14	24.1
26/34	-16	1x11	30.3

## **French Gas fittings**

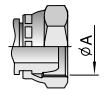
Typical to the French market the French Gas fittings have a 24° sealing surfaces seat with metric straight threads. Although similar to German DIN fittings the threads differ in some sizes as the French Gas fittings have fine threads in all sizes whereas the German DIN fittings use standard threads in the larger sizes.

# French Metric 24° Cone Gas Fittings

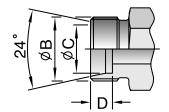
The sealing mechanism is metal-to-metal.

The fittings are not specified in any international standard.

Some Parker end configurations may be non-standard parts.



E-23



Tube O.D. (mm)	Spec.	Thread metric	ØA (mm)	ØB (mm)	ØC (mm)	D (mm)
6.00	6N	M12x1	11.00	12.00	6.20	9.00
8.00	8N	M14x1.5	12.50	14.00	8.15	9.00
10.00	10N	M16x1.5	14.50	16.00	10.20	9.00
12.00	12N	M18x1.5	16.50	18.00	12.15	9.00
13.25	13G	M20x1.5	18.50	20.00	13.50	9.00
14.00	14N	M20x1.5	18.50	20.00	14.15	9.00
15.00	15N	M22x1.5	20.50	22.00	15.15	9.00
16.00	16N	M24x1.5	22.50	24.00	16.15	9.00
16.75	17G	M24x1.5	22.50	24.00	17.00	9.00
18.00	18N	M27x1.5	25.50	27.00	18.15	9.00
20.00	20N	M27x1.5	25.50	27.00	20.15	9.00
21.25	21G	M30x1.5	28.50	30.00	21.50	9.00
22.00	22N	M30x1.5	28.50	30.00	22.15	9.00
25.00	25N	M33x1.5	31.50	33.00	25.15	9.00
26.75	27G	M36x1.5	34.50	36.00	27.00	9.00
28.00	28N	M36x1.5	34.50	36.00	28.25	9.00
30.00	30N	M39x1.5	37.50	39.00	30.25	9.00
32.00	32N	M42x1.5	40.50	42.00	32.25	9.00
33.25	34G	M45x1.5	43.50	45.00	33.80	9.00
35.00	35N	M45x1.5	43.50	45.00	35.25	9.00
38.00	38N	M48x1.5	46.50	48.00	38.25	9.00
40.00	40N	M52x1.5	50.50	52.00	40.35	9.00
42.25	42G	M52x1.5	50.50	52.00	42.55	9.00
48.25	49G	M58x2	55.90	58.00	49.00	11.00

4

В

### **North American Thread Types**

This type of fitting uses the thread interface to seal and as such has a tapered thread that deforms and forms the seal.

They have 30° sealing angle surfaces, forming a 60° inverted (concave) seat.

The fittings are most frequently seen on machines of US origin.

### **Dryseal American Standard Ta**per Pipe Thread (NPTF)

The NPTF male will mate with the NPTF, NPSF, or NPSM females. Care should be taken not to confuse the NPTF fitting with the BSPT male fitting. NPTF fittings have a 60° thread angle. BSPT has a 55° thread angle.

Standard **SAE J516** 

B

D

Parker end configuration

## 01

### SAE JIC 37°

Commonly referred to as JIC fittings, these metal-to-metal sealing type fittings have a 37° flare (sealing surface angle) and straight **United National Fine Threads** (UNF).

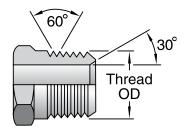
The original design specification for the fittings comes from the Society of Automotive Engineers (SAE) and these fittings are the most common American fitting types in Europe.

Standard

ISO 12151-5, ISO8434-2 and **SAE J516** 

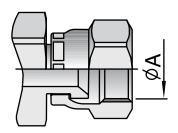
Parker JIC hose fittings are fully compatible with Parker Triple-Lok Tube Fittings and adapters.

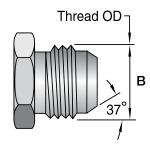
Parker end configurations 03, 06/68, 37/3V, 39/3W, 41/3Y, L9



ØA dimension is measured on the 4th pitch of the thread

Size	Thread NPTF	ØA (mm)	ØB (mm)
-2	1/8x27	10.24	8.73
-4	1/4x18	13.61	11.90
-6	3/8x18	17.05	15.90
-8	1/2x14	21.22	19.05
-12	3/4x14	26.56	24.60
-16	1x11.5	33.22	30.95
-20	1-1/4x11.5	41.98	39.69
-24	1-1/2x11.5	48.05	45.24
-32	2x11.5	60.09	57.15





Tube O.D. (inch)	Tube O.D. (mm)	Thread UNF	Size	ØA (mm)	ØB (mm)
3/16		3/8x24	-3	8.60	9.50
1/4	6	7/16x20	-4	10.00	11.10
5/16	8	1/2x20	-5	11.60	12.70
3/8	10	9/16x18	-6	13.00	14.30
1/2	12	3/4x16	-8	17.60	19.10
5/8	14-15-16	7/8x14	-10	20.50	22.20
3/4	18-20	1-1/16x12	-12	24.60	27.00
7/8	22	1-3/16x12	-14	28.30	30.10
1	25	1-5/16x12	-16	31.30	33.30
1-1/4	30-32	1-5/8x12	-20	39.20	41.30
1-1/2	38	1-7/8x12	-24	45.60	47.60
2		2-1/2x12	x32	61.50	63.50

### SAE 45° Flare

The angle of the flare is commonly used as a name when referring to these metal-to-metal sealing fittings.

The female fittings have a 90° concave inverted seat, created by the 45° angle sealing surfaces.

The SAE 45° flare male will mate with an SAE 45° flare female only or a dual seat JIC 37°/SAE45°.

Standard

### **SAE J516**

Parker end configurations **04**, **08/68**, **77/3V**, **79/3W**, **81/3Y** 

### **SAE O-ring (Boss Type)**

This male fitting has straight threads, a sealing face and an O-ring. It is compatible only with female boss type fittings generally found in the ports of machines. Sealing is achieved through the O-ring of the male and through the sealing face of the female.

Parker end configuration

### 05

### O-ring Face Seal (ORFS)

ORFS fittings are becoming the most popular international fitting type used on global OEM machines due to their high level of sealing and their good vibration resistance. The fittings use the O-ring compression mechanism to seal.

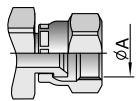
The female fittings have flat faces and straight threaded UNF swivel nuts. The male fittings have the O-ring in a groove in the flat face.

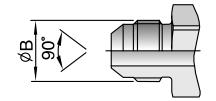
Seen as a major advantage, these fittings offer the possibility to build the hose assemblies into fixed distances/ spaces, without having to move back other system components due the flat faces of the male and female fittings – the hose assembly can be slotted in.

Standard

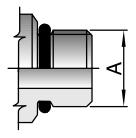
ISO 12151-1, ISO8434-3 and SAE J516

Parker end configurations JC, JM/J0, JS, JU, J1, J3, J5, J7, J9





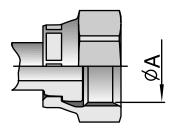
Tube O.D. (inch)	Size	Thread UNF	ØA (mm)	ØB (mm)
1/4	x4	7/16x20	9.90	11.10
5/16	-5	1/2x20	11.50	12.70
3/8	-6	5/8x18	14.30	15.90
1/2	-8	3/4x16	17.50	19.10
5/8	-10	7/8x14	20.60	22.20
3/4	-12	1-1/16x14	25.00	27.00



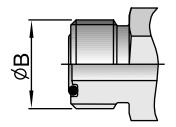
Thread UNF	Size	ØA (mm)
5/16x24	-2	7.93
3/8x24	-3	9.52
7/16x20	-4	11.11
1/2x20	-5	12.70
9/16x18	-6	14.28
3/4x16	-8	19.10
7/8x14	-10	22.22
1-1/16x12	-12	27.00
1-3/16x12	-14	30.10
1-5/16x12	-16	33.30
1-5/8x12	-20	41.30
1-7/8x12	-24	47.60
2-1/2x12	-32	63.50

B

D



E-25



Tube O.D. (inch)	Tube O.D. (mm)	Thread UNF	Size	ØA (mm)	ØB (mm)
1/4	6	9/16x18	-4	13.00	14.20
3/8	10	11/16x16	-6	15.90	17.50
1/2	12	13/16x16	-8	19.10	20.60
5/8	16	1x14	-10	23.80	25.40
3/4	20	1-3/16x12	-12	28.20	30.10
1	25	1-7/16x12	-16	34.15	36.50
1-1/4	32	1-11/16x12	-20	40.50	42.90
1-1/2	38	2x12	-24	48.80	50.80



## Flange Fittings Code 61 and Code 62

The 4-bolt split flange (or full flange) fitting is used worldwide for connecting high-pressure hoses typically to pumps, motors and cylinders, where the hose assemblies are subjected to large pressure loadings. The sealing mechanism is through compression of the O-ring in the face of the flange head against the surface of the port/connection.

The flange fittings are generally separated into two pressure classes referred to as 3000 psi (SFL) or 6000 psi (SFS).

B

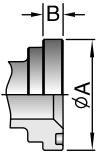
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ISO 12151-3 refers to the flange fittings as code 61 for the 3000 psi and code 62 for the 6000 psi. In addition to these flanges, customer-specific Komatsu® and CATERPILLAR® flanges can also be found in the market.

Parker end configurations
Code 61 (3000 psi)
15, 16, 17, 19, P5, P7, P9
5000 psi (Code 61 dimensions)
4A, 4F, 4N
Code 62 (6000 psi)
6A, 6F, 6N, PA, PF, PN, 89
Caterpillar flange
XA, XF, XG, XN

Although not in the SAE or the ISO standard the size -10 (5/8) flange head is gaining popularity. This flange is often found on Komatsu equipment or hydrostatic drives in agricultural machines.

- Standard Code 61 for 3000 to 5000 psi max.,depending on size
- High Pressure Code 62 for 6000 psi max. regardless of size



Flange (inch)	Size	Code 61 MPa / psi	Code 62 MPa / psi
1/2	-8	34.5 / 5000	41.3 / 6000
3/4	-12	34.5 / 5000	41.3 / 6000
1	-16	34.5 / 5000	41.3 / 6000
1-1/4	-20	27.5 / 4000	41.3 / 6000
1-1/2	-24	20.7 / 3000	41.3 / 6000
2	-32	20.7 / 3000	41.3 / 6000

Note: 5000 psi in size -20/-24/-32 with 4A,4F and 4N fittings and 50H flange halves.

### Code 61 - SAE - 3000 psi

Flange (inch)	Size	ØA B (mm)		O-Ring	
1/2	-8	30.18	6.73	18.64x3.53	
3/4	-12	38.10	6.73	24.99x3.53	
1	-16	44.45	8.00	32.92x3.53	
1-1/4	-20	50.80	8.00	37.69x3.53	
1-1/2	-24	60.33	8.00	47.22x3.53	
2	-32	71.42	9.53	56.74x3.53	
2-1/2	-40	84.12	9.53	69.44x3.53	
3	-48	101.60	9.53	85.32x3.53	

### Code 62 - SAE - 6000 psi

Flange (inch)	Size	ØA (mm)	B (mm)	O-Ring
1/2	-8	31.75	7.75	18.64x3.53
3/4	-12	41.28	8.76	24.99x3.53
1	-16	47.63	9.53	32.92x3.53
1-1/4	-20	53.98	10.29	37.69x3.53
1-1/2	-24	63.50	12.57	47.22x3.53
2	-32	79.38	12.57	56.74x3.53

### **CATERPILLAR®**

Flange (inch)	Size	ØA (mm)	B (mm)	O-Ring
3/4	-12	41.28	14.22	25.40x5.00
1	-16	47.63	14.22	31.90x5.00
1-1/4	-20	53.98	14.22	38.20x5.00
1-1/2	-24	63.50	14.22	44.70x5.00

### Komatsu®

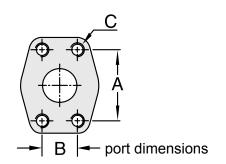
Flange (inch)	Size	ØA (mm)	B (mm)	O-Ring
5/8	-10	34.25	6.00	21.7x3.5



### 4-Bolt Split Flange

A 4-bolt split flange is used to attach the flange fittings to their ports.

- Standard Code 61 for 3000 to 5000 psi max., depending on size
- High Pressure Code 62 for 6000 psi max., regardless of size



Code 61 - SAE - 3000 psi

Flange		А В		С		
(inch)	Size	(mm)	(mm)	(inch)	(metr.)	
1/2	-8	38.1	17.5	5/16x18	M8x1.25	
3/4	-12	47.6	22.3	3/8x16	M10x1.5	
1	-16	52.4	26.2	3/8x16	M10x1.5	
1-1/4	-20	58.7	30.2	7/16x14	M10x1.5	
1-1/2	-24	69.9	35.7	1/2x13	M12x1.75	
2	-32	77.8	42.8	1/2x13	M12x1.75*	

Code 62 - SAE - 6000 psi

Flange	Size	Α	В		;	
(inch)	Size	(mm) (mm)		(inch)	(metr.)	
1/2	-8	40.5	18.2	5/16x18	M8x1.25	
3/4	-12	50.8	23.8	3/8x16	M10x1.5	
1	-16	57.2	27.8	7/16x14	M12x1.75	
1-1/4	-20	66.7	31.8	1/2x13	M12x1.75*	
1-1/2	-24	79.4	36.5	5/8x11	M16x2	
2	-32	96.8	44.4	3/4x10	M20x2.5	

B

C

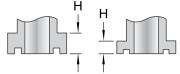
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### Replacing Caterpillar® 6000 PSI Flange Fittings with SAE Code 62 Flange Fittings and Parker "Caterpillar®" Style Flange Fittings

E-27

Caterpillar® has a proprietary 6000 PSI hydraulic flange fitting for use on their equipment. This fitting is similar to the SAE Code 62 hydraulic flange (SAE J518). Flange diameters and bolt hole spacing are the same. The Caterpillar® flange head is thicker (.560" in all sizes) and the configuration and location of the O-ring groove is different, requiring the use of a special O-ring.

The Caterpillar® 6000 PSI flange fitting can be replaced with a Parker "Caterpillar®" style flange fitting



		H (in)		
Size		Caterpillar®	SAE Code 62	
3/4	(-12)	.560	.345	
1	(-16)	.560	.375	
1-1/4	(-20)	.560	.405	
1-1/2	(-24)	.560	.495	

such as the 1XA78 using the existing Caterpillar® flange halves and bolts. In this case the XARG O-ring would be used. The fitting could also be replaced with a standard Code 62 flange fitting such as the 16A78. In this case use HFH flange halves or the HFHFHK kit with the standard SAE O-ring (711510).

Do not use the Caterpillar® 6000 PSI split flange halves on SAE Code 62 flange fittings or SAE Code 62 flange halves on Caterpillar® 6000 PSI flange fittings.

Procedure	P-ring P/N	Flange Half P/N	Flange Kit P/N
When replacing Caterpillar® 6000 PSI Flange Fittings with Parker "Caterpillar® Style" Fittings:	XARG-Size	Use existing flange halves and bolts	Use existing flange halves and bolts
When replacing Caterpillar® 6000 PSI Flange Fittings with SAE Code 62 Flange Fittings:	711510*	HFH-Size	HFHFHK- Size



<sup>\*</sup>M14x2 still used in the market but no longer in accordance with ISO 6162

## Japanese fittings

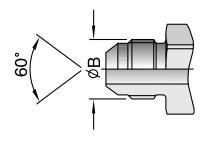
The Japanese Industrial Standard (JIS) is seen on most Japanese equipment and uses a 30° sealing angle seat and either British Standard Pipe Parallel or metric threads.

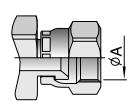
Care must be taken not to confuse the JIS fittings with BSP or JIC fittings.

### Japanese fittings - JIS

The sealing mechanism of the fittings is the 30° metal-to-metal angled surfaces

Parker end configurations MU, XU (Metric) FU (BSP)





### JIS 30° metric

Symbol	Thread metric		
MU-6	M14x1.5	12.50	14.00
MU-9	M18x1.5	16.50	18.00
MU-12	M22x1.5	20.50	22.00
MU-15	M27x2	25.00	27.00
MU-19	M27x2	25.00	27.00
MU-25	M33x2	31.00	33.00
MU-32	M42x2	40.00	42.00
MU-38	M50x2	48.00	50.00
MU-50	M60x2	58.00	60.00

### JIS 30° BSP

Symbol	mbol Thread ØA BSP (mm)		ØB (mm)
GUI-3	1/8x28	8.60	9.70
GUI-5/-6	1/4x19	11.50	13.20
GUI-8/-9	GUI-8/-9 3/8x19 14.90		16.70
GUI-12	GUI-12 1/2x14 18.60		20.90
GUI-15/-19	3/4x14	24.10	26.40
GUI-25	1x11	30.30	33.20
GUI-32	1-1/4x11	38.90	41.90
GUI-38	1-1/2x11	44.90	47.80
GUI-50	2x11	56.70	59.60

В



# A pplication

### **Thread Guide**

size	NPTF Pipe Thread Size	SAE (JIC) 37 Flare Thread Size	SAE 45 Flare Thread Size	O-Ring Style Straight Thread Size	SAE Inverted Flare Thread Size	PTT 30 Flare Thread Size	SAE Flare- less Thread Size	Seal-Lok Thread
2	1/8 - 27	5/16 - 24	5/16 - 24	5/16 - 24	-	-	5/16 - 24	-
3	-	3/8 - 24	3/8 - 24	3/8 - 24	-	-	3/8 -24	-
4	1/4 - 18	7/16 - 20	7/16 - 20	7/16 - 20	7/16 - 24	-	7/16 - 20	9/16 - 18
5	-	1/2 - 20	1/2 - 20	1/2 - 20	1/2 - 20	-	1/2 - 20	-
6	3/8 - 18	9/16 - 18	5/8 - 18	9/16 - 18	5/8 - 18	-	9/16 - 18	11/16-16
8	1/2 - 14	3/4 - 16	3/4 - 16	3/4 - 16	3/4 - 18	-	3/4 - 16	13/16 - 16
10	-	7/8 - 14	7/8 - 14	7/8 - 14	7/8 - 18	-	7/8 - 14	1 -14
12	3/4 - 14	1 1/16 - 12	1 1/16 - 14	1 1/16 - 12	-	-	1 1/16 - 12	1 3/16 - 12
14	-	1 3/16 - 12	-	1 3/16 - 12	-	-	1 3/16 - 12	-
16	1 - 11 1/2	1 5/16 - 12	-	1 5/16 - 12	-	1 5/16 - 14	1 5/16 - 12	1 7/16 - 12
20	1 1/4 - 11 1/2	1 5/8 - 12	-	1 5/8 - 12	-	1 5/8 - 14	1 5/8 - 12	1 11/16 - 12
24	1 1/2 - 11 1/2	1 7/8 - 12	-	1 7/8 - 12	-	1 7/8 - 14	1 7/8 - 12	2-12
32	2 - 11 1/2	2 1/2 - 12	-	2 1/2 - 12	-	2 1/2 - 12	2 1/2 - 12	-

Fitting Size	DIN "L" Swivel Female Thread Size	DIN "S" Swivel Female Thread Size	DIN "L" Male Stud Thread Size	DIN "S" Male Stud Thread Size	Male BSPP Thread Size	BSP Swivel Female Thread Size	French Swivel Female Gaz Series	French Swivel Female Met- ric Series	French Male Stud Metric Series
4	-	-	-	-	1/4x19	1/4x19		-	
6	M12x1,5	M14x1,5	M12x1,5	M14x1,5	3/8x19	3/8x19	-	M12	x1
8	M14x1,5	M16x1,5	M14X1,5	M16x1,5	1/2x14	1/2x14	-	M14x	1,5
10	M16X1,5	M18x1,5	M16x1,5	M18x1,5	5/8x14	5/8x14	-	M16x	1,5
12	M18x1,5	M20x1,5	M18X1,5	M20x1,5	3/4x14	3/4x14	-	M18x	1,5
-	-	-	-	-	-	-	M20x1,5	-	
14	-	M22x1,5	-	M22x1,5	-	-	-	M20x	1,5
15	M22x1,5	-	M22x1,5	-	-	-	-	M22x	1,5
16	-	M24x1,5	-	M24x1,5	1x11	1x 11	-	M24X	(1,5
-	-	-	-	-	-	-	M24x1,5	-	
18	M26x1,5	-	M26x1,5	-	-	-	-	M27x	1,5
20	-	M30x2	-	M30x2	1 1/4x11	1 1/4x11	-	M27x	1,5
-	-	-	-	-	-	-	M30x 1,5	-	
22	M30x2	-	M30x2	-	-	-	-	M30x	1,5
25	-	M36x2	-	M36x2	1 1/2x11	1 1/2x11	-	M33x	1,5
-	-	-	-	-	-	-	M36x1,5	-	
28	M36x2	-	M36x2	-	-	-	-	M36x	1,5
30	-	M42x2	-	M42x2	2x11	2x11	-	M39x	1,5
33	-	-	-	-	-	-	M45x1,5		

E-29



A

В

C

D

E

# **Application**

В

D

	Description	End Code
	Male NPTF Pipe - Rigid - Straight	01
	Male NPTF Pipe - Swivel - Straight	13
Pipe	Male NPTF Pipe - Swivel - 90° Elbow	1L
	Male API Pipe - Rigid - Straight	AP
	Female NPTF Pipe - Rigid - Straight	02
be	Female NPSM Pipe - Swivel - Straight (60° Cone)	07
₾	Female NPTF Pipe - Swivel - Straight	S2
	Female NPSM Pipe - Gasket Joint - Swivel - Straight	7G
	Female Grease Connection - SPL-PTF Taper Thread - Rigid Straight - $\frac{1}{2}$ x 27	GJ
	Male NPTF Pipe - Rigid - 45° Elbow	31
	Male NPTF Pipe - Rigid - 90° Elbow or Side Outlet	21
	Male SAE Straight Thread with O-Ring - Rigid - Straight	05
Ę.	Male SAE Straight Thread with O-Ring - Swivel - Straight	0G
Str.	Male SAE Straight Thread with O-Ring - Adjustable - 45° Elbow	25
SAE	Male SAE Straight Thread with O-Ring - Swivel - 90° Elbow	0L
	Male SAE Straight Thread with O-Ring - Adjustable - 90° Elbow	35
	Male JIC 37° - Rigid - Straight	03
	Male JIC 37° - Bulkhead without Locknut - Straight	LB
	Female JIC 37° - Swivel - Straight	06
	Female JIC 37° - Swivel - 45° Elbow - Short Drop	37
	Female JIC 37° - Swivel - 45° Elbow - Medium Drop	L7
	Female JIC 37° - Swivel - 90° Elbow - Short Drop	39
	Female JIC 37° - Swivel - 90° Elbow - Medium Drop	L9
e	Female JIC 37° - Swivel - 90° Elbow - Long Drop	41
Flare	Female JIC 37° - Swivel - Straight	48
	Female JIC 37° - Swivel - 150° Elbow	4V
	Male SAE 45° - Rigid - Straight	04
	Female SAE 45° - Swivel - Straight	08
	Female SAE 45 / Swivel - 45° Elbow	77
	Female SAE 45 / Swivel - 90° Elbow	79
	Female SAE 45 / Swivel - 90° Elbow - Long Drop	81
	Female JIC 37°/SAE 45° Dual Flare - Swivel - Straight	68
ē	Male Inverted SAE 45° - Swivel - Straight	28
Flare	Male Inverted SAE 45° - Swivel - 45° Elbow	67
red	Male Inverted SAE 45° - Swivel - 90° Elbow	69
nverted	Male Inverted SAE 45° - Swivel - 90° Elbow - Long (In-Line)	71
	Female Inverted SAE 45° - Rigid - Straight	29

# **Standard Fitting Configurations by Connection and End Code**

	Description	End Code				
	Male Tube-O - Swivel - Straight - Short Pilot	S5				
	Male Tube-O - Swivel - Straight - Long Pilot	45				
	Male Tube-O - Swivel - Straight - Long Pilot with Low Pressure Charge Port for R134a	45-PT				
	Female Tube-O - Swivel - 90° Elbow - Long Pilot					
	Female Tube-O - Swivel - 90° Elbow - Long Pilot with Low Pressure Charge Port for R134a					
	Male Tube-O - Swivel - 90° Elbow - Long Pilot	5M				
	Male Tube-O - Swivel - 90° Elbow - Long Pilot with Low Pressure Charge Port for R134a	5M-PT				
	Male Tube-O - Swivel - 90° Elbow - Long Pilot with Low Pressure Charge Port for R134a	5M-PV				
	Male Tube-O - Rigid - Straight - Internal Long Pilot (3-Step)	5G				
	Male Tube-O - Swivel - 45° Elbow - Short Pilot	5R				
	Male Tube-O - Swivel - 45° Elbow - Long Pilot	5P				
O-aqr	Male Tube-O - Swivel - 45° Elbow - Long Pilot with Low Pressure Charge Port for R134a					
Ĭ	Male Tube-O - Swivel - 90° Elbow - Short Pilot	5K				
	Male Tube-O - Swivel - 90° Elbow - Short Pilot with High Pressure Charge Port for R134a	5K-PB				
	Female Tube-O - Swivel - Straight - Short Pilot	5S				
	Female Tube-O - Swivel - Straight - Long Pilot	59				
	Female Tube-O - Swivel - Straight - Long Pilot with High Pressure Charge Port for 134a	59-PB				
	Female Tube-O - Swivel - Straight - Long Pilot with Low Pressure Charge Port for R134a	59-PT				
	Female Tube-O - Swivel - 45° Elbow - Short Pilot	5H				
	Female Tube-O - Swivel - 45° Elbow - Long Pilot	5N				
	Female Tube-O - Swivel - 45° Elbow - Long Pilot with High Pressure Charge Port for R134a	5N-PB				
	Female Tube-O - Swivel - 45° Elbow - Long Pilot with Low Pressure Charge Port for R134a	5N-PT				
	Female Tube-O - Swivel - 90° Elbow - Short Pilot	5T				
	Female Compressor - Swivel - 45° Elbow	5V				
sor	Female Compressor - Swivel - 90° Elbow	5W				
ressor	Female Compressor - Swivel - 90° Elbow - Block Type	5Z				
Compi	Female Compressor - Swivel - 135° Elbow	RV				
Ö	Female Compressor - Swivel - 180° Elbow - Block Type	RZ				
	Two Hole (2.25" X 0.44") Flange - Rigid - 90° Elbow	2H				
ge	SAE Code 61 Flange Head - Straight	15				
Flange	SAE Code 61 Flange Head - Straight (5,000 psi)	4A				
_	SAE Code 61 Flange Head - 221/2° Elbow -	16				



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# A pplication

Continued from previous page

	Description	End Code
	SAE Code 61 Flange Head-30° Elbow	26
	SAE Code 61 Flange Head-45° Elbow	17
	SAE Code 61 Flange Head-45° Elbow (5,000 psi)	4F
	SAE Code 61 Flange Head-60° Elbow	27
	SAE Code 61 Flange Head - 67½° Elbow	18
	SAE Code 61 Flange Head - 90° Elbow	19
	SAE Code 61 Flange Head - 90° Elbow - (5,000 psi)	4N
	SAE Code 61 Flange Head - 90° Elbow - Long Drop	89
	SAE Code 61 Flange Head - 110° Elbow	2U
	SAE Code 62 Flange Head - Straight	6A
Flange	SAE Code 62 Flange Head - 22½° Elbow	6B
Flai	SAE Code 62 Flange Head - 30° Elbow	6E
	SAE Code 62 Flange Head - 45° Elbow	6F
	SAE Code 62 Flange Head - 60° Elbow	6G
	SAE Code 62 Flange Head - 90° Elbow	6N
	Caterpillar® Flange Head - Straight	XA
	Caterpillar® Flange Head - 221/2° Elbow	XB
	Caterpillar® Flange Head - 30° Elbow	XE
	Caterpillar® Flange Head - 45° Elbow	XF
	Caterpillar® Flange Head - 60° Elbow	XG
	Caterpillar® Flange Head - 67½° Elbow	XM
	Caterpillar® Flange Head - 90° Elbow	XN
	Male Seal-Lok - Rigid - Straight (with O-Ring)	J0
	Male Seal-Lok - Bulkhead without Locknut - Straight	JB
	(with O-Ring)	
	Female Seal-Lok - Swivel - Straight - Long	JS
후	Female Seal-Lok - Swivel - Straight - Short	JC
Seal-Lok	Female Seal-Lok - Swivel - 221/2° Elbow	J6
	Female Seal-Lok - Swivel - 45° Elbow	J7
	Female Seal-Lok - Swivel - 90° Elbow - Short Drop	J9
	Female Seal-Lok - Swivel - 90° Elbow - Medium Drop	J5
	Female Seal-Lok - Swivel - 90° Elbow - Long Drop	J1
	Female Metric Swivel - Straight (30° Flare)	MU
	Female Metric - Swivel - Straight (30° Flare)	XU
್ತ	Male Metric L - Rigid - Straight (24° Cone)	D0
Metric	Male Standpipe Metric L - Rigid - Straight	1D
-	Female Metric - Swivel - Straight (Ball Nose)	C0
	Female Metric L - Swivel - Straight (Ball Nose)	C3
	Female Metric L - Swivel - 45° Elbow (Ball Nose)	C4

# **Standard Fitting Configurations** by Connection and End Code

	Description	End
	Description	Code
	Female Metric L - Swivel - 90° Elbow (Ball Nose)	C5
	Female Metric L - Swivel - Straight (24° Cone with O-Ring)	CA
	Female Metric L - Swivel - 45° Elbow (24° Cone with O-Ring) -	CE
	Female Metric L - Swivel - 90° Elbow (24° Cone with O-Ring) -	CF
Metric	Male Metric S - Rigid - Straight (24° Cone)	D2
	Male Standpipe Metric S - Rigid - Straight	3D
Me	Female Metric S - Swivel - Straight (Ball Nose)	C6
	Female Metric S - Swivel - 45° Elbow (Ball Nose)	C7
	Female Metric S - Swivel - 90° Elbow (Ball Nose)	C8
	Female Metric S - Swivel - Straight (24° Cone with O-Ring)	C9
	Female Metric S - Swivel - 45° Elbow (24° Cone with O-Ring)	0C
	Female Metric S - Swivel - 90° Elbow (24° Cone with O-Ring)	1C
	Male BSP Taper Pipe - Rigid - Straight	91
	Female BSP Parallel Pipe - Swivel - Straight (60° Cone)	92
	Male BSP Parallel Pipe - Rigid - Straight (60° Cone)	D9
	Female BSP Parallel Pipe - Swivel - 45° Elbow (60° Cone)	B1
	Female BSP Parallel Pipe - Swivel - 90° Elbow (60° Cone)	B2
	Female BSP Parallel Pipe - Swivel - 90° Elbow Block Type (60° Cone)	B4
BSP	Female BSP Parallel Pipe - Swivel - Straight (Flat Seat)	B5
	Male BSP Taper Pipe - Rigid - 45° Elbow	BV
	Male BSP Taper Pipe - Rigid - 90° Elbow or Side Outlet	BZ
	Female BSP Parallel Pipe - Swivel - Straight (30° Flare)	FU
	Male BSP Taper Pipe - Rigid - Straight (60° Cone)	UT
	Female BSP Parallel Pipe - Swivel - Straight (60° Cone)	GU
	Female BSP Parallel Pipe - Swivel - 45° Elbow (60° Cone)	G1
	Female BSP Parallel Pipe - Swivel - 90° Elbow (60° Cone)	G2
Gaz	Male French Gaz Series - Rigid - Straight (24° Cone)	FG
표	Female French Gaz Series - Swivel - Straight (Ball Nose)	F4
	DIN Metric Banjo - Straight	49
	88 Series Heavy Duty Hose Clamp (Double Bolt Hose Clamp)	88DB
	88 Series Hose Clamp-SAE 100R4 Two-Bolt Clamp	88HC-H
	88 Series Hose Clamp (Worm Gear)	88HC
	Push-Lok Union	82
<u>~</u>	Hose Splicer	88
Specialty	Male Standpipe - Rigid - Straight (Inch Size Tube O.D.)	34
Spe	Male Ferulok Flareless-Rigid-Straight (24° Cone with Nut and Ferrule)	11
	Female Ferulok Flareless - Swivel - Straight (24° Cone)	12
	Female Air Brake Jounce Line - Swivel - Straight	7B
	Male Refrigerant Tube Mender - Straight (with Nut and Ferrule)	T1
	Female PTT 30° - Swivel	32
	Male SAE Compression Seat (without Nut or Sleeve)	61













# Application

В

C

	Description	End Code
	Female Metric S - Swivel - 45° Elbow (24° Cone with O-Ring)	0C
	Male SAE Straight Thread with O-Ring - Swivel - Straight	0G
	Male SAE Straight Thread with O-Ring - Swivel - 90° Elbow	0L
	Male NPTF Pipe - Rigid - Straight	01
	Female Metric S - Swivel - 90° Elbow (24° Cone with O-Ring)	1C
	Male Standpipe Metric L - Rigid - Straight	1D
	Male NPTF Pipe - Swivel - 90° Elbow	1L
	Female NPTF Pipe - Rigid - Straight	02
rder	Two Hole (2.25" X 0.44") Flange - Rigid - 90° Elbow	2H
a 0	SAE Code 61 Flange Head - 110° Elbow	2U
eric	Male JIC 37° - Rigid - Straight	03
E E	Male Standpipe Metric S - Rigid - Straight	3D
<u>=</u>	Male SAE 45° - Rigid - Straight	04
stec	SAE Code 61 Flange Head - Straight (5,000 psi)	4A
de Li	SAE Code 61 Flange Head-45° Elbow (5,000 psi)	4F
ပိ	SAE Code 61 Flange Head - 90° Elbow - (5,000 psi)	4N
End	Female JIC 37° - Swivel - 150° Elbow	4V
and	Male SAE Straight Thread with O-Ring - Rigid - Straight	05
ion	Male Tube-O - Rigid - Straight - Internal Long Pilot (3-Step)	5G
Ject	Female Tube-O - Swivel - 45° Elbow - Short Pilot	5H
Son	Male Tube-O - Swivel - 90° Elbow - Short Pilot	5K
s by (	Male Tube-O - Swivel - 90° Elbow - Short Pilot with High Pressure Charge Port for R134a	5K-PB
uration	Female Tube-O - Swivel - 90° Elbow - Long Pilot with Low Pressure Charge Port for R134a	5L-PT
nfigu	Male Tube-O - Swivel - 90° Elbow - Long Pilot	5M
ng Col	Male Tube-O - Swivel - 90° Elbow - Long Pilot with Low PressureCharge Port for R134a	5M-PT
Standard Fitting Configurations by Connection and End Code Listed in Numerical Order	Male Tube-O - Swivel - 90° Elbow - Long Pilot with Low PressureCharge Port for R134a	5M-PV
ndaı	Female Tube-O - Swivel - 45° Elbow - Long Pilot	5N
Sta	Female Tube-O - Swivel - 45° Elbow - Long Pilot with High Pressure Charge Port for R134a	5N-PB
	Female Tube-O - Swivel - 45° Elbow - Long Pilot with Low Pressure Charge Port for R134a	5N-PT
	Male Tube-O - Swivel - 45° Elbow - Long Pilot	5P
	Male Tube-O - Swivel - 45° Elbow - Long Pilot with Low Pressure Charge Port for R134a	5P-PT
	Male Tube-O - Swivel - 45° Elbow - Short Pilot	5R
	Female Tube-O - Swivel - Straight - Short Pilot	5S
	Female Tube-O - Swivel - 90° Elbow - Short Pilot	5T

# **Standard Fitting Configurations by Connection and End Code**

	Description	End Code					
	Female Compressor - Swivel - 45° Elbow	5V					
	Female Compressor - Swivel - 90° Elbow	5W					
	Female Compressor - Swivel - 90° Elbow - Block Type	5Z					
	Female JIC 37° - Swivel - Straight	06					
	SAE Code 62 Flange Head - Straight						
	SAE Code 62 Flange Head - 22½° Elbow						
	SAE Code 62 Flange Head - 30° Elbow						
	SAE Code 62 Flange Head - 45° Elbow						
Ē	SAE Code 62 Flange Head - 60° Elbow	6G					
Ord	SAE Code 62 Flange Head - 90° Elbow	6N					
ical	Female NPSM Pipe - Swivel - Straight (60° Cone)	07					
mer	Female Air Brake Jounce Line - Swivel - Straight	7B					
N C	Female NPSM Pipe - Gasket Joint - Swivel - Straight	7G					
ed ir	Female SAE 45° - Swivel - Straight	80					
Standard Fitting Configurations by Connection and End Code Listed in Numerical Order	Male Ferulok Flareless-Rigid-Straight (24° Cone with Nut and Ferrule)						
ပိ	Female Ferulok Flareless - Swivel - Straight (24° Cone)						
End	Male NPTF Pipe - Swivel - Straight						
and	SAE Code 61 Flange Head - Straight	15					
ion	SAE Code 61 Flange Head - 22½° Elbow -	16					
Ject	SAE Code 61 Flange Head-45° Elbow	17					
Sonr	SAE Code 61 Flange Head - 67½° Elbow	18					
by 6	SAE Code 61 Flange Head - 90° Elbow	19					
ons	Male NPTF Pipe - Rigid - 90° Elbow or Side Outlet	21					
ırati	Male SAE Straight Thread with O-Ring - Adjustable - 45° Elbow	25					
Jigir	SAE Code 61 Flange Head-30° Elbow	26					
S	SAE Code 61 Flange Head-60° Elbow	27					
ting	Male Inverted SAE 45° - Swivel - Straight	28					
ᆵ	Female Inverted SAE 45° - Rigid - Straight	29					
Idar	Male NPTF Pipe - Rigid - 45° Elbow	31					
Stan	Female PTT 30° - Swivel	32					
	Male Standpipe - Rigid - Straight (Inch Size Tube O.D.)	34					
	Male SAE Straight Thread with O-Ring - Adjustable - 90° Elbow	35					
	Female JIC 37° - Swivel - 45° Elbow - Short Drop	37					
	Female JIC 37° - Swivel - 90° Elbow - Short Drop	39					
	Female JIC 37° - Swivel - 90° Elbow - Long Drop	41					
	Male Tube-O - Swivel - Straight - Long Pilot	45					
	Male Tube-O - Swivel - Straight - Long Pilot with Low Pressure Charge Port for R134a	45-PT					
	Female JIC 37° - Swivel - Straight	48					

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# A pplication

Continued from previous page

	Description	End Code					
	DIN Metric Banjo - Straight	49					
	Female Tube-O - Swivel - Straight - Long Pilot	59					
	Female Tube-O - Swivel - Straight - Long Pilot with Charge Port for 134a						
	Female Tube-O - Swivel - Straight - Long Pilot with Charge Port						
	Male SAE Compression Seat (without Nut or Sleeve)						
	Male Inverted SAE 45° - Swivel - 45° Elbow						
	Female JIC 37°/SAE 45° Dual Flare - Swivel - Straight						
	Male Inverted SAE 45° - Swivel - 90° Elbow						
	Male Inverted SAE 45° - Swivel - 90° Elbow - Long (In-Line)	71					
	Female SAE 45 / Swivel - 45° Elbow	77					
rder	Female SAE 45 / Swivel - 90° Elbow	79					
<u>a</u>	Female SAE 45 / Swivel - 90° Elbow - Long Drop	81					
eric	Push-Lok Union	82					
l m	Hose Splicer	88					
<u>=</u>	88 Series Heavy Duty Hose Clamp (Double Bolt Hose Clamp)	88DB					
stec	88 Series Hose Clamp (Worm Gear)	88HC					
e Li	88 Series Hose Clamp-SAE 100R4 Two-Bolt Clamp						
ဒိ	SAE Code 61 Flange Head - 90° Elbow - Long Drop						
End	Male BSP Taper Pipe - Rigid - Straight	91					
pue	Female BSP Parallel Pipe - Swivel - Straight (60° Cone)						
on	Male API Pipe - Rigid - Straight						
ecti	Female BSP Parallel Pipe - Swivel - 45° Elbow (60° Cone)						
Son	Female BSP Parallel Pipe - Swivel - 90° Elbow (60° Cone)						
andard Fitting Configurations by Connection and End Code Listed in Numerical Orde	Female BSP Parallel Pipe - Swivel - 90° Elbow Block Type (60° Cone)	B4					
atio	Female BSP Parallel Pipe - Swivel - Straight (Flat Seat)	B5					
gur	Male BSP Taper Pipe - Rigid - 45° Elbow	BV					
onfi	Male BSP Taper Pipe - Rigid - 90° Elbow or Side Outlet	BZ					
ng C	Female Metric - Swivel - Straight (Ball Nose)	C0					
Ħ	Female Metric L - Swivel - Straight (Ball Nose)	C3					
ard	Female Metric L - Swivel - 45° Elbow (Ball Nose)	C4					
and	Female Metric L - Swivel - 90° Elbow (Ball Nose)	C5					
જ	Female Metric S - Swivel - Straight (Ball Nose)	C6					
	Female Metric S - Swivel - 45° Elbow (Ball Nose)	C7					
	Female Metric S - Swivel - 90° Elbow (Ball Nose)	C8					
	Female Metric S - Swivel - Straight (24° Cone with O-Ring)	C9					
	Female Metric L - Swivel - Straight (24° Cone with O-Ring)	CA					
	Female Metric L - Swivel - 45° Elbow (24° Cone with O-Ring) -	CE					
	Female Metric L - Swivel - 90° Elbow (24° Cone with O-Ring) -	CF					
	Male Metric L - Rigid - Straight (24° Cone)	D0					
	Male Metric S - Rigid - Straight (24° Cone)	D2					
	Male BSP Parallel Pipe - Rigid - Straight (60° Cone)	D9					
	Female French Gaz Series - Swivel - Straight (Ball Nose)	F4					

# **Standard Fitting Configurations** by Connection and End Code

	Description	End Code					
	Male French Gaz Series - Rigid - Straight (24° Cone)	FG					
	Female BSP Parallel Pipe - Swivel - Straight (30° Flare)	FU					
	Female BSP Parallel Pipe - Swivel - 45° Elbow (60° Cone)						
	Female BSP Parallel Pipe - Swivel - 90° Elbow (60° Cone)	G2					
	Female Grease Connection - SPL-PTF Taper Thread - Rigid Straight - ½ x 27						
	Female BSP Parallel Pipe - Swivel - Straight (60° Cone)	GU					
Order	Male Seal-Lok - Rigid - Straight (with O-Ring)	J0					
Sal	Female Seal-Lok - Swivel - 90° Elbow - Long Drop	J1					
nerio	Female Seal-Lok - Swivel - 90° Elbow - Medium Drop	J5					
Nun	Female Seal-Lok - Swivel - 221/2° Elbow	J6					
d in	Female Seal-Lok - Swivel - 45° Elbow	J7					
iste	Female Seal-Lok - Swivel - 90° Elbow - Short Drop	J9					
de L	Male Seal-Lok - Bulkhead without Locknut - Straight	JB					
ပိ	Female Seal-Lok - Swivel - Straight - Short						
End	Female Seal-Lok - Swivel - Straight - Long	JS					
and	Female JIC 37° - Swivel - 45° Elbow - Medium Drop	L7					
ion	Female JIC 37° - Swivel - 90° Elbow - Medium Drop	L9					
ect	Male JIC 37° - Bulkhead without Locknut - Straight	LB					
Son	Female Metric Swivel - Straight (30° Flare)	MU					
by (	Female Compressor - Swivel - 135° Elbow	RV					
ons	Female Compressor - Swivel - 180° Elbow - Block Type	RZ					
ırati	Female NPTF Pipe - Swivel - Straight	S2					
ıfigu	Male Tube-O - Swivel - Straight - Short Pilot	S5					
Standard Fitting Configurations by Connection and End Code Listed in Numerical	Male Tube-O - Swivel - Straight - Short Pilot with Charge Port for R12	S5-PR					
Fitti	Male Refrigerant Tube Mender - Straight (with Nut and Ferrule)	T1					
ard	Male BSP Taper Pipe - Rigid - Straight (60° Cone)	UT					
and	Caterpillar® Flange Head - Straight	XA					
St	Caterpillar® Flange Head - 22½° Elbow	XB					
	Caterpillar® Flange Head - 30° Elbow	XE					
	Caterpillar® Flange Head - 45° Elbow	XF					
	Caterpillar® Flange Head - 60° Elbow	XG					
	Caterpillar® Flange Head - 67½° Elbow	XM					
	Caterpillar® Flange Head - 90° Elbow (with O-Ring)	XN					
	Female Metric - Swivel - Straight (30° Flare)	XU					



В



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# A pplication

### **Metric Conversion**

# METRIC to ENGLISH EQUIVALENTS ENGLISH to METRIC EQUIVALENTS

inches x 25.4 = millimeters (mm)

inches x 2.54 = centimeters (cm)

feet x.3048 = meters (m)

yard x .9144 = meters (m)

psi x .0689 = bar

psi x .0069 = Megapascals (MPa)

psi x .0703 = Kilogram force per square centimeter

(Kgf/cm<sup>2</sup>)

B

D

pound force x 4.448 = Newtons

pound  $\cdot$  inch x .113 = Newton  $\cdot$  meters (N  $\cdot$  m)

pound  $\cdot$  foot x 1.356 = Newton  $\cdot$  meters (N  $\cdot$  m)

millimeter x.0394 = inch (in)

centimeter x .3937 = inch (in)

meters ÷ 3.281 = feet (ft)

meters x 1.0936 = yards (yd)

bar x 14.5 = psi

Megapascals x 145.0 = psi

Kilogram force per square centimeter x 14.22 = psi

Newtons x .2248 = pounds force (lbf)

Newton  $\cdot$  meter x 8.850 = pound  $\cdot$  inches (lb  $\cdot$  in)

Newton  $\cdot$  meter x .737 = pound feet (lb  $\cdot$  ft)

# METRIC I.D. KIT INTERNATIONAL HOSE FITTING IDENTIFICATION KIT

The booklet, gauges and caliper contained in this fitting I.D. Kit, can be used to identify most types of hydraulic hose fittings and adapters including:

U.S. Standards

British Standard Pipe

German (DIN) Metric

French Metric and GAZ

Japanese Standards (JIS)

Contents of Kit:

Instruction Book with Tables

Screw Pitch Gauge for U.S. Threads

International Gauge for Metric and British Threads

Inch and Millimeter Caliper

Carry Case

For information, contact your local distributor or the Parker Catalog Service Department - 1-800-272-7537 or 1-614-279-7070.

	MILLIMETERS to FRACTIONS to DECIMALS										
ММ	INC	HES	ММ	INCHES		ММ	INC	INCHES		INCH	IES
	FRACTION	DECIMAL		FRACTION	DECIMAL		FRACTION	DECIMAL		FRACTION	DECIMAL
0.3969	1/64	0.0156	6.7469	17/64	0.2656	13.0969	33/64	0.5156	19.4469	49/64	0.7656
0.7938	1/32	0.0312	7.1438	9/32	0.2812	13.4938	17/32	0.5312	19.8438	25/32	0.7812
1.1906	3/64	0.0468	7.5406	19/64	0.2968	13.8906	35/64	0.5468	20.2406	51/64	0.7968
1.5875	1/16	0.0625	7.9375	5/16	0.3125	14.2875	9/16	0.5625	20.2375	13/16	0.8125
1.9844	5/64	0.0781	8.3344	21/64	0.3281	14.6844	37/64	0.5781	21.0344	53/64	0.8281
2.3812	3/32	0.0937	8.7312	11/32	0.3437	15.0812	19/32	0.5937	21.4312	27/32	0.8437
2.7781	7/64	0.1093	9.1281	23/64	0.3593	15.4781	39/64	0.6093	21.8281	55/64	0.8593
3.1750	1/8	0.1250	9.5250	3/8	0.3750	15.8750	5/8	0.6250	22.2250	7/8	0.8750
3.5719	9/64	0.1406	9.9219	25/64	0.3906	16.2719	41/64	0.6406	22.6219	57/64	0.8906
3.9688	5/32	0.1562	10.3188	13/32	0.4062	16.6688	21/32	0.6562	23.0188	29/32	0.9062
4.3656	11/64	0.1718	10.7156	27/64	0.4218	17.0656	43/64	0.6718	23.4156	59/64	0.9218
4.7625	3/16	0.1875	11.1125	7/16	0.4375	17.4625	11/16	0.6875	23.8125	15/16	0.9375
5.1594	13/64	0.2031	11.5094	29/64	0.4531	17.8594	45/64	0.7031	24.2094	61/64	0.9531
5.5562	7/32	0.2187	11.9062	15/32	0.4687	18.2562	23/32	0.7187	24.6062	31/32	0.9687
5.9531	15/64	0.2343	12.3031	31/64	0.4843	18.6531	47/64	0.7343	25.0031	63/64	0.9843
6.3500	1/4	0.2500	12.7000	1/2	0.5000	19.0500	3/4	0.7500	25.4000	1	1.0000



 $ilde{\mathbb{A}}$  **Warning**: This chemical compatibility guide must not be used in conjunction with any other compatibility guides from previous or future catalog editions, bulletins or publications. Incorrect use of these charts could result in death, personal injury or property damage.

### Hose Selection by Medium and Hose Type

This hose compatibility chart is a ready reference of Parker hose compatibility with various fluid media. It is intended as a guide to chemical compatibility with inner tube materials and assembly lubricant applied internally. The specific recommendations are based upon field experience, the advice of various polymer or fluid suppliers, and specific laboratory experiments. It must be stressed, however, that this information is offered only as a guide. Final hose selection depends also upon pressure, fluid temperature, ambient temperature, and special requirements or variations, which may not be known by Parker Hannifin. Legal and other regulations must be followed with particular care. Where an external compatibility problem may occur, or for fluids not listed, we encourage you to first contact the fluid manufacturer for a recommendation prior to contacting your Parker Hannifin Field Representative or the Technical Service Department, Hose Products Division. Wickliffe. Ohio.

### Use the Chart as Follows:

- Locate medium to be carried using the Chemical Resistance Table on the following pages.
- Select suitability of hose and fitting material from the table based on the letter rating in the table. See resistance rating key below for explanation of compatibility ratings. See list of numerals below for an explanation when a numeral, or a numeral and a letter rating are present in the table.
- The Column headings on the Chemical Resistance Table, I, II, III, IV, V, refer to specific groups of hoses.
- Locate hose part number under Column I, II, III, IV, V from the list below.
- For fitting material availability refer to appropriate fitting section of catalog.
- Check hose specifications in this catalog. Contact Hose Division Technical Service Department on any items not cataloged.

### Resistance Rating Key

A = Preferred, good to excellent with little or no change in physical properties.

F = Fair, marginal or conditional with noticeable affects on physical properties.

X = Unsuitable, severe affects on physical properties.

~ = No rating, insufficient information.

Note: All data based on 70°F unless otherwise noted.

Please visit www.Parkerhose.com for the latest information.

### Chemical Resistance Information

#### **Numerals**

- For air or gaseous applications above 250 PSI (1,7 MPa), the cover should be pin pricked. The service life for air or gaseous applications can be unpredictable, especially at higher pressures. Contact Technical Service Department for more information.
- 2. Legal and insurance regulations must be considered. Contact Technical Service Department for more information.
- 3. Push-Lok hoses 801 and 836 are approved for diesel fuel applications only when coupled with HY series fittings.
- Use 285, 235 or 244 hoses. The compatibility of the systems refrigeration oil with these hoses needs to be evaluated on a case by case basis. Contact HPD Technical Service Department for more information. Do not use mineral oil or Alkyl Benzene refrigeration oils with 244 hose. Chemical compatibility does not imply low permeation.
- 150°F (65°C) maximum.
- Satisfactory at some concentrations and temperatures, unsatisfactory at others.
- For phosphate ester fluids use 304, 424, 774, F42 or 804 hoses.
- Acceptable for flushing hose assemblies.
- 221FR hose recommended.
- For dry air applications, hoses with inner tubes from columns IV. and V are preferred. See hose specifications for maximum recommended temperatures with air.
- 11. Use SS23CG or SS25UL
- 12. Use SS23CG

### **Hose Types**

Column I

AX, BXX, P35, 201, 341, 601, 701, 711 721, 721TC,

721ST, 731, 761, 781, 791TC, 881

SS25UL, 301LT, 351TC, 351ST, 421WC, 431, 451TC, 451ST, 471TC, 471ST, 472LT, 722LT, 772LT, 792LT, 801, 811, 811HT

Column III

JK, 221FR, 302, 387, 422, 472TC, 482TC, 482ST, 487, 722TC, 772TC, 772ST, 782TC, 782ST, 787TC, 792TC, 792ST, 797TC, 821

Column IV 206, 213, 266, 293, 426, 611HT, 821FR, 836, 436 Column V

F42, 304, 424, 774, 804

### ⚠ Caution:

The fluid manufacturer's recommended maximum operating temperature for any specific name-brand fluid should be closely observed by the user. Specific name brand fluids can vary greatly between manufacturers even though they are considered to be from the same family or type of fluids. Using fluids above the manufacturers maximum recommended temperature can cause the fluid to break down, creating by-products that can be harmful to elastomers or other materials used in the system. When selecting a hose type, both the fluid manufacturer and hose manufacturers maximum temperature limit must be taken into consideration, with the lower of the two taking precedence.

















# Chemical Resistance Information(Page 1 of 9)

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MEDIA	1	II	III	IV	٧	Steel	Brass	SS
3M FC-75	Α	Α	Α	Α	Α	Α	Α	A
Acetic Acid	Х	Х	X	Α	6	х	Х	Α
Acetone	Х	Х	X	Α	Α	Α	Α	Α
Acetylene	Х	Х	X	Х	Х	~	~	~
Aeroshell 31	F	Α	Α	F	~	Α	Α	Α
AEROSHELL Turbine Oil 500	Х	Х	F	Х	Х	Α	Α	Α
Air	A,1,10	A,1,10	A,1,10	A,1,10	A,1,10	Α	Α	A
Air (dry)	Х	F,1,10	F,1,10	A,1,10	A,1,10	Α	Α	Α
Alcohol (Methanol-Ethanol)	F	F	F	F	F	F	Α	Α
Americas Choice AW ISO 46	~	F	F	~	~	~	~	~
Ammonia (Anhydrous)	Х	Х	X	Х	Х	Х	Х	х
Ammonium Chloride	Α	Α	Α	Α	Α	Х	Х	x
Ammonium Hydroxide	F	F	F	Α	Α	F	Х	Α
Ammonium Nitrate	Α	Α	Α	F	Α	F	X	Α
Ammonium Phosphate	Α	Α	Α	Α	Α	Х	X	F
Ammonium Sulfate	Α	Α	А	Α	Α	F	X	F
Amoco 32 Rykon	Х	Α	Α	F	Х	Α	Α	Α
Ampol PE 46	Х	Х	Х	Х	A,7	Α	Α	Α
AMSOIL Synthetic ATF	F	Α	Α	Α	Х	Α	Α	Α
Amyl Alcohol	Χ	X	Χ	F	F	X	Α	Α
Anderol 495,497,500,750	Χ	X	Χ	F	X	Α	Α	Α
Aniline	X	Х	Х	F	Α	Α	Х	Α
Animal Fats	Х	F	F	F	F	6	6	A
Aquacent Light, Heavy	Х	Α	Α	Х	Х	Α	Α	Α
Aries/Athena	F	F	F	~	Х	Α	Α	Α
Aromatic 100,150	X	F	F	~	Х	Α	Α	Α
Arrow 602P	Α	Α	Α	Α	X	Α	Α	Α
Asphalt	Х	F	F	F	Х	F	F	Α
ASTM #3 Oil	F	F	F	F	Х	Α	Α	Α
Astrol 1044AW	Α	Α	Α	~	Х	Α	Α	Α
ATF-M	F	Α	Α	Α	Χ	Α	Α	Α
Automotive Brake Fluid	X	Χ	Χ	Χ	~	X	X	X
AW 32,46,68	F	Α	Α	Α	Χ	Α	Α	Α
BCF	F	F	F	F	~	Α	Α	Α
Benz Petraulic 32,46,68,100,150,220,320,460	F	Α	Α	Α	X	Α	Α	Α
Benzene, Benzol	X	X	X	F	X	Α	Α	Α
Benzgrind HP 15	~	Α	Α	Α	Χ	Α	Α	Α
Benzine	X	X	Χ	F	Х	Α	Α	Α
Bio Diesel B20	~	Α	Α	Α	Х	Α	Α	Α
Bio-Soy, Agri Industries	X	Α	Α	Х	Х	Α	Α	Α
Biodegradable Hydraulic Fluid 112B	X	Α	Α	Х	~	Α	Α	Α
Borax	F	F	F	F	Α	F	Α	Α
Boric Acid	Α	Α	Α	Х	Α	X	6	Α
Brayco 882	Х	Α	Α	Α	Х	Α	Α	A





### **Chemical Resistance** Information(Page 2 of 9)

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MEDIA	1	II	III	IV	V	Steel	Brass	SS
Brayco Micronic 745	~	A	A	F	Х	A	A	A
Brayco Micronic 776RP	F	Α	Α	F	Х	Α	Α	Α
Brayco Micronic 889	Х	F	F	~	Х	Α	Α	Α
Brine	F	F	F	Α	A	Х	F	F
Butane		See i	numerals 2 and	d 11		Α	Α	Α
Butyl Alcohol, Butanol	F	F	F	F	F	F	F	Α
Calcium Chloride	A	A	A	F	A	F	F	Х
Calcium Hydroxide	Α	Α	Α	Α	Α	Α	Α	Α
Calcium Hypochlorite	Х	Х	Х	Α	Α	Х	F	X
Calibrating Fluid	Α	Α	Α	Α	Х	Α	Α	А
Carbon Dioxide, gas	F	F	F	F	6	Α	Α	Α
Carbon Dioxide, liquid	Х	Х	Х	Х	Х	Х	Х	x
Carbon Disulfide	Х	Х	Х	F	Х	A	F	A
Carbon Monoxide (hot)	F	F	F	F	6	F	6	Α
Carbon Tetrachloride	Х	Х	Х	F	Х	6	6	6
Carbonic Acid	F	F	F	Х	F	X	X	F
Castor Oil	Α	Α	Α	Α	Α	Α	Α	A
Castrol 5000	Х	F	F	Α	Х	Α	Α	A
Cellosolve Acetate	X	Х	Х	Х	A	Х	Х	A
Celluguard	A	A	Α	~	A	Α	A	A
Cellulube 90, 150, 220 300, 550, 1000	X	Х	Х	~	Α	Α	Α	Α
Chevron Clarity AW 32, 46, 68	Α	A	Α	Α	Х	Α	Α	A
Chevron FLO-COOL 180	F	F	F	~	Х	Α	Α	A
Chevron FR-8, 10, 13, 20	X	Х	Х	Х	A,7	Α	Α	A
Chevron Hydraulic Oils AW MV 15, 32, 46, 68, 100	A	A	A	A	X	A	A	A
Chevron HyJet IV (9)	X	Х	X	Х	A,7	Α	Α	A
Chevron Rykon MV	F	Α	Α	~	~	Α	Α	Α
Cindol 3204 PBR	~	Α	Α	Α	Х	Α	Α	A
Citric Acid	F	Α	Α	X	Α	х	Х	6
Commonwealth EDM 242, 244	Α	Α	Α	~	Х	Α	Α	A
CompAir CN300	Х	Х	Х	F	Х	A	A	A
CompAir CS100, 200, 300, 400	X	Х	Х	F	Х	Α	Α	Α
Coolanol 15, 20, 25, 35, 45	Α	Α	Α	Α	Α	Α	Α	Α
Copper Chloride	F	Α	Α	Χ	Α	Х	X	х
Copper Sulfate	Α	Α	Α	X	Α	X	X	F
Cosmolubric HF-122, HF-130, HF-144	X	F	Α	X	Х	Α	Α	Α
Cosmolubric HF-1530	X	F	A	Х	X	A	A	A
Cottonseed Oil	F	Α	Α	F	Х	Α	Α	Α
CPI CP-4000	Χ	Х	X	F	Х	Α	Α	Α
Crude Petroleum Oil	F	Α	A	Α	X	F	F	Α
CSS 1001Dairy Hydraulic Fluid	F	Α	Α	Α	X	A	A	Α
Daphne AW32	A	A	A	A	X	A	A	A
Dasco FR 201-A	A	A	A	~	Х	A	A	A
Dasco FR150, 200, 310	F	Α	Α	~	Α	A	A	A
Dasco FR300, FR2550	X	X	X	~	X	A	A	A
	-	-	-		-		•	

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В





D

# Chemical Resistance Information(Page 3 of 9)

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MEDIA	1	II	Ш	IV	V	Steel	Brass	SS
Dasco FR355-3	Х	F	A	Х	Х	Α	Α	Α
Deicer Fluid 419R	Α	Α	Α	~	~	Α	Α	Α
Deionized Water	Α	Α	Α	Α	Α	F	F	Α
Dexron II ATF	F	Α	Α	Α	Х	Α	Α	Α
Dexron III ATF (to 170°F)	A	Α	Α	Α	Х	Α	Α	Α
Dexron III ATF (to 212°F)	Х	F	F	Α	Х	Α	Α	Α
Dexron III ATF (to 250°F)	Х	Х	Х	F	Х	Α	Α	Α
Dexron III ATF (to 300°F)	Х	X	Х	Х	Х			
Dexron VI ATF (to 170°F)	Α	Α	Α	Α	Х	Α	Α	Α
Dexron VI ATF (to 212°F)	Х	F	F	Α	Х	Α	Α	Α
Dexron VI ATF (to 250°F)	Х	X	Х	Х	Х	Α	Α	Α
Dexron VI ATF (to 300°F)	Х	Х	Х	Х	Х			
DexronIIE/Mercon (at 212°F)	Х	Α	Α	Α	Х	Α	Α	Α
Diesel Fuel (Standard and Ultra Low Sulfur)	F,3	A,3	A,3	A,3	Х	Α	Α	Α
Diester Fluids	Χ	Χ	Х	F	Х	Α	Α	Α
Dow Corning 2-1802 Sullair (24KT)	~	~	~	F	~	Α	Α	Α
Dow Corning DC 200, 510, 550, 560, FC126	Α	Α	Α	F	~	Α	Α	Α
Dow HD50-4	F	F	F	~	~	~	~	Α
Dow Sullube 32	~	~	~	F	~	Α	Α	Α
Dowtherm A,E	Χ	Χ	X	F	Χ	Α	Α	Α
Dowtherm G	Χ	Χ	X	Χ	Χ	Α	Α	Α
Duro AW-16, 31	Α	Α	Α	~	Х	Α	Α	Α
Duro FR-HD	Α	Α	Α	~	Х	Α	Α	Α
EcoSafe FR-68	Α	Α	Α	~	~	Α	Α	Α
Envirologic 3032, 3046, 3068	Α	Α	Α	~	~	~	~	~
Ethanol	F	F	F	F	F	F	Α	Α
Ethers	Х	Х	X	F	Х	Α	Α	Α
Ethyl Acetate	Х	Χ	X	F	F	F	Α	Α
Ethyl Alcohol	F	F	F	F	F	F	Α	Α
Ethyl Cellulose	F	F	F	F	F	X	F	F
Ethyl Chloride	X	Χ	Х	X	Α	F	F	F
Ethylene Dichloride	X	Χ	Х	F	X	X	Α	X
Ethylene Glycol	F	A	Α	Α	Α	Α	F	Α
Exxon 2380 Turbo Oil	X	F	F	X	X	Α	Α	Α
Exxon 3110 FR	Α	Α	Α	Α	X	Α	Α	Α
Exxon Esstic	Α	Α	Α	Α	Α	Α	Α	Α
Exxon Mobil Rarus SHC 1026	~	~	~	Α	~	Α	Α	Α
Exxon Nuto H 46, 68	Α	Α	Α	Α	X	Α	Α	Α
Exxon Tellura Indusrial Process Oils	Α	Α	Α	Α	Х	Α	A	A
Exxon Terresstic, EP	Α	Α	Α	Α	Α	Α	Α	A
Exxon Turbo Oil 2380	X	F	F	F	Х	Α	Α	A
Exxon Univolt 60, N61	F	Α	Α	Α	X	Α	Α	A
FE 232 (Halon)	X	Х	Х	Х	F	Α	Α	Α





# Chemical Resistance Information(Page 4 of 9)

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MEDIA	1	II	III	IV	V	Steel	Brass	SS	
Fenso 150	~	Α	Α	~	Х	А	Α	Α	
Formaldehyde	Х	Х	Х	Α	Α	X	F	Α	
Formic Acid	X	Х	X	Х	Α	X	6	X	
Freons see refrigerants	~	~	~	~	~	~	~	~	
Fuel Oil	F	Α	Α	Α	Х	Α	Α	Α	
Fyre-Safe 120C,126,155,1090E,1150,1220,1300E	Х	Х	Х	Х	A,7	Α	Α	А	
Fyre-Safe 200C, 225, 211	F	Α	Α	Α	Α	Α	Α	Α	
Fyre-Safe W/O	Α	Α	Α	Α	Х	Α	Α	Α	
Fyrguard 150, 150-M, 200	Α	Α	Α	Α	Α	Α	Α	Α	
Fyrquel 60, 90, 150, 220, 300, 550, 1000	X	Х	X	Х	A,7	Α	Α	Α	
Fyrquel EHC, GT, LT, VPF	Х	Х	X	Х	A,7	Α	Α	Α	
Fyrtek MF, 215, 290, 295	X	Х	Х	Х	Х	Α	Α	Α	
Gardner-Denver GD5000, GD8000	Х	Х	Х	F	Х	Α	Α	Α	
Gasoline			See numeral	9		Α	Α	Α	
Glue	F	F	F	~	Х	Α	F	Α	
Glycerine, Glycerol	Α	Α	Α	Α	Α	А	F	Α	
Grease	Α	Α	Α	Α	Х	Α	Α	Α	
Green Plus ES	Х	Α	Α	Х	~	Α	Α	Α	
Greens Care 32, 46	F	Α	Α	F	~	Α	Α	Α	
Gulf-FR Fluid P37, P40, P43, P45, P47	X	X	X	F	Α	Α	Α	Α	
H-515 (NATO)	Α	Α	Α	~	Х	Α	Α	Α	
Halon 1211, 1301	F	F	F	F	~	Α	Α	Α	
Helium Gas	Х	X	X	Х	Х	Α	Α	Α	
Heptane	Х	F	F	Α	Х	Α	Α	Α	
Hexane	Χ	F	F	Α	Χ	Α	Α	Α	
HF-20, HF-28	~	Α	Α	Α	Α	Α	Α	Α	
Houghto-Safe 1055, 1110, 1115, 1120, 1130 (9)	Χ	Χ	Χ	X	A,7	Α	Α	Α	
Houghto-Safe 271 to 640	F	Α	Α	F	Α	Α	Α	Α	
Houghto-Safe 419 Hydraulic Fluid	Α	Α	Α	~	Х	Α	Α	Α	
Houghto-Safe 419R Deicer Fluid	Α	Α	Α	~	~	Α	Α	Α	
Houghto-Safe 5046, 5046W, 5047-F	Α	Α	Α	Α	Х	Α	Α	Α	
HP 100C (Jack hammer oil)	F	Α	Α	Α	Х	Α	Α	Α	
HPWG 46B	F	Α	Α	F	~	Α	Α	Α	
Hul-E-Mul	Α	Α	Α	~	Х	Α	Α	Α	
Hychem C, EP1000, RDF	Α	Α	Α	Α	Α	Α	Α	Α	
Hydra Safe E-190	Α	Α	Α	F	Х	Α	Α	Α	
Hydra-Cut 481, 496	Α	Α	Α	~	Х	Α	Α	Α	
Hydrafluid 760	Α	Α	Α	~	Х	Α	Α	Α	
Hydrochloric Acid	X	Х	Х	Х	Х	X	Х	X	
Hydrofluoric Acid	Χ	X	Х	X	X	X	6	Χ	
Hydrogen Gas	X	X	Х	X	X	Α	Α	Α	
Hydrogen Peroxide	X	X	X	F	X	X	Х	6	
Hydrogen Sulfide	Χ	X	Х	X	Α	X	Х	6	
Hydrolube	Α	Α	Α	F	Α	Α	Α	Α	

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В

C



# Chemical Resistance Information(Page 5 of 9)

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MEDIA				D.		<b>.</b> .			
MEDIA	I	II	III	IV	V	Steel	Brass	SS	
Hydrolubric 120-B, 141, 595	F	Α	Α	F	Α	Α	Α	Α	
Hydrosafe Glycol 200	Α	Α	Α	Α	Α	Α	F	Α	
HyJet IV	Х	Х	Х	Х	A,7	Α	Α	Α	
Hyspin SP 10	~	Α	Α	Α	~	Α	Α	Α	
Ideal Yellow 77	Α	Α	Α	Α	Х	Α	Α	Α	
Imol S150 to S550	Х	Х	Х	~	~	Α	Α	Α	
Ingersoll Rand SSR Coolant	Х	Х	Х	F	Х	Α	Α	Α	
Isocyanates	F	F	F	F	Χ	Α	~	Α	
Isooctane	Χ	F	F	Α	Χ	Α	Α	Α	
Isopar H	Х	Х	Х	Х	Х	Α	Α	Α	
Isopropyl Alcohol	F	F	F	F	F	F	Α	Α	
Jayflex DIDP	Х	Х	Х	Х	Α	Α	Α	Α	
JP3 and JP4	Х	A,3	A,3	~	Х	Α	Α	Α	
JP5	Х	A,3	A,3	F,3	Х	Α	Α	Α	
JP9	Х	Х	Х	Х	Х	Α	~	Α	
Kaeser 150P, 175P, 325R, 687R	Х	Х	Х	F	X	Α	Α	А	
Kerosene	Х	Α	Α	F	Х	Α	Α	Α	
KSL-214, 219, 220, 222	Х	Х	Х	F	Х	Α	Α	Α	
Lacquer	Х	Х	Х	F	Х	Х	Α	Α	
Lacquer Solvents	X	Х	Х	F	Х	X	Α	Α	
Lactic Acids	X	Х	Х	Х	Х	X	Х	Α	
Lindol HF	Х	Х	Х	F	Α	Α	Α	Α	
Linseed Oil	Α	A	Α	A	A	Α	Α	A	
LP-Gas			See numera			Α	Α	A	
Magnesium Chloride	A	Α	A	Α	A	X	X	X	
Magnesium Hydroxide	F	F	F	A	A	F	F	F	
Magnesium Sulfate	A	Α	Α	A	A	Α	F	Α	
Mercaptans	X	X	X	X	X	~	~	~	
Methane	^	^	See numera		^	A	A	~ A	
	F	F	F	F F	F	F			
Methanol Marked Alexand	F	F	F		F		A	A	
Methyl Alcohol				F		F	A	A	
Methyl Chloride	X	X	X	F	X	A	A	A	
Methyl Ethyl Ketone (MEK)	X	X	X	F	X	F	Α	Α	
Methyl Isopropyl-Ketone	X	X	X	X	X	F .	A	A	
Metsafe FR303-M, FR303	X	Х	Х	X	Х	Α	Α	Α	
Metsafe FR310, FR315, FR330, FR350	X	X	Х	X	F, 7	Α	Α	Α	
Microzol-T46	X	Α	Α	~	Х	Α	Α	Α	
MIL-B-46176A	X	Х	Х	Х	Х	Х	Х	Х	
MIL-H-46170	Х	F	F	F	Х	Α	Α	A	
MIL-H-5606	F	Α	Α	Α	Х	Α	Α	Α	
MIL-H-6083	F	Α	Α	Α	Х	Α	Α	Α	
MIL-H-7083	F	Α	Α	Α	Х	Α	Α	Α	
MIL-H-83282	F	Α	Α	Α	Х	Α	Α	Α	
MIL-L-2104, 2104B	F	Α	Α	Α	Χ	Α	Α	Α	
1									





# Chemical Resistance Information(Page 6 of 9)

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MEDIA	1	II	III	IV	V	Steel	Brass	SS
MIL-L-23699	Х	Х	Х	Х	Х	A	A	A
MIL-L-7808	F	Α	Α	~	Х	Α	Α	Α
Mine Guard FR	Α	Α	Α	~	Α	Α	Α	Α
Mineral Oil	Α	Α	Α	F	Х	Α	Α	Α
Mineral Spirits	8	8	8	8	Х	Α	Α	Α
Mobil Aero HFE	F	Α	Α	F	Х	Α	Α	Α
Mobil DTE 11M, 13M, 15M, 16M, 18M, 19M	F	Α	Α	Α	Х	Α	Α	Α
Mobil DTE 22, 24, 25, 26	F	Α	Α	Α	X	Α	Α	Α
Mobil EAL 224H	Х	Α	Α	Х	~	Α	Α	Α
Mobil EAL Artic 10, 15, 22,32, 46, 68, 100	Х	Х	Х	Х	Х	Α	Α	Α
Mobil EAL Evirosyn 46	Α	Α	Α	Α	Х	Α	Α	Α
Mobil Glygoyle 11, 22, 30, 80	Α	Α	Α	~	Х	Α	Α	Α
Mobil HFA	F	Α	Α	Α	Х	Α	Α	Α
Mobil Jet 2	X	F	F	Α	Х	Α	Α	Α
Mobil Nyvac 20, 30, 200, FR	F	Α	Α	F	Α	Α	Α	Α
Mobil Rarus 824, 826, 827	Х	Х	Х	F	Х	Α	Α	Α
Mobil SHC 500 Series	Α	Α	Α	Α	Х	Α	Α	Α
Mobil SHC 600 Series	F	Α	Α	Α	Х	Α	Α	Α
Mobil SHC 800 Series	F	Α	Α	Α	Х	Α	Α	Α
Mobil SHL 624	~	Α	Α	Α	Х	Α	Α	Α
Mobil Vactra Oil	Α	Α	Α	F	Х	Α	Α	Α
Mobil XRL 1618B	Х	Х	Х	Х	A,7	Α	Α	Α
Mobilfluid 423	F	Α	Α	Α	Χ	Α	Α	Α
Mobilgear SHC 150, 220, 320, 460, 680	F	F	F	F	Χ	Α	Α	Α
Mobilrama 525	Α	Α	Α	F	Χ	Α	Α	Α
Molub-Alloy 890	Χ	Χ	X	F	Χ	Α	Α	Α
Moly Lube 'HF' 902	F	F	F	F	Χ	Α	Α	Α
Monolec 6120 Hydraulic Oil	Α	Α	Α	Α	X	Α	Α	Α
Morpholine (pure additive)	Х	X	X	Х	Х	Х	Х	Α
Naptha	X	F	F	Α	Х	Α	Α	Α
Napthalene	X	Х	Х	F	Х	Α	Α	Α
Natural Gas		S	ee numeral 12	!		Α	Α	Α
Nitric Acid	X	Х	Х	Х	Х	Х	Х	F
Nitrobenzene	X	Х	X	F	Х	Х	Х	Α
Nitrogen, gas	F,1	F,1	F,1	F,1	F,1	Α	Α	Α
Nitrogen, liquid	X	Х	Х	Х	X	Х	X	X
NORPAR 12, 13, 15	8	8	8	8	Х	Α	Α	Α
Nuto H 46, 68	Α	Α	Α	Α	Χ	Α	Α	Α
Nyvac 20, 30, 200, FR	F	Α	Α	F	Α	Α	Α	Α
Nyvac Light	X	Х	Х	~	Α	Α	Α	Α
Oceanic HW	F	Α	Α	F	Х	Α	Α	Α
Oxygen	X	X	X	Х	Χ	Χ	Α	Α
Ozone	F	F	F	~	Α	Α	Α	Α
Pacer SLC 150, 300, 500, 700	X	Х	Х	F	Х	Α	Α	Α

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В

C



D

# Chemical Resistance Information(Page 7 of 9)

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MEDIA	1	Ш	III	IV	٧	Steel	Brass	SS
Pennzbell AWX	F	A	A	F	Х	A	A	A
Perchloroethylene	X	X	Х	X	Х	F	X	Α
Petroleum Ether	X	F	F	F	Х	Α	Α	Α
Petroleum Oils	Α	Α	Α	Α	Χ	Α	Α	Α
Phenol (Carbolic Acid)	X	X	X	Α	Х	X	F	Α
Phosphate Ester Blends	X	X	Х	Х	X	Α	Α	A
Phosphate Esters	Х	Х	Х	Х	A,7	A	A	A
Phosphoric Acid	X	X	Х	Х	X	X	X	F
Plurasafe P 1000, 1200	F	Α	Α	Α	F	Α	Α	Α
Polyalkylene Glycol	A	A	Α	~	X	Α	Α	A
Polyol Ester	X	F	A	х	X	A	A	A
Potassium Chloride	A	A	A	Α	A	X	F	F
Potassium Hydroxide	X	X	X	F	A	6	X	Α
Potassium Sulfate	A	A	A	Α	A	A	A	A
Propane	Α		See numeral 11	Α	^	A	A	A
Propylene Glycol	F	A	A	Α	A	F	F	F
	X	X	X	X				
Pydraul 10-E, 29-E, 50-E, 65-E, 90-E, 115-E	X	X	X	X	A,7 A,7	A	Α	A
Pydraul 230-C, 312-C, 68-S						A	A	
Pydraul 60, 150, 625, F9	X	X	X	X	A,7	A	A	A
Pydraul 90, 135, 230, 312, 540, MC	X	X	X	X	X	A	Α .	A
Pydraul A-200	X	X	X	F	X	A	A	A
Pyro Gard 43, 230, 630	X -	X	X	X -	X	Α .	Α .	A
Pyro Gard C, D, R, 40S, 40W	F	A	A	F	X	A	Α .	A
Pyro Guard 53, 55, 51, 42	X	Χ	Χ	X	A,7	Α	Α	Α
Quakerol 641, 720	X	F	Α	X	F	Α	Α	Α
Quintolubric 700	Α	Α	Α	Α	Α	Α	F	Α
Quintolubric 807-SN	F	Α	A	~	X	Α	A	A
Quintolubric 822, 833	X	F,5	A,5	X	X	Α	Α	Α
Quintolubric 822-68EHC (71°C, 160°F maximum)	X	F,5	A,5	~	~	Α	Α	Α
Quintolubric 888	X	F,5	A,5	X	X	Α	Α	Α
Quintolubric 957, 958	F	Α	Α	F	Α	Α	Α	Α
Quintolubric N822-300	~	~	Α	~	~	Α	Α	Α
Rando	Α	Α	Α	A	Х	Α	Α	A
Rayco 782	X	F	Α	X	X	X	X	X
Refrigerant 124			See numeral 4			Α	Α	Α
Refrigerant Freon 113, 114	Χ	Χ	X	Χ	Χ	Α	Α	Α
Refrigerant Freon 12			See numeral 4			Α	Α	Α
Refrigerant Freon 22			See numeral 4			Α	Α	Α
Refrigerant Freon 502			See numeral 4			Α	Α	Α
Refrigerant HFC134A			See numeral 4			Α	Α	Α
Reolube Turbofluid 46	X	Х	Χ	X	A,7	Α	Α	Α
Rotella	Α	Α	Α	Α	Х	Α	Α	Α
Royal Bio Guard 3032, 3046, 3068, 3100	Х	~	Α	X	Х	Α	Α	Α
Royco 2200, 2210, 2222, 2232, 2246, 2268	Х	Х	Х	X	Х	Α	Α	Α
Royco 4032, 4068, 4100, 4150	Х	Х	Х	F	Х	Α	Α	A





# Chemical Resistance Information(Page 8 of 9)

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Royco 756, 783   Royco 756, 783   Royco 756, 783   Royco 750, 783   Royc	MEDIA	1	II	III	IV	٧	Steel	Brass	SS
RTY Silicone Adhaeive Sealants         X         X         X         X         X         X         F         A <th< td=""><td>Royco 756, 783</td><td>A</td><td>A</td><td>A</td><td>A</td><td>Х</td><td>A</td><td>A</td><td>A</td></th<>	Royco 756, 783	A	A	A	A	Х	A	A	A
Sation-Sation 170,120   F	Royco 770	Х	F	F	F	Х	Α	Α	Α
Salto Salto T10, T20         1         2         2         2         4         A	RTV Silicone Adhesive Sealants	Х	Х	Х	Х	Х	Α	Α	Α
Satisty-Notion ISO 32, 46, 68 hydrauric oil   F8		~	~	~	~	Α	F	F	Α
Saboly-Kleen Solvent		F	Α	Α	~	Х	Α	Α	Α
Sambotilex 13		F.8			F.8				
Santosafe 300         X         X         X         -         -         A         <									
Santosato WG 15 to 30         -         -         -         A					~				
Schaeffer Oil #112 HTC @ 158°F hou 212°F   F					Α				
Schaeffer Oil #112 HTC @ 158°F to 212°F         F         F         -         X         A         A         A           Schaeffer Oil #275 Dilex Supreme @ 158°F max         A <td></td> <td>A</td> <td>Α</td> <td>Α</td> <td>~</td> <td></td> <td></td> <td></td> <td></td>		A	Α	Α	~				
Schaeffer Oil #275 Dilex Supreme ® 158°F max         A         A         A          X         A         A         A           Schaeffer Oil #275 Dilex Supreme ® 158°F to 212°F         F         F         F         F          X         A         A         A           Sea Water         F         F         F         F         F         A         X         F         A           Shell Completa         B         8         8         8         8         X         A         A         A           Shell Completa Oil         F         F         F         A         X         A         A         A           Shell Completa Oil S 46, 68         F         F         F         A         X         A         A         A           Shell Collada         F         F         F         A         X         A         A         A           Shell Collada         F         F         F         A         X         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A <td< td=""><td></td><td></td><td></td><td></td><td>~</td><td></td><td></td><td></td><td></td></td<>					~				
Schaeffer Cil #275 Dilex Supreme @ 158°F to 212°F         F         F         F         -         X         A         A         A           Sew Water         F         F         F         F         A         X         F         A           Sewage         F         F         F         A         F         X         F         A           Shell Lows HFC 68         X         X         X         X         X         A         A         A           Shell Comptella Oil         F         F         F         F         A         X         A         A         A           Shell Comptella Oil S 46, 68         F         F         F         A         X         A         A         A         A           Shell Diala A, (R) Oil AX         F         F         F         F         A         X         A					~				
Sea Water         F         F         F         F         A         X         F         A           Sewage         F         F         F         A         F         X         F         A           Shell Carbotel AG         8         8         8         8         X         A         A         A           Shell Camptella Oil         F         F         F         A         X         A         A         A           Shell Camptella Oil S46,68         F         F         F         A         X         A         A         A           Shell Camptella Oil S46,68         F         F         F         A         X         A         A         A           Shell Camptella Oil SM         F         F         A         A         X         A         A         A           Shell Camptella Oil SM         F         F         A         A         X         A </td <td>·</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	·								
Sewage         F         F         F         A         F         X         F         A           Shell 140 Solvent         8         8         8         8         X         A         A         A           Shell Comptella Oil S 46, 68         F         F         F         A         X         A         A         A         A           Shell Comptella Oil S M         F         F         F         A         X         A         A         A         A           Shell Comptella Oil S M         F         F         F         A         X         A	·								
Shell 140 Solvent         8         8         8         8         X         A         A         A           Shell Clavus HFC 68         X         X         X         X         X         X         X         A         A         A         A           Shell Comptella Oil S46, 68         F         F         F         A         X         A         A         A         A           Shell Diala A, (R) Oil AX         F         A         A         X         A         A         A           Shell FIM         -         -         -         -         -         -         A									
Shell Claws HFC 68         X         X         X         X         X         A         A         A           Shell Comptella Oil         F         F         F         F         A         X         A         A         A           Shell Comptella Oil S46, 68         F         F         F         A         X         A         A         A           Shell Comptella Oil SM         F         F         F         A         X         A         A         A           Shell Comptella Oil SM         F         F         F         A         X         A         A         A           Shell Comptella Oil SM         F         F         F         A         X         A <td< td=""><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	-								
Shell Comptella Oil         F         F         F         A         X         A         A         A           Shell Comptella Oil S4 6, 68         F         F         F         F         A         X         A         A         A           Shell Comptella Oil SM         F         F         F         F         A         X         A         A         A           Shell Diala A, (R) Oil AX         F         A									
Shell Comptella Oil S 46, 68   F									
Shell Comptella Oil SM         F         F         F         F         A         X         A									
Shell Diala A, (R) Oil AX         F         A         A         F         X         A         A         A           Shell FRIM         -         -         -         -         X         A         A         A           Shell FRIMS 902, 905         A	·								
Shell FRM         -         -         -         -         -         X         A         A         A           Shell IRUS 902, 905         A         A         A         A         -         A         A         A         A           Shell Fella-A         A         A         A         A         A         X         A         A         A           Shell Tellus         F         A         A         A         X         A         A         A           Shell Thurbo R         X         F         F         A         X         A         A         A           Shell Turbo R         X         F         F         A         X         A         A         A           Shell Turbo R         X         X         X         A         X         X         A <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>									
Shell IRUS 902, 905         A	. , ,								
Shell Pella-A         <									
Shell Tellus         F         A         A         A         X         A         A         A           Shell Thermia Oil C         A         A         A         A         X         A <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
Shell Thermia Oil C         A									
Shell Turbo R         X         F         F         A         X         A         A         A           SHF 220, 300, 450         X         X         X         A         X         X         A									
SHF 220, 300, 450         X         X         A         X         X         A         B         B         B         B         B         B         B         B									
Silicate Esters         A         F         F         A         X         A         A         A           Silicone Oils         A         A         A         A         -         -         A         A         A           Silicone Sealants         X         X         X         X         X         X         A         A         A         A           Skydrol 500B-4, LD-4         X         X         X         X         X         A,7         A         A         A           Soap Solutions         X         F         F         F         A         A         A         A           Sodium Carbonate         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         F         A         A         A         F         A         A         F         A         A         F         A         A         F         A         A         F         A         A         A         F         A         A         A         A         A         A         A         A									
Silicone Oils         A         <		X			X		Α	Α	Α
Silicone Sealants         X         X         X         X         X         A         A         A         A           Skydrol 500B-4, LD-4         X         X         X         X         X         A,7         A         A         A           Soap Solutions         X         F         F         F         F         A         B         F         A         A         A         A         A         B         F         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         <		Α	F	F	Α	X	Α	Α	Α
Skydrol 500B-4, LD-4         X         X         X         X         X         A,7         A         A         A           Soap Solutions         X         F         F         F         A         B         F         A	Silicone Oils	Α	Α	Α	~	~	Α	Α	Α
Soap Solutions         X         F         F         F         A         A         A         A           Soda Ash, Sodium Carbonate         A         A         A         A         A         A         A         F         A           Sodium Bisulfate         F         F         F         F         A         A         F         A         F           Sodium Chloride         F         F         F         F         A         A         A         X         X         A           Sodium Hydroxide         X         X         X         X         A         A         A         A         X         X         X           Sodium Hypochlorite         F         F         F         F         X         F         X         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A         A <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>Α</td> <td>Α</td> <td>Α</td>		X	X	X	X	X	Α	Α	Α
Sodia Ash, Sodium Carbonate         A         A         A         A         A         A         A         F         A           Sodium Bisulfate         F         F         F         F         A         A         F         A         F           Sodium Chloride         F         F         F         A         A         X         F         A           Sodium Hydroxide         X         X         X         X         A         A         A         X         X         X           Sodium Hypochlorite         F         F         F         F         X         F         X         X         X         X           Sodium Nitrate         F         F         F         F         A         A         A         A         F         A           Sodium Peroxide         X         X         X         X         X         X         X         A	Skydrol 500B-4, LD-4	Х	X	Х	X	A,7	Α	Α	Α
Sodium Bisulfate         F         F         F         A         A         F         A         F           Sodium Chloride         F         F         F         F         A         A         X         F         A           Sodium Hydroxide         X         X         X         X         A         A         A         A         X         A           Sodium Hypochlorite         F         F         F         F         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         A <td>Soap Solutions</td> <td>X</td> <td>F</td> <td>F</td> <td>F</td> <td>Α</td> <td>Α</td> <td>Α</td> <td>A</td>	Soap Solutions	X	F	F	F	Α	Α	Α	A
Sodium Chloride         F         F         F         A         A         X         F         A           Sodium Hydroxide         X         X         X         A         A         A         A         X         A           Sodium Hypochlorite         F         F         F         F         X         X         X         X         X           Sodium Nitrate         F         F         F         F         A         A         A         F         A           Sodium Peroxide         X         X         X         X         X         X         X         A	Soda Ash, Sodium Carbonate	Α	Α	Α	Α	Α	Α	F	Α
Sodium Hydroxide         X         X         X         A         A         A         X         A           Sodium Hypochlorite         F         F         F         F         X         F         X         X         X           Sodium Nitrate         F         F         F         A         A         A         F         A           Sodium Peroxide         X         X         X         X         X         X         X         A	Sodium Bisulfate				Α	Α	F		F
Sodium Hypochlorite         F         F         F         X         F         X         X         X         X           Sodium Nitrate         F         F         F         A         A         A         A         F         A           Sodium Peroxide         X         X         X         X         X         A<	Sodium Chloride	F	F	F	Α	Α	X	F	A
Sodium Nitrate         F         F         F         A         A         A         F         A           Sodium Peroxide         X         X         X         X         A         X         X         A           Sodium Silicate         A         A         A         A         A         A         A         A	Sodium Hydroxide				Α		Α	X	Α
Sodium Peroxide         X         X         X         X         A	Sodium Hypochlorite	F	F	F	Χ	F	X	X	X
Sodium Silicate A A A A A A A	Sodium Nitrate	F	F	F	Α	Α	Α	F	Α
	Sodium Peroxide	X	Х	X	Х	Α	Х	X	A
Sodium Sulfate A A A A A A A	Sodium Silicate	Α	Α	Α	Α	Α	Α	Α	A
	Sodium Sulfate	Α	Α	Α	Α	Α	Α	A	A
Soybean Oil F A A A A A A	Soybean Oil	F	Α	Α	Α	Α	Α	Α	Α
SSR Coolant X X X F X A A A	SSR Coolant	X	X	X	F	X	Α	Α	Α
Steam X X X X F A A	Steam	Х	Х	X	Х	Х	F	Α	Α

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A

В



D

# Chemical Resistance Information(Page 9 of 9)

⚠ Warning: This chemical compatibility guide must not be used in conjunction with any other compatibility guides from previous or future catalog editions, bulletins or publications. Incorrect use of these charts could result in death, personal injury or property damage.

MEDIA	1	II	III	IV	٧	Steel	Brass	ss
Stoddard Solvent	8	8	8	8	Х	A	A	Α
Sulfur Chloride	X	Χ	Χ	F	Χ	X	X	x
Sulfur Dioxide	X	Χ	Х	Χ	F	Χ	F	F
Sulfur Trioxide	Χ	Χ	Χ	F	F	Χ	Χ	Х
Sulfuric Acid 0%-30% Room Temp	F,6	F,6	F,6	Χ	F,6	6	X	6
Summa-20, Rotor, Recip	X	Χ	Х	F	Χ	Α	Α	Α
Summit DSL-32,68,100,125	Х	Х	Х	F	Х	Α	Α	Α
Sun Minesafe, Sun Safe	X	F	F	F	Χ	Α	Α	Α
Sundex 8125	X	F	F	~	Α	Α	Α	Α
Suniso 3GS	Α	Α	Α	Α	Χ	Α	Α	Α
Sun-Vis 722	X	F	F	~	Χ	Α	Α	Α
Super Hydraulic Oil 100, 150, 220	Α	Α	Α	Α	Χ	Α	Α	Α
SUVA MP 39, 52, 66	X	Χ	Χ	Х	Χ	Α	Α	Α
SYNCON Oil	X	Χ	Χ	Χ	Χ	Α	Α	Α
Syndale 2820	X	F	F	~	~	Α	Α	Α
Synesstic 32,68,100	X	Χ	Χ	Χ	Χ	Α	Α	Α
Syn-Flo 70,90	X	Χ	Χ	F	Χ	Α	Α	Α
SYN-O-AD 8478	X	Χ	Χ	Χ	A,7	Α	Α	Α
Tannic Acid	F	Α	Α	F	Α	Х	F	Х
Tar	F	F	F	F	Χ	Χ	F	Α
Tellus (Shell)	F	Α	Α	Α	Χ	Α	Α	Α
Texaco 760 Hydrafluid	~	~	~	~	Χ	Α	Α	Α
Texaco 766, 763 (200 - 300)	~	~	~	~	Α	F	F	Α
Texaco A-Z Oil	Α	Α	Α	F	Χ	Α	Α	Α
Texaco Spindura Oil 22	F	F	F	F	Χ	Α	Α	Α
Texaco Way Lubricant 68	Α	Α	Α	Α	Χ	Α	Α	Α
Thanol-R-650-X	X	F	F	~	Χ	Α	Α	Α
Thermanol 60	X	Χ	Χ	Χ	Χ	Α	Α	Α
Toluene, Toluol	x	Χ	Χ	Χ	Χ	Α	Α	Α
Transmission Oil	Α	Α	Α	Α	Χ	Α	Α	Α
Tribol 1440	Х	F	F	Х	Χ	A	Α	Α
Trichloroethylene	X	Χ	X	F	Χ	Χ	Α	Α
Trim-Sol	F	Α	Α	F	Χ	Α	Α	Α
Turbinol 50, 1122, 1223	Х	Χ	Χ	Χ	A,7	Α	Α	Α
Turpentine	Х	Χ	Χ	F	Χ	Α	Α	Α
Ucon Hydrolubes	F	Α	Α	F	Α	Α	Α	Α
UltraChem 215,230,501,751	Х	Х	Х	F	Х	Α	Α	Α
Univis J26	Α	Α	Α	Α	Χ	Α	Α	Α
Unleaded Gasoline		See nun	neral 9		~	Α	Α	Α
Unocal 66/3 Mineral Spirits	8	8	8	8	Χ	Α	Α	Α
Urea	F	F	F	Α	F	F	~	F
Urethane Formulations	Α	Α	Α	Α	~	Α	Α	Α
Van Straaten 902	Α	Α	Α	Α	Χ	Α	Α	Α
Varnish	X	Χ	Χ	F	Χ	F	F	Α
Varsol	8	F	F	8	Χ	Α	Α	Α
Versilube F44, F55	~	Α	Α	Α	~	Α	Α	Α
Vinegar	X	Χ	Χ	F	Α	F	Χ	Α
Vital 29, 4300, 5230, 5310	X	Χ	Χ	Χ	Χ	Α	Α	Α
Volt Esso 35	Α	Α	Α	Α	Χ	Α	Α	Α
Water	F	Α	Α	Α	Α	F	Α	Α
Water / Glycols	Α	Α	Α	Α	Α	Α	F	Α
Xylene, Xylol	X	Χ	Χ	Χ	Χ	Α	Α	Α
Zerol 150	Α	Α	Α	Α	Χ	Α	Α	Α
Zinc Chloride	Α	Α	Α	Χ	Α	Χ	Χ	F
Zinc Sulfate	Α	Α	Α	Χ	Α	Χ	Α	Α





# Pressure Rating of Hose End Connections

### **PRESSURE RATINGS HOSE ASSEMBLIES - PSI**

THE MAXIMUM DYNAMIC WORKING PRESSURE OF THE HOSE ASSEMBLY IS THE LESSER OF THE RATED WORKING PRESSURE OF THE HOSE AND THE END CONNECTIONS USED.

Hose End Connection	Part Number	Inch Size Fittings (psi)												
Description	Codes	-2	-4	-5	-6	-8	-10	-12	-16	-20	-24	-32	-40	-48
Male Pipe (NPTF)	01	12,000	12,000		10,000	10,000		7,500	6,500	5,000	3,000	2,500		
Female Pipe (NPTF, NPSM)	02 & 07	7,500	7,000		6,000	5,000		4,000	3,000	2,500	2,000	2,000		
Male Pipe (BSP)	91 & D9	5,000	9,000		8,000	6,250		5,000	4,000	3,500	3,000	3,000		
Female Pipe (BSP)	92, B1, B2 & B4	5,000	9,000		8,000	6,250	5,500	5,000	4,000	3,500	3,000	3,000		
JIS	FU, GU, MU & UT		5,000		5,000	5,000		4,000	3,000	2,500	1,500	1,500		
O-Ring Swivel and 45° Flare*	13, 1L, S2, 0G, 0L,48, 08, 77 & 79		3,000	3,000	3,000	3,000	2,750	2,250	2,000	1,625	1,250	1,125		
37° Flare and Straight Thread*	03, 05, 06**, 37, 39**,41, L7 & L9		6,000	6,000	5,000	5,000	5,000	5,000	4,000	3,000	2,500	2,500		
SAE Flareless	11 & 12		6,000	6,000	5,600	5,600	4,200	4,200	3,500	3,500	3,000	3,000		
SAE Inverted Flare	28, 67 & 69		2,750	2,500	2,250	2,000								
Seal-Lok®* (O-ring Face Seal)	JM, JC, JS, J0, J1, J5, J7 & J9		9,200		9,200	9,200	6,000	6,000	6,000	4,000	4,000			
SAE Flanges Code 61	15, 16, 17, 18, 19, 26, 27 & 89					5,000		5,000	5,000	4,000	4,000	3,000	2,500	2,000
SAE Flanges Code 61 Special	4A, 4F & 4N									5,000	5,000	5,000		
SAE Flanges Code 62	6A, 6E, 6F, 6G, 6N,XA, XF, XG & XN							6,000	6,000	6,000	6,000	6,000		

For adapter pressure ratings, see Tube Fittings Division catalog 4300.

<sup>\*\*</sup>NOTE: For pressure rating of 01, 06 and 39 end configurations in 73, 77, 78, and 79 series, see each description in Section B.

Hose End Connection	Part Number		Metric Fittings (psi)														
Description	Codes	-6	-8	-10	-12	-14	-15	-16	-18	-20	-22	-25	-28	-30	-35	-38	-42
DIN Light "L" without O-Ring	C3, C4, C5 & 1D	3,500	3,500	3,500	3,500		3,500		2,250		2,250		1,400		1,400		1,400
DIN Light "L" with O-Ring	D0, CA, CE & CF	4,500	4,500	4,500	4,500		4,500		2,250		2,250		2,250		2,250		2,250
DIN Heavy "S" without O-Ring	C6, C7, C8 & 3D		9,000	9,000	9,000	9,000		5,750		5,750		5,750		3,500		3,500	
DIN Heavy "S" with O-Ring	C9, 0C, 1C & D2		9,000	9,000	9,000	9,000		6,000		6,000		6,000		6,000		4,500	
DIN 20078 Form C	Co										900		900		900		900
Banjo	49	3,000	3,000	3,000	3,000		3,000			3,000	3,000	3,000					
French Metric	F9 & FA			3,000	3,500	2,000			2,250	2,000	1,900			1,750			

Hose End Connection	Part Number	French Gaz Fittings (psi)								
Description	Codes	-13	-17	-21	-27	-33				
French Gaz	F4, FG, GJ & GE	5,250	3,900	3,700	3,000	2,500				

\*NOTE: ALL THE ABOVE RATINGS ARE BASED ON LOW CARBON STEEL HOSE FITTINGS. HIGHER PRESSURE RATINGS CAN BE ATTAINED WITH MEDIUM CARBON AND ALLOY STEEL HOSE FITTINGS AND MATING ADAPTERS.

PRESSURE RATING OF HOSE - PSI

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THE MAXIMUM WORKING PRESSURES OF HOSES ARE LISTED WITH EACH HOSE DESCRIPTION IN SECTION A.



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<sup>\*</sup>NOTE: 45°, 37° and Seal-Lok Torque Tables are on page E-17

# Pressure

### **Metric Pressure Conversions**

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PRESSURE CONVERSIONS									
Kilo- Pascals (kPa)	Mega- Pascals (MPa)	Bar (bar)	Kilograms per Square Centimeter (Kgf/cm <sup>2</sup> )	lbs per Square Inch (psi)	lbs per Square Inch (psi)	Kilo- Pascals (kPa)	Mega- Pascals (MPa)	Bar (bar)	Kilograms per Square Centimeter (Kgf/cm <sup>2</sup> )
100	0,1	1,00	1.0	14.50	10	68.9	0,07	0,7	0.70
200	0,2	2,00	2.0	29.00	20	137.9	0,14	1,4	1.41
300	0,3	3,00	3.1	43.50	30	206.8	0,21	2,1	2.11
400	0,4	4,00	4.1	58.00	40	275.8	0,28	2,8	2.81
500	0,5	5,00	5.1	72.50	50	344.7	0,34	3,4	3.52
600	0,6	6,00	6.1	87.00	60	413.7	0,41	4,1	4.22
700	0,7	7,00	7.1	101.50	70	482.6	0,48	4,8	4.92
800	0,8	8,00	8.2	116.00	80	551.6	0,55	5,5	5.63
900	0,9	9,00	9.2	130.50	90	620.5	0,62	6,2	6.33
1000	1,0	10,00	10.2	145.00	100	689.0	0,70	6,9	7.00
2000	2,0	20,00	20.4	290.10	200	1379.0	1,40	13,8	14.10
3000	3,0	30,00	30.6	435.10	300	2068.0	2,10	20,7	21.10
4000	4,0	40,00	40.8	580.20	400	2758.0	2,80	27,6	28.10
5000	5,0	50,00	51.0	725.20	500	3447.0	3,40	34,5	35.20
6000	6,0	60,00	61.2	870.20	600	4137.0	4,10	41,4	42.20
7000	7,0	70,00	71.4	1015.30	700	4826.0	4,80	48,3	49.20
8000	8,0	80,00	81.6	1160.30	800	5516.0	5,50	55,2	56.30
9000	9,0	90,00	91.8	1305.30	900	6205.0	6,20	62,1	63.30
10000	10,0	100,00	102.0	1450.00	1000	6895.0	6,90	68,9	70.30
20000	20,0	200,00	204.0	2901.00	2000	13790.0	13,80	137,9	140.70
30000	30,0	300,00	306.0	4351.00	3000	20684.0	20,70	206,8	211.00
40000	40,0	400,00	408.0	5802.00	4000	27579.0	27,60	275,8	281.30
50000	50,0	500,00	510.0	7252.00	5000	34474.0	34,50	344,7	351.60
60000	60,0	600,00	612.0	8702.00	6000	41369.0	41,40	413,7	421.90
70000	70,0	700,00	714.0	10153.00	7000	48263.0	48,30	482,6	492.30
80000	80,0	800,00	816.0	11603.00	8000	55158.0	55,20	551,6	562.60
90000	90,0	900,00	918.0	13053.00	9000	62053.0	62,10	620,5	632.90
100000	100,0	1000.00	1020.0	14504.00	10000	68948.0	68,90	689,0	703.00
200000	200,0	2000.00	2040.0	29008.00	20000	137895.0	137,90	1379,0	1406.00
300000	300,0	3000.00	3060.0	43511.00	30000	206843.0	206,80	2068,0	2110.00
			2220.0		40000	275790.0	275,80	2758,0	2813.00
					40000	213190.0	213,00	2130,0	2013.00





### PSI and MPa or N/mm<sup>2</sup> Conversions

Pounds per Square Inch (abbrev. PSI) - A basic unit of pressure or tension measurement in the Imperial or English System of Weights and Measures.

1 psi = .006895 MPa, 1000 psi = 1 ksi

MegaPascal (abbrev. MPa) - A basic unit of pressure or tension measurement in the International System of Weights and Measures.

1 MPa = 145 psi, 1 MPa = 1 N/mm<sup>2</sup>. For oil field applications, units of measurement smaller than 1 psi usually have little meaning. Units of MPa may often appear with a decimal.

Example: 1000 psi = 6.895 MPa.

1 MegaPascal (MPa) = 1 Newton per Square Millimeter (N/mm²) = 145 Pounds per Square Inch (psi).

Psi, Ksi, MPa, and N/mm² all express force measurement, either pressure (as fluid pressure) or load (as tension). All of these temrs may appear as pressure ratings or test pressures, and tensile or yield requirements or test results.

## API Spec 6A specifies equipment pressure ratings in both PSI, and MPa as:

2,000 psi	=	13.8 MPa	=	138 bar
3,000 psi	=	20.7 MPa	=	207 bar
5,000 psi	=	34.5 MPa	=	345 bar
10,000 psi	=	69.0 MPa	=	690 bar
15,000 psi	=	103.5 MPa	=	1,035 bar
20,000 psi	=	138.0 MPa	=	1,380 bar
Bar press	sure	provided for in	forma	ition only.

To express PSI pressures in bars, convert PSI to MPa and move the decimal in the MPa value 1 space to the right, e.g. 5000 PSI = 34.5 MPa = 345 bar.

## API Spec 6A specifies material property requirements\* as:

Material	Yi	eld	Tensile		
Designation	PSI	MPa	PSI	MPa	
36 K	36,000	248	70,000	483	
45 K	45,000	310	70,000	483	
60 K	60,000	414	85,000	586	
75 K	75,000	517	95,000	655	

\*For Elongation and Reduction of Area, see API Spec 6A. The values specified for these requirements do not require conversion.

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226	A-59	10125	B-6	11777	B-99
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266	A-56	10170	B-60	11871	B-75
271	A-61	10171	B-70	11877	B-100
285	A-65	10173	B-84	11943	B-39
293	A-54	10177	B-94	11970	B-61
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422	A-28	10370	B-60	12643	B-38
424	A-49	10371	B-70	12671	B-74
426	A-30	10377	B-94	12677	B-98
431	A-32	10426	B-13	12743	B-39
436	A-33	10443	B-34	12771	B-74
487	A-14	10543	B-29	12777	B-99
0588	B-202	10571	B-70	12826	B-14
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701	A-42	10626	B-12	13726	B-12
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721	A-40	10670	B-60	13771	B-71
722	A-15	10671	B-71	13777	B-95
731	A-42	10673	B-84	13926	B-12
774	A-50	10677	B-95	13943	B-33
781	A-23	10678	B-113	13970	B-60
787	A-16	10743	B-29	13971	B-72
797	A-17	10825	B-6	13973	B-84
801	A-45	10826	B-13	13977	B-95
804	A-47	10843	B-34	13978	B-113
811	A-43	11143	B-35	14126	B-13
821	A-48	11243	B-36	14143	B-34
836	A-47	11343	B-27	14171	B-72
881	A-44	11543	B-37	14177	B-96
1588	B-203	11571	B-73	14943	B-56
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20530	B-172	26921	B-159	107HY	B-132
20542	B-178	27720	B-149	108HY	B-137
20620	B-147	27721	B-157	10C43	B-53
20621	B-156	27920	B-149	10C70	B-65
20622	B-164	27921	B-158	10C73	B-89
20623	B-168	28120	B-150	10C77	B-110
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20830	B-174	31382	B-186	113HY	B-131
20842	B-180	32882	B-190	11C43	B-54
21120	B-150	32982	B-190	11C70	B-65
21130	B-175	33482	B-192	11C73	B-90
21230	B-175	33782	B-188	11C77	B-110
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14A73	B-85	16AS6	B-123	1C970	B-66
14A77	B-98	16B77	B-101	1C971	B-80
14B77	B-98	16B78	B-115	1C973	B-89
14A78	B-114	16E77	B-102	1C977	B-109
14AS6	B-112	16F71	B-76	1C978	B-120
14F73	B-85	16F43	B-40	1CA43	B-51
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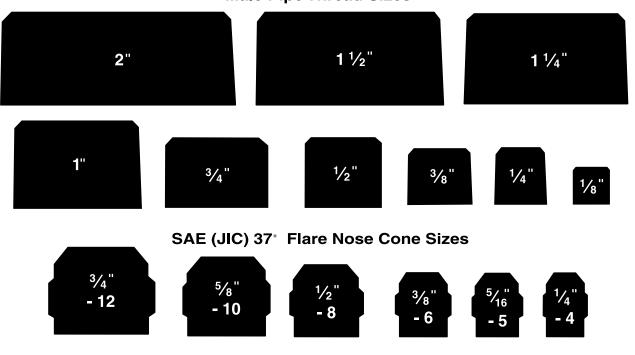




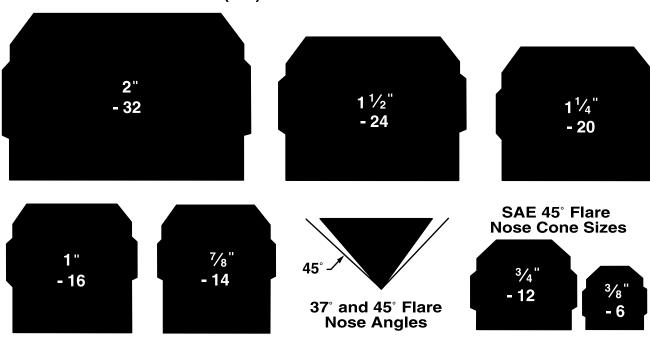
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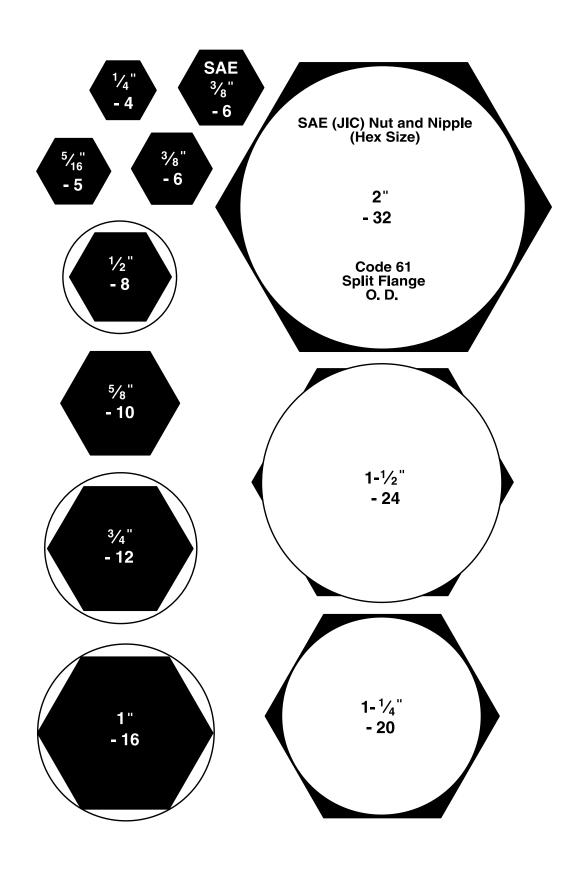
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### **Safety Guide**

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## Parker Safety Guide for Selecting and Using Hose, Tubing, Fittings, Connectors, Conductors, Valves and Related Accessories

Parker Publication No. 4400-B.1

**WARNING:** Failure or improper selection or improper use of hose, tubing, fittings, assemblies, valves, connectors, conductors or related accessories ("Products") can cause death, personal injury and property damage. Possible consequences of failure or improper selection or improper use of these Products include but are not limited to:

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- Fittings thrown off at high speed.
- High velocity fluid discharge.
- · Explosion or burning of the conveyed fluid.
- · Electrocution from high voltage electric powerlines.
- Contact with suddenly moving or falling objects that are controlled by the conveyed fluid.
- Injections by high-pressure fluid discharge.
- · Dangerously whipping Hose.
- Tube or pipe burst.
- Weld joint fracture.
- Contact with conveyed fluids that may be hot, cold, toxic or otherwise injurious.
- Sparking or explosion caused by static electricity buildup or other sources of electricity.
- · Sparking or explosion while spraying paint or flammable liquids.
- Injuries resulting from inhalation, ingestion or exposure to fluids.

Before selecting or using any of these Products, it is important that you read and follow the instructions below. No product from any division in Parker Fluid Connectors Group is approved for in-flight aerospace applications. For hoses and fittings used in in-flight aerospace applications, please contact Parker Aerospace Group.

#### 1.0 GENERAL INSTRUCTIONS

- Scope: This safety guide provides instructions for selecting and using (including assembling, installing, and maintaining) these Products. For convenience, all rubber and/or thermoplastic products commonly called "hose" or "tubing" are called "Hose" in this safety guide. Metallic tube or pipe are called "tube". All assemblies made with Hose are called "Hose Assemblies". All assemblies made with Tube are called "Tube Assemblies". All products commonly called "fittings", "couplings" or "adapters" are called "Fittings". Valves are fluid system components that control the passage of fluid. Related accessories are ancillary devices that enhance or monitor performance including crimping, flaring, flanging, presetting, bending, cutting, deburring, swaging machines, sensors, tags, lockout handles, spring guards and associated tooling. This safety guide is a supplement to and is to be used with the specific Parker publications for the specific Hose, Fittings and Related Accessories that are being considered for use. Parker publications are available at www.parker.com. SAE J1273 (www. sae.org) and ISO 17165-2 (www.ansi.org) also provide recommended practices for hydraulic Hose Assemblies, and should be followed.
- 1.2 Fail-Safe: Hose, Hose Assemblies, Tube, Tube Assemblies and Fittings can and do fail without warning for many reasons. Design all systems and equipment in a fail-safe mode, so that failure of the Hose, Hose Assembly, Tube, Tube Assembly or Fitting will not endanger persons or property.
- 1.3 Distribution: Provide a copy of this safety guide to each person responsible for selecting or using Hose, Tube and Fitting products. Do not select or use Parker Hose, Tube or Fittings without thoroughly reading and understanding this safety guide as well as the specific Parker publications for the Products.
- 1.4 User Responsibility: Due to the wide variety of operating conditions and applications for Hose, Tube and Fittings. Parker does not represent or warrant that any particular Hose, Tube or Fitting is suitable for any specific end use system. This safety guide does not analyze all technical parameters that must be considered in selecting a product. The user, through its own analysis and testing, is solely responsible for:
  - · Making the final selection of the Products.
  - Assuring that the user's requirements are met and that the application presents no health or safety hazards.
  - Following the safety guide for Related Accessories and being trained to operate Related Accessories.
  - Providing all appropriate health and safety warnings on the equipment on which the Products are used.
  - Assuring compliance with all applicable government and industry standards.
- 1.5 Additional Questions: Call the appropriate Parker technical service department if you have any questions or require any additional information. See the Parker publication for the Products being considered or used, or call 1-800-CPARKER, or go to www.parker.com, for telephone numbers of the appropriate technical service department.

### 2.0 HOSE, TUBE AND FITTINGS SELECTION INSTRUCTIONS

2.1 Electrical Conductivity: Certain applications require that the Hose be nonconductive to prevent electrical current flow. Other applications require the Hose and the Fittings and the Hose/Fitting interface to be sufficiently conductive to drain off static electricity. Extreme care must be exercised when selecting Hose, Tube and Fittings for these or any other applications in which electrical conductivity or nonconductivity is a factor.

The electrical conductivity or nonconductivity of Hose, Tube and Fittings is dependent upon many factors and may be susceptible to change. These factors include but are not limited to the various materials used to make the Hose and the Fittings, Fitting finish (some Fitting finishes are electrically conductive while others are nonconductive), manufacturing methods (including moisture control), how the Fittings contact the Hose, age and amount of deterioration or damage or other changes, moisture content of the Hose at any particular time, and other factors.

The following are considerations for electrically nonconductive and conductive Hose. For other applications consult the individual catalog pages and the appropriate industry or regulatory standards for proper selection.

- 2.1.1 Electrically Nonconductive Hose: Certain applications require that the Hose be nonconductive to prevent electrical current flow or to maintain electrical isolation. For applications that require Hose to be electrically nonconductive, including but not limited to applications near high voltage electric lines, only special nonconductive Hose can be used. The manufacturer of the equipment in which the nonconductive Hose is to be used must be consulted to be certain that the Hose, Tube and Fittings that are selected are proper for the application. Do not use any Parker Hose or Fittings for any such application requiring nonconductive Hose, including but not limited to applications near high voltage electric lines or dense magnetic fields, unless (i) the application is expressly approved in the Parker technical publication for the product, (ii) the Hose is marked "nonconductive", and (iii) the manufacturer of the equipment on which the Hose is to be used specifically approves the particular Parker Hose, Tube and Fittings for such use.
- 2.1.2 Electrically Conductive Hose: Parker manufactures special Hose for certain applications that require electrically conductive Hose.

Parker manufactures special Hose for conveying paint in airless paint spraying applications. This Hose is labeled "Electrically Conductive Airless Paint Spray Hose" on its layline and packaging. This Hose must be properly connected to the appropriate Parker Fittings and properly grounded in order to dissipate dangerous static charge buildup, which occurs in all airless paint spraying applications. Do not use any other Hose for airless paint spraying, even if electrically conductive. Use of any other Hose or failure to properly connect the Hose can cause a fire or an explosion resulting in death, personal injury, and property damage. All hoses that convey fuels must be grounded.

Parker manufactures a special Hose for certain compressed natural gas ("CNG") applications where static electricity buildup may occur. Parker CNG Hose assemblies comply with the requirements of ANSI/IAS NGV 4.2; CSA 12.52, "Hoses for Natural Gas Vehicles and Dispensing Systems" (www.ansi.org). This Hose is labeled "Electrically Conductive for CNG Use" on its layline and packaging. This Hose must be properly connected to the appropriate Parker Fittings and properly grounded in order to dissipate dangerous static charge buildup, which occurs in, for example, high velocity CNG dispensing or transfer. Do not use any other Hose for CNG applications where static charge buildup may occur, even if electrically conductive. Use of other Hoses in CNG applications or failure to properly connect or ground this Hose can cause a fire or an explosion resulting in death, personal injury, and property damage. Care must also be taken to protect against CNG permeation through the Hose wall. See section 2.6, Permeation, for more information. Parker CNG Hose is intended for dispenser and vehicle use within the specified temperature range. Parker CNG Hose should not be used in confined spaces or unventilated areas or areas exceeding the specified temperature range. Final assemblies must be tested for leaks. CNG Hose Assemblies should be tested on a monthly basis for conductivity per ANSI/IAS NGV 4.2; CSA 12.52.

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### **Safety Guide**

Parker manufactures special Hose for aerospace in-flight applications. Aerospace in-flight applications employing Hose to transmit fuel, lubricating fluids and hydraulic fluids require a special Hose with a conductive inner tube. This Hose for in-flight applications is available only from Parker's Stratoflex Products Division. Do not use any other Parker Hose for in-flight applications, even if electrically conductive. Use of other Hoses for in-flight applications or failure to properly connect or ground this Hose can cause a fire or an explosion resulting in death, personal injury and property damage. These Hose assemblies for in-flight applications must meet all applicable aerospace industry, aircraft engine and aircraft requirements.

- 2.2 Pressure: Hose, Tube and Fitting selection must be made so that the published maximum working pressure of the Hose, Tube and Fittings are equal to or greater than the maximum system pressure. The maximum working pressure of a Hose, or Tube Assembly is the lower of the respective published maximum working pressures of the Hose, Tube and the Fittings used. Surge pressures or peak transient pressures in the system must be below the published maximum working pressure for the Hose, Tube and Fitting. Surge pressures and peak pressures can usually only be determined by sensitive electrical instrumentation that measures and indicates pressures at millisecond intervals. Mechanical pressure gauges indicate only average pressures and cannot be used to determine surge pressures or peak transient pressures. Published burst pressure ratings for Hose is for manufacturing test purposes only and is no indication that the Product can be used in applications at the burst pressure or otherwise above the published maximum recommended working pressure.
- 2.3 Suction: Hoses used for suction applications must be selected to insure that the Hose will withstand the vacuum and pressure of the system. Improperly selected Hose may collapse in suction application.
- 2.4 Temperature: Be certain that fluid and ambient temperatures, both steady and transient, do not exceed the limitations of the Hose, Tube, Fitting and Seals. Temperatures below and above the recommended limit can degrade Hose, Tube, Fittings and Seals to a point where a failure may occur and release fluid. Tube and Fittings performances are normally degraded at elevated temperature. Material compatibility can also change at temperatures outside of the rated range. Properly insulate and protect the Hose Assembly when routing near hot objects (e.g. manifolds). Do not use any Hose in any application where failure of the Hose could result in the conveyed fluids (or vapors or mist from the conveyed fluids) contacting any open flame, molten metal, or other potential fire ignition source that could cause burning or explosion of the conveyed fluids or vapors.
- 2.5 Fluid Compatibility: Hose, and Tube Assembly selection must assure compatibility of the Hose tube, cover, reinforcement, Tube, Plating and Seals with the fluid media used. See the fluid compatibility chart in the Parker publication for the product being considered or used. This information is offered only as a guide. Actual service life can only be determined by the end user by testing under all extreme conditions and other analysis.

Hose, and Tube that is chemically compatible with a particular fluid must be assembled using Fittings and adapters containing likewise compatible seals. Flange or flare processes can change Tube material properties that may not be compatible with certain requirements such as NACE

2.6 Permeation: Permeation (that is, seepage through the Hose or Seal) will occur from inside the Hose or Fitting to outside when Hose or Fitting is used with gases, liquid and gas fuels, and refrigerants (including but not limited to such materials as helium, diesel fuel, gasoline, natural gas, or LPG). This permeation may result in high concentrations of vapors which are potentially flammable, explosive, or toxic, and in loss of fluid. Dangerous explosions, fires, and other hazards can result when using the wrong Hose for such applications. The system designer must take into account the fact that this permeation will take place and must not use Hose or Fitting if this permeation could be hazardous. The system designer must take into account all legal, government, insurance, or any other special regulations which govern the use of fuels and refrigerants. Never use a Hose or Fitting even though the fluid compatibility is acceptable without considering the potential hazardous effects that can result from permeation through the Hose or Tube Assembly.

Permeation of moisture from outside the Hose or Fitting to inside the Hose or Fitting will also occur in Hose or Tube assemblies, regardless of internal pressure. If this moisture permeation would have detrimental effects (particularly, but not limited to refrigeration and air conditioning systems), incorporation of sufficient drying capacity in the system or other appropriate system safeguards should be selected and used. The sudden pressure release of highly pressurized gas could also result in Explosive Decompression failure of permeated Seals and Hoses.

- 2.7 Size: Transmission of power by means of pressurized fluid varies with pressure and rate of flow. The size of the components must be adequate to keep pressure losses to a minimum and avoid damage due to heat generation or excessive fluid velocity.
- 2.8 Routing: Attention must be given to optimum routing to minimize inherent problems (kinking or flow restriction due to Hose collapse, twisting of the Hose, proximity to hot objects or heat sources). For additional routing recommendations see SAE J1273 and ISO 17165-2. Hose Assemblies have a finite life and should be installed in a manner that allows for ease of inspection and future replacement. Hose because of its relative short life, should not be used in residential and commercial buildings inside of inaccessible walls or floors, unless specifically allowed in the product literature. Always review all product literature for proper installation and routing instructions.
- 2.9 Environment: Care must be taken to insure that the Hose, Tube and Fittings are either compatible with or protected from the environment (that is, surrounding conditions) to which they are exposed. Environmental conditions including but not limited to ultraviolet radiation, sunlight, heat, ozone, moisture, water, salt water, chemicals and air pollutants can cause degradation and premature failure.
- 2.10 Mechanical Loads: External forces can significantly reduce Hose, Tube and Fitting life or cause failure. Mechanical loads which must be considered include excessive flexing, twist, kinking, tensile or side loads, bend radius, and vibration. Use of swivel type Fittings or adapters may be required to insure no twist is put into the Hose. Use of proper Hose or Tube clamps may also be required to reduce external mechanical loads. Unusual applications may require special testing prior to Hose selection.
- 2.11 Physical Damage: Care must be taken to protect Hose from wear, snagging, kinking, bending smaller that minimum bend radius and cutting, any of which can cause premature Hose failure. Any Hose that has been kinked or bent to a radius smaller than the minimum bend radius, and any Hose that has been cut or is cracked or is otherwise damaged should be removed and discarded. Fittings with damages such as scratches on sealing surfaces and deformation should be replaced.
- 2.12 Proper End Fitting: See instructions 3.2 through 3.5. These recommendations may be substantiated by testing to industry standards such as SAE J517 for hydraulic applications, or MIL-A-5070, AS1339, or AS3517 for Hoses from Parker's Stratoflex Products Division for aerospace applications.
- 2.13 Length: When determining the proper Hose or Tube length of an assembly, be aware of Hose length change due to pressure, Tube length change due to thermal expansion or contraction, and Hose or Tube and machine tolerances and movement must be considered. When routing short hose assemblies, it is recommended that the minimum free hose length is always used. Consult the hose manufacturer for their minimum free hose length recommendations. Hose assemblies should be installed in such a way that any motion or flexing occurs within the same plane.
- 2.14 Specifications and Standards: When selecting Hose, Tube and Fittings, government, industry, and Parker specifications and recommendations must be reviewed and followed as applicable.
- 2.15 Hose Cleanliness: Hose and Tube components may vary in cleanliness levels. Care must be taken to insure that the Hose and Tube Assembly selected has an adequate level of cleanliness for the application.
- 2.16 Fire Resistant Fluids: Some fire resistant fluids that are to be conveyed by Hose or Tube require use of the same type of Hose or Tube as used with petroleum base fluids. Some such fluids require a special Hose, Tube, Fitting and Seal, while a few fluids will not work with any Hose at all. See instructions 2.5 and 1.5. The wrong Hose, Tube, Fitting or Seal may fail after a very short service. In addition, all liquids but pure water may burn fiercely under certain conditions, and even pure water leakage may be hazardous.
- 2.17 Radiant Heat: Hose and Seals can be heated to destruction without contact by such nearby items as hot manifolds or molten metal. The same heat source may then initiate a fire. This can occur despite the presence of cool air around the Hose or Seal. Performance of Tube and Fitting subjected to the heat could be degraded.
- 2.18 Welding or Brazing: When using a torch or arc welder in close proximity to hydraulic lines, the hydraulic lines should be removed or shielded with appropriate fire resistant materials. Flame or weld spatter could burn through the Hose or Seal and possibly ignite escaping fluid resulting in a catastrophic failure. Heating of plated parts, including Hose Fittings and adapters, above 450°F (232°C) such as during welding, brazing or soldering may emit deadly gases.



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Any elastomer seal on fittings shall be removed prior to welding or brazing, any metallic surfaces shall be protected after brazing or welding when necessary. Welding and brazing filler material shall be compatible with the Tube and Fitting that are joined.

- Atomic Radiation: Atomic radiation affects all materials used in Hose and Tube assemblies. Since the long-term effects may be unknown, do not expose Hose or Tube assemblies to atomic radiation. Nuclear applications may require special Tube and Fittings.
- Aerospace Applications: The only Hose, Tube and Fittings that may be used for in-flight aerospace applications are those available from Parker's Stratoflex Products Division. Do not use any other Hose or Fittings for in-flight applications. Do not use any Hose or Fittings from Parker's Stratoflex Products Division with any other Hose or Fittings, unless expressly approved in writing by the engineering manager or chief engineer of Stratoflex Products Division and verified by the user's own testing and inspection to aerospace industry standards.
- Unlocking Couplings: Ball locking couplings or other Fittings with quick disconnect ability can unintentionally disconnect if they are dragged over obstructions, or if the sleeve or other disconnect member, is bumped or moved enough to cause disconnect. Threaded Fittings should be considered where there is a potential for accidental uncoupling.

#### 3.0 HOSE AND FITTINGS ASSEMBLY AND INSTALLATION INSTRUCTIONS

- Component Inspection: Prior to assembly, a careful examination of 3.1 the Hose and Fittings must be performed. All components must be checked for correct style, size, catalog number, and length. The Hose must be examined for cleanliness, obstructions, blisters, cover looseness, kinks, cracks, cuts or any other visible defects. Inspect the Fitting and sealing surfaces for burrs, nicks, corrosion or other imperfections. Do NOT use any component that displays any signs of nonconformance.
- 3.2 Hose and Fitting Assembly: Do not assemble a Parker Fitting on a Parker Hose that is not specifically listed by Parker for that Fitting, unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division. Do not assemble a Parker Fitting on another manufacturer's Hose or a Parker Hose on another manufacturer's Fitting unless (i) the engineering manager or chief engineer of the appropriate Parker division approves the Assembly in writing or that combination is expressly approved in the appropriate Parker literature for the specific Parker product, and (ii) the user verifies the Assembly and the application through analysis and testing. For Parker Hose that does not specify a Parker Fitting, the user is solely responsible for the selection of the proper Fitting and Hose Assembly procedures. See instruction 1.4.

To prevent the possibility of problems such as leakage at the Fitting or system contamination, it is important to completely remove all debris from the cutting operation before installation of the Fittings. The Parker published instructions must be followed for assembling the Fittings on the Hose. These instructions are provided in the Parker Fitting catalog for the specific Parker Fitting being used, or by calling 1-800-CPARKER, or at www.parker.com.

- Related Accessories: Do not crimp or swage any Parker Hose or Fit-33 ting with anything but the listed swage or crimp machine and dies in accordance with Parker published instructions. Do not crimp or swage another manufacturer's Fitting with a Parker crimp or swage die unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division
- Parts: Do not use any Parker Fitting part (including but not limited to socket, shell, nipple, or insert) except with the correct Parker mating parts, in accordance with Parker published instructions, unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division
- Field Attachable/Permanent: Do not reuse any field attachable Hose Fitting that has blown or pulled off a Hose. Do not reuse a Parker permanent Hose Fitting (crimped or swaged) or any part thereof. Complete Hose Assemblies may only be reused after proper inspection under section 4.0. Do not assemble Fittings to any previously used hydraulic Hose that was in service, for use in a fluid power application.
- 36 Pre-Installation Inspection: Prior to installation, a careful examination of the Hose Assembly must be performed. Inspect the Hose Assembly for any damage or defects. DO NOT use any Hose Assembly that displays any signs of nonconformance.
- Minimum Bend Radius: Installation of a Hose at less than the minimum listed bend radius may significantly reduce the Hose life. Particular attention must be given to preclude sharp bending at the Hose to Fitting juncture. Any bending during installation at less than the minimum bend radius must be avoided. If any Hose is kinked during installation, the Hose must be discarded.

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- Twist Angle and Orientation: Hose Assembly installation must be such that relative motion of machine components does not produce twisting.
- 39 Securement: In many applications, it may be necessary to restrain, protect, or guide the Hose to protect it from damage by unnecessary flexing, pressure surges, and contact with other mechanical components. Care must be taken to insure such restraints do not introduce additional stress or wear points.
- Proper Connection of Ports: Proper physical installation of the Hose Assembly requires a correctly installed port connection insuring that no twist or torque is transferred to the Hose when the Fittings are being tightened or otherwise during use.
- External Damage: Proper installation is not complete without insuring that tensile loads, side loads, kinking, flattening, potential abrasion, thread damage or damage to sealing surfaces are corrected or eliminated. See instruction 2.10.
- System Checkout: All air entrapment must be eliminated and the 3 12 system pressurized to the maximum system pressure (at or below the Hose maximum working pressure) and checked for proper function and freedom from leaks. Personnel must stay out of potential hazardous areas while testing and
- 3.13 Routing: The Hose Assembly should be routed in such a manner so if a failure does occur, the escaping media will not cause personal injury or property damage. In addition, if fluid media comes in contact with hot surfaces, open flame or sparks, a fire or explosion may occur. See section 2.4.
- Ground Fault Equipment Protection Devices (GFEPDs): WARNING! Fire and Shock Hazard. To minimize the danger of fire if the heating cable of a Multitube bundle is damaged or improperly installed, use a Ground Fault Equipment Protection Device. Electrical fault currents may be insufficient to trip a conventional circuit breaker.

For ground fault protection, the IEEE 515: (www.ansi.org) standard for heating cables recommends the use of GFEPDs with a nominal 30 milliampere trip level for "piping systems in classified areas, those areas requiring a high degree of maintenance, or which may be exposed to physical abuse or corrosive atmospheres".

#### 4.0 TUBE AND FITTINGS ASSEMBLY AND INSTALLATION INSTRUCTIONS

- Component Inspection: Prior to assembly, a careful examination of the Tube and Fittings must be performed. All components must be checked for correct style, size, material, seal, and length. Inspect the Fitting and sealing surfaces for burrs, nicks, corrosion, missing seal or other imperfections. Do NOT use any component that displays any signs of nonconformance.
- Tube and Fitting Assembly: Do not assemble a Parker Fitting with a Tube that is not specifically listed by Parker for that Fitting, unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division. The Tube must meet the requirements specified to the Fitting.

The Parker published instructions must be followed for assembling the Fittings to a Tube. These instructions are provided in the Parker Fitting catalog for the specific Parker Fitting being used, or by calling 1-800-CPARKER, or at www.parker.com.

- Related Accessories: Do not preset or flange Parker Fitting components using another manufacturer's equipment or procedures unless authorized in writing by the engineering manager or chief engineer of the appropriate Parker division. Tube, Fitting component and tooling must be check for correct style, size and material. Operation and maintenance of Related Accessories must be in accordance with the operation manual for the designated Accessory.
- Securement: In many applications, it may be necessary to restrain, protect, or guide the Tube to protect it from damage by unnecessary flexing, pressure surges, vibration, and contact with other mechanical components. Care must be taken to insure such restraints do not introduce additional stress or wear
- 4.5 Proper Connection of Ports: Proper physical installation of the Tube Assembly requires a correctly installed port connection insuring that no torque is transferred to the Tube when the Fittings are being tightened or otherwise during use.
- External Damage: Proper installation is not complete without insuring that tensile loads, side loads, flattening, potential abrasion, thread damage or damage to sealing surfaces are corrected or eliminated. See instruction 2.10.
- System Checkout: All air entrapment must be eliminated and the system pressurized to the maximum system pressure (at or below the Tube Assembly maximum working pressure) and checked for proper function and freedom from leaks. Personnel must stay out of potential hazardous areas while testing and



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4.8 Routing:The Tube Assembly should be routed in such a manner so if a failure does occur, the escaping media will not cause personal injury or property damage. In addition, if fluid media comes in contact with hot surfaces, open flame or sparks, a fire or explosion may occur. See section 2.4.

### 5.0 HOSE AND FITTING MAINTENANCE AND REPLACEMENT

- 5.1 Even with proper selection and installation, Hose life may be significantly reduced without a continuing maintenance program. The severity of the application, risk potential from a possible Hose failure, and experience with any Hose failures in the application or in similar applications should determine the frequency of the inspection and the replacement for the Products so that Products are replaced before any failure occurs. Certain products require maintenance and inspection per industry requirements. Failure to adhere to these requirements may lead to premature failure. A maintenance program must be established and followed by the user and, at minimum, must include instructions 5.2 through 5.7
- 5.2 Visual Inspection Hose/Fitting: Any of the following conditions require immediate shut down and replacement of the Hose Assembly:
  - · Fitting slippage on Hose;

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- Damaged, cracked, cut or abraded cover (any reinforcement exposed):
- · Hard, stiff, heat cracked, or charred Hose;
- · Cracked, damaged, or badly corroded Fittings;
- · Leaks at Fitting or in Hose;
- · Kinked, crushed, flattened or twisted Hose; and
- · Blistered, soft, degraded, or loose cover.
- 5.3 Visual Inspection All Other: The following items must be tightened, repaired, corrected or replaced as required:
  - · Leaking port conditions;
  - Excess dirt buildup:
  - · Worn clamps, guards or shields; and
  - · System fluid level, fluid type, and any air entrapment.
- 5.4 Functional Test: Operate the system at maximum operating pressure and check for possible malfunctions and leaks. Personnel must avoid potential hazardous areas while testing and using the system. See section 2.2.
- 5.5 Replacement Intervals: Hose assemblies and elastomeric seals used on Hose Fittings and adapters will eventually age, harden, wear and deteriorate under thermal cycling and compression set. Hose Assemblies and elastomeric seals should be inspected and replaced at specific replacement intervals, based on previous service life, government or industry recommendations, or when failures could result in unacceptable downtime, damage, or injury risk. See section 1.2. Hose and Fittings may be subjected to internal mechanical and/or chemical wear from the conveying fluid and may fail without warning. The user must determine the product life under such circumstances by testing. Also see section 2.5.
- 5.6 Hose Inspection and Failure: Hydraulic power is accomplished by utilizing high pressure fluids to transfer energy and do work. Hoses, Fittings and Hose Assemblies all contribute to this by transmitting fluids at high pressures. Fluids under pressure can be dangerous and potentially lethal and, therefore, extreme caution must be exercised when working with fluids under pressure handling the Hoses transporting the fluids. From time to time, Hose Assemblies will fail if they are not replaced at proper time intervals. Usually these failures are the result of some form of misapplication, abuse, wear or failure to perform proper maintenance. When Hoses fail, generally the high pressure fluids inside escape in a stream which may or may not be visible to the user. Under no circumstances should the user attempt to locate the leak by "feeling" with their hands or any other part of their body. High pressure fluids can and will penetrate the skin and cause severe tissue damage and possibly loss of limb. Even seemingly minor hydraulic fluid injection injuries must be treated immediately by a physician with knowledge of the tissue damaging properties of hydraulic fluid.

If a Hose failure occurs, immediately shut down the equipment and leave the area until pressure has been completely released from the Hose Assembly. Simply shutting down the hydraulic pump may or may not eliminate the pressure in the Hose Assembly. Many times check valves, etc., are employed in a system and can cause pressure to remain in a Hose Assembly even when pumps or equipment are not operating. Tiny holes in the Hose, commonly known as pinholes, can eject small, dangerously powerful but hard to see streams of hydraulic fluid. It may take several minutes or even hours for the pressure to be relieved so that the Hose Assembly may be examined safely.

Once the pressure has been reduced to zero, the Hose Assembly may be taken off the equipment and examined. It must always be replaced if a failure has occurred. Never attempt to patch or repair a Hose Assembly that has failed. Consult the nearest Parker distributor or the appropriate Parker division for Hose Assembly replacement information.

Never touch or examine a failed Hose Assembly unless it is obvious that the Hose no longer contains fluid under pressure. The high pressure fluid is extremely dangerous and can cause serious and potentially fatal injury.

- 5.7 Elastomeric seals: Elastomeric seals will eventually age, harden, wear and deteriorate under thermal cycling and compression set. Elastomeric seals should be inspected and replaced.
- 5.8 Refrigerant gases: Special care should be taken when working with refrigeration systems. Sudden escape of refrigerant gases can cause blindness if the escaping gases contact the eye and can cause freezing or other severe injuries if it contacts any other portion of the body.
- 5.9 Compressed natural gas (CNG): Parker CNG Hose Assemblies should be tested after installation and before use, and at least on a monthly basis per instructions provided on the Hose Assembly tag. The recommended procedure is to pressurize the Hose and check for leaks and to visually inspect the Hose for damage and to perform an electrical resistance test.

Caution: Matches, candles, open flame or other sources of ignition shall not be used for Hose inspection. Leak check solutions should be rinsed off after use.

### 6.0 HOSE STORAGE

- 6.1 Age Control: Hose and Hose Assemblies must be stored in a manner that facilitates age control and first-in and first-out usage based on manufacturing date of the Hose and Hose Assemblies. Unless otherwise specified by the manufacturer or defined by local laws and regulations:
- 6.1.1 The shelf life of rubber hose in bulk form or hose made from two or more materials is 28 quarters (7 years) from the date of manufacture, with an extension of 12 quarters (3 years), if stored in accordance with ISO 2230;
- 6.1.2 The shelf life of thermoplastic and polytetrafluoroethylene hose is considered to be unlimited;
- 6.1.3 Hose assemblies that pass visual inspection and proof test shall not be stored for longer than 2 years.
- 6.1.4 Storage: Stored Hose and Hose Assemblies must not be subjected to damage that could reduce their expected service life and must be placed in a cool, dark and dry area with the ends capped. Stored Hose and Hose Assemblies must not be exposed to temperature extremes, ozone, oils, corrosive liquids or fumes, solvents, high humidity, rodents, insects, ultraviolet light, electromagnetic fields or radioactive materials.

MSDS (Available upon request.)

Federal OSHA regulation 29 CFR 1910.1200 requires that we transmit to our customers Material Safety Data Sheets for all material covered under the law. If you are an employer in SIC 20-39 who has not yet received them, you are required to obtain them from us and provide the information to employees as directed in Secton (b) of the regulation. Please contact the Hose Products Division - Technical Services Department: (PH) 440- 943-5700 (FAX) 440- 943-3129.



### Offer of Sale

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The goods, services or work (referred to as the "Products") offered by Parker-Hannifin Corporation, its subsidiaries, groups, divisions, and authorized distributors ("Seller") are offered for sale at prices indicated in the offer, or as may be established by Seller. The offer to sell the Products and acceptance of Seller's offer by any customer ("Buyer") is contingent upon, and will be governed by all of the terms and conditions contained in this Offer of Sale. Buyer's order for any Products specified in Buyer's purchase document or Seller's offer, proposal or quote ("Quote") attached to the purchase order, when communicated to Seller verbally, or in writing, shall constitute acceptance of this offer.

- 1. Terms and Conditions. Seller's willingness to offer Products for sale or accept an order for Products is subject to the terms and conditions contained in this Offer of Sale or any newer version of the same, published by Seller electronically at www.parker.com/saleterms/. Seller objects to any contrary or additional terms or conditions of Buyer's order or any other document or other communication issued by Buyer.
- 2. Price; Payment. Prices stated on Seller's Quote are valid for thirty (30) days, except as explicitly otherwise stated therein, and do not include any sales, use, or other taxes or duties unless specifically stated. Seller reserves the right to modify prices to adjust for any raw material price fluctuations. Unless otherwise specified by Seller, all prices are F.C.A. Seller's facility (INCOTERMS 2010). Payment is subject to credit approval and payment for all purchases is due thirty (30) days from the date of invoice (or such date as may be specified by Seller's Credit Department). Unpaid invoices beyond the specified payment date incur interest at the rate of 1.5% per month or the maximum allowable rate under applicable law.
- 3. Shipment; Delivery; Title and Risk of Loss. All delivery dates are approximate. Seller is not responsible for damages resulting from any delay. Regardless of the manner of shipment, delivery occurs and title and risk of loss or damage pass to Buyer, upon placement of the Products with the shipment carrier at Seller's facility. Unless otherwise stated, Seller may exercise its judgment in choosing the carrier and means of delivery. No deferment of shipment at Buyers' request beyond the respective dates indicated will be made except on terms that will indemnify, defend and hold Seller harmless against all loss and additional expense. Buyer shall be responsible for any additional shipping charges incurred by Seller due to Buyer's acts or omissions.
- 4. Warranty. Seller warrants that the Products sold hereunder shall be free from defects in material or workmanship for a period of twelve (12) months from the date of delivery or 2,000 hours of normal use, whichever occurs first. All prices are based upon the exclusive limited warranty stated above, and upon the following disclaimer: <u>DISCLAIMER OF WARRANTY</u>: THIS WARRANTY IS THE SOLE AND ENTIRE WARRANTY PERTAINING TO PRODUCTS PROVIDED. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS AND IMPLIED, INCLUDING DESIGN, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
- 5. Claims; Commencement of Actions. Buyer shall promptly inspect all Products upon receipt. No claims for shortages will be allowed unless reported to the Seller within ten (10) days of delivery. No other claims against Seller will be allowed unless asserted in writing within thirty (30) days after delivery. Buyer shall notify Seller of any alleged breach of warranty within thirty (30) days after the date the defect is or should have been discovered by Buyer. Any claim or action against Seller based upon breach of contract or any other theory, including tort, negligence, or otherwise must be commenced within twelve (12) months from the date of the alleged breach or other alleged event, without regard to the date of discovery.
- 6. LIMITATION OF LIABILITY. IN THE EVENT OF A BREACH OF WARRANTY, SELLER WILL, AT ITS OPTION, REPAIR OR REPLACE A DEFECTIVE PRODUCT, OR REFUND THE PURCHASE PRICE WITHIN A REASONABLE PERIOD OF TIME. IN NO EVENT IS SELLER LIABLE FOR ANY SPECIAL INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR AS THE RESULT OF, THE SALE, DELIVERY, NON-DELIVERY, SERVICING, USE OR LOSS OF USE OF THE PRODUCTS OR ANY PART THEREOF, OR FOR ANY CHARGES OR EXPENSES OF ANY NATURE INCURRED WITHOUT SELLER'S WRITTEN CONSENT, WHETHER BASED IN CONTRACT, TORT OR OTHER LEGAL THEORY. IN NO EVENT SHALL SELLER'S LIABILITY UNDER ANY CLAIM MADE BY BUYER EXCEED THE PURCHASE PRICE OF THE PRODUCTS.

- 7. User Responsibility. The user, through its own analysis and testing, is solely responsible for making the final selection of the system and Product and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application and follow applicable industry standards and Product information. If Seller provides Product or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the Products or systems.
- 8. Loss to Buyer's Property. Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer or any other items which become Buyer's property, will be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer ordering the items manufactured using such property. Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.
- 9. Special Tooling. A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture Products. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the Products, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller has the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.
- 10.Buyer's Obligation; Rights of Seller. To secure payment of all sums due or otherwise, Seller retains a security interest in all Products delivered to Buyer and this agreement is deemed to be a Security Agreement under the Uniform Commercial Code. Buyer authorizes Seller as its attorney to execute and file on Buyer's behalf all documents Seller deems necessary to perfect its security interest.
- 11. Improper Use and Indemnity. Buyer shall indemnify, defend, and hold Seller harmless from any losses, claims, liabilities, damages, lawsuits, judgments and costs (including attorney fees and defense costs), whether for personal injury, property damage, patent, trademark or copyright infringement or any other claim, brought by or incurred by Buyer, Buyer's employees, or any other person, arising out of: (a) improper selection, application, design, specification or other misuse of Products purchased by Buyer from Seller; (b) any act or omission, negligent or otherwise, of Buyer; (c) Seller's use of patterns, plans, drawings, or specifications furnished by Buyer to manufacture Products; or (d) Buyer's failure to comply with these terms and conditions. Seller shall not indemnify Buyer under any circumstance except as otherwise provided.
- 12.Cancellations and Changes. Buyer may not cancel or modify or cancel any order for any reason, except with Seller's written consent and upon terms that will indemnify, defend and hold Seller harmless against all direct, incidental and consequential loss or damage. Seller may change Product features, specifications, designs and availability.
- 13. Limitation on Assignment. Buyer may not assign its rights or obligations under this agreement without the prior written consent of Seller.
- 14. Force Majeure. Seller does not assume the risk and is not liable for delay or failure to perform any of Seller's obligations by reason of events or circumstances beyond its reasonable control (hereinafter "Events of Force Majeure"). Events of Force Majeure shall include without limitation: accidents, strikes or labor disputes, acts of any government or government agency, acts of nature, delays or failures in delivery from carriers or suppliers, shortages of materials, or any other cause beyond Seller's reasonable control.
- 15. Waiver and Severability. Failure to enforce any provision of this agreement will not invalidate that provision; nor will any such failure prejudice Seller's right to enforce that provision in the future. Invalidation of any provision of this agreement by legislation or other rule of law shall not invalidate any other provision herein. The remaining provisions of this agreement will remain in full force and effect.
- 16.Termination. Seller may terminate this agreement for any reason and at any time by giving Buyer thirty (30) days prior written notice. Seller may immediately terminate this agreement, in writing, if Buyer: (a) breaches any provision of this agreement (b) appoints a trustee, receiver or custodian for all or any part of Buyer's property (c) files a petition for relief in bankruptcy on its own behalf, or one if filed by a third party (d) makes an assignment for the benefit of creditors; or (e) dissolves its business or liquidates all or a majority of its assets.



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- 17. Governing Law. This agreement and the sale and delivery of all Products are deemed to have taken place in, and shall be governed and construed in accordance with, the laws of the State of Ohio, as applicable to contracts executed and wholly performed therein and without regard to conflicts of laws principles. Buyer irrevocably agrees and consents to the exclusive jurisdiction and venue of the courts of Cuyahoga County, Ohio with respect to any dispute, controversy or claim arising out of or relating to this agreement.
- 18. Indemnity for Infringement of Intellectual Property Rights. Seller is not liable for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Section. Seller will defend and indemnify Buyer against allegations of infringement of U.S. patents, U.S. trademarks, copyrights, trade dress and trade secrets ("Intellectual Property Rights"). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that a Product sold pursuant to this agreement infringes the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If a Product is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and option, procure for Buyer the right to continue using the Product, replace or modify the Product so as to make it noninfringing, or offer to accept return of the Product and refund the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller is not liable for claims of infringement based on information provided by Buyer, or directed to Products delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any Product sold hereunder. The foregoing provisions of this Section constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.
- 19.Entire Agreement. This agreement contains the entire agreement between the Buyer and Seller and constitutes the final, complete and exclusive expression of the terms of sale. All prior or contemporaneous written or oral agreements or negotiations with respect to the subject matter are herein merged. The terms contained herein may not be modified unless in writing and signed by an authorized representative of Seller.
- 20. Compliance with Laws. Buyer agrees to comply with all applicable laws, regulations, and industry and professional standards of care, including those of the United Kingdom, the United States of America, and the country or countries in which Buyer may operate, including without limitation the U. K. Bribery Act, the U.S. Foreign Corrupt Practices Act ("FCPA"), the U.S. Anti-Kickback Act ("Anti-Kickback Act") and the U.S. Food Drug and Cosmetic Act ("FDCA"), each as currently amended, and the rules and regulations promulgated by the U.S. Food and Drug Administration ("FDA"), and agrees to indemnify and hold harmless Seller from the consequences of any violation of such provisions by Buyer, its employees or agents. Buyer acknowledges that it is familiar with the provisions of the U. K. Bribery Act, the FCPA, the FDA, and the Anti-Kickback Act, and certifies that Buyer will adhere to the requirements thereof. In particular, Buyer represents and agrees that Buyer will not make any payment or give anything of value, directly or indirectly to any governmental official, any foreign political party or official thereof, any candidate for foreign political office, or any commercial entity or person, for the purpose of influencing such person to purchase Products or otherwise benefit the business of Seller.



## Parker's Motion & Control Product Groups

At Parker, we're guided by a relentless drive to help our customers become more productive and achieve higher levels of profitability by engineering the best systems for their requirements. It means looking at customer applications from many angles to find new ways to create value. Whatever the motion and control technology need, Parker has the experience, breadth of product and global reach to consistently deliver. No company knows more about motion and control technology than Parker. For further info call 1 800 C-Parker (1 800 272 7537).



### Aerospace

#### Key Markets

Aftermarket services Commercial transports Engines General & business aviation Heliconters Launch vehicles Military aircraft Missiles Power generation Regional transports Unmanned aerial vehicles

### Key Products

Control systems & actuation products Engine systems & components Fluid conveyance systems & components Fluid metering, delivery & atomization devices Fuel systems & components Fuel tank inerting systems Hydraulic systems & components Thermal management Wheels & brakes



#### **Automation**

#### Key Markets

Alternative energy Conveyor & material handling Factory automation Food & beverage Life sciences & medical Machine tools Packaging machinery Paner machinery Plastics machinery Primary metals Safety & security Semiconductor & electronics Transportation & automotive

#### **Key Products**

AC/DC drives & systems Air preparation Flectric actuators, gantry robots & slides Human machine interfaces Inverters Manifolds Miniature fluidics Pneumatic actuators & grippers Pneumatic valves & controls Rotary actuators Stepper motors, servo motors, drives & controls Structural extrusions Vacuum generators, cups & sensors



### Climate & Industrial **Controls**

#### Kev Markets

Agriculture Air conditioning Construction Machinery Food & beverage Industrial machinery Life sciences Oil & gas Precision cooling Process Refrigeration Transportation

### **Key Products**

Accumulators Advanced actuators CO controls Electronic controllers Filter driers Hand shut-off valves Heat exchangers Hose & fittings Pressure regulating valves Refrigerant distributors Safety relief valves Smart pumps Solenoid valves Thermostatic expansion valves



#### Filtration

### Key Markets

Aerospace Food & beverage Industrial plant & equipment Life sciences Marine Mobile equipment Oil & gas Power generation & renewable energy Process Transportation Water Purification

### **Key Products**

Analytical gas generators Compressed air filters & dryers Engine air, coolant, fuel & oil filtration systems Fluid condition monitoring systems Hydraulic & lubrication filters Hydrogen, nitrogen & zero air generators Instrumentation filters Membrane & fiber filters Microfiltration Sterile air filtration Water desalination & purification filters & systems



#### Fluid Connectors

## **Key Markets** Aerial lift

Agriculture Bulk chemical handling Construction machinery Food & beverage Fuel & gas delivery Industrial machinery Life sciences Marine Mining Mobile Oil & gas Renewable energy Transportation

#### **Key Products**

Check valves Connectors for low pressure fluid conveyance Deep sea umbilicals Diagnostic equipment Hose couplings Industrial hose Mooring systems & power cables PTFE hose & tubing Quick couplings Rubber & thermoplastic hose Tube fittings & adapters Tubing & plastic fittings



#### **Hydraulics**

### Key Markets

Aerial lift Agriculture Alternative energy Construction machinery Forestry Industrial machinery Machine tools Marine Material handling Mining Oil & gas Power generation Refuse vehicles Renewable energy Truck hydraulics Turf equipment

### **Key Products**

Accumulators Cartridge valves Electrohydraulic actuators Human machine interfaces Hybrid drives Hydraulic cylinders Hydraulic motors & pumps Hydraulic systems Hydraulic valves & controls Hydrostatic steering Integrated hydraulic circuits Power take-offs Power units Rotary actuators



### Instrumentation

### Key Markets

Alternative fuels Biopharmaceuticals Chemical & refining Food & beverage Marine & shipbuilding Medical & dental Nuclear Power Offshore oil exploration Oil & gas Pharmaceuticals Power generation Pulp & paper Steel Water/wastewater

### **Key Products**

Analytical Instruments Analytical sample conditioning products & systems Chemical injection fittings & valves Fluoropolymer chemical delivery fittings, valves & pumps High purity gas delivery fittings, valves, regulators & digital flow controllers Industrial mass flow meters/ controllers Process control double block & bleeds Process control fittings, valves, regulators & manifold valves
Permanent no-weld tube fittings Precision industrial regulators & flow controllers



### Seal

#### Key Markets Aerospace

Chemical processing Consumer Fluid power General industrial Information technology Microelectronics Military Oil & gas Power generation Renewable energy Telecommunications Transportation

#### **Key Products**

Dynamic seals Elastomeric o-rings Electro-medical instrument design & assembly EMI shielding Extruded & precision-cut, fabricated elastomeric seals High temperature metal seals Homogeneous & inserted elastomeric shapes Medical device fabrication & assembly Metal & plastic retained composite seals Shielded optical windows Silicone tubing & extrusions Thermal management Vibration dampening



# Parker Fluid Connectors Group North American Divisions & Distribution Service Centers

Your complete source for quality tube fittings, hose & hose fittings, brass & composite fittings, quick-disconnect couplings, valves and assembly tools, locally available from a worldwide network of authorized distributors.

### Fittings:

Available in inch and metric sizes covering SAE, BSP, DIN, GAZ, JIS and ISO thread configurations, manufactured from steel, stainless steel, brass, aluminum, nylon and thermoplastic.

### Hose, Tubing and Bundles:

Available in a wide variety of sizes and materials including rubber, wire-reinforced, thermoplastic, hybrid and custom compounds.

### Worldwide Availability:

Parker operates Fluid Connectors manufacturing locations and sales offices throughout North America, South America, Europe and Asia-Pacific.

### **North American Divisions**

### **Energy Products Division**

Stafford, TX phone 281 566 4500 fax 281 530 5353

## Fluid System Connectors Division

Otsego, MI phone 269 694 9411 fax 269 694 4614

### **Hose Products Division**

Wickliffe, OH phone 440 943 5700 fax 440 943 3129

### **Industrial Hose Division**

30242 Lakeland Boulevard Wickliffe, OH 44092 phone 440 833-2120 fax 440 833-2230

### **Parflex Division**

Ravenna, OH phone 330 296 2871 fax 330 296 8433

### **Quick Coupling Division**

Minneapolis, MN phone 763 544 7781 fax 763 544 3418

### **Tube Fittings Division**

Columbus, OH phone 614 279 7070 fax 614 279 7685

### **Distribution Service Centers**

### Buena Park, CA

phone 714 522 8840 fax 714 994 1183

### Conyers, GA

phone 770 929 0330 fax 770 929 0230

### Lakeville, MN

phone 952 469 5000 fax 952 469 5729

### Louisville, KY

phone 502 937 1322 fax 502 937 4180

### Portland, OR

phone 503 283 1020 fax 503 283 2201

### Toledo, OH

phone 419 878 7000 fax 419 878 7001 fax 419 878 7420 (FCG Kit Operations)

### Canada Grimsby, ONT

phone 905 945 2274 fax 905 945 3945 (Contact Grimsby for other Service Center locations.)

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