

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.

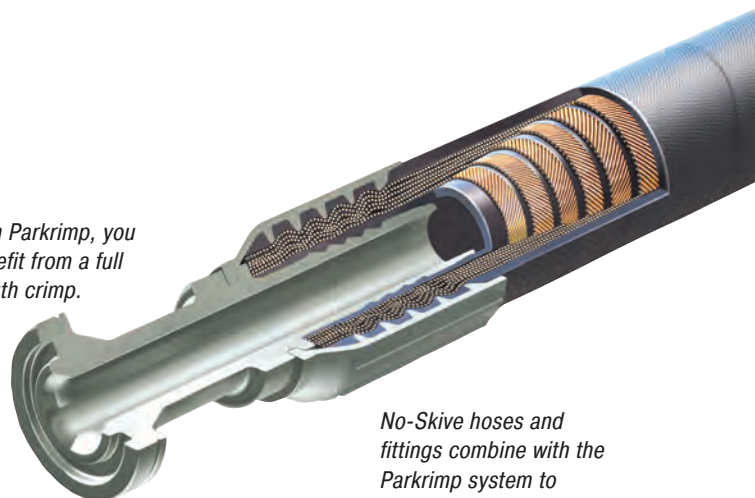
When it comes to hose assemblies, no one puts it all together like Parker. From high-volume productivity to portable on-site assembly, we offer a variety of crimping machines, No-Skive hoses, and No-Skive fittings to meet your needs.

With Parkrimp equipment, anyone can make factory-quality 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 bench-mounted 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.



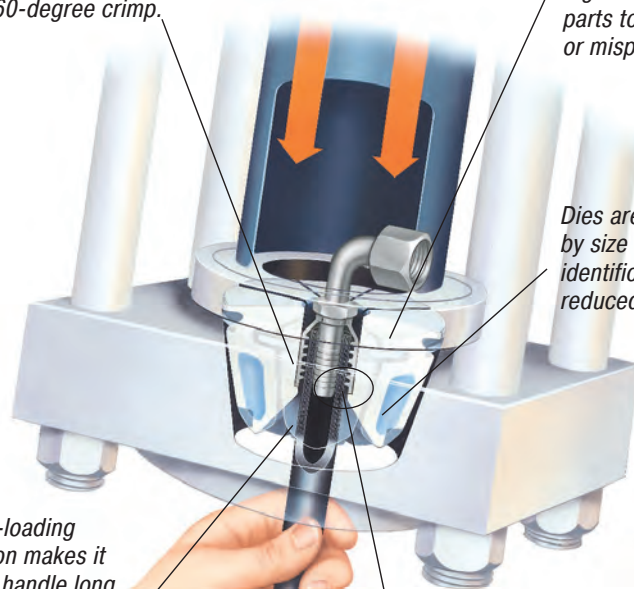
With Parkrimp, you benefit from a full length crimp.



No-Skive hoses and fittings combine with the Parkrimp system to create high quality, reliable hydraulic hose assemblies every time.

Our low profile design makes routing hose assemblies easy.

Eight segment crimp dies provide a smooth, even, 360-degree crimp.

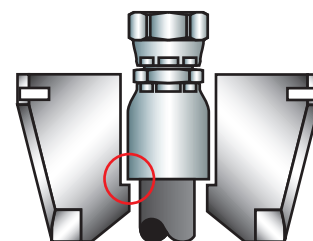


Bottom-loading operation makes it easy to handle long hose assemblies.

Our linked crimp dies keep die segments together. No loose parts to mismatch or misplace.

Dies are color-coded by size for easy identification and reduced set-up time.

Parker's exclusive Parkalign™ feature positions the fitting in the dies perfectly every time.



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.

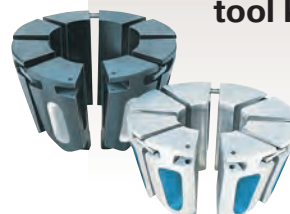
Example:

Hose	387-4
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 Equipment Section of this catalog.

For general hose assembly instructions for all Parkrimp machines, please turn to pages 266 and 267. (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.



Hose Dash Size	Die Cavity Color Code	43 & 26 Series Die Body Color	77 Series Die Body Color	79 Series Die Body Color	76 Series Die Body Color	25 Series Die Body Color	81 Series Die Body Color
		Silver	Black	Olive Drab	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			N/A	N/A		N/A
-10	ORANGE			N/A	N/A	N/A	N/A
-12	GREEN			N/A		N/A	
-16	BLACK			N/A		N/A	
-20	WHITE				N/A	N/A	
-24	RED				N/A	N/A	
-32	GREEN				N/A	N/A	

Hose Dash Size	Die Cavity Color Code	HY Series Die Body Color
		Silver
-4	BROWN	
-5	BROWN	
-6	BROWN	
-8	BROWN	
-10	BROWN	
-12	BROWN	
-16	BROWN	



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Reference pages 256 through 262 for specific tool information regarding hose, fitting, and crimper combinations. Be sure to check www.parker.com/crimpsource for the most up to date information and crimp specifications.

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

- Not applicable to all hoses. Verify hose and fitting capability on Crimpsource
- 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" high
- Weight: 70 lbs (without power unit)
- Rating: 30 ton force @ 10,000 psi maximum
- Crimp Cycle Time: 30 seconds 82C-0EP power unit (1/2" 43 Series)
- Reference pages 263 and 264 for information on available power units

Standard Equipment

Part Number			Description	Individual Part Number
82C-CHD	82C-061L	82C-KKB		
●	●	●	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

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Note:

- For crimp instructions, see pages 266 and 267.
- 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.

Karrykrimp Bench Mount



view on
web page

Capability

- Not applicable to all hoses. Verify hose and fitting capability on Crimpsource
- 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
- Crimp Cycle Time: 8 seconds (1/2" 43 Series straight fittings)
- Full Stroke Crimp Time: 15 seconds
- 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 life 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. Do not use extension cords to operate this machine.

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" and 1-1/4" only)

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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

- Not applicable to all hoses. Verify hose and fitting capability on Crimpsource
- 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

- 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, 77, 81 and HY Series fittings

Specifications

- Dimensions: 14" wide, 14" deep, 31-1/2" high
- Weight: 120 lbs (without power unit)
- Rating: 60 ton force @ 10,000 psi maximum
- Cycle Time: 15 seconds with 85C-0EP power unit (1/2" 43 series)
- Reference pages 263 and 264 for information on available power units

Standard Equipment

Part Number			Description	Individual Part Number
85C-CHD	85C-061L	85C-KKB		
●	●	●	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



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Note:

- For crimp instructions, see pages 266 and 267.
- 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.

Karrykrimp 2 Bench Mount



view on
web page

Capability

- Not applicable to all hoses. Verify hose and fitting capability on Crimpsource
- 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, 77, 81 and HY Series fittings

Specifications

- Dimensions: 19" wide, 24" deep, 28" high
- Weight: 265 lbs
- Rating: 60 ton force @ 10,000 psi maximum
- Crimp Cycle Time: 15 seconds (1/2" 43 series straight fitting)
- Full Stroke Cycle Time: 24 seconds
- 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 life 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. Do not use extension cords to operate this machine.

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.

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Parkrimp 1



[view on web page](#)

Features

- Compact bench mount design
- Engineered for optimal reliability, consistency, and durability
- All in one crimper and power unit design
- For use with 25, 26, 43, 81, and HY Series fittings

Specifications

- Dimensions: 26" wide, 20" deep, 25" high
- Weight: 275 lbs (with power unit)
- Rating: 30 ton force @ 3,000 psi maximum
- Full Cycle Time: 20 seconds
- Hydraulic Fluid: AW32 oil
- Note: Includes a 115/230 volt, 1 phase, 60 hertz power unit wired for 115V. This unit comes with a 20 AMP male plug and must be run on a dedicated 20 AMP circuit.

Standard Equipment

Part Number	Description	Individual Part Number
80C-061		
●	Parkrimp 1 crimper with 115/230 volt, 1 phase, 60 Hz power unit wired for 115V	80C-181
●	Silver die ring	80C-R01
●	Black die ring	80C-R02

Crimping Capabilities:

For use with 25, 26, 43, 81, and HY fittings.

- Not applicable to all hoses. Verify hose and fitting capability on Crimpsource
- Up to 1" ID 1 and 2 spiral hose
- Up to 5/8" ID 4 spiral hose
- Up to 3/8" ID compact spiral hose

No Stainless Steel Fittings

Crimp Cycle Time: 15-20 seconds, depending on Pusher position. (1/2" 43 series straight fittings)

Note: Cycle times vary depending on hose, fitting styles and sizes.

This machine may require the use of the Molykote GN grease for larger hose and fittings. For best performance and longevity of crimper components, use the Molykote GN grease for all crimping.

This machine is designed to make about 200 crimps per day and is not designed for production use. Exceeding the suggested production amounts will significantly reduce the life expectancy of the machine components.

80C-061 Includes:

- Parkrimp 1 Crimper
- Die ring Silver
- Die ring Black
- No Dies - Order Separately



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Note:

- For crimp instructions, see pages 266 and 267.
- 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.

Parkrimp 2



[view on web page](#)

Capability

- Not applicable to all hoses. Verify hose and fitting capability on Crimpsource
- 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, 76, 77, 79, 81 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 Stroke Cycle Time: 30 seconds without adapter bowl
20 seconds with adapter bowl
- Hydraulic oil: Enerpac oil

Standard Equipment

Part Number		Description	Individual Part Number
83C-081	83C-082		
●	●	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

*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", 3/4", 1", 1-1/4", 1-1/2" and 2" only)



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Phastkrimp 2

Capability

- Not applicable to all hoses.
Verify hose and fitting capability on Crimpsource
- Up to 1-1/4" ID 1 and 2 wire hose
- Up to 1-1/4" ID 4 spiral hose
- Up to 1" ID compact spiral hose

Features

- Designed to make up to 200 crimps per day
- For use with 25, 26, 43, 77, 81, and HY fittings



[view on web page](#)

Specifications

- Dimensions: Length 32", width 22", height 38"
- Weight: 530 lbs. with oil
- Rating: 64 tons cylinder force @ 4,500 psi
- Crimp Cycle Time: 7-10 seconds, depending on Pusher position (1/2" 43 series straight fittings).
- Hydraulic oil: ISO Grade 46AW, 5 gallon reservoir capacity
- This unit is designed to make up to 200 crimps per day and is not designed to be a production crimper. Exceeding these suggested production amounts will significantly reduce the life expectancy of the crimper components.
- This machine requires the use of the Molykote GN (TH18-100-59) Grease shipped with the 77 Series, -16 die (83C-CS16).

Part Number		Description	Individual Part Number
89CR-061	89CR-062		
●	●	Crimp Head Assembly	89CR-CHD
●		Phastkrimp 2 230 V, 3 phase, 60 HZ	89CR-HPS-3PH
	●	Phastkrimp 2 230 V, 1 phase, 60 HZ	89CR-HPS-1PH
●	●	Silver die ring	85C-R01
●	●	Black die ring	85C-R02

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.



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SCAN FOR
CRIMPSOURCE



TH8-380



[view on web page](#)

Capability

- Not applicable to all hoses. Verify hose and fitting capability on Crimpsource
- Up to 3" ID 2 wire braided hose
- Up to 3" ID 4/6 wire spiral hose
- Up to 4" (6")* industrial hoses

Shown with optional QDS239S front die rack

Features

- Electronic display preloaded with Parker part numbers and crimp specifications
- Greaseless die design

Specifications

- Dimensions: 47"L x 24-1/2" W x 67" H
- Weight without oil: 1653 lbs
- Weight with oil: 1852 lbs
- Crimp Force: 340 Ton
- Electrical Power*: 230-480 V / 50/60 Hz / 3PH / 5 HP
- Crimp Range: 165 mm
- Opening: 70 mm
- Opening without dies: 215 mm
- Full Cycle Time (mm/s):
 - Close: 23 (mm/s)
 - Crimp Force: 1.3 (mm/s)
 - Open: 33 (mm/s)

Hydraulic Oil: ISO Grade AW46: 26.5 gal.

Prefiltered oil required

Noise Level: 62 dBA

Delivered without oil and connecting plug

Standard Equipment

Description	Part Number
Production Crimper**	TH8-380

Crimper Accessories	
Adapter die	237.239.2L2
Automatic Depth Stop	TAHM3xxCA
Front Die Rack	QDS239S
Mobile Die Rack (Wheels)	QDS239C
Bench Top Die Rack	QDS239R
Foot Switch	PS.2 Double
Mirror	SHS 375/380
Quick Change Tool	QDC239.5
Workplace Lamp	LUS

Available Die Sizes	
PB239***	14, 17, 20, 24, 26, 28, 31, 34, 38, 40, 44, 50, 54
PB237L	57, 62, 69, 74

*Without Flange

**TH8-380 includes QDC239.5 quick change tool

***PB239 dies require adapter die 237.239.2L2

*Machine is factory wired to operate at high voltage. Can be field converted to operate at low voltage.

TH8-380

Hose Die Selection Chart

Fitting Series	Hose Size Range										
	-4	-5	-6	-8	-10	-12	-16	-20	-24	-32	-40
43 Series	17	17	20	24	26	31	40	50	57	69	78
70 Series			24	28	31						
71 Series			24	28	31	34	40	50	57	69	
77 Series				24	26	31	38	50	57	69	
79 Series						34	44	54	62		
HY Series	14	17	17	20	24	28	34	44			

Die Chart

Size (mm)	Part Number
14	PB239-50-14
17	PB239-65-17
20	PB239-65-20
24	PB239-65-24
26	PB239-65-26
28	PB239-80-28
31	PB239-80-31
34	PB239-80-34
38	PB239-80-38
40	PB239-80-40
44	PB239-80-44
50	PB239-100-50
54	PB239-100-54
57	PB237L-57
62	PB237L-62
69	PB237L-69
74	PB237L-74
78	PB237L-78

All PB239-xx dies require the use of adapter die (Part number 237.239.2L2)

26 Series Die Chart

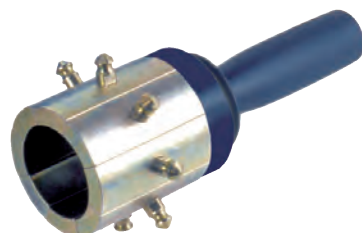
Size	Part Number
S26-04	PB239-S26-04
S26-05	PB239-S26-05
S26-06	PB239-S26-06
S26-08	PB239-S26-08
S26-10	PB239-S26-10
S26-12	PB239-S26-12
S26-16	PB239-S26-16
S26-20	PB239-S26-20
S26-24	PB239-S26-24
S26-32	PB237L-S26-32

All PB239-xx dies require the use of adapter die (Part number 237.239.2L2)

81 Series Die Chart

Size	Part Number
S81-12	PB239-S81-12
S81-16	PB239-S81-16
S81-20	PB239-S81-20
S81-24	PB239-S81-24
S81-32	PB237L-S81-32

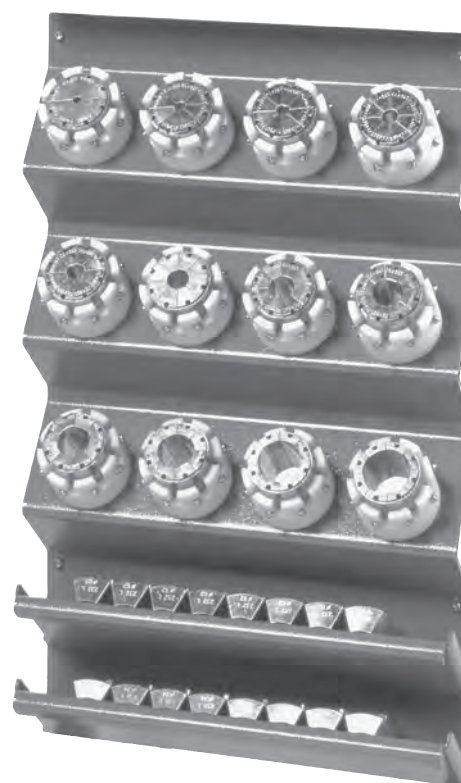
All PB239-xx dies require the use of adapter die (Part number 237.239.2L2)



QDS239.5
(included with machine)



QDS239R
(optional item)



QDS239S
(optional item)

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Hand Pump*

Part No. 82C-0HP



[view on web page](#)

(for use with the Minikrimp, Karrykrimp and Karrykrimp 2)
Ease of operation hand pump delivers 10,000 psi

Length: 23"
Width: 4"
Height: 5"
Port Size: 3/8" NPTF
Weight: 9 lbs
Hydraulic Fluid: Enerpac oil

Hand Pump*

Part No. 85C-0HP



[view on web page](#)

(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



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Enerpac Warranty Statement

Enerpac 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 Enerpac'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.

Electric Pump*

Part No. 82C-0EP



[view on web page](#)

(for use with the Minikrimp, Karrykrimp and Karrykrimp 2)
Ease of operation electric pump delivers 10,000 psi

Length: 13"
Width: 13"
Height: 15"
Port Size: 3/8" NPTF
Weight: 31 lbs
Hydraulic Fluid: Enerpac oil
Power Source: 115 volt, 1 phase, 50/60 Hz, 9 amp

Electric Pump*

Part No. 85C-0EP



[view on web page](#)

(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"
Port Size: 3/8" NPTF
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



[view on web page](#)

(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"
Height: 6"
Intake Port Size: 1/4" NPTF
Output Port Size: 3/8" NPTF
Weight: 14 lbs
Hydraulic Fluid: Enerpac oil

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Enerpac Warranty Statement

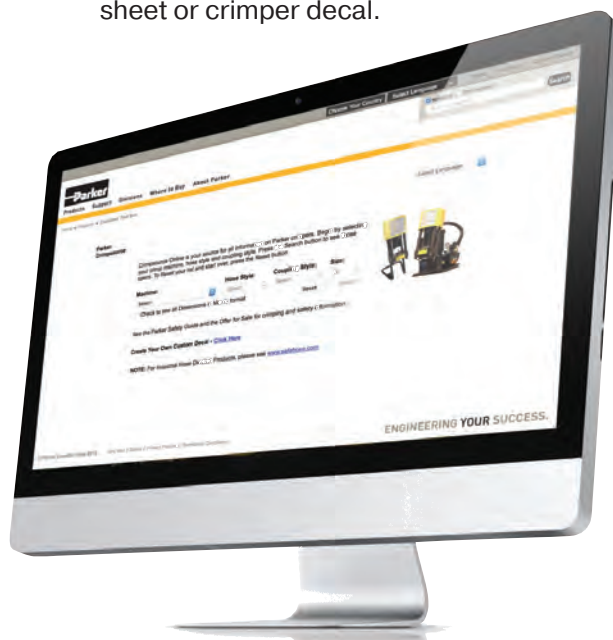
Enerpac products are warranted to be free of defects in materials and workmanship. Any product that does not conform to specification will be repaired or replaced at Enerpac's expense, anywhere in the world; simple as that! This warranty does not cover ordinary wear and tear, abuse, misuse, alterations, 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.

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:

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

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.

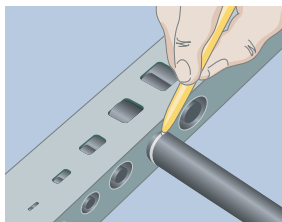


Crimpsource Home Page

Crimping using Minikrimp, Karrykrimp 2 and Karrykrimp 2 Bench Mount

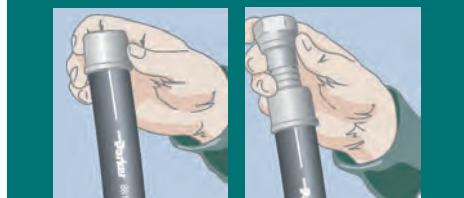
Parkrimp Fittings Series 25, 26, 43, 70, 71, 77, 81, HY

1 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.

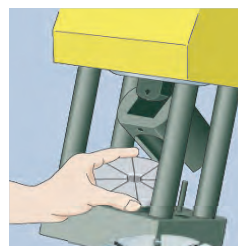
For 81 Series Shells with 88 Series Fittings



Place shell onto end of hose and make sure the end of the shell lines up with the Insertion Depth mark.

Push hose onto the 88 Series fitting until the shell bottoms against the fitting's stop ring or hex. Lubricate hose if necessary.

2 Insert unitized die train

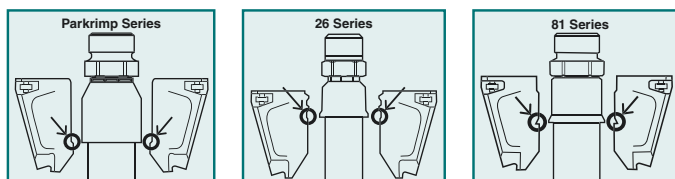


Pull pin at the top of pusher to swing it back. Place unitized die-train into base plate. See decal on crimper for proper die set.

Important: Lubricate the crimper's die bowl using a premium quality lithium-base grease.

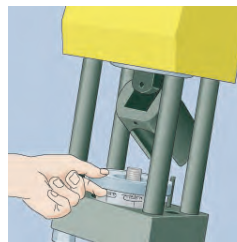
Color-Coded Unitized Die-Train

3 Position the fitting

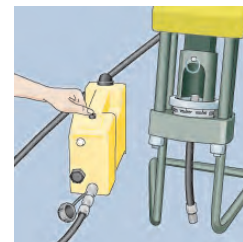


Position the hose and fitting in dies from below. Rest bottom of coupling on die step using the PARKALIGN® feature.

4 Place die ring and crimp

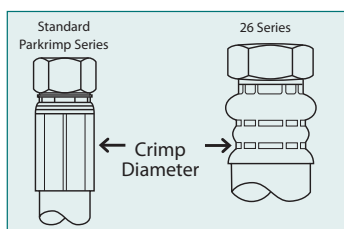


Place correct die ring on top of the dies. See decal on crimper for proper die ring.



Position pusher by replacing the pin and operate pump until the die ring bottoms out. Release pressure within the pump — remove finished assembly.

5 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.

Note: Minikrimp, Karrykrimp & Karrykrimp 2 have several types of power sources, all of which are separate units from the crimping machine.

Hose insertion depths

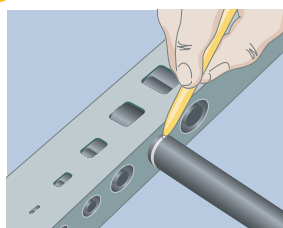
Fitting Size	Fitting Series																	
	25		26		43		70		71		77		79		81		HY	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
-4	-	-	0.81	21	0.81	21	-	-	-	-	-	-	-	-	-	-	1.38	35
-5	-	-	0.81	21	0.94	24	-	-	-	-	-	-	-	-	-	-	1.41	36
-6	0.88	22	0.81	21	1.13	29	1.06	27	1.06	27	-	-	-	-	-	-	1.35	34
-8	0.88	22	0.81	21	1.31	33	1.31	33	1.25	32	1.36	34.6	-	-	-	-	1.44	37
-10	-	-	0.88	22	1.56	40	1.38	35	1.31	33	1.53	38.9	-	-	-	-	1.46	37
-12	-	-	0.88	22	1.50	38	1.50	38	1.44	37	1.78	45.2	2.18	56	1.12	29	1.55	39
-16	-	-	1.00	25	1.75	44	1.81	46	1.75	44	2.13	54.1	2.31	59	1.25	32	1.69	43
-20	-	-	1.00	25	1.88	48	1.75	44	1.81	46	2.51	63.8	2.81	71	1.31	33	-	-
-24	-	-	1.06	27	1.44	37	-	-	2.31	59	2.67	67.7	-	-	1.31	33	-	-
-32	-	-	1.25	32	1.81	46	-	-	2.44	62	3.05	77.5	-	-	1.69	43	-	-

For specific information on crimping, visit CrimpSource™ online at www.parker.com/crimpsource.

Crimping using Parkrimp 2

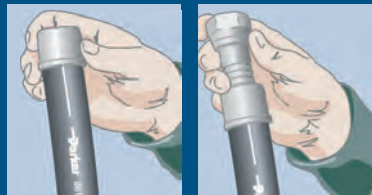
Parkrimp Fittings Series 25, 26, 43, 70, 71, 77, 81, HY

1 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

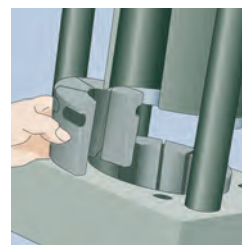


Place 81 Series Shell onto end of hose and make sure the end of the shell lines up with the Insertion Depth mark.

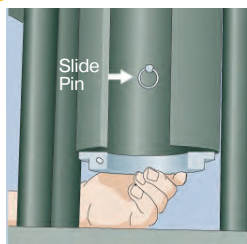
Push hose onto the 88 Series fitting until the shell bottoms against the fitting's stop ring or hex. Lubricate hose if necessary.

2a If using large two-piece dies

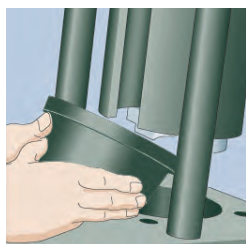
Insert the proper die set into the die bowl. (The die sets are in two halves of four dies each. Place one half in the back and one half in the front to accommodate bent tube fittings.) Reference decal on crimper for proper tool selection.



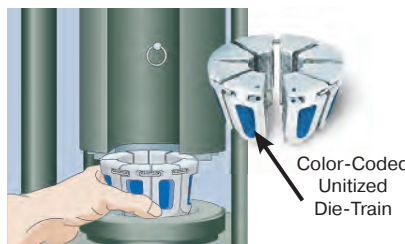
2b If using small unitized dies



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 lithium-base 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 die-train into the adapter bowl. Select die and die ring by hose size and type. See decal on crimper for proper die set.

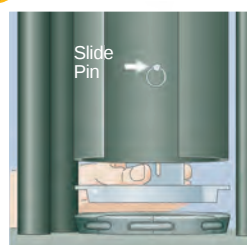
Note: Die sets have color-coded cavities indicating size and have the fitting series and dash size stamped on the top.

3 Place spacer ring

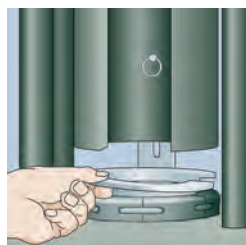


If required, place spacer ring on locating step of adapter bowl. Reference decal on crimper for tool selection.

4 Position the split die ring

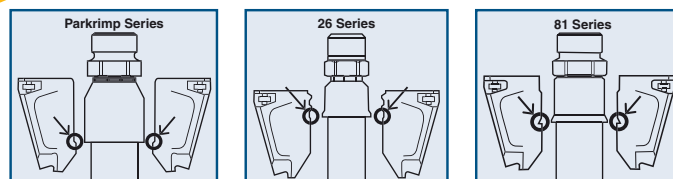


Lower the back half of the split die ring onto the dies by pulling the slide pin forward.



Insert the front half of the split die ring aligning the pins in the back half with the hole in the front half.

5 Position the fitting



Position the hose and fitting in dies from below. Rest bottom of coupling on die step using the PARKALIGN® feature.

6 Crimp hose

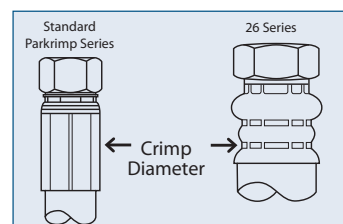
Turn on the pump by pressing the "ON" switch. Pull the valve handle forward to bring the pusher down for crimping. When the split die ring contacts the base plate, the crimp is complete. Push the valve handle back to lift the pusher, open the dies, and release the finished assembly.

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.



7 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.

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.

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 ADVERSELY AFFECT THE HOSE INNER TUBE 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 rings. 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.

Hose Cut-Off Machine

Part No. 86C-220V

Features

- Engineered for workshop, retail, or production use
- Cuts hoses with less friction, less heat, and less debris
- Vacuum port eliminates any very small amount of smoke or debris created
- Comes standard with a Parker branded advanced scallop blade
- Cuts wire reinforced hoses including 6 heavy wire constructions up to 2" ID

Specifications

- Dimensions: 27" wide X 16.5" long X 24" high (when handle is at the highest point)
- Shipping Weight: 108 lbs



[view on web page](#)

Part Number 86C-220V	Description	Individual Part Number
●	Hose cut off machine with 220V single phase motor	
●	Parker branded advanced scallop blade- 10" OD x .125 THK X 40 mm arbor	HYD10X125X40-PH

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Hose Cut-Off Machine

Part No. 86C-220V3

Features

- Engineered for workshop, retail, or production use
- Cuts hoses with less friction, less heat, and less debris
- Vacuum port eliminates any very small amount of smoke or debris created
- Comes standard with a Parker branded advanced scallop blade
- Cuts wire reinforced hoses including 6 heavy wire constructions up to 2" ID

Specifications

- Dimensions: 27" wide X 16.5" long X 24" high (when handle is at the highest point)
- Shipping Weight: 108 lbs



[view on web page](#)

Part Number 86C-220V3	Description	Individual Part Number
●	Hose cut off machine with 220V3 single phase motor	
●	Parker branded advanced scallop blade- 10" OD x .125 THK X 40 mm arbor	HYD10X125X40-PH

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Hose Cut-Off Machine

Part No. 86C-110V

Features

- Engineered for workshop, retail, or production use
- Cuts hoses with less friction, less heat, and less debris
- Vacuum port eliminates any very small amount of smoke or debris created
- Comes standard with a Parker branded advanced scallop blade
- Cuts wire 4-wire spiral hoses up to 1 1/4" ID
- For frequent use cutting larger ID, 4-wire hoses, a larger saw may be more suitable



[view on web page](#)

Specifications

- Electrical: Single Phase, 1.5 HP, 110 VAC, 60 Cycle, 3,450 RPM
- Dimensions: 22" wide X 14" long X 15" high
- Shipping Weight: 75 lbs

Standard Equipment

Part Number 86C-110V	Description	Individual Part Number
●	Hose cut off machine with 110V single phase motor	
●	Parker branded advanced scallop blade- 7" OD x .093 THK X 3/4" arbor	HYD07X093X3/4-PH

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Clean-Cuts Diamond Knife Blade

Part No. HSK7X093X3/4-D-PH /
HSK10X125X40-D-PH

Features

- Drastically improves cutting performance
- Effortless cutting
- Faster than standard steel blades
- Designed specifically for heavy hoses, like 6 wire spiral
- HSK7x093x3/4-D-PH is a 7" OD X .093 thickness for a 3/4" Arbor
- HSK10x125x40-D-PH is a 7" OD x .125 thickness or a 40 mm Arbor



Standard Equipment

Part Number 86C-220V3	Description	Individual Part Number
●	Hose cut off machine with 220V three phase motor	
●	Parker branded advanced scallop blade- 10" OD x .125 THK X 40 mm arbor	HYD10X125X40-PH

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Premium Hose Cleaning Kit



[view on
web page](#)

Part No. TH6-10-HL-10-2 (10 Nozzle Kit)

Features

- 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

Nozzles Included in Kits

End Type	Size	Nozzle Part Number*	Projectile Part Number†	Projectile Quantity‡
Hose	1/4"	TH6-10-H06	TH6-10-P10	100
Hose	5/16"	TH6-10-H08	TH6-10-P12	100
Hose	3/8"	TH6-10-H10	TH6-10-P14	100
Hose	1/2"	TH6-10-H13	TH6-10-P18	100
Hose	5/8"	TH6-10-H16	TH6-10-P22	50
Hose	3/4"	TH6-10-H19	TH6-10-P26	50
Hose	1"	TH6-10-H25	TH6-10-P33	40
Hose	1-1/4"	TH6-10-H32	TH6-10-P40	30
Hose	1-1/2"	TH6-10-H38	TH6-10-P50	20
Hose	2"	TH6-10-H50	TH6-10-P60	15

*Nozzles are not available individually

†Projectiles sold separately

Additional Available Nozzles

End Type	Size	Nozzle Part Number	Projectile Part Number†	Projectile Quantity‡
JIC	1/4"	TH6-10-J06	TH6-10-P06	100
JIC	3/8"	TH6-10-J10	TH6-10-P12	100
JIC	1/2"	TH6-10-J13	TH6-10-P16	100
JIC	5/8"	TH6-10-J16	TH6-10-P22	50
JIC	3/4"	TH6-10-J19	TH6-10-P26	50
JIC	1"	TH6-10-J25	TH6-10-P33	40
JIC	1-1/4"	TH6-10-J32	TH6-10-P40	30
JIC	1-1/2"	TH6-10-J38	TH6-10-P50	20
JIC	2"	-	TH6-10-P60	15

†Projectiles sold separately

Economy Hose Cleaning Kit



[view on
web page](#)

Part No. TH6-10-EL-8 (8 Nozzle Kit)

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:

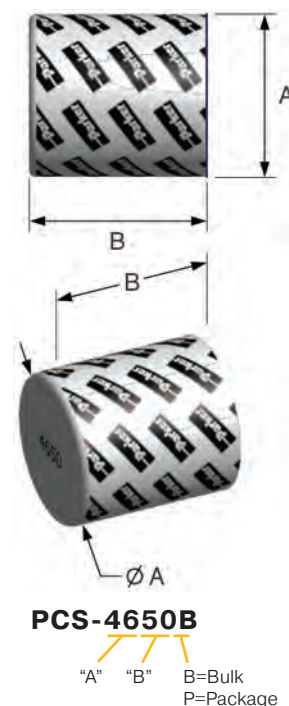
- For use on fittings up to -24 (1-1/2")
- Fits straight and elbow fittings
- Easy pull tab removal
- Reduced environmental impact compared to traditional caps
 - Less plastic used
 - More crushable
- Multiple hoses can be capped at one time



[view on web page](#)

Cap Part Numbers

Packaged		Bulk		Sizing	
Parker P/N (Package)	Package Quantity	Parker P/N (Bulk)	Bulk Quantity	Hex Sizes Covered (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 

Push-Lok Cut-Off & Assembly Tool

Part No. 881540



[view on web page](#)

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.



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Hose Insertion Depth Blocks

Part No. TH9-1-XXX



[view on web page](#)

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
TH9-1-77	77 Series -8 through -32
TH9-1-HY	HY Series -4 through -16



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Hose Cut-Off Tool

Part No. TH11-1



[view on web page](#)

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
- Shipping Weight: 0.3 lbs.

Die Storage Racks

Part No. 80C-0DR and 83C-0DR



[view on web page](#)

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		Description
80C-0DR	83C-0DR	
●		Storage of three sets of small dies
	●	Storage of two sets of large dies

Swivel Die Rack

Part No. 80C-SDR-XXXX



[view on web page](#)

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



[view on web page](#)

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

- Elbow Pusher Set (TH2-7-ELS)
- -32 Monoblock Elbow Pusher Set (TH2-7-ELSH)



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Mandrels - 25 Series

(For 271 Transportation Hose)

Part No. TH2-7M25-6 and TH2-7M25-8



[view on web page](#)



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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



[view on web page](#)

Large Crimper Hood

Part No. 83C-CVR

Features

- Water repellant
- UV protected
- Perfect for indoor and outdoor applications

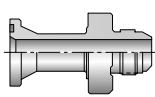
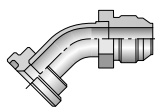
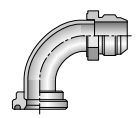
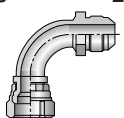
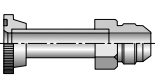
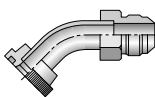
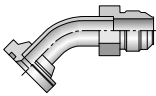
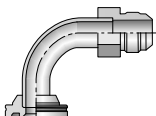
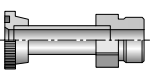
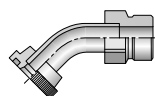
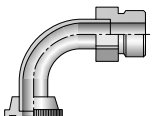
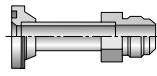
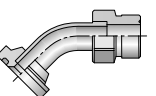
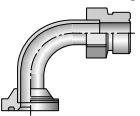
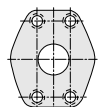
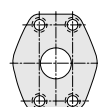
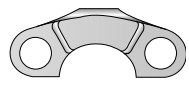
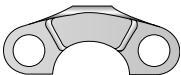
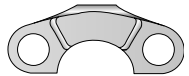
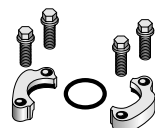
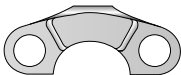
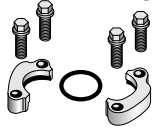
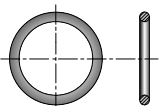
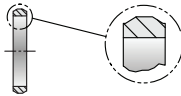
Fits

- PHastkrimp, Superkrimp
Parkrimp2

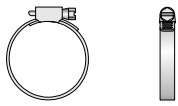
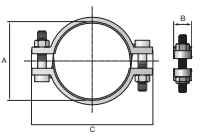
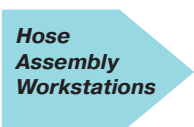


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Accessories

 Hose Adapters	Hose Adapters 278 	 Hydraulic Flange Adapters	15T3 279  <i>Code 61 - JIC 37°</i>	17T3 279  <i>Code 61 - JIC 37° 45° Elbow</i>	19T3 279  <i>Code 61 - JIC 37° 90° Elbow</i>
	39T3 280  <i>Male - Female JIC 37° - 90° Elbow</i>		41T3 280  <i>Male - Female JIC 37° 90° Elbow - Long</i>	4AH3 280  <i>Code 61 - JIC 37° 5000 psi</i>	4FH3 281  <i>Code 61 - JIC 37° 5000 psi - 45° Elbow</i>
6FH3 281  <i>Code 62 - JIC 37° 45° Elbow</i>	6NH3 282  <i>Code 62 - JIC 37° 90° Elbow</i>	4AJM 282  <i>Code 61 - Seal-Lok®</i>	4FJM 282  <i>Code 61 - Seal-Lok® 45° Elbow</i>	4NJM 282  <i>Code 61 - Seal-Lok® 90° Elbow</i>	6AH3 281  <i>Code 62 - JIC 37°</i>
6FJM 283  <i>Code 62 - Seal-Lok® 45° Elbow</i>	6NJM 283  <i>Code 62 - Seal-Lok® 90° Elbow</i>	Standard Pressure (Code 61) Specifications 284 	High Pressure (Code 62) Specifications 284 	50H 284  <i>Flange Half 5000 psi (Code 61)</i>	5050HK 285  <i>Flange Kit Code 61 - 5000 psi</i>
51H 285  <i>Flange Half - Code 61</i>	5151HK 285  <i>Flange Kit - Code 61</i>	HFH 286  <i>Flange Half - Code 62</i>	HFHFHK 286  <i>Flange Kit - Code 62</i>	M1H 287  <i>Flange Half ISO - Code 61</i>	M1M1HK 287  <i>Flange Kit ISO - Code 61</i>
M2H 288  <i>Flange Half ISO - Code 62</i>	M2M2HK 288  <i>Flange Kit ISO - Code 62</i>	XCXCHK 288  <i>Flange Kit - CAT</i>	 O-Rings		EFS 289  <i>Engineered Flange Seal</i>
711510 290  <i>O-Rings Code 61/Code 62</i>	D9DT 290  <i>Bonded Seal for BSPP Port Fittings</i>	J0RG 291  <i>O Rings - Seal-Lok®</i>	XARG 291  <i>Flange "D" Rings CAT</i>	59RG 292  <i>O-Rings - Tube O-Ring & Compressor Fittings</i>	T1RG 292  <i>O-Rings Compression Fittings (IT126)</i>
CORG 292  <i>O-Ring Assembly Tools</i>	 Hose Guards	Partek Defense 293 	Partek Wrap 294 	Partek Sleeve 295 	PolyGuard (HG) 295 

Accessories

ParKoil™ (PG) 295 	Spring Guard (SG) 296 	Polyguard 296 Strain Reliever 	Firesleeve (FS-F) 297 	FSC Clamp 297 	Firesleeve Tape 297 
Protection Shields 298 	Hose Whip Restraint 306 	CL Clamp 310 	HC Clamp 311 	88HC-H Wormgear 311 	88DB Clamp 311 
Hose Assembly Workstations 	Hose Assembly 312 Workstations 	HoseFab Table 313 	Rotary Reel Rack 313 	Saw Table 313 	3/4 Reel Rack 313 
Parker Kart 314 	72B-Cabinet 314 	HR3 Hose Bin 314 			

SAE/NPT/Metric Hose Adapters

					
O-Ring Face-Seal Seal-Lok™	O-Ring Face-Seal Metric Seal-Lok™	37° Flare Fittings Triple-Lok®	37° Flare Metric Triple-Lok®	Pipe Fittings and Port Adapters	Conversion Adapters
<i>Sizes: 6 mm – 38 mm Materials: Steel, Stainless Steel Pressures: Up to 9200 psi</i>	<i>Sizes: 1/4" – 2" Materials: Steel, Stainless Steel Pressures: Up to 9200 psi</i>	<i>Sizes: 1/8" – 2" Materials: Steel, Stainless Steel, Brass Pressures: Up to 9000 psi</i>	<i>Sizes: 6 mm – 38 mm Materials: Steel, Stainless Steel Pressures: Up to 7200 psi</i>	<i>Sizes: 1/8" – 2" Materials: Steel, Stainless Steel, Brass Pressures: Up to 7200 psi</i>	<i>Sizes: 1/4" – 1-1/2" Materials: Steel, Stainless Steel Pressures: Up to 7700 psi</i>
					
Pipe Swivels	Hydraulic Flange and Flange Adapters	Japanese Industrial Standard JIS	30° Flare Komatsu Style	60° Cone BSPP K4	
<i>Sizes: 1/8" – 2" Materials: Steel, Stainless Steel Pressures: Up to 5000 psi</i>	<i>Sizes: 3/4" – 3" Materials: Steel, Stainless Steel Pressures: Up to 6000 psi</i>	<i>Sizes: 1/4" – 1" Materials: Steel Pressures: Up to 5000 psi</i>	<i>Sizes: M14 x 1.5 – M33 x 1.5 Materials: Steel Pressures: Up to 4000 psi</i>	<i>Sizes: 1/8" – 2" Materials: Steel Pressures: Up to 5000 psi</i>	

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

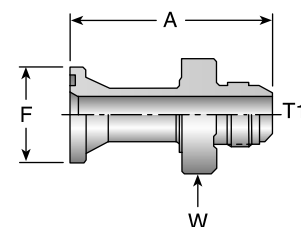
Web: <http://www.parker.com/tfd>

15T3

SAE (Code 61) Flange – Male SAE (JIC) 37° Flare

Part Number				Maximum Working Pressure psi	A			
	Flange inch		Thread T1		inch	mm	W inch	F inch
15T3-8-8	1/2	1/2	3/4x16	4000	2.80	71	1-1/4	1-3/16
15T3-12-12	3/4	3/4	1-1/16x12	3100	3.20	81	1-9/16	1-1/2
15T3-16-12	1	3/4	1-1/16x12	3100	2.68	47	1-1/8	1-3/4
15T3-16-16	1	1	1-5/16x12	2400	3.22	82	1-7/8	1-3/4
15T3-20-16	1-1/4	1	1-5/16x12	2400	2.76	51	1-3/8	2
15T3-20-20	1-1/4	1-1/4	1-5/8x12	1800	3.69	94	2-1/4	2
15T3-24-24	1-1/2	1-1/2	1-7/8x12	1300	4.04	103	2-1/2	2-3/8
15T3-32-32	2	2	2-1/2x12	1150	4.44	113	2-7/8	2-13/16

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



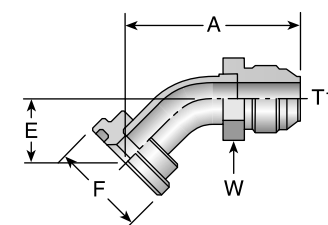
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17T3

SAE (Code 61) Flange – Male SAE (JIC) 37° Flare - 45° Elbow

Part Number				Maximum Working Pressure psi	A		E			
	Flange inch		Thread T1		inch	mm	inch	mm	inch	inch
17T3-8-8	1/2	1/2	3/4x16	4000	2.54	65	0.78	20	13/16	1-3/16
17T3-12-12	3/4	3/4	1-1/16x12	3100	2.76	70	1.00	25	1-9/16	1-1/2
17T3-16-12	1	3/4	1-1/16x12	3100	2.72	70	1.00	25	1-1/8	1-3/4
17T3-16-16	1	1	1-5/16x12	2400	2.99	76	1.06	27	1-3/8	1-3/4
17T3-20-16	1-1/4	1	1-5/16x12	2400	2.99	76	1.06	27	1-7/8	2
17T3-20-20	1-1/4	1-1/4	1-5/8x12	1800	3.22	82	1.12	28	1-11/16	2
17T3-24-20	1-1/2	1-1/4	1-5/8x12	1800	3.26	83	1.17	30	1-11/16	2-3/8
17T3-24-24	1-1/2	1-1/2	1-7/8x12	1300	3.43	87	1.12	28	2	2-3/8
17T3-32-32	2	2	2-1/2x12	1150	4.02	102	1.25	32	2-5/8	2-13/16

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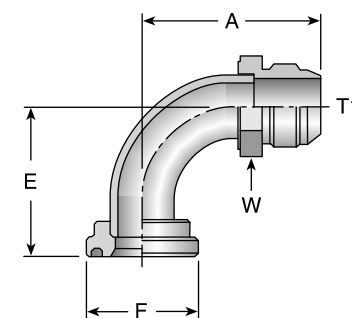
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19T3

SAE (Code 61) Flange – Male SAE (JIC) 37° Flare - 90° Elbow

Part Number				Maximum Working Pressure psi	A		E			
	Flange inch	Thread T1			inch	mm	inch	mm	W inch	F inch
19T3-8-8	1/2	1/2	3/4x16	4000	1.92	49	1.62	41	13/16	1-3/16
19T3-12-12	3/4	3/4	1-1/16x12	3100	2.46	62	2.12	54	1-1/8	1-1/2
19T3-16-12	1	3/4	1-1/16x12	3100	2.46	62	2.12	54	1-3/8	1-3/4
19T3-20-12	1-1/4	3/4	1-1/16x12	3100	2.46	62	2.12	54	1-3/8	2
19T3-16-16	1	1	1-5/16x12	2400	2.79	71	2.37	60	1-3/8	1-3/4
19T3-20-16	1-1/4	1	1-5/16x12	2400	2.79	71	2.37	60	1-3/8	2
19T3-24-16	1-1/2	1	1-5/16x12	2400	2.79	71	2.44	62	1-11/16	2-3/8
19T3-20-20	1-1/4	1-1/4	1-5/8x12	1800	3.12	79	2.50	64	1-11/16	2
19T3-24-20	1-1/2	1-1/4	1-5/8x12	1800	3.12	79	2.56	65	1-11/16	2-3/8
19T3-20-24	1-1/4	1-1/2	1-7/8x12	1300	3.48	88	2.69	68	2	2
19T3-24-24	1-1/2	1-1/2	1-7/8x12	1300	3.48	88	2.75	70	2	2-3/8
19T3-32-24	2	1-1/2	1-7/8x12	1300	3.48	88	2.75	70	2	2-13/16
19T3-32-32	2	2	2-1/2x12	1150	5.61	142	4.50	114	2-5/8	2-13/16

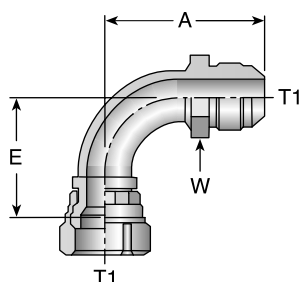
WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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39T3

Male - Female Swivel - SAE (JIC) 37° - 90° Elbow



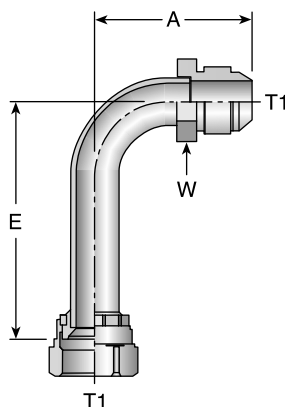
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Part Number	Thread T1		Maximum Working Pressure psi	A		E		W
				inch	mm	inch	mm	inch
39T3-6-6	3/8	9/16x18	4500	1.61	41	0.85	22	5/8
39T3-8-8	1/2	3/4x16	4000	1.86	47	1.09	28	13/16
39T3-10-10	5/8	7/8x14	3600	2.13	54	1.24	31	15/16
39T3-12-12	3/4	1-1/16x12	3100	2.62	67	1.81	46	1-1/8
39T3-16-16	1	1-5/16x12	2400	2.94	75	2.14	54	1-3/8
39T3-20-20	1-1/4	1-5/8x12	1800	3.12	79	2.59	66	1-11/16

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

41T3

Male - Female Swivel - SAE (JIC) 37° - 90° Elbow - Long



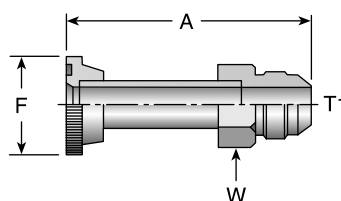
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Part Number	Thread T1		Maximum Working Pressure psi	A		E		W
				inch	mm	inch	mm	inch
41T3-8-8	1/2	3/4x16	4000	1.94	49	2.43	62	13/16
41T3-10-10	5/8	7/8x14	3600	2.20	56	2.57	65	15/16
41T3-12-12	3/4	1-1/16x12	3100	2.50	64	3.74	95	1-1/8
41T3-16-16	1	1-5/16x12	2400	2.79	71	4.23	107	1-3/8

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

4AH3

SAE Code 61 Flange - Male SAE (JIC) 37° Flare



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Part Number	Flange inch	Thread T1		Maximum Working Pressure psi	A		W	F
					inch	mm	inch	inch
4AH3-12-12	3/4	3/4	1-1/16x12	5000	3.82	97	1-1/8	1-1/2
4AH3-16-16	1	1	1-5/16x12	4500	4.09	104	1-3/8	1-3/4
4AH3-20-20	1-1/4	1-1/4	1-5/8x12	4400	4.16	106	1-3/4	2
4AH3-24-24	1-1/2	1-1/2	1-7/8x12	4250	4.97	126	2	2-3/8

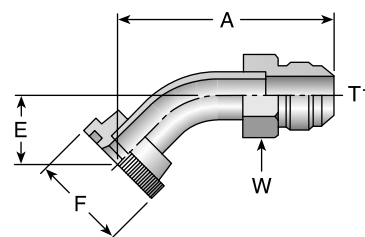
WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

4FH3

SAE Code 61 Flange - Male SAE (JIC) 37° Flare - 45° Elbow

Part Number			Maximum Working Pressure psi	A		E				
	Flange inch	Thread T1		inch	mm	inch	mm	W inch	F inch	
4FH3-12-12	3/4	3/4	1-16x12	5000	3.39	86	1.06	27	1-1/8	1-1/2
4FH3-16-16	1	1	1-5/16x12	4500	3.85	98	1.27	32	1-3/8	1-3/4
4FH3-20-20	1-1/4	1-1/4	1-5/8x12	4400	4.22	107	1.36	35	1-3/4	2

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



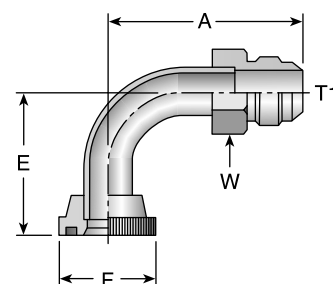
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4NH3

SAE Code 61 Flange - Male SAE (JIC) 37° Flare - 90° Elbow

Part Number				Maximum Working Pressure psi	A		E			
	Flange inch		Thread T1		inch	mm	inch	mm	W inch	F inch
4NH3-8-8	1/2	1/2	3/4x16	5000	1.93	49	1.68	43	13/16	1-13/16
4NH3-12-12	3/4	3/4	1-1/16x12	5000	3.07	78	2.24	57	1-1/8	1-1/2
4NH3-16-16	1	1	1-5/16x12	4500	3.25	83	2.48	63	1-3/8	1-3/4
4NH3-20-20	1-1/4	1-1/4	1-5/8x12	4400	4.68	119	2.99	76	1-3/4	2
4NH3-24-24	1-1/2	1-1/2	1-7/8x12	4250	3.92	100	3.64	92	2	2-3/8

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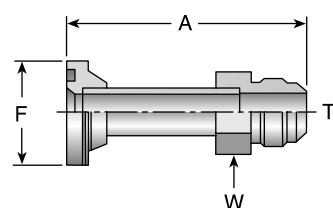
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6AH3

SAE Code 62 Flange - Male SAE (JIC) 37° Flare

Part Number				Maximum Working Pressure psi	A			
	Flange inch		Thread T1		inch	mm	W inch	F inch
6AH3-12-12	3/4	3/4	1-1/16x12	5000	3.82	97	1-1/8	1-5/8
6AH3-16-16	1	1	1-5/16x12	4500	4.09	104	1-3/8	1-7/8
6AH3-20-20	1-1/4	1-1/4	1-5/8x12	4400	4.16	106	1-3/4	2-1/8
6AH3-24-24	1-1/2	1-1/2	1-7/8x12	4250	4.97	126	2	2-1/2

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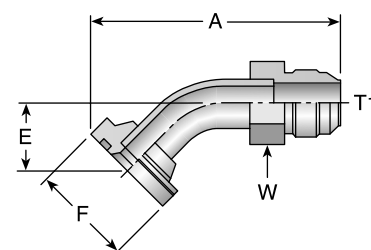
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6FH3

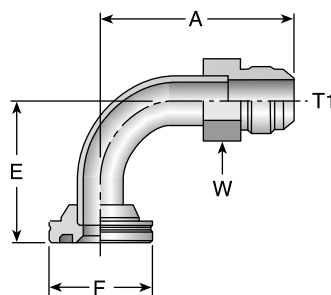
SAE Code 62 Flange - Male SAE (JIC) 37° Flare - 45° Elbow

Part Number				Maximum Working Pressure psi	A		E			
	Flange inch	Thread T1			inch	mm	inch	mm	W inch	F inch
6FH3-12-12	3/4	3/4	1-1/16x12	5000	3.40	86	1.06	27	1-1/8	1-5/8
6FH3-16-16	1	1	1-5/16x12	4500	3.85	98	1.28	33	1-3/8	1-7/8
6FH3-20-20	1-1/4	1-1/4	1-5/8x12	4400	4.22	107	1.36	35	1-3/4	2-1/8
6FH3-24-24	1-1/2	1-1/2	1-7/8x12	4250	5.13	130	1.71	43	2	2-1/2

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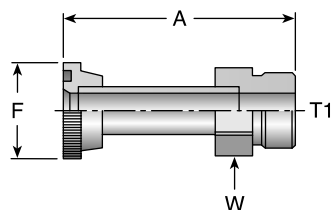
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6NH3**SAE Code 62 Flange - Male SAE (JIC) 37° Flare - 90° Elbow**

view on web page

Part Number	Flange inch	Thread T1	Maximum Working Pressure psi	A		E		W inch	F inch
				inch	mm	inch	mm		
6NH3-12-12	3/4	3/4 1-1/16x12	5000	3.07	78	2.24	57	1-1/8	1-5/8
6NH3-16-16	1	1 1-5/16x12	5000	3.58	91	2.81	71	1-3/8	1-7/8
6NH3-20-20	1-1/4	1-1/4 1-5/8x12	4400	4.68	119	2.99	76	1-3/4	2-1/8
6NH3-24-24	1-1/2	1-1/2 1-7/8x12	4250	3.92	100	3.64	92	2	2-1/2

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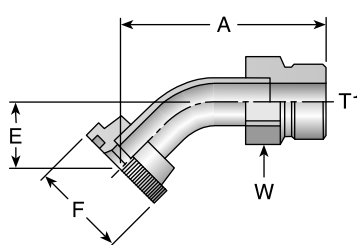
4AJM**Code 61 Flange - Male Seal-Lok**

view on web page

Part Number	Flange inch	Thread T1	Maximum Working Pressure psi	A		W inch	F inch
				inch	mm		
4AJM-12-12	3/4	1-3/16x12	5000	3.65	93	1-1/4	1-1/2
4AJM-16-16	1	1-7/16x12	4500	3.90	99	1-1/2	1-3/4

JM adapters do not include O-rings. Order separately.

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

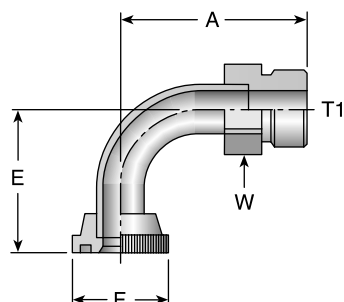
4FJM**Code 61 Flange - Male Seal-Lok - 45° Elbow**

view on web page

Part Number	Flange inch	Thread T1	Maximum Working Pressure psi	A		E		W inch	F inch
				inch	mm	inch	mm		
4FJM-16-16	1	1-7/16x12	4500	3.64	92	1.27	33	1-1/2	1-3/4

JM adapters do not include O-rings. Order separately.

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4NJM**Code 61 Flange - Male Seal-Lok - 90° Elbow**

view on web page

Part Number	Flange inch	Thread T1	Maximum Working Pressure psi	A		E		W inch	F inch
				inch	mm	inch	mm		
4NJM-12-12	3/4	1-3/16x12	5000	2.90	74	2.24	57	1-1/4	1-1/2
4NJM-16-16	1	1-7/16x12	4500	3.38	86	2.81	71	1-1/2	1-3/4
4NJM-20-20	1-1/4	1-11/16x12	4000	4.44	113	2.99	76	1-3/4	2

JM adapters do not include O-rings. Order separately.

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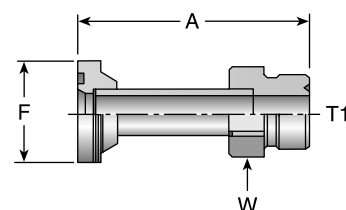
6AJM

Code 62 Flange - Male Seal-Lok

Part Number	 Flange inch	 Thread T1	Maximum Working Pressure psi	A		 W inch	 F inch
				inch	mm		
6AJM-12-12	3/4	1-3/16x12	5000	3.65	93	1-1/4	1-5/8
6AJM-16-16	1	1-7/16x12	4500	3.90	99	1-1/2	1-7/8

JM adapters do not include O-rings. Order separately.

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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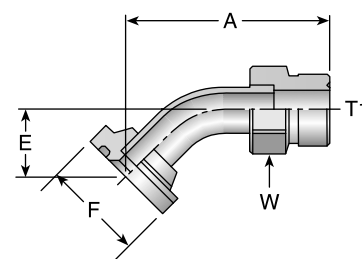
6FJM

Code 62 Flange - Male Seal-Lok - 45° Elbow

Part Number	 Flange inch	 Thread T1	Maximum Working Pressure psi	A		E		 W inch	 F inch
				inch	mm	inch	mm		
6FJM-12-12	3/4	1-3/16x12	5000	3.22	82	1.06	27	1-1/4	1-5/8
6FJM-16-16	1	1-7/16x12	4500	3.64	92	1.27	33	1-1/2	1-7/8

JM adapters do not include O-rings. Order separately.

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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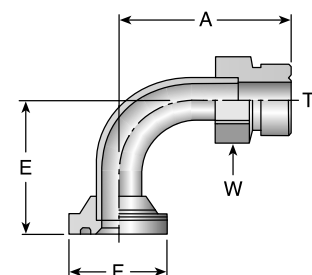
6NJM

Code 62 Flange - Male Seal-Lok - 90° Elbow

Part Number	 Flange inch	 Thread T1	Maximum Working Pressure psi	A		E		 W inch	 F inch
				in	mm	in	mm		
6NJM-12-12	3/4	1-3/16x12	5000	2.90	74	2.24	57	1-1/4	1-5/8
6NJM-16-16	1	1-7/16x12	5000	3.38	86	2.81	71	1-1/2	1-7/8
6NJM-20-20	1-1/4	1-11/16x12	4000	4.44	113	2.99	76	1-3/4	2-1/8

JM adapters do not include O-rings. Order separately.

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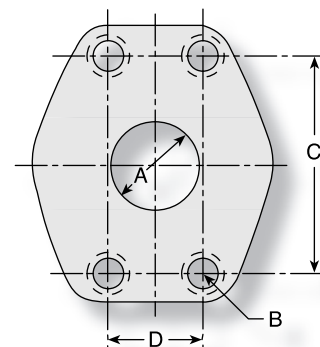
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SAE J518 port dimensions for 4-Bolt Split Flanges

There are two non-interchangeable SAE split flanges:

- Standard or Code 61 is for 3,000psi to 5,000psi maximum, depending on size.
- 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) [view on web page](#)

Nominal Flange	Flange Dash Size	A Dia Max		B Thread	C		D		Maximum Working Pressure	
		inch	mm		±0.010 inch	±0,25 mm	±0.010 inch	±0,25 mm	psi	MPa
1/2	-8	0.50	13	5/16x18	1.50	38,10	0.68	17,47	5000	34,5
3/4	-12	0.75	19	3/8x16	1.88	47,63	0.87	22,22	5000	34,5
1	-16	1.00	25	3/8x16	2.06	52,37	1.03	26,18	5000	34,5
1 1/4	-20	1.25	32	7/16x14	2.31	58,72	1.18	30,17	4000*	27,6
1 1/2	-24	1.50	38	1/2x13	2.75	69,85	1.40	35,71	3000*	20,7
2	-32	2.00	51	1/2x13	3.06	77,77	1.68	42,87	3000*	20,7

Note: *5000 psi with 4A, 4F and 4N Fittings and 50H Flange Halves.

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High Pressure (Code 62) [view on web page](#)

Nominal Flange	Flange Dash Size	A Dia Max		B Thread	C		D		Maximum Working Pressure	
		inch	mm		±0.010 inch	±0,25 mm	±0.010 inch	±0,25 mm	psi	MPa
3/4	-12	0.75	19	3/8x16	2.00	47,75	0.88	22,35	6000	41,4
1	-16	1.00	25	7/16x14	2.25	57,15	1.09	27,76	6000	41,4
1-1/4	-20	1.25	32	1/2x13	2.63	66,67	1.25	31,75	6000	41,4
1-1/2	-24	1.50	38	5/8x11	3.13	79,37	1.43	36,49	6000	41,4
2	-32	2.00	51	3/4x10	3.81	96,82	1.75	44,45	6000	41,4

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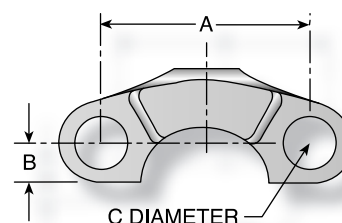
50H

5000 psi Flange Half (Code 61)

Part Number	SAE Flange Size	A	B	C	Maximum Working Pressure
	inch	inch	inch	inch	psi
50H-20	1-1/4	2.31	0.55	0.47	5000
50H-24	1-1/2	2.75	0.66	0.53	5000
50H-32	2	3.06	0.80	0.53	5000

Note: For use with 4A, 4F and 4N Flanges.

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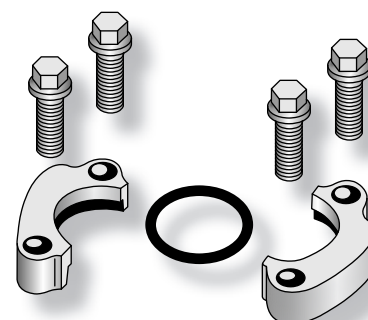
5050HK

5000 psi Flange Kit (Code 61)

Part Number	SAE Flange Size inch	Maximum Working Pressure psi	(2) Flange Halves	O-Ring	(4) Bolts Grade 8		(4) Washers
					Thread inch	Length inch	
5050HK-20	1-1/4	5000	50H-20	711510-3	7/16x14	1-1/2	7/16
5050HK-24	1-1/2	5000	50H-24	711510-2	1/2x13	1-1/2	1/2
5050HK-32	2	5000	50H-32	711510-1	1/2x13	1-1/2	1/2

Note: For use with 4A, 4F and 4N Flanges.

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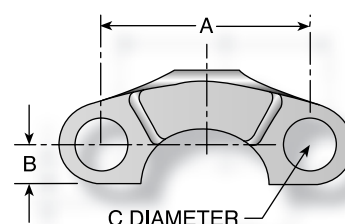
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51H

SAE Flange Half (Code 61)

Part Number	SAE Flange Size inch	A	B	C	Maximum Working Pressure psi
		inch	inch	inch	
51H-8	1/2	1.50	0.31	0.35	5000
51H-12	3/4	1.88	0.40	0.42	5000
51H-16	1	2.06	0.48	0.42	5000
51H-20	1-1/4	2.31	0.56	0.42	4000
51H-24	1-1/2	2.75	0.67	0.53	3000
51H-32	2	3.06	0.81	0.53	3000
51H-40	2-1/2	3.50	0.96	0.53	2500
51H-48	3	4.19	1.18	0.66	2000

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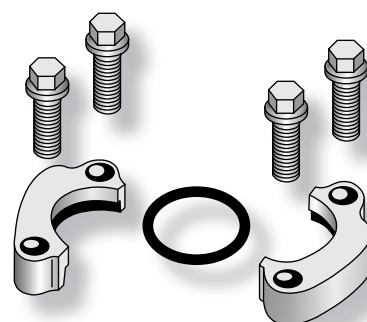
5151HK

SAE Flange Kit (Code 61)

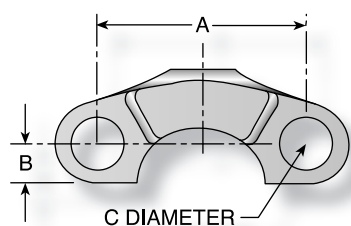
Part Number	SAE Flange Size inch	Maximum Working Pressure psi	(2) Flange Halves	O-Ring	(4) Bolts Grade 8		(4) Washers
					Thread inch	Length inch	
5151HK-8	1/2	5000	51H-8	711510-6	5/16x18	1-1/4	5/16
5151HK-12	3/4	5000	51H-12	711510-5	3/8x16	1-1/4	3/8
5151HK-16	1	5000	51H-16	711510-4	3/8x16	1-1/4	3/8
5151HK-20	1-1/4	4000	51H-20	711510-3	7/16x14	1-1/2	7/16
5151HK-24	1-1/2	3000	51H-24	711510-2	1/2x13	1-1/2	1/2
5151HK-32	2	3000	51H-32	711510-1	1/2x13	1-1/2	1/2
5151HK-40	2-1/2	2500	51H-40	711510-7	1/2x13	1-3/4	1/2
5151HK-48	3	2000	51H-48	711510-8	5/8-11	1-3/4	5/8

Note: High pressure applications also require the use of Code 61 Flange End hose fittings.

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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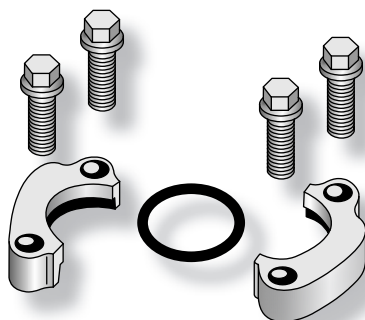
HFH**SAE Flange Half (Code 62)**

[view on web page](#)

Part Number	SAE Flange Size inch	A inch	B inch	C inch	Maximum Working Pressure psi
HFH-12	3/4	2.00	0.43	0.41	6000
HFH-16	1	2.25	0.51	0.47	6000
HFH-20	1 1/4	2.62	0.59	0.53	6000
HFH-24	1 1/2	3.12	0.68	0.66	6000
HFH-32	2	3.81	0.84	0.78	6000



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HFHFHK**SAE Flange Kit (Code 62)**

[view on web page](#)

Part Number	SAE Flange Size inch	Maximum Working Pressure psi	(2) Flange Halves	O-Ring	(4) Bolts Grade 8		(4) Washers
					Thread inch	Length inch	
HFHFHK-12	3/4	6000	HFH-12	711510-5	3/8x16	1-1/2	3/8
HFHFHK-16	1	6000	HFH-16	711510-4	7/16x14	1-3/4	7/16
HFHFHK-20	1-1/4	6000	HFH-20	711510-3	1/2x13	1-3/4	1/2
HFHFHK-24	1-1/2	6000	HFH-24	711510-2	5/8x11	2-1/4	5/8
HFHFHK-32	2	6000	HFH-32	711510-1	3/4x10	2-3/4	3/4



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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

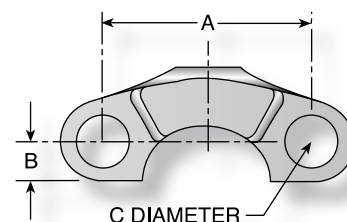
M1H

DIN (ISO) Flange Half

Part Number	DIN Flange Size	ISO Flange Size	A	B	C	Maximum Working Pressure	
						psi	MPa
51H-12	12	19	48	10	11	5000	34,5
51H-16	16	25	52	12	11	5000	34,5
51H-20	20	32	59	14	11	4000	27,6
51H-24	24	38	70	17	13.5	3000	20,7

Note: High pressure applications also require the use of Code 62 Flange End hose fittings.

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



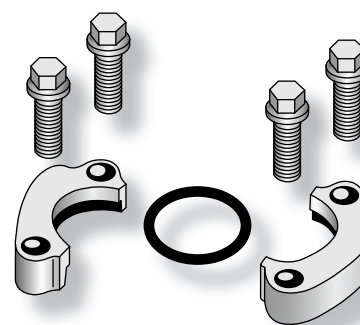
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M1M1HK

DIN (ISO) Flange Kit (Code 61)

Part Number	DIN Flange Size	ISO Flange Size	Maximum Working Pressure		(2) Flange Ha	O-Ring	(4) Bolts		(4) Washers
			psi	MPa			Thread mm	Length mm	
M1M1HK-8	8	13	5000	34,5	51H-8	711510-6	M8x1.25	30	10
M1M1HK-12	12	19	5000	34,5	51H-12	711510-5	M10x1.50	30	10
M1M1HK-16	16	25	5000	34,5	51H-16	711510-4	M10x1.50	30	10
M1M1HK-20	20	32	4000	27,6	51H-20	711510-3	M10x1.50	40	10
M1M1HK-24	24	38	3000	20,7	M1H-24	711510-2	M12x1.75	40	12
M1M1HK-32	32	51	3000	20,7	M1H-32	711510-1	M12x1.75	40	12

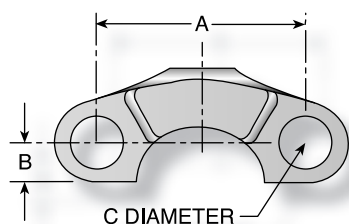
WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



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M2H

DIN (ISO) Flange Half (Code 62)



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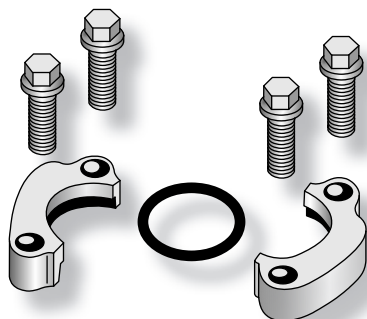
Part Number	DIN Flange Size	ISO Flange Size	A mm	B mm	C mm	Maximum Working Pressure	
						psi	MPa
HFH-12	12	19	51	11	10,6	6000	41,5
M2H-16	16	25	57	13	13,5	6000	41,5
M2H-20	20	32	67	15	15,0	6000	41,5
HFH-24	24	38	79	17	16,7	6000	41,5
HFH-32	32	51	97	21	20,6	6000	41,5



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

M2M2HK

DIN (ISO) Flange Kit (Code 62)



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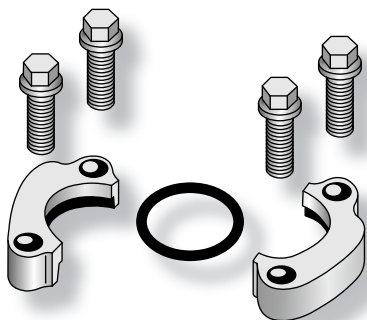
Part Number	DIN Flange Size	ISO Flange Size	Maximum Working Pressure		(2) Flange Halves	O-Ring	(4) HHCS		(4) Washers
			psi	MPa			Thread mm	Length mm	
M2M2HK-8	8	13	6000	41,5	M2H-8	711510-6	M8x1.25	30	8
M2M2HK-12	12	19	6000	41,5	HFH-12	711510-5	M10x1.50	35	10
M2M2HK-16	16	25	6000	41,5	M2H-16	711510-4	M12x1.75	45	12
M2M2HK-20	20	32	6000	41,5	M2H-20	711510-3	M12x1.75	45	12
M2M2HK-24	24	38	6000	41,5	HFH-24	711510-2	M16x2.00	55	16
M2M2HK-32	32	51	6000	41,5	HFH-32	711510-1	M20x2.50	70	20



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

XCXCHK

Caterpillar® Flange Kits



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Part Number	C Diameter inch	Maximum Working Pressure psi	O-Ring	(4) Bolts Grade 8		(4) Washers
				Thread inch	Length inch	
XCXCHK-12	0.406	6000	XARG-12	3/8-16	1.75	3/8
XCXCHK-16	0.469	6000	XARG-16	7/16-14	1.75	7/16
XCXCHK-20	0.531	6000	XARG-20	1/2-13	2.00	1/2
XCXCHK-24	0.656	6000	XARG-24	5/8-11	2.50	5/8
XCXCHK-32	0.827	6000	XARG-32	3/4-10	2.75	3/4



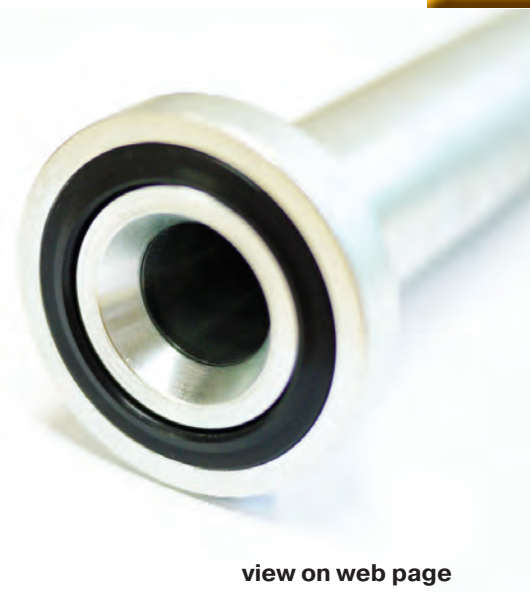
WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Engineered Flange Seal

Engineered to seal. Designed to

The Engineered Flange Seal (EFS) is designed to fit precisely into the seal groove of a Parker Code 61 or Code 62 Flange. Unlike standard O-rings that tend to pop out of the flange groove, the engineered shape of EFS fits precisely, providing consistently strong seal retention. O-rings pinching or falling out during assembly will no longer be an issue. O-rings with unsecured retention can cause dangerous, and time consuming hose assembly leaks. EFS reduces the possibility of the O-ring falling out, rework, replacement, and provides for quick assembly.

Your high pressure applications will benefit from its secure, engineered design. After installing Parker's EFS, you can expect reduced downtime and increased confidence from your guaranteed leak-free assembly.



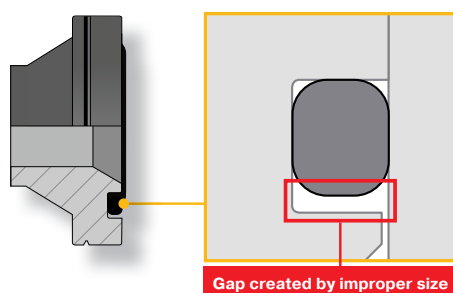
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Product Features:

- Secure seal retention before, during and after installation
- Engineered for high pressure applications
- Quick assembly with no tooling or lubrication needed
- Reduced risk of seal damage and leakage
- Ability to withstand working temperatures up to 247°F
- 90 durometer nitrile

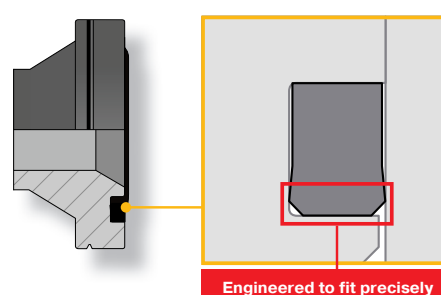
Part Number	Nominal Size	Dash Size
EFS-8	1/2	-8
EFS-12	3/4	-12
EFS-16	1	-16
EFS-20	1-1/4	-20
EFS-24	1-1/2	-24
EFS-32	2	-32

Standard O-Ring



Standard O-rings have an unnatural fit in Code 61 and Code 62 flanges because of their improper size and shape. This off-the-shelf solution creates a gap which can lead to difficult installation, hose assembly leakage and the potential for the O-ring to fall out.

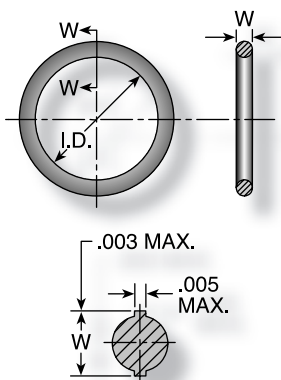
Engineered Flange Seal



The EFS fits precisely in Code 61 and Code 62 flanges because its shape and size are engineered for the space and application. Its purpose-designed shape reduces the possibility of pop out, and the need to replace or reinstall the O-ring, eliminating costly leakage and time consuming pre-assembly handling.

711509

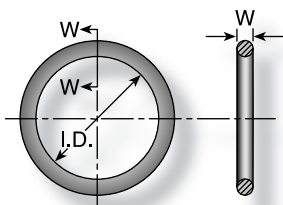
O-Rings - SAE Thread (Compound N552-90)*



Part Number	Tube Dash Size	Tube O.D. inch	SAE Thread inch	W		I.D.	
				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 Number	Flange Dash Size	Flange Size inch	W		I.D.	
			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.

D9DT

Bonded Seal for BSPP Port Fittings

Part Number	I.D.		O.D.	
	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 Number	Tube Dash Size	Tube O.D. Inch	SAE Thread Inch	I.D.		O.D.	
				Inch	mm	Inch	mm
JORG-4	-4	1/4	9/16x18	0.301	7,65	0.070	1,78
JORG-6	-6	3/8	11/16x16	0.364	9,25	0.070	1,78
JORG-8	-8	1/2	13/16x16	0.489	12,42	0.070	1,78
JORG-10	-10	5/8	1x14	0.614	15,59	0.070	1,78
JORG-12	-12	3/4	1-3/16x12	0.739	18,77	0.070	1,78
JORG-16	-16	1	1-7/16x12	0.926	23,52	0.070	1,78
JORG-20	-20	1-1/4	1-11/16x12	1.176	29,87	0.070	1,78
JORG-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.



SAE 711509-4



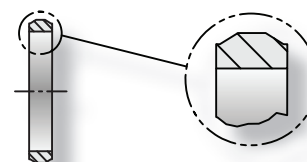
Seal-Lok JORG-8

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

Part Number	Flange Size	Dash Size	Seal Thickness		I.D.		Fitting Series & Pressure Rating		Replaces P/N
			Inch	mm	Inch	mm	78 - 79 psi	76 psi	
XARG-12	3/4	-12	0.20	5,0	1.00	25,4	6,000	8,000	8ARG-12
XARG-16	1	-16	0.20	5,0	1.25	31,8	6,000	8,000	8ARG-16
XARG-20	1-1/4	-20	0.20	5,0	1.50	38,1	6,000	8,000	8ARG-20
XARG-24	1-1/2	-24	0.20	5,0	1.75	44,5	6,000	-	-
XARG-32	2	-32	0.20	5,0	2.52	63,9	6,000	-	-



59RG

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

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

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	



Bench Type

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 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 hoses.

MSHA Rated for Use in Underground Mines.



[view on web page](#)

Product Features

- Contains hose bursts up to 12,000 psi
- MSHA rated
- Meets ISO 3457, ISO 4413, EN 414, MDG41
- Multi-layer construction
- Sizes -4 to -16
- Made of high-performance materials and a proprietary weave pattern for reliable, long-lasting protection
- Easy to assemble
- Packaged in 50-ft. reels
- Temperature range: -70°F to +302°F

Installation Instructions

- For use with one hose per sleeve
- Identify the size of the hose that needs to be protected
- Select the matching sleeve size from the chart
- Cut the sleeve length equal to the overall hose assembly length plus two inches
- Cut with a heat blade or heat scissors to avoid fraying
- Slide sleeve over the hose assembly (hose should be inserted into yellow layer)
- Must secure end of sleeve to hose fitting shell using a metal band clamp and the FSC Clamp Tool, part number FST-711617

Partek Defense Hose Sleeve



Part Number	Hose Size ID*	Sleeve Flat ID "A"		Sleeve Round ID "B"	
		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
YS-B-37	-16	3.73	95	2.38	60

*Approved with 43, 70, 71, 77 and 79 Series fittings.

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
- Stays closed using hook & loop fastener



[view on web page](#)

Partek Wrap

Part Number	Bundle O.D. inch	Circumference inch	Open Width (+/- 0.375) inch	Roll Length feet	Color
PS-BV-100	1	3.25	4.00	50	Black
PS-BV-200	2	6.00	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



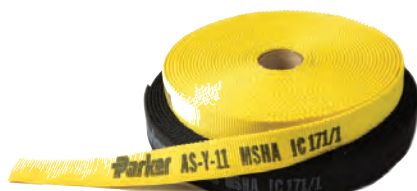
Protective Coils, Sleeves & Guards

Partek Sleeve

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.

MSHA Rated for Use in Underground Mines.



[view on web page](#)

Partek Sleeve (Black) Part Number	Partek Sleeve (Yellow) Part Number	Partek PS Sleeve (Black) Part Number	Inside Dia.	
			A	B
			inch	inch
AS-B-11	AS-Y-11		1.07	0.69
AS-B-13	AS-Y-13	PS-B-13	1.34	0.86
AS-B-15	AS-Y-15	PS-B-15	1.66	1.06
AS-B-17	AS-Y-17	PS-B-17	1.92	1.22
AS-B-19	AS-Y-19		2.12	1.35
AS-B-22	AS-Y-22	PS-B-22	2.24	1.42
AS-B-27	AS-Y-27		2.55	1.63
AS-B-33	AS-Y-33	PS-B-33	2.85	1.81
AS-B-35	AS-Y-35	PS-B-35	3.43	2.19
AS-B-37	AS-Y-37	PS-B-37	3.73	2.38
		PS-B-39	4.12	2.63
		PS-B-45	4.53	2.88
AS-B-47		PS-B-47	4.90	3.13
AS-B-58			5.69	3.63
AS-B-64			6.81	4.00

PolyGuard

Parker's PolyGuard is a black, heavy-duty polyethylene shield that provides protection in rugged operating conditions. PolyGuard is used to prevent hose assemblies from abrasion and cuts while also minimizing kinking of the hose. PolyGuard can be used to bundle high-pressured hose lines.

PolyGuard can be installed without removing hose lines and without the use of clamps for easy installation. This shield resists water, oil, gasoline, hydraulic fluid and most solvents.

Use the formula below to determine the length of sleeve required.

Temperature Range: 0°F to +200°F (-17°C to +93°C)

Caution: This material will support combustion.

$$\frac{\text{Hose O.D.} \times \text{Length to be Protected}}{\text{Dimension A}} + \text{Dimension B}$$



[view on web page](#)

Part Number	Inside Diameter "A" (inch)	Coil Width "B" (inch)
HG-075	0.75	0.95
HG-100	1.00	1.25
HG-125	1.25	1.35
HG-150	1.50	1.50
HG-200	2.00	1.60
HG-350	3.50	1.95



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ParKoil

Parker's ParKoil is a lower-cost protection shield for applications that call for a tighter bend radius and are less demanding. ParKoil is easy to install and is used to prevent hose assemblies from abrasion and cuts while also minimizing kinking of the hose. ParKoil is great for bundling high-pressured hose lines.

Use the formula below to determine the length of sleeve required.

Temperature Range: 0°F to +200°F (-17°C to +93°C)

Caution: This material will support combustion.

$$\frac{\text{Hose O.D.} \times \text{Length to be Protected}}{\text{Dimension A}} + \text{Dimension B}$$



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Part Number	Inside Diameter "A" (inch)	Coil Width "B" (inch)
PG-038	0.38	0.25
PG-050	0.50	0.40
PG-062	0.62	0.40
PG-075	0.75	0.40
PG-088	0.88	0.40
PG-100	1.00	0.65
PG-119	1.19	0.65
PG-138	1.38	0.65
PG-188	1.88	0.65

See pages 299 through 305 for sleeve selection guide.

Protective Coils, Sleeves & Guards

Spring Guard

Parker’s Spring Guard prolongs the life of hose lines that are exposed to rugged operating conditions by distributing bending radii to avoid kinking in the hose lines and protects hose from abrasion and deep cuts. Guards are constructed of steel wire and plated to resist rust.

Spring Guard is packaged in 10 ft. pieces.



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Polyguard Strain Reliever

The Polyguard Strain Reliever is designed to limit kinking of hose assemblies. These strain relievers are made from flexible PVC making them easy to install and use.

Temperature Range: -40°F to +225°F
(-40°C to +107°C)



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Spring Guard Part Number	Inside Diameter
SG-060	0.60
SG-072	0.72
SG-084	0.84
SG-097	0.97
SG-113	1.13
SG-122	1.22
SG-131	1.32
SG-155	1.55
SG-182	1.82
SG-209	2.09
SG-232	2.32
SG-292	2.92

Part Number	Length (inch)	Hose O.D. (inch)
4PG	7	0.53
6PG	7	0.63
7PG	7	0.69

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See pages 299 through 305 for sleeve 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 1072E.

Temperature Range: -65°F to +500°F (-54°C to +260°C) continuous exposure, up to 2000°F (1093°C) for 15-20 minutes and up to 3000°F (1650°C) for 15-30 seconds.

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.



Firesleeve (FS-F)

[view on web page](#)



FSC Clamp (FSC)

(One size fits all hoses up to 2 inch O.D.)

[view on web page](#)



**Firesleeve Tape
(FSS-Tape-16)**

[view on web page](#)

Certifications and Specifications

- UL 1441 Certified
- VW1 Flame Test Certified
- MSHA Certified for use in underground mines
- SAE AS1072E
- DNV-GL Certified to 800°C/30 mins. (ISO15540 & ISO15541)
- 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 45545 Low Smoke Toxicity
- DIN 54837 / 5510-2 Rail Vehicle Certified for Resistance to Combustibility
- DIN 5659-2 / 5510-2 Rail Vehicle Certified for Toxicity
- LNE French Rail Certification STM-S-001; Class F0
- DIN EN45545-2:2013-08 Rail Certification
- Oil and Fluid Resistance: Impervious to most liquids including those with a hydrocarbon base. Remains functional after immersion for 120 hours at 80°F in MIL-L-6082 and Skydrol 500.

FS-F Sizes

Part Number	Inside Diameter
FS-F-10	0.58
FS-F-11	0.65
FS-F-12	0.71
FS-F-14	0.84
FS-F-16	0.96
FS-F-18	1.08
FS-F-20	1.21
FS-F-22	1.34
FS-F-24	1.46
FS-F-28	1.72
FS-F-30	1.84
FS-F-32	1.96
FS-F-38	2.34
FS-F-40	2.46
FS-F-48	2.96
FS-F-60	3.71



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Firesleeve Assembly Instructions

1. Cut Firesleeve to the same length as hose.
2. Crimp one end of hose. Slide Firesleeve over uncrimped end of hose.
3. Push Firesleeve back from uncrimped end of hose and crimp second fitting on hose. Align the Firesleeve so it covers the crimp shell on both ends.
4. Using FSS-Tape-16, tape Firesleeve to fittings making sure to cover all exposed ends of the Firesleeve fiber. Repeat on the other end.
5. Clamp Firesleeve in place using the FSC Clamp.

Note: If assembling with Firesleeve tape, please stretch tape during installation using at least a 50% overlap. For best results, use on clean, dry surfaces free from dirt and oil.

Protection Shields

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.

Assembly Instructions

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.

Retail Counter Display

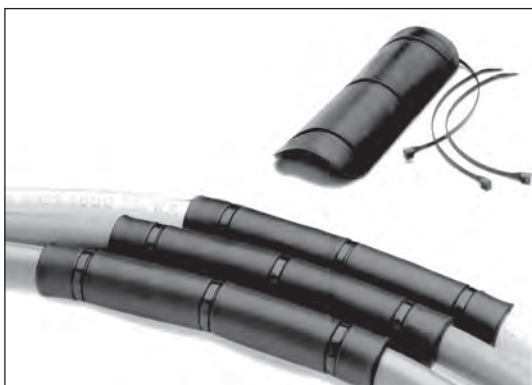
Part number: HP-B-13X18

Kit Includes:

- 20 - 4" Hose Protectors (HP-B-13)
- 60 - Tie Wraps (HT-12) for HP-B-13
- 20 - 6" Hose Protectors (HP-B-15)
- 60 - Tie Wraps (HT-16) for HP-B-15
- 20 - 8" Hose Protectors (HP-B-18)
- 60 - Tie Wraps (HT-22) for HP-B-18

Display Refills

Part Number	Description
HP-B-13-RFL	10 - 4" Hose Protectors (HP-B-13) 30 - Tie Wraps (HT-12)
HP-B-15-RFL	10 - 6" Hose Protectors (HP-B-15) 30 - Tie Wraps (HT-16)
HP-B-18-RFL	5 - 8" Hose Protectors (HP-B-18) 15 - Tie Wraps (HT-22)
HT-12-KIT	30 - Tie Wraps (HT-12) for HP-B-13 Hose Protector
HT-16-KIT	30 - Tie Wraps (HT-16) for HP-B-15 Hose Protector
HT-22-KIT	15 - Tie Wraps (HT-22) for HP-B-18 Hose Protector



[view on web page](#)



Retail Counter Display

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.

Protective Coils, Sleeves & Guards Selection Guide

Hose Part Number	Hose OD (in)	Partek Defense	Partek Sleeve: Black	Partek Sleeve: Yellow	Partek PS Sleeve Black	PolyGuard	ParKoil	Spring Guard	Firesleeve
187-8	0.810	YS-B-22	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
187-10	0.93	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
187-12	1.08	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-20
187-16	1.41	YS-B-37	AS-B-27	AS-Y-27	PS-B-33	HG-150	PG-188	SG-155	FS-F-24
187-20	1.75	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
187-24	2.04	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	SG-209	FS-F-38
187-32	2.54	-	AS-B-47	-	PS-B-47	HG-350	PG-188	SG-292	FS-F-48
187-40	2.97	-	AS-B-58	-	-	HG-350	PG-188	-	-
187-48	3.44	-	AS-B-64	-	-	HG-350	PG-188	-	-
201-4	0.52	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
201-5	0.582	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-11
201-6	0.675	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	SG-072	FS-F-12
201-8	0.766	-	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
201-10	0.922	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
201-12	1.078	-	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-18
201-16	1.235	-	AS-B-22	AS-Y-22	PS-B-22	HG-125	PG-138	SG-131	FS-F-22
201-20	1.5	-	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
201-24	1.75	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
201-32	2.22	-	-	-	PS-B-39	HG-350	PG-188	SG-232	FS-F-38
201-40	2.88	-	AS-B-47	-	PS-B-47	HG-350	PG-188	SG-292	FS-F-48
201-48	3.56	-	AS-B-64	-	-	HG-350	PG-188	-	FS-F-60
206-4	0.52	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
206-5	0.58	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
206-6	0.68	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	SG-072	FS-F-12
206-8	0.77	-	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
206-10	0.92	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
206-12	1.08	-	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-18
206-16	1.23	-	AS-B-22	AS-Y-22	PS-B-22	HG-125	PG-138	SG-131	FS-F-22
206-20	1.5	-	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
206-24	1.75	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
206-32	2.22	-	-	-	PS-B-39	HG-350	PG-188	SG-232	FS-F-38
206-40	2.88	-	AS-B-47	-	PS-B-47	HG-350	PG-188	SG-292	FS-F-48
213-4	0.49	-	AS-B-11	AS-Y-11	-	HG-075	PG-050	-	FS-F-10
213-5	0.55	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
213-6	0.62	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	-	FS-F-11
213-8	0.74	-	AS-B-15	AS-Y-15	PS-B-15	HG-075	PG-075	SG-084	FS-F-14
213-10	0.83	-	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
213-12	0.96	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
213-16	1.21	-	AS-B-22	AS-Y-22	PS-B-22	HG-125	PG-138	SG-122	FS-F-20

NOTES: "X" indicates there is no recommended sleeve because the sleeve supports combustion.

Sizes indicated are suggestions only and based on hose O.D. A larger size may be required for over fitting applications.

Suggestions indicated are for standard, ToughCover, and SuperTough cover options.

Protective Coils, Sleeves & Guards Selection Guide

Hose Part Number	Hose OD (in)	Partek Defense	Partek Sleeve: Black	Partek Sleeve: Yellow	Partek PS Sleeve Black	PolyGuard	ParKoil	Spring Guard	Firesleeve
213-20	1.49	-	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
213-24	1.73	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
213-32	2.14	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	-	FS-F-38
213-40	2.88	-	AS-B-47	-	PS-B-47	HG-350	PG-188	SG-292	FS-F-48
221FR-5	0.582	X	X	X	X	X	X	SG-060	FS-F-11
221FR-6	0.676	X	X	X	X	X	X	SG-072	FS-F-12
221FR-8	0.766	X	X	X	X	X	X	SG-084	FS-F-14
221FR-10	0.922	X	X	X	X	X	X	SG-097	FS-F-16
221FR-12	1.078	X	X	X	X	X	X	SG-113	FS-F-18
221FR-16	1.235	X	X	X	X	X	X	SG-131	FS-F-22
244-16	1.23	-	AS-B-22	AS-Y-22	PS-B-22	HG-125	PG-138	SG-131	FS-F-22
244-20	1.5	-	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
244-24	1.75	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
266-4	0.52	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
266-5	0.58	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
266-6	0.68	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	SG-072	FS-F-12
266-8	0.77	-	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
266-10	0.92	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
266-12	1.08	-	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-18
266-16	1.24	-	AS-B-22	AS-Y-22	PS-B-22	HG-125	PG-138	SG-131	FS-F-22
266-20	1.5	-	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
266-24	1.75	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
271-4	0.25	-	AS-B-11	AS-Y-11	-	HG-075	PG-038	-	FS-F-10
271-6	0.75	-	AS-B-15	AS-Y-15	PS-B-15	HG-075	PG-075	SG-084	FS-F-14
271-8	0.88	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-088	SG-097	FS-F-16
285-4	0.49	-	AS-B-11	AS-Y-11	-	HG-075	PG-050	-	FS-F-10
285-6	0.62	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	-	FS-F-11
285-8	0.68	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	SG-072	FS-F-12
285-10	0.83	-	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
285-12	0.96	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
293-4	0.491	-	AS-B-11	AS-Y-11	-	HG-075	PG-050	-	FS-F-10
293-6	0.617	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	-	FS-F-11
293-8	0.737	-	AS-B-15	AS-Y-15	PS-B-15	HG-075	PG-075	SG-084	FS-F-14
293-10	0.831	-	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
293-12	0.956	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
293-16	1.206	-	AS-B-22	AS-Y-22	PS-B-22	HG-125	PG-138	SG-122	FS-F-20
302-4	0.591	YS-B-17	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-11
302-5	0.654	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	-	FS-F-12

NOTES: "X" indicates there is no recommended sleeve because the sleeve supports combustion.

Sizes indicated are suggestions only and based on hose O.D. A larger size may be required for over fitting applications.

Suggestions indicated are for standard, ToughCover, and SuperTough cover options.

Protective Coils, Sleeves & Guards Selection Guide

Hose Part Number	Hose OD (in)	Partek Defense	Partek Sleeve: Black	Partek Sleeve: Yellow	Partek PS Sleeve Black	PolyGuard	ParKoil	Spring Guard	Firesleeve
302-6	0.748	YS-B-19	AS-B-15	AS-Y-15	PS-B-15	HG-075	PG-075	SG-084	FS-F-14
302-8	0.876	YS-B-22	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-097	FS-F-16
302-10	1.002	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-119	-	FS-F-18
302-12	1.156	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-122	FS-F-20
302-16	1.5	YS-B-37	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
302-20	1.86	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-209	FS-F-32
302-24	2.14	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	-	FS-F-38
302-32	2.64	-	AS-B-47	-	PS-B-45	HG-350	PG-188	SG-292	FS-F-48
304-4	0.591	YS-B-17	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-11
304-6	0.748	YS-B-19	AS-B-15	AS-Y-15	PS-B-15	HG-075	PG-075	SG-084	FS-F-14
304-8	0.876	YS-B-22	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-088	SG-097	FS-F-16
304-10	1.002	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-119	-	FS-F-18
304-12	1.156	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-122	FS-F-20
304-16	1.5	YS-B-37	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
304-20	1.86	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-209	FS-F-32
304-24	2.14	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	-	FS-F-38
304-32	2.64	-	AS-B-47	-	PS-B-45	HG-350	PG-188	SG-292	FS-F-48
387-4	0.526	YS-B-17	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
387-6	0.685	YS-B-19	AS-B-15	AS-Y-15	PS-B-15	HG-075	PG-075	SG-072	FS-F-12
387-8	0.815	YS-B-22	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
387-10	0.939	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
387-12	1.093	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-20
387-16	1.394	YS-B-37	AS-B-27	AS-Y-27	-	HG-150	PG-188	SG-155	FS-F-24
387-20	1.82	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
387-24	2.08	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	SG-209	FS-F-38
387-32	2.61	-	AS-B-47	-	PS-B-45	HG-350	PG-188	SG-292	FS-F-48
422-4	0.528	YS-B-17	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
422-5	0.591	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-11
422-6	0.685	YS-B-19	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	SG-072	FS-F-12
422-8	0.81	YS-B-22	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
422-10	0.939	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
422-12	1.095	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-20
422-16	1.41	YS-B-37	AS-B-27	AS-Y-27	-	HG-150	PG-188	SG-155	FS-F-24
422-20	1.79	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
422-24	2	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-209	FS-F-38
422-32	2.54	-	AS-B-47	-	PS-B-39	HG-350	PG-188	SG-292	FS-F-48
424-16	1.41	YS-B-37	AS-B-27	AS-Y-27	-	HG-150	PG-188	SG-155	FS-F-24
424-20	1.73	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
424-24	2	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-209	FS-F-38

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Hose Part Number	Hose OD (in)	Partek Defense	Partek Sleeve: Black	Partek Sleeve: Yellow	Partek PS Sleeve Black	PolyGuard	ParKoil	Spring Guard	Firesleeve
424-32	2.5	-	AS-B-47	-	PS-B-39	HG-350	PG-188	SG-292	FS-F-48
426-4	0.528	YS-B-17	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
426-6	0.68	YS-B-19	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	SG-072	FS-F-12
426-8	0.81	YS-B-22	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
426-10	0.94	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
426-12	1.09	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-20
426-16	1.4	YS-B-37	AS-B-27	AS-Y-27	-	HG-150	PG-188	SG-155	FS-F-24
426-20	1.79	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
426-24	2	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-209	FS-F-38
426-32	2.54	-	AS-B-47	-	PS-B-39	HG-350	PG-188	SG-292	FS-F-48
436-6	0.685	YS-B-19	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	SG-072	FS-F-12
436-8	0.815	YS-B-22	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
436-10	0.939	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
436-12	1.095	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-20
436-16	1.41	YS-B-37	AS-B-27	AS-Y-27	-	HG-150	PG-188	SG-155	FS-F-24
471-4	0.516	YS-B-17	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
471-6	0.678	YS-B-19	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	SG-072	FS-F-12
471-8	0.804	YS-B-22	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
471-10	0.939	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
471-12	1.093	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-20
471-16	1.394	YS-B-37	AS-B-27	AS-Y-27	-	HG-150	PG-188	SG-155	FS-F-24
472-20	1.79	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
472-24	2.01	-	AS-B-35	AS-Y-35	PS-B-35	HG-350	PG-188	SG-209	FS-F-38
472-32	2.54	-	AS-B-47	-	PS-B-39	HG-350	PG-188	SG-292	FS-F-48
472LT-4	0.516	YS-B-17	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
472LT-6	0.678	YS-B-19	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	SG-072	FS-F-12
472LT-8	0.804	YS-B-22	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
472LT-10	0.939	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
472LT-12	1.093	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-20
472LT-16	1.394	YS-B-37	AS-B-27	AS-Y-27	-	HG-150	PG-188	SG-155	FS-F-24
482-4	0.528	YS-B-17	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
482-6	0.685	YS-B-19	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	SG-072	FS-F-12
482-8	0.815	YS-B-22	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
482-10	0.939	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
482-12	1.095	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-20
482-16	1.41	YS-B-37	AS-B-27	AS-Y-27	-	HG-150	PG-188	SG-155	FS-F-24
487-4	0.516	YS-B-17	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
487-6	0.678	YS-B-19	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	SG-072	FS-F-12
487-8	0.804	YS-B-22	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14

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Sizes indicated are suggestions only and based on hose O.D. A larger size may be required for over fitting applications. Suggestions indicated are for standard, ToughCover, and SuperTough cover options.

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Hose Part Number	Hose OD (in)	Partek Defense	Partek Sleeve: Black	Partek Sleeve: Yellow	Partek PS Sleeve Black	PolyGuard	ParKoil	Spring Guard	Firesleeve
487-10	0.939	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
487-12	1.093	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-20
487-16	1.49	YS-B-37	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
487-20	1.82	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
487-24	2.03	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	SG-209	FS-F-38
487-32	2.65	-	AS-B-47	-	PS-B-45	HG-350	PG-188	SG-292	FS-F-48
611HT-4	0.5	-	AS-B-11	AS-Y-11	-	HG-075	PG-050	-	FS-F-10
611HT-6	0.625	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	-	FS-F-11
611HT-8	0.781	-	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
611HT-10	0.907	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
611HT-12	1.032	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-119	-	FS-F-18
722-6	0.78	YS-B-19	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
722-8	0.89	YS-B-22	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
722-10	1.04	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-119	-	FS-F-18
722-12	1.21	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-138	SG-122	FS-F-20
722-16	1.5	YS-B-37	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
722-20	1.84	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-209	FS-F-30
722-24	2.07	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	SG-209	FS-F-38
722-32	2.59	-	AS-B-47	-	PS-B-39	HG-350	PG-188	SG-292	FS-F-48
722LT-6	0.782	YS-B-19	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
722LT-8	0.892	YS-B-22	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
722LT-10	1.04	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-119	-	FS-F-18
722LT-12	1.207	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-138	SG-122	FS-F-20
722LT-16	1.49	YS-B-37	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
722LT-20	1.82	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
722LT-24	2.06	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	SG-209	FS-F-38
774-12	1.207	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-138	SG-122	FS-F-20
774-16	1.5	YS-B-37	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
774-20	1.84	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-209	FS-F-30
774-24	2.07	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	SG-209	FS-F-38
774-32	2.59	-	AS-B-47	-	PS-B-39	HG-350	PG-188	SG-292	FS-F-48
777-6	0.66	YS-B-19	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	-	FS-F-12
777-8	0.81	YS-B-19	AS-B-15	AS-Y-15	PS-B-15	HG-100	PG-088	SG-097	FS-F-16
777-10	0.93	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-113	FS-F-18
777-12	1.12	YS-B-33	AS-B-15	AS-Y-15	PS-B-15	HG-100	PG-138	SG-122	FS-F-20
777TC-12	1.12	YS-B-33	AS-B-15	AS-Y-15	PS-B-15	HG-100	PG-138	SG-122	FS-F-20
777ST-12	1.12	YS-B-33	AS-B-15	AS-Y-15	PS-B-15	HG-100	PG-138	SG-122	FS-F-20
777-16	1.38	YS-B-37	AS-B-17	AS -Y-17	PS-B-17	HG-150	PG -188	SG-155	FS-F-24
777TC-16	1.38	YS-B-37	AS-B-17	AS -Y-17	PS-B-17	HG-150	PG -188	SG-155	FS-F-24
777ST-16	1.38	YS-B-37	AS-B-17	AS -Y-17	PS-B-17	HG-150	PG -188	SG-155	FS-F-24

NOTES: "X" indicates there is no recommended sleeve because the sleeve supports combustion.
 Sizes indicated are suggestions only and based on hose O.D. A larger size may be required for over fitting applications.
 Suggestions indicated are for standard, ToughCover, and SuperTough cover options

Protective Coils, Sleeves & Guards Selection Guide

Hose Part Number	Hose OD (in)	Partek Defense	Partek Sleeve: Black	Partek Sleeve: Yellow	Partek PS Sleeve Black	PolyGuard	ParKoil	Spring Guard	Firesleeve
787-4	0.516	YS-B-17	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
787-6	0.68	YS-B-19	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	SG-072	FS-F-12
787-8	0.83	YS-B-22	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
787-10	0.94	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
787-12	1.1	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-20
787-16	1.4	YS-B-37	AS-B-27	AS-Y-27	-	HG-150	PG-188	SG-155	FS-F-24
787-20	1.77	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
787-24	2.08	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	SG-209	FS-F-38
787-32	2.66	-	AS-B-47	-	PS-B-45	HG-350	PG-188	SG-292	FS-F-48
792LT-16	1.52	YS-B-37	AS-B-33	AS-Y-33	PS-B-33	HG-200	PG-188	SG-155	FS-F-28
792LT-20	1.97	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-209	FS-F-38
792LT-24	2.22	-	-	-	PS-B-39	HG-350	PG-188	SG-232	FS-F-38
797-4	0.516	YS-B-17	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-10
797-6	0.66	YS-B-19	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	-	FS-F-12
797-8	0.83	YS-B-22	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
797-10	0.94	YS-B-27	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
797-12	1.1	YS-B-33	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-113	FS-F-20
797-16	1.4	YS-B-37	AS-B-27	AS-Y-27	-	HG-150	PG-188	SG-155	FS-F-24
797-20	1.77	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
797-24	2.08	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	SG-209	FS-F-38
797-32	2.66	-	AS-B-47	-	PS-B-45	HG-350	PG-188	SG-292	FS-F-48
801-4	0.5	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-050	-	FS-F-10
801-6	0.625	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	-	FS-F-11
801-8	0.781	-	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
801-10	0.907	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
801-12	1.032	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-119	-	FS-F-18
801-16	1.281	-	AS-B-27	AS-Y-27	-	HG-150	PG-138	SG-131	FS-F-22
804-4	0.5	-	AS-B-11	AS-Y-11	-	HG-075	PG-050	-	FS-F-10
804-6	0.625	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	-	FS-F-11
804-8	0.781	-	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
804-10	0.907	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
811-12	1.18	-	AS-B-27	AS-Y-27	-	HG-125	PG-119	SG-122	FS-F-20
811-16	1.5	-	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
811-20	1.77	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
811-24	2.05	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	SG-209	FS-F-38
811-32	2.5	-	AS-B-47	-	PS-B-39	HG-350	PG-188	SG-292	FS-F-48
811-40	3	-	AS-B-58	-	-	HG-350	PG-188	-	FS-F-60
811HT-12	1.18	-	AS-B-19	AS-Y-19	-	HG-125	PG-119	SG-122	FS-F-20
811HT-16	1.5	-	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
811HT-20	1.77	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30

NOTES: "X" indicates there is no recommended sleeve because the sleeve supports combustion.

Sizes indicated are suggestions only and based on hose O.D. A larger size may be required for over fitting applications. Suggestions indicated are for standard, ToughCover, and SuperTough cover options.

Protective Coils, Sleeves & Guards Selection Guide

Hose Part Number	Hose OD (in)	Partek Defense	Partek Sleeve: Black	Partek Sleeve: Yellow	Partek PS Sleeve Black	PolyGuard	ParKoil	Spring Guard	Firesleeve
811HT-24	2.05	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	SG-209	FS-F-38
811HT-32	2.5	-	AS-B-47	-	PS-B-39	HG-350	PG-188	SG-292	FS-F-48
811HT-40	3	-	AS-B-58	-	-	HG-350	PG-188	-	FS-F-60
821-4	0.5	-	AS-B-11	AS-Y-11	-	HG-075	PG-050	-	FS-F-10
821-6	0.625	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	-	FS-F-11
821-8	0.781	-	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
821-10	0.907	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
821-12	1.03	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-119	-	FS-F-18
821FR-4	0.5	X	X	X	X	X	X	-	FS-F-10
821FR-6	0.625	X	X	X	X	X	X	-	FS-F-11
821FR-8	0.781	X	X	X	X	X	X	SG-084	FS-F-14
821FR-12	1.032	X	X	X	X	X	X	-	FS-F-18
836-4	0.5	-	AS-B-11	AS-Y-11	-	HG-075	PG-050	-	FS-F-10
836-6	0.625	-	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-075	-	FS-F-11
836-8	0.781	-	AS-B-15	AS-Y-15	PS-B-15	HG-125	PG-088	SG-084	FS-F-14
836-10	0.907	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-16
836-12	1.032	-	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-119	-	FS-F-18
881-12	1.2	-	AS-B-27	AS-Y-27	-	HG-125	PG-138	SG-122	FS-F-20
881-16	1.49	-	AS-B-33	AS-Y-33	PS-B-33	HG-150	PG-188	SG-155	FS-F-28
881-20	1.78	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-182	FS-F-30
881-24	2.06	-	AS-B-37	AS-Y-37	PS-B-37	HG-350	PG-188	SG-209	FS-F-38
881-32	2.48	-	AS-B-47	-	PS-B-39	HG-350	PG-188	SG-292	FS-F-48
881-40	3	-	AS-B-58	-	-	HG-350	PG-188	-	FS-F-60
F42-8	0.969	YS-B-22	AS-B-17	AS-Y-17	PS-B-17	HG-125	PG-100	SG-097	FS-F-18
F42-12	1.264	YS-B-33	AS-B-27	AS-Y-27	-	HG-150	PG-138	SG-131	FS-F-22
F42-16	1.52	YS-B-37	AS-B-33	AS-Y-33	PS-B-33	HG-200	PG-188	SG-155	FS-F-28
F42-20	1.97	-	AS-B-35	AS-Y-35	PS-B-35	HG-200	PG-188	SG-209	FS-F-38
JK-4	0.59	YS-B-17	AS-B-13	AS-Y-13	PS-B-13	HG-075	PG-062	SG-060	FS-F-11
JK-6	0.75	YS-B-19	AS-B-15	AS-Y-15	PS-B-15	HG-075	PG-075	SG-084	FS-F-14
SS25UL-4	0.52	X	X	X	X	X	X	SG-060	FS-F-10
SS25UL-5	0.582	X	X	X	X	X	X	SG-060	FS-F-11
SS25UL-6	0.676	X	X	X	X	X	X	SG-072	FS-F-12
SS25UL-8	0.766	X	X	X	X	X	X	SG-084	FS-F-14
SS25UL-10	0.922	X	X	X	X	X	X	SG-097	FS-F-16
SS25UL-12	1.078	X	X	X	X	X	X	SG-113	FS-F-18

NOTES: "X" indicates there is no recommended sleeve because the sleeve supports combustion.

Sizes indicated are suggestions only and based on hose O.D. A larger size may be required for over fitting applications.

Suggestions indicated are for standard, ToughCover, and SuperTough cover options.

Hose Whip Restraint

The Hose Whip Restraint System is designed to prevent whipping of a pressurized hose in the event of the hose separating from its fitting.

This 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 fitting.

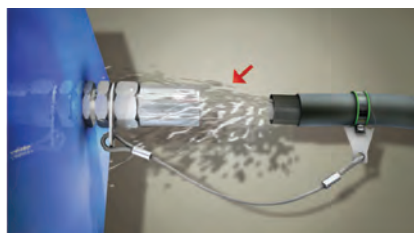
Serious damage or injury can occur from whipping hoses, especially at higher pressures. The system is comprised of two parts – a hose collar and a cable assembly.

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 Hose Products Division Catalog 4400. Exceeding the maximum operating pressure of the hose jeopardizes the proper operation of the Hose Whip Restraint System.



Step 1: Select a WRC part number based on the outside diameter of your hose.

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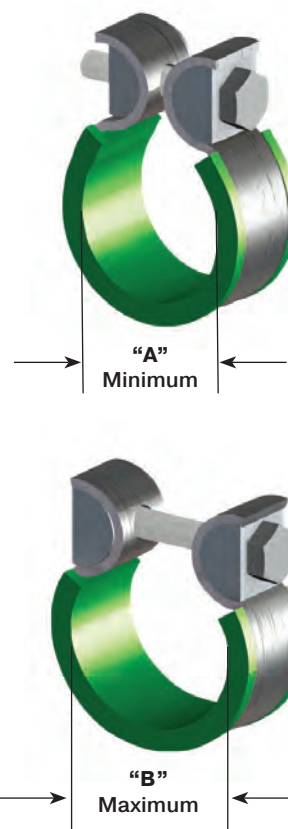
Hose Collars

Part Number	A		B		Hose Collar Bolt Size*
	inch	mm	inch	mm	
WRC1212	0.47	12,0	0.49	12,5	M6
WRC1313	0.51	13,0	0.53	13,5	M6
WRC1415	0.55	14,0	0.59	15,0	M6
WRC1718	0.67	17,0	0.71	18,0	M6
WRC1819	0.71	18,0	0.75	19,0	M6
WRC2021	0.79	20,0	0.83	21,0	M6
WRC2223	0.87	22,0	0.91	23,0	M6
WRC2425	0.95	24,0	0.98	25,0	M6
WRC2526	0.98	25,0	1.02	26,0	M6
WRC2728	1.06	27,0	1.10	28,0	M6
WRC2829	1.10	28,0	1.14	29,0	M6
WRC3031	1.18	30,0	1.22	31,0	M6
WRC3435	1.34	34,0	1.38	35,0	M6
WRC3637	1.42	36,0	1.46	37,0	M6
WRC3839	1.50	38,0	1.54	39,0	M6
WRC4243	1.65	42,0	1.69	43,0	M6
WRC4445	1.73	44,0	1.77	45,0	M6
WRC4547	1.77	45,0	1.85	47,0	M8
WRC4850	1.89	48,0	1.97	50,0	M8
WRC5153	2.01	51,0	2.09	53,0	M8
WRC5456	2.13	54,0	2.21	56,0	M8
WRC6365	2.48	63,0	2.56	65,0	M8
WRC6971	2.72	69,0	2.78	71,0	M8

*Bolt size on collar must match the WRA or WRF bolt size.



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.



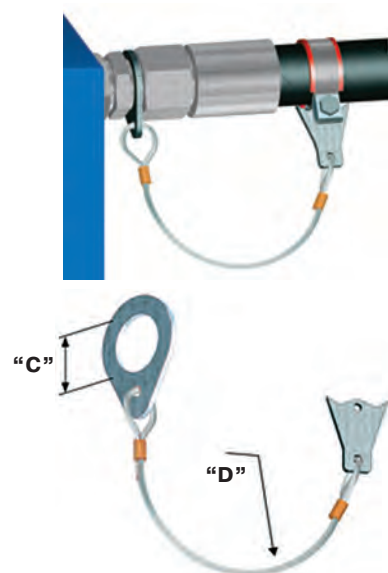
Step 2: Select either a WRA or a WRF cable assembly based on your connection type.

Cable assembly for hose fittings or adapters

Part Number	Maximum Working Pressure	Hole I.D. C		Cable Length D		Grip Plate Bolt Size*
		inch	mm	inch	mm	
WRA115	6525	0.45	11,5	11.81	300	M6
WRA132	6525	0.52	13,2	11.81	300	M6
WRA145	6525	0.57	14,5	11.81	300	M6
WRA148	6525	0.58	14,8	11.81	300	M6
WRA170	6453	0.67	17,0	11.81	300	M6
WRA185	6090	0.73	18,5	11.81	300	M6
WRA195	6090	0.77	19,5	11.81	300	M6
WRA205	6090	0.81	20,5	11.81	300	M6
WRA225	6090	0.89	22,5	11.81	300	M6
WRA228	6090	0.90	22,8	11.81	300	M6
WRA245	6090	0.96	24,5	11.81	300	M6
WRA265	6090	1.04	26,5	11.81	300	M6
WRA275	6090	1.08	27,5	11.81	300	M6
WRA305	6090	1.20	30,5	11.81	300	M6
WRA340S	6090	1.34	34,0	17.72	450	M6
WRA340JIC	6090	1.34	34,0	17.72	450	M8
WRA365	6090	1.44	36,5	17.72	450	M8
WRA415S	6090	1.63	41,5	17.72	450	M6
WRA415	6090	1.63	41,5	17.72	450	M8
WRA425	6090	1.67	42,5	17.72	450	M8
WRA455	6090	1.79	45,5	17.72	450	M8
WRA480S	6090	1.89	48,0	17.72	450	M6
WRA480	6090	1.89	48,0	17.72	450	M8
WRA490	6090	1.93	49,0	17.72	450	M8
WRA525	5583	2.07	52,5	17.72	450	M8
WRA600	5075	2.36	60,0	17.72	450	M8
WRA640	5075	2.52	64,0	17.72	450	M8



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Cable assembly for Code 61/Code 62 flanges

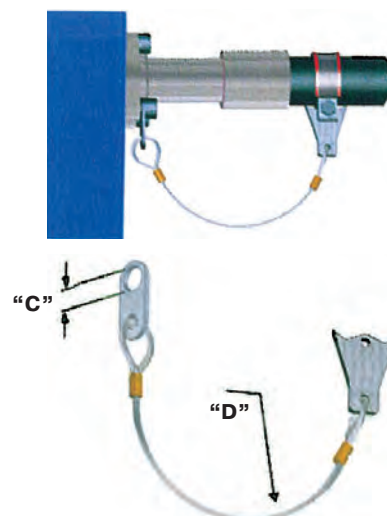
Part Number	Maximum Working Pressure	Hole I.D. C		Cable Length D		Grip Plate Bolt Size*
		inch	mm	inch	mm	
WRF085	6018	0.33	8,5	11.81	300	M6
WRF105	6090	0.41	10,5	17.72	450	M8
WRF125	6090	0.49	12,5	17.72	450	M8
WRF145	6090	0.57	14,5	17.72	450	M8
WRF165	6090	0.65	16,5	17.72	450	M8
WRF205	5075	0.81	20,5	17.72	450	M8

*Bolt size on collar must match the WTA or WRF bolt size.



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The Hose Whip Restraint System has been tested to the operating pressures of the hoses listed in Hose Products Division 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.



Hose Whip Restraint Selection Guide

Collar

Part Number	Min. Opening A		Max. Opening B		201, 221FR, 206, 225, 244, 266	213, 285, 293	302, 304, 421WC	187/TC/ST 422, 424, 436, 387/TC/ST 471TC/ST, 482TC/ST, 472TC/ST 487/TC/ST	601	722/TC/ST, 774	F42	801, 804, 821, 821FR, 836	811, 881, 811HT	787/TC/ST 797/TC/ST
	inch	mm	inch	mm										
WRC1212	0.47	12,0	0.49	12,5		-4			-3			-4		
WRC1313	0.51	13,0	0.53	13,5	-4		-3	-4						-4
WRC1415	0.55	14,0	0.59	15,0	-5	-5, -6	-4	-5	-4			-5, -6		
WRC1718	0.67	17,0	0.71	18,0	-6			-6	-5					-6
WRC1819	0.71	18,0	0.75	19,0	-8	-8	-6		-6			-8		
WRC2021	0.79	20,0	0.83	21,0				-8		-6				-8
WRC2223	0.87	22,0	0.91	23,0	-10	-10	-8		-8	-8		-10		-10
WRC2425	0.95	24,0	0.98	25,0		-12		-10			-8			
WRC2526	0.98	25,0	1.02	26,0			-10		-10			-12		
WRC2728	1.06	27,0	1.10	28,0	-12			-12		-10				-12
WRC2829	1.10	28,0	1.14	29,0			-12							
WRC3031	1.18	30,0	1.22	31,0	-16	-16			-12	-12	-12	-16	-12	
WRC3435	1.34	34,0	1.38	35,0				-16						-16
WRC3637	1.42	36,0	1.46	37,0		-20			-16	-16			-16	
WRC3839	1.50	38,0	1.54	39,0	-20		-16				-16			
WRC4243	1.65	42,0	1.69	43,0										
WRC4445	1.73	44,0	1.77	45,0	-24	-24			-20				-20	
WRC4547	1.77	45,0	1.85	47,0			-20	-20		-20				-20
WRC4850	1.89	48,0	1.97	50,0				-24			-20			
WRC5153	2.01	51,0	2.09	53,0						-24			-24	-24
WRC5456	2.13	54,0	2.21	56,0	-32	-32	-24							
WRC6365	2.48	63,0	2.56	65,0				-32		-32			-32	
WRC6971	2.72	69,0	2.80	71,0										-32



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Hose Whip Restraint Selection Guide

Adapter

Part Number	A		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
	inch	mm				
WRA115	0.45	11,5	-4			
WRA132	0.52	13,2	-5			
WRA145	0.57	14,5		-4	-4	-4
WRA148	0.58	14,8	-6			
WRA170	0.67	17,0				-6
WRA185	0.73	18,5		-6	-6	
WRA195	0.77	19,5				
WRA205	0.81	20,5	-8			
WRA225	0.89	22,5		-8	-8	-8
WRA228	0.90	22,8	-10			
WRA245	0.96	24,5				-10
WRA265	1.04	26,5		-10		
WRA275	1.08	27,5	-12			
WRA305	1.20	30,5	-14	-12	-12	-12
WRA340S	1.34	34,0	-16		-16	-16
WRA340JIC	1.34	34,0	-16			
WRA365	1.44	36,5		-16		
WRA415S	1.63	41,5	-20			
WRA415	1.63	41,5	-20			
WRA425	1.67	42,5			-20	-20
WRA455	1.79	45,5		-20		
WRA480S	1.89	48,0	-24			
WRA480	1.89	48,0	-24			
WRA490	1.93	49,0			-24	-24
WRA525	2.07	52,5		-24		
WRA600	2.36	60,0				
WRA640	2.52	64,0	-32			

Contact HPD for other style fittings.



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Flange

Part Number	A		5050HK	5151HK	HFHFHK	8FHFHK	M1M1HK	M2M2HK	FFK61	FFK62
	inch	mm								
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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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.

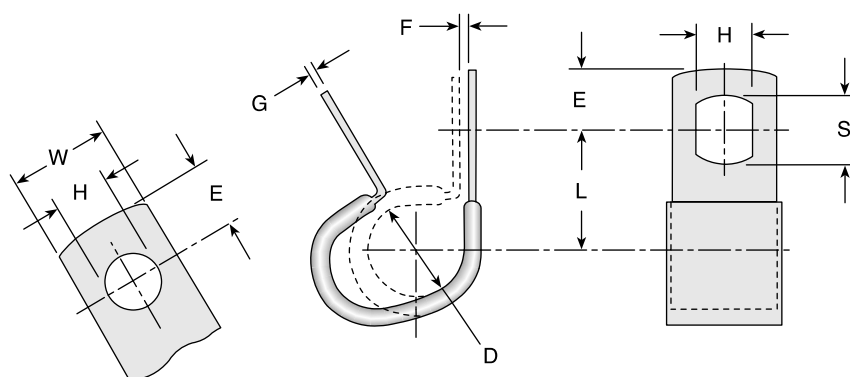
Material: CR Steel with Zinc Plating

Coating: Black Vinyl Plastisol - 0,8 mm (0.03 inch) thick.

Temperature Range: -40°C to +107°C (-40°F to +225°F).



[view on web page](#)



Part Number	D		H		L		W		E		F		G		S	
	±0,8 (mm)	±0.031 (inch)	±0,1 (mm)	±0.005 (inch)	±0,8 (mm)	±0.031 (inch)	±0,25 (mm)	±0.01 (inch)	±0,4 (mm)	±0.015 (inch)	±0,8 (mm)	±0.031 (inch)	±0,1 (mm)	±0.004 (inch)	±0,5 (mm)	±0.020 (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-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-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-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-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-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

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HC, 88HC-H and 88DB Clamp

The Parker HC Clamp is a stainless steel worm gear clamp designed for low pressure industrial hose applications.

HC Hose Clamp Table

SAE J1508 Type F

Part Number	Size (SAE)	"A" Clamp Diameter				"B" Maximum	
		Minimum mm	inch	Maximum mm	inch	mm	inch
HC-6	-8	13	0.50	23	0.91	19,1	0.75
HC-8	-10	14	0.56	27	1.06	19,1	0.75
HC-10	-12	18	0.69	32	1.25	19,1	0.75
88HC-12	-16	21	0.81	38	1.50	19,1	0.75
88HC-16	-20	21	0.81	44	1.75	19,1	0.75
88HC-20	-24	27	1.06	51	2.00	19,1	0.75
88HC-24	-28	33	1.31	57	2.25	19,1	0.75
88HC-32	-36	46	1.81	70	2.75	19,1	0.75

Suggested installation torque: 35 in-lbs (4 Nm)

Material: Band & Housing: 201 SS

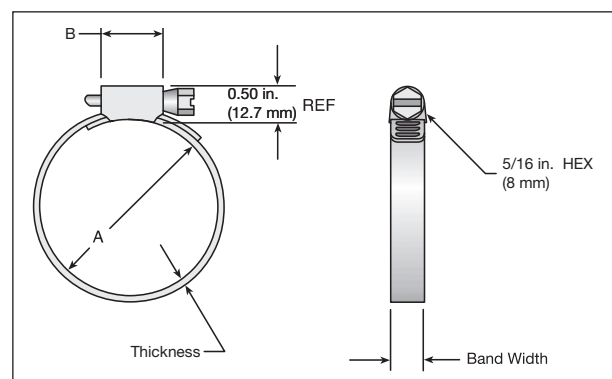
Screw: 410 SS

Band Width: 0.562 in.

Band Thickness: 0.022 in (0.559 mm)



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88HC-H

Series Hose Clamp (High Torque Wormgear)

SAE J1508 Type HD

Part Number	Size (SAE)	"A" Clamp Diameter				"B" Maximum	
		Minimum mm	inch	Maximum mm	inch	mm	inch
88HC-16H	175	25	1.00	44	1.750	26,9	1.06
88HC-20H	212	32	1.25	54	2.125	26,9	1.06
88HC-32H	262	44	1.75	67	2.625	26,9	1.06
88HC-40H	312	57	2.25	80	3.625	26,9	1.06
88HC-48H	362	70	2.75	92	3.625	26,9	1.06

Use for 88 Series Fittings

Suggested installation torque: 75 to 90 in-lbs (8.5 to 10 Nm)

Note: See 88 Series Assembly Instructions for proper 88HC-H clamp attachment.

Material: Band & Housing: 304 SS

Screw: 410 SS

Band Width: 0.625 in.

Band Thickness: 0.028 in (0.711 mm)

Use for 88 Series Fittings

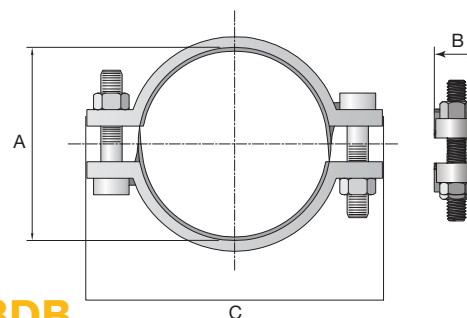
Material: Iron

88DB

Series Heavy Duty Hose Clamp (Double Bolt Hose Clamp)

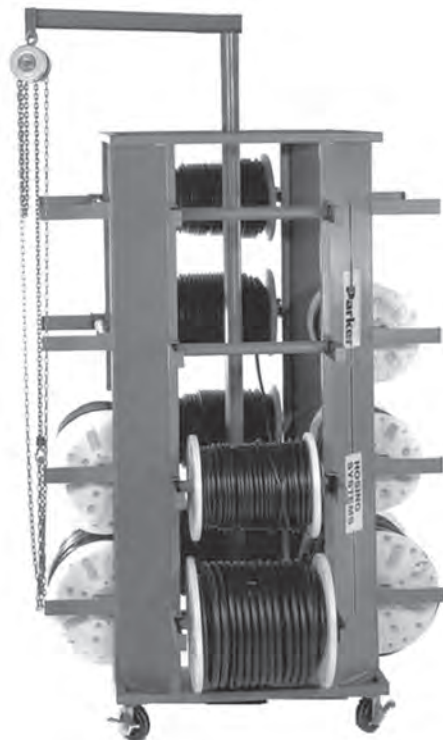
Part Number	"A" I.D. inch	"B" Width inch	"C" Width inch
88DB-12	1.25	0.88	1.75
88DB-16	1.40	0.75	2.00
88DB-20	1.75	0.96	2.35
88DB-24	2.00	1.00	2.66
88DB-32	2.40	1.03	3.12

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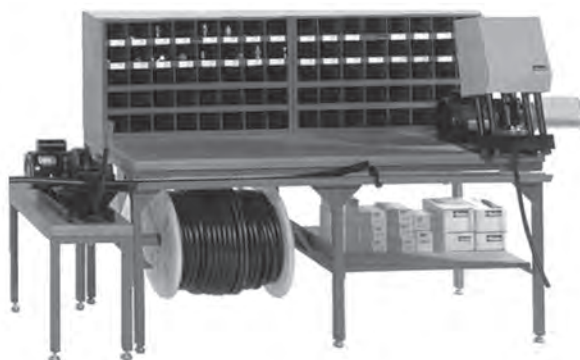
HPD Hose Assembly Workstations



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
540-362-9636
www.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
- (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 adjustable hose stop

Specifications: HoseFab Table (heavy duty)

- Laminated wood table top
- 1-1/2" square tubing structure
- Gusseted 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

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

Note: Part number and specifications of components for both workstations are listed on the following pages.

HoseFab Table

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"



See Safety Step contact information on page 312

Rotary Reel Rack

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

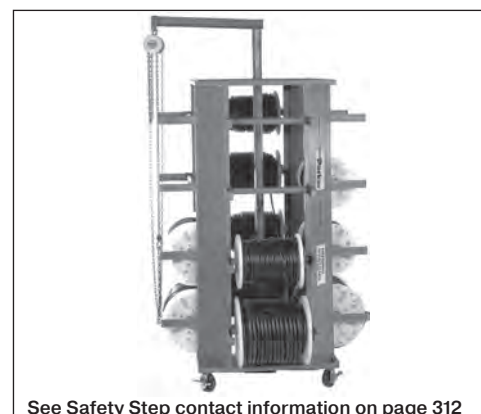
Rack measurements:

Height - 104" (120" with optional overhead crane)

Width - 67"

Length - 67"

[view on web page](#)



See Safety Step contact information on page 312

Saw Table

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"



See Safety Step contact information on page 312

3/4 Reel Rack

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"

[view on web page](#)



See Safety Step contact information on page 312



See Safety Step contact information on page 312

Parker Kart 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.



See Safety Step contact information on page 312

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.

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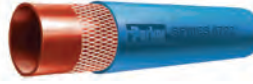
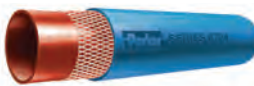


Hose Stock Bins HR3-Hose-Bin

Rugged gray, powder coated, metal cabinet with 3 openings for stocking coils of Parker hose 24 3/16" wide, 21 5/8" high, 23 15/16" deep.

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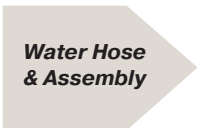
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	7094	329	7095	329	7212	331		
								
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HOSE VISUAL INDEX

100 	405	GPH 	407	125 	409	126 	409
7541 	411	7542 	412	 <i>Steam Hose</i>		7285 	413
7263C 	414	7264C 	415	7264 	416	7263E 	417
7288 	418	7200 	419	 <i>Water Hose & Assembly</i>		7392E 	420
7268E 	421	7258 	422	7258BK 	423	7055 	424

HOSE OVERVIEW CHART

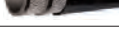
	Hose Size	Hose Construction	-3	-4	-5	-6	-8	Pressure PSI										4"	5"	6"	>6"	Standard Temp. Range °F	Standards	Page
Air / Multipurpose	7092		200	200-300	200-300	200-300	200-300	200-300	200-300	200-300	200	200	200						-40/+212		323			
	7093		200	200-300	200-300	200-300	200-300	200-300	200-300	200-300	200	200	200						-40/+212		325			
	7057						250		300										-40/+212		327			
	7031								300+										-40/+212	ARPM IP-7	326			
	7096								300										-40/+212		327			
	7322										200	200	200						-40/+212		328			
	7323										200	200	200						Air -20 / -158 Other -20/+212		328			
	7094			200-300	300	200-300	200-300	300	200-300	200-300	200	200							Air -20 / -158 Other -20/+212	Electrically non-conductive*	329			
	7095			200-300	300	200-300	200-300	300	200-300	200-300	200	200							Air -20 / -158 Other -20/+212	Electrically non-conductive*	329			
	7212			300		300	300	300	300										Air -20 / -158 Other -20/+212	MSHA	331			
	7107			500		500	500		500	500	500	500	500						Air -40 / -158 Other -40/+212	Electrically non-conductive*, MSHA	332			
	7102					300	300		300	300	300	300							Air -70 / -158 Other -70/+212		333			
	SW360											200	200		200	125		100	-40/+350		334			
	7251											600	600	500	500	400			-20/+212	MSHA	335			
	7337**											N/A	N/A	N/A	N/A	N/A			-30/+180	MSHA	338			
	7337M**						N/A	N/A	N/A	N/A	N/A								-30/+180	MSHA	339			
Chemical	7373T								200	200	200	200	200		200	200			-40/+180		340			
	SWC693									250	250	250	250		200	200			-40/+180		341			
	7374									600	400	400	400						-40/+180		342			
	7108			500		500													0 / +200		343			
	SWC693B									250	250	250	250		200	200			-40/+180		344			

(*min. resistance of one megaohm p/in. at 1000 volts DC)



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

HOSE OVERVIEW CHART

	Hose Size	Hose Construction	-3	-4	-5	-6	-8	-10	-12	-16	-20	-24	-32	-40	-48	4"	5"	6"	>6"	Standard Temp. Range °F	Standards	Page
Coolant & Engine Hose	7395**						75	75	75	75	75	75	75	75	75	75				-50/+257	SAE J20R2-D1 performance	345
	7390										150	150	150		150					-40F° to +212°F		347
	7391																			-40F° to +212°F		347
	7219**						75	75	75	75	75*	75*	75*	75*	75*	75*				-30/+212°/+257		348
	7399**						150	150	150	150										-40/+257		350
	389		100	100	100	100	100	100	100											-40/+257	SAEJ30R7 & R14 T2	351
	397		100	100	100	100	100	35	35													352
	395		75	50	50	50	35															353
	7181			65	65	65	65	65	50	45										-40/+257	SAEJ20R3 D-2	354
	7186						125	90	70											-40/+212		355
	6722			83	83	83	83	83	83	83										-65/+350	SAEJ20R3 Class A	356
	6723						83	83	83	83										-65/+350		357
	6724			83		83														-65/+500		358
	6750						142		108	100	92	83	67	50	29	17	17			-65/+350		359
	6823														27	27				-65/+500		360
	6621									225	225		225							-76/+392	SAE J20R2 Class A and TMC	31
	7116M					150	150		150	150										-40/+212		362
	SW569**						75	75	75		75	75	50	50	50	40	40			-20/+212	ABYC H-24, NMMA, SAE J1527 A1/A2, SAE J1942 Code: F / VW / NW, SAE J2006 R2, SAE J20R2 B, SAE J20R4 B, SAE J20R5 B, SAE J30R5, ISO 7840:2004 A2, ISO 8469 B1,USCG	363
	SS269**										50	50	50	50	25	25	25	25		-40/+200	ABYC, USCG/SAE J2006R1	365
	7165			100	100	100	100	75												-20/+212	ABYC, CARB, CE, EPA, ISO 7840 A1, NMMA, SAE J1527, A1-15, USCG A1	366
629		150	150																-40/+212		367	
650		400	400	400	400	350	300												-40/+257		368	

**See product page for additional sizes



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HOSE OVERVIEW CHART

	Hose Size	Hose Construction	-3	-4	-5	-6	-8	Pressure PSI								Standard Temp. Range °F				Standards	Page	
								-10	-12	-16	-20	-24	-32	-40	-48	4"	5"	6"	>6"			
Food and Beverage Hose	7640										150		150	150		150				-13/+176	FDA, BFR,DM, 3A, MHLW, REACH, CE, GMP	369
	7640P										150		150	150		150				-13/+176	FDA, BFR,DM, 3A, MHLW, REACH, CE, GMP	370
	7630										250		250	250	250					-40/+248	FDA, CE, DM, 3A, MHLW, REACH, GMP	371
	7630P										250		250	250	250					-40/+248	FDA, CE, DM, 3A, MHLW, REACH, GMP	372
	7630PL												150	150	150	150				-13/+248	FDA, CE, DM, 3A, MHLW, REACH, GMP	373
	7680						300			300	300									-40/+212	N/A	374
	7685						300			300	300									-40/+212	N/A	375
Fuel Dispenser Hose	7280							50	50	50										-40/+180	UL330/UIC; NFPA 30A; UL30N4 (factory assemblies)	376
	7124							50	50	50										-40/+180	UL330/UIC; NFPA 30A; UL30N4 (factory assemblies)	377
	7114							50	50	50										-40/+180	UL330/UIC; NFPA 30A; UL30N4 (factory assemblies)	378
	7175								50	50										-40/+180		379
LPG/Propane Hose & Assemblies	7132			350		350	350			350	350									-40/+180*		380
	7132XTC										350									-65/+180*	UL21; CSA 8.1 Type I; optional DOT factory hose assembly testing and marking available for sizes smaller than 3/4"	382
	7232										350	350	350							-40/+180*	UL21; CSA 8.1 Type I; optional DOT factory hose assembly testing and marking available	384
	7231														350					-22/+158*	ISO 2928-1986 (E)	386
	7122					125														-20/+160		387
	SS25UL				350	350	350	350												-40/+180*	UL21	388

**See product page for additional sizes

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HOSE OVERVIEW CHART

	Hose Size	Hose Construction	Pressure PSI																Standard Temp. Range °F	Standards	Page		
			-3	-4	-5	-6	-8	-10	-12	-16	-20	-24	-32	-40	-48	4"	5"	6"	>6"				
Material Handling	7204								1000	1000											Air -20/+158; Steam -20/+368 (saturated steam to 150 psi max); Other -20/+300		389
	SW387											150	150	150	150	150					-40/+350		390
	7363											100		100	100	100	100				-40/+160		391
	8341										75	75		75	75		75	75			-40/+180		392
	8341HD																	75					393
	SS135**															100	100	100			-40/+180		394
	SS247**															100	100	100	100		-40/+180		395
	SW409											200		175	150	100					-40/+180		396
Oil Field	7213E											150	150	150	150	150					-22/+185		397
	7301											2250									-40/+275		398
	7311N											400	400		400	400		400			-40/+200		399
	7311NXT														400	400					-40/+200		399
	7331/ 7331XT †7331XT only												400		400	400		400			-40/+200		400
Petroleum Transport Hose	7216E											150	150	150	150	150					-22/+185		401
	SWC609/ SCW609R †SWC609 only									250	250	250	200	200	150			150 [†]	150 [†] (8")		-40/+200		402
	SWC325											150	150	150	150	150		125			-67/+180		403
	7705										200	200	200	200	200	200	200					-20/+180	

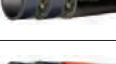
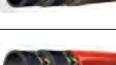
**See product page for additional sizes

* (working pressures are at +68, higher temps reduce the available working pressure)



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HOSE OVERVIEW CHART

	Hose Size	Hose Construction	-3	-4	-5	-6	-8	Pressure PSI										4"	5"	6"	>6"	Standard Temp. Range °F	Standards	Page
PVC Hose and Tubing	100		55-60	55-60	50-55	45-55	30-45	25-45	35	25-30											405			
	GPH		300	300	300	300	300	300	300	250								-15/+150*	Electrically non-conductive**		407			
	125		250	250	250	225	200	200	150	125	100	100	75					-25/+150*	FDA; EU		409			
	126			350	275	250	250		200	150	125	100						-25/+150*	FDA; EU		409			
	7541											70	70	60	60	60		45	45 (8")	-5/+170*		411		
	7542												150	150	150	150	140		100	80 (8")	-5/+170*	MSHA	412	
Steam Hose	7285						261		261	261										-40/+406 saturated steam; +450 super-heated steam	ISO 6134 Type2	413		
	7263C						261			261										-40/+406 saturated steam; +450 super-heated steam	ISO 6134 Type2	414		
	7264C								261											-40/+406 saturated steam; +450 super-heated steam	ISO 6134 Type2	415		
	7264						261		261	261	261	261	261							-40/+406 saturated steam; +450 super-heated steam	ISO 6134 Type2	416		
	7263E								261											-40/+406 saturated steam; +450 super-heated steam	ISO 6134 Type2	417		
	7288						261		261											-40/+406 saturated steam; +450 super-heated steam	ISO 6134 Type2	418		
	7200								350	350										-20/+300;+350 intermittent		419		
Water Hose & Assembly	7392E											150	150	150	150	150		150		-40/+180		420		
	7268E								1000	1000	1000	1000	1000							-20/+212	MSHA	421		
	7258			3000		3000	2500													-40/+250		422		
	7258BK			3000		3000	2500													-40/+250		423		
	7055							100	100											-40/+180		424		

**See product page for additional sizes

* (working pressures are at +68, higher temps reduce the available working pressure)

GST® II General Service Hose

Series 7031(R) (Green), Series 7057 (Blue),
Series 7092 (Red), Series 7093 (Black),
and Series 7096 (Yellow)



view on web page

GST® II hose is a versatile general purpose hose designed to handle air, mild chemicals and water. The hose construction incorporates a tube that is compatible with light oil mists found in air tool lubricating systems, and the multiple plies of textile reinforcement provide flexibility. The cover is resistant to abrasion, heat and ozone, and is available in multiple standard colors for color-coded identification.

NOTE: Do not use in welding hose and/or welding gas delivery applications.

Other cover colors available:

7031(R) (Green)



7057 (Blue)



7096 (Yellow)



7093 (Black)



Series 7092 (Red)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
-25200	1/4	6.4	2	0.5	12.7	0.09	0.13	3	64	200	14	HY	800	Reel
-25300	1/4	6.4	2	0.6	14.0	0.12	0.18	3	84	300	21	HY	800	Reel
-31200	5/16	7.9	2	0.6	15.1	0.12	0.18	3	84	200	14		Reel	Reel
-31300	5/16	7.9	2	0.6	15.9	0.14	0.21	4	89	300	21	HY	750	Reel
-38200	3/8	9.5	2	0.7	16.7	0.14	0.21	4	89	200	14	HY	700	Reel
-3820050	3/8	9.5	2	0.7	16.7	0.14	0.21	4	89	200	14	HY	50	Carton

Factory Assemblies: Air, Service Station Air, Jackhammer and Sledgehammer hose assemblies are available from stock in popular configurations and appear at the end of this section.



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

UNDER NO CIRCUMSTANCES IS THE GSTII FAMILY OF HOSES OR ANY OTHER EPDM HOSE TO BE USED IN A WELDING HOSE AND OR WELDING GAS DELIVERY APPLICATION UNLESS THE PARKER CATALOG, LITERATURE, AND PRODUCT MARKING EXPLICITLY STATES THAT THE PRODUCT IS APPROVED FOR WELDING HOSE FUEL GAS APPLICATIONS.

Tube: Black EPDM; ARPM Class C oil resistance

Reinforcement: Multiple textile plies

Cover: Black, blue, green, red, yellow EPDM; smooth finish

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

Brand Method: White ink on black, blue, green, red hose;
black ink on yellow hose

Brand Example: PARKER (SERIES) GST® II (ID) XXX PSI MAX
WP

Design Factor: 4:1

Industry Standards: None Applicable

Applications:

- Air (including oil mist), mild chemicals, water
- Agriculture, construction, general industrial

Vacuum: Not recommended

Compare to: Boston Boflex A/W; ContiTech Frontier General Purpose; Gates Adapta Flex; Thermoid Valuflex GS

(Continued on the following page)



WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Series 7031(R), Series 7057, Series 7092, Series 7093, and Series 7096 – GST® II General Service Air & Water Hose (Continued)

Series 7092 (Red)

#														
Part Number 7092	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
-38300	3/8	9.5	2	0.7	17.5	0.16	0.24	4	102	300	21	HY	700	Reel
-3830050												HY	50	Carton
-50200	1/2	12.7	2	0.8	20.7	0.20	0.30	5	114	200	14	HY	550	Reel
-5020050	1/2	12.7	2	0.8	20.7	0.21	0.31	5	114	200	14	HY	50	Carton
-50250	1/2	12.7	2	0.8	21.4	0.22	0.33	5	114	250	17	HY	550	Reel
-50304	1/2	12.7	4	0.9	22.2	0.24	0.36	5	127	300	21	HY	500	Reel
-5030450												HY	50	Carton
-63200	5/8	15.9	2	1.0	24.6	0.24	0.36	6	140	200	14	HY	450	Reel
-6320050												HY	50	Carton
-63304	5/8	15.9	4	1.1	27.0	0.35	0.52	6	140	300	21	HY	450	Reel
-75200	3/4	19.1	2	1.1	28.2	0.32	0.48	6	152	200	14	HY	400	Reel
-7520050												HY	50	Carton
-75254	3/4	19.1	4	1.2	29.4	0.37	0.55	6	152	250	17	HY	400	Reel
-7525450												HY	50	Carton
-75304	3/4	19.1	4	1.2	29.4	0.37	0.55	6	152	300	21	HY	400	Reel
-7530450												HY	50	Carton
-100200	1	25.4	2	1.4	35.7	0.47	0.70	7	178	200	14	HY	300	Reel
-100304	1	25.4	4	1.4	36.5	0.51	0.76	8	203	300	21	HY	300	Reel
-10030450	1	25.4	4	1.4	36.5	0.53	0.79	8	203	300	21	HY	50	Carton
-125204	1-1/4	31.8	4	1.8	45.2	0.77	1.15	9	229	200	14	HY	250	Reel
-150204	1-1/2	38.1	4	2.0	51.6	0.84	1.25	10	254	200	14	43	200	Reel
-15020450												43	50	Carton
-150204100												43	100	Reel
-200154	2	50.8	4	2.6	64.8	1.13	1.68	14	356	200	14	43	250	Reel

Factory Assemblies: Air, Service Station Air, Jackhammer and Sledgehammer hose assemblies are available from stock in popular configurations and appear at the end of this section.

UNDER NO CIRCUMSTANCES IS THE GSTII FAMILY OF HOSES OR ANY OTHER EPDM HOSE TO BE USED IN A WELDING HOSE AND OR WELDING GAS DELIVERY APPLICATION UNLESS THE PARKER CATALOG, LITERATURE, AND PRODUCT MARKING EXPLICITLY STATES THAT THE PRODUCT IS APPROVED FOR WELDING HOSE FUEL GAS APPLICATIONS.

(Continued on the following page)

GST® II General Service Hose

Series 7031(R) (Green),
Series 7057 (Blue), Series 7092 (Red),
Series 7093 (Black), and Series 7096 (Yellow)



view on web page

GST® II hose is a versatile general purpose hose designed to handle air, mild chemicals and water. The hose construction incorporates a tube that is compatible with light oil mists found in air tool lubricating systems, and the multiple plies of textile reinforcement provide flexibility. The cover is resistant to abrasion, heat and ozone, and is available in multiple standard colors for color-coded identification.

NOTE: Do not use in welding hose and/or welding gas delivery applications.

Other cover colors available:

7031(R) (Green)	
7057 (Blue)	
7096 (Yellow)	
7092 (Red)	

Series 7093 (Black)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
-19200	3/16	4.8	2	0.4	11.1	0.07	0.10	2	51	200	14	*	800	Reel
-25200	1/4	6.4	2	0.5	12.7	0.09	0.13	3	64	200	14	HY	800	Reel
-25250	1/4	6.4	2	0.5	12.9	0.10	0.15	3	76	250	17	HY	800	Reel
-25300	1/4	6.4	2	0.6	14.0	0.12	0.18	3	84	300	21	HY	800	Reel

Factory Assemblies: Air, Service Station Air, Jackhammer and Sledgehammer hose assemblies are available from stock in popular configurations and appear at the end of this section.

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UNDER NO CIRCUMSTANCES IS THE GSTII FAMILY OF HOSES OR ANY OTHER EPDM HOSE TO BE USED IN A WELDING HOSE AND OR WELDING GAS DELIVERY APPLICATION UNLESS THE PARKER CATALOG, LITERATURE, AND PRODUCT MARKING EXPLICITLY STATES THAT THE PRODUCT IS APPROVED FOR WELDING HOSE FUEL GAS APPLICATIONS.

Tube: Black EPDM; ARPM Class C oil resistance

Reinforcement: Multiple textile plies

Cover: Black, blue, green, red, yellow EPDM; smooth finish

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

Brand Method: White ink on black, blue, green, red hose;
black ink on yellow hose

Brand Example: PARKER (SERIES) GST® II (ID) XXX PSI MAX
WP

Design Factor: 4:1

Industry Standards: None Applicable

Applications:

- Air (including oil mist), mild chemicals, water
- Agriculture, construction, general industrial

Vacuum: Not recommended

Compare to: Boston Bosflex A/W; ContiTech Frontier General Purpose; Gates Adapta Flex; Thermoid Valuflex GS

(Continued on the following page)

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Series 7031(R), Series 7057, Series 7092, Series 7093, and Series 7096 – GST® II General Service Air & Water Hose (Continued)

Series 7093 (Black) (Continued)

#	ID	ID	Reinf	OD	OD	Approx	Approx	Min	Min	Max	Max	Perm	Nom Std	Pkg
Part Number	(in)	(mm)	Layers	(in)	(mm)	Wt (lbs/ft)	Wt (kg/m)	Bend Rad (in)	Bend Rad (mm)	WP (psi)	WP (bar)	Cplg Rec *	Pack Qty (ft)	Type
-31200	5/16	7.9	2	0.6	15.1	0.12	0.18	3	84	200	14		750	Reel
-31300	5/16	7.9	2	0.6	15.9	0.14	0.21	4	89	300	21	HY	750	Reel
-38200	3/8	9.5	2	0.7	16.7	0.14	0.21	4	89	200	14	HY	700	Reel
-38300	3/8	9.5	2	0.7	17.5	0.16	0.24	4	102	300	21	HY	700	Reel
-50200	1/2	12.7	2	0.8	20.7	0.20	0.30	5	114	200	14	HY	550	Reel
-50250	1/2	12.7	2	0.8	21.4	0.22	0.33	5	114	250	17	HY	550	Reel
-50304	1/2	12.7	4	0.9	22.2	0.24	0.36	5	127	300	21	HY	500	Reel
-63200	5/8	15.9	2	1.0	24.6	0.24	0.36	6	140	200	14	HY	450	Reel
-63304	5/8	15.9	4	1.1	27.0	0.35	0.52	6	140	300	21	HY	450	Reel
-75200	3/4	19.1	2	1.1	28.2	0.32	0.48	6	152	200	14	HY	400	Reel
-7520050												HY	50	Carton
-75304	3/4	19.1	4	1.2	29.4	0.37	0.55	6	152	300	21	HY	400	Reel
-100200	1	25.4	2	1.4	35.7	0.47	0.70	7	178	200	14	HY	300	Reel
-100304	1	25.4	4	1.4	36.5	0.51	0.76	8	203	300	21	HY	300	Reel
-125204	1-1/4	31.8	4	1.8	45.2	0.77	1.15	9	229	200	14	HY	250	Reel
-150204	1-1/2	38.1	4	2.0	51.6	0.84	1.25	10	254	200	14	43	200	Reel
-200154	2	50.8	4	2.6	64.8	1.13	1.68	14	356	200	14	43	250	Reel

Factory Assemblies: Air, Service Station Air, Jackhammer and Sledgehammer hose assemblies are available from stock in popular configurations and appear at the end of this section.

UNDER NO CIRCUMSTANCES IS THE GSTII FAMILY OF HOSES OR ANY OTHER EPDM HOSE TO BE USED IN A WELDING HOSE AND OR WELDING GAS DELIVERY APPLICATION UNLESS THE PARKER CATALOG, LITERATURE, AND PRODUCT MARKING EXPLICITLY STATES THAT THE PRODUCT IS APPROVED FOR WELDING HOSE FUEL GAS APPLICATIONS.



Series 7031 / 7031(R) (Green)

[view on web page](#)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID	ID	Reinf	OD	OD	Approx	Approx	Min	Min	Max	Max	Perm	Nom Std	Pkg
Part Number	(in)	(mm)	Layers	(in)	(mm)	Wt (lbs/ft)	Wt (kg/m)	Bend Rad (in)	Bend Rad (mm)	WP (psi)	WP (bar)	Cplg Rec *	Pack Qty (ft)	Type
7031-75304R	3/4	19.1	4	1.2	29.4	0.37	0.55	6	152	300†	21†	HY	400	Reel
7031-7530450R												HY	50	Carton

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

UNDER NO CIRCUMSTANCES IS THE GSTII FAMILY OF HOSES OR ANY OTHER EPDM HOSE TO BE USED IN A WELDING HOSE AND OR WELDING GAS DELIVERY APPLICATION UNLESS THE PARKER CATALOG, LITERATURE, AND PRODUCT MARKING EXPLICITLY STATES THAT THE PRODUCT IS APPROVED FOR WELDING HOSE FUEL GAS APPLICATIONS.

Series 7031(R), Series 7057, Series 7092, Series 7093, and Series 7096 – GST® II General Service Air & Water Hose (Continued)



Series 7057 (Blue)

[view on web page](#)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7057-50250	1/2	12.7	2	0.8	21.4	0.23	0.34	5	114	250	17	HY	500	Reel
7057-75304	3/4	19.1	4	1.2	29.4	0.37	0.55	6	152	300	21	HY	350	Reel
7057-7530450												HY	50	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

UNDER NO CIRCUMSTANCES IS THE GSTII FAMILY OF HOSES OR ANY OTHER EPDM HOSE TO BE USED IN A WELDING HOSE AND OR WELDING GAS DELIVERY APPLICATION UNLESS THE PARKER CATALOG, LITERATURE, AND PRODUCT MARKING EXPLICITLY STATES THAT THE PRODUCT IS APPROVED FOR WELDING HOSE FUEL GAS APPLICATIONS.



Series 7096 (Yellow)

[view on web page](#)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7096-75304	3/4	19.1	4	1.2	29.4	0.37	0.55	6	152	300	21	HY	400	Reel
7096-7530450												HY	50	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

UNDER NO CIRCUMSTANCES IS THE GSTII FAMILY OF HOSES OR ANY OTHER EPDM HOSE TO BE USED IN A WELDING HOSE AND OR WELDING GAS DELIVERY APPLICATION UNLESS THE PARKER CATALOG, LITERATURE, AND PRODUCT MARKING EXPLICITLY STATES THAT THE PRODUCT IS APPROVED FOR WELDING HOSE FUEL GAS APPLICATIONS.

SUPER-FLEX® GS

General Service Air & Water Hose

Series 7322 (Red) and
Series 7323 (Black)



[view on web page](#)



[view on web page](#)

Series 7322/7323 is a versatile general purpose hose designed to handle air, mild chemicals and water. The hose incorporates a tube that is compatible with light oil mists, and features a rigid mandrel construction that produces a true round, concentric profile for superior coupling fit and retention. The cover is resistant to abrasion, heat and ozone.

NOTE: Do not with use with oil or refined fuel.

Series 7322 (Red) and Series 7323 (Black)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
Part Number 7322 or 7323														
-125200	1-1/4	31.8	2	1.7	44.2	0.71	1.06	8	191	200	14	43	200	Coil
-150200	1-1/2	38.1	2	2.0	50.4	0.82	1.22	9	216	200	14	43	200	Coil
-200200	2	50.8	4	2.6	65.2	1.23	1.83	12	305	200	14	43	200	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black EPDM; ARPM Class Coil resistance

Reinforcement: Multiple textile plies

Cover: **7322:** Red EPDM, wrapped finish

7323: Black EPDM, wrapped finish

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

Brand Method: **7322:** White text on red stripe

7323: White text on black stripe

Brand Example: PARKER SERIES (7322) (7323) SUPER-FLEX® GS 200 PSI MAX WP GENERAL SERVICE

Design Factor: 4:1

Vacuum: Not recommended

Industry Standards: None applicable

Applications:

- Air (including oil mist), mild chemicals, water
- Agriculture, construction, general industrial

Compare to: ContiTech Frontier; Gates AdaptaFlex

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

MPT® II

Multipurpose Oil Resistant Hose

Series 7094 (Red) and
Series 7095 (Black)



view on web page



view on web page

Series 7094/7095 hose construction is electrically nonconductive multipurpose hose with a minimum resistance of one megaohm per inch at 1000 volts DC. The multiple plies of textile reinforcement provide flexibility and the cover is resistant to oil and weathering.

- NOTES:**
- Do not use in dry air applications (typically, air systems that do not expose the tube of the hose to lubricating oil mist from the compressor).
 - The user must determine if the hose is suitable for applications subject to electrical hazard. Contact Parker for additional information.
 - Do not use to dispense or transfer biodiesel, diesel fuel, or gasoline.

Series 7094 (Red)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
-25200	1/4	6.4	2	0.5	12.7	0.10	0.15	2	51	200	14	HY	800	Reel
-25300				0.6	14.0	0.12	0.18	3	64	300	21	HY	800	Reel
-31300	5/16	7.9	2	0.6	15.1	0.13	0.19	3	84	300	21	HY	750	Reel
-38200	3/8	9.5	2	0.7	16.7	0.15	0.22	4	97	200	14	HY	700	Reel
-38300	3/8	9.5	2	0.7	17.5	0.17	0.25	4	97	300	21	HY	650	Reel
-50200	1/2	12.7	2	0.8	20.7	0.21	0.31	5	127	200	14	HY	550	Reel
-50304	1/2	12.7	4	0.9	22.2	0.26	0.39	5	127	300	21	HY	500	Reel
-63304	5/8	15.9	4	1.1	27.0	0.38	0.57	6	155	300	21	HY	450	Reel
-75200	3/4	19.1	2	1.1	28.2	0.34	0.51	8	191	200	14	HY	400	Reel
-75304	3/4	19.1	4	1.2	29.4	0.40	0.60	6	152	300	21	HY	400	Reel
-100200	1	25.4	2	1.4	35.7	0.49	0.73	10	254	200	14	HY	300	Reel
-100304					36.5	0.54	0.80	8	203	300	21	HY	300	Reel
-125204	1-1/4	31.8	4	1.8	45.2	0.82	1.22	9	229	200	14	HY	250	Reel
-150204	1-1/2	38.1	4	2.0	51.6	0.90	1.34	10	254	200	14	HY	200	Reel



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

(Continued on the following page)



WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Series 7094 (Red) and Series 7095 (Black) – MPT® II Multipurpose Oil Resistant Hose – Nonconductive (*Continued*)

Series 7095 (Black)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
-25300				0.6	14.0	0.12	0.18	3	64	300	21	HY	800	Reel
-31300	5/16	7.9	2	0.6	15.1	0.13	0.19	3	84	300	21	HY	750	Reel
-38200	3/8	9.5	2	0.7	16.7	0.15	0.22	4	97	200	14	HY	700	Reel
-38300	3/8	9.5	2	0.7	17.5	0.17	0.25	4	97	300	21	HY	650	Reel
-50200	1/2	12.7	2	0.8	20.7	0.21	0.31	5	127	200	14	HY	550	Reel
-50304	1/2	12.7	4	0.9	22.2	0.26	0.39	5	127	300	21	HY	500	Reel
-63304	5/8	15.9	4	1.1	27.0	0.38	0.57	6	155	300	21	HY	450	Reel
-75200	3/4	19.1	2	1.1	28.2	0.34	0.51	8	191	200	14	HY	400	Reel
-75304	3/4	19.1	4	1.2	29.4	0.40	0.60	6	152	300	21	HY	400	Reel
-100200	1	25.4	2	1.4	35.7	0.49	0.73	10	254	200	14	HY	300	Reel
-100304	1	25.4	2	1.4	36.5	0.54	0.80	8	203	300	21	HY	300	Reel
-125204	1-1/4	31.8	4	1.8	45.2	0.82	1.22	9	229	200	14	HY	250	Reel
-150204	1-1/2	38.1	4	2.0	51.6	0.90	1.34	10	254	200	14	HY	200	Reel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile; ARPM Class A oil resistance

Reinforcement: Multiple textile plies

Cover: 7094: Red chloroprene, smooth finish

7095: Black chloroprene, smooth finish

Temp. Range: Air: -20°F to +158°F (-29°C to +70°C)

Other Media: -20°F to +212°F (-29°C to +100°C)

Brand Method: White ink

Brand Example: PARKER SERIES (7094) (7095) MPT®
II (ID) XXX PSI MAX WP ELECTRICALLY
NONCONDUCTIVE

Design Factor: 4:1

Industry Standards: Electrically nonconductive with a minimum resistance of one megaohm per inch at 1000 volts DC

Applications:

- Air, mild chemicals, oil, water
- Cooling lines for electric furnaces and pot lines; lubrication systems
- Agriculture, construction, foundries, general industrial

Vacuum: Not recommended

Compare to: Boston Shock Safe; ContiTech Ortac/Variflex; Gates PremoFlex/19B

JIFFY™**Push-On Multipurpose Hose****Series 7212**

Series 7212 hose construction incorporates a silicone-free tube that does not contaminate air powered paint spray systems. The braided textile reinforcement is applied at a precise angle to provide kink resistance and superior coupling retention—to be used with push-on couplings which do not require bands, clamps or special tools for installation. The flame resistant cover meets MSHA requirements and is resistant to oil and weathering.


[view on web page](#)

- NOTES:**
- Do not use in dry air applications (typically, air systems that do not expose the tube to a lubricating oil mist).
 - Do not use to dispense or transfer biodiesel, diesel fuel, or gasoline in regulated service (API, NFPA, UL, ULC or any other agency approval or listing).
 - Do not use in vehicle engine applications.
 - Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.
 - Do not use bands or clamps to attach push-on couplings.

Other colors available:

7212-BL	
7212-GN	
7212-GY	
7212-RD	
7212-YL	

⚠ WARNING!

► The hose does not include a static wire; transfer of refined fuel may create an accumulation – and catastrophic discharge – of static electrical buildup.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7212-251XX	1/4	6.4	1	0.5	12.5	0.09	0.13	3	76	300	21	HY	700	Reel
7212-381XX	3/8	9.5	1	0.6	15.7	0.12	0.18	3	76	300	21	HY	700	Reel
7212-501XX	1/2	12.7	1	0.8	19.1	0.15	0.22	5	127	300	21	HY	600	Reel
7212-631XX	5/8	15.9	1	0.9	23.0	0.21	0.31	6	152	300	21	HY	500	Reel
7212-750XX	3/4	19.1	1	1.1	27.7	0.30	0.45	7	178	300	21	HY	400	Reel

XX in Part Number = BK (black), BL (blue), GN (green), GY (grey), RD (red), YL (yellow)

Factory Cut Lengths: Blue and gray hose available from stock in 50-ft. coils. See the following page.

Reattachable Couplings: Parker Series 82 Push-Lok® couplings.



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile; ARPM Class A oil resistance

Reinforcement: One textile braid

Cover: Black, blue, gray, green, red or yellow chloroprene; smooth finish

Temp. Range: Air: -40°F to +158°F (-40°C to +70°C)

Other Media: -40°F to +212°F (-40°C to +100°C)

Brand Method: White ink on black, blue and red hose; black ink on green, gray and yellow hose

Brand Example: PARKER 7212 JIFFY™ HOSE PUSH-ON (ID) 300 PSI MAX WP MSHA #

Design Factor: 4:1

Industry Standards: MSHA

Applications:

- Air, mild chemicals, oil, water; biodiesel (to B20 in dedicated service), diesel, ethanol, gasoline
- Air operated paint systems, air tools, transfer lines, vacuum lines
- Agriculture, construction, general industrial; automotive/factory color-coded assembly equipment

Compare to: ContiTech Autogrip; Gates Python Plus; Thermoid Flex Loc 300

Vacuum: 1/4" ID through 1/2" ID @ 28" Hg (711 mm Hg);
5/8" ID through 3/4" ID @ 15" Hg (381 mm Hg)

GRIZZLY™ 500

Multipurpose Hose

Series 7107



[view on web page](#)

Series 7107 hose is multipurpose hose that is electrically nonconductive with a minimum resistance of one megaohm per inch at 1000 volts DC. The bright yellow flame resistant modified nitrile/PVC cover is resistant to abrasion, oil and weathering.

- NOTES:**
- Do not use in dry air applications (typically, air systems that do not expose the tube to a lubricating oil mist).
 - The user must determine if the hose is suitable for applications subject to electrical hazard. Review the safety guide for electrical resistance.
 - Do not use to dispense or transfer biodiesel, diesel fuel, or gasoline.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7107-25500	1/4	6.4	4	0.6	15.9	0.16	0.24	2	51	500	34	*	750	Reel
7107-38500	3/8	9.5	4	0.8	19.1	0.20	0.30	3	76	500	34	HY	600	Reel
7107-50500	1/2	12.7	4	0.906	23.01	0.27	0.40	3	76	500	34	*	500	Reel
7107-75500	3/4	19.1	4	1.2	30.1	0.40	0.60	5	127	500	34	HY	400	Reel
7107-75500050												HY	24 x 50	Carton
7107-100500	1	25.4	4	1.5	38.1	0.59	0.88	6	152	500	34	*	300	Reel
7107-125500	1-1/4	31.8	4	1.8	45.7	0.80	1.19	9	229	500	34	43	250	Reel
7107-150500	1-1/2	38.1	4	2.0	51.6	0.91	1.36	12	305	500	34	43	200	Reel
7107-200500	2	50.8	4	2.685	68.2	1.31	1.95	24.0	609.6	500	34	*	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile; ARPM Class A oil resistance

Reinforcement: Multiple aramid plies; 2" ID (only) multiple textile plies

Cover: Yellow nitrile/PVC, smooth finish; 2" ID (only) wrapped finish

Temp. Range: Air: -40°F to +158°F (-40°C to +70°C)

Other Media: -40°F to +212°F (-40°C to +100°C)

Brand Method: Black ink

Brand Example: PARKER SERIES 7107 GRIZZLY (ID) 500 PSI
MAX WP ELECTRICALLY NONCONDUCTIVE
MSHA #

Design Factor: 4:1

Industry Standards: Electrically nonconductive with a minimum resistance of one megaohm per inch at 1000 volts DC; MSHA

Applications:

- Air, oil, mild chemicals, water
- Agriculture, construction, foundries, general industrial, mines

Vacuum: Not recommended

Compare to: Boston Mineforce; ContiTech Gorilla; Gates Terminator

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

ARCTIC EDGE™

Low Temperature Multipurpose Hose

Series 7102



[view on web page](#)

Series 7102 hose construction is a low temperature multipurpose hose that incorporates a static wire as a path to conduct an electrical charge to ground. The multiple plies of textile reinforcement provide flexibility and kink resistance to -70°F (-57°C). The cover is resistant to oil and weathering, and incorporates a longitudinal solid blue stripe for color-coded identification.

- NOTES:**
- Do not use in dry air applications (typically, air systems that do not expose the tube to a lubricating oil mist).
 - Do not use to dispense or transfer biodiesel, diesel fuel, or gasoline in regulated service (API, NFPA, UL, ULC or any other agency approval or listing).
 - Do not use in vehicle engine applications.
 - Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID	ID	Reinf	OD	OD	Approx	Approx	Min	Min	Max	Max	Perm	Nom	Std	Pkg
Part	(in)	(mm)	Layers	(in)	(mm)	Wt	Wt	Bend	Bend	WP	WP	Cplg	Std	Pack	Type
Number						(lbs/ft)	(kg/m)	Rad	Rad	(psi)	(bar)	Rec	Qty	Qty	
								(in)	(mm)			*	(ft)	(ft)	
7102-38304	3/8	9.5	4	0.8	19.1	0.21	0.31	4	97	300	21	HY	650		Reel
7102-50304	1/2	12.7	4	0.9	23.0	0.28	0.42	5	127	300	21	*	500		Reel
7102-75304	3/4	19.1	4	1.2	29.4	0.37	0.55	6	152	300	21	HY	400		Reel
7102-100304	1	25.4	4	1.5	37.0	0.54	0.80	8	203	300	21	HY	250		Reel
7102-125304	1-1/4	31.8	4	1.8	46.0	0.83	1.24	9	229	300	21	HY	250		Reel
7102-138304	1-3/8	34.9	4	1.9	48.9	0.89	1.33	10	241	300	21	*	200		Reel



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile; ARPM Class A oil resistance

Reinforcement: Multiple textile plies with static wire

Cover: Black chloroprene; smooth finish

Temp. Range: Air: -70°F to +158°F (-57°C to +70°C)

Other Media: -70°F to +212°F (-57°C to +100°C)

Brand Method: White ink; solid blue stripe on reverse

Brand Example: PARKER SERIES 7102 ARCTIC EDGE™
(-70°F) LOW TEMP (ID) 300 PSI MAX WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Air, mild chemicals, oil, water; biodiesel (to B20 in dedicated service), diesel, ethanol, gasoline
- Cold weather, refrigerated applications
- Agriculture, construction, general industrial

Vacuum: Not recommended

Compare to: ContiTech Arctic Ortac; Thermoid Glacier Multipurpose



WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

DRAGON BREATH®

Hot Air Blower Hose

Series SW360



[view on web page](#)

Series SW360 hose transfers hot air from a truck's compressor to the storage bin/cargo bay to blow out bulk material. The hose offers full suction capability, kink resistance, flexibility for ease of handling and a path to conduct a static electrical charge to ground. The cover resists abrasion, heat and ozone.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
SW360-1500	1-1/2	38.1	2	2.0	51.0	1.06	1.58	5	127	200	14	*	100	Coil
SW360-2000	2	50.8	2	2.5	64.7	1.52	2.26	6	152	200	14	*	100	Coil
SW360-3000	3	76.2	2	3.6	90.9	2.54	3.78	12	305	200	14	*	100	Coil
SW360-4000	4	101.6	2	4.6	116.6	3.73	5.55	16	406	125	9	*	100	Coil
SW360-6000	6	152.4	2	6.7	169.4	4.65	6.92	24	610	100	7	*	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black EPDM

Reinforcement: Multiple textile plies with single or dual wire helix

Cover: Black EPDM; wrapped finish

Temp. Range: -40°F to +350°F (-40°C to +177°C)

Brand Method: Black text on yellow stripe

Brand Example: PARKER DRAGON BREATH SW360 HOT AIR BLOWER HOSE XXX PSI WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Hot air blower systems
- In-plant transfer; delivery, loading/unloading
- General industrial, transportation

Compare to: ContiTech Plicord Torrid Air; Eaton Boston Wildcat Hot Air; Gates Hot Air Blower

Vacuum: 29" Hg (737 mm Hg)

THORO-BRAID®

Medium Pressure Wire Braid

Multipurpose Hose

Series 7251



view on web page

Series 7251 hose construction incorporates high tensile wire braid reinforcement that provides durability, kink resistance, medium pressure capability, and superior coupling retention. The flame resistant yellow cover is resistant to abrasion and oil.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7251-1501K	1-1/2	38.1	1	2.1	52.4	1.22	1.82	20	508	600	41	43, 71	150	Carton
7251-2002K	2	50.8	2	2.7	67.5	1.89	2.82	25	635	600	41	43, *	150	Carton
7251-2502K	2-1/2	63.5	2	3.2	80.2	2.30	3.43	32	813	500	35	*	150	Carton
7251-3002K	3	76.2	2	3.7	92.9	2.73	4.07	37	927	500	35	*	150	Carton
7251-4002K	4	101.6	2	4.7	118.3	3.63	5.41	48	1219	400	28	*	150	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black chloroprene

Reinforcement: One or multiple wire braids

Cover: Yellow nitrile/PVC; perforated wrapped finish

Temp. Range: -20°F to +212°F (-29°C to +100°C)

Brand Method: Embossed

Brand Example: PARKER SERIES 7251 THORO-BRAID® AIR HOSE - WIRE BRAID XXX PSI MAX WP-DE4 FIRE RESISTANT-MSHA #

Design Factor: 4:1

Industry Standards: MSHA

Applications:

- Air, mild chemicals, oil, water
- Heavy duty air tools, compressors; bull hose, drill hose
- Construction, general industrial, mines and quarries

Vacuum: Not recommended

Compare to: ContiTech Ultrabraid Steel Air; Gates 500 MP/Air Drill; Kuriyama T130AK

Factory Assemblies Air Hose

Series 7092 (Red) and
Series 7093 (Black)



[view on web page](#)

Series 7092/7093 factory-installed, crimped- on lightweight brass couplings provide a secure hose/fitting interface, and the rigid male NPT ends provide easy, quick and secure connections.

#											
Part Number	ID (in)	ID (mm)	Length (ft)	Length (m)	Approx Wt (lbs/ea)	Approx Wt (kg/ea)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Std Pack Qty (ea)	Pkg Type
7092253-KAA	1/4	6.4	50	15.24	6.01	2.73	300	21	*	5	Carton
7092253-KAB			25	7.62	3.15	1.43				10	Carton
7092382-KAC	3/8	9.5	50	15.24	7.37	3.34	200	14	*	5	Carton
7092383-KAA	3/8	9.5	50	15.24	8.33	3.78	300	21	*	5	Carton
7092383-KAB			25	7.62	4.34	1.87				10	Carton

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series 7093 (Black)

#											
Part Number	ID (in)	ID (mm)	Length (ft)	Length (m)	Approx Wt (lbs/ea)	Approx Wt (kg/ea)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Std Pack Qty (ea)	Pkg Type
7093383-KAA	3/8	9.5	50	15.24	8.09	3.67	300	21	*	5	Carton

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Temp Range: -40°F to +160°F (-40°C to +100°C)

Design Factor: 4:1

Crimped-on Brass: Rigid Male 1/4" x 1/4" NPT Thread Couplings Each End

Display Cartons with Parker Center Retail Packaging Disc

Series 7092 (Red)

Factory Assemblies Service Station Air Hose

Series 7092 (Red)



[view on web page](#)

Series 7092 is designed as an abrasion and weather resistant hose for service station compressor and general industrial air service. The factory-installed, crimped-on lightweight brass couplings provide a secure hose/fitting interface, and the rigid male NPT ends provide easy, quick and secure connections.

# Part Number	ID (in)	Length (ft)	Approx Wt (lbs/ea)	Approx Wt (kg/ea)	Max WP (psi)	Cplg Thread Size (in)	Perm Cplg Rec *	Std Pack Qty (ea)	Pkg Type
7092RLC-300	3/8	25	4.34	1.97	300	1/4 x 1/4	*	10	Carton
7092RLC-600		50	8.33	3.78			*	5	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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

Design Factor: 4:1

Crimped-on Brass: Rigid Male NPT Thread Couplings Each End

Cartoned and Tied: No Center Disc

Carton

Reinforced Conduit Hose

Series 7337



[view on web page](#)

Series 7337 is a durable cable cover with a rugged, abrasion resistant construction that is ideal for extreme service conditions in mining application. Meets MSHA requirements for flame resistance and wall thickness.

#									
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Nom Std Pack Qty (ft)	Pkg Type
7337-1382	1-3/8	34.9	2	1.8	46.0	0.68	1.01	50	Coil
7337-1502	1-1/2	38.1	2	1.9	49.0	0.72	1.07	50	Coil
7337-1752	1-3/4	44.5	2	2.2	55.4	0.83	1.24	50	Coil
7337-1882	1-7/8	47.6	2	2.3	58.6	0.88	1.31	50	Coil
7337-2002	2	50.8	2	2.4	61.8	0.94	1.40	50	Coil
7337-2252	2-1/4	57.2	2	2.7	68.2	1.05	1.56	50	Coil
7337-2382	2-3/8	60.3	2	2.8	71.3	1.10	1.64	50	Coil
7337-2502	2-1/2	63.5	2	2.9	74.5	1.15	1.71	50	Coil
7337-3002	3	76.2	2	3.4	87.2	1.37	2.04	50	Coil
7337-3502	3-1/2	90.0	2	4.0	101.0	1.59	2.37	50	Coil
7337-4002	4	102.0	2	4.4	113.0	1.79	2.67	50	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black synthetic rubber

Reinforcement: Multiple textile plies

Cover: Black synthetic rubber; wrapped finish

Temp. Range: -30°F to +180°F (-34°C to +82°C)

Brand Method: Embossed

Brand Example: PARKER SERIES 7337 PREMIUM CONDUIT
HOSE FLAME RESISTANT MINE CONDUIT
USMSHA

Industry Standards: MSHA

Applications:

- Conduit
- Underground mining equipment

Vacuum: Not recommended

Reinforced Conduit Hose

Series 7337M



[view on web page](#)

Series 7337M is a durable, smooth finish cable cover with a rugged, abrasion resistant construction that is ideal for extreme service in mining applications, and meets MSHA requirements for flame resistance and wall thickness.

# Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Nom Std Pack Qty (ft)	Pkg Type
7337M-502	1/2	12.7	2	1.0	24.6	0.31	0.46	450	Reel
7337M-502050								50	Carton
7337M-632	5/8	15.9	2	1.1	27.8	0.37	0.55	400	Reel
7337M-632050								50	Carton
7337M-752	3/4	19.1	2	1.2	30.8	0.41	0.61	350	Reel
7337M-752050								50	Carton
7337M-1002	1	25.4	2	1.5	37.2	0.52	0.77	250	Reel
7337M-1002050								50	Carton
7337M-1132	1-1/8	28.6	2	1.6	40.5	0.57	0.85	250	Reel
7337M-1132050								50	Carton
7337M-1252	1-1/4	31.8	2	1.7	43.6	0.63	0.94	250	Reel
7337M-1252050								50	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black synthetic rubber

Reinforcement: Multiple textile plies

Cover: Black synthetic rubber; smooth finish

Temp. Range: -30°F to +180°F (-34°C to +82°C)

Brand Method: Impression (2-sided)

Brand Example: Side 1: PARKER 7337M PREMIUM MINE
CONDUIT HOSE FLAME RESISTANT
USMSHA
Side 2: (ID) USMSHA

Industry Standards: MSHA

Applications:

- Conduit
- Underground mining equipment

Vacuum: Not recommended

BLUE THUNDER® UHMWPE Chemical Hose Series 7373T



[view on web page](#)

Series 7373T is a high pressure suction and discharge hose designed to handle the vast majority of commonly used acids, chemicals and solvents. The ultra high molecular weight polyethylene (UHMWPE) tube will not leach into and contaminate the product being conveyed, and features a temperature rating to 180°F (82°C). The corrugated hose construction incorporates a dual wire helix that provides full suction capability, kink resistance, flexibility for ease of handling, and a path to conduct a static electrical charge to ground. The cover is resistant to abrasion, mild chemicals and ozone.

NOTE: Refer to the Safety and Technical Information section of this catalog for safety, handling and use information. Refer to the Media Compatibility section to determine compatibility with specific chemicals. Contact Parker for additional chemical compatibility information.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7373T-750	3/4	19.1	2	1.2	30.3	0.40	0.60	3	76	200	14	43	100	Coil
7373T-1000	1	25.4	2	1.5	37.0	0.55	0.82	3	76	200	14	43	100	Coil
7373T-1250	1-1/4	31.8	2	1.7	43.2	0.64	0.95	4	102	200	14	43	100	Coil
7373T-1500	1-1/2	38.1	2	2.0	49.9	0.79	1.18	5	127	200	14	43	100	Coil
7373T-2000	2	50.8	2	2.6	65.0	1.27	1.89	6	152	200	14	43	100	Coil
7373T-2500	2-1/2	63.5	4	3.2	80.1	1.73	2.58	7	178	200	14	*	100	Coil
7373T-3000	3	76.2	4	3.6	92.6	2.12	3.16	7	178	200	14	*	100	Coil
7373T-4000	4	101.6	4	4.7	120.0	3.02	4.50	8	203	200	14	*	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Translucent ultra high molecular weight polyethylene (UHMWPE)

Reinforcement: Multiple textile plies with dual wire helix

Cover: Blue EPDM; corrugated wrapped finish

Temp. Range: -40°F to +180°F (-40°C to +82°C)

Brand Method: Yellow text on blue stripe

Brand Example: PARKER SERIES 7373T BLUE THUNDER®
UHMWPE TUBE MAX WP 200 PSI

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Acid, chemicals, solvents
- In-plant and storage tank transfer
- Delivery, transport

Vacuum: 29" Hg (737 mm Hg)

Compare to: Boston Chemcat; ContiTech Fabchem;
Gates Renegade

⚠️ WARNINGS!

- ▶ The data tables published in the Media Compatibility section of Catalog 4800 are based on tests and believed to be reliable—but the data should be used ONLY as a guide. The compatibility ratings for rubber/non-PVC materials apply to media at 70°F (21°C). However, chemicals may become increasingly aggressive as their temperatures progress above that level. Chemicals at elevated temperatures typically exceed the performance capability of a hose, even if that hose's general rating exceeds 70°F (21°C). Contact Parker for chemical compatibility data at elevated temperatures. If no data exists, it is the user's responsibility to determine hose/chemical/temperature compatibility. All critical applications should be tested.
- ▶ At operating temperatures of 125°F and above, only permanently attached couplings should be installed. At any operating temperature, couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- ▶ Do not use with internally expanded couplings. Refer to chemical hoses that incorporate a MXLPE tube.

WILDCATTER®

Green Corrugated Chemical Hose

Series SWC693



view on web page

Series SWC693 is an extremely flexible high pressure suction and discharge hose designed to handle the vast majority of commonly used acids, chemicals and solvents. The ultra high molecular weight polyethylene (UHM-WPE) tube will not leach into and contaminate the product being conveyed. The lightweight corrugated hose construction incorporates a dual wire helix that provides full suction capability, superior kink resistance, minimal force-to-bend and a path to conduct a static electrical charge to ground. The cover is resistant to abrasion, mild chemicals and ozone.

NOTE: Refer to the Safety and Technical Information section of this catalog for safety, handling and use information. Refer to the Media Compatibility section to determine compatibility with specific chemicals. Contact Parker for additional chemical compatibility information. Contact Parker for additional chemical compatibility information.

The Wildcatter trade name indicates the product is designed and manufactured for premium service in oilfield applications. However, Wildcatter products may be used in other industries, markets and applications where the product meets the required performance criteria.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
SWC693-1000	1	25.4	2	1.5	37	0.53	0.79	1.0	25	250	17	*	100	Coil
SWC693-1250	1-1/4	31.8	2	1.7	44	0.67	1.00	1.3	33	250	17	*	100	Coil
SWC693-1500	1-1/2	38.1	2	2.0	50	0.78	1.16	1.5	38	250	17	*	100	Coil
SWC693-2000	2	50.8	2	2.5	65	1.14	1.70	2.0	51	250	17	*	100	Coil
SWC693-3000	3	76.2	2	3.5	90	1.76	2.62	4.5	114	200	14	*	100	Coil
SWC693-4000	4	101.6	2	4.6	117	2.52	3.75	8.0	203	200	14	*	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Translucent ultra high molecular weight polyethylene (UHMWPE)

Reinforcement: Multiple textile plies with dual wire helix

Cover: Green EPDM; corrugated wrapped finish

Temp. Range: -40°F to +180°F (-40°C to +82°C)

Brand Method: Black text on yellow stripe

Brand Example: PARKER **WILDCATTER** SWC693 CHEMICAL HOSE UHMW TUBE MAX WP XXX PSI

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Acids, chemicals, solvents
- In-plant and tank transfer, delivery, transport

Vacuum: 29" Hg (737 mm Hg)

WARNINGS!

- ▶ The data tables published in the Media Compatibility section of Catalog 4800 are based on tests and believed to be reliable—but the data should be used ONLY as a guide. The compatibility ratings for rubber/non-PVC materials apply to media at 70°F (21°C). However, chemicals may become increasingly aggressive as their temperatures progress above that level. Chemicals at elevated temperatures typically exceed the performance capability of a hose, even if that hose's general rating exceeds 70°F (21°C). Contact Parker for chemical compatibility data at elevated temperatures. If no data exists, it is the user's responsibility to determine hose/chemical/temperature compatibility. All critical applications should be tested.
- ▶ At operating temperatures of 125°F and above, only permanently attached couplings should be installed. At any operating temperature, couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- ▶ Do not use with internally expanded couplings. Refer to chemical hoses that incorporate a MXLPE tube.

WILDCATTER®

High Pressure Chemical Hose

Series 7374



[view on web page](#)

Series 7374 is a high pressure, high temperature chemical suction and discharge hose designed for high pressure chemical blending functions on oilfield service equipment. The hose handles abrasive solutions and the vast majority of commonly used acids, chemicals and solvents to 180°F (82°C).

The hose construction incorporates a dual wire helix that provides full suction capability, kink resistance, flexibility for ease of handling and a path to conduct a static electrical charge to ground. The cover is resistant to abrasion, mild chemicals and ozone.

The Wildcatter trade name indicates the product is designed and manufactured for premium service in oilfield applications. However, Wildcatter products may be used in other industries, markets and applications where the product meets the required performance criteria.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7374-1000	1	25.4	4	1.6	40.1	0.68	1.01	4	102	600	41	*	100	Coil
7374-1250	1-1/4	31.8	4	1.8	46.9	0.83	1.24	5	127	400	28	*	100	Coil
7374-1500	1-1/2	38.1	4	2.1	53.1	1.00	1.49	6	152	400	28	*	100	Coil
7374-2000	2	50.8	4	2.7	68.1	1.48	2.21	8	203	400	28	*	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Translucent ultra high molecular weight polyethylene (UHMWPE)

Reinforcement: Multiple textile plies with dual wire helix

Cover: Black EPDM; wrapped finish

Temp. Range: -40°F to +180°F (-40°C to +82°C)

Brand Method: Yellow text on blue stripe

Brand Example: PARKER **WILDCATTER** 7374 HP CHEMICAL HOSE UHMW TUBE MAX WP XXX PSI

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Abrasive solutions, acids, chemicals, solvents
- OEM aftermarket/replacement
- Oilfield blender service equipment

Vacuum: 29" Hg (737 mm Hg)

WARNINGS!

- ▶ The data tables published in the Media Compatibility section of Catalog 4800 are based on tests and believed to be reliable—but the data should be used ONLY as a guide. The compatibility ratings for rubber/non-PVC materials apply to media at 70°F (21°C). However, chemicals may become increasingly aggressive as their temperatures progress above that level. Chemicals at elevated temperatures typically exceed the performance capability of a hose, even if that hose's general rating exceeds 70°F (21°C). Contact Parker for chemical compatibility data at elevated temperatures. If no data exists, it is the user's responsibility to determine hose/chemical/temperature compatibility. All critical applications should be tested.
- ▶ At operating temperatures of 125°F and above, only permanently attached couplings should be installed. At any operating temperature, couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- ▶ Do not use with internally expanded couplings. Refer to chemical hoses that incorporate a MXLPE tube.

Paint Fluid Hose

Series 7108



[view on web page](#)

Series 7108 is a medium pressure transfer hose designed to handle high aromatic content products such as ketone solvents, lacquers, paint thinners, oil-based and water-based paints and many common chemicals. The hose construction incorporates a nylon tube that will not leach into and contaminate the product being conveyed, and the robust aramid reinforcement provides kink resistance, strength and superior coupling retention. The cover is resistant to mild chemicals, oil and ozone.

- NOTES:**
- Refer to the Safety and Technical Information section of this catalog for safety, handling and use information. Refer to the Media Compatibility section to determine compatibility with specific chemicals. Contact Parker for additional chemical compatibility information.
 - Do not use in high pressure paint spray applications.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7108-251	1/4	6.4	2	0.5	12.4	0.09	0.13	3	76	500	35	HY, 43	500	Reel
7108-381	3/8	9.5	2	0.7	17.3	0.16	0.24	4	102	500	35	HY, 43	500	Reel
7108-501	1/2	12.7	2	0.9	22.2	0.25	0.37	5	127	750	52	HY, 43	500	Reel



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Translucent nylon

Reinforcement: Multiple aramid plies

Cover: Black chloroprene; smooth finish

Temp. Range: 0°F to +200°F (-18°C to +93°C)

Brand Method: White ink

Brand Example: PARKER SERIES 7108 PAINT FLUID HOSE
(ID) XXX PSI MAX WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Lacquers, light chemicals, paints, solvents, thinners
- Connector, mixing, transfer service

Vacuum: Not rated

Compare to: Boston Nyall; ContiTech NR Spray; Gates 77B

⚠ WARNINGS!

- It is the responsibility of the user to determine if the hose is suitable for the application. Most chemical resistance guides are based on temperatures of 70°F (21°C). Elevated temperatures can change the chemical resistance ratings. Many chemicals will become more aggressive as temperatures increase, reducing the ability of hose compounds to withstand them. Contact Parker for chemical compatibility data at elevated temperatures. If no data exists, users are required to perform compatibility testing at the desired temperature.
- Do not use in high pressure paint spray applications requiring a statically conductive hose.

WILDCATTER®

Blue Chemical Hose

Series SWC693B



[view on web page](#)

Series SWC693B is a high pressure, high temperature suction and discharge hose designed to transfer, transport and blend/mix the vast majority of commonly used acids, chemicals and solvents. The extremely flexible, lightweight and kink resistant corrugated design easily winds onto truck-mounted reels that service oilfield drilling sites. The hose construction incorporates a dual wire helix that provides full suction capability, superior kink resistance, minimal force-to-bend and a path to conduct a static electrical charge to ground. The distinctive blue cover is resistant to abrasion, mild chemicals and ozone.

The Wildcatter trade name indicates the product is designed and manufactured for premium service in oilfield applications. However, Wildcatter products may be used in other industries, markets and applications where the product meets the required performance criteria.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
SWC693B-1000	1	25.4	2	1.4	34.9	0.38	0.57	1	25	250	17	*	100	Coil
SWC693B-1250	1-1/4	31.8	2	1.6	41.3	0.48	0.72	1	33	250	17	*	100	Coil
SWC693B-1500	1-1/2	38.1	2	1.9	47.8	0.62	0.92	2	38	250	17	*	100	Coil
SWC693B-2000	2	50.8	2	2.4	61.9	0.93	1.39	2	51	250	17	*	100	Coil
SWC693B-3000	3	76.2	2	3.4	87.3	1.45	2.16	5	114	200	14	*	100	Coil
SWC693B-4000	4	101.6	2	4.5	114.3	2.17	3.23	8	203	200	14	*	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Translucent ultra high molecular weight polyethylene (UHMWPE)

Reinforcement: Multiple textile plies with dual wire helix

Cover: Blue EPDM; corrugated wrapped finish

Temp. Range: -40°F to +180°F (-40°C to +82°C)

Brand Method: Yellow text on blue stripe

Brand Example: PARKER **WILDCATTER** SWC693B CHEMICAL HOSE UHMW TUBE
MAX WP XXX PSI

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Acids; chemicals; DEF fill & suction/transfer; solvents
- In-plant and tank transfer delivery, transport
- General industrial, oilfield

Vacuum: 29" Hg (737 mm Hg)

⚠ WARNINGS!

- ▶ The data tables published in the Media Compatibility section of Catalog 4800 are based on tests and believed to be reliable—but the data should be used ONLY as a guide. The compatibility ratings for rubber/non-PVC materials apply to media at 70°F (21°C). However, chemicals may become increasingly aggressive as their temperatures progress above that level. Chemicals at elevated temperatures typically exceed the performance capability of a hose, even if that hose's general rating exceeds 70°F (21°C). Contact Parker for chemical compatibility data at elevated temperatures. If no data exists, it is the user's responsibility to determine hose/chemical/temperature compatibility. All critical applications should be tested.
- ▶ At operating temperatures of 125°F and above, only permanently attached couplings should be installed. At any operating temperature, couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- ▶ Do not use with internally expanded couplings. Refer to chemical hoses that incorporate a MXLPE tube.

E-Z FORM™ GS

General Service Hose

Series 7395



[view on web page](#)

Series 7395 hose construction incorporates a tube that is resistant to commonly used coolant mixtures, a wire helix that provides full suction/vacuum capability and a path to conduct a static electrical charge to ground, and a cover that is resistant to abrasion, mild chemicals, heat and ozone. The unique Greek cover corrugations are tightly pitched and precision-engineered, providing minimal force-to-bend, superior kink resistance, and extreme flexibility to allow for routing through confined spaces where formed hose is normally required.

NOTE: Do not drag across sharp edges or highly abrasive surfaces.

Tube: Peroxide cured EPDM for sizes up through 1",
Sulfur cured for sizes above 1"

Reinforcement: Multiple textile braids or plies with wire helix

Cover: Black EPDM; Greek corrugated finish

Temp. Range: -50°F to +257°F (-45°C to +125°C)

Brand Method: Black text on blue stripe

Brand Example: PARKER SERIES 7395 E-Z FORM™ GS
HOSE XXX PSI MAX WP

Design Factor: 4:1

Industry Standards: SAE J20R2-D1 performance
UL94 Flame Resistance Rating HB

Applications:

- Air, coolant, mild chemicals, water
- Coolant systems, drain lines, vacuum service
- SAE-performance in engine coolant service, general industrial

Vacuum: 29" Hg (737 mm Hg)

(Continued on the following page)

Series 7395 – E-Z FORM™ GS General Service Hose (Continued)

Crimp SpecificationsFor currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	Nom ID (in)	Nom ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7395-0375300	3/8	9.5	2	0.8	20.8	0.24	0.36	0.9	24.1	150	11	*	300	Reel
7395-0500025	1/2	12.7	2	0.9	22.9	0.27	0.40	0.9	24.1	150	5	HY	25	Carton
7395-0500300													300	Reel
7395-0625025	5/8	15.9	2	1.1	27.0	0.33	0.49	1.3	32.7	150	5	HY	25	Carton
7395-0625300													300	Reel
7395-0750025	3/4	19.1	2	1.2	30.0	0.35	0.52	1.4	36.3	150	5	HY/43	25	Carton
7395-0750300													300	Reel
7395-0875025	7/8	22.2	2	1.3	32.8	0.38	0.57	1.4	36.3	150	5	*	25	Carton
7395-0875300													300	Reel
7395-1000025	1	25.4	2	1.4	36.0	0.41	0.61	1.0	25.4	150	5	HY/43	25	Carton
7395-1000300													300	Reel
7395-1000300 RED	1	25.4	2	1.4	36.0	0.41	0.61	1.0	25.4	150	50	HY/43	300	Carton
7395-1125025	1-1/8	28.6	2	1.5	38.0	0.42	0.63	1.8	46.5	75	5	*	25	Carton
7395-1250025	1-1/4	31.8	2	1.7	43.0	0.50	0.75	2.2	56.7	75	5	HY/43	25	Carton
7395-1250130													130	Coil
7395-1375025	1-3/8	34.9	2	1.8	46.0	0.54	0.80	2.8	70.5	75	5	*	25	Carton
7395-1375130													130	Coil
7395-1500025	1-1/2	38.1	2	1.9	49.0	0.58	0.86	2.9	74.1	75	5	43	25	Carton
7395-1500130													130	Coil
7395-1625025	1-5/8	41.3	2	2.1	53.0	0.64	0.95	3.6	92.4	75	5	*	25	Carton
7395-1750025	1-3/4	44.5	2	2.2	56.0	0.68	1.01	4.0	101.0	75	5	*	25	Carton
7395-2000025	2	50.8	2	2.5	63.0	0.96	1.43	4.6	117.4	75	5	43	25	Carton
7395-2000130													130	Coil
7395-2250025	2-1/4	57.1	2	2.8	70.0	1.08	1.61	6.5	165.2	75	5	*	25	Carton
7395-2375025	2-3/8	60.3	2	2.9	73.0	1.11	1.65	6.9	174.3	75	5	*	25	Carton
7395-2500025	2-1/2	63.5	2	3.0	76.5	1.17	1.74	7.2	182.5	75	5	*	25	Carton
7395-2750025	2-3/4	69.9	2	3.3	84.0	1.40	2.09	8.1	206.9	75	5	*	25	Carton
7395-3000025	3	76.2	2	3.5	90.0	1.51	2.25	8.8	224.2	75	5	*	25	Carton
7395-3000130													130	Coil
7395-3500025	3-1/2	88.9	2	4.1	104.0	1.92	2.86	11.7	298.0	75	5	*	25	Carton
7395-3500130													130	Coil
7395-4000025	4	101.6	2	4.6	116.0	2.20	3.28	13.4	340.3	75	5	*	25	Carton

**WARNING:** The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.**WARNING!** Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

E-Z FORM™ EPDM-P Hose

Series 7390


[view on web page](#)

The 7390 hose is designed to handle extreme bends and kink-free performance, while providing full-flow capabilities. Additionally, 7390 hose features a highly engineered peroxide-cured EPDM tube, that is designed to ensure fluid purity, thermal resistance, and superior sealing capabilities within thermal management systems. Further enhancing its durability, the synthetic rubber cover is specially compounded for flame resistance.

#	Hose I.D.		Hose O.D.		Min Bend Rad		Max WP		Approx Wt		Vacuum Rating		Series Cplg Rec	Std Pack Qty (ft)	Pkg Type
Part Number	(in)	(mm)	(in)	(mm)	(in)	(mm)	(psi)	(psi)	(lbs/ft)	(kg/m)	(in HG)	(kPa)			
7390-1250100-BLYL	1.25	31.8	1.70	44.3	1.25	31.8	150	10.3	0.50	0.75	29	98	NA	100	Coils
7390-1500100-BLYL	1.50	38.1	1.90	50.5	1.50	38.1	150	10.3	0.58	0.86	29	98	NA	100	Coils
7390-2000100-BLYL	2.00	50.8	2.50	65.0	2.00	50.8	150	10.3	0.96	1.43	29	98	NA	100	Coils
7390-3000100-BLYL	3.00	76.2	3.50	90.5	3.00	76.2	150	10.3	1.51	2.25	29	98	NA	100	Coils
7390-1250100-RLYL	1.25	31.8	1.70	44.3	1.25	31.8	150	10.3	0.50	0.75	29	98	NA	100	Coils
7390-1500100-RLYL	1.50	38.1	1.90	50.5	1.50	38.1	150	10.3	0.58	0.86	29	98	NA	100	Coils
7390-2000100-RLYL	2.00	50.8	2.50	65.0	2.00	50.8	150	10.3	0.96	1.43	29	98	NA	100	Coils
7390-3000100-RLYL	3.00	76.2	3.50	90.5	3.00	76.2	150	10.3	1.51	2.25	29	98	NA	100	Coils

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black EPDM, peroxide cured

Reinforcement: Multiple textile braids or plies with wire helix

Cover: Black synthetic rubber; greek corrugated

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

Brand Method: Mylar Blue (-BLYL) or Red (-RLYL) for color coding

Brand Example: Parker Series 7390 E-Z Form EPDM-P Hose

Design Factor: 4:1

Industry Standards: UL94 V-0 flame resistance rating

Application: DI water and glycol based coolant solutions

Vacuum: Full

EPDM-P Suction & Discharge

Series 7391


[view on web page](#)

The 7391 hose features a highly engineered peroxide-cured EPDM tube to ensure premier fluid purity, thermal resistance and superior sealing capabilities within thermal management systems. Additionally, the 7391 hose will have a completely halogen-free construction and carry the UL94 V-0 flame rating.

#	Hose I.D.		Reinf Layers	Hose O.D.		Approx Wt		Minimum Bend Radius		Max WP		Perm Cplg Rec	Nom Std Pack Qty (ft)	Pkg Type
Part Number	(in)	(mm)		(in)	(mm)	(lbs/ft)	(kg/m)	(in)	(mm)	inch	mm			
7391-2000100	2.0	50.8	2	2.56	65.0	1.09	1.63	7	178	150	10.3	NA	100	Coils
7391-3000100	3.0	76.2	2	3.58	90.9	1.72	2.57	10	254	150	10.3	NA	100	Coils
7391-4000100	4.0	101.6	2	4.65	118.1	2.61	3.89	22	559	150	10.3	NA	100	Coils

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Peroxide cured EPDM

Reinforcement: Multiple textile plies with wire helix

Cover: Synthetic rubber; smooth wrapped cover

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

Brand Method: White text on blue stripe

Brand Example: Parker Series 7391 EPDM-P Hose

Design Factor: 4:1

Industry Standards: UL94 V-0 flame resistance rating

Application: DI water and glycol based coolant solutions

Vacuum: Full (28")

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

E-Z FORM™ MP

Multipurpose Oil Resistant Hose

Series 7219



[view on web page](#)

Series 7219 hose construction incorporates a tube that is resistant to oil and refined fuels, a wire helix that provides full suction/vacuum capability and a path to conduct a static electrical charge to ground, and a cover that is resistant to oil and weathering. The unique Greek corrugations are tightly pitched and precision-engineered, providing minimal force-to-bend, superior kink resistance, extreme flexibility and allow for routing through confined spaces where formed hose is normally required.

- NOTES:**
- Do not use in fuel dispensing or service applications requiring API, NFPA, UL, ULC or any other agency approval or listing.
 - Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.
 - Do not drag across sharp edges or highly abrasive surfaces.

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile plies with wire helix

Cover: Black chloroprene; Greek corrugated finish

Temp. Range: Sizes 1/2", 5/8", 3/4" and 1": -30°F to +250°F (-34°C to +121°C)
All other sizes: -30°F to +212°F (-34°C to +100°C)

Brand Method: Black text on red stripe

Brand Example: PARKER SERIES 7219 E-Z FORM™ MP
HOSE 75 PSI MAX WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Biodiesel (to B20 in dedicated and non-dedicated service), diesel, ethanol, gasoline, oil
- Oil suction/return lines; vehicle fuel fill connector lines; drain lines
- Buses, cranes, mobile off-road equipment

Vacuum: 29" Hg (737 mm Hg)

(Continued on the following page)

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Series 7219 – E-Z FORM™ MP Multipurpose Oil Resistant Hose (Continued)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	Nom ID (in)	Nom ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7219-0500025	1/2	12.7	2	0.9	22.9	0.30	0.45	0.9	24.1	150	5	HY	25	Carton
7219-0500300													300	Reel
7219-0625025	5/8	15.9	2	1.1	27.0	0.37	0.55	1.3	32.7	150	5	HY	25	Carton
7219-0625300													300	Reel
7219-0750025	3/4	19.1	2	1.2	30.0	0.39	0.58	1.4	36.3	150	5	HY/43	25	Carton
7219-0750300													300	Reel
7219-1000025	1	25.4	2	1.4	36.0	0.46	0.69	1.4	36.3	150	5	HY/43	25	Carton
7219-1000300													300	Reel
7219-1125025	1-1/8	28.6	2	1.5	38.0	0.42	0.63	1.8	46.5	75	5	*	25	Carton
7219-1250025	1-1/4	31.8	2	1.7	43.0	0.50	0.75	2.2	56.7	75	5	HY/43	25	Carton
7219-1250130													130	Coil
7219-1500025	1-1/2	38.1	2	1.9	49.0	0.58	0.86	2.9	74.1	75	5	43	25	Carton
7219-1500130													130	Coil
7219-1625025	1-5/8	41.3	2	2.1	53.0	0.64	0.95	3.6	92.4	75	5	*	25	Carton
7219-1750025	1-3/4	44.5	2	2.2	56.0	0.68	1.01	4.0	101.0	75	5	*	25	Carton
7219-2000025	2	50.8	2	2.5	63.0	0.96	1.43	4.6	117.4	75	5	43	25	Carton
7219-2000130													130	Coil
7219-2250025	2-1/4	57.2	2	2.8	70.0	1.08	1.61	6.5	165.2	75	5	*	25	Carton
7219-2500025	2-1/2	63.5	2	3.0	76.5	1.17	1.74	7.2	182.5	75	5	*	25	Carton
7219-2500130													130	Coil
7219-3000025	3	76.2	2	3.5	90.0	1.51	2.25	8.8	224.2	75	5	*	25	Carton
7219-3500025	3-1/2	88.9	2	4.1	104.0	1.92	2.86	11.7	298.0	75	5	*	25	Carton
7219-4000025	4	101.6	2	4.6	116.0	2.20	3.28	13.4	340.3	75	5	*	25	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

E-Z FORM™ HT

High Temperature Hose

Series 7399



[view on web page](#)

Series 7399 hose construction incorporates a high temperature and oil resistant tube, a wire helix that provides full suction/vacuum capability and a path to conduct a static electrical charge to ground, and a cover that is resistant to high temperatures, oil and weathering. The unique Greek corrugations are tightly pitched and precision-engineered, providing minimal force-to-bend, superior kink resistance, extreme flexibility and allow for routing through confined spaces where formed hose is normally required.

NOTE: Do not drag across sharp edges or highly abrasive surfaces.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7399-0500025	1/2	12.7	2	0.9	22.9	0.29	0.43	0.9	24.1	150	10	*	25	Carton
7399-0500300													300	Reel
7399-0625025	5/8	15.9	2	1.1	27.0	0.36	0.54	1.3	32.7	150	10	HY	25	Carton
7399-0625300													300	Reel
7399-0750025	3/4	19.1	2	1.2	30.0	0.38	0.57	1.4	36.3	150	10	HY	25	Carton
7399-0750300													300	Reel
7399-0875025	7/8	22.2	2	1.3	32.8	0.41	0.61	1.4	36.3	150	10	*	25	Carton
7399-0875300													300	Reel
7399-1000025	1	25.4	2	1.4	36.0	0.44	0.66	1.4	36.3	150	10	HY	25	Carton
7399-1000300													300	Reel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black CPE

Reinforcement: Multiple textile braids with wire helix

Cover: Black hydrogenated nitrile; Greek corrugated finish

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

Brand Method: Black text on yellow stripe

Brand Example: PARKER SERIES 7399 E-Z FORM™ HT

HOSE (ID) 150 PSI MAX WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Oil suction/return lines; non-SAE power steering return lines
- Drain lines
- Buses, cranes, trucks, mobile/heavy-duty off-road equipment

Vacuum: 29" Hg (737 mm Hg)

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

SUPER-FLEX® FL-7 Barrier Fuel Line Hose Series 389



[view on web page](#)

Series 389 hose incorporates a THV barrier to resist permeation, multiple aramid plies of reinforcement for coupling retention, durability and kink resistance. The cover is resistant to abrasion, oil and weathering. The hose is flexible for easy routing around small engines and compartments. Series 389 surpasses all of the current California Air Resource Board (CARB)/Small Off-Road Engine (SORE) and Environmental Protection Agency (EPA) stringent permeation requirements of 15g/m²/day. It also meets or exceeds SAE J30R7 and SAE J30R14T2 specifications.

NOTES: • Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.
• Do not use in marine fuel applications. Refer to Series 7165.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
38903	3/16	4.8	2	0.4	10.3	0.06	0.09	1	33	100	7	*	250	Reel
38904	1/4	6.4	2	0.5	12.7	0.09	0.13	2	38	100	7	HY	250	Reel
38905	5/16	7.9	2	0.6	14.3	0.11	0.16	2	51	100	7	HY	250	Reel
38906	3/8	9.8	2	0.6	15.8	0.12	0.18	3	64	100	7	HY	250	Reel
38908	1/2	12.7	2	0.8	19.8	0.18	0.27	4	102	100	7	HY	250	Reel
38910	5/8	15.9	2	0.9	23.9	0.24	0.36	5	127	100	7	*	250	Reel



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile and translucent THV barrier

Reinforcement: Multiple aramid plies

Cover: Black CPE, smooth finish

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

Brand Method: White ink

Brand Example: PARKER SERIES 389 SUPER-FLEX® FL-7
(ID) SAE J30R7/R14T2 FUEL LINE (x)
PKHPLINE 389 EPA COMPLIANT 15 g/m²/
day CARB Q-08-013 MAX WP 100 PSI

NOTE: (x) changes every year

Design Factor: 5:1

Industry Standards: CARB 2020 SORE, EPA, SAE J30R7,
SAE J30R14T2

Applications:

- Low pressure fuel lines on blowers, grinders, mowers, off-road engines, pressure washers, saws
- Biodiesel (to B20 in dedicated and non-dedicated service), diesel, ethanol, gasoline
- Agricultural equipment, autos, buses, construction equipment, off-road equipment

Vacuum: 3/16" ID through 3/8" ID @ 24" Hg (609 mm Hg); 1/2" ID through 3/4" ID @ 10" Hg (254 mm Hg)

Compare to: Avon Greenbar 700, Gates 4219B



WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

SUPER-FLEX® FL Barrier Fuel Line Hose Series 397



[view on web page](#)

Series 397 incorporates a barrier to resist permeation and the cover is resistant to abrasion, oil and weathering. The hose is flexible for easy routing around small engines and compartments. Series 397 surpasses requirements of 15g/m²/day, and provides SAE J30R7/30R14T2 performance.

NOTES:

- Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.
- Do not use in marine fuel applications. Refer to Series 7165.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
39703	3/16	4.7	1	0.4	11.1	0.06	0.09	1	33	100	7	*	250	Reel
39704	1/4	6.4	1	0.5	12.7	0.09	0.13	2	38	100	7	HY	250	Reel
39705	5/16	7.9	1	0.6	14.2	0.11	0.16	2	51	100	7	HY	250	Reel
39706	3/8	9.5	1	0.7	16.7	0.12	0.18	3	64	100	7	HY	250	Reel
39708	1/2	12.7	1	0.8	21.0	0.18	0.27	4	102	100	7	HY	250	Reel
39710	5/8	15.9	2	0.9	23.9	0.23	0.34	5	127	35	2	*	250	Reel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile and translucent thermoplastic barrier

Reinforcement: One textile braid or multiple textile plies

Cover: Black CPE, smooth finish

Temp. Range: -30°F to +257°F (-34°C to +125°C)

Brand Method: White ink

Brand Example: PARKER SERIES 397 (P/N) SUPER-FLEX®
FL (ID) LOW PERMEATION FUEL LINE (x)
PKHPLINE 397 EPA COMPLIANT EPA
COMPLIANT 15 g/m²/day C-U-06-010 MAX
WP 100 PSI

NOTE: (x) changes every year

Design Factor: 5:1

Industry Standards: EPA, SAE J30R7/J30R14T2
(Performance)

Applications:

- Low pressure fuel lines on blowers, grinders, mowers, off-road engines, pressure washers, saws
- Biodiesel (to B100 in dedicated and non-dedicated service), diesel, ethanol, gasoline
- Agricultural equipment, autos, buses, construction equipment, off-road equipment

Vacuum: 3/16" ID through 3/8" ID @ 24" Hg (609 mm Hg);
1/2" ID through 3/4" ID @ 10" Hg (254 mm Hg)

Compare to: Avon Greenbar, Mark IV PermaSeal

Fittings: Over B20 biodiesel fuel, recommend using stainless or nylon fittings.

See Material Compatibility Chart

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Fuel Line/Vapor Emission Hose

Series 395



[view on web page](#)

Series 395 hose is flexible for easy routing in and around small engines and small engine compartments, and the cover is resistant to abrasion, oil and weathering.

NOTES: • Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.
• Do not use in marine fuel applications. Refer to Series 7165.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
39553	3/16	4.8	2	0.4	10.3	0.07	0.10	2	51	75	5	*	250	Carton
39550	1/4	6.4	2	0.5	12.7	0.10	0.15	2	51	50	3	HY	250	Carton
39551	5/16	7.9	2	0.6	14.3	0.11	0.16	3	76	50	3	*	250	Carton
39552	3/8	9.5	2	0.6	15.9	0.14	0.21	4	89	50	3	HY	250	Carton
39554	1/2	12.7	2	0.8	19.8	0.17	0.25	4	102	35	2	HY	250	Reel



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile plies

Cover: Black chloroprene; smooth finish

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

Brand Method: White ink

Brand Example: (ID) FUEL/VAPOR LINE SAE 30R7

Design Factor: 5:1

Industry Standards: SAE J30R7

Applications:

- Low pressure fuel lines, vapor emission service
- Biodiesel (to B20 in dedicated and non-dedicated service), diesel, ethanol, gasoline
- Agricultural equipment, autos, buses, construction equipment, off-road equipment

Vacuum: 24" Hg (3/16" ID through 3/8" ID); 10" Hg (1/2" ID)

Compare to: Thermoid Fueling, Vapor Emission and Crankcase Ventilation SAE 30R7



WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Heater Hose

Series 7181



[view on web page](#)

Series 7181 hose construction designed to SAEJ20R3 D-2 provides electrochemical resistance (ECR) to inhibit striations and rusting of hose-to-metal interfaces, and high temperature performance. The hose is resistant to abrasion, mild chemicals and weathering.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7181-251	1/4	6.4	2	0.5	13.4	0.10	0.15	3	64	65	5	*	700	Reel
7181-311	5/16	8.0	2	0.6	15.0	0.13	0.27	5	127	65	5	*	700	Reel
7181-381	3/8	9.5	2	0.7	17.5	0.16	0.24	5	127	65	5	*	600	Reel
7181-501	1/2	12.7	2	0.8	20.7	0.19	0.28	6	152	65	5	*	500	Reel
7181-631	5/8	15.9	2	0.9	23.9	0.23	0.34	8	203	65	5	HY	500	Reel
7181-631050	5/8	15.9	2	0.9	23.9	0.23	0.37	8	203	65	5	HY	5 x 50	Carton
7181-751	3/4	19.1	2	1.1	27.1	0.27	0.40	9	229	50	3	*	500	Reel
7181-1001	1	25.4	2	1.3	34.0	0.37	0.55	12	305	45	3	*	300	Reel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black EPDM

Reinforcement: Multiple textile plies

Cover: Black EPDM; smooth finish

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

Brand Method: White ink

Brand Example: PARKER SERIES 7181 HEATER HOSE
SAE 20R3EC D-2 (ID) XX PSI MAX WP
ELECTROCHEMICALLY RESISTANT

Design Factor: 4:1

Industry Standards: SAE J20R3EC Class D2

Applications:

- Coolant, hot water, mild chemicals
- Industrial and vehicle coolant systems; low pressure drain lines
- Agriculture, construction, general industrial, transportation

Vacuum: 1/4" ID through 1/2" ID @ 10" Hg (254 mm Hg);
5/8" ID @ 8" Hg (203 mm Hg);
3/4" ID @ 7" Hg (179 mm Hg);
1" ID @ 6" Hg (152 mm Hg)

Compare to: ContiTech OEM; Gates Green Stripe

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Heater Hose

Series 7186


[view on web page](#)

Series 7186 is a flexible, lightweight coolant/heater/water hose for standard duty service. The EPDM construction is resistant to abrasion, mild chemicals and weathering.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7186-501	1/2	12.7	2	0.8	19.8	0.17	0.25	6	152	125	9	*	500	Reel
7186-501050													5 x 50	Carton
7186-631	5/8	15.9	2	0.9	23.0	0.20	0.30	8	203	90	6	*	500	Reel
7186-631050													5 x 50	Carton
7186-751	3/4	19.1	2	1.0	26.2	0.24	0.36	9	229	70	5	*	500	Reel
7186-751050													5 x 50	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black EPDM

Reinforcement: Multiple textile plies

Cover: Black EPDM; smooth finish

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

Brand Method: White ink

Brand Example: PARKER SERIES 7186 HEATER HOSE (ID)

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Coolant, hot water, mild chemicals
- Industrial and vehicle coolant systems; low pressure drain line
- Agriculture, construction, general industrial, transportation

Vacuum: 1/2" ID @ 10" Hg (254 mm Hg);
5/8" ID @ 8" Hg (203 mm Hg);
3/4" ID @ 7" Hg (179 mm Hg)

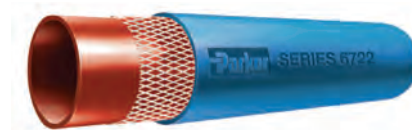
Compare to: Thermoid Black Standard Heater



WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Silicone Heater Hose / Standard Wall

Series 6722



[view on web page](#)

Series 6722 silicone heater hose meets or exceeds SAE J20R3 Class A requirements. The multiple plies of textile reinforcement and extruded construction provide long and flexible lengths that resist coolant solutions, aging, cold leaks, cracking, delamination, ozone and peeling.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	⊙	⊙	⊙	⚖	↩	⌚	⏏						
Part Number	Size (in)	ID (in)	ID (mm)	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Min Burst Press (psi)	Min Burst Press (bar)	Nom Std Pack Qty (ft)	Pkg Type
6722-0250050	1/4	0.250	6.4	0.5	13.4	0.10	0.15	1	13	250	17	50	Carton
6722-0250250												250	Reel
6722-0313100	5/16	0.313	8.0	0.6	15.0	0.12	0.18	1	18	250	17	100	Reel
6722-0375050	3/8	0.375	9.5	0.7	17.5	0.13	0.19	1	19	250	17	50	Carton
6722-0375250												250	Reel
6722-0500050	1/2	0.500	12.7	0.8	20.7	0.17	0.25	2	38	250	17	50	Carton
6722-0500250												250	Reel
6722-0625050	5/8	0.625	15.9	0.9	23.9	0.24	0.36	2	45	250	17	50	Carton
6722-0625100												100	Reel
6722-0625250												250	Reel
6722-0750050	3/4	0.750	19.1	1.1	27.1	0.26	0.39	3	70	200	14	50	Carton
6722-0750100												100	Reel
6722-1000050	1	1.000	25.4	1.3	34.0	0.34	0.51	5	127	175	12	50	Carton
6722-1000100												100	Reel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Brick red silicone

Reinforcement: Multiple high temperature textile plies

Cover: Blue silicone, glossy finish

Temp. Range: -65°F to +347°F (-53°C to +175°C)

Brand Method: Impression

Brand Example: PARKER SILICONE SERIES 6722 (ID) -65°F TO +350°F

Max. Rec. WP: 1/3 of minimum burst pressure shown in table below

Industry Standards: SAE J20R3 Class A

Applications:

- Automobiles, buses, mobile/off-road equipment, trucks
- Other equipment or vehicles with heating lines

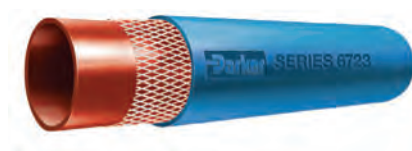
Vacuum: 1/4" ID through 1/2" ID @ 10" Hg (33.8 kPa);
5/8" ID @ 8" Hg (27.0 kPa);
3/4" ID @ 7" Hg (23.6 kPa);
1" ID @ 6" Hg (20.3 kPa)

Compare to: Federal 5526; Flexfab Blue 5526; Purosil 80

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Silicone Heater Hose / Heavy Wall

Series 6723



[view on web page](#)

Series 6723 thick wall silicone heater hose meets or exceeds SAE J20R3 Class A requirements. The multiple plies of textile reinforcement and extruded construction provide long and flexible lengths that resist coolant solutions, aging, cold leaks, cracking, delamination, ozone and peeling.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	Size (in)	ID (in)	ID (mm)	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Min Burst Press (psi)	Min Burst Press (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
6723-0375250	3/8	0.375	9.5	0.8	19.4	0.15	0.22	1	16	250	17	HY	250	Reel
6723-0625050	5/8	0.625	15.9	1.0	25.8	0.27	0.40	2	38	250	17	HY	50	Carton
6723-0750100	3/4	0.750	19.1	1.1	29.0	0.29	0.43	2	60	200	14	HY	100	Reel
6723-1000050	1	1.000	25.4	1.4	35.3	0.39	0.58	4	102	175	12	HY	50	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Brick red silicone

Reinforcement: Multiple high temperature textile plies

Cover: Blue silicone, glossy finish

Temp. Range: -65°F to +350°F (-53°C to +176°C)

Brand Method: Impression

Brand Example: PARKER SILICONE SERIES 6723 (ID) -65°F TO +350°

Max. Rec. WP: 1/3 of minimum burst pressure shown in table below

Industry Standards: SAE J20R3 Class A

Applications:

- Automobiles, buses, mobile/off-road equipment, trucks
- Other equipment or vehicles with heating lines

Vacuum: 3/8" ID @ 10" Hg (33.8 kPa);
5/8" ID @ 8" Hg (27.0 kPa);
3/4" ID @ 7" Hg (23.6 kPa);
1" ID @ 6" Hg (20.3 kPa)

Compare to: Flexfab Green 5521



WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Silicone Heater Hose

Series 6724


[view on web page](#)

Series 6724 silicone high temperature heater hose meets or exceeds SAE J20R3 Class A requirements. The multiple plies of textile reinforcement and extruded construction provide long and flexible lengths that resist coolant solutions, aging, cold leaks, cracking, delamination, ozone and peeling.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#													
Part Number	Size (in)	ID (in)	ID (mm)	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Min Burst Press (psi)	Min Burst Press (bar)	Nom Std Pack Qty (ft)	Pkg Type
6724-0250250	1/4	0.250	6.4	0.5	13.4	0.10	0.15	1	13	250	17	250	Reel
6724-0375250	3/8	0.375	9.5	0.7	17.5	0.13	0.19	1	19	250	17	250	Reel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Brick red silicone

Reinforcement: Multiple high temperature textile plies

Cover: Blue silicone, glossy finish

Temp. Range: -65°F to +500°F (-53°C to +260°C)

Brand Method: Impression

Brand Example: PARKER SILICONE SERIES 6724 -65°F TO +500°F

Max. Rec. WP: 1/3 of minimum burst pressure shown in table below

Industry Standards: SAE J20R3 Class A

Applications:

- Automobiles, buses, mobile/off-road equipment, trucks
- Other equipment or vehicles with heating lines

Vacuum: 1/4" ID through 3/8" ID @ 10" Hg (33.8 kPa)

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Silicone Coolant Hose / 3-Ply

Series 6750



[view on web page](#)

Series 6750 silicone construction meets or exceeds SAE J20R1 Class A requirements. This hose resists coolant solutions, aging, cold leaks, cracking, delamination, ozone and peeling. Series 6750 is manufactured on twelve-foot mandrels for tight dimensional tolerances and is offered in standard 3-foot lengths.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

# Part Number	Size (in)	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ea)	Approx Wt (kg/ea)	Min Burst Press (psi)	Min Burst Press (bar)	Std Pack Qty (ea)	Pkg Type
6750-0750003	3/4	0.750	19.1	3	1.1	27.9	2.73	4.07	325	22	4 x 3-ft	Carton
6750-0875003	7/8	0.875	22.2	3	1.2	31.0	3.00	4.47	325	22	4 x 3-ft	Carton
6750-1000003	1	1.000	25.4	3	1.4	34.3	3.24	4.83	299	21	4 x 3-ft	Carton
6750-1125003	1-1/8	1.125	28.6	3	1.5	37.3	3.60	5.36	299	21	4 x 3-ft	Carton
6750-1250003	1-1/4	1.250	31.8	3	1.6	40.6	3.84	5.72	276	19	4 x 3-ft	Carton
6750-1500003	1-1/2	1.500	38.1	3	1.9	47.0	4.47	6.66	249	17	4 x 3-ft	Carton
6750-1625003	1-5/8	1.625	41.3	3	2.0	50.0	4.74	7.06	249	18	2 x 3-ft	Carton
6750-1750003	1-3/4	1.750	44.5	3	2.1	53.3	5.10	7.60	225	16	2 x 3-ft	Carton
6750-2000003	2	2.000	50.8	3	2.4	59.7	5.73	8.54	200	14	2 x 3-ft	Carton
6750-2375003	2-3/8	2.375	60.3	3	2.7	69.1	7.00	10.43	175	12	1 x 3-ft	Carton
6750-2500003	2-1/2	2.500	63.5	3	2.9	72.4	7.20	10.73	149	10	1 x 3-ft	Carton
6750-3000003	3	3.000	76.2	3	3.4	85.1	9.00	13.41	87	6	1 x 3-ft	Carton
6750-3500003	3-1/2	3.500	88.9	3	3.9	97.8	9.96	14.84	75	5	1 x 3-ft	Carton
6750-4000003	4	4.000	101.6	3	4.4	110.5	11.10	16.54	49	4	1 x 3-ft	Carton
6750-5000003	5	5.000	127.0	3	5.4	135.9	14.34	21.37	49	4	1 x 3-ft	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Brick red silicone

Reinforcement: Multiple high temperature textile plies

Cover: Blue silicone, matte finish

Temp. Range: -65°F to +350°F (-53°C to +176°C)

Brand Method: Black ink

Brand Example: PARKER SILICONE SERIES 6750 (ID)
-65°F TO +350°F

Max. Rec. WP: 1/3 of minimum burst pressure shown in table below

Industry Standards: SAE J20R1 Class A

Applications:

- Automobiles, buses, mobile/off-road equipment, trucks
- Other equipment or vehicles with heating lines

Vacuum: 3/4" ID @ 8" Hg (27.0 kPa);

7/8" through 1" ID @ 7" Hg (23.6 kPa);

1-1/8" ID @ 6" Hg (20.3 kPa);

1-1/4" ID @ 5" Hg (16.9 kPa);

1-1/2" ID @ 3" Hg (10.1 kPa);

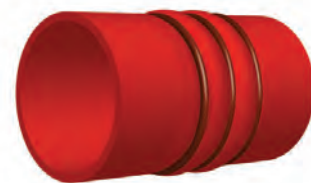
1-5/8" ID @ 2" Hg (6.8 kPa);

1-3/4" ID @ 1" Hg (3.4 kPa);

2" ID through 5" ID is not recommended

Compare to: Federal 5515; Flexfab Blue 5515; Flexfab Green 5500; Purosil 7030

Silicone Charge Air Cooler Hose / 4-Ply Hot Side Series 6823



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Series 6823 is a 4-ply silicone Charge Air Cooler (CAC) hose designed to connect and align segments of the air charge system of a heavy duty engine. The air charge system manages the flow of the cool/hot air between the turbocharger and the engine; the hot side CAC hose transfers hot air from the engine and also helps stabilize the system by compensating for vibrations. Series 6823 features a maximum temperature to +500°F (+260°C), while the red color is used for color-coding the hot side of the system.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	Size (in)	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ea)	Approx Wt (kg/ea)	Min Bend Rad (in)	Min Bend Rad (mm)	Min Burst Press (psi)	Min Burst Press (bar)	Std Pack Qty (ea)	Pkg Type
6823-30006000	3	3.00	76.2	4	3.2	81.8	0.37	0.55	n/a	n/a	80	6	6 x 6-in	Carton
6823-35006000	3-1/2	3.50	88.9	4	3.7	94.5	0.43	0.64	n/a	n/a	80	6	6 x 6-in	Carton
6823-40006000	4	4.00	101.6	4	4.22	107.2	0.55	0.82	n/a	n/a	80	6	6 x 6-in	Carton
6823-40008000	4	4.00	101.6	4	4.2	107.2	0.74	1.10	n/a	n/a	80	5.5	6 x 8-in	Carton

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Brick red silicone

Reinforcement: Multiple high temperature aramid plies with external stainless steel retaining rings

Cover: Brick red silicone, matte finish

Temp. Range: -65°F to +500°F (-53°C to +260°C)

Brand Method: Black ink

Brand Example: PARKER SERIES 6823

Max. Rec. WP: 1/3 of minimum burst pressure shown in table below

Industry Standards: None applicable

Applications:

- Hot air connection between engine charge air system components
- Automobiles, buses, mobile/off-road equipment, trucks
- Other equipment or vehicles with heating lines

Vacuum: Not recommended

Compare to: Purosil 367

Silicone Coolant / Heater Hose

Series 6621



[view on web page](#)

Series 6621 hose construction meets SAE J20R2 Class A performance criteria and incorporates multiple plies of textile reinforcement for durability, a helical wire for limited suction capability and collapse/kink resistance, and resists coolant solutions, aging, cold leaks, cracking, delamination, ozone and peeling. The unique Greek corrugations are precision engineered, providing extreme flexibility and kink resistance for applications that require tight bends for routing through confined spaces where formed hoses might normally be required. Series 6621 is manufactured on 130-foot mandrels—providing the longest and most flexible continuous hose lengths in the industry—for tight dimensional tolerances and maximum inventory utilization.

NOTE: Do not drag across sharp edges or highly abrasive services.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	Size (in)	ID (in)	ID (mm)	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Min Burst Press (psi)	Min Burst Press (bar)	Nom Std Pack Qty (ft)	Pkg Type
6621-1000025	1	0.984	25.0	14	35.0	0.30	0.52	2	50	225	16	25	Carton
6621-1250025	1-1/4	1.260	32.0	1.7	43.0	0.40	0.60	3	80	225	16	25	Carton
6621-2000025	2	2.008	51.0	2.5	64.0	0.88	1.31	6	150	225	16	25	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black silicone (other colors available; contact Parker)

Reinforcement: Multiple high temperature textile plies with wire helix

Cover: Red Greek corrugated silicone, matte finish (other colors available; contact Parker)

Temp. Range: -76°F to +392°F (-60°C to +200°C)

Brand Method: Black text on yellow stripe

Brand Example: PARKER SILICONE SERIES 6621 -76°F to +392°F

Max. Rec. WP: 1/3 of minimum burst pressure shown in table below

Industry Standards: SAE J20R2 Class A and TMC RP303B performance; ISO 1307-1997 dimensional tolerance

Applications:

- Coolant transfer in heater and coolant circuits
- Automobiles, buses, mobile/off-road equipment, trucks

Vacuum: 18" hg (457 mm Hg)

SOFT-FLEX™ DEF Dispenser Hose Series 7116M



[view on web page](#)

Series 7116M hose construction incorporates a specially formulated EPDM tube and multiple plies of textile reinforcement for flexibility and kink resistance. The EPDM cover is resistant to abrasion, mild chemicals and ozone.

- NOTES:**
- To avoid DEF contamination, use only hose designed for the application, and stainless steel couplings to fabricate hose assemblies.
 - Do not use for oil or fuel service.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7116M-380	3/8	9.5	2	0.7	16.7	0.13	0.19	4	97	150	10	*	700	Reel
7116M-500	1/2	12.7	4	0.9	22.7	0.24	0.36	5	127	150	10	*	550	Reel
7116M-750	3/4	19.1	4	1.2	29.4	0.34	0.51	6	152	150	10	*	400	Reel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black EPDM, peroxide cured

Reinforcement: Multiple textile plies

Cover: Black EPDM; smooth finish

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

Brand Method: White ink

Brand Example: PARKER SERIES 7116M DEF SOFT-FLEX™
(ID) MAX WP 150 PSI

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- DEF fluids, urea
- Dispensing for buses, trucks, mobile equipment
- Agriculture, construction, transportation

Vacuum: Not recommended

Compare to: ContiTech DEF Dispensing Hose; Flextral PE60

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

ARMADA®

Marine Multipurpose, Fuel Fill / Vent and Hardwall Wet Exhaust Hose

Series SW569



[view on web page](#)

Series SW569 is an extremely versatile suction and discharge hose for diverse applications such as bilge pump intake, discharge and ventilation; cabin heating; coolant and radiator service; oil and fuel systems using biodiesel (to B100 in dedicated service), ethanol, and gasoline; lubrication systems; wet exhaust systems; nonpotable water systems; and toilet and bath connections. Series SW569 incorporates a dual wire helix that provides full suction capability, flexibility and kink resistance, and the cover is resistant to oil and ozone. The hose is available in multiple incremental sizes for connection to various sizes of pipe used in the marine industry.

NOTES:

- Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.
- Do not use in applications requiring low-permeation fuel feed hose (SAE J1527 A1-15).

Tube: Black nitrile

Reinforcement: Multiple textile plies with dual wire helix

Cover: Black chloroprene; wrapped finish

Temp. Range: -20°F to +212°F (-29°C to +100°C)

Brand Method: Black text on yellow stripe

Brand Example: PARKER SERIES SW569 ARMADA (ID)
MARINE FUEL/WET EXHAUST HOSE XX PSI
WP

Design Factor: 4:1

Industry Standards: ABYC H-24; NMMA; SAE J1527 A1 and
A2 Style R2; SAE J1942 Codes F, VW,
NVW; SAE J2006 R2; SAE J20R2 B; SAE
J20R4 B; SAE J20R5 B; SAE J30R5; ISO
7840:2004 A2; ISO 8469 B1; USCG

Applications:

- Biodiesel (to B100 in dedicated service), diesel, ethanol, gasoline, oil
- Hot exhaust fumes, nonpotable water
- Marine coolant and fuel/vent systems, wet exhaust

Vacuum: 29" Hg (737 mm Hg)

Compare to: Thermoid 7910 Bellowsflex A

(Continued on the following page)

⚠ WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Series SW569 – ARMADA® Marine Multipurpose, Fuel Fill / Vent and Hardwall Wet Exhaust Hose (Continued)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
SW569-500	1/2	12.7	2	0.9	22.6	0.29	0.43	2	38	75	5	*	50	Coil
SW569-625	5/8	15.9	2	1.0	26.4	0.37	0.55	2	38	75	5	*	50	Coil
SW569-750	3/4	19.1	2	1.2	29.4	0.42	0.63	2	38	75	5	*	50	Coil
SW569-1000	1	25.4	2	1.4	35.8	0.53	0.79	2	51	75	5	*	50	Coil
SW569-1125	1-1/8	28.6	2	1.6	39.6	0.62	0.92	3	64	75	5	*	50	Coil
SW569-1250	1-1/4	31.8	2	1.7	42.2	0.64	0.95	3	64	75	5	*	50	Coil
SW569-1500	1-1/2	38.1	2	1.9	48.4	0.78	1.16	3	76	50	3	*	50	Coil
SW569-1625	1-5/8	41.3	2	2.0	51.9	0.87	1.30	4	89	50	3	*	50	Coil
SW569-1750	1-3/4	44.5	2	2.2	55.4	0.96	1.43	4	89	50	3	*	50	Coil
SW569-1875	1-7/8	47.6	2	2.4	59.8	1.14	1.70	4	102	50	3	*	50	Coil
SW569-2000	2	50.8	2	2.5	63.0	1.18	1.76	5	114	50	3	*	50	Coil
SW569-2250	2-1/4	57.2	2	2.7	67.6	1.33	1.98	5	114	50	3	*	50	Coil
SW569-2375	2-3/8	60.3	2	2.8	71.9	1.40	2.09	6	152	50	3	*	50	Coil
SW569-2500	2-1/2	63.5	2	2.9	73.3	1.41	2.10	7	178	50	3	*	50	Coil
SW569-3000	3	76.2	2	3.5	87.8	1.74	2.59	9	229	40	3	*	50	Coil
SW569-3500	3-1/2	88.9	2	4.0	101.2	2.13	3.17	10	254	40	3	*	50	Coil
SW569-4000	4	101.6	2	4.5	114.4	2.50	3.73	12	305	40	3	*	25	Coil



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Marine Softwall Wet Exhaust Hose

Series SS269



[view on web page](#)

Series SS269 hose is easier to install and absorbs more vibration than rigid pipe or tubing. The cover is resistant to oil and ozone, and is available in multiple incremental sizes for connection to various sizes of pipe used in the marine industry.

NOTE: Do not use with refined oil or fuel, or in suction applications.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#												
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
SS269-1000	1	25.4	2	1.4	36.6	0.45	0.20	200	14	*	50	Coil
SS269-1250	1-1/4	31.8	2	1.8	45.4	0.71	0.32	200	14	*	50	Coil
SS269-1500	1-1/2	38.1	2	2.0	51.7	0.81	0.37	200	14	*	50	Coil
SS269-1625	1-5/8	41.3	2	2.2	55.6	0.90	0.41	200	14	*	50	Coil
SS269-1750	1-3/4	44.5	2	2.3	58.0	0.91	0.41	200	14	*	50	Coil
SS269-1875	1-7/8	47.6	2	2.4	61.2	0.96	0.44	200	14	*	50	Coil
SS269-2000	2	50.8	4	2.6	65.2	1.11	0.50	200	14	*	50	Coil
SS269-2250	2-1/4	57.2	4	2.8	71.6	1.24	0.56	200	14	*	25	Coil
SS269-2375	2-3/8	60.3	4	3.0	75.3	1.33	0.60	200	14	*	25	Coil
SS269-2625	2-5/8	66.7	4	3.2	81.3	1.43	0.65	200	14	*	25	Coil
SS269-2750	2-3/4	69.9	4	3.3	84.0	1.45	0.66	200	14	*	25	Coil
SS269-2875	2-7/8	66.7	4	3.4	87.0	1.46	0.66	200	14	*	25	Coil
SS269-3000	3	76.2	4	3.7	93.0	1.83	0.83	200	14	*	25	Coil
SS269-3500	3-1/2	88.9	4	4.1	105.3	2.08	0.94	200	14	*	25	Coil
SS269-4000	4	101.6	4	4.6	117.6	2.32	1.05	200	14	*	25	Coil
SS269-4500	4-1/2	114.3	4	5.1	130.7	2.55	1.16	200	14	*	25	Coil
SS269-5000	5	127.0	6	5.9	148.6	3.69	1.68	200	14	*	25	Coil
SS269-5562	5-9/16	141.3	6	6.4	162.8	4.09	1.86	200	14	*	25	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile plies

Cover: Black nitrile; wrapped finish

Temp. Range: -40°F to +200°F (-40°C to +93°C)

Brand Method: Black text on blue stripe

Brand Example: PARKER SERIES SS269 (ID) SOFTWALL
MARINE WET EXHAUST HOSE XXX PSI
WP U.S.C.G. TYPE SAE J2006R1 MEETS
STANDARDS FOR ABYC

Design Factor: 4:1

Industry Standards: ABYC; USCG; SAE J2006R1

Applications:

- Hot exhaust fumes; oil, nonpotable water
- Marine coolant systems, wet exhaust

Vacuum: Not recommended

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

WAVEMASTER™ Marine Barrier Fuel Line / Vent Hose Series 7165



[view on web page](#)

Series 7165 hose incorporates a thermoplastic barrier to resist fuel permeation and the cover is resistant to abrasion, oil and weathering. The hose is flexible for easy routing in engine compartments and used as a feed line to fuel tanks where liquid fuel is continuously in the hose under normal conditions.

NOTE: Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7165-25250	1/4	6.3	2	0.5	13.6	0.11	0.16	3	64	100	7	*	250	Reel
7165-31250	5/16	7.9	2	0.6	15.5	0.13	0.19	3	64	100	7	*	250	Reel
7165-38250	3/8	9.5	2	0.7	17.3	0.16	0.24	3	64	100	7	*	250	Reel
7165-50250	1/2	12.7	2	0.8	20.9	0.20	0.30	5	114	100	7	*	250	Reel
7165-63250	5/8	16.0	2	1.0	25.4	0.30	0.45	5	114	75	5	*	250	Reel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Translucent Nylon

Reinforcement: Multiple textile plies

Cover: Black nitrile/PVC; smooth finish

Temp. Range: -20°F to +212°F (-29°C to +100°C)

Brand Method: Side One: White ink

Side Two: Solid red stripe

Brand Example: PARKER SERIES 7165 WAVEMASTER MARINE FUEL HOSE – EPA COMPLIANT – (x)9PKHPLINE165 – SAE J1527 USCG TYPE A1-15 ISO 7840 A1 CE NMMA TYPE ACCEPTED (ID) PH USE WITH ABYC COMPLIANT SYSTEMS AND FITTINGS ONLY

NOTE: (x) changes every year

Design Factor: 4:1

Industry Standards: ABYC, CARB, CE, EPA, ISO 7840 A1, NMMA, SAE J1527 A1-15, USCG A1

Applications:

- Biodiesel (to B100 in dedicated and non-dedicated service), diesel, ethanol, gasoline, oil
- Marine fuel/vent systems

Vacuum: Not recommended

Compare to: ContiTech Marine Fuel Line Flexshield

Couplings: ABYC compliant

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Server Blade Hose

Series 629



[view on web page](#)

The 629 Server Blade Hose, is designed to be utilized for the transfer of coolant solutions in direct liquid cooling servers in data center rack manifolds. The tube is a specially formulated peroxide cured EPDM for robust sealing properties and fluid purity of multiple industry coolants.

The 629 Server Blade Hose, is part of Parker Hannifin's thermal cooling product line. This highly engineered construction offers greater flexibility and a reduced O.D. for transferring coolant in direct-to-chip liquid cooling server blade applications. The hose tube is uniquely designed with a proprietary compounded EPDM, which is peroxide cured to increase fluid purity, thermal resistance, and enhanced sealing properties required by a high-performing system. The 629 hose features a cover designed for performance with flame and ozone resistance.

# Part Number	Hose I.D. (in) (mm)		Hose O.D. (in) (mm)		Weight lbs/ft kg/m		Minimum Bend Radius (in) (mm)		Working Pressure (psi) (bar)		Vacuum Rating in (HG) (kPa)		Series Cplg Rec	Nom Std Pack Qty (ft)	Pkg Type
629-3.5-RL	0.21	5.3	0.38	9.7	150	10.3	0.6	16.0	150	10.3	28	95	N/A	500	Reel
629-4-RL	0.25	6.4	0.44	11.2	150	10.3	0.8	19.1	150	10.3	28	95	N/A	600	Reel



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black EPDM, peroxide cured

Reinforcement: One fiber braid

Cover: Black Synthetic Rubber; smooth finish

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

Brand Method: White ink

Brand Example: Parker 629-4 HOSE EPDM-P WP 1MPa
(150 psi) 6,4mm (1/4") UL94 V-0
HOSE COVER MADE IN USA

Design Factor: 4:1

Industry Standards: UL94 V-0 Flame Resistance Rating

Application: DI water and glycol-based coolant solutions

Couplings: Designed to be used on hose barb and clamped

**This product is only available to
full line Parker distributors.**



WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Renewable Diesel Fuel Hose

Series 650



[view on web page](#)

The 650 series fuel hose is the “one hose to do it all” fuel line. It can be used in a variety of fuel line applications that transfer gasoline, diesel, or biodiesel from the fuel tank to the engine circuit. Parker has simplified the choices for our customers of which hose fits the required specification, the 650 series has you covered for almost all your fuel line requirements.

# Part Number	 Hose I.D. (in) (mm)	Reinf Plies	 Hose O.D. (in) (mm)	 Weight lbs/ft kg/m	 Minimum Bend Radius (in) (mm)	 Working Pressure (psi) (bar)	 Std Pack Qty	 Coupling HY Series	J2044 Specs
650-3-RL	3/16 4.8	2	0.41 10.3	0.07 0.11	1.25 32	500 34.5	250 ft	•	
650-4-RL	1/4 6.4	2	0.50 12.7	0.09 0.13	1.50 38	400 27.6	250 ft	•	
650-5-RL	5/16 7.9	2	0.56 14.3	0.10 0.15	2.00 51	400 27.6	250 ft	•	•
650-6-RL	3/8 9.5	2	0.63 15.9	0.14 0.20	2.50 64	400 27.6	250 ft	•	•
650-8-RL	1/2 12.7	2	0.78 19.8	0.21 0.31	4.00 102	400 27.6	250 ft	•	•
650-10-RL	5/8 15.9	2	0.94 23.8	0.23 0.34	5.00 127	350 24.1	250 ft	•	•
650-12-RL	3/4 19.1	2	1.13 28.6	0.34 0.50	7.00 180	300 20.7	250 ft	•	•

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black synthetic rubber

Reinforcement: Multiple aramid plies

Cover: Black synthetic rubber

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

Brand Method: White ink

Brand Example: Parker 650-6 SAE 30R7 & PERFORMANCE
OF SAE 30R2 TYPE 3/SAE30R: WP 2,8 MPA
(400 F 397/5139/5155/ 1 RENEWABLE DIESEL
FUEL TO B100; 10,0MM (3/8);
MADE IN USA

Design Factor: 5:1

Industry Standards: SAE J30R7, meets performance of 30R2
Type 1, 2 and 3, 30R3, and 30R13 (portions of T1 and T3)

Application: Fuel lines on equipment utilizing gasoline, diesel or
biodiesel up to B100 including HVO, SME and PME renewable
fuels

Vacuum: 24" Hg (3/16" thru 3/8" ID); 10" Hg (1/2" thru 3/4" ID)

Packaging: Reels

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

PUREFood

7640



[view on web page](#)

Series 7640 is a high-quality and flexible delivery and suction hose. This series is designed to convey cooking oils and fat, dairy products, and oily sauces. Tube materials consist of premium nitrile (NBR). We offer multiple cover options to fit you applications individual needs.

#														
Part Number	Hose ID		Hose OD		Vacuum		Max. Working Pressure		Min. Burst Pressure		Weight		Bend Radius	
	in	mm	in	mm	in of Hg	kPa	psi	bar	psi	bar	lbs/ft	kg/m	in	mm
7640-1000	1	25.4	1.46	37	26.5	90	150	10	450	30	0.61	0.91	3.35	85
7640-1500	1.5	38	2	51	26.5	90	150	10	450	30	0.94	1.40	5.91	150
7640-2000	2	51	2.52	64	26.5	90	150	10	450	30	1.21	1.80	8.27	210
7640-3000	3	76	3.58	91	26.5	90	150	10	450	30	2.12	3.17	12.60	320
7640-4000	4	102	4.65	118	26.5	90	150	10	450	30	2.96	4.42	16.93	430

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

All PUREFood hoses comply with the following standards:



Tube: White Nitrile, phthalates free

Temperature: -13°F / +176°F (-25°C / +80°C)

Reinforcement: Synthetic plies, galvanized wire helices

Cover: Blue EPDM, Smooth wrapped finish

PURE Aging, ozone resistant

Sterilization: Refer to Parker's guidelines for cleaning and sanitizing

ISO 1307: For dimensional tolerances

Applications: Cooking oils & fat, dairy products, oily sauces

PUREFood

7640P



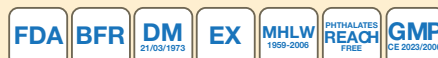
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Series 7640P is a high-quality and flexible delivery and suction hose. This series is designed to convey cooking oils and fat, dairy products, and oily sauces. Tube materials consist of premium nitrile (NBR). We offer multiple cover options to fit you applications individual needs.

#														
Part Number	Hose ID		Hose OD		Vacuum		Max. Working Pressure		Min. Burst Pressure		Weight		Bend Radius	
	in	mm	in	mm	in of Hg	kPa	psi	bar	psi	bar	lbs/ft	kg/m	in	mm
7640P-1000	1	25.4	1.46	37	26.5	90	150	10	450	30	0.54	0.81	2.76	70
7640P-1500	1.5	38	2.03	51.5	26.5	90	150	10	450	30	0.82	1.23	3.15	80
7640P-2000	2	51	2.52	66	26.5	90	150	10	450	30	1.27	1.90	3.94	100
7640P-3000	3	76	3.62	91	26.5	90	150	10	450	30	1.95	2.91	5.91	150

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

All PUREFood hoses comply with the following standards:



Tube: White Nitrile, phthalates free

Temperature: -13°F / +176°F (-25°C / +80°C)

Reinforcement: Synthetic plies, galvanized wire helices

Cover: Blue EPDM, Corrugated Low friction, non-marking, UHMWPE, Smooth wrapped finish. Abrasion, aging, ozone resistant



Sterilization: Refer to Parker's guidelines for cleaning and sanitizing.

ISO 1307: For dimensional tolerances.

Applications: Cooking oils & fat, dairy products, oily sauces

PUREBev

7630



[view on web page](#)

Series 7630 is a high-quality, low permeation, flexible delivery and suction hose. This series is designed to convey alcohol/spirits (concentration up to 96%), beer, wine, potable water and many other food and beverage applications. Tube materials consist of premium Butyl. We offer multiple cover options including corrugated and crush resistant options to fit your applications and individual needs.

#														
Part Number	Hose ID		Hose OD		Vacuum		Max. Working Pressure		Min. Burst Pressure		Weight		Bend Radius	
	in	mm	in	mm	in of Hg	kPa	psi	bar	psi	bar	lbs/ft	kg/m	in	mm
7630-1000	1	25	1.5	40	26.5	90	250	16	750	48	0.69	1.03	3.94	100
7630-1500	1.5	38	2.09	53	26.5	90	250	16	750	48	1.01	1.51	6.10	155
7630-2000	2	51	2.6	66	26.5	90	250	16	750	48	1.31	1.96	8.46	215
7630-2500	2.5	63.5	3.19	81	26.5	90	250	16	750	48	2.02	3.02	10.83	275
7630-3000	3	76	3.7	94	26.5	90	250	16	750	48	2.63	3.92	12.99	330
7630-4000	4	102	4.72	120	26.5	90	250	16	750	48	3.52	5.26	17.72	450



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

All PUREBev hoses comply with the following standards:



Tube: White Butyl, phthalates free

Temperature: -40°F / +248°F (-40°C / +120°C)

Reinforcement: Synthetic plies, galvanized wire helices

Cover: Red EPDM, Smooth wrapped finish, ozone, aging

PURE resistant

Sterilization: Refer to Parker's guidelines for cleaning and sanitizing

ISO 1307: For dimensional tolerances

Applications: Beer, wine and consumable liquids

PUREBev

7630P



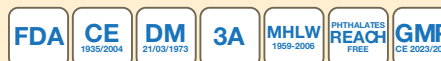
[view on web page](#)

Series 7630P is a high-quality, low permeation, flexible delivery and suction hose. This series is designed to convey alcohol/spirits (concentration up to 96%), beer, wine, potable water and many other food and beverage applications. Tube materials consist of premium Butyl. We offer multiple cover options including corrugated and crush resistant options to fit your applications and individual needs.

#														
Part Number	Hose ID		Hose OD		Vacuum		Max. Working Pressure		Min. Burst Pressure		Weight		Bend Radius	
	in	mm	in	mm	in of Hg	kPa	psi	bar	psi	bar	lbs/ft	kg/m	in	mm
7630P-1000	1	25.4	1.5	38	26.5	90	250	16	900	60	0.61	0.91	4.13	105
7630P-1500	1.5	38	2.07	52.5	26.5	90	250	16	900	60	0.92	1.38	4.72	120
7630P-2000	2	51	2.64	67	26.5	90	250	16	900	60	1.48	2.21	5.91	150
7630P-2500	2.5	63.5	3.17	80.5	26.5	90	250	16	900	60	1.87	2.79	7.68	195
7630P-3000	3	76	3.7	94	26.5	90	250	16	900	60	2.35	3.51	8.86	225

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

All PUREBev hoses comply with the following standards:



Tube: White Butyl, phthalates free

Temperature: -40°F / +248°F (-40°C / +120°C)

Reinforcement: Synthetic plies, galvanized wire helices

Cover: Red EPDM Corrugated, wrapped finish with UHMWPE anti-friction layer.



Abrasion, aging, ozone resistant

Sterilization: Refer to Parker's guidelines for cleaning and sanitizing.

ISO 1307: For dimensional tolerances.

Applications: Beer, wine and consumable liquids

PUREBev

7630PL



[view on web page](#)

Series 7630PL is a high-quality, low permeation, flexible delivery and suction hose. This series is designed to convey alcohol/spirits (concentration up to 96%), beer, wine, potable water and many other food and beverage applications. Tube materials consist of premium Butyl. We offer multiple cover options including corrugated and crush resistant options to fit your applications and individual needs.

#												
Part Number	Hose ID		Vacuum		Max. Working Pressure		Min. Burst Pressure		Weight		Bend Radius	
	in	mm	in of Hg	kPa	psi	bar	psi	bar	lbs/ft	kg/m	in	mm
7630PL-1500	1.5	38	26.5	90	150	10	450	30	0.94	1.40	3.15	80
7630PL-2000	2	51	26.5	90	150	10	450	30	1.24	1.84	3.94	100
7630PL-2500	2.5	63.5	26.5	90	150	10	450	30	1.48	2.20	5.12	130
7630PL-3000	3	76	26.5	90	150	10	450	30	1.90	2.83	5.91	150
7630PL-4000	4	102	26.5	90	150	10	450	30	2.46	3.66	7.87	200



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

All PUREBev hoses comply with the following standards:



Tube: White Butyl, phthalates free

Temperature: -13°F / +248°F (-25°C / +120°C)

Reinforcement: Synthetic plies, thermoplastic wire helices

Cover: Red EPDM, Red PVC Corrugated.



Abrasion, aging, ozone, oil resistant

Sterilization: Refer to Parker's guidelines for cleaning and sanitizing

ISO 1307: For dimensional tolerances

Applications: Beer, wine and consumable liquids

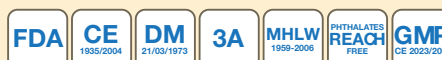
Green PVC Banding Coil Series 7630CL



7630CL-1 to be used with 7630PL hose sizes 1.5" – 2.5"

7630CL-2 to be used with 7630PL hose sizes 3" – 4"

All PUREBev hoses comply with the following standards:



PUREWash 7680

Series 7680 washdown hose is used in virtually every type of food and beverage processing plant. Sanitation of equipment and work area is critical in packing houses, hot processing plants, breweries, dairies, wineries, and general industrial applications.

Cleaning and purification practices require a commitment to preventative maintenance. This in turn extends the life of equipment and productivity.



[view on web page](#)

Additional Features include:

- FDA compliant tube (not to be used in food contact/transfer)
- Enhanced printed layline
- Non-marking covers
- Additional blue cover in product offering for a cleaner look
- Compatible with Parkrimp crimpers or variable crimpers.

Please refer to Crimpsource for specifications.

#													
Part Number	Hose ID		Reinf Plies	Hose OD		Approximate Weight		Minimum Bend Radius		Maximum Rec WP		Per Cplg Rec	Std Pack Qty
	in	mm		in	mm	lbs/ft	kg/m	in	mm	psi	bar		
7680-8-WHT-RL	.50	12.7	4	0.875	22.2	0.25	0.11	5	127	300	20.7	HY	500
7680-8-BLU-RL	.50	12.7	4	0.875	22.2	0.25	0.11	5	127	300	20.7	HY	500
7680-12-WHT-RL	.75	19.1	4	1.156	29.4	0.37	0.17	6	152	300	20.7	HY	400
7680-12-WHT-BX	.75	19.1	4	1.156	29.4	0.38	0.17	6	152	300	20.7	HY	50
7680-12-BLU-RL	.75	19.1	4	1.156	29.4	0.38	0.17	6	152	300	20.7	HY	400
7680-12-BLU-BX	.75	19.1	4	1.156	29.4	0.38	0.17	6	152	300	20.7	HY	50
7680-16-WHT-RL	1	25.4	4	1.438	36.5	0.52	0.24	8	203	300	20.7	HY	300
7680-16-BLU-RL	1	25.4	4	1.438	36.5	0.53	0.24	8	203	300	20.7	HY	300

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: White EPDM; FDA Compliant

Temperature: -40°F / +212°F (-40°C / +100°C)

Reinforcement: Multiple textile plies

Cover: White (WHT) or Blue (BLU) EPDM;

PURE smooth finish

Sterilization: Refer to Parker's guidelines for cleaning and sanitizing

Applications: Food & beverage processing plants, equipment sanitation, preventative maintenance

PUREWash High Pressure Washdown Hose 7685



[view on web page](#)

Series 7685 high pressure washdown hose is used in most food and beverage processing plants. Sanitation of equipment and work area is critical in poultry processing facilities, packing houses, breweries, dairies, wineries, and general industrial applications. The non-marking cover is resistant to abrasion, heat, and fatty, oily foods.

Cleaning and purification practices require a commitment to preventative maintenance. This in turn extends the life of equipment and productivity. Devoted to developing products to support our customers in these critical applications and to complement our food hose line, Parker has developed a new high pressure PUREWash hose, replacing our existing 7143 hose series.

NOTE: Do not use for steam service.

Other cover colors available.

YL = Yellow



Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7685-6GRA-RL	3/8	9.5	4	0.765	19.43	0.21	0.31	4	102	1500	103	HY	500	Reel
7685-6-YEL-RL														

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black EPDM

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

Reinforcement: Multiple spiral aramid fiber layers

Cover: Gray (-GRA), Yellow (-YEL) EPDM, smooth finish



Brand Method: Black ink on gray and yellow hose; white ink on black hose

Design Factor: 3.5:1

Industry Standards: None applicable

Applications:

- Hot water, mild chemicals
- Breweries, dairies, food/poultry processing plants, general industrial

Vacuum: Not recommended

Compare to: Boston Washdown 1250; ContiTech Fortress; Gates Cyclone

FLEX-EVER™ 2000

Hardwall Gasoline Dispenser Hose

Series 7280



[view on web page](#)

Series 7280 hardwall construction incorporates a dual wire helix that provides full suction capability, kink resistance, and a path to conduct a static electrical charge to ground. The cover is resistant to abrasion, cuts, oil and ozone, and will not mar the finish of a vehicle. Series 7280 is suitable for use with reeling devices or applications where retractable cables are employed.

- NOTES:**
- The  symbol in the brand/layline signifies the hose as a "UL Recognized Component" for UL gasoline dispenser hose assemblies.
 - Not UL listed for E85 service.
 - Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.
 - Refer to the Safety and Technical Information section of this catalog for safety, handling and use information.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7280-632A	5/8	15.9	2	1.0	26.2	0.39	0.58	3	76	50	3	*	500	Reel
7280-752A	3/4	19.1	2	1.2	29.8	0.47	0.70	4	102	50	3	*	500	Reel
7280-1002A	1	25.4	2	1.5	36.9	0.64	0.95	5	127	50	3	*	500	Reel

Couplings: Bulk gasoline dispenser hose couplings are not sold separately by Parker.

 **WARNING:** The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile braids with dual wire helix

Cover: Black CPE; wrapped finish

Temp. Range: -40°F to +180°F (-40°C to +82°C)

Brand Method: White ink

Brand Example: PARKER SERIES 7280 FLEX-EVER™ 2000
GASOLINE HOSE  655N MH530 PN16
TRbF131T.2

Design Factor: 5:1

Industry Standards: UL330/ULC; NFPA 30A and UL30N4
(factory assemblies)

Applications:

- Biodiesel (to B20 in dedicated service), diesel, ethanol, gasoline, oil
- Gasoline dispensers and pumps

Vacuum: 29" Hg (737 mm Hg)

Compare to: ContiTech BC Gasoline; Gates Curb Pump 124HW

WARNINGS!

- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- ▶ Do not use Parker gasoline dispenser hose for aircraft fueling applications. Use only API/NFPA qualified hose for aircraft fueling applications.

SUPER-FLEX® 2000

Semi-Hardwall Gasoline Dispenser Hose

Series 7124



[view on web page](#)

Series 7124 construction provides superior strength, crush-resistant durability, kink resistance and a path to conduct a static electrical charge to ground. The cover is resistant to abrasion, cuts, oil and ozone, and will not mar the finish of a vehicle.

- NOTES:**
- The  symbol in the brand/layline signifies the hose as a “UL Recognized Component” for UL gasoline dispenser hose assemblies.
 - Not UL listed for E85 service.
 - Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.
 - Refer to the Safety and Technical Information section of this catalog for safety, handling and use information.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7124-631A	5/8	15.9	1	1.0	24.6	0.35	0.52	3	76	50	3	*	500	Reel
7124-751A	3/4	19.1	1	1.1	28.2	0.42	0.63	4	102	50	3	*	500	Reel
7124-1001A	1	25.4	1	1.3	34.0	0.50	0.75	5	127	50	3	*	500	Reel

Couplings: Bulk gasoline dispenser hose couplings are not sold separately by Parker.



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: One wire braid

Cover: Black CPE; wrapped finish

Temp. Range: -40°F to +180°F (-40°C to +82°C)

Brand Method: White ink

Brand Example: PARKER SERIES 7124 SUPER-FLEX® 2000
GASOLINE HOSE

 655N MH530

Design Factor: 5:1

Industry Standards: UL330/ULC; NFPA 30A and UL30N4
(factory assemblies)

Applications:

- Biodiesel (to B20 in dedicated service), diesel, ethanol, gasoline, oil
- Gasoline dispensers and pumps

Vacuum: Not recommended

Compare to: ContiTech Flexsteel Hardwall; Thermoid
Pumpflex II Hardwall

⚠️ WARNINGS!

- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- ▶ Do not use Parker gasoline dispenser hose for aircraft fueling applications. Use only API/NFPA qualified hose for aircraft fueling applications.

SOFT-FLEX™ 2000

Softwall Gasoline Dispenser Hose

Series 7114



[view on web page](#)

Series 7114 softwall construction incorporates multiple textile plies of reinforcement for flexibility and kink resistance, and a static wire as a path to conduct a static electrical charge to ground. The cover is resistant to abrasion, cuts, oil and ozone, and will not mar the finish of a vehicle.

- NOTES:**
- The  symbol in the brand/layline signifies the hose as a "UL Recognized Component" for UL gasoline dispenser hose assemblies.
 - Not UL listed for E85 service.
 - Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.
 - Refer to the Safety and Technical Information section of this catalog for safety, handling and use information.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7114-63154A	5/8	15.9	4	1.0	24.4	0.27	0.40	5	127	50	3	*	475	Reel
7114-75154A	3/4	19.1	4	1.1	27.9	0.34	0.51	6	152	50	3	*	350	Reel
7114-100154A	1	25.4	4	1.4	35.3	0.47	0.70	8	203	50	3	*	250	Reel

Couplings: Bulk gasoline dispenser hose couplings are not sold separately by Parker.

 **WARNING:** The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile plies with static wire

Cover: Black CPE; smooth finish

Temp. Range: -40°F to +180°F (-40°C to +82°C)

Brand Method: White ink

Brand Example: PARKER SERIES 7114 SOFT-FLEX™ 2000
GASOLINE HOSE 4SP
 655N MH530

Design Factor: 5:1

Industry Standards: UL330/ULC; NFPA 30A and UL30N4
(factory assemblies)

Applications:

- Biodiesel (to B20 in dedicated service), diesel, ethanol, gasoline, oil
- Gasoline dispensers and pumps

Vacuum: Not recommended

Compare to: ContiTech Pacer; Thermoid Pumpflex I Softwall

⚠ WARNINGS!

- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- ▶ Do not use Parker gasoline dispenser hose for aircraft fueling applications. Use only API/NFPA qualified hose for aircraft fueling applications.

Farm Pump / Gravity Tank Fuel Hose

Static Wire

Not UL Listed

Series 7175



view on web page

Series 7175 softwall construction incorporates multiple textile plies of reinforcement for flexibility and a static wire as a path to conduct a static electrical charge to ground. The cover is resistant to abrasion, oil and ozone.

NOTES:

- Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.
- Refer to the Safety and Technical Information section of this catalog for safety, handling and use information.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

# Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7175-75052	3/4	19.1	2	1.1	28.2	0.35	0.52	5	127	50	3	*	400	Reel
7175-100052	1	25.4	2	1.4	35.3	0.48	0.72	8	203	50	3	*	300	Reel

Couplings: Bulk farm pump hose couplings are not sold separately by Parker.



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile plies with static wire

Cover: Black chloroprene; smooth finish

Temp. Range: -40°F to +180°F (-40°C to +82°C)

Brand Method: White ink

Brand Example: PARKER SERIES 7175 FARM PUMP HOSE
W/STATIC WIRE (ID) XX PSI MAX WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Biodiesel (to B20 in dedicated service), diesel, ethanol, gasoline, oil
- Gravity tanks, hand pumps, powered pumps
- Agriculture

Vacuum: Not recommended

Compare to: Thermoid Premier Farm Tank

⚠️ WARNINGS!

- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- ▶ Do not use Parker farm pump hose for aircraft fueling or service station applications. Use only API/NFPA qualified hose for aircraft fueling applications. Use only UL330 listed hose for service station applications.

LP Gas Hose

Series 7132



[view on web page](#)

Series 7132 is a flexible, lightweight liquefied petroleum gas (LPG)/propane delivery and transfer hose. The hose meets all Underwriters Laboratories (UL21) and Canadian Standards Association (CSA Type I) requirements. The construction incorporates multiple textile plies of reinforcement for flexibility and kink resistance. The perforated cover is resistant to mild chemicals, oil and ozone.

NOTE: Refer to the Safety and Technical Information section of this catalog for safety, handling and use information.

Series 7132 and DOT: LPG hose assemblies installed on on-road vehicles must meet Department of Transportation (DOT) requirements. Factory assemblies (3/4" and larger) are pressure tested, one of the fittings is etched with a unique DOT certification number, and a document incorporating the identical certification number accompanies each assembly. Metal DOT identification bands are also available/attached for an additional charge at customer request.

Series 7132 and Natural Gas: Series 7132 may be used for natural gas service, but ONLY under ALL of the following conditions:

- 1) The application must be in a well-ventilated environment: Outdoors, or indoors with significant continuous air movement.
- 2) Series 7132 is not to replace fixed/rigid pipe where that material is more appropriate due to reduced permeation and overall strength and durability. Use rigid pipe, non-permeable tubing or hose with barrier constructions to convey natural gas whenever possible.

Series 7132 and Compressed Natural Gas (CNG): Series 7132 is not for use in any CNG application, including fuel dispensing, on-board vehicle fuel lines, or fuel transfer.

Series 7132 and Anhydrous Ammonia (NH₃): Series 7132 is not for use with anhydrous ammonia.

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile plies

Cover: Black chloroprene; perforated smooth finish

Temp. Range: -40°F to +180°F (-40°C to +82°C) (The hose construction is capable of this rating, but LP Gas should NEVER be conveyed over 140°F/60°C)

Brand Method: Impression

Brand Example: PARKER SERIES 7132 (ID) CSA® 8.1 TYPE I CAUTION - LP GAS HOSE MH6737 C U[®]
US ISSUE NO. XXXXX 350 PSI MAX WP

Design Factor: 5:1

Industry Standards: UL21; CSA 8.1 Type I; optional DOT factory hose assembly testing and marking also available for sizes smaller than 3/4". Contact Parker.

Applications:

- LP gas/propane
- Cookers, grills, heaters, weed burners; delivery, transfer
- Agriculture, commercial and residential heating, construction, general industrial

Vacuum: Not recommended

Compare to: Boston Blackline (LPG); Gates LP350; Thermoid Type 75

(Continued on the following page)

WARNINGS!

- ▶ Use only with couplings qualified by Parker. Do not use with male swivel couplings or other couplings containing o-rings, which may dry out, crack and fail over time.
- ▶ When using this product in a mobile application such as delivery or service vehicles, the inspection procedures detailed in DOT regulation 49CFR 180.416 must be strictly adhered to.

Series 7132 – LP Gas Hose (Continued)

Crimp Specifications														
For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource .														
#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7132-25354	1/4	6.4	4	0.6	15.5	0.15	0.22	3	64	350	24	*	750	Reel
7132-25354E													350	Reel
7132-38354	3/8	9.5	4	0.8	19.1	0.22	0.33	4	89	350	24	HY	600	Reel
7132-38354E													300	Reel
7132-50354	1/2	12.7	4	0.9	23.8	0.32	0.48	5	114	350	24	*	500	Reel
7132-75354													350	Reel
7132-75354100	3/4	19.1	4	1.3	31.8	0.50	0.75	7	165	350	24	HY	2 x 100	Carton
7132-75354150													1 x 150	Carton
7132-75354200													1 x 200	Carton
7132-100354	1	25.4	4	1.5	38.1	0.63	0.94	8	191	350	24	*	300	Reel
7132-100354100													100	Carton
7132-100354150													1 x 150	Carton
7132-100354200													200	Reel

NOTE: "E" reel part numbers are UPS-able.



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

X-TREME™ Low Temperature LP Gas Hose Series 7132XTC



[view on web page](#)

Series 7132XTC is a flexible, lightweight, low temperature liquefied petroleum gas (LPG)/propane delivery and transfer hose. The hose meets all Underwriters Laboratories (UL21) and Canadian Standards Association (CSA Type I) requirements. The construction stays flexible to -65°F (-53°C) and incorporates multiple textile plies of reinforcement for flexibility and kink resistance. The perforated cover is resistant to mild chemicals, oil and ozone.

NOTE: Refer to the Safety and Technical Information section of this catalog for safety, handling and use information.

Series 7132XTC and DOT: LPG hose assemblies installed on on-road vehicles must meet Department of Transportation (DOT) requirements. Factory assemblies (3/4" and larger) are pressure tested, one of the fittings is etched with a unique DOT certification number, and a document incorporating the identical certification number accompanies each shipment. Metal DOT identification bands are also attached at an additional charge per customer request.

Series 7132XTC and Natural Gas: Series 7132XTC may be used for natural gas service, but ONLY under ALL of the following conditions:

- 1) The application must be in a well-ventilated environment: Outdoors, or indoors with significant continuous air movement.
- 2) Series 7132XTC is not to replace fixed/rigid pipe where that material is more appropriate due to reduced permeation and overall strength and durability. Use rigid pipe, non-permeable tubing or hose with barrier constructions to convey natural gas whenever possible.

Series 7132XTC and Compressed Natural Gas (CNG): Series 7132XTC is not for use in any CNG application, including fuel dispensing, on-board vehicle fuel lines, or fuel transfer.

Series 7132XTC and Anhydrous Ammonia (NH₃): Series 7132XTC is not for use with anhydrous ammonia.

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile plies

Cover: Black chloroprene; perforated smooth finish

Temp. Range: -65°F to +180°F (-53°C to +82°C) (The hose construction is capable of this rating, but LP Gas should NEVER be conveyed over 140°F/60°C)

Brand Method: Impression

Brand Example: PARKER SERIES 7132XTC X-TREME CSA 8.1 TYPE I CAUTION - LP GAS HOSE (-65°F) MH6737 C U R® US ISSUE NO. XXXXX 350 PSI MAX WP

Design Factor: 5:1

Industry Standards: UL21; CSA 8.1 Type I; optional DOT factory hose assembly testing and marking also available for sizes smaller than 3/4". Contact Parker.

Applications:

- LP gas/propane
- Low temperature delivery, transfer
- Agriculture, commercial and residential heating, construction, general industrial

Vacuum: Not recommended

Compare to: Thermoid Polarflex

(Continued on the following page)

⚠ WARNINGS!

- ▶ Use only with couplings qualified by Parker. Do not use with male swivel couplings or other couplings containing o-rings, which may dry out, crack and fail over time.
- ▶ When using this product in a mobile application such as delivery or service vehicles, the inspection procedures detailed in DOT regulation 49CFR 180.416 must be strictly adhered to.

Series 7132XTC – X-TREME™ Low Temperature LP Gas Hose (Continued)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7132XTC-1000125	1	25.4	4	1.5	38.1	0.63	0.94	8	191	350	24	*	1 x 125	Carton
7132XTC-1000150	1	25.4	4	1.5	38.1	0.63	0.94	8	191	350	24	*	1 x 150	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

LP Gas Hose

Series 7232



[view on web page](#)

Series 7232 is a large diameter, flexible liquified petroleum gas (LPG)/propane transfer hose for large volume bulk loading/unloading and vibration-resistant onboard vehicle connections. The hose meets all Underwriters Laboratories (UL21) and Canadian Standards Association (CSA Type I) requirements. The construction incorporates multiple braids or plies of textile reinforcement for kink resistance and superior coupling retention. The perforated cover is resistant to mild chemicals, oil and ozone.

NOTE: Refer to the Safety and Technical Information section of this catalog for safety, handling and use information.

Series 7232 and DOT: LPG hose assemblies installed on on-road vehicles must meet Department of Transportation (DOT) requirements. Factory assemblies (all sizes) are pressure tested, one of the fittings is etched with a unique DOT certification number, and a document incorporating the identical certification number accompanies each assembly. Metal DOT identification bands are also available/attached for an additional charge at customer request.

Series 7232 and Natural Gas: Series 7232 may be used for natural gas service, but ONLY under ALL of the following conditions:

- 1) The application must be in a well-ventilated environment: Outdoors, or indoors with significant continuous air movement.
- 2) Series 7232 is not to replace fixed/rigid pipe where that material is more appropriate due to reduced permeation and overall strength and durability. Use rigid pipe, non-permeable tubing or hose with barrier constructions to convey natural gas whenever possible.

Series 7232 and Compressed Natural Gas (CNG): Series 7232 is not to be used for any CNG application, including fuel dispensing, on-board vehicle fuel lines, or fuel transfer.

Series 7232 and Anhydrous Ammonia (NH₃): Series 7232 is not for use with anhydrous ammonia.

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile braids

Cover: Black chloroprene; perforated wrapped finish

Temp. Range: -40°F to +180°F (-40°C to +82°C) (The hose construction is capable of this rating, but LP Gas should NEVER be conveyed over 140°F/60°C)

Brand Method: Side one: Embossed

Side two: Black text on yellow stripe

Brand Example: Side one (Embossed): PARKER SERIES 7232 CSA 8.1 TYPE I CAUTION - LP GAS HOSE MH6737 C U R® US ISSUE NO. XXXX 350 PSI MAX WP
Side two (Stripe): PARKER LP GAS HOSE

Design Factor: 5:1

Industry Standards: UL21; CSA 8.1 Type I; optional DOT factory hose assembly testing and marking also available. Contact Parker.

Applications:

- LP gas/propane
- Bulk loading/unloading, in-plant tank transfer, transport
- Agriculture, commercial and residential heating, construction, general industrial

Vacuum: Not recommended

Compare to: Boston Blackline (LPG); Gates LP350; Thermoid Type 65

(Continued on the following page)

WARNINGS!

- ▶ Use only with couplings qualified by Parker. Do not use with male swivel couplings or other couplings containing o-rings, which may dry out, crack and fail over time.
- ▶ When using this product in a mobile application such as delivery or service vehicles, the inspection procedures detailed in DOT regulation 49CFR 180.416 must be strictly adhered to.

Series 7232 – LP Gas Hose (Continued)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7232-1252	1-1/4	31.8	2	1.8	46.1	0.85	1.27	12	305	350	24	HY	300	Reel
7232-1252100												HY	100	Carton
7232-1503K	1-1/2	38.1	2	2.2	54.8	1.12	1.67	14	356	350	24	43	150	Carton
7232-2003K	2	50.8	4	2.8	69.9	1.90	2.83	16	406	350	24	LA	150	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

LP Gas Hose Stainless Steel Reinforced Series 7231



[view on web page](#)

Series 7231 is a large diameter, extremely durable liquefied petroleum gas (LPG)/propane transfer hose for bulk loading/unloading and vibration-resistant onboard vehicle connections. The hose meets all Underwriters Laboratories (UL21) and Canadian Standards Association (CSA Type I) requirements. The construction incorporates high tensile corrosion resistant stainless steel braided reinforcement for superior strength, durability and kink resistance. The perforated cover is resistant to mild chemicals, oil and ozone.

NOTE: Refer to the Safety and Technical Information section of this catalog for safety, handling and use information.

Series 7231 and DOT: LPG hose assemblies installed on on-road vehicles must meet Department of Transportation (DOT) requirements. Factory assemblies (all sizes) are pressure tested, one of the fittings is etched with a unique DOT certification number, and a document incorporating the identical certification number accompanies each assembly. Metal DOT identification bands are also available/attached for an additional charge at customer request.

Series 7231 and Natural Gas: Series 7231 may be used for natural gas service, but ONLY under ALL of the following conditions:

- 1) The application must be in a well-ventilated environment: Outdoors, or indoors with significant continuous air movement.
- 2) Series 7231 is not to replace fixed/rigid pipe where that material is more appropriate due to reduced permeation and overall strength and durability. Use rigid pipe, non-permeable tubing or hose with barrier constructions to convey natural gas whenever possible.

Series 7231 and Compressed Natural Gas (CNG): Series 7231 is not to be used for any CNG application, including fuel dispensing, on-board vehicle fuel lines, or fuel transfer.

Series 7231 and Anhydrous Ammonia (NH₃): Series 7231 is not for use with anhydrous ammonia.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource. Refer to the COS-K4 crimper for crimp specs for hose 4" ID and smaller.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max Rec. WP (psi)	Max Rec. WP (bar)	Perm Cplg Rec. *	Std Pack Qty (ft)	Stock Status **
7231-1251	1-1/4	31.8	1	1.8	44.5	0.97	1.45	17	419	350	24	43	100	Y
7231-1501K	1-1/2	38.1	1	2.0	50.8	1.12	1.67	20	508	350	24	43, 71	150	Y
7231-2002K	2	50.8	2	2.6	66.7	1.87	2.79	26	635	350	24	WC, 43, 71, 7661	150	Y

* Couplings: Refer to Crimpsource at www.crimpsource.com for coupling recommendations and crimp specifications.

** Stock: "Y" indicates stocked item; "N" indicates non-stocked item. Stock status subject to change. Contact Parker Customer Service.



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: One or multiple stainless steel braids

Cover: Black chloroprene; perforated wrapped finish

Temp. Range: -40°F to +180°F (-40°C to +82°C) (The hose construction is capable of this rating, but LP Gas should NEVER be conveyed over 140°F/60°C)

Brand Method: Black text on blue stripe

Brand Example: PARKER SERIES 7231 CGA TYPE I

CAUTION - LP GAS HOSE MH6737 C UR®
US ISSUE NO. XXXX 350 PSI MAX WP

Design Factor: 5:1

Industry Standards: UL21; CSA 8.1 Type I; optional DOT factory hose assembly testing and marking also available. Contact Parker.

Applications:

- LP gas/propane
- Bulk loading/unloading; in-plant tank transfer
- Petrochemical refineries

Vacuum: Not recommended

Packaging: Cartons

WARNING! Use only with couplings qualified by Parker. Do not use with male swivel couplings or other couplings containing o-rings, which may dry out, crack and fail over time.

LP Gas Vapor Hose

Series 7122



[view on web page](#)

Series 7122 is a flexible, lightweight, light duty hose connector for transfer of LP Gas vapor in space heaters for chicken brooders and other light applications. The hose construction incorporates multiple textile plies of reinforcement for flexibility and kink resistance. The perforated cover is resistant to mild chemicals, oil and ozone.

NOTES:

- Do not use to transfer liquid LP gas in gas grill or other applications requiring Underwriters Laboratories (UL) or Canadian Standards Association (CSA) performance or listing.
- Refer to the Safety and Technical Information section of this catalog for safety, handling and use information.

Series 7122 and Natural Gas: Series 7122 may be used for natural gas service, but ONLY under ALL of the following conditions:

- 1) The application must be in a well-ventilated environment: Outdoors, or indoors with significant continuous air movement.
- 2) Series 7122 is not to replace fixed/rigid pipe where that material is more appropriate due to reduced permeation and overall strength and durability. Use rigid pipe, non-permeable tubing or hose with barrier constructions to convey natural gas whenever possible.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID	ID	Reinf	OD	OD	Approx	Approx	Min	Min	Max WP	Max WP	Perm	Nom Std	Pkg
Part Number	(in)	(mm)	Layers	(in)	(mm)	Wt (lbs/ft)	Wt (kg/m)	Bend Rad (in)	Bend Rad (mm)	(psi)	(bar)	Cplg Rec *	Pack Qty (ft)	Type
7122-38200	3/8	9.5	2	0.7	16.7	0.15	0.22	4	97	125	9	HY	700	Reel



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile plies

Cover: Red chloroprene; perforated smooth finish

Temp. Range: -20°F to +160°F (-29°C to +71°C) (The hose construction is capable of this rating, but LP Gas should NEVER be conveyed over 140°F/60°C)

Brand Method: Black ink

Brand Example: PARKER SERIES 7122 LPG VAPOR HOSE 125
PSI MAX WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- LP gas – vapor ONLY
- Chicken brooders, space heaters
- Agriculture, light industrial

Vacuum: Not recommended

Compare to: Gates LPG Vapor

LP Gas Hose

Stainless Steel Reinforced – Textile Cover

Series SS25UL



view on web page

Series SS25UL is a textile-covered, small diameter, extremely durable liquefied petroleum gas (LPG)/propane transfer hose in applications such as fuel line hose on forklifts and utility equipment. The hose meets all Underwriter Laboratories (UL21) requirements. The construction incorporates high tensile stainless steel braided reinforcement for superior strength, durability and kink resistance. The textile cover is resistant to abrasion, mild chemicals, and ozone. Series SS25UL is qualified with Parker crimp couplings and is compatible with Parker Series 20 field reattachable fittings.

NOTE: Refer to the Safety and Technical Information section of this catalog for safety, handling and use information.

Series SS25UL and Natural Gas: SS25UL may be used for natural gas service, but ONLY under ALL of the following conditions:

- 1) The application must be in a well-ventilated environment: Outdoors, or indoors with significant continuous air movement.
- 2) Series SS25UL is not to replace fixed/rigid pipe where that material is more appropriate due to reduced permeation and overall strength and durability. Use rigid pipe, non-permeable tubing or hose with barrier constructions to convey natural gas whenever possible.

Series SS25UL and Compressed Natural Gas (CNG): Series SS25UL is not to be used for any CNG application, including fuel dispensing, on-board vehicle fuel lines, or fuel transfer.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#							
Part Number	Hose I.D. inch mm	Hose O.D. inch mm	Working Pressure psi MPa	Minimum Bend Radius inch mm	Weight lbs/ft kg/m	Parkrimp 26 Series	Field Attachable 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	•	•

Field Attachable Couplings: Parker Series 20.

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: One stainless steel braid

Cover: Black chloroprene-impregnated textile braid

Temp. Range: -40°F to +180°F (-40°C to +82°C) (The hose construction is capable of this rating, but LP Gas should NEVER be conveyed over 140°F/60°C)

Brand Method: White ink with dashed spiral stripe

Brand Example: Side one: PARKER SERIES SS25UL
CAUTION LP GAS HOSE MH6737 C
ISSUE NO. XXXX 350 PSI MAX WP

Side Two: CAUTION FOR LP GAS USE ONLY
1750 PSI MIN BURST

Design Factor: 5:1

Industry Standards: UL21

Applications:

- LP gas/propane
- Fork lifts

Vacuum: Not recommended

Compare to: Gates Stainless Steel LPG

WARNING! Use only with couplings qualified by Parker. Do not use with male swivel couplings or other couplings containing o-rings, which may dry out, crack and fail over time.

MPW-1000® High Pressure Wire Braid Multipurpose Hose

Series 7204



[view on web page](#)

Series 7204 hose construction incorporates a premium grade tube especially suited for high temperature materials. The high tensile wire braid reinforcement provides durability, kink resistance, high pressure capability and superior coupling retention, and the cover is resistant to heat, oil and weathering. The tube resists popcorning and oil-based detergents and rust inhibitors found in steam systems.

- NOTES:**
- Do not use in hot, dry air applications.
 - Do not use to dispense or transfer biodiesel, diesel fuel or gasoline in regulated service (API, NFPA, UL, ULC or any other agency approval or listing).
 - Do not use in vehicle engine applications.
 - Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
										Non-Steam Applications				
7204-751	3/4	19.1	1	1.2	30.1	0.52	0.77	10	254	1000	69	43	500	Reel
7204-1001	1	25.4	1	1.5	38.1	0.75	1.12	12	305	1000	69	43	500	Reel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: One wire braid

Cover: Black chloroprene; perforated wrapped finish

Temp. Range: Air: -20°F to +158°F (-29°C to +70°C)

Steam: -20°F to +368°F (-29°C to +187°C) saturated steam to 150 psi max WP

Other: -20°F to +300°F (-29°C to +149°C) / 350°F (177°C) intermittent

Brand Method: Embossed

Brand Example: PARKER SERIES 7204 - MPW XXX PSI MAX WP

Design Factor: 4:1 (10:1 steam @ 150 psi/10 bar)

Industry Standards: None applicable

Applications:

- Air, mild chemicals, oil, water; hot asphalt, glue, oil, tar and wax; steam; biodiesel (to B20 in dedicated and non-dedicated service), diesel, ethanol, gasoline
- High pressure washdown; cleaning containment vessels and manufacturing equipment; cleaning and heating processing equipment
- General industrial, manufacturing and processing plants, refineries

Vacuum: Not recommended

Compare to: Boston Hot Tar Pumping; ContiTech Pyroflex; Gates 319MB Gold Master

WARNINGS!

- ▶ Failure to properly inspect, maintain, test and use steam hose assemblies may result in property damage, personal injury or death. Refer to ARPM publication IP-11-1, "Guide for Use, Testing and Inspection of Steam Hose."
- ▶ Water changes to hot water and phases of steam when subjected to heat and pressure. The greater the pressure, the higher the temperature required to achieve and maintain a steam phase. If steam escapes, dangerous quantities of heat may be released very suddenly. Exposure to hot water, low pressure steam and high pressure steam may cause severe scalding or fatal burns.
- ▶ Use only hoses designated for steam service for steam applications. Use ONLY Parker recommended hose/coupling combinations for steam applications. Refer to CrimpSource® at www.parker.com/crimpsource.
- ▶ Prior to use with detergents or rust inhibitors, refer to the chemical guide in this catalog or contact Parker.
- ▶ Drain steam hose after each use to reduce the possibility of hose popcorning while in service.
- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

WILDCATTER®

Hot Tar Hose

Series SW387



[view on web page](#)

Series SW387 is a suction and discharge hose for high temperature materials such as hot asphalt, glue, oil, tar and wax to 300°F continuous. The hose construction incorporates a dual wire helix that provides full suction capability, kink resistance and a path to conduct a static electrical charge to ground. The cover is resistant to abrasion, heat, oil and weathering.

NOTE: For other hot tar and asphalt hoses, refer to Series 7204.

The Wildcatter trade name indicates the product is designed and manufactured for premium service in oilfield applications. However, Wildcatter products may be used in other industries, markets and applications where the product meets the required performance criteria.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#													
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Nom Std Pack Qty (ft)	Pkg Type
SW387-1500	1-1/2	38.1	2	2.1	54.0	0.98	1.46	6	152	150	10	100	Coil
SW387-2000	2	50.8	2	2.6	66.7	1.43	2.13	8	203	150	10	100	Coil
SW387-2500	2-1/2	63.5	2	3.4	85.7	1.84	2.74	10	254	150	10	100	Coil
SW387-3000	3	76.2	2	3.8	95.3	2.42	3.61	12	305	150	10	100	Coil
SW387-4000	4	101.6	2	4.8	122.2	3.60	5.36	18	457	150	10	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile; ARPM Class A oil resistance

Reinforcement: Multiple textile plies with dual wire helix

Cover: Black nitrile; ARPM Class A oil resistance; wrapped finish

Temp. Range: -40°F to +300°F (-40°C to +177°C)

Brand Method: Black text on red stripe

Brand Example: PARKER **WILDCATTER** SW387 HOT TAR HOSE
150 PSI MAX WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Hot asphalt, glue, oil, tar
- In-plant and storage tank transfer
- Delivery, transport applicator trucks

Vacuum: 29" Hg (737 mm Hg)

Compare to: Boston Black Cat; ContiTech Pyroflex;
Thermoid Transporter

WARNING! Do not use for continuous service at 350°F. Do not use above 350°F for any service or any duration. Using above the recommended service duration or temperature may lead to premature hose failure and property damage, personal injury or death.

SUPER-FLEX®

Corrugated Material Handling Hose

Suction / Vacuum

3/16" Natural Rubber / SBR Blend Tube

Series 7363



view on web page

Series 7363 is a flexible suction and discharge hose for dry or wet abrasive materials in applications such as loading/unloading barges, hoppers and railcars, and debris evacuation. The static dissipating 3/16" natural rubber/SBR blend tube provides abrasion resistance, and the wire helix provides full suction capability and kink resistance. The corrugated natural rubber blend cover provides flexibility and is resistant to abrasion and weathering.

#													
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Nom Std Pack Qty (ft)	Pkg Type
7363-3000	3	76.2	3	3.8	96.6	2.35	3.50	9	229	100	7	100	Coil
7363-4000	4	101.6	3	4.8	123.1	3.26	4.86	12	305	100	7	100	Coil
7363-5000	5	127.0	3	5.9	150.6	4.64	6.91	15	381	100	7	100	Coil
7363-6000	6	152.4	3	6.9	176.2	5.60	8.34	18	457	100	7	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black natural rubber/SBR blend; static dissipating

Reinforcement: Multiple textile plies with wire helix

Cover: Black natural rubber/SBR blend; corrugated wrapped finish

Temp. Range: -40°F to +160°F (-40°C to +71°C)

Brand Method: White text on black stripe

Brand Example: PARKER SERIES 7363 SUPER-FLEX®
ABRASIVE SUCTION AND DISCHARGE 100
PSI MAX WP

Design Factor: 3:1

Industry Standards: None applicable

Applications:

- Abrasive materials, debris, water
- Loading/unloading barges, hoppers and railcars
- Construction, general industrial, mining, sewer cleaning

Vacuum: 29" Hg (737 mm Hg)

Compare to: Boston Sabertooth; ContiTech Plicord HD
Vacuum; Diversiflex; Gates 688SB

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

DAY-LITE® Corrugated Material Handling Hose Suction / Vacuum Natural Rubber / SBR Blend Tube Series 8341



view on web page

Series 8341 is a flexible suction/vacuum and discharge hose for dry or wet abrasive materials such as debris evacuation by mobile vacuum trucks in sewer cleaning and similar applications. The static dissipating natural rubber/SBR blend tube provides abrasion resistance, and the wire helix provides full suction capability and kink resistance. The corrugated natural rubber/SBR cover provides flexibility and is resistant to abrasion and weathering.

# Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Nom Std Pack Qty (ft)	Pkg Type
8341-1500	1-1/2	38.1	2	2.0	50.0	0.77	1.15	5	114	75	5	100	Coil
8341-2000	2	50.8	2	2.5	63.0	1.00	1.49	6	152	75	5	100	Coil
8341-3000	3	76.2	2	3.5	90.0	1.62	2.41	9	229	75	5	100	Coil
8341-4000	4	101.6	2	4.6	117.2	2.47	3.68	12	305	75	5	100	Coil
8341-6000	6	152.4	2	6.7	170.0	4.41	6.57	18	457	75	5	100	Coil
8341-8000	8	203.2	3	8.7	221.0	5.91	8.81	24	610	75	5	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black natural rubber/SBR blend

Reinforcement: Multiple textile plies with wire helix

Cover: Black natural rubber/SBR; corrugated wrapped finish

Temp. Range: -40°F to +180°F (-40°C to +83°C)

Brand Method: Black text on green stripe

Brand Example: PARKER SERIES 8341 DAY-LITE® SUCTION
AND DISCHARGE HOSE

Design Factor: 3:1

Industry Standards: None applicable

Applications:

- Abrasive materials, debris, water
- Construction, general industrial, sewer cleaning

Vacuum: 29" Hg (737 mm Hg)

Compare to: ContiTech Plicord Vacuum

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

DAY-LITE®

Corrugated Material

Handling Hose Suction / Vacuum

Natural Rubber / SBR Blend Tube

Series 8341HD



[view on web page](#)

Parker's new Day-Lite 8341HD designed for use in daylighting to both excavate and remove soil allowing to safely expose utility lines and underground pipes. Daylighting construction applications include exposing buried lines and cables, potholing, and debris removal.

DAY-LITE 8341HD offers an increased tube thickness of 3/16", full vacuum and 3:1 safety factor. The static dissipating natural rubber/SBR blend tube provides abrasion resistance, and wire helix provides full suction capability and kink resistance. The corrugated natural rubber/SBR cover provides flexibility and is resistant to abrasion and weathering.

#	#						
Part Number	Size/ID	Hose O.D.	Weight	Min. Bend Radius	Max Working Pressure	Vacuum	Packaging
	in	in	mm	(lbs/ft) (kg/m)	in	mm	
8341HD-8000-33	8	9.3	236	9.8 4.4	28 711	75	Full
							33 ft. (1 piece, continuous, coiled)



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black natural rubber/SBR blend

Reinforcement: Multiple textile plies with wire helix

Cover: Black natural rubber/SBR; corrugated wrapped finish

Temp. Range: -40°F to +180°F (-40°C to +83°C)

Brand Method: Black text on green stripe

Brand Example: PARKER SERIES 8341HD DAY-LITE®
SUCTION AND DISCHARGE HOSE

Design Factor: 3:1

Industry Standards: None applicable

Applications:

- Abrasive materials, debris, water
- Construction, general industrial, sewer cleaning

Vacuum: 29" Hg (737 mm Hg)

Compare to: ContiTech Plicord Vacuum



WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

WILDCATTER®

Material Handling Hose

1/8" SBR Tube

Series SS135



[view on web page](#)

Series SS135 is a lightweight, low pressure discharge hose for dry abrasive materials such as cement and powders. The static dissipating 1/8" SBR tube provides abrasion resistance and the SBR cover is resistant to abrasion, cuts, scuffs and weathering.

The Wildcatter trade name indicates the product is designed and manufactured for premium service in oilfield applications. However, Wildcatter products may be used in other industries, markets and applications where the product meets the required performance criteria.

#											
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Max WP (psi)	Max WP (bar)	Nom Std Pack Qty (ft)	Pkg Type
SS135-4000	4	101.6	2	4.5	114.3	1.49	2.22	65	5	100	Coil
SS135-4500	4-1/2	114.3	2	5.0	127.0	1.71	2.55	65	5	100	Coil
SS135-5000	5	127.0	2	5.5	139.7	1.90	2.83	65	5	100	Coil
SS135-6000	6	152.4	2	6.6	166.6	2.32	3.46	65	5	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: 1/8" Black SBR; static dissipating

Reinforcement: Multiple textile plies

Cover: Black SBR; wrapped finish

Temp. Range: -40°F to +180°F (-40°C to +83°C)

Brand Method: Black text on white stripe

Brand Example: PARKER **WILDCATTER** SS135 DRY CEMENT
DISCHARGE 65 PSI WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Abrasive materials, dry cement, lime, powders, silica
- Bulk transport trucks
- Construction, general industrial

Vacuum: Not recommended

Compare to: Boston Lynx HD; ContiTech Black Softwall;
Gates Dry Cement Delivery; Thermoid
Transporter

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

WILDCATTER®

Material Handling Hose

1/4" SBR Tube

Series SS247



[view on web page](#)

Series SS247 is a flexible, heavy duty discharge hose for dry abrasive materials such as pebble lime and sand. The static dissipating 1/4" SBR tube provides abrasion resistance and the SBR cover is resistant to abrasion, cuts, scuffs and weathering.

The Wildcatter trade name indicates the product is designed and manufactured for premium service in oilfield applications. However, Wildcatter products may be used in other industries, markets and applications where the product meets the required performance criteria.

#											
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Max WP (psi)	Max WP (bar)	Nom Std Pack Qty (ft)	Pkg Type
SS247-4000	4	101.6	2	4.8	120.7	2.49	3.71	75	5	100	Coil
SS247-4500	4-1/2	114.3	2	5.3	133.4	2.79	4.16	75	5	100	Coil
SS247-5000	5	127.0	2	5.8	146.1	3.11	4.63	75	5	100	Coil
SS247-6000	6	152.4	2	6.8	171.5	3.69	5.50	70	5	100	Coil
SS247-8000	8	203.2	2	8.8	222.3	4.88	7.27	60	4	100	Coil



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: 1/4" Black SBR; static dissipating

Reinforcement: Multiple textile plies

Cover: Black SBR; wrapped finish

Temp. Range: -40°F to +180°F (-40°C to +83°C)

Brand Method: Black text on blue stripe

Brand Example: PARKER **WILDCATTER** SS247 HEAVY DUTY
DRY CEMENT XXX PSI WP

Design Factor: 3:1

Industry Standards: None applicable

Applications:

- Dry abrasive materials, cement, pebble lime, powders, sand, silica
- In-plant transfer/loading, bulk transport trucks
- Construction, general industrial

Vacuum: Not recommended

Compare to: Boston Lynx HD; ContiTech Black Softwall;
Gates Dry Cement Delivery; Thermoid
Transporter



WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Sand Recovery Hose Suction / Vacuum 3/16" Natural Rubber Tube Series SW409



[view on web page](#)

Series SW409 is a heavy duty suction and discharge hose for transfer and recovery of sand and severely abrasive materials. The static dissipating 3/16" natural rubber tube provides abrasion resistance, and the dual wire helix provides full suction capability and kink resistance. The SBR cover is resistant to abrasion, cuts, scuffs and weathering.

#													
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Nom Std Pack Qty (ft)	Pkg Type
SW409-2000	2	50.8	2	2.8	69.9	1.41	2.10	6	152	200	14	100	Coil
SW409-3000	3	76.2	2	3.8	95.3	2.42	3.61	12	305	175	12	100	Coil
SW409-4000	4	101.6	2	4.8	120.7	3.16	4.71	16	406	150	10	100	Coil
SW409-6000	6	152.4	2	6.8	173.0	5.30	7.90	24	610	100	7	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: 3/16" Black natural rubber; static dissipating

Reinforcement: Multiple textile plies with dual wire helix

Cover: Black SBR; wrapped finish

Temp. Range: -40°F to +150°F (-40°C to +66°C)

Brand Method: Black text on red stripe

Brand Example: PARKER SERIES SW409 SAND RECOVERY
HOSE XXX PSI WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Abrasive materials, debris, sand
- Construction, general industrial, mining, sand clean-up/recovery

Vacuum: 29" Hg (737 mm Hg)

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

WILDCATTER® BS & W™ Corrugated Vacuum Hose Series 7213E



[view on web page](#)

Series 7213E is a flexible yet durable suction and discharge hose designed to handle brine, crude oil, mild chemicals, petroleum waste, sediments, sludge, slurries and water in harsh oilfield bottom sediment and waste pit recovery applications. The corrugated hose construction incorporates a wire helix that provides full suction capability, flexibility, kink resistance, and a path to conduct a static electrical charge to ground. The nitrile/SBR cover is resistant to abrasion, oil and weathering.

- NOTES:**
- Do not use with refined oil or fuel.
 - This hose is not intended to transfer undiluted solutions of diesel fuel, fuel oil, kerosene or petroleum distillates. However, it is suitable for transferring brine, crude oil, drilling mud, fracking fluids, fresh water, mild chemicals, salt water and slurries that may contain additives such as diesel fuel, fuel oil, kerosene or petroleum distillates that are used as corrosion or freeze inhibitors, or gelling agents.

The Wildcatter trade name indicates the product is designed and manufactured for premium service in oilfield applications. However, Wildcatter products may be used in other industries, markets and applications where the product meets the required performance criteria.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7213E-1500	1-1/2	38.1	2	2.0	50.2	0.86	1.28	4	102	150	10	*	100	Coil
7213E-2000	2	50.8	3	2.4	62.0	1.02	1.52	5	127	150	10	*	100	Coil
7213E-2500	2-1/2	63.5	3	3.0	75.0	1.29	1.92	6	158	150	10	*	100	Coil
7213E-3000	3	76.2	3	3.5	89.0	1.52	2.26	8	193	150	10	*	100	Coil
7213E-4000	4	101.6	3	4.6	116.0	2.49	3.71	12	305	150	10	*	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile/SBR; ARPM Class A oil resistance

Reinforcement: Multiple textile plies with wire helix

Cover: Black nitrile/SBR corrugated wrapped finish; ARPM Class A oil resistance

Temp. Range: -22°F to +185°F (-30°C to +85°C)

Brand Method: White text on blue stripe

Brand Example: PARKER **WILDCATTER** 7213E BS&W OILFIELD SUCTION HOSE 150 PSI MAX WP

Industry Standards: None applicable

Applications:

- Brine, crude oil, mild chemicals, petroleum waste, sediments, sludge, slurries, water
- Oilfield waste recovery, general industrial

Vacuum: 29" Hg (737 mm Hg)

Compare to: ContiTech Flextra Oilfield; Jason Tupelo 4677; Kuriyama T601AA; Texcel Tex-Vac;

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

WILDCATTER®

Hot Oiler Hose

Series 7301



[view on web page](#)

Series 7301 is a heavy duty, high pressure hose for hot oil at 275°F continuous/300°F intermittent (135°C/149°C). The hose construction incorporates multiple wire braids of reinforcement for crush resistance, durability, kink resistance and a path to conduct a static electrical charge to ground. The cover is resistant to abrasion, heat, oil and weathering.

The Wildcatter trade name indicates the product is designed and manufactured for premium service in oilfield applications. However, Wildcatter products may be used in other industries, markets and applications where the product meets the required performance criteria.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7301-1502150	1-1/2	38.1	2	2.1	53.3	1.70	2.53	13	330	2250	155	*	150	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black chloroprene

Reinforcement: Multiple wire braids

Cover: Black chloroprene; perforated wrapped finish

Temp. Range: -40°F to +275°F/300°F (-40°C to +135°C/149°C)

Brand Method: Red text on black stripe

Brand Example: PARKER **WILDCATTER** 7301 HOT OILER HOSE (ID) 2250 PSI MAX WP TEMP RATING 275°F CONTINUOUS 300°F INTERMITTENT

Design Factor: 3:1

Industry Standards: None applicable

Applications:

- Hot asphalt, glue, tar, oil, wax
- In-plant transfer; delivery trucks
- Construction, general industrial, oilfield

Vacuum: Not recommended

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

WILDCATTER®

Multipurpose Fracking Hose

Series 7311N / 7311NXT



Series 7311N/7311NXT is a high pressure oilfield stimulation/fracking discharge hose designed to handle oil and refined fuels such as biodiesel (to B20 in dedicated service), diesel, ethanol and gasoline, as well as brine, mild chemicals, fracking fluids, drilling mud, petroleum waste, slurries and water. The heavy duty multipurpose hose construction helps to extend service life in multiple applications, and incorporates dual static wires that provide a path to conduct an electrical charge to ground. The cover is resistant to abrasion, oil and weathering.

Series 7311NXT features a layer of ultra high molecular weight polyethylene (UHMWPE) bonded to the cover for extreme abrasion resistance and service life.

The Wildcatter trade name indicates the product is designed and manufactured for premium service in oilfield applications. However, Wildcatter products may be used in other industries, markets and applications where the product meets the required performance criteria.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID	ID	Reinf	OD	OD	Approx	Approx	Max WP	Max WP	Perm	Nom Std	Pkg
Part	(in)	(mm)	Layers	(in)	(mm)	Wt	Wt	(psi)	(bar)	Cplg	Pack Qty	Type
Number						(lbs/ft)	(kg/m)			Rec *	(ft)	
7311N-1500	1-1/2	38.1	4	2.0	50.8	0.76	1.13	400	28	*	100	Coil
7311N-2000	2	50.8	4	2.6	66.0	1.16	1.73	400	28	*	100	Coil
7311N-3000	3	76.2	4	3.7	93	1.77	2.64	400	28	*	100	Coil
7311N-4000	4	101.6	4	4.8	121.2	2.61	3.89	400	28	*	100	Coil
7311N-6000	6	152.4	6	7.0	177.8	5.21	7.75	400	28	*	100	Coil
7311NXT-3000	3	76.2	4	3.7	94.7	1.94	2.89	400	28	*	100	Coil
7311NXT-4000	4	101.6	4	4.8	122.7	2.78	4.14	400	28	*	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile; ARPM Class A oil resistance

Reinforcement: Multiple textile plies with dual static wires

Cover: 7311N: Black nitrile blend; wrapped finish
7311NXT: Black nitrile blend; sleek UHMWPE abrasion resistant finish

Temp. Range: -40°F to +200°F (-40°C to +93°C)

Brand Method: Black text on yellow stripe

Brand Example: PARKER **WILDCATTER** (7311N) (7311NXT)
DISCHARGE HOSE 400 PSI WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Refined fuels, oil
- Brine, mild chemicals, fracking fluids, drilling mud, petroleum waste, slurries, water
- General industrial, oilfield

Vacuum: Not recommended

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

WILDCATTER®

Multipurpose Fracking Hose

Series 7331/7331XT



[view on web page](#)

Series 7331/7331XT is a high pressure oilfield stimulation/fracking suction & discharge hose designed to handle oil and refined fuels such as biodiesel (to B20 in dedicated service), diesel, ethanol and gasoline, as well as brine, mild chemicals, fracking fluids, drilling mud, petroleum waste, slurries and water. The heavy duty multipurpose hose construction provides an extended service life in multiple applications, and incorporates a wire helix that provides full suction capability, kink resistance, flexibility for ease of handling and a path to conduct a static electrical charge to ground. The cover is resistant to abrasion, oil and weathering.

The Wildcatter trade name indicates the product is designed and manufactured for premium service in oilfield applications. However, Wildcatter products may be used in other industries, markets and applications where the product meets the required performance criteria.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7331-2000	2	50.8	2	2.6	64.8	1.16	1.73	8	203	400	28	*	100	Coil
7331-3000	3	76.2	2	3.6	91.7	1.98	2.95	15	381	400	28	*	100	Coil
7331-4000	4	101.6	4	4.9	124.2	3.90	5.81	20	508	400	28	*	100	Coil
7331-6000	6	152.4	6	7.1	179.0	7.65	11.40	36	914	400	28	*	100	Coil
7331XT-6000	6	152.4	6	7.1	179.3	7.08	10.54	36	914	400	28	*	100	Coil



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile; ARPM Class A oil resistance

Reinforcement: Multiple textile plies with one or multiple wire helixes

Cover: 7331: Black nitrile blend; wrapped finish
7331XT: Black nitrile blend with sleek UHMWPE abrasion resistant finish

Temp. Range: -40°F to +200°F (-40°C to +93°C)

Brand Method: Blue text on yellow stripe

Brand Example: PARKER **WILDCATTER** (7331) (7331XT)
SUCTION HOSE 400 PSI

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Biodiesel (to B20 in dedicated service), diesel, ethanol, gasoline, oil
- Brine, mild chemicals, fracking fluids, drilling mud, petroleum waste, slurries, water
- General industrial, oilfield

Vacuum: 29" Hg (737 mm Hg)

WARNING! Do not use for continuous service at 350°F. Do not use above 350°F for any service or any duration. Using above the recommended service duration or temperature may lead to premature hose failure and property damage, personal injury or death.

WILDCATTER® Tank Truck Hose Series 7216E



[view on web page](#)

Series 7216E is a lightweight suction and discharge hose designed to handle oil and refined fuels such as biodiesel (to B20 in dedicated service), diesel, ethanol and gasoline. The hose construction incorporates a wire helix that provides full suction capability, kink resistance, and a path to conduct a static electrical charge to ground. The cover is resistant to abrasion, oil and weathering.

NOTE: Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.

The Wildcatter trade name indicates the product is designed and manufactured for premium service in oilfield applications. However Wildcatter products may be used in other industries, markets and applications where the product meets the required performance criteria.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID	ID	Reinf	OD	OD	Approx	Approx	Min	Min	Max WP	Max WP	Perm	Nom Std	Pkg
Part Number	(in)	(mm)	Layers	(in)	(mm)	Wt (lbs/ft)	Wt (kg/m)	Bend Rad (in)	Bend Rad (mm)	(psi)	(bar)	Cplg Rec *	Pack Qty (ft)	Type
7216E-1002	1	25.4	2	1.3	33.0	0.47	0.70	3	76	150	10	43	100	Coil
7216E-1252	1-1/4	31.8	2	1.7	42.4	0.65	0.97	4	102	150	10	43	100	Coil
7216E-1502	1-1/2	38.1	2	2.0	49.8	0.92	1.37	5	127	150	10	43	100	Coil
7216E-2002	2	50.8	2	2.5	63.8	1.10	1.64	6	152	150	10	43	100	Coil
7216E-2502	2-1/2	63.5	2	3.0	76.9	1.55	2.31	7	178	150	10	*	100	Coil
7216E-3002	3	76.2	2	3.7	93.0	2.08	3.10	8	203	150	10	*	100	Coil
7216E-4002	4	102.0	2	4.7	117.5	2.80	4.17	11	279	150	10	*	100	Coil



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile plies with dual wire helix

Cover: Black synthetic rubber; wrapped finish

Temp. Range: -35°F to +180°F (-37°C to +82°C)

Brand Method: Black text on orange stripe

Brand Example: PARKER **WILDCATTER** 7216E TANK TRUCK
HOSE 150 PSI MAX WP

Industry Standards: None applicable

Applications:

- Biodiesel (to B20 in dedicated service), diesel, ethanol, gasoline, oil
- In-plant and storage tank transfer
- Delivery, transport

Vacuum: 29" Hg (737 mm Hg)

Compare to: Boston Puma; ContiTech Plicord Flexwing
Petroleum; Gates Longhorn; Kuriyama T605AA

⚠️ WARNINGS!

- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- ▶ Do not use for oil or fuel transfer service in or on open water.

TITANFLEX®

Corrugated Tank Truck Hose

Series SWC609 (Black) and
Series SWC609R (Red)



[view on web page](#)



[view on web page](#)

Series SWC609/SWC609R is an extremely flexible, high pressure suction and discharge hose. The corrugated hose construction incorporates a dual wire helix that provides full suction capability, superior kink resistance, minimal force-to bend and a path to conduct a static electrical charge to ground. The cover is resistant to abrasion, oil and weathering.

NOTE: Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.

Series SWC609 (Black) and Series SWC609R (Red)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number SWC609 or SWC609R	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
-1250*	1-1/4	31.8	2	1.7	42.9	0.63	0.94	1	33	250	17	*	100	Coil
-1500	1-1/2	38.1	2	2.0	49.5	0.78	1.16	2	38	250	17	43	100	Coil
-2000	2	50.8	2	2.5	62.2	1.00	1.49	2	51	250	17	43	100	Coil
-2500	2-1/2	63.5	2	3.0	76.2	1.44	2.15	3	64	200	14	*	100	Coil
-3000	3	76.2	2	3.6	90.9	1.70	2.53	3	76	200	14	*	100	Coil
-4000	4	101.6	2	4.6	117.5	2.41	3.59	6	152	150	10	*	100	Coil
-6002*	6	152.4	2	6.8	172.2	4.75	7.08	12	305	150	10	*	100	Coil
-8002*	8	203.2	2	8.8	223.3	6.95	10.36	16	406	150	10	*	100	Coil

* Series SWC609 only.

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile plies with dual wire helix

Cover: SWC609: Black nitrile; corrugated wrapped finish
SWC609R: Red nitrile; corrugated wrapped finish

Temp. Range: -40°F to +200°F (-40°C to +93°C)

Brand Method: SWC609: Red text on black stripe
SWC609R: White text on red stripe

Brand Example: PARKER SERIES SWC609(R) TITANFLEX®
PETROLEUM SUCTION & DISCHARGE
HOSE
XXX PSI WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Biodiesel (to B 100 in dedicated service), diesel, ethanol, gasoline, oil
- In-plant and storage tank transfer
- Delivery, transport

Vacuum: 29" Hg (737 mm Hg)

Compare to: Boston Bobcat; ContiTech Flextra; Gates Longhorn; Thermoid Transporter

WARNINGS!

- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- ▶ Do not use for oil or fuel transfer service in or on open water.

Arctic Translite® Hose

Low Temp/Corrugated Tank Truck Hose

Series SWC325



[view on web page](#)

Series SWC325 is a flexible, lightweight, low temperature suction and discharge hose. The corrugated hose construction incorporates a dual wire helix that provides full suction capability, flexibility and kink resistance — even in the harshest cold climate conditions — and a path to conduct a static electrical charge to ground. The cover is resistant to abrasion, oil and weathering.

NOTE: Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
SWC325-1500	1-1/2	38.1	2	2.1	52.3	0.97	1.44	4	102	150	10.3	*	100	Coil
SWC325-2000	2	50.8	2	2.6	65.4	1.33	1.98	5	127	150	10.3	*	100	Coil
SWC325-2500	2-1/2	63.5	2	3.2	80.0	1.86	2.77	6	152	150	10.3	*	100	Coil
SWC325-3000	3	76.2	2	3.7	93.8	2.52	3.75	8	203	150	10.3	*	100	Coil
SWC325-4000	4	101.6	2	4.6	117.9	2.93	4.36	10	254	150	10.3	*	100	Coil
SWC325-6000	6	152.4	2	6.8	172.8	5.86	8.72	16	406	125	8.6	*	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile plies with dual wire helix

Cover: Black nitrile; corrugated wrapped finish

Temp. Range: -67°F to +180°F (-55°C to +82°C)

Brand Method: Side 1: White text on blue stripe
Side 2: Solid reflective silver stripe

Brand Example: PARKER SWC325 ARCTIC TRANSLITE®
-67°F LOW-TEMP TANK TRUCK HOSE XXX
PSI MAX WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Biodiesel (to B100 in dedicated and non-dedicated service), diesel, ethanol, gasoline, oil
- Low temperature in-plant and storage tank transfer
- Low temperature delivery, transport

Vacuum: 29" Hg (737 mm Hg)

Compare To: ContiTech LW Arctic Tank Truck

⚠️ WARNINGS!

- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

GREEN LABEL™

Corrugated Tank Truck Hose

Series 7705



[view on web page](#)

Series 7705 is a flexible, medium pressure suction and discharge biodiesel hose. The corrugated hose construction incorporates a dual wire helix that provides full suction capability, flexibility, kink resistance, and a path to conduct a static electrical charge to ground. The nitrile/PVC cover is resistant to abrasion, oil and weathering.

NOTE: Refer to the Refined Fuel/Hose Compatibility Table in the Media Compatibility section.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7705-1000	1	25.4	2	1.4	36.5	0.55	0.82	2	51	200	14	43	100	Coil
7705-1250	1-1/4	31.8	2	1.7	43.0	0.70	1.04	3	64	200	14	*	100	Coil
7705-1500	1-1/2	38.1	2	2.0	50.0	0.83	1.24	3	76	200	14	43	100	Coil
7705-2000	2	50.8	2	2.4	62.8	1.00	1.49	4	102	200	14	43	100	Coil
7705-2500	2-1/2	63.5	2	3.0	75.0	1.37	2.04	5	127	200	14	*	100	Coil
7705-3000	3	76.2	2	3.5	88.6	1.75	2.61	5	127	200	14	*	100	Coil
7705-4000	4	101.6	2	4.5	115.0	2.33	3.47	6	152	150	10	*	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile

Reinforcement: Multiple textile plies with dual wire helix

Cover: Black nitrile/PVC; corrugated wrapped finish

Temp. Range: -20°F to +180°F (-29°C to +82°C)

Brand Method: Black text on green stripe

Brand Example: PARKER SERIES 7705 GREEN LABEL™
TANK TRUCK HOSE XXX PSI MAX WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- Biodiesel (to B100 in dedicated and non-dedicated service), diesel, ethanol, gasoline, oil
- In-plant and storage tank transfer
- Delivery, transport

Vacuum: 29" Hg (737 mm Hg)

⚠ WARNINGS!

- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- Do not use for oil or fuel transfer service in or on open water.

NEXCLEAR® Clear PVC Tubing Series 100



[view on web page](#)

Series 100 is flexible PVC tubing featuring a smooth interior that is abrasion resistant and will not impart taste or odor, and allows full-flow. The clear PVC construction permits visual observation of materials being conveyed. Also provides excellent general industrial service for low pressure air, distilled water, wine and wire harness applications.

Tube: Clear PVC, 75A durometer

Temp. Range: +25°F to +150°F (-5°C to +65°C)
Working pressures are at +68°F (+20°C).
Higher temperatures reduce the available working pressure. See the PVC and Thermoplastic Temperature/Pressure chart in the Media Compatibility section.

Brand Method: Black ink

Brand Example: NEXCLEAR® FOOD GRADE PVC TUBING BY
PARKER NEXGEN® (P/N) (ID) X (OD) NSF-51
MAX TEMP 150°F (65C)

Industry Standards:

- FDA ingredients*, NSF 51 certified to 180°F (82°C)***, USP Class VI Rated Materials*
- GSA A-A-52047 Type VI Compliant
- EU: Meets requirements and amendments of Resolution AP(89) for food contact

Applications:

- Beverages, potable and pure water, wine
- Air, drain, light vacuum, wire harness
- General industrial, laboratories, wineries

Vacuum: Light



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

(Continued on the following page)

WARNING! Working pressures are at +68°F (+20°C). Higher temperatures reduce the available working pressure. See the PVC and Thermoplastic Temperature/Pressure chart in the Media Compatibility section.

Series 100 — NEXCLEAR® Clear PVC Tubing (Continued)

#												
Part Number	ID (in)	ID (mm)	Wall (in)	Wall (mm)	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Max WP @ 68°F (psi)	Max WP @ 20°C (bar)	Nom Std Pack Qty (ft)	Pkg Type
100-01020502	1/16	1.6	0.031	0.8	1/8	3.2	0.02	0.03	50	3	500	Coil
100-02040102	1/8	3.2	0.062	1.6	1/4	6.4	0.02	0.03	65	5	100	Coil
100-03040102			0.032	0.8	1/4	6.4	0.02	0.03	50	3	100	Coil
100-03050102	3/16	4.8	0.062	1.6	5/16	7.9	0.02	0.03	55	4	100	Coil
100-03060102			0.094	2.4	3/8	9.5	0.04	0.06	60		100	Coil
100-04060102			0.062	1.6	3/8	9.5	0.04	0.06	55		100	Coil
100-04070102	1/4	6.4	0.094	2.4	7/16	11.1	0.04	0.06	58	4	100	Coil
100-04080102			0.125	3.2	1/2	12.7	0.09	0.13	60		100	Coil
100-05070102			0.062	1.6	7/16	11.1	0.04	0.06	50	3	100	Coil
100-05080102	5/16	7.9	0.094	2.4	1/2	12.7	0.07	0.10	55	4	100	Coil
100-05090102			0.125	3.2	9/16	14.3	0.09	0.13	60		100	Coil
100-06080102			0.062	1.6	1/2	12.7	0.04	0.06	45	3	100	Coil
100-06090102	3/8	9.5	0.094	2.4	9/16	14.3	0.07	0.10	50		100	Coil
100-06100102	3/8	9.5	0.125	3.2	5/8	15.9	0.11	0.16	55	4	100	Coil
100-08100102			0.062	1.6	5/8	15.9	0.07	0.10	30	2	100	Coil
100-08110102	1/2	12.7	0.094	2.4	11/16	17.5	0.09	0.13	40	3	100	Coil
100-08120102			0.125	3.2	3/4	19.1	0.13	0.19	45		100	Coil
100-10120102			0.062	1.6	3/4	19.1	0.07	0.10	25	2	100	Coil
100-10130102	5/8	15.9	0.094	2.4	13/16	20.6	0.11	0.16	35	2	100	Coil
100-10140102			0.125	3.2	7/8	22.2	0.15	0.22	40	3	100	Coil
100-12160100			0.125	3.2	1	25.4	0.18	0.27	35	2	100	Coil
100-12180100	3/4	19.1	0.187	4.7	1-1/8	28.6	0.29	0.43	40	3	100	Coil
100-12200100			0.250	6.4	1-1/4	31.8	0.42	0.63	45		100	Coil
100-14180100	7/8	22.2	0.125	3.2	1-1/8	28.6	0.20	0.30	30	2	100	Coil
100-16200100			0.125	3.2	1-1/4	31.8	0.24	0.36	25		100	Coil
100-16220100	1	25.4	0.187	4.7	1-3/8	34.9	0.37	0.55	30	2	100	Coil
100-16240100			0.250	6.4	1-1/2	38.1	0.53	0.79	35		100	Coil
100-20240100			0.125	3.2	1-1/2	38.1	0.29	0.43	20	1	100	Coil
100-20280100	1-1/4	31.8	0.250	6.4	1-3/4	44.5	0.62	0.92	40	3	100	Coil
100-24300100			0.187	4.7	1-7/8	47.6	0.53	0.79	30	2	100	Coil
100-24320100	1-1/2	38.1	0.250	6.4	2	50.8	0.73	1.09	35		100	Coil
100-32400100	2	50.8	0.250	6.4	2-1/2	63.5	0.93	1.39	30	2	100	Coil

* All compound ingredients used in this tubing are listed in the US FDA CFR, Title 21. Tubing NSF 51 Listed. Compound USP Class VI rated.

 **WARNING:** The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

PVC General Purpose Hose

Series GPH™



[view on web page](#)

Series GPH is a versatile, flexible and lightweight PVC hose. The multiple plies of textile reinforcement provide strength and flexibility, and the flame resistant cover is also resistant to abrasion, mild chemicals, ultraviolet light and weathering. The hose is electrically nonconductive with a minimum resistance of one megaohm per inch at 1000 volts DC.

NOTES:

- The user must determine if the hose is suitable for applications subject to electrical hazard. Contact Parker for additional information.
- Series GPH does not contain red phosphorous.

Other cover colors available:

GPH-BLU 

GPH-YEL 

Tube: Black PVC

Reinforcement: Multiple textile plies

Cover: Black, blue, gray, red or yellow PVC; perforated smooth finish

Temp. Range: -15°F to +150°F (-25°C to +65°C).
Working pressures are at +68°F (+20°C) ambient temperature. Higher temperatures reduce the available working pressure. See the PVC and Thermoplastic Temperature/Pressure chart in the Media Compatibility section.

Brand Method: White ink on black, blue and red hose
Black ink on gray and yellow hose

Brand Example: PARKER GPH – (dash ID) – (fraction ID) –
XXX PSI – GENERAL PURPOSE

Design Factor: 4:1

Industry Standards: Electrically nonconductive with a minimum resistance of one megaohm per inch at 1000 volts DC

Applications:

- Air (including oil mist), mild chemicals, water
- Agriculture, construction, general industrial

Vacuum: See table on the following page

Compare to: Boston Polyforce II; ContiTech Pliovic 300



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

(Continued on the following page)

⚠️ WARNINGS!

- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- ⚠️ Working pressures are at +68°F (+20°C). Higher temperatures reduce the available working pressure. See the PVC and Thermoplastic Temperature/Pressure chart in the Media Compatibility section.

Series GPH™ – PVC General Purpose Hose (Continued)

Crimp SpecificationsFor currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

# Part Number	 ID (in)	 ID (mm)	 Reinf Layers	 OD (in)	 OD (mm)	 Approx Wt (lbs/ft)	 Approx Wt (kg/m)	 Min Bend Rad (in)	 Min Bend Rad (mm)	 Max WP @ 68°F (psi)	 Max WP @ 20°C (bar)	 Vacuum Hg (in)	 Perm Cplg Rec *	 Nom Std Pack Qty (ft)	 Pkg Type
GPH-3GRA500RL	3/16	4.8	2	0.4	10.2	0.06	0.09	1	15	300	21	25	*	500	Coil
GPH-4BLK500RL	1/4	6.4	2	0.5	13.0	0.08	0.12	1	20	300	21	23	HY	500	Coil
GPH-4BLU500RL															
GPH-4GRA500RL															
GPH-4RED500RL															
GPH-4YEL500RL	3/8	9.5	2	0.6	16.3	0.12	0.18	1	25	300	21	23	HY	500	Coil
GPH-6BLK500RL															
GPH-6BLU500RL															
GPH-6GRA500RL															
GPH-6RED500RL	1/2	12.7	2	0.8	20.3	0.17	0.25	2	38	300	21	17	HY	500	Coil
GPH-6YEL500RL															
GPH-8BLK500RL															
GPH-8BLU500RL															
GPH-8GRA500RL	5/8	15.9	2	0.9	23.1	0.22	0.33	3	64	300	21	10	HY	250	Coil
GPH-8RED500RL															
GPH-8YEL500RL															
GPH-10BLK250															
GPH-10GRA250	3/4	19.1	2	1.1	27.2	0.25	0.37	3	71	300	21	10	HY	100	Coil
GPH-10RED250															
GPH-12BLK100															
GPH-12BLU100															
GPH-12GRA100	1	25.4	2	1.3	33.8	0.36	0.54	4	102	250	17	5	HY	100	Coil
GPH-12RED100															
GPH-16BLK100															
GPH-16RED100															

**WARNING:** The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

NEXBRAID® Clear PVC Hose

Series 125 (Standard Wall) and
Series 126 (Heavy Duty)

Series 125 (standard wall) and Series 126 (thick wall) are flexible PVC transfer hoses for dry abrasive materials such as grains, granules, pellets and powders; beverages and potable water; non-fatty and non-oily foods; and sanitary products.

The hoses feature a smooth tube that is abrasion resistant and will not impart taste or odor, and allows full-flow, while the clear PVC construction permits visual observation of materials being conveyed. Series 125 and Series 126 also provide excellent general industrial service in air breathing supply pneumatics, flexible conduit, harness and light vacuum applications.



[view on web page](#)



[view on web page](#)

Tube: Clear PVC

Reinforcement: Multiple textile plies

Cover: Blue tint PVC; smooth finish

Temp. Range: +25°F to +150°F (-5°C to +65°C)

Working pressures are at +68°F (+20°C).

Higher temperatures reduce the available working pressure.

See the PVC and Thermoplastic Temperature/Pressure chart in the Media Compatibility section.

Brand Method: Black ink

Brand Example: Series 125: NEXBRAID® SW FOOD GRADE PVC BY PARKER NEXGEN® (P/N) (ID) MAX WP XXX PSI AT 68°F (20°C) NSF-51 MAX TEMP 150°F (65°C)
Series 126: NEXBRAID® HD FOOD GRADE PVC BY PARKER NEXGEN® (P/N) (ID) MAX WP XXX PSI AT 68°F (20°C) **NSF-51 MAX TEMP 150°F (65°C)**

Industry Standards:

- FDA ingredients**, NSF 51 certified to 180°F (82°C)**, USP Class VI Rated**
- EU: Meets requirements and amendments of Resolution AP(89) for food contact

Applications:

- Beverages, potable water, pure water
- Dry abrasive materials, flour, grains, granules, pellets, powders, sugar
- Air, flexible conduit, light vacuum, wire harness

Vacuum: Light

(Continued on the following page)

⚠ WARNINGS!

- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

⚠ Working pressures are at +68°F (+20°C). Higher temperatures reduce the available working pressure. See the PVC and Thermoplastic Temperature/Pressure chart in the Media Compatibility section.

Series 125 / 126 — NEXBRAID® Clear PVC Hose (Continued)

Crimp SpecificationsFor currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.**Series 125 (Standard Wall)**

#												
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Max WP (psi) @ 68°F	Max WP (bar) @ 20°C	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
125-03000300	3/16	4.8	2	0.4	9.5	0.05	0.07	250	17	*	300	Coil
125-04000300	1/4	6.4	2	0.4	11.1	0.06	0.09	250	17	*	300	Coil
125-05000300	5/16	7.9	2	0.5	13.3	0.08	0.12	250	17	*	300	Coil
125-06000300	3/8	9.5	2	0.6	15.1	0.09	0.13	225	16	*	300	Coil
125-08000300	1/2	12.7	2	0.8	19.1	0.14	0.21	200	14	*	300	Coil
125-10000300	5/8	15.9	2	0.9	22.2	0.17	0.25	200	14	*	300	Coil
125-12000300	3/4	19.1	2	1.0	26.2	0.22	0.33	150	10	*	300	Coil
125-16000200	1	25.4	2	1.3	33.0	0.31	0.46	125	9	*	200	Coil
125-20000100	1-1/4	31.8	2	1.6	41.3	0.45	0.67	100	7	*	100	Coil
125-24000100	1-1/2	38.1	2	1.9	49.2	0.64	0.95	100	7	*	100	Coil
125-32000100	2	50.8	2	2.5	63.3	0.95	1.42	75	5	*	100	Coil

* All tube compound ingredients used in this hose are listed in the U.S. FDA CFR, Title 21. Hose NSF 51 listed. Compound USP Class VI rated.

 **WARNING:** The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.**Series 126 (Heavy Duty)**

#												
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Max WP (psi) @ 68°F	Max WP (bar) @ 20°C	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
126-04000300	1/4	6.4	2	0.5	12.7	0.08	0.12	350	24	*	300	Coil
126-05000300	5/16	7.9	2	0.6	14.3	0.09	0.13	275	19	*	300	Coil
126-06000300	3/8	9.5	2	0.6	15.9	0.11	0.16	250	17	*	300	Coil
126-08000300	1/2	12.7	2	0.8	20.6	0.18	0.27	250	17	*	300	Coil
126-12000200	3/4	19.1	2	1.1	28.5	0.30	0.45	200	14	*	200	Coil

* All tube compound ingredients used in this hose are listed in the U.S. FDA CFR, Title 21. Hose NSF 51 listed. Compound USP Class VI rated.

 **WARNING:** The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

GULLY WASHER®

Standard Duty Lay Flat

PVC Water Discharge Hose

Series 7541



[view on web page](#)

Series 7541 standard duty lay flat PVC discharge hose is a lightweight, standard duty hose. The lay flat construction rolls up flat for easy handling, storage and transportation in agriculture, construction, general industrial and mining applications. The cover is resistant to abrasion, mild chemicals, ultraviolet light and weathering.

#												
Part Number	ID (in)	ID (mm)	Reinf Layers	Wall Thickness (in)	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Max WP (psi) @ 68°F	Max WP (bar) @ 20°C	Nom Std Pack Qty (ft)	Pkg Type
7541-1501	1-1/2	38.1	3	0.055	1.6	40.7	0.14	0.21	70	5	300	Coil
7541-2001	2	50.8	3	0.055	2.1	53.4	0.18	0.27	70	5	300	Coil
7541-2501	2-1/2	63.5	3	0.059	2.6	66.2	0.24	0.36	60	4	300	Coil
7541-3001	3	76.2	3	0.059	3.1	79.0	0.30	0.45	60	4	300	Coil
7541-4001	4	101.6	3	0.059	4.1	104.6	0.36	0.54	60	4	300	Coil
7541-6001	6	152.4	3	0.071	6.1	156.0	0.71	1.06	45	3	300	Coil
7541-8001	8	204.0	3	0.083	8.1	206.8	1.28	1.91	45	3	300	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black PVC (not oil resistant)

Reinforcement: Multiple textile plies

Cover: Blue PVC

Temp. Range: -5°F to +170°F (-20°C to +76°C)

Working pressures are at +68°F (+20°C).

Higher temperatures reduce the available working pressure. See the PVC and Thermoplastic Temperature/Pressure chart in the Media Compatibility section.

Brand Method: White ink

Brand Example: PARKER SERIES 7541 GULLY WASHER (ID)
XXX PSI WP

Design Factor: 3:1

Industry Standards: None applicable

Applications:

- Mild chemicals, water
- Agriculture, construction, general industrial, mining

Vacuum: Not recommended

Compare to: ContiTech Spiralflex; Gates Master-Flex 500; Kanaflex 4501, 4502; Kuriyama NuFlo, VinylFlow; Petzetakis 11252; Sun-Flow SF-10; Superflex DH

⚠️ WARNINGS!

► Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

⚠️ Working pressures are at +68°F (+20°C). Higher temperatures reduce the available working pressure. See the PVC and Thermoplastic Temperature/Pressure chart in the Media Compatibility section.

GULLY WASHER®

Medium Duty Lay Flat

PVC Water Discharge Hose

Series 7542



[view on web page](#)

Series 7542 medium duty lay flat PVC discharge hose is a lightweight, medium duty hose. The lay flat construction rolls up flat for easy handling, storage and transportation in agriculture, construction, general industrial and mining applications. The red flame resistant cover meets MSHA requirements and is also resistant to abrasion, mild chemicals, ultraviolet light and weathering.

#												
Part Number	ID (in)	ID (mm)	Reinf Layers	Wall Thickness (in)	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Max WP @ 68°F (psi)	Max WP @ 20°C (bar)	Nom Std Pack Qty (ft)	Pkg Type
7542-1501	1-1/2	38.1	3	0.075	1.7	42.1	0.23	0.34	150	10	300	Coil
7542-2001	2	50.8	3	0.079	2.2	55.0	0.30	0.45	150	10	300	Coil
7542-2501	2-1/2	63.5	3	0.083	2.7	68.1	0.37	0.55	150	10	300	Coil
7542-3001	3	76.2	3	0.091	3.2	80.8	0.46	0.69	150	10	300	Coil
7542-4001	4	101.6	3	0.098	4.2	106.8	0.66	0.98	140	10	300	Coil
7542-6001	6	152.4	3	0.106	6.2	158.2	1.02	1.52	100	7	300	Coil
7542-8001	8	203.2	3	0.118	8.2	209.3	1.51	2.25	80	6	300	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black PVC (not oil resistant)

Reinforcement: Multiple textile plies

Cover: Red PVC

Temp. Range: -5°F to +170°F (-20°C to +76°C)

Working pressures are at +68°F (+20°C). Higher temperatures reduce the available working pressure. See the PVC and Thermoplastic Temperature/Pressure chart in the Media Compatibility section.

Brand Method: White ink

Brand Example: SERIES 7542 GULLY WASHER (ID) XXX PSI
WP FLAME RESISTANT US MSHA IC-257/0

Design Factor: 3:1

Industry Standards: MSHA

Applications:

- Mild chemicals, water
- Agriculture, construction, general industrial, mining

Vacuum: Not recommended

Compare to: Jason 4510; Kuriyama Ironsides; Petzetakis 11298; Sun-Flow SF-30, SF-50

WARNINGS!

► Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

▲ Working pressures are at +68°F (+20°C). Higher temperatures reduce the available working pressure. See the PVC and Thermoplastic Temperature/Pressure chart in the Media Compatibility section.

DRAGON BREATH® II

Chlorobutyl Barber Pole

Steam Hose

Non-Skive E-Z Crimp

Series 7285



view on web page

Series 7285 is a distinctive hose designed for long-lasting steam service—one of the toughest applications for hose, where the hot-cold/wet-dry cycling attacks rubber compounds externally as well as internally. The hose construction incorporates a premium, high-performance chlorobutyl tube which resists heat and popcorning, and a wire braid reinforcement for crush-resistant durability, kink resistance and a path to conduct a static electrical charge to ground. The EPDM cover resists abrasion, cracking, hardening and ozone, and the red/black barber pole cover provides color-coded identification from all angles and great distances. Series 7285 is qualified with Parker non-skive crimp couplings for easy and quick assembly fabrication as well as maintenance-free service.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)*	Max WP (bar)*	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7285-502	1/2	12.7	2	1.0	26.2	0.50	0.75	7.0	178	261	18	*	2x50	Carton
7285-752	3/4	19.1	2	1.3	32.6	0.64	0.95	9.5	241	261	18	CS	50	Carton
7285-1002	1	25.4	2	1.6	39.3	0.81	1.21	12.0	305	261	18	CS	5x50	Carton

* 261 psi saturated steam; 250 psi superheated steam • 18 bar saturated steam; 17 bar superheated steam



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black chlorobutyl

Reinforcement: Multiple wire braids

Cover: Black and red EPDM in alternating spirals; perforated wrapped finish

Temp. Range: -40°F to +406°F saturated steam/+450°F superheated steam
(-40°C to +208°C saturated steam/+232°C superheated steam)

Brand Method: Embossed

Brand Example: PARKER SERIES 7285 DRAGON BREATH® II
STEAM HOSE
250 PSI MAX WP

Design Factor: 20:1

Industry Standards: ISO 6134 Type 2

Applications:

- Saturated and superheated steam
- Cleaning containment vessels and manufacturing equipment; cleaning and heating process equipment
- Manufacturing and processing plants, refineries

Vacuum: Not recommended

Compare to: Boston Concord Standard Steam—Spiral Stripe, Steam Slayer; Goodall N2711 Inferno Steam

⚠ WARNINGS!

- ▶ Failure to properly inspect, maintain, test and use steam hose assemblies may result in property damage, personal injury or death. Refer to ARPM publication IP-11-1, "Guide for Use, Testing and Inspection of Steam Hose."
- ▶ Water changes to hot water and phases of steam when subjected to heat and pressure. The greater the pressure, the higher the temperature required to achieve and maintain a steam phase. If steam escapes, dangerous quantities of heat may be released very suddenly. Exposure to hot water, low pressure steam and high pressure steam may cause severe scalding or fatal burns.
- ▶ Use only hoses designated for steam service for steam applications.
- ▶ Prior to use with detergents or rust inhibitors, refer to the chemical guide in this catalog or contact Parker.
- ▶ Drain steam hose after each use to reduce the possibility of hose popcorning while in service.
- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

STEAM-LANCE® 250

EPDM Compact Steam Hose

Non-Skive E-Z Crimp

Series 7263C



[view on web page](#)

Series 7263C is a compact, slim profile hose for long-lasting steam service, one of the toughest applications for hose, where the hot-cold/wet-dry cycling attacks rubber compounds externally as well as internally. The hose construction incorporates an EPDM tube that resists heat and popcorning, and a wire braid reinforcement for crush-resistant durability, kink resistance and a path to conduct a static electrical charge to ground. The EPDM cover is resistant to abrasion, cracking, hardening and ozone. Series 7263C is qualified with Parker non-skive crimp couplings for easy and quick assembly fabrication as well as maintenance-free service.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

Series 7263C

#														
Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)*	Max WP (bar)*	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7263C-502	1/2	12.7	2	1.0	24.1	0.37	0.55	7	178	261	18	*	2x50	Carton
7263C-752	3/4	19.1	2	1.2	30.5	0.47	0.70	9	229	261	18	CS	50	Carton
7263C-1002	1	25.4	2	1.5	37.3	0.63	0.94	12	305	261	18	CS	5x50	Carton

* 261 psi saturated steam; 250 psi superheated steam • 18 bar saturated steam; 17 bar superheated steam



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black EPDM

Reinforcement: Multiple wire braids

Cover: Black or red EPDM; perforated wrapped finish

Temp. Range: -40°F to +406°F saturated steam/+450°F superheated steam
(-40°C to +208°C saturated steam/+232°C superheated steam)

Brand Method: Embossed

Brand Example: PARKER SERIES (7263C) STEAM-LANCE® E-Z CRIMP 250 PSI MAX WP

Design Factor: 20:1

Industry Standards: ISO 6134 Type 2

Applications:

- Saturated and superheated steam
- Cleaning containment vessels and manufacturing equipment; cleaning and heating process equipment
- Manufacturing and processing plants, refineries

Vacuum: Not recommended

Compare to: Boston Concord 250; ContiTech Flexsteel 250 Steam; Gates 205MB Steam King; Goodall N2576 Thermoflex; Thermoid Burstproof Regular

⚠ WARNINGS!

- ▶ Failure to properly inspect, maintain, test and use steam hose assemblies may result in property damage, personal injury or death. Refer to ARPM publication IP-11-1, "Guide for Use, Testing and Inspection of Steam Hose."
- ▶ Water changes to hot water and phases of steam when subjected to heat and pressure. The greater the pressure, the higher the temperature required to achieve and maintain a steam phase. If steam escapes, dangerous quantities of heat may be released very suddenly. Exposure to hot water, low pressure steam and high pressure steam may cause severe scalding or fatal burns.
- ▶ Use only hoses designated for steam service for steam applications.
- ▶ Prior to use with detergents or rust inhibitors, refer to the chemical guide in this catalog or contact Parker.
- ▶ Drain steam hose after each use to reduce the possibility of hose popcorning while in service.
- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

STEAM-LANCE® 250

EPDM Compact Steam Hose

Non-Skive E-Z Crimp

Series 7264C



[view on web page](#)

Series 7264C is a compact, slim profile hose for long-lasting steam service, one of the toughest applications for hose, where the hot-cold/wet-dry cycling attacks rubber compounds externally as well as internally. The hose construction incorporates an EPDM tube that resists heat and popcorning, and a wire braid reinforcement for crush-resistant durability, kink resistance and a path to conduct a static electrical charge to ground. The EPDM cover is resistant to abrasion, cracking, hardening and ozone; the red cover provides color-coded identification. Series 7264C is qualified with Parker non-skive crimp couplings for easy and quick assembly fabrication as well as maintenance-free service.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

Series 7264C

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)*	Max WP (bar)*	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7264C-752	3/4	19.1	2	1.2	30.5	0.47	0.70	9	229	261	18	CS	5x50	Carton

* 261 psi saturated steam; 250 psi superheated steam • 18 bar saturated steam; 17 bar superheated steam



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black EPDM

Reinforcement: Multiple wire braids

Cover: Black or red EPDM; perforated wrapped finish

Temp. Range: -40°F to +406°F saturated steam/+450°F superheated steam
(-40°C to +208°C saturated steam/+232°C superheated steam)

Brand Method: Embossed

Brand Example: PARKER SERIES (7264C) STEAM-LANCE®
E-Z CRIMP 250 PSI MAX WP

Design Factor: 20:1

Industry Standards: ISO 6134 Type 2

Applications:

- Saturated and superheated steam
- Cleaning containment vessels and manufacturing equipment; cleaning and heating process equipment
- Manufacturing and processing plants, refineries

Vacuum: Not recommended

Compare to: Boston Concord 250; ContiTech Flexsteel 250 Steam; Gates 205MB Steam King; Goodall N2576 Thermoflex; Thermoid Burstproof Regular

⚠ WARNINGS!

- ▶ Failure to properly inspect, maintain, test and use steam hose assemblies may result in property damage, personal injury or death. Refer to ARPM publication IP-11-1, "Guide for Use, Testing and Inspection of Steam Hose."
- ▶ Water changes to hot water and phases of steam when subjected to heat and pressure. The greater the pressure, the higher the temperature required to achieve and maintain a steam phase. If steam escapes, dangerous quantities of heat may be released very suddenly. Exposure to hot water, low pressure steam and high pressure steam may cause severe scalding or fatal burns.
- ▶ Use only hoses designated for steam service for steam applications.
- ▶ Prior to use with detergents or rust inhibitors, refer to the chemical guide in this catalog or contact Parker.
- ▶ Drain steam hose after each use to reduce the possibility of hose popcorning while in service.
- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

STEAM-LANCE® 250

EPDM Steam Hose

Series 7264 (Red)



[view on web page](#)

Series 7264 is a traditional hose designed for long-lasting steam service, one of the toughest applications for hose, where the hot/cold wet/dry cycling attacks rubber compounds externally as well as internally. The hose construction incorporates an EPDM tube that resists heat and popcorning, and a wire braid reinforcement for crush-resistant durability, kink resistance and a path to conduct a static electrical charge to ground. The EPDM cover is resistant to abrasion, cracking, hardening and ozone; the red cover of 7264 provides color-coded identification.

Series 7264 (Red)

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)*	Max WP (bar)*	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7264-752	3/4	19.1	2	1.3	34.1	0.70	1.04	10	241	261	18	43, CS, *	3x50	Carton

* 261 psi saturated steam; 250 psi superheated steam • 18 bar saturated steam; 17 bar superheated steam

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black EPDM

Reinforcement: Multiple wire braids

Cover: Black or red EPDM; perforated wrapped finish

Temp. Range: -40°F to +406°F saturated steam/+450°F superheated steam (-40°C to +208°C saturated steam/+232°C superheated steam)

Brand Method: Embossed

Brand Example: PARKER SERIES (7264) STEAM-LANCE® 250 PSI MAX WP

Design Factor: 10:1 (20:1 for 1/2", 3/4" and 1" sizes only)

Industry Standards: ISO 6134 Type 2

Applications:

- Saturated and superheated steam
- Cleaning containment vessels and manufacturing equipment; cleaning and heating process equipment
- Manufacturing and processing plants, refineries

Vacuum: Not recommended

Compare to: Boston Concord 250; ContiTech Flexsteel 250 Steam; Gates 205MB Steam King; Goodall N2576 Thermoflex; Thermoid Burstproof Regular

STEAM-LANCE® 250

EPDM Steam Hose

Series 7263/7263(E)



[view on web page](#)

Series 7263/7263(E) is a traditional hose designed for long-lasting steam service, one of the toughest applications for hose, where the hot/cold wet/dry cycling attacks rubber compounds externally as well as internally. The hose construction incorporates an EPDM tube that resists heat and popcorning, and a wire braid reinforcement for crush-resistant durability, kink resistance and a path to conduct a static electrical charge to ground. The EPDM cover is resistant to abrasion, cracking, hardening and ozone.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

Series 7263(E) (Black)

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)*	Max WP (bar)*	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7263-502	1/2	12.7	2	1.0	26.2	0.48	0.72	7	178	261	18	43	2x50	Carton
7263-752	3/4	19.1	2	1.3	34.1	0.66	0.98	10	241	261	18	43, CS	3x50	Carton
7263-1002	1	25.4	2	1.6	40.5	0.85	1.27	12	305	261	18	CS, 43	5x50	Carton
7263-1002A												CS, 43	500	Reel
7263-1252	1-1/4	31.8	2	1.9	47.6	1.14	1.70	17	419	261	18	71	8x50	Carton
7263E-1502	1-1/2	38.1	2	2.2	55.6	1.44	2.15	20	508	261	18	43	50	Carton
7263E-2002	2	50.8	2	2.7	67.8	1.76	2.62	25	635	261	18	*	50	Carton

* 261 psi saturated steam; 250 psi superheated steam • 18 bar saturated steam; 17 bar superheated steam



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black EPDM

Reinforcement: Multiple wire braids

Cover: Black or red EPDM; perforated wrapped finish

Temp. Range: -40°F to +406°F saturated steam/+450°F superheated steam (-40°C to +208°C saturated steam/+232°C superheated steam)

Brand Method: Embossed

Brand Example: PARKER SERIES 7263/7263E STEAM-LANCE® 250 PSI MAX WP

Design Factor: 10:1 (20:1 for 1/2", 3/4" and 1" sizes only)

Industry Standards: ISO 6134 Type 2

Applications:

- Saturated and superheated steam
- Cleaning containment vessels and manufacturing equipment; cleaning and heating process equipment
- Manufacturing and processing plants, refineries

Vacuum: Not recommended

Compare to: Boston Concord 250; ContiTech Flexsteel 250 Steam; Gates 205MB Steam King; Goodall N2576 Thermoflex; Thermoid Burstproof Regular

WARNINGS!

- ▶ Failure to properly inspect, maintain, test and use steam hose assemblies may result in property damage, personal injury or death. Refer to ARPM publication IP-11-1, "Guide for Use, Testing and Inspection of Steam Hose."
- ▶ Water changes to hot water and phases of steam when subjected to heat and pressure. The greater the pressure, the higher the temperature required to achieve and maintain a steam phase. If steam escapes, dangerous quantities of heat may be released very suddenly. Exposure to hot water, low pressure steam and high pressure steam may cause severe scalding or fatal burns.
- ▶ Use only hoses designated for steam service for steam applications.
- ▶ Prior to use with detergents or rust inhibitors, refer to the chemical guide in this catalog or contact Parker.
- ▶ Drain steam hose after each use to reduce the possibility of hose popcorning while in service.
- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

DRAGON BREATH® 250

Oil Resistant Steam Hose

Series 7288



[view on web page](#)

Series 7288 is a traditional oil resistant hose designed for long-lasting steam service, one of the toughest applications for hose, where the hot/cold wet/dry cycling attacks rubber compounds externally as well as internally. The hose construction incorporates an EPDM tube that resists heat and popcorning, and a wire braid reinforcement for crush-resistant durability, kink resistance and a path to conduct a static electrical charge to ground. The red chloroprene cover is resistant to weathering and oil—an important criteria for oil refineries and petrochemical plants—and provides color-coded identification.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)*	Max WP (bar)*	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7288-502	1/2	12.7	2	1.0	26.2	0.52	0.77	7	178	261	18	43	2x50	Carton
7288-752	3/4	19.1	2	1.3	34.1	0.73	1.09	10	241	261	18	CS, 43	3x50	Carton

* 261 psi saturated steam; 250 psi superheated steam • 18 bar saturated steam; 17 bar superheated steam

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black EPDM

Reinforcement: Multiple wire braids

Cover: ARPM Class B oil resistant red chloroprene; perforated wrapped finish

Temp. Range: -40°F to +406°F saturated steam/+450°F superheated steam (-40°C to +208°C saturated steam/+232°C superheated steam)

Brand Method: Embossed

Brand Example: PARKER SERIES 7288 DRAGON BREATH® STEAM HOSE 250 PSI MAX WP OIL RESISTANT

Design Factor: 20:1

Industry Standards: ISO 6134 Type 2

Applications:

- Saturated and superheated steam
- Cleaning containment vessels and manufacturing equipment; cleaning and heating process equipment
- Manufacturing and processing plants, refineries

Vacuum: Not recommended

Compare to: Boston Concord 250 OR; ContiTech Flexsteel 250 ORS; Gates 232MB Steam Queen; Thermoid Burstproof Oil Resistant

⚠ WARNINGS!

- ▶ Failure to properly inspect, maintain, test and use steam hose assemblies may result in property damage, personal injury or death. Refer to ARPM publication IP-11-1, "Guide for Use, Testing and Inspection of Steam Hose."
- ▶ Water changes to hot water and phases of steam when subjected to heat and pressure. The greater the pressure, the higher the temperature required to achieve and maintain a steam phase. If steam escapes, dangerous quantities of heat may be released very suddenly. Exposure to hot water, low pressure steam and high pressure steam may cause severe scalding or fatal burns.
- ▶ Use only hoses designated for steam service for steam applications.
- ▶ Prior to use with detergents or rust inhibitors, refer to the chemical guide in this catalog or contact Parker.
- ▶ Drain steam hose after each use to reduce the possibility of hose popcorning while in service.
- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

Hydrocarbon Drain Hose

Oil Resistant

Non-Skive E-Z Crimp

Series 7200



[view on web page](#)

Series 7200 is designed to evacuate hot, liquefied residue from steam cleaning operations. The wire braid reinforcement provides crush-resistant durability, kink resistance and a path to conduct a static electrical charge to ground. The vivid blue chloroprene cover is resistant to oil and weathering, and provides color-coded identification. Series 7200 is qualified with Parker non-skive crimp couplings for easy and quick assembly fabrication as well as maintenance-free service.

NOTE: Do not use for steam service.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7200-751050	3/4	19.1	1	1.2	30.1	0.52	0.77	10	241	350	24	43	3x50	Carton
7200-1001050	1	25.4	1	1.5	38.1	0.76	1.13	12	305	350	24	43	5x50	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black nitrile; ARPM Class A oil resistance

Reinforcement: One wire braid

Cover: Blue chloroprene; wrapped finish

Temp. Range: -20°F to +300°F (-29°C to +149°C)/+350°F (+177°C) intermittent

Brand Method: Blue text on green stripe

Brand Example: PARKER SERIES 7200 HYDROCARBON DRAIN HOSE 350 PSI WP

Design Factor: 4:1

Industry Standards: None applicable

Applications:

- NOT FOR STEAM SERVICE
- Drainage of hot residue from steam cleaning operations
- Manufacturing and processing plants, refineries

Vacuum: Not recommended

Compare to: Boston Hydrocarbon Drain Hose

⚠️ WARNINGS!

- ▶ Use only hoses designated for steam service for steam applications.
- ▶ Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

SUPER-FLEX® EPDM Water Suction Hose Series 7392E



[view on web page](#)

Series 7392E is a lightweight suction and discharge hose for water. The construction incorporates a wire helix that provides full suction capability and kink resistance. The EPDM cover is resistant to abrasion, heat, mild chemicals and weathering.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

# Part Number	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7392E-1500	1-1/2	38.1	2	1.9	48.0	0.72	1.07	6	152	150	10	*	100	Coil
7392E-2000	2	50.8	2	2.4	62.0	1.08	1.61	7	178	150	10	*	100	Coil
7392E-2500	2-1/2	63.5	2	3.0	74.9	1.45	2.16	8	203	150	10	*	100	Coil
7392E-3000	3	76.2	2	3.5	88.9	1.80	2.68	10	254	150	10	*	100	Coil
7392E-4000	4	107.0	2	4.5	115.1	2.43	3.62	22	559	150	8.69	*	100	Coil
7392E-6000	6	152.4	4	6.6	168.3	3.71	5.53	30	711	100	8.69	*	100	Coil

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black synthetic rubber

Reinforcement: Multiple textile plies with dual wire helix

Cover: Black EPDM; wrapped finish

Temp. Range: -40°F to +180°F (-40°C to +82°C)

Brand Method: White text on blue stripe

Brand Example: PARKER SERIES 7392E WATER SUCTION
HOSE – XXX PSI MAX WP

Industry Standards: None applicable

Applications:

- Alkalies, brine, glycols, herbicides, mild chemicals, slurries, water
- Agriculture, construction, general industrial, irrigation, surface mining

Vacuum: 29" Hg (737 mm Hg)

Compare to: ContiTech Plicord Con-Ag Water S&D; Gates Barracuda

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

STINGER™ II

High Pressure Mine and Multipurpose Hose

Series 7268E



[view on web page](#)

Series 7268E is a versatile, high pressure hose commonly used in mining. The construction incorporates high tensile wire braid reinforcement that provides durability, kink resistance, high pressure capability, and superior coupling retention. The flame resistant bright yellow cover meets MSHA requirements and is also resistant to abrasion and oil.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7268E-751													524	Reel
7268E-751050	3/4	19.1	1	1.0	26.5	0.34	0.51	6	152	1000	69	HY, 43	50	Coil
7268E-751100													100	Coil
7268E-1001													524	Reel
7268E-1001050	1	25.4	1	1.3	34.0	0.50	0.75	8	203	1000	69	HY, 43	50	Coil
7268E-1001100													100	Coil
7268E-1251050	1-1/4	31.8	1	1.6	41.4	0.67	1.00	12	305	1000	69	HY, 43	50	Coil
7268E-1251100													100	Coil
7268E-1501050	1-1/2	38.1	1	1.9	48.0	0.86	1.28	14	356	1000	69	43	50	Coil
7268E-1501100													100	Coil
7268E-2001	2	50.8	1	2.4	62.0	1.14	1.70	18	457	1000	69	43	50	Coil
7268E-2001100													100	Coil



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black chloroprene

Reinforcement: One wire braid

Cover: Yellow nitrile/PVC; perforated wrapped finish

Temp. Range: -20°F to +212°F (-29°C to +100°C)

Brand Method: Embossed (1-1/2" black ink)

Brand Example: PARKER SERIES 7268E STINGER II (ID)
1000 PSI MAX WP MSHA #

Design Factor: 4:1

Industry Standards: MSHA

Applications:

- Air, mild chemicals, oil, water
- Heavy duty air tools, compressors; drill hose, dust suppression in mines
- Construction, general industrial, mines and quarries

Vacuum: Not recommended

Compare to: Boston Concord Yellow Jack; ContiTech Minespray, Super Ortac;
Gates 1000MP/Mine Spray



WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

HURRICANE™ Pressure Washer Hose Series 7258



[view on web page](#)

Series 7258/7258BL hose construction incorporates a high tensile wire braid reinforcement that provides durability, kink resistance and superior coupling retention. Both cover colors are resistant to oil and weathering.

NOTE: Do not use for carpet cleaning or steam service.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

#	ID (in)	ID (mm)	Reinf Layers	OD (in)	OD (mm)	Approx Wt (lbs/ft)	Approx Wt (kg/m)	Min Bend Rad (in)	Min Bend Rad (mm)	Max WP (psi)	Max WP (bar)	Perm Cplg Rec *	Nom Std Pack Qty (ft)	Pkg Type
7258-250BK	1/4	6.4	1	0.500	12.7	0.14	0.21	2	38	3000	207	HY, 43	500	Reel
7258-380BK	3/8	9.5	1	0.620	15.7	0.19	0.28	2	51	3000	207	HY, 43	500	Reel
7258-501BK	1/2	12.7	1	0.700	18.9	0.23	0.34	3	76	2500	172	HY, 43	500	Reel
7258-250BL	1/4	6.4	1	0.500	12.7	0.14	0.21	2	38	3000	207	43	500	Reel
7258-380BL	3/8	9.5	1	0.620	15.7	0.19	0.28	2	51	3000	207	43	500	Reel
7258-501BL												HY, 43		

Factory Assemblies: Available from stock in popular configurations. Refer to the following page.

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Tube: Black chloroprene

Reinforcement: One wire braid

Cover: Black (BK) chloroprene, wrapped finish;
Blue (BL) chloroprene; perforated wrapped finish

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

Brand Method: White ink

Brand Example: PARKER SERIES 7258 HURRICANE™
3000 PSI MAX WP

Design Factor: 4:1 (1/2" @ 3.5:1)

Industry Standards: None applicable

Applications:

- Hot water, mild chemicals
- Agriculture, construction, general industrial, oilfield, shipyards

Vacuum: Not recommended

Compare to: Gates Power Clean

WARNING! Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

HURRICANE™

Pressure Washer Hose – Factory Assemblies

Series 7258BK (Black) and 7258BL (Blue)



[view on web page](#)

Series 7258BK (Black)

#	ID (in)	Length (ft)	Approx Wt (lbs/ea)	Max WP (psi)	Fitting 1	Thread Size (in)	Fitting 2	Thread Size (in)	Std Pack Qty (ea)	Pkg Type
725825BKRS-600	1/4	50	7.25	3000	101HY-4-4	1/4 - 18	113HY-4-4	1/4 - 18	5	Carton
725838BKRS-600	3/8	50	9.85	3000	10143-6-6	3/8 - 18	11343-6-6	3/8 - 18	5	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series 7258BL (Blue)

#	ID (in)	Length (ft)	Approx Wt (lbs/ea)	Max WP (psi)	Fitting 1	Thread Size (in)	Fitting 2	Thread Size (in)	Std Pack Qty (ea)	Pkg Type
725825BLRS-600	1/4	50	7.25	3000	101HY-4-4	1/4 - 18	113HY-4-4	1/4 - 18	5	Carton
725838BLRS-600	3/8	50	9.85	3000	10143-6-6	3/8 - 18	11343-6-6	3/8 - 18	5	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

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

Design Factor: 4:1

Crimped-on Carbon Steel Rigid Male x Swivel Male,
Black PVC Bend Restrictors Each End

Coiled and Tied, No Center Disc

NOTE: Refer to the previous page for bulk hose information.

Contractor's Water Hose – Factory Assemblies

Series 7055 (Black)



[view on web page](#)

Series 7055 is designed as a lightweight, abrasion and weather resistant hose for general industrial water service. The factory-installed, crimped-on lightweight brass couplings provide a secure hose/fitting interface, and the male and female garden hose ends provide easy, quick and secure connections.

Series 7055 (Black)

#										
Part Number	ID (in)	ID (mm)	Length (ft)	Length (m)	Approx Wt (lbs/ea)	Approx Wt (kg/ea)	Max WP (psi)	Max WP (bar)	Std Pack Qty (ea)	Pkg Type
7055GHT63-300	5/8	15.9	25	7.62	4.91	2.23	100	7	10	Carton
7055GHT63-600			50	15.24	9.32	4.23			5	Carton
7055GHT75-300	3/4	19.1	25	7.62	7.23	3.28	100	7	6	Carton
7055GHT75-600			50	15.24	13.87	6.29			3	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Premium Contractor's Water Hose – Factory Assemblies

Series PR (Black EPDM)

Series PR is designed as a durable, lightweight, abrasion and weather resistant hose for agriculture, construction or general industrial water service. The factory-installed, crimped-on lightweight, crush resistant nickel-plated brass couplings provide a secure hose/fitting interface, and the male and female garden hose ends provide easy, quick and secure connections.



[view on web page](#)

#										
Part Number	ID (in)	ID (mm)	Length (ft)	Length (m)	Approx Wt (lbs/ea)	Approx Wt (kg/ea)	Max WP (psi)	Max WP (bar)	Std Pack Qty (ea)	Pkg Type
PR5825	5/8	15.9	25	7.62	5.58	2.53	125	9	8	Carton
PR5850			50	15.24	10.66	4.84			4	Carton
PR5875			75	22.86	15.86	7.19			3	Carton
PR58100			100	30.48	20.94	9.50			2	Carton
PR3450	3/4	19.1	50	15.24	14.07	6.38	125	9	3	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Temp Range: -40°F to +180°F (-40°C to +82°C)
Design Factor: 4:1
 Crimped-on Crush Resistant Nickel Plated Brass

Male x Female Garden Hose Thread Couplings
Display Coils with Parker Center Retail Packaging Disc

Premium Hot Water Hose – Factory Assemblies

Series HWR (Red EPDM)

Series HWR is designed as a lightweight, abrasion and weather resistant hose for general industrial/commercial hot water (to 212°F) water service. The factory-installed, crimped-on crush resistant nickel-plated brass couplings provide a secure hose/fitting interface, and the male and female garden hose ends provide easy, quick and secure connections.



[view on web page](#)

#										
Part Number	ID (in)	ID (mm)	Length (ft)	Length (m)	Approx Wt (lbs/ea)	Approx Wt (kg/ea)	Max WP (psi)	Max WP (bar)	Std Pack Qty (ea)	Pkg Type
HWR5825	5/8	15.9	25	7.62	5.73	2.60	125	9	8	Carton
HWR5850			50	15.24	10.95	4.97			4	Carton
HWR5875			75	22.86	16.30	7.39			3	Carton
HWR58100			100	30.48	21.52	9.76			2	Carton
HWR3450	3/4	19.1	50	15.24	14.36	6.51	125	9	2	Carton



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Temp Range: -40°F to +212°F (-40°C to +100°C)
Design Factor: 4:1

Male x Female Garden Hose Thread Couplings
Display Coils with Parker Center Retail Packaging Disc

Premium Rubber Garden Hose - Factory Assemblies

Series RGR (Green EPDM)



[view on web page](#)

Series RGR is designed as a lightweight, abrasion and weather resistant hose for general consumer/commercial water service. The green color naturally blends in with grass, plants and a garden/landscape environment.

The factory-installed, crimped-on crush resistant nickel-plated brass couplings provide a secure hose/fitting interface, and the male and female garden hose ends provide easy, quick and secure connections.

# Part Number	ID (in)	ID (mm)	Length (ft)	Length (m)	Approx Wt (lbs/ea)	Approx Wt (kg/ea)	Max WP (psi)	Max WP (bar)	Std Pack Qty (ea)	Pkg Type
RGR1250	1/2	12.7	50	15.24	7.68	3.48	100	7	6	Carton
RGR12100			100	30.48	14.78	6.70			3	Carton
RGR5825	5/8	15.9	25	7.62	5.81	2.64	125	9	8	Carton
RGR5850			50	15.24	11.01	4.99			4	Carton
RGR5875	5/8	15.9	75	22.86	16.20	7.35	125	9	3	Carton
RGR58100			100	30.48	21.39	9.70			2	Carton

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Temp Range: -40°F to +180°F (-40°C to +82°C)

Design Factor: 4:1 (1/2" @ 3.5:1)

Crimped-on Crush Resistant Nickel Plated Brass

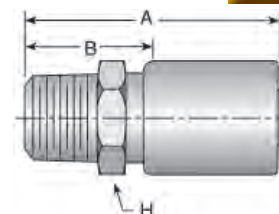
Male x Female Garden Hose Thread Couplings

Display Coils with Parker Center Retail Packaging Disc

Series HY

101HY Male NPTF Pipe – Straight Rigid

view on web page



# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	Dimensions					 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	B (in)	B (mm)			
101HY-2-4	1/4	1/8x27	-2	2.34	59	5/8	1.00	25	1.94	20	Carton
101HY-4-4	1/4	1/4x18	-4	2.53	64	9/16	1.19	30	2.73	25	Carton
101HY-4-6	3/8	1/4x18	-4	2.55	65	11/16	1.19	30	3.06	20	Carton
101HY-6-4	1/4	3/8x18	-6	2.53	64	3/4	1.19	30	2.68	20	Carton
101HY-6-6	3/8	3/8x18	-6	2.55	65	3/4	1.19	30	4.20	25	Carton
101HY-6-8	1/2	3/8x18	-6	2.72	69	7/8	1.38	35	4.54	20	Carton
101HY-8-6	3/8	1/2x14	-8	2.73	69	7/8	1.38	35	4.36	20	Carton
101HY-8-8	1/2	1/2x14	-8	2.91	74	7/8	1.41	40	6.53	25	Carton
101HY-8-10	5/8	1/2x14	-8	2.94	75	1-1/8	1.59	40	7.26	20	Carton
101HY-8-12	3/4	1/2x14	-8	3.08	78	1-1/4	1.50	38	4.33	10	Carton
101HY-12-8	1/2	3/4x14	-12	2.91	74	1-1/16	1.56	40	7.60	20	Carton
101HY-12-10	5/8	3/4x14	-12	2.98	76	1-1/8	1.59	40	3.80	10	Carton
101HY-12-12	3/4	3/4x14	-12	3.08	78	1-1/4	1.50	38	4.58	10	Carton
101HY-12-16	1	3/4x14	-12	3.23	82	1-3/8	1.63	41	5.40	10	Carton
101HY-16-12	3/4	1x11-1/2	-16	3.27	83	1-3/8	1.69	43	5.10	10	Carton
101HY-16-16	1	1x11-1/2	-16	3.42	87	1-3/8	1.81	46	6.29	10	Carton
S101HY-20-20	1-1/4	1-1/4 x 11-1/2	-20	3.84	98	1-3/4	2.00	51	6.62	4	Carton



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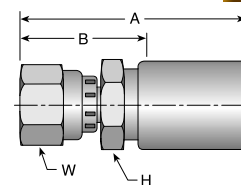
Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

Series HY

106HY Female JIC 37° – Straight Swivel

view on web page



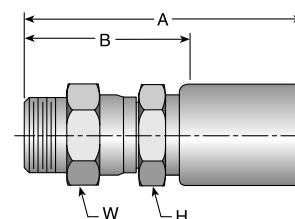
# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	Dimensions						 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	W (in)	B (in)	B (mm)			
106HY-4-4	1/4	7/16x20	-4	2.60	66	9/16	9/16	1.25	32	3.18	25	Carton
106HY-4-6	3/8	7/16x20	-4	2.67	68	3/4	9/16	1.31	33	3.30	20	Carton
106HY-5-4	1/4	1/2x20	-5	2.65	67	9/16	5/8	1.31	33	2.52	20	Carton
106HY-6-4	1/4	9/16x18	-6	2.67	68	5/8	11/16	1.31	33	2.62	20	Carton
106HY-6-6	3/8	9/16x18	-6	2.69	68	11/16	11/16	1.34	34	8.35	50	Carton
106HY-6-8	1/2	9/16x18	-6	2.86	73	7/8	9/16	1.50	38	4.80	20	Carton
106HY-8-6	3/8	3/4x16	-8	2.72	69	7/8	7/8	1.38	35	3.96	20	Carton
106HY-8-8	1/2	3/4x16	-8	2.90	74	7/8	7/8	1.56	40	13.20	50	Carton
106HY-8-10	5/8	3/4x16	-8	2.98	76	1-1/8	7/8	1.59	40	7.06	20	Carton
106HY-8-12	3/4	3/4x16	-8	3.08	78	1-1/4	7/8	1.53	39	2.64	10	Carton
106HY-10-8	1/2	7/8x14	-10	2.98	76	1	1	1.63	41	6.20	20	Carton
106HY-10-10	5/8	7/8x14	-10	3.06	78	1-1/8	1	1.69	43	9.95	25	Carton
106HY-10-12	3/4	7/8x14	-10	3.16	80	1-1/4	1	1.59	40	5.23	10	Carton
106HY-12-8	1/2	1-1/16x12	-12	3.05	77	1-1/8	1-1/4	1.69	43	3.84	10	Carton
106HY-12-10	5/8	1-1/16x12	-12	3.12	79	1-1/8	1-1/4	1.75	44	4.48	10	Carton
106HY-12-12	3/4	1-1/16x12	-12	3.22	82	1-1/4	1-1/4	1.66	42	13.08	25	Carton
106HY-12-16	1	1-1/16x12	-12	3.38	86	1-3/8	1-1/4	1.75	44	6.40	10	Carton
106HY-16-16	1	1-5/16x12	-16	3.45	88	1-3/8	1-1/2	1.84	47	6.86	10	Carton
106HY-20-20	1-1/4	1-5/8x12	-20	4.09	104	2	2	2.25	57	5.00	4	Carton

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series HY

113HY Male NPTF Pipe – Straight Swivel

view on web page



# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	Dimensions						 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	W (in)	B (in)	B (mm)			
113HY-4-4	1/4	1/4x18	-4	3.06	78	9/16	5/8	1.72	44	2.95	25	Carton
113HY-6-6	3/8	3/8x18	-6	3.11	79	11/16	11/16	1.75	44	6.23	25	Carton
113HY-8-8	1/2	1/2x14	-8	3.50	89	7/8	7/8	2.16	55	8.55	25	Carton
113HY-12-12	3/4	3/4x14	-12	3.95	100	1-1/4	1-1/4	2.38	60	7.50	10	Carton
113HY-16-16	1	1x11-1/2	-16	4.23	107	1-1/2	1-1/2	2.63	67	11.52	10	Carton

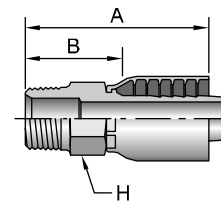
Material: Plated steel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series 43

10143 Male NPTF Pipe – Straight Rigid

[view on web page](#)



# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	Dimensions					 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	B (in)	B (mm)			
10143-4-4	1/4	1/4x18	-4	2.01	51	9/16	1.26	32	3.00	25	Carton
10143-6-6	3/8	3/8x18	-6	2.37	60	3/4	1.34	34	4.25	25	Carton
10143-8-8	1/2	1/2x14	-8	2.84	72	7/8	1.58	40	5.30	20	Carton
10143-12-12	3/4	3/4x14	-12	3.09	78	1-1/16	1.65	42	4.35	10	Carton
10143-16-16	1	1x11-1/2	-16	2.59	66	1-3/8	1.97	50	3.71	5	Carton
10143-20-20	1-1/4	1-1/4x11-1/2	-20	4.08	104	1-3/4	2.39	61	5.50	5	Carton
10143-24-24	1-1/2	1-1/2x11-1/2	-24	3.50	89	2	2.13	54	8.06	5	Carton
10143-32-32	2	2x11-1/2	-32	4.05	103	2-1/2	2.27	58	13.37	5	Carton

Material: Plated steel

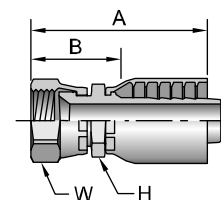


WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series 43

10643 Female JIC 37° – Straight Swivel

[view on web page](#)



# Part Number	 Hose ID (in)	 Thread ID (in)	Thread Dash Size	Dimensions						 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	W (in)	B (in)	B (mm)			
10643-4-4	1/4	7/16x20	-4	1.94	49	9/16	9/16	1.19	30	2.63	25	Carton
10643-6-6	3/8	9/16x18	-6	2.29	58	11/16	11/16	1.26	32	4.33	25	Carton
10643-8-8	1/2	3/4x16	-8	2.63	67	13/16	7/8	1.37	35	5.14	20	Carton
10643-12-12	3/4	1-1/16x12	-12	3.17	81	1-1/16	1-1/4	1.73	44	2.35	5	Carton
10643-16-16	1	1-5/16x12	-16	3.62	92	1-3/8	1-1/2	2.00	51	4.15	5	Carton
10643-20-20	1-1/4	1-5/8x12	-20	3.94	100	1-7/8	2	2.25	57	7.60	5	Carton
10643-24-24	1-1/2	1-7/8x12	-24	3.84	98	2-1/8	2-1/4	2.47	63	4.00	2	Carton
10643-32-32	2	2-1/2x12	-32	4.73	120	2-1/2	2-7/8	2.95	75	3.08	1	Carton

Material: Plated steel



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

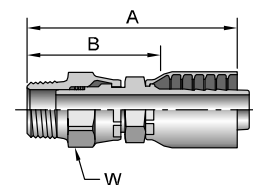
Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

Series 43

11343 Male NPTF Pipe – Straight Swivel

[view on web page](#)



# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	Dimensions					 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	B (in)	B (mm)			
11343-4-4	1/4	1/4X18	-4	2.68	68	5/8	1.93	49	1.53	10	Carton
11343-6-6	3/8	3/8X18	-6	3.08	78	3/4	2.05	52	2.55	10	Carton
11343-8-8	1/2	1/2X14	-8	3.52	89	7/8	2.26	57	3.70	10	Carton

Material: Plated steel

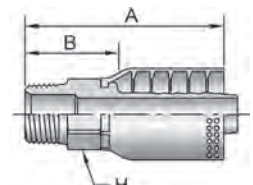


WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series CC

S101CC Male NPTF Pipe – Straight Rigid

[view on web page](#)



# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	Dimensions					 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	B (in)	B (mm)			
S101CC-16-16CW	1	1x11-1/2	-16	3.94	100	1-3/8	2.00	51	18.60	20	Carton
S101CC-20-20CW	1-1/4	1-1/4x11-1/2	-20	4.06	103	1-3/4	2.39	61	3.00	–	Carton
S101CC-24-24CW	1-1/2	1-1/2x11-1/2	-24	3.50	89	2	2.13	54	5.00	5	Carton
S101CC-32-32CW	2	2x11-1/2	-32	5.39	137	2-5/8	2.14	54	13.00	2	Carton

Material: Stainless Steel Inserts, Carbon Steel Ferrules



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

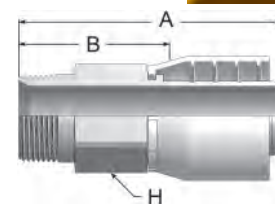
Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

Series WC

S1APWC Male API – Straight Rigid

[view on web page](#)



# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	Dimensions					 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	B (in)	B (mm)			
S1APWC-32-32	2	2x11-1/2	-32	7.17	182	2-5/8	3.92	99	2.00	2	Carton

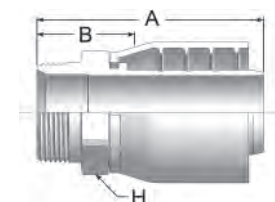
Material: Plated steel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series WC

S101WC Male NPTF Pipe – Straight Rigid

[view on web page](#)



# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	Dimensions					 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	B (in)	B (mm)			
S101WC-32-32	2	2x11-1/2	-32	5.39	137	2-5/8	2.14	54	2.00	2	Carton

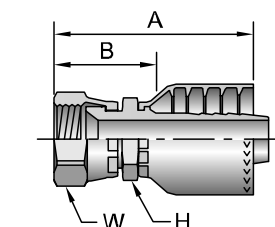
Material: Plated steel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series WC

S106WC Female JIC 37° – Straight Swivel

[view on web page](#)



# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	Dimensions						 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	W (in)	B (in)	B (mm)			
S106WC-32-32	2	2-1/2x12	-32	5.95	151	2-5/8	2-7/8	2.70	69	2.00	2	Carton

Material: Plated steel

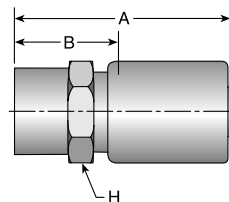
WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

Series 7661/TY-FF Female NPTF Pipe – Straight Rigid

[view on web page](#)



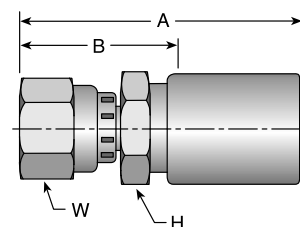
#											
Part Number	Hose ID (in)	Thread ID (in)	Thread Dash Size	Dimensions					Approx Wt Per Ctn (lbs)	Std Pack Qty (per carton)	Pkg Type
				A (in)	A (mm)	H (in)	B (in)	B (mm)			
7661-04FF04TY	1/4	1/4x18	-4	2.47	63	11/16	1.15	26	3.23	25	Carton

Material: Plated steel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series 7661/TY-FJ Female JIC 37° – Straight Swivel

[view on web page](#)



# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	Dimensions						 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	W (in)	B (in)	B (mm)			
7661-04FJ04TY	1/4	7/16x20	-4	2.60	66	9/16	9/16	1.25	32	3.18	25	Carton
7661-08FJ08TY	1/2	3/4x16	-8	2.90	74	7/8	7/8	1.56	40	26.40	100	Carton

Material: Plated steel

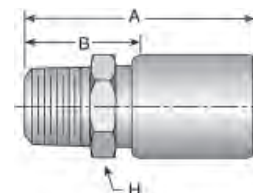
WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

Series 7661/TY-MP Male NPTF Pipe – Straight Rigid

[view on web page](#)



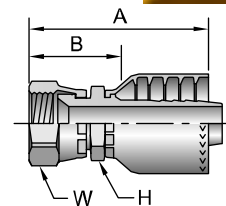
# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	 Dimensions					 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	B (in)	B (mm)			
7661-04MP04TY	1/4	1/4x18	-4	2.53	64	9/16	1.19	30	7.00	50	Carton
7661-08MP08TY	1/2	1/2x14	-8	2.91	74	7/8	1.56	40	30.00	100	Carton
7661-12MP08TY	1/2	3/4x14	-12	2.91	74	1-1/16	1.56	40	80.00	80	Carton

Material: Plated steel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series 7661/LA-FJ Female JIC 37° – Straight Swivel

[view on web page](#)



# Part Number	Hose ID (in)	Thread ID (in)	Thread Dash Size	Dimensions						Approx Wt Per Ctn (lbs)	Std Pack Qty (per carton)	Pkg Type
				A (in)	A (mm)	H (in)	W (in)	B (in)	B (mm)			
7661-32FJ32LA	2	2-1/2x12	-32	5.39	137	2-5/8	2-7/8	2.70	69	27.20	7	Carton

Material: Plated steel

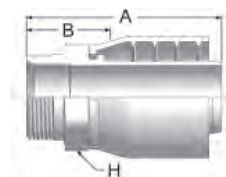
WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

Series 7661/LA-NP Male NPTF Pipe – Straight Rigid

[view on web page](#)



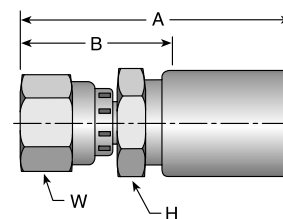
# Part Number	Hose ID (in)	Thread ID (in)	Thread Dash Size	Dimensions					Approx Wt Per Ctn (lbs)	Std Pack Qty (per carton)	Pkg Type
				A (in)	A (mm)	H (in)	B (in)	B (mm)			
7661-32NP32LA	2	2x11-1/2	-32	5.39	137	2-5/8	2.14	54	26.90	8	Carton

Material: Plated steel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series 7661/LAR-FJ Female JIC 37° – Straight Swivel with Internal O-Ring

[view on web page](#)



# Part Number	Hose ID (in)	Thread ID (in)	Thread Dash Size	Dimensions						Approx Wt Per Ctn (lbs)	Std Pack Qty (per carton)	Pkg Type
				A (in)	A (mm)	H (in)	W (in)	B (in)	B (mm)			
7661-16FJ16LAR	1	1-5/16x12	-16	3.55	90	1-3/8	1-3/8	1.81	46	17.15	25	Carton

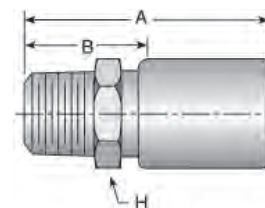
Material: Plated steel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series 7661/LAR-MP

Male NPTF Pipe – Straight Rigid with Internal O-Ring

[view on web page](#)



# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	Dimensions					 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	B (in)	B (mm)			
7661-16MP16LAR	1	1x11-1/2	-16	3.42	87	1-3/8	1.69	43	15.73	25	Carton

Material: Plated steel

WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

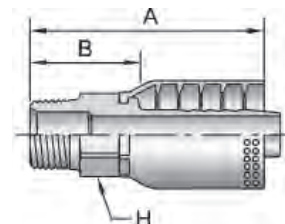
Crimp Specifications

For currently qualified crimp specifications including coupling designation, refer to CrimpSource at www.parker.com/crimpsource.

Series CS

S101CS Male NPTF Pipe – Straight Rigid

[view on web page](#)



# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	Dimensions					 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	B (in)	B (mm)			
S101CS-12-12	3/4	3/4x14	-12	3.56	90	1-1/8	1.75	44	16.05	25	Carton
S101CS-16-16	1	1x11-1/2	-16	3.94	100	1-3/8	2.00	51	27.43	25	Carton

Material: Plated steel

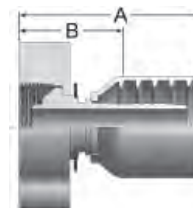
WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series 7610/CS

Crimp Coupling for Steam Hose

Female Ground Joint NPSM with Wing Nut and O-Ring

[view on web page](#)



# Part Number	Description	 Hose ID (in)	 Thread (in)	Dimensions				 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	B (in)	B (mm)			
7610-12CSGJF	With Wing Nut	3/4	1-1/2	3.70	94	1.57	40	4.00	4	Carton
7610-12CSGJFS	Spud	3/4	1-1/2	n/a	n/a	n/a	n/a	4.00	4	Carton
7610-16CSGJF	With Wing Nut	1	1-1/2	3.97	100	1.53	39	4.00	4	Carton

Material: Coupling, plated steel; Wing Nut, malleable iron

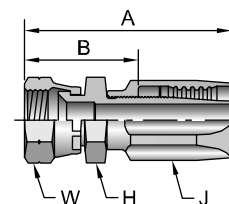
WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Series 20

Reattachable Couplings for LPG Fuel Hose

Female SAE 45° – Straight Swivel

[view on web page](#)



# Part Number	 Hose ID (in)	 Thread ID (in)	 Thread Dash Size	Dimensions							 Approx Wt Per Ctn (lbs)	 Std Pack Qty (per carton)	 Pkg Type
				A (in)	A (mm)	H (in)	J (in)	W (in)	B (in)	B (mm)			
20820-6-6	5/16	5/8x18	-6	2.36	60	3/4	13/16	3/4	1.44	37	4.20	25	Carton

Material: Plated steel



WARNING: The products described in this catalog can expose you to chemicals, including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

HYDRAULIC TECHNICAL SECTION

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Size

Flow Capacities at Recommended Flow Velocities

The nomogram below is provided as an aid in determining the correct hose size.

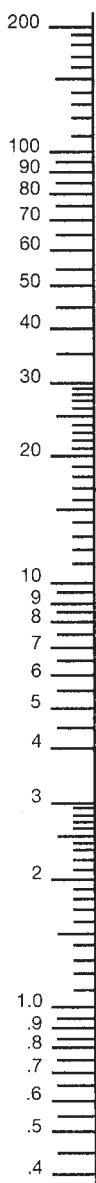
How to use the nomogram: Determine the proper flow rate your system requires, then connect a straight edge from the selected flow rate to the recommended velocity range. The required hose I.D. will appear at the intersection of the straight edge and the center column. If the straight edge passes through 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 or return lines, except utilizing their respective maximum recommended velocities.

Flow
Gallons per Minute



Inside Diameter of Hose
Inch / Dash Size
20, 21, 22, 23, All Others
Group XV, 90, 91

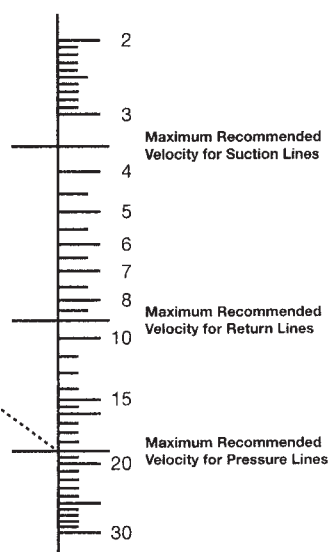
2-3/8"	40	32	2"
1-13/16"	32	24	1-1/2"
1-3/8"	24	20	1-1/4"
1-1/8"	20	16	1"
7/8"	16	12	3/4"
5/8"	12	10	5/8"
1/2"	10	8	1/2"
13/32"	8	6	3/8"
5/16"	6	5	5/16"
1/4"	5	4	1/4"
3/16"	4	3	3/16"

The nomogram is based on the following formula:

$$D = \sqrt{\frac{Q \times 0.4081}{V}}$$

Where: Q = Flow in Gallons per Minute (gpm)
V = Velocity in Feet per Second (ft/sec)
D = Hose Inside Diameter (inches)

Velocity
Feet per Second



Size

Hose Flow Capacities
Pressure Drop

Hose Dash Size	-04		-05		-06		-08		-10		-12		-16		-20		-24		-32		-40	-48
Hose I.D. (Inches)	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	3.00
0.25	10.0	3.1	3.1																			
0.5	19.0	6.0	6.0	2.7	2.7																	
1	40.0	12.0	12.0	5.5	5.5	2.4																
2	95.0	24.0	24.0	10.0	10.0	4.8	3.5															
3	185.0	46.0	46.0	17.0	17.0	7.0	5.0	2.2	2.2													
4		78.0	78.0	29.0	29.0	12.0	8.0	3.0	3.0	1.2	1.2											
5		120.0	120.0	44.0	44.0	18.0	12.0	4.5	4.5	1.6	1.6	0.7										
8				95.0	95.0	39.0	26.0	10.0	10.0	3.6	3.6	1.4	0.6									
10						59.0	40.0	15.0	15.0	5.7	5.7	2.0	1.0	0.6								
12						80.0	52.0	20.0	20.0	7.2	7.2	2.6	1.5	0.8	0.4							
15							75.0	30.0	30.0	10.0	10.0	4.2	2.2	1.2	0.7	0.4						
18							107.0	40.0	40.0	15.0	15.0	6.3	3.0	1.5	0.7	0.6	0.4					
20								49.0	49.0	19.0	19.0	8.0	3.4	2.0	1.1	0.7	0.4	0.3				
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			
30										34.0	34.0	14.0	7.0	3.6	2.2	1.3	0.8	0.5	0.2	0.1		
35										47.0	47.0	19.0	9.5	5.0	2.8	1.7	1.1	0.7	0.3	0.2		
40												25.0	12.0	6.5	3.4	2.2	1.4	0.9	0.4	0.2		
50												36.0	17.0	9.0	5.3	3.3	2.0	1.3	0.5	0.4	0.2	
60												50.0	23.0	12.0	7.5	4.4	2.8	1.8	0.8	0.5	0.2	
70													31.0	17.0	9.3	6.0	3.8	2.4	1.0	0.7	0.3	
80													38.0	21.0	12.0	7.1	4.6	3.0	1.2	0.8	0.3	0.1
90													49.0	27.0	15.0	9.0	5.9	3.8	1.5	1.0	0.5	0.1
100														33.0	19.0	12.0	7.0	4.7	1.9	1.3	0.6	0.2
150														60.0	36.0	22.0	13.0	8.5	3.4	2.2	1.0	0.3
200															36.0	23.0	15.0	6.0	3.9	1.7	0.6	
250															54.0	33.0	22.0	8.5	5.3	2.5	0.8	
300																45.0	29.0	12.0	7.5	4.0	1.1	
400																	51.0	21.0	14.0	6.5	2.2	
500																			32.0	20.0	10.0	3.0
800																					18.0	5.0
1000																						10.0

Pressure drop in psi (pounds per square inch) per 10 feet of hose (smooth bore) without fittings.

Fluid specification: Specific gravity = 0.85; Viscosity = ν = 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

Temperature / Pressure Chart -
201, 206, 213, and 266 Hose

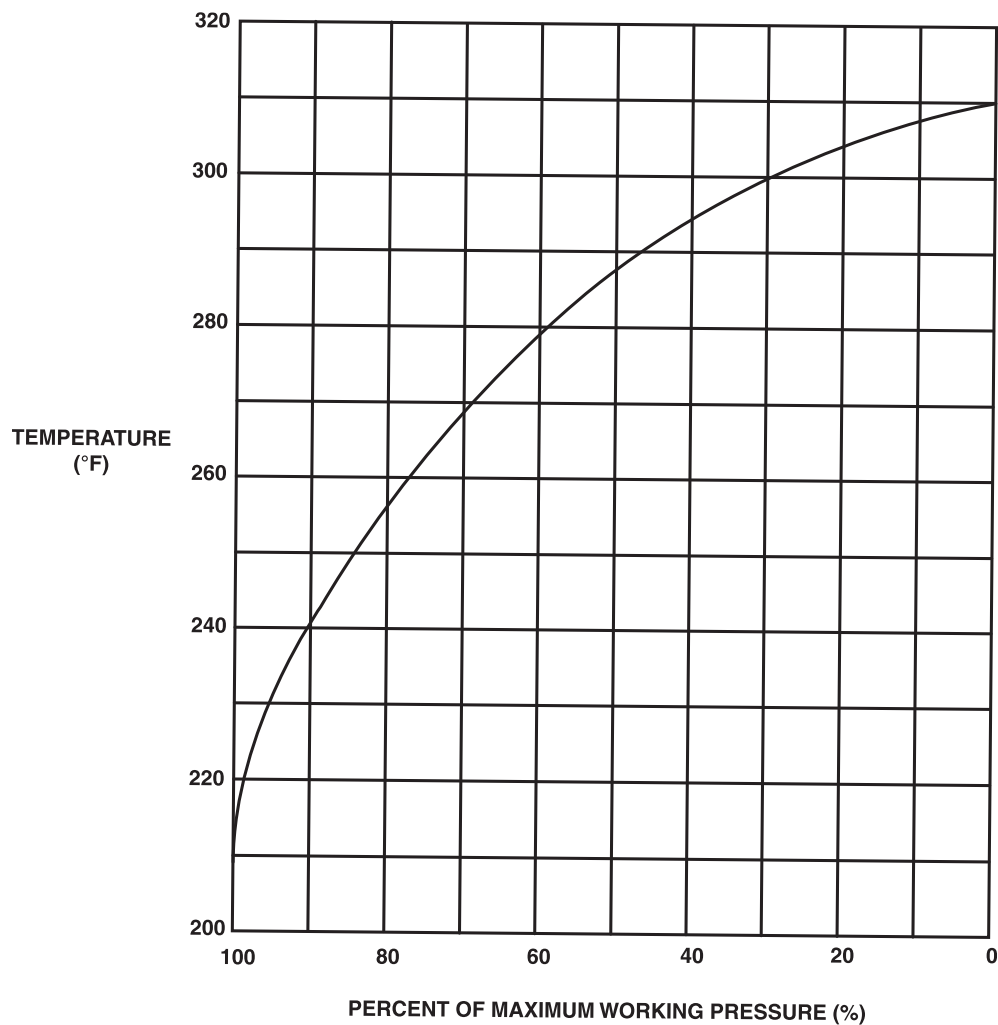
The Temperature / Pressure Chart identifies the effects temperature change has on the maximum working pressure of specific hoses.

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 Pressure 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	x	(85%)	=	1,700 psi



Temperature

Minimum/Maximum Temperature

(Page 1 of 4)

Hose Family	Cover (ISO Rating)	Petroleum base hydraulic fluids and lubricating oils	Antifreeze solutions	Diesel fuels	SAE J1942 Marine lube oil and diesel fuel systems (Application Code F)**
GlobalCore 187	Standard	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	x	x
	TC (AC)	-40°C to +125°C (-40°F to +257°F)	-40°C to +125°C (-40°F to +257°F)	x	x
	TC (AS)	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	x	x
	ST (AC)	-40°C to +125°C (-40°F to +257°F)	-40°C to +125°C (-40°F to +257°F)	x	x
	ST (AS)	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	x	x
GlobalCore 387	Standard	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	x	x
	TC	-40°C to +125°C (-40°F to +257°F)	-40°C to +125°C (-40°F to +257°F)	x	x
	ST	-40°C to +125°C (-40°F to +257°F)	-40°C to +125°C (-40°F to +257°F)	x	x
GlobalCore 487	Standard	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	x	x
	TC	-40°C to +125°C (-40°F to +257°F)	-40°C to +125°C (-40°F to +257°F)	x	x
	ST	-40°C to +125°C (-40°F to +257°F)	-40°C to +125°C (-40°F to +257°F)	x	x
GlobalCore 722	Standard	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	x	x
	TC	-40°C to +125°C (-40°F to +257°F)	-40°C to +125°C (-40°F to +257°F)	x	x
	ST	-40°C to +125°C (-40°F to +257°F)	-40°C to +125°C (-40°F to +257°F)	x	x
GlobalCore 787	Standard	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	x	x
	TC (DC)	-40°C to +125°C (-40°F to +257°F)	-40°C to +125°C (-40°F to +257°F)	x	x
	TC (AC)	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	x	x
	ST (DC)	-40°C to +125°C (-40°F to +257°F)	-40°C to +125°C (-40°F to +257°F)	x	x
	ST (AC)	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	x	x
GlobalCore 797	Standard	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	x	x
	TC (CC, DC)	-40°C to +125°C (-40°F to +257°F)	-40°C to +125°C (-40°F to +257°F)	x	x
	TC (AC)	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	x	x
	ST (CC, DC)	-40°C to +125°C (-40°F to +257°F)	-40°C to +125°C (-40°F to +257°F)	x	x
	ST (AC)	-40°C to +100°C (-40°F to +212°F)	-40°C to +100°C (-40°F to +212°F)	x	x
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)	x	-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	x
422		-40°C to +100°C (-40°F to +212°F)	x	x	-40°C to +100°C (-40°F to +212°F)
424		x	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)
436		-48°C to +150°C (-55°F to +302°F)	x	x	x
471TC/ST		-40°C to +100°C (-40°F to +212°F)	x	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)	x	x	x
482TC/ST		-40°C to +100°C (-40°F to +212°F)	x	x	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)	x

* The maximum working pressures for these hoses are reduced at temperatures above +212°F (+100°C). Consult the pressure/temperature curve on 318 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., Code H. Refer to individual hose listings in Section A and Hose Assemblies List, SAE J1942-1 or HPD Approval Bulletin #APR-004.

Temperature

Minimum/Maximum Temperature

(Page 2 of 4)

Hose	Cover (ISO Rating)	Air	Water, water/oil emulsion	Water/glycol hydraulic	Water	Phosphate ester fluids	Polyol ester fluids
GlobalCore 187	Standard	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
	TC (AC)	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
	TC (AS)	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
	ST (AC)	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
	ST (AS)	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
GlobalCore 387	Standard	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
	TC	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
	ST	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
GlobalCore 487	Standard	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
	TC	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
	ST	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
GlobalCore 722	Standard	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
	TC	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
	ST	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
GlobalCore 787	Standard	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
	TC (DC)	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
	TC (AC)	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
	ST (DC)	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
	ST (AC)	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
GlobalCore 797	Standard	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
	TC (CC, DC)	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
	TC (AC)	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
	ST (CC, DC)	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
	ST (AC)	+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	+65°C (+150°F)
201*		+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
206*		+100°C (+212°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
213*		+93°C (+200°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
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
436		+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

* The maximum working pressures for these hoses are reduced at temperatures above +212°F (+100°C). Consult the pressure/temperature curve on 318 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., Code H. Refer to individual hose listings in Section A and Hose Assemblies List, SAE J1942/1 or HPD Approval Bulletin #APR-004.

Temperature

Minimum/Maximum Temperature

(Page 3 of 4)

Hose Family	Cover (ISO Rating)	Petroleum base hydraulic fluids and lubricating oils	Antifreeze solutions	Diesel fuels	SAE J1942 Marine lube oil and diesel fuel systems (Application Code F)**
722LT		-57°C to +100°C (-70°F to +212°F)	x	x	x
792LT		-57°C to +100°C (-70°F to +212°F)	x	x	x
F42		x	x	x	x
774		x	x	x	x
781		-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	x	x	x
811		-40°C to +100°C (-40°F to +212°F)	x	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	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)	x	x	x
JK		-40°C to +49°C (-40°F to +120°F)	x	x	x
SS25UL		x	x	x	x
811HT		-46°C to +125°C (-50°F to +257°F)	x	x	x

* The maximum working pressures for these hoses are reduced at temperatures above +212°F (+100°C). Consult the pressure/temperature curve on 318 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., Code H. Refer to individual hose listings in Section A and Hose Assemblies List, SAE J1942/1 or HPD Approval Bulletin #APR-004.

Temperature

Minimum/Maximum Temperature

(Page 4 of 4)

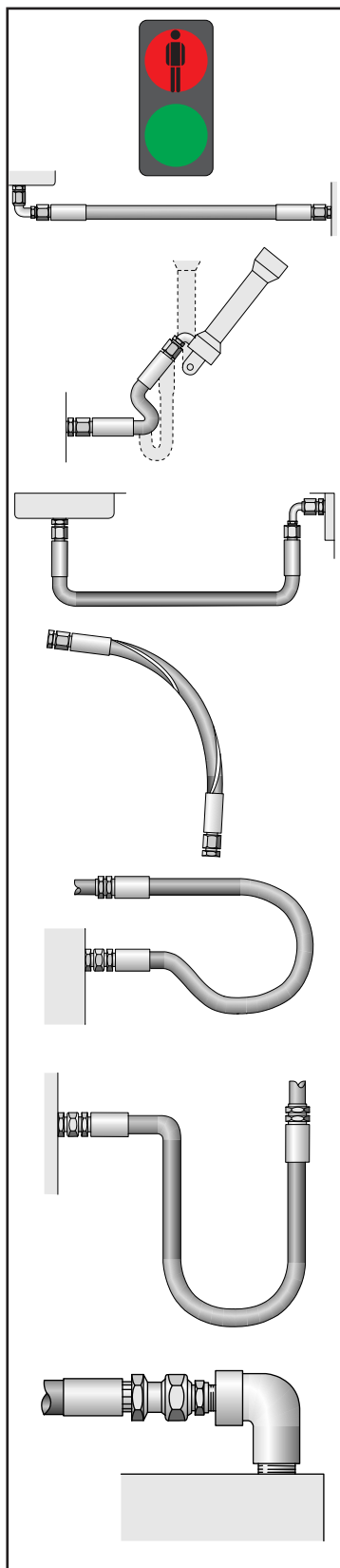
Hose	Cover (ISO Rating)	Air	Water, wa- ter/oil emulsion	Water/glycol hydraulic	Water	Phosphate ester fluids	Polyol ester fluids
722LT		x	x	x	x	x	x
792LT		+70°C (+158°F)	x	x	x	x	x
F42		+70°C (+158°F)	x	x	x	x	x
774		+70°C (+158°F)	x	+85°C (+185°F)	+85°C (+185°F)	-40°C to +80°C (-40°F to +176°F)	x
781		+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
801		+70°C (+158°F)	+85°C (+185°F)	+85°C (+185°F)	+85°C (+185°F)	x	x
804		+70°C (+158°F)	x	+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	x
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	x
JK		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	x

* The maximum working pressures for these hoses are reduced at temperatures above +212°F (+100°C). Consult the pressure/temperature curve on 318 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., Code H. Refer to individual hose listings in Section A and Hose Assemblies List, SAE J1942/1 or HPD Approval Bulletin #APR-004.

Application

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 maximize 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 allow too much slack and therefore introduce the risk of the hose snagging on other equipment or rubbing on other components.

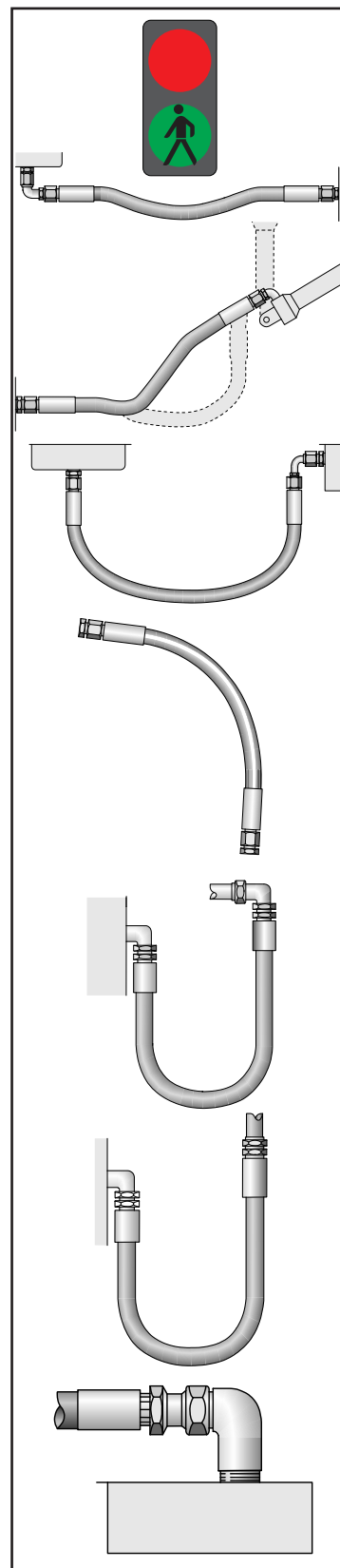
Mechanical straining of the hoses needs to be avoided, so the hose must not be bent below its minimum bend radius or twisted during installation. The minimum bending radii for each hose is stated in the hose tables in the catalog.

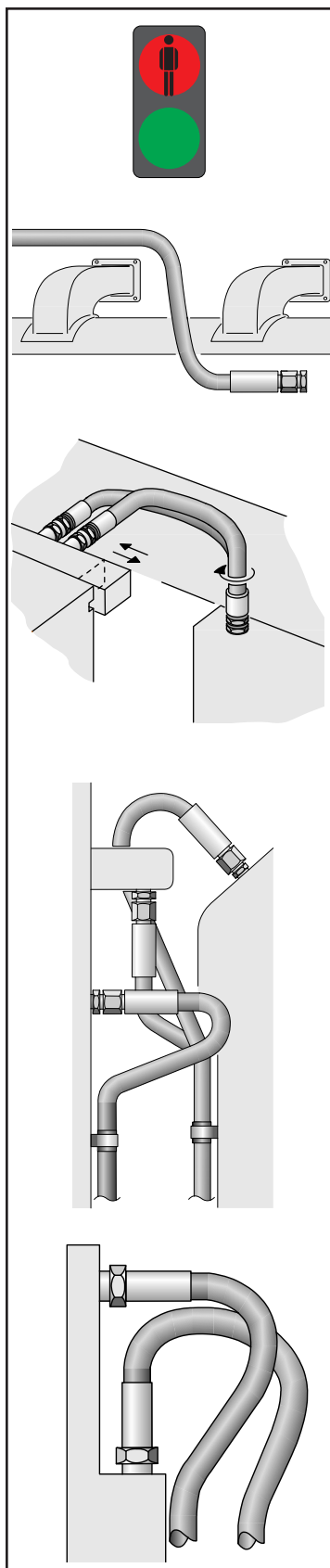
The plane of movement must also be considered and the hose routing selected accordingly.

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.

Hose Installation Tips

right



wrong

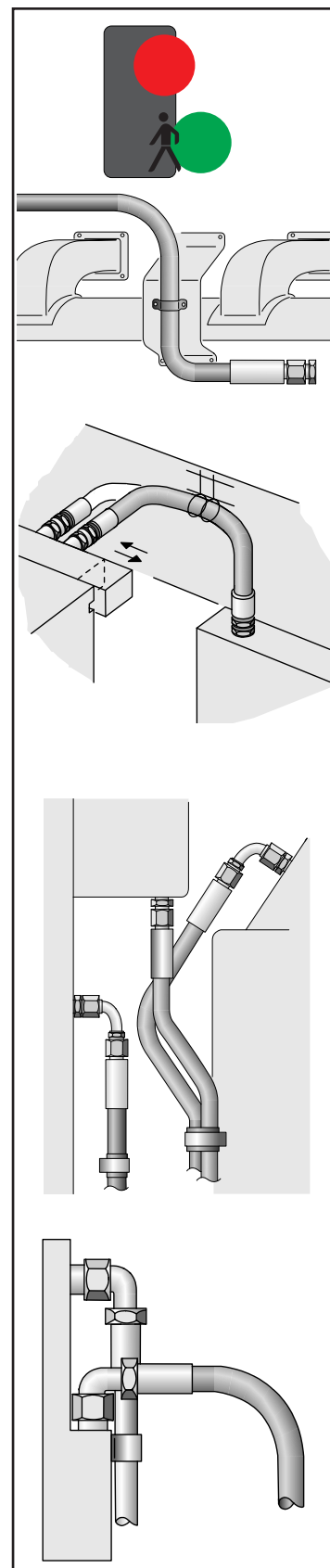
Correct clamping (holding/supporting) of the hose should be exercised to securely route the hose or to avoid the hose contacting surfaces that will cause the hose damage. It is however, vital that the hose be allowed to keep its functionality as a “flexible-pipe” and not be restricted from changing in 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.

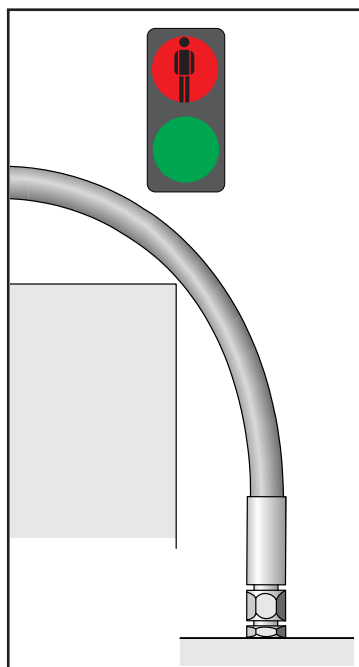
Hose should not be bent in more than one plane. If hose follows a compound bend, it shall be coupled into separate segments or clamped into segments that each flex in only one plane.

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

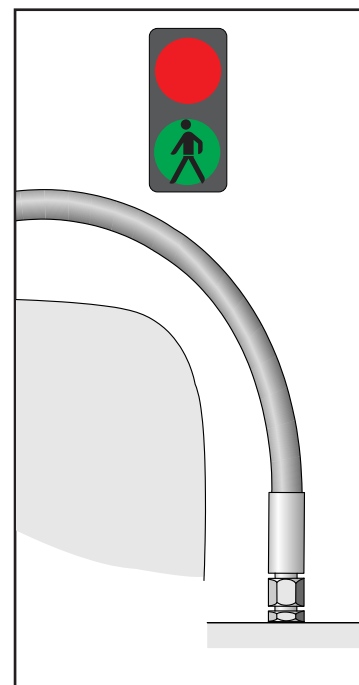
wrong

**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.

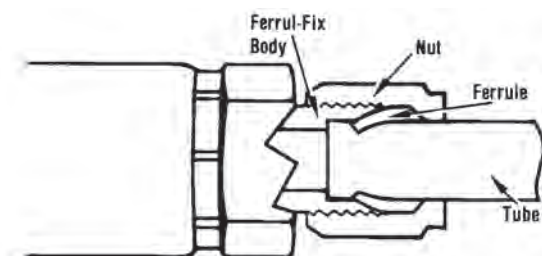
Parker **TOUGH COVER** (C) or **SUPER TOUGH** covers offer 80 times or respectively 450 times the abrasion resistance of standard rubber covers.

right



Application

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 ferrule, 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



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 tight.
5. Wrench nut down 1-3/4 turns to preset the ferrule.
6. 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.
8. 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).

Application Performance Standards and Specifications

Hose	Meets or Exceeds:						
	ISO	SAE	EN	NFPA	EES	DOT	UL
187	ISO 18752						
187TC	ISO 18752						
187ST	ISO 18752						
387	ISO 18752						
387TC	ISO 18752						
387ST	ISO 18752						
487	ISO 18752						
487TC	ISO 18752						
487ST	ISO 18752						
722 (-6 through -16)	ISO 18752						
722TC (-6 through -16)	ISO 18752						
722ST (-6 through -16)	ISO 18752						
787	ISO 18752						
787TC	ISO 18752						
787ST	ISO 18752						
797	ISO 18752						
797TC	ISO 18752						
797ST	ISO 18752						
201		SAE J517 100R5 / SAE J1402 AII				DOT FMVSS 106 AIR BRAKE - AII	
206		SAE J517 100R5 / SAE J1402 AII				DOT FMVSS 106 AIR BRAKE - AII	
213		SAE J1402 AI				DOT FMVSS 106 AIR BRAKE - AI	
221FR	ISO 7840	SAE J1527 A CLASS I / SAE J1942					
244		SAE J2064 B CLASS I					
266		SAE J1402 AII				DOT FMVSS 106 AIR BRAKE - AII	
271		SAE J1402 A				DOT FMVSS 106 AIR BRAKE - A	
285		SAE J2064 C (w/ 26 series)					
293		SAE J1402 AI				DOT FMVSS 106 AIR BRAKE - AI	
302	ISO 1436-1 Type 2SN	SAE J517 100R2AT / SAE J1942	EN 853 Type 2SN				
304							
422	ISO 1436-1 Type 1SN	SAE J517 100R1AT / SAE J1942	EN 853 Type 1SN				
424							
426		SAE J1942					
436	ISO 11237 Type R16						
471TC	ISO 11237 Type 2SC	SAE J1942	EN 857 Type 2SC				
471TC Twin Tough	ISO 11237 Type 2SC	SAE J1942	EN 857 Type 2SC				
471ST	ISO 11237 Type 2SC	SAE J1942	EN 857 Type 2SC				

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 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 Iowa is our only approved assembler.

UL "Listed" Assemblies must be made at Davenport Iowa
CSA/CGA Assemblies must be made at Davenport Iowa

Application

Performance Standards and Specifications

Hose	Meets or Exceeds:			Agency Approvals:												
	ECE	CSA	AS/NZS	ABS	DNV	USCG	LR	MSHA	BV	CSA	RDW	UL	AGA	DOT	IMCI	NK
187																
187TC				.	.	.		.								
187ST				.	.	.		.								
387																
387TC				.	.	.	.	.								
387ST				.	.	.	.	.								
487																
487TC				.	.	.	.	.								
487ST				.	.	.	.	.								
487CP								.								
722 (-6 through -16)						.		.								
722TC (-6 through -16)				.	.	.	.	.								
722ST (-6 through -16)				.	.	.	.	.								
777TC				.				.								
777ST				.				.								
777CP				.				.								
787								.								
787TC				.	.	.	.	.								
787ST				.	.	.	.	.								
787CP								.								
797								.								
797TC				.	.	.	.	.								
797ST				.	.	.	.	.								
797CP								.								
201														.		
206														.		
213														.		
221FR				.	.	.	.	.							.	
244																
266														.		
271														.		
285														.		
293														.		
302				.	.	.			.							.
304																
422				.	.	.										
424																
426				.		.		.								
436				.		.		.								
471TC				.	.	.		.	.							
471TC Twin Tough				.	.	.		.	.							
471ST				.	.	.		.								

Continued on next page

Notes:

(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 J1475.

F = Fuel and lube 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.

Application

Performance Standards and Specifications

Continued from previous page

Hose	Meets or Exceeds:						
	ISO	SAE	EN	NFPA	EES	DOT	UL
472TC		SAE J1942					
472LT			EN 857 Type 2SC				
482TC	ISO 1436-1 Type 1SN	SAE J517 100R1AT / SAE J1942	EN 853 Type 1SN				
482ST	ISO 1436-1 Type 1SN	SAE J517 100R1AT	EN 853 Type 1SN				
611HT		SAE J517 100R6	EN 854 Type R6				
722TC (-20 through -32)	ISO 3862-1 Type R12	SAE J517 100R12 / SAE J1942	EN 856 Type R12				
722ST (-20 through -32)	ISO 3862-1 Type R12	SAE J517 100R12 / SAE J1942	EN 856 Type R12				
722LT	ISO 3862-1 Type R12	SAE J517 100R12	EN 856 Type R12				
774							
792LT	ISO 3862-1 Type R15	SAE J517 100R15	EN 856 Type R15				
801							
804							
811		SAE J517 100R4 / SAE J1942					
811HT		SAE J517 100R4 / SAE J1942					
821							
821FR							
836							
881		SAE J517 100R4 / SAE J1942					
F42							
JK	ISO 1436-1 Type 2SN	SAE J517 100R2AT	EN 853 Type 2SN	NFPA 1936	EES 116-4		
SS25UL (-4 through -12)				NFPA 58			UL 21
SS25UL-AGA (-4, -6, -8)							

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Application

Performance Standards and Specifications

Hose	Meets or Exceeds:			Agency Approvals:												
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472TC				.	.	.		.								
472LT						.		.								
482TC						.		.								
482ST								.								
611HT								.								
721								.								
722ST (-20 through -32)				.	.	.	.	.								
722LT								.								
774																
792LT								.								
801								.								
804																
811																
811HT				.		.		.								
821																
821FR																
836								.								
881				.		.		.								
F42																
JK								.								
SS25UL (-4 through -12)												.				
SS25UL-AGA (-4, -6, -8)			AS/NZS 1869-2012 Class D										.			

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For questions on standards and specifications please contact the Hose Products' Technical Services Department at (440) 943-5700.

Application

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 Configuration Code	Fitting Series 43	Fitting Series 70	Fitting Series 71	Fitting Series 79
R	UT	X		X	
F	FU	X		X	
C	GU	X	X	X	
MF	MU	X		X	
S	15	X	X	X	
4S	17	X	X	X	
9S	19	X	X	X	
H	6A		X	X	X
4H	6F			X	X
9H	6N		X	X	X

Note: Parker Hose Standards are listed on page 448 thru 451.

Application

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.

Dash Size	Flats From Wrench Resistance (FFWR)	Swivel Nut Torque	
		Newton Meters (Ref)	Pound Feet (Ref)
-4	2	18	13
-5	2	19	14
-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 Size	Swivel Nut Torque		Flats From Wrench Resistance (FFWR)
	Newton Meters (+10% / -0)	Pound Feet (+10% / -0)	
-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.
- 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

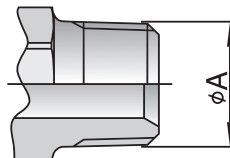
In general fittings can be identified by their visual appearance, their sealing surface/sealing type or by their thread type/form. Viewing the following pages, the visual identification will be self explanatory. The sealing mechanism and the method of thread identification, however, needs further explanation

Determining Sealing Mechanisms:

- Thread interface
- O-ring
- Matching angle or metal-to-metal joint
- Mated angle with O-ring

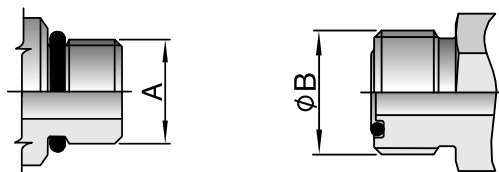
Thread Interface

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.



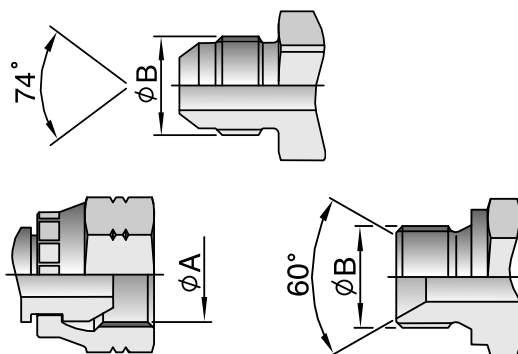
O-ring

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.



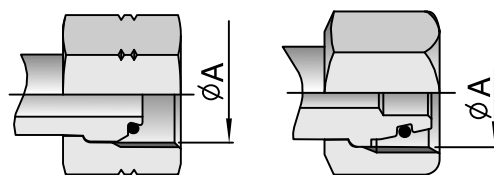
Matching Angle or Metal-to-Metal Joint

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.

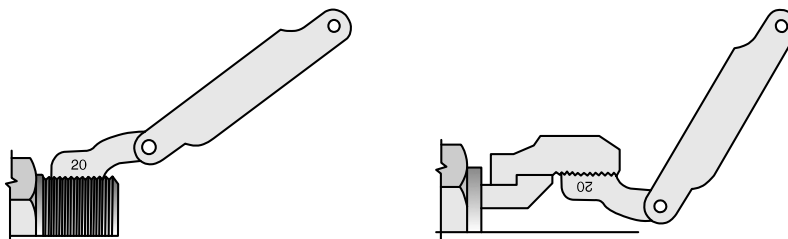


Determining the Thread Type

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.

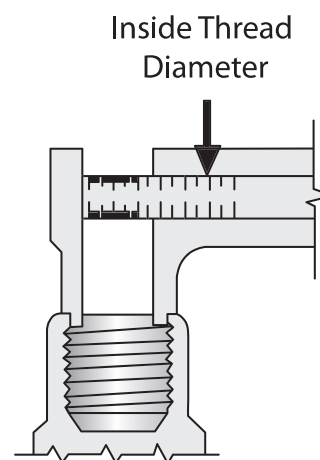
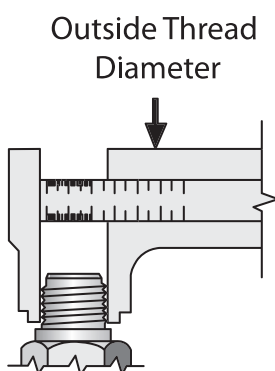
Thread Gauge

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

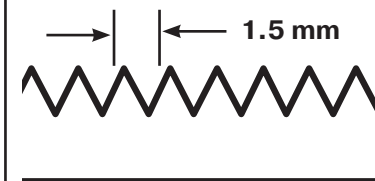
Often referred to as metric fittings, these fittings seal using the angled sealing surfaces (metal-to-metal) or the combination of metal-to-metal with O-rings.

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.

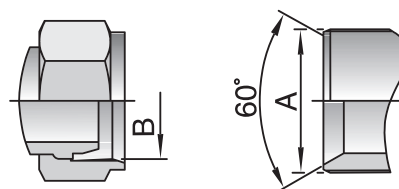
Defined by the outside diameter and the pitch (distance between 2 crests of the thread) example: M22x1.5 - pitch of 1.5mm.



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

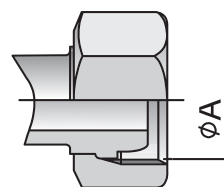
C0

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.

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



without O-ring

Standard

DIN 20078 Part 2 ¹⁾

(previously known as

DIN 20078 A, D & E)

Parker end configurations

light series

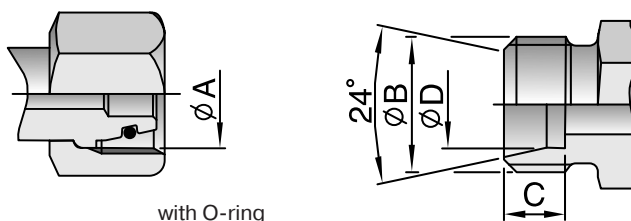
C3, C4, C5, C6

(Often also referred to as "Ball nose cones")

¹⁾ 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

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).

BSPP

BS5200

Parker end configurations

92, B1, B2, B4, D9

BSPP

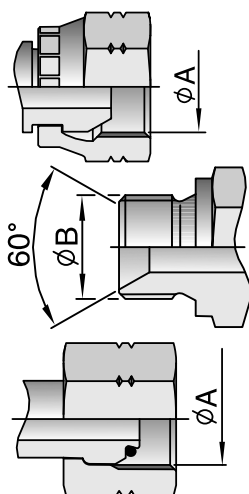
metal-to-metal with O-ring

Standard

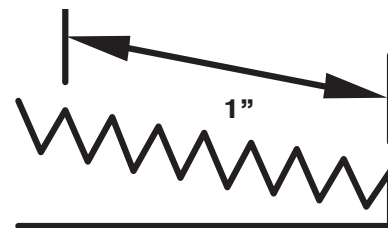
ISO 12151-6

Some Parker end configurations

may be non-standard parts.



Identification is made by measuring the outside diameter of the thread and the number of threads per inch (25.4 mm)



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

BSPT

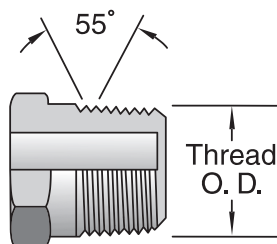
fittings seal through the thread interface mechanism. Care should be taken not to confuse the BSPT fitting with the NPTF male fitting.

BSPT has a 55° thread angle. NPTF has 60° thread angle.

BSPT has a 55° thread angle. NPTF has 60° thread angle.

Parker end configuration

91

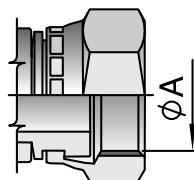


Tube I.D./O.D. (mm)	Size	Thread BSP	ØA (mm)
5/10	-2	1/8x28	9.73
8/13	-4	1/4x19	13.16
12/17	-6	3/8x19	16.66
15/21	-8	1/2x14	20.96
20/27	-12	3/4x14	26.44
26/34	-16	1x11	33.25
33/42	-20	1-1/4x11	41.91
40/49	-24	1-1/2x11	47.80
50/60	-32	2x11	59.61

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)
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

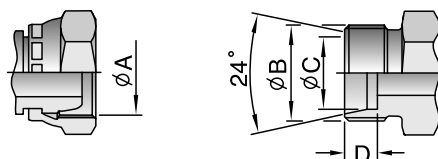
Typical to the French market the French Gas fittings have a 24° sealing surfaces seat with metric straight threads. Although similar to German DIN fittings the threads differ in some sizes as the French Gas fittings have fine threads in all sizes whereas the German DIN fittings use standard threads in 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.



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

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 Taper Pipe Thread (NPTF)

The NPTF male will mate with the NPTF, NPSF, or NPSM females.

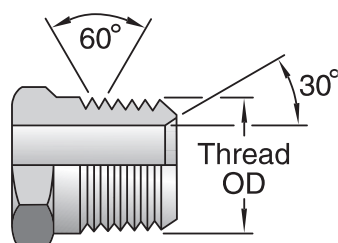
Care should be taken not to confuse the NPTF fitting with the BSPT male fitting.

NPTF fittings have a 60° thread angle.

BSPT has a 55° thread angle.

Standard

SAE J516



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

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.

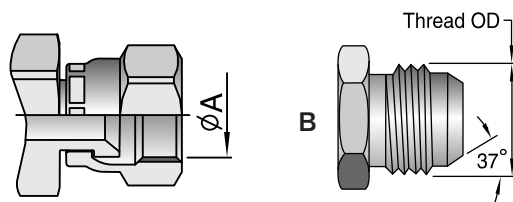
Standard

**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



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.

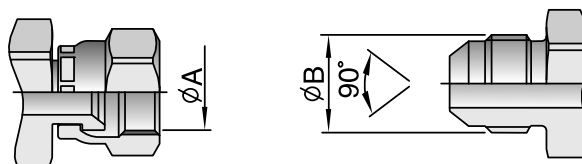
The SAE 45° flare male will mate with an SAE 45° flare female only or a dual seat JIC 37°/SAE45°.

Standard

SAE J516

Parker end configurations

04, 08/68, 77/3V, 79/3W, 81/3Y



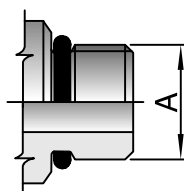
Tube O.D. (inch)	Size	Thread UNF	ØA (mm)	ØB (mm)
1/4	x4	7/16x20	9.90	11.10
5/16	-5	1/2x20	11.50	12.70
3/8	-6	5/8x18	14.30	15.90
1/2	-8	3/4x16	17.50	19.10
5/8	-10	7/8x14	20.60	22.20
3/4	-12	1-1/16x14	25.00	27.00

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



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

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.

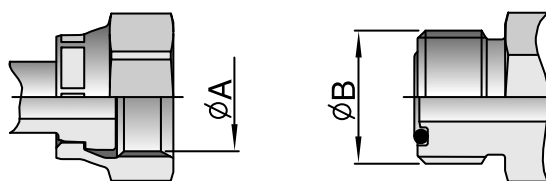
Seen as a major advantage, these fittings offer the possibility to build the hose assemblies into fixed distances/spaces, without having to move back other system components due the flat faces of the male and female fittings – the hose assembly can be slotted in.

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)	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).

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)

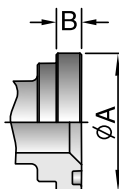
6A, 6F, 6N, PA, PF, PN, 89

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 (mm)	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

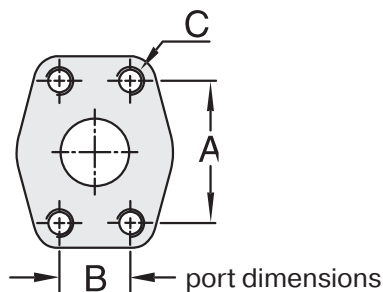
Komatsu®

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 (inch)	Size	A (mm)	B (mm)	C	
				(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 (inch)	Size	A (mm)	B (mm)	C	
				(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

*M14x2 still used in the market but no longer in accordance with ISO 6162

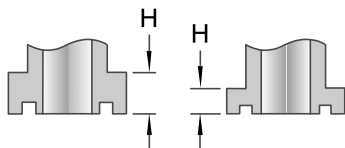
Replacing Caterpillar® 6000 PSI Flange Fittings with SAE Code 62 Flange Fittings and Parker “Caterpillar®” Style Flange Fittings

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 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.



Size		H (in)	
		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

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

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

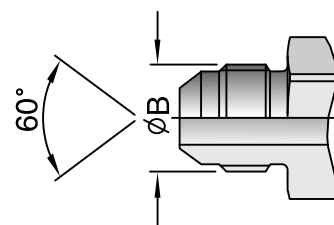
Parker end configurations

MU, XU (Metric)

FU (BSP)

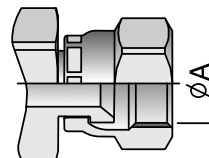
JIS 30° metric

Symbol	Thread metric	ØA (mm)	ØB (mm)
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	Thread BSP	ØA (mm)	ØB (mm)
GUI-3	1/8x28	8.60	9.70
GUI-5/-6	1/4x19	11.50	13.20
GUI-8/-9	3/8x19	14.90	16.70
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



Application

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 Flareless 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 Swive Female Thread Size	French Swivel Female Gaz Series	French Swivel Female Metric Series	French Male Stud Metric Series
4	-	-	-	-	1/4x19	1/4x19	--	-	-
6	M12x1,5	M14x1,5	M12x1,5	M14x1,5	3/8x19	3/8x19	-	-	M12x1
8	M14x1,5	M16x1,5	M14x1,5	M16x1,5	1/2x14	1/2x14	-	-	M14x1,5
10	M16x1,5	M18x1,5	M16x1,5	M18x1,5	5/8x14	5/8x14	-	-	M16x1,5
12	M18x1,5	M20x1,5	M18x1,5	M20x1,5	3/4x14	3/4x14	-	-	M18x1,5
-	-	-	-	-	-	-	M20x1,5	-	-
14	-	M22x1,5	-	M22x1,5	-	-	-	-	M20x1,5
15	M22x1,5	-	M22x1,5	-	-	-	-	-	M22x1,5
16	-	M24x1,5	-	M24x1,5	1x11	1x 11	-	-	M24x1,5
-	-	-	-	-	-	-	M24x1,5	-	-
18	M26x1,5	-	M26x1,5	-	-	-	-	-	M27x1,5
20	-	M30x2	-	M30x2	1 1/4x11	1 1/4x11	-	-	M27x1,5
-	-	-	-	-	-	-	M30x 1,5	-	-
22	M30x2	-	M30x2	-	-	-	-	-	M30x1,5
25	-	M36x2	-	M36x2	1 1/2x11	1 1/2x11	-	-	M33x1,5
-	-	-	-	-	-	-	M36x1,5	-	-
28	M36x2	-	M36x2	-	-	-	-	-	M36x1,5
30	-	M42x2	-	M42x2	2x11	2x11	-	-	M39x1,5
33	-	-	-	-	-	-	M45x1,5	-	-

Application

	Description	End Code
Pipe	Male NPTF Pipe - Rigid - Straight	01
	Male NPTF Pipe - Swivel - Straight	13
	Male NPTF Pipe - Swivel - 90° Elbow	1L
	Male API Pipe - Rigid - Straight	AP
	Female NPTF Pipe - Rigid - Straight	02
	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 x 27	GJ
	Male NPTF Pipe - Rigid - 45° Elbow	31
SAE Str. Trd.	Male NPTF Pipe - Rigid - 90° Elbow or Side Outlet	21
	Male SAE Straight Thread with O-Ring - Rigid - Straight	05
	Male SAE Straight Thread with O-Ring - Swivel - Straight	0G
	Male SAE Straight Thread with O-Ring - Adjustable - 45° Elbow	25
	Male SAE Straight Thread with O-Ring - Swivel - 90° Elbow	0L
Flare	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
	Female JIC 37° - Swivel - 90° Elbow - Long Drop	41
	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
Inverted Flare	Female SAE 45° / Swivel - 90° Elbow - Long Drop	81
	Female JIC 37°/SAE 45° Dual Flare - Swivel - Straight	68
	Male Inverted SAE 45° - Swivel - Straight	28
	Male Inverted SAE 45° - Swivel - 45° Elbow	67
	Male Inverted SAE 45° - Swivel - 90° Elbow	69
	Male Inverted SAE 45° - Swivel - 90° Elbow - Long (In-Line)	71
	Female Inverted SAE 45° - Rigid - Straight	29

Standard Fitting Connections by Connection Type

	Description	End Code
Tube-O	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	5L
	Female Tube-O - Swivel - 90° Elbow - Long Pilot with Low Pressure Charge Port for R134a	5L-PT
	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
	Male Tube-O - Swivel - 45° Elbow - Long Pilot with Low Pressure Charge Port for R134a	5P-PT
	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 R134a	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
Compressor	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
	Female Compressor - Swivel - 90° Elbow	5W
	Female Compressor - Swivel - 90° Elbow - Block Type	5Z
	Female Compressor - Swivel - 135° Elbow	RV
Flange	Female Compressor - Swivel - 180° Elbow - Block Type	RZ
	Two Hole (2.25" X 0.44") Flange - Rigid - 90° Elbow	2H
	SAE Code 61 Flange Head - Straight	15
	SAE Code 61 Flange Head - Straight (5,000 psi)	4A
	SAE Code 61 Flange Head - 22½° Elbow -	16

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Application

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	Description	End Code
Flange	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
	SAE Code 62 Flange Head - 22½° Elbow	6B
	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 - 22½° Elbow	XB
	Caterpillar® Flange Head - 30° Elbow	XE
	Caterpillar® Flange Head - 45° Elbow	XF
	Caterpillar® Flange Head - 60° Elbow	XG
Seal-Lok	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 (with O-Ring)	JB
	Female Seal-Lok - Swivel - Straight - Long	JS
	Female Seal-Lok - Swivel - Straight - Short	JC
	Female Seal-Lok - Swivel - 22½° 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
Metric	Female Seal-Lok - Swivel - 90° Elbow - Long Drop	J1
	Female Metric Swivel - Straight (30° Flare)	MU
	Female Metric - Swivel - Straight (30° Flare)	XU
	Male Metric L - Rigid - Straight (24° Cone)	D0
	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 Connections by Connection Type

	Description	End Code
Metric	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
	Male Metric S - Rigid - Straight (24° Cone)	D2
	Male Standpipe Metric S - Rigid - Straight	3D
	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
BSP	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
	Female BSP Parallel Pipe - Swivel - Straight (Flat Seat)	B5
	Male BSP Taper Pipe - Rigid - 45° Elbow	BV
Fr. Gaz	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
	Male French Gaz Series - Rigid - Straight (24° Cone)	FG
	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
Specialty	88 Series Hose Clamp- SAE 100R4 Two-Bolt Clamp	88HC-H
	88 Series Hose Clamp (Worm Gear)	88HC
	Push-Lok Union	82
	Hose Splicer	88
	Male Standpipe - Rigid - Straight (Inch Size Tube O.D.)	34
	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
	Female Slip-fit Counterbore for Brazing - Straight (Inch Size Tube O.D.)	S9

Application

Standard Fitting Connections by Connection Type

Standard Fitting Configurations by Connection and End Code Listed in Numerical Order	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
	Two Hole (2.25" X 0.44") Flange - Rigid - 90° Elbow	2H
	SAE Code 61 Flange Head - 110° Elbow	2U
	Male JIC 37° - Rigid - Straight	03
	Male Standpipe Metric S - Rigid - Straight	3D
	Male SAE 45° - Rigid - Straight	04
	SAE Code 61 Flange Head - Straight (5,000 psi)	4A
	SAE Code 61 Flange Head-45° Elbow (5,000 psi)	4F
	SAE Code 61 Flange Head - 90° Elbow - (5,000 psi)	4N
	Female JIC 37° - Swivel - 150° Elbow	4V
	Male SAE Straight Thread with O-Ring - Rigid - Straight	05
	Male Tube-O - Rigid - Straight - Internal Long Pilot (3-Step)	5G
	Female Tube-O - Swivel - 45° Elbow - Short Pilot	5H
	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 - 90° Elbow - Long Pilot with Low Pressure Charge Port for R134a	5L-PT
	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
	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
	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 Listed in Numerical Order	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	6A
	SAE Code 62 Flange Head - 22½° Elbow	6B
	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
	Female NPSM Pipe - Swivel - Straight (60° Cone)	07
	Female Air Brake Jounce Line - Swivel - Straight	7B
	Female NPSM Pipe - Gasket Joint - Swivel - Straight	7G
	Female SAE 45° - Swivel - Straight	08
	Male Ferulok Flareless-Rigid-Straight (24° Cone with Nut and Ferrule)	11
	Female Ferulok Flareless - Swivel - Straight (24° Cone)	12
	Male NPTF Pipe - Swivel - Straight	13
	SAE Code 61 Flange Head - Straight	15
	SAE Code 61 Flange Head - 22½° Elbow -	16
	SAE Code 61 Flange Head-45° Elbow	17
	SAE Code 61 Flange Head - 67½° Elbow	18
	SAE Code 61 Flange Head - 90° Elbow	19
	Male NPTF Pipe - Rigid - 90° Elbow or Side Outlet	21
	Male SAE Straight Thread with O-Ring - Adjustable - 45° Elbow	25
	SAE Code 61 Flange Head-30° Elbow	26
	SAE Code 61 Flange Head-60° Elbow	27
	Male Inverted SAE 45° - Swivel - Straight	28
	Female Inverted SAE 45° - Rigid - Straight	29
	Male NPTF Pipe - Rigid - 45° Elbow	31
	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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Application

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Standard Fitting Configurations by Connection and End Code Listed in Numerical Order	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	59-PB
	Female Tube-O - Swivel - Straight - Long Pilot with Charge Port	59-PT
	Male SAE Compression Seat (without Nut or Sleeve)	61
	Male Inverted SAE 45° - Swivel - 45° Elbow	67
	Female JIC 37°/SAE 45° Dual Flare - Swivel - Straight	68
	Male Inverted SAE 45° - Swivel - 90° Elbow	69
	Male Inverted SAE 45° - Swivel - 90° Elbow - Long (In-Line)	71
	Female SAE 45 / Swivel - 45° Elbow	77
	Female SAE 45 / Swivel - 90° Elbow	79
	Female SAE 45 / Swivel - 90° Elbow - Long Drop	81
	Push-Lok Union	82
	Hose Splicer	88
	88 Series Heavy Duty Hose Clamp (Double Bolt Hose Clamp)	88DB
	88 Series Hose Clamp (Worm Gear)	88HC
	88 Series Hose Clamp-SAE 100R4 Two-Bolt Clamp	88HC-H
	SAE Code 61 Flange Head - 90° Elbow - Long Drop	89
	Male BSP Taper Pipe - Rigid - Straight	91
	Female BSP Parallel Pipe - Swivel - Straight (60° Cone)	92
	Male API Pipe - Rigid - Straight	AP
	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
	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 Metric - Swivel - Straight (Ball Nose)	C0
	Female Metric L - Swivel - Straight (Ball Nose)	C3
	Female Metric L - Swivel - 45° Elbow (Ball Nose)	C4
	Female Metric L - Swivel - 90° Elbow (Ball Nose)	C5
	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 Connections by End Code

Standard Fitting Configurations by Connection and End Code Listed in Numerical Order	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)	G1
	Female BSP Parallel Pipe - Swivel - 90° Elbow (60° Cone)	G2
	Female Grease Connection - SPL-PTF Taper Thread - Rigid Straight - ½ x 27	GJ
	Female BSP Parallel Pipe - Swivel - Straight (60° Cone)	GU
	Male Seal-Lok - Rigid - Straight (with O-Ring)	J0
	Female Seal-Lok - Swivel - 90° Elbow - Long Drop	J1
	Female Seal-Lok - Swivel - 90° Elbow - Medium Drop	J5
	Female Seal-Lok - Swivel - 221/2° Elbow	J6
	Female Seal-Lok - Swivel - 45° Elbow	J7
	Female Seal-Lok - Swivel - 90° Elbow - Short Drop	J9
	Male Seal-Lok - Bulkhead without Locknut - Straight	JB
	Female Seal-Lok - Swivel - Straight - Short	JC
	Female Seal-Lok - Swivel - Straight - Long	JS
	Female JIC 37° - Swivel - 45° Elbow - Medium Drop	L7
	Female JIC 37° - Swivel - 90° Elbow - Medium Drop	L9
	Male JIC 37° - Bulkhead without Locknut - Straight	LB
	Female Metric Swivel - Straight (30° Flare)	MU
	Female Compressor - Swivel - 135° Elbow	RV
	Female Compressor - Swivel - 180° Elbow - Block Type	RZ
	Female NPTF Pipe - Swivel - Straight	S2
	Male Tube-O - Swivel - Straight - Short Pilot	S5
	Male Tube-O - Swivel - Straight - Short Pilot with Charge Port for R12	S5-PR
	Female Slip-fit Counterbore for Brazing - Straight (Inch Size Tube O.D.)	S9
	Male Refrigerant Tube Mender - Straight (with Nut and Ferrule)	T1
	Male BSP Taper Pipe - Rigid - Straight (60° Cone)	UT
	Caterpillar® Flange Head - Straight	XA
	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

Application

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/cm²)
 pound force x 4.448 = Newtons
 pound · inch x .113 = Newton · meters (N · m)
 pound · foot x 1.356 = Newton · meters (N · m)
 millimeter x .0394 = inch (in)
 centimeter x .3937 = inch (in)
 meters x 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 · meter x 8.850 = pound · inches (lb · in)
 Newton · meter x .737 = pound feet (lb · 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

MILLIMETERS to FRACTIONS to DECIMALS

MM	INCHES		MM	INCHES		MM	INCHES		MM	INCHES	
	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

Media

Chemical Resistance Information

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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:

1. Locate medium to be carried using the Chemical Resistance Table on the following pages.
2. 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.
3. The Column headings on the Chemical Resistance Table, I, II, III, IV, V, refer to specific groups of hoses.
4. Locate hose part number under Column I, II, III, IV, V from the list below.
5. For fitting material availability refer to appropriate fitting section of catalog.
6. 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.

Numerals

1. 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.
4. 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.
5. 150°F (65°C) maximum.
6. Satisfactory at some concentrations and temperatures, unsatisfactory at others.
7. For Phosphate Ester and Skydrol fluids, be aware a certain amount of permeation will occur. The rate and amount will depend on the fluid type, any blends or additives to the fluid, and the system operating parameters.
8. Acceptable for flushing hose assemblies.
9. 221FR hose recommended.
10. 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 SS25UL & SS23CG
12. Use SS23CG

Hose Types

Column I

201, 601, 881

Column II

SS25UL, 421WC, 471TC, 471ST, 472LT, 722LT, 792LT, 801, 811, 811HT

Column III

JK, 187/TC/ST, 221FR, 302, 387/TC/ST, 422, 472TC, 482TC, 482ST, 487/TC/ST, 722/TC/ST, 787/TC/ST, 797/TC/ST, 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.

Media

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MEDIA	I	II	III	IV	V	Steel	Brass	SS
3M FC-75	A	A	A	A	A	A	A	A
Acetic Acid	X	X	X	A	6	X	X	A
Acetone	X	X	X	A	A	A	A	A
Acetylene	X	X	X	X	X	~	~	~
Aeroshell 31	F	A	A	F	~	A	A	A
AEROSHELL Turbine Oil 500	X	X	F	X	X	A	A	A
Air	A,1,10	A,1,10	A,1,10	A,1,10	A,1,10	A	A	A
Air (dry)	X	X	X	A,1,10	A,1,10	A	A	A
Alcohol (Methanol-Ethanol)	F	F	F	F	F	F	A	A
Americas Choice AW ISO 46	~	F	F	~	~	~	~	~
Ammonia (Anhydrous)	X	X	X	X	X	X	X	X
Ammonium Chloride	A	A	A	A	A	X	X	X
Ammonium Hydroxide	F	F	F	A	A	F	X	A
Ammonium Nitrate	A	A	A	F	A	F	X	A
Ammonium Phosphate	A	A	A	A	A	X	X	F
Ammonium Sulfate	A	A	A	A	A	F	X	F
Amoco 32 Rykon	X	A	A	F	X	A	A	A
Ampol PE 46	X	X	X	X	A,7	A	A	A
AMSOIL Synthetic ATF	F	A	A	A	X	A	A	A
Amyl Alcohol	X	X	X	F	F	X	A	A
Anderol 495,497,500,750	X	X	X	F	X	A	A	A
Aniline	X	X	X	F	A	A	X	A
Animal Fats	X	F	F	F	F	6	6	A
Aquacent Light, Heavy	X	A	A	X	X	A	A	A
Aries/Athena	F	F	F	~	X	A	A	A
Aromatic 100,150	X	F	F	~	X	A	A	A
Arrow 602P	A	A	A	A	X	A	A	A
Asphalt	X	F	F	F	X	F	F	A
ASTM #3 Oil	F	F	F	F	X	A	A	A
Astrol 1044AW	A	A	A	~	X	A	A	A
ATF-M	F	A	A	A	X	A	A	A
Automotive Brake Fluid	X	X	X	X	~	X	X	X
AW 32,46,68	F	A	A	A	X	A	A	A
BCF	F	F	F	F	~	A	A	A
Benz Petraulic 32,46,68,100,150,220,320,460	F	A	A	A	X	A	A	A
Benzene, Benzol	X	X	X	F	X	A	A	A
Benzgrind HP 15	~	A	A	A	X	A	A	A
Benzine	X	X	X	F	X	A	A	A
Bio Diesel B20	~	A	A	A	X	A	A	A
Bio-Soy, Agri Industries	X	A	A	X	X	A	A	A
Biodegradable Hydraulic Fluid 112B	X	A	A	X	~	A	A	A
Borax	F	F	F	F	A	F	A	A
Boric Acid	A	A	A	X	A	X	6	A
Brayco 882	X	A	A	A	X	A	A	A

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MEDIA	I	II	III	IV	V	Steel	Brass	SS
Brayco Micronic 745	~	A	A	F	X	A	A	A
Brayco Micronic 776RP	F	A	A	F	X	A	A	A
Brayco Micronic 889	X	F	F	~	X	A	A	A
Brine	F	F	F	A	A	X	F	F
Butane	See numerals 2 and 11					A	A	A
Butyl Alcohol, Butanol	F	F	F	F	F	F	F	A
Calcium Chloride	A	A	A	F	A	F	F	X
Calcium Hydroxide	A	A	A	A	A	A	A	A
Calcium Hypochlorite	X	X	X	A	A	X	F	X
Calibrating Fluid	A	A	A	A	X	A	A	A
Carbon Dioxide, gas	F	F	F	F	6	A	A	A
Carbon Dioxide, liquid	X	X	X	X	X	X	X	X
Carbon Disulfide	X	X	X	F	X	A	F	A
Carbon Monoxide (hot)	F	F	F	F	6	F	6	A
Carbon Tetrachloride	X	X	X	F	X	6	6	6
Carbonic Acid	F	F	F	X	F	X	X	F
Castor Oil	A	A	A	A	A	A	A	A
Castrol 5000	X	F	F	A	X	A	A	A
Cellosolve Acetate	X	X	X	X	A	X	X	A
Celluguard	A	A	A	~	A	A	A	A
Cellulube 90, 150, 220 300, 550, 1000	X	X	X	~	A	A	A	A
Chevron Clarity AW 32, 46, 68	A	A	A	A	X	A	A	A
Chevron FLO-COOL 180	F	F	F	~	X	A	A	A
Chevron FR-8, 10, 13, 20	X	X	X	X	A,7	A	A	A
Chevron Hydraulic Oils AW MV 15, 32, 46, 68, 100	A	A	A	A	X	A	A	A
Chevron HyJet IV (9)	X	X	X	X	A,7	A	A	A
Chevron Rykon MV	F	A	A	~	~	A	A	A
Cindol 3204 PBR	~	A	A	A	X	A	A	A
Citric Acid	F	A	A	X	A	X	X	6
Commonwealth EDM 242, 244	A	A	A	~	X	A	A	A
CompAir CN300	X	X	X	F	X	A	A	A
CompAir CS100, 200, 300, 400	X	X	X	F	X	A	A	A
Coolanol 15, 20, 25, 35, 45	A	A	A	A	A	A	A	A
Copper Chloride	F	A	A	X	A	X	X	X
Copper Sulfate	A	A	A	X	A	X	X	F
Cosmolubric HF-122, HF-130, HF-144	X	F	A	X	X	A	A	A
Cosmolubric HF-1530	X	F	A	X	X	A	A	A
Cottonseed Oil	F	A	A	F	X	A	A	A
CPI CP-4000	X	X	X	F	X	A	A	A
Crude Petroleum Oil	F	A	A	A	X	F	F	A
CSS 1001 Dairy Hydraulic Fluid	F	A	A	A	X	A	A	A
Daphne AW32	A	A	A	A	X	A	A	A
Dasco FR 201-A	A	A	A	~	X	A	A	A
Dasco FR150, 200, 310	F	A	A	~	A	A	A	A
Dasco FR300, FR2550	X	X	X	~	X	A	A	A

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MEDIA	I	II	III	IV	V	Steel	Brass	SS
Dasco FR355-3	X	F	A	X	X	A	A	A
DEF Fluid	X	X	X	X	X	X	X	A
Deicer Fluid 419R	A	A	A	~	~	A	A	A
Deionized Water	A	A	A	A	A	F	F	A
Dexron II ATF	F	A	A	A	X	A	A	A
Dexron III ATF (to 170°F)	A	A	A	A	X	A	A	A
Dexron III ATF (to 212°F)	X	F	F	A	X	A	A	A
Dexron III ATF (to 250°F)	X	X	X	F	X	A	A	A
Dexron III ATF (to 300°F)	X	X	X	X	X			
Dexron VI ATF (to 170°F)	A	A	A	A	X	A	A	A
Dexron VI ATF (to 212°F)	X	F	F	A	X	A	A	A
Dexron VI ATF (to 250°F)	X	X	X	X	X	A	A	A
Dexron VI ATF (to 300°F)	X	X	X	X	X			
DexronII/Mercon (at 212°F)	X	A	A	A	X	A	A	A
Diesel Fuel (Standard and Ultra Low Sulfur)	F,3	A,3	A,3	A,3	X	A	A	A
Diester Fluids	X	X	X	F	X	A	A	A
Dow Corning 2-1802 Sullair (24KT)	~	~	~	F	~	A	A	A
Dow Corning DC 200, 510, 550, 560, FC126	A	A	A	F	~	A	A	A
Dow HD50-4	F	F	F	~	~	~	~	A
Dow Sullube 32	~	~	~	F	~	A	A	A
Dowtherm A,E	X	X	X	F	X	A	A	A
Dowtherm G	X	X	X	X	X	A	A	A
Duro AW-16, 31	A	A	A	~	X	A	A	A
Duro FR-HD	A	A	A	~	X	A	A	A
EcoSafe FR-68	A	A	A	~	~	A	A	A
Envirologic 3032, 3046, 3068	A	A	A	~	~	~	~	~
Ethanol	F	F	F	F	F	F	A	A
Ethers	X	X	X	F	X	A	A	A
Ethyl Acetate	X	X	X	F	F	F	A	A
Ethyl Alcohol	F	F	F	F	F	F	A	A
Ethyl Cellulose	F	F	F	F	F	X	F	F
Ethyl Chloride	X	X	X	X	A	F	F	F
Ethylene Dichloride	X	X	X	F	X	X	A	X
Ethylene Glycol	F	A	A	A	A	A	F	A
Exxon 2380 Turbo Oil	X	F	F	X	X	A	A	A
Exxon 3110 FR	A	A	A	A	X	A	A	A
Exxon Esstic	A	A	A	A	A	A	A	A
Exxon Mobil Rarus SHC 1026	~	~	~	A	~	A	A	A
Exxon Nuto H 46, 68	A	A	A	A	X	A	A	A
Exxon Tellura Industrial Process Oils	A	A	A	A	X	A	A	A
Exxon Terresstic, EP	A	A	A	A	A	A	A	A
Exxon Turbo Oil 2380	X	F	F	F	X	A	A	A
Exxon Univolt 60, N61	F	A	A	A	X	A	A	A
FE 232 (Halon)	X	X	X	X	F	A	A	A

Media

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MEDIA	I	II	III	IV	V	Steel	Brass	SS
Fenso 150	~	A	A	~	X	A	A	A
Formaldehyde	X	X	X	A	A	X	F	A
Formic Acid	X	X	X	X	A	X	6	X
Freons see refrigerants	~	~	~	~	~	~	~	~
Fuel Oil	F	A	A	A	X	A	A	A
Fyre-Safe 120C, 126, 155, 1090E, 1150, 1220, 1300E	X	X	X	X	A,7	A	A	A
Fyre-Safe 200C, 225, 211	F	A	A	A	A	A	A	A
Fyre-Safe W/O	A	A	A	A	X	A	A	A
Fyrguard 150, 150-M, 200	A	A	A	A	A	A	A	A
Fyrquel 60, 90, 150, 220, 300, 550, 1000	X	X	X	X	A,7	A	A	A
Fyrquel EHC, GT, LT, VPF	X	X	X	X	A,7	A	A	A
Fyrtek MF, 215, 290, 295	X	X	X	X	X	A	A	A
Gardner-Denver GD5000, GD8000	X	X	X	F	X	A	A	A
Gasoline			See numeral 9			A	A	A
Glue	F	F	F	~	X	A	F	A
Glycerine, Glycerol	A	A	A	A	A	A	F	A
Grease	A	A	A	A	X	A	A	A
Green Plus ES	X	A	A	X	~	A	A	A
Greens Care 32, 46	F	A	A	F	~	A	A	A
Gulf-FR Fluid P37, P40, P43, P45, P47	X	X	X	F	A	A	A	A
H-515 (NATO)	A	A	A	~	X	A	A	A
Halon 1211, 1301	F	F	F	F	~	A	A	A
Helium Gas	X	X	X	X	X	A	A	A
Heptane	X	F	F	A	X	A	A	A
Hexane	X	F	F	A	X	A	A	A
HF-20, HF-28	~	A	A	A	A	A	A	A
Houghto-Safe 1055, 1110, 1115, 1120, 1130 (9)	X	X	X	X	A,7	A	A	A
Houghto-Safe 271 to 640	F	A	A	F	A	A	A	A
Houghto-Safe 419 Hydraulic Fluid	A	A	A	~	X	A	A	A
Houghto-Safe 419R Deicer Fluid	A	A	A	~	~	A	A	A
Houghto-Safe 5046, 5046W, 5047-F	A	A	A	A	X	A	A	A
HP 100C (Jack hammer oil)	F	A	A	A	X	A	A	A
HPWG 46B	F	A	A	F	~	A	A	A
Hul-E-Mul	A	A	A	~	X	A	A	A
Hychem C, EP1000, RDF	A	A	A	A	A	A	A	A
Hydra Safe E-190	A	A	A	F	X	A	A	A
Hydra-Cut 481, 496	A	A	A	~	X	A	A	A
Hydrafluid 760	A	A	A	~	X	A	A	A
Hydrochloric Acid	X	X	X	X	X	X	X	X
Hydrofluoric Acid	X	X	X	X	X	X	6	X
Hydrogen Gas	X	X	X	X	X	A	A	A
Hydrogen Peroxide	X	X	X	F	X	X	X	6
Hydrogen Sulfide	X	X	X	X	A	X	X	6
Hydrolube	A	A	A	F	A	A	A	A

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MEDIA	I	II	III	IV	V	Steel	Brass	SS
Hydrolubric 120-B, 141, 595	F	A	A	F	A	A	A	A
Hydrosafe Glycol 200	A	A	A	A	A	A	F	A
HyJet IV	X	X	X	X	A,7	A	A	A
Hyspin SP 10	~	A	A	A	~	A	A	A
Ideal Yellow 77	A	A	A	A	X	A	A	A
Imol S150 to S550	X	X	X	~	~	A	A	A
Ingersoll Rand SSR Coolant	X	X	X	F	X	A	A	A
Isocyanates	F	F	F	F	X	A	~	A
Isooctane	X	F	F	A	X	A	A	A
Isopar H	X	X	X	X	X	A	A	A
Isopropyl Alcohol	F	F	F	F	F	F	A	A
Jayflex DIDP	X	X	X	X	A	A	A	A
JP3 and JP4	X	A,3	A,3	~	X	A	A	A
JP5	X	A,3	A,3	F,3	X	A	A	A
JP9	X	X	X	X	X	A	~	A
Kaeser 150P, 175P, 325R, 687R	X	X	X	F	X	A	A	A
Kerosene	X	A	A	F	X	A	A	A
KSL-214, 219, 220, 222	X	X	X	F	X	A	A	A
Lacquer	X	X	X	F	X	X	A	A
Lacquer Solvents	X	X	X	F	X	X	A	A
Lactic Acids	X	X	X	X	X	X	X	A
Lindol HF	X	X	X	F	A	A	A	A
Linseed Oil	A	A	A	A	A	A	A	A
LP-Gas	See numeral 11					A	A	A
Magnesium Chloride	A	A	A	A	A	X	X	X
Magnesium Hydroxide	F	F	F	A	A	F	F	F
Magnesium Sulfate	A	A	A	A	A	A	F	A
Mercaptans	X	X	X	X	X	~	~	~
Methane	See numeral 12					A	A	A
Methanol	F	F	F	F	F	F	A	A
Methyl Alcohol	F	F	F	F	F	F	A	A
Methyl Chloride	X	X	X	F	X	A	A	A
Methyl Ethyl Ketone (MEK)	X	X	X	F	X	F	A	A
Methyl Isopropyl-Ketone	X	X	X	X	X	F	A	A
Metsafe FR303-M, FR303	X	X	X	X	X	A	A	A
Metsafe FR310, FR315, FR330, FR350	X	X	X	X	F, 7	A	A	A
Microzol-T46	X	A	A	~	X	A	A	A
MIL-B-46176A	X	X	X	X	X	X	X	X
MIL-H-46170	X	F	F	F	X	A	A	A
MIL-H-5606	F	A	A	A	X	A	A	A
MIL-H-6083	F	A	A	A	X	A	A	A
MIL-H-7083	F	A	A	A	X	A	A	A
MIL-H-83282	F	A	A	A	X	A	A	A
MIL-L-2104, 2104B	F	A	A	A	X	A	A	A

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MEDIA	I	II	III	IV	V	Steel	Brass	SS
MIL-L-23699	X	X	X	X	X	A	A	A
MIL-L-7808	F	A	A	~	X	A	A	A
Mine Guard FR	A	A	A	~	A	A	A	A
Mineral Oil	A	A	A	F	X	A	A	A
Mineral Spirits	8	8	8	8	X	A	A	A
Mobil Aero HFE	F	A	A	F	X	A	A	A
Mobil DTE 11M, 13M, 15M, 16M, 18M, 19M	F	A	A	A	X	A	A	A
Mobil DTE 22, 24, 25, 26	F	A	A	A	X	A	A	A
Mobil EAL 224H	X	A	A	X	~	A	A	A
Mobil EAL Artic 10, 15, 22, 32, 46, 68, 100	X	X	X	X	X	A	A	A
Mobil EAL Evirosyn 46	A	A	A	A	X	A	A	A
Mobil Glygoyle 11, 22, 30, 80	A	A	A	~	X	A	A	A
Mobil HFA	F	A	A	A	X	A	A	A
Mobil Jet 2	X	F	F	A	X	A	A	A
Mobil Nylvac 20, 30, 200, FR	F	A	A	F	A	A	A	A
Mobil Rarus 824, 826, 827	X	X	X	F	X	A	A	A
Mobil SHC 500 Series	A	A	A	A	X	A	A	A
Mobil SHC 600 Series	F	A	A	A	X	A	A	A
Mobil SHC 800 Series	F	A	A	A	X	A	A	A
Mobil SHL 624	~	A	A	A	X	A	A	A
Mobil Vactra Oil	A	A	A	F	X	A	A	A
Mobil XRL 1618B	X	X	X	X	A,7	A	A	A
Mobilfluid 423	F	A	A	A	X	A	A	A
Mobilgear SHC 150, 220, 320, 460, 680	F	F	F	F	X	A	A	A
Mobilrama 525	A	A	A	F	X	A	A	A
Molub-Alloy 890	X	X	X	F	X	A	A	A
Moly Lube "HF" 902	F	F	F	F	X	A	A	A
Monolec 6120 Hydraulic Oil	A	A	A	A	X	A	A	A
Morpholine (pure additive)	X	X	X	X	X	X	X	A
Naptha	X	F	F	A	X	A	A	A
Napthalene	X	X	X	F	X	A	A	A
Natural Gas			See numeral 12			A	A	A
Nitric Acid	X	X	X	X	X	X	X	F
Nitrobenzene	X	X	X	F	X	X	X	A
Nitrogen, gas	F,1	F,1	F,1	F,1	F,1	A	A	A
Nitrogen, liquid	X	X	X	X	X	X	X	X
NORPAR 12, 13, 15	8	8	8	8	X	A	A	A
Nuto H 46, 68	A	A	A	A	X	A	A	A
Nylvac 20, 30, 200, FR	F	A	A	F	A	A	A	A
Nylvac Light	X	X	X	~	A	A	A	A
Oceanic HW	F	A	A	F	X	A	A	A
Oxygen	X	X	X	X	X	X	A	A
Ozone	F	F	F	~	A	A	A	A
Pacer SLC 150, 300, 500, 700	X	X	X	F	X	A	A	A

Media

Chemical Resistance
Information (Page 7 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	I	II	III	IV	V	Steel	Brass	SS
Pennzbell AWW	F	A	A	F	X	A	A	A
Perchloroethylene	X	X	X	X	X	F	X	A
Petroleum Ether	X	F	F	F	X	A	A	A
Petroleum Oils	A	A	A	A	X	A	A	A
Phenol (Carbolic Acid)	X	X	X	A	X	X	F	A
Phosphate Ester Blends	X	X	X	X	X	A	A	A
Phosphate Esters	X	X	X	X	A,7	A	A	A
Phosphoric Acid	X	X	X	X	X	X	X	F
Plurasafe P 1000, 1200	F	A	A	A	F	A	A	A
Polyalkylene Glycol	A	A	A	~	X	A	A	A
Polyol Ester	X	F	A	X	X	A	A	A
Potassium Chloride	A	A	A	A	A	X	F	F
Potassium Hydroxide	X	X	X	F	A	6	X	A
Potassium Sulfate	A	A	A	A	A	A	A	A
Propane			See numeral 11			A	A	A
Propylene Glycol	F	A	A	A	A	F	F	F
Pydraul 10-E, 29-E, 50-E, 65-E, 90-E, 115-E	X	X	X	X	A,7	A	A	A
Pydraul 230-C, 312-C, 68-S	X	X	X	X	A,7	A	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	A	A
Pydraul A-200	X	X	X	F	X	A	A	A
Pyro Gard 43, 230, 630	X	X	X	X	X	A	A	A
Pyro Gard C, D, R, 40S, 40W	F	A	A	F	X	A	A	A
Pyro Guard 53, 55, 51, 42	X	X	X	X	A,7	A	A	A
Quakerol 641, 720	X	F	A	X	F	A	A	A
Quintolubric 700	A	A	A	A	A	A	F	A
Quintolubric 807-SN	F	A	A	~	X	A	A	A
Quintolubric 822, 833	X	F,5	A,5	X	X	A	A	A
Quintolubric 822-68EHC (71°C, 160°F maximum)	X	F,5	A,5	~	~	A	A	A
Quintolubric 888	X	F,5	A,5	X	X	A	A	A
Quintolubric 957, 958	F	A	A	F	A	A	A	A
Quintolubric N822-300	~	~	A	~	~	A	A	A
Rando	A	A	A	A	X	A	A	A
Rayco 782	X	F	A	X	X	X	X	X
Refrigerant 124			See numeral 4			A	A	A
Refrigerant Freon 113, 114	X	X	X	X	X	A	A	A
Refrigerant Freon 12			See numeral 4			A	A	A
Refrigerant Freon 22			See numeral 4			A	A	A
Refrigerant Freon 502			See numeral 4			A	A	A
Refrigerant HFC134A			See numeral 4			A	A	A
Reolube Turbofluid 46	X	X	X	X	A,7	A	A	A
Rotella	A	A	A	A	X	A	A	A
Royal Bio Guard 3032, 3046, 3068, 3100	X	~	A	X	X	A	A	A
Royco 2200, 2210, 2222, 2232, 2246, 2268	X	X	X	X	X	A	A	A
Royco 4032, 4068, 4100, 4150	X	X	X	F	X	A	A	A

Media

Chemical Resistance
Information (Page 8 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	I	II	III	IV	V	Steel	Brass	SS
Royco 756, 783	A	A	A	A	X	A	A	A
Royco 770	X	F	F	F	X	A	A	A
RTV Silicone Adhesive Sealants	X	X	X	X	X	A	A	A
Safco-Safe T10, T20	~	~	~	~	A	F	F	A
Safety-Kleen ISO 32, 46, 68 hydraulic oil	F	A	A	~	X	A	A	A
Safety-Kleen Solvent	F,8	F,8	F,8	F,8	X	A	A	A
Santoflex 13	F	F	F	~	F	A	A	A
Santosafe 300	X	X	X	~	X	A	A	A
Santosafe W/G 15 to 30	~	~	~	A	A	A	A	A
Schaeffer Oil #112 HTC @ 158°F max	A	A	A	~	X	A	A	A
Schaeffer Oil #112 HTC @ 158°F to 212°F	F	F	F	~	X	A	A	A
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	~	X	A	A	A
Sea Water	F	F	F	F	A	X	F	A
Sewage	F	F	F	A	F	X	F	A
Shell 140 Solvent	8	8	8	8	X	A	A	A
Shell Clavus HFC 68	X	X	X	X	X	A	A	A
Shell Comptella Oil	F	F	F	A	X	A	A	A
Shell Comptella Oil S 46, 68	F	F	F	A	X	A	A	A
Shell Comptella Oil SM	F	F	F	A	X	A	A	A
Shell Diala A, (R) Oil AX	F	A	A	F	X	A	A	A
Shell FRM	~	~	~	~	X	A	A	A
Shell IRUS 902, 905	A	A	A	~	A	A	A	A
Shell Pella-A	A	A	A	A	X	A	A	A
Shell Tellus	F	A	A	A	X	A	A	A
Shell Thermia Oil C	A	A	A	A	X	A	A	A
Shell Turbo R	X	F	F	A	X	A	A	A
SHF 220, 300, 450	X	X	A	X	X	A	A	A
Silicate Esters	A	F	F	A	X	A	A	A
Silicone Oils	A	A	A	~	~	A	A	A
Silicone Sealants	X	X	X	X	X	A	A	A
Skydrol 500B-4, LD-4	X	X	X	X	A,7	A	A	A
Soap Solutions	X	F	F	F	A	A	A	A
Soda Ash, Sodium Carbonate	A	A	A	A	A	A	F	A
Sodium Bisulfate	F	F	F	A	A	F	A	F
Sodium Chloride	F	F	F	A	A	X	F	A
Sodium Hydroxide	X	X	X	A	A	A	X	A
Sodium Hypochlorite	F	F	F	X	F	X	X	X
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 Sulfate	A	A	A	A	A	A	A	A
Soybean Oil	F	A	A	A	A	A	A	A
SSR Coolant	X	X	X	F	X	A	A	A
Steam	X	X	X	X	X	F	A	A

Media

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	I	II	III	IV	V	Steel	Brass	SS
Stoddard Solvent	8	8	8	8	X	A	A	A
Sulfur Chloride	X	X	X	F	X	X	X	X
Sulfur Dioxide	X	X	X	X	F	X	F	F
Sulfur Trioxide	X	X	X	F	F	X	X	X
Sulfuric Acid 0%-30% Room Temp	F,6	F,6	F,6	X	F,6	6	X	6
Summa-20, Rotor, Recip	X	X	X	F	X	A	A	A
Summit DSL-32,68,100,125	X	X	X	F	X	A	A	A
Sun Minesafe, Sun Safe	X	F	F	F	X	A	A	A
Sundex 8125	X	F	F	~	A	A	A	A
Suniso 3GS	A	A	A	A	X	A	A	A
Sun-Vis 722	X	F	F	~	X	A	A	A
Super Hydraulic Oil 100, 150, 220	A	A	A	A	X	A	A	A
SUVA MP 39, 52, 66	X	X	X	X	X	A	A	A
SYNCON Oil	X	X	X	X	X	A	A	A
Syndale 2820	X	F	F	~	~	A	A	A
Synesstic 32,68,100	X	X	X	X	X	A	A	A
Syn-Flo 70,90	X	X	X	F	X	A	A	A
SYN-O-AD 8478	X	X	X	X	A,7	A	A	A
Tannic Acid	F	A	A	F	A	X	F	X
Tar	F	F	F	F	X	X	F	A
Tellus (Shell)	F	A	A	A	X	A	A	A
Texaco 760 Hydraulfluid	~	~	~	~	X	A	A	A
Texaco 766, 763 (200 - 300)	~	~	~	~	A	F	F	A
Texaco A-Z Oil	A	A	A	F	X	A	A	A
Texaco Spindura Oil 22	F	F	F	F	X	A	A	A
Texaco Way Lubricant 68	A	A	A	A	X	A	A	A
Thanol-R-650-X	X	F	F	~	X	A	A	A
Thermanol 60	X	X	X	X	X	A	A	A
Toluene, Toluol	X	X	X	X	X	A	A	A
Transmission Oil	A	A	A	A	X	A	A	A
Tribol 1440	X	F	F	X	X	A	A	A
Trichloroethylene	X	X	X	F	X	X	A	A
Trim-Sol	F	A	A	F	X	A	A	A
Turbinol 50, 1122, 1223	X	X	X	X	A,7	A	A	A
Turpentine	X	X	X	F	X	A	A	A
Ucon Hydrolubes	F	A	A	F	A	A	A	A
UltraChem 215,230,501,751	X	X	X	F	X	A	A	A
Univis J26	A	A	A	A	X	A	A	A
Unleaded Gasoline	See numeral 9				~	A	A	A
Unocal 66/3 Mineral Spirits	8	8	8	8	X	A	A	A
Urea	F	F	F	A	F	F	~	F
Urethane Formulations	A	A	A	A	~	A	A	A
Van Straaten 902	A	A	A	A	X	A	A	A
Varnish	X	X	X	F	X	F	F	A
Varsol	8	F	F	8	X	A	A	A
Versilube F44, F55	~	A	A	A	~	A	A	A
Vinegar	X	X	X	F	A	F	X	A
Vital 29, 4300, 5230, 5310	X	X	X	X	X	A	A	A
Volt Esso 35	A	A	A	A	X	A	A	A
Water	F	A	A	A	A	F	A	A
Water / Glycols	A	A	A	A	A	A	F	A
Xylene, Xylol	X	X	X	X	X	A	A	A
Zerol 150	A	A	A	A	X	A	A	A
Zinc Chloride	A	A	A	X	A	X	X	F
Zinc Sulfate	A	A	A	X	A	X	A	A

Pressure

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 Description	Part Number Codes	Inch Size Fittings (psi)													
		-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, 0L48, 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	3,000			
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, 4B, 4F, 4G & 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			
Female Slip-fit for Counterbore Brazing-1S926	S9				2,250	2,000	1,750	1,500							
Female Slip-fit for Counterbore Brazing-1S943	S9		4,000		4,000	4,000	4,000	4,000	3,000	3,000					

For adapter pressure ratings, see Tube Fittings Division catalog 4300.

*NOTE: 45°, 37° and Seal-Lok Torque Tables are on page E-19

**NOTE: For pressure rating of 01, 06 and 39 end configurations in 73, 77, 78, and 79 series, see each description in Section 2.

Hose End Connection Description	Part Number Codes	Metric Fittings (psi)															
		-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	C0										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 Description	Part Number Codes	French Gaz Fittings (psi)				
		-13	-17	-21	-27	-33
French Gaz	F4, FG, GJ & GE	5,250	3,900	3,700	3,000	2,500

The Maximum working pressure of hoses are listed with each hose description in Section 1.

Pressure

Metric Pressure Conversions

PRESSURE CONVERSIONS									
Kilo-Pascals (kPa)	Mega-Pascals (MPa)	Bar (bar)	Kilograms per Square Centimeter	lbs per Square Inch (psi)	lbs per Square Inch (psi)	Kilo-Pascals (kPa)	Mega-Pascals (MPa)	Bar (bar)	Kilograms per Square Centimeter (Kgf/cm ²)
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
					40000	275790.0	275,80	2758,0	2813.00

Conversions

PSI and MPa or N/mm² 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.

$$1 \text{ psi} = .006895 \text{ MPa},$$

$$1000 \text{ psi} = 1 \text{ ksi}$$

MegaPascal (abbrev. MPa) - A basic unit of pressure or tension measurement in the International System of Weights and Measures.

$$1 \text{ MPa} = 145 \text{ psi},$$

$$1 \text{ MPa} = 1 \text{ N/mm}^2.$$

For oil field applications, units of measurement smaller than 1 psi usually have little meaning. Units of MPa may often appear with a decimal.

$$\text{Example: } 1000 \text{ psi} = 6.895 \text{ MPa}.$$

$$1 \text{ MegaPascal (MPa)} = 1 \text{ Newton per Square Millimeter (N/mm}^2\text{)} = 145 \text{ Pounds per Square Inch (psi)}.$$

Psi, Ksi, MPa, and N/mm² all express force measurement, either pressure (as fluid pressure) or load (as tension). All of these terms 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 pressure provided for information 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 Designation	Yield		Tensile	
	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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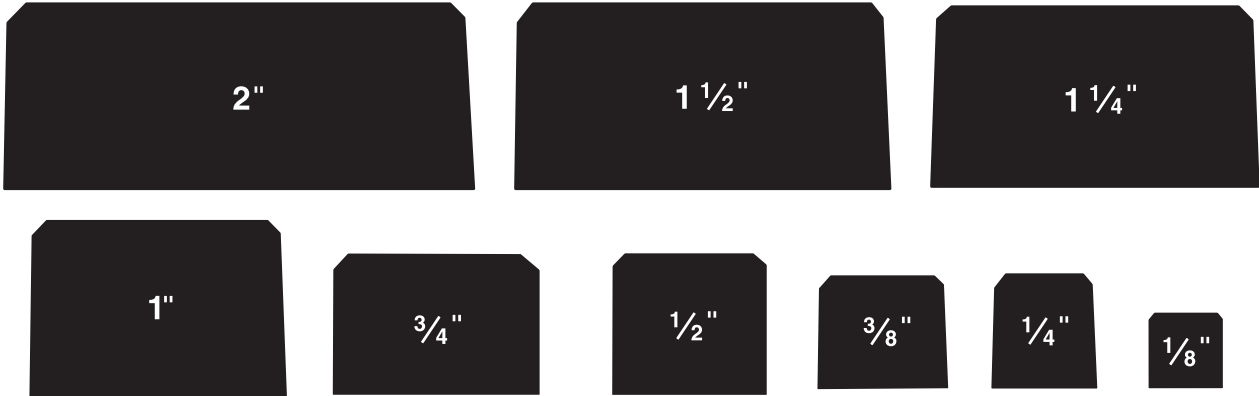
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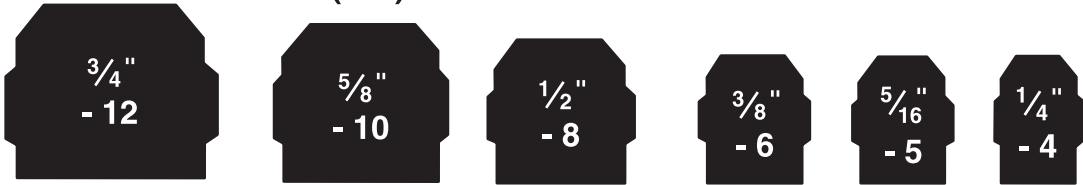
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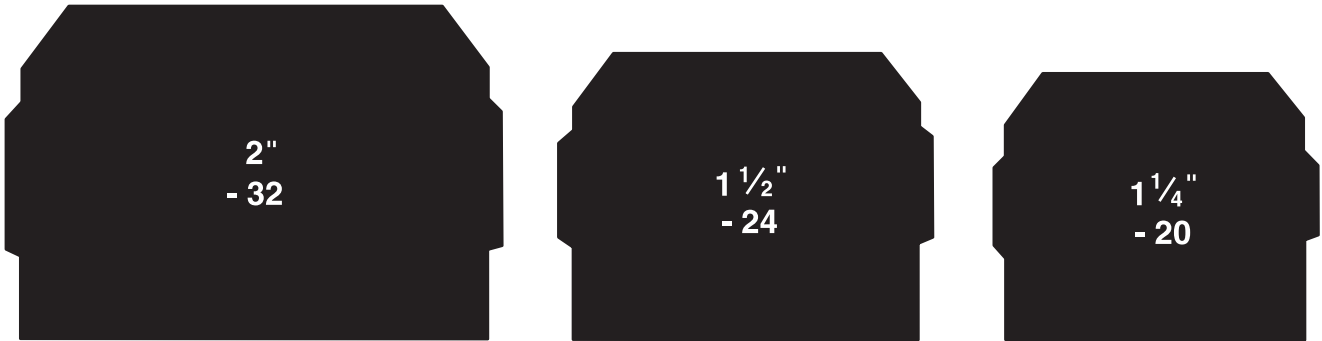
Male Pipe Thread Sizes



SAE (JIC) 37° Flare Nose Cone Sizes



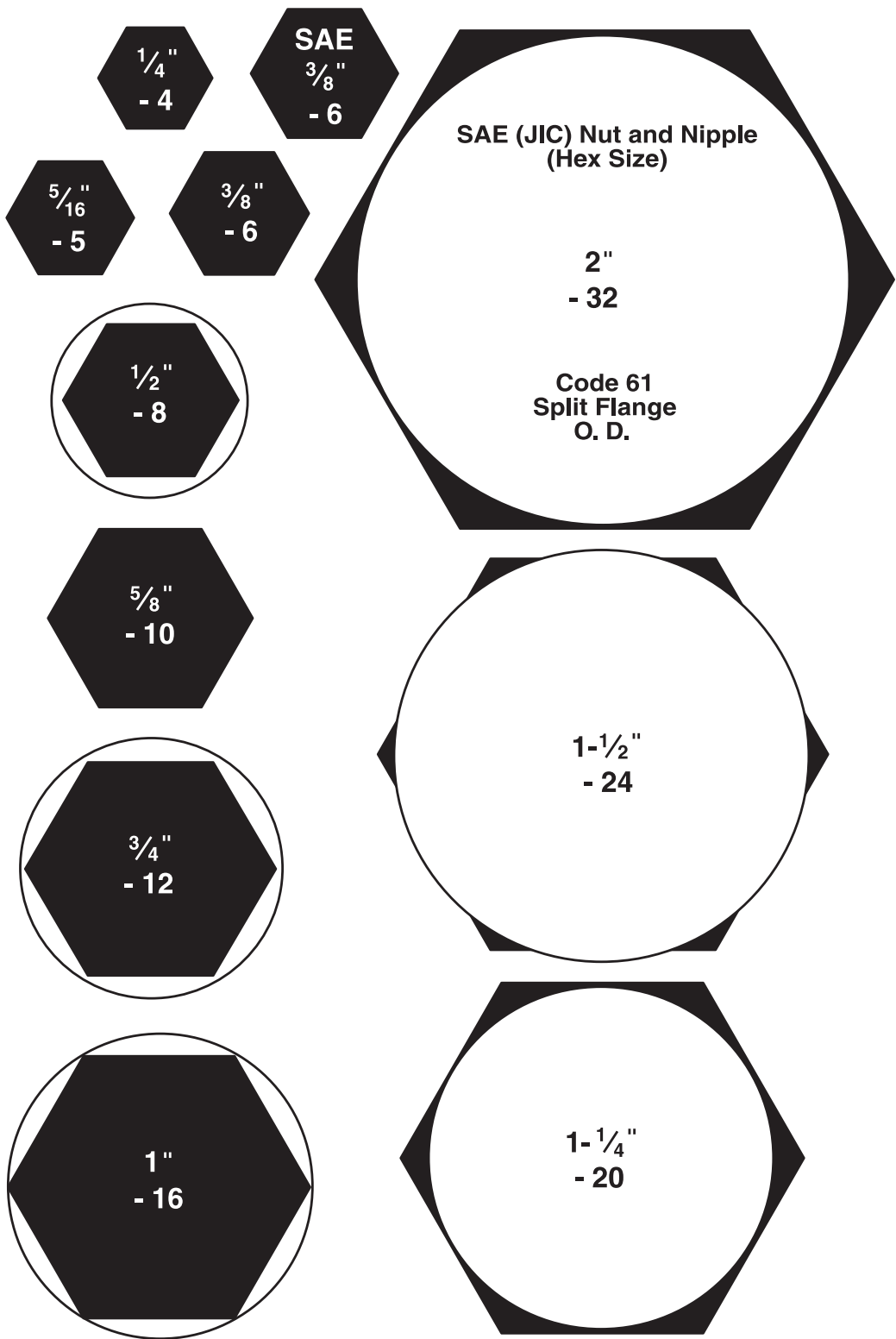
SAE (JIC) 37° Flare Nose Cone Sizes



37° and 45° Flare
Nose Angles

SAE 45° Flare
Nose Cone Sizes







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:

- 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

1.1 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.iso.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. Only hoses specifically designated for electrically conductive airless paint spraying should be used for airless paint spray applications. 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 special hoses for certain applications such as Compressed Natural Gas ("CNG") and Hydrogen (H₂), where static electricity buildup may occur. Parker CNG and H₂ Hose assemblies comply with globally recognized regulatory and test requirements for CNG and H₂. These hoses are specifically printed with the approved gas service as well as important safety, application, and maintenance information on the hose assembly lay line, tagging, 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 or H₂ dispensing or transfer. Do not use any other Hose for CNG or H₂ applications where static charge buildup may occur, even if electrically conductive. Use of other Hoses in CNG or H₂ 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 or H₂ permeation through the Hose wall. See section 2.6, Permeation, for more information. Parker CNG or H₂ Hose is intended for dispenser and vehicle use within the specified temperature range. Parker CNG or H₂ 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 or H₂ Hose Assemblies should be tested on a monthly basis for conductivity per the applicable regulatory specification. 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.

Parker Safety Guide, Parker Publication No. 4400-B.1 (continued)

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 ensure 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, hydrogen, diesel fuel, gasoline, natural gas, CNG 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 ensure 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 ensure 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 than 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 or ISO 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 ensure 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. 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.

2.19 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.

2.20 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.

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2.21 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.

2.22 Regulated Materials: Hose, Tubing and Fittings are made from a variety of materials and must be selected to comply and warn in accordance with applicable regulations. The system designer and end user must appropriately address end of life disposal.

3.0 HOSE AND FITTINGS ASSEMBLY AND INSTALLATION INSTRUCTIONS

3.1 Component Inspection: Prior to assembly, a careful examination of 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.

3.3 Related Accessories: Do not crimp or swage any Parker Hose or Fitting 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.

3.4 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.

3.5 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.

3.6 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.

3.7 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.

3.8 Twist Angle and Orientation: Hose Assembly installation must be such that relative motion of machine components does not produce twisting.

3.9 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 ensure such restraints do not introduce additional stress or wear points.

3.10 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.

3.11 External Damage: Proper installation is not complete without ensuring that tensile loads, side loads, kinking, flattening, potential abrasion, thread damage or damage to sealing surfaces are corrected or eliminated. See instruction 2.10.

3.12 System Checkout: All air entrapment must be eliminated, and the 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 potentially hazardous areas while testing and using.

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.

3.14 Ground Fault Equipment Protection Devices (GFEEDs): 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 GFEEDs 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

4.1 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.

4.2 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.

4.3 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 checked for correct style, size and material. Operation and maintenance of Related Accessories must be in accordance with the operation manual for the designated Accessory.

4.4 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 ensure such restraints do not introduce additional stress or wear points.

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.

4.6 External Damage: Proper installation is not complete without ensuring that tensile loads, side loads, flattening, potential abrasion, thread damage or damage to sealing surfaces are corrected or eliminated. See instruction 2.10.

4.7 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 potentially hazardous areas while testing and using.

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 PRODUCT MAINTENANCE AND REPLACEMENT INSTRUCTIONS

5.1 Even with proper selection and installation, a Product (refer to section 1.1) life may be significantly reduced without a continuing maintenance program. The severity of the application, risk potential from a possible Product failure, and experience with any Product 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 Product Inspection: Any of the following conditions require immediate shut down and replacement of the Hose/Tube Assembly:

- Fitting slippage on Hose/Tubing;
- Damaged, cracked, cut or abraded tube or cover (any reinforcement exposed);
- Hard, stiff, heat cracked, or charred Hose;
- Cracked, damaged, or badly corroded Fittings;

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- 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 potentially 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 and 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) and Hydrogen (H2): Parker CNG and H2 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 and including all applicable Standards and Codes for the application. The recommended procedure is to pressurize the Hose Assembly, check for leaks, visually inspect the Hose for damage, and perform an electrical resistance test.

Caution: Matches, candles, open flame or other sources of ignition shall not be used for Hose inspection leak detection. 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 For fittings with O-rings and Seals refer to the Parker O-Ring and Engineered Seals Division guidance on shelf life and age control.

6.1.5 Storage: Stored Hose, Fittings 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, Fittings 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.

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10. **Security Interest.** To secure payment of all sums due, Seller retains a security interest in all Products delivered to Buyer and, Buyer's acceptance of these Terms 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. **User Responsibility.** The Buyer through its own analysis and testing, is solely responsible for making the final selection of the Products and assuring that all performance, endurance, maintenance, safety and warning requirements of the application of the Products are met. The Buyer must analyze all aspects of the application and follow applicable industry standards, specifications, and other technical information provided with the Product. If Seller provides Product options based upon data or specifications provided by the Buyer, the Buyer is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the Products. In the event the Buyer is not the end-user, Buyer will ensure such end-user complies with this paragraph.

12. **Use of Products, Indemnity by Buyer.** Buyer shall comply with all instructions, guides and specifications provided by Seller with the Products. **Unauthorized Uses.** If Buyer uses or resells the Products for any uses prohibited in Seller's instructions, guides or specifications, or Buyer otherwise fails to comply with Seller's instructions, guides and specifications, Buyer acknowledges that any such use, resale, or non-compliance is at Buyer's sole risk. 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, intellectual property 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 provided by Seller; (b) any act or omission, negligent or otherwise, of Buyer; (c) Seller's use of patterns, tooling, equipment, plans, drawings, designs or specifications or other information or things furnished by Buyer; (d) damage to the Products from an external cause, repair or attempted repair by anyone other than Seller, failure to follow instructions, guides and specifications provided by Seller, use with goods not provided by Seller, or opening, modifying, deconstructing or tampering with the Products for any reason; or (e) Buyer's failure to comply with these Terms. Seller shall not indemnify Buyer under any circumstance except as otherwise provided in these Terms.

13. Cancellations and Changes. Buyer may not cancel or modify 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, at any time, may change Product features, specifications, designs and availability.

14. Limitation on Assignment. Buyer may not assign its rights or obligations without the prior written consent of Seller.

15. 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 ("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.

16. Waiver and Severability. Failure to enforce any provision of these Terms 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 these Terms by legislation or other rule of law shall not invalidate any other provision herein and, the remaining provisions will remain in full force and effect.

17. Termination. Seller may terminate any agreement governed by or arising from these Terms for any reason and at any time by giving Buyer thirty (30) days prior written notice. Seller may immediately terminate, in writing, if Buyer: (a) breaches any provision of these Terms (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.

18. Ownership of Software. Seller retains ownership of all Software supplied to Buyer hereunder. In no event shall Buyer obtain any greater right in and to the Software than a right in the nature of a license limited to the use thereof and subject to compliance with any other terms provided with the Software.

19. 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 ("Intellectual Property Rights") except as provided in this Section. 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 a third party claim that one or more of the Products sold hereunder infringes the Intellectual Property Rights of a third party in the country of delivery of the Products by the Seller to the Buyer. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of any such claim, and Seller having sole control over the defense of the claim including all negotiations for settlement or compromise. If one or more Products sold hereunder is subject to such a claim, Seller may, at its sole expense and option, procure for Buyer the right to continue using the Products, replace or modify the Products so as to render them non-infringing, or offer to accept return of the Products and refund the purchase price less a reasonable allowance for depreciation. Seller has no obligation or liability for any claim of infringement: (i) arising from information provided by Buyer; or (ii) directed to any Products provided hereunder for which the designs are specified in whole or part by Buyer; or (iii) resulting from the modification, combination or use in a system of any Products provided hereunder. The foregoing provisions of this Section constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for such claims of infringement of Intellectual Property Rights.

20. Governing Law. These Terms 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 the sale and delivery of the Products.

21. Entire Agreement. These Terms, along with the terms set forth in the main body of any Quote, forms the entire agreement between the Buyer and Seller and constitutes the final, complete and exclusive expression of the terms of sale. In the event of a conflict between any term set forth in the main body of a Quote and these Terms, the terms set forth in the main body of the Quote shall prevail. All prior or contemporaneous written or oral agreements or negotiations with respect to the subject matter shall have no effect. These Terms may not be modified unless in writing and signed by an authorized representative of Seller.

22. Compliance with Laws. Buyer agrees to comply with all applicable laws, regulations, and industry and professional standards, including those of the United States of America, and the country or countries in which Buyer may operate, including without limitation the U.S. Foreign Corrupt Practices Act ("FCPA"), the U.S. Anti-Kickback Act ("Anti-Kickback Act"), U.S. and E.U. export control and sanctions laws ("Export Laws"), the U.S. Food Drug and Cosmetic Act ("FDCA"), and the rules and regulations promulgated by the U.S. Food and Drug Administration ("FDA"), each as currently amended. Buyer agrees to indemnify, defend, and hold harmless Seller from the consequences of any violation of such laws, regulations and standards by Buyer, its employees or agents. Buyer acknowledges that it is familiar with all applicable provisions of the FCPA, the Anti-Kickback Act, Export Laws, the FDCA and the FDA and certifies that Buyer will adhere to the requirements thereof and not take any action that would make Seller violate such requirements. Buyer represents and agrees that Buyer will not make any payment or give anything of value, directly or indirectly, to any governmental official, foreign political party or official thereof, candidate for foreign political office, or commercial entity or person, for any improper purpose, including the purpose of influencing such person to purchase Products or otherwise benefit the business of Seller. Buyer further represents and agrees that it will not receive, use, service, transfer or ship any Product from Seller in a manner or for a purpose that violates Export Laws or would cause Seller to be in violation of Export Laws.

INDUSTRIAL TECHNICAL SECTION



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:

- Fittings thrown off at high speed.
- High velocity fluid discharge.
- Explosion or burning of the conveyed fluid.
- Electrocutation 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

1.1 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.iso.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. Only hoses specifically designated for electrically conductive airless paint spraying should be used for airless paint spray applications. 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 special hoses for certain applications such as Compressed Natural Gas ("CNG") and Hydrogen (H₂), where static electricity buildup may occur. Parker CNG and H₂ Hose assemblies comply with globally recognized regulatory and test requirements for CNG and H₂. These hoses are specifically printed with the approved gas service as well as important safety, application, and maintenance information on the hose assembly lay line, tagging, 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 or H₂ dispensing or transfer. Do not use any other Hose for CNG or H₂ applications where static charge buildup may occur, even if electrically conductive. Use of other Hoses in CNG or H₂ 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 or H₂ permeation through the Hose wall. See section 2.6, Permeation, for more information. Parker CNG or H₂ Hose is intended for dispenser and vehicle use within the specified temperature range. Parker CNG or H₂ 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 or H₂ Hose Assemblies should be tested on a monthly basis for conductivity per the applicable regulatory specification.

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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 ensure 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, hydrogen, diesel fuel, gasoline, natural gas, CNG 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 ensure 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 ensure 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 than 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 or ISO 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 ensure 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. 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.
- 2.19 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.

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2.20 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.

2.21 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.

2.22 Regulated Materials: Hose, Tubing and Fittings are made from a variety of materials and must be selected to comply and warn in accordance with applicable regulations. The system designer and end user must appropriately address end of life disposal.

3.0 HOSE AND FITTINGS ASSEMBLY AND INSTALLATION INSTRUCTIONS

3.1 Component Inspection: Prior to assembly, a careful examination of 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.

3.3 Related Accessories: Do not crimp or swage any Parker Hose or Fitting 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.

3.4 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.

3.5 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.

3.6 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.

3.7 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.

3.8 Twist Angle and Orientation: Hose Assembly installation must be such that relative motion of machine components does not produce twisting.

3.9 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 ensure such restraints do not introduce additional stress or wear points.

3.10 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.

3.11 External Damage: Proper installation is not complete without ensuring that tensile loads, side loads, kinking, flattening, potential abrasion, thread damage or damage to sealing surfaces are corrected or eliminated. See instruction 2.10.

3.12 System Checkout: All air entrapment must be eliminated, and the 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 potentially hazardous areas while testing and using.

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.

3.14 Ground Fault Equipment Protection Devices (GFEEDs): 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 GFEEDs 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

4.1 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.

4.2 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.

4.3 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 checked for correct style, size and material. Operation and maintenance of Related Accessories must be in accordance with the operation manual for the designated Accessory.

4.4 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 ensure such restraints do not introduce additional stress or wear points.

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.

4.6 External Damage: Proper installation is not complete without ensuring that tensile loads, side loads, flattening, potential abrasion, thread damage or damage to sealing surfaces are corrected or eliminated. See instruction 2.10.

4.7 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 potentially hazardous areas while testing and using.

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.

Parker Safety Guide, Parker Publication No. 4400-B.1 *(continued)***5.0 PRODUCT MAINTENANCE AND REPLACEMENT INSTRUCTIONS**

5.1 Even with proper selection and installation, a Products (refer to section 1.1) life may be significantly reduced without a continuing maintenance program. The severity of the application, risk potential from a possible Product failure, and experience with any Product 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 Product Inspection: Any of the following conditions require immediate shut down and replacement of the Hose/Tube Assembly:

- Fitting slippage on Hose/Tubing;
- Damaged, cracked, cut or abraded tube or 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 potentially 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 and 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) and Hydrogen (H₂): Parker CNG and H₂ 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 and including all applicable Standards and Codes for the application. The recommended procedure is to pressurize the Hose Assembly, check for leaks, visually inspect the Hose for damage, and perform an electrical resistance test.

Caution: Matches, candles, open flame or other sources of ignition shall not be used for Hose inspection leak detection. 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 For fittings with O-rings and Seals refer to the Parker O-Ring and Engineered Seals Division guidance on shelf life and age control.

6.1.5 Storage: Stored Hose, Fittings 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, Fittings 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.

Issue Date 24-SEP-2015	ECO Number: ECO-0482114	Revision Letter: B	Revision Date: 8-NOV-2024	Specification FC-Safety Guide
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Safety Overview

It is important to employ safe practices in the use of industrial hose due to the number of potentially dangerous applications encountered and products conveyed, and the number of people that may be involved or exposed. Strictly observe these simple practices to help avoid accidents:

- **Training:** Train all operators thoroughly.
- **Evaluation:** Evaluate the application to determine the hose assembly performance requirements.
- **Selection:** Select the most appropriate hose and couplings for the application; ensure that the couplings are compatible with the media and hose, and securely attached to the hose.
- **Service:** Regularly inspect and maintain both the hose and couplings while in service.

Industrial Hose Assemblies

Coupling Compatibility and Maximum Working Pressure Rating

NOTE: This advisory does not apply to hose, hose couplings, hose assemblies and related accessories manufactured by any other Parker Fluid Connector Division worldwide. Products from other Parker divisions must be assembled and applied in strict compliance with their respective catalog instructions, Safety Guide precautions, and other statutory, industry and regulatory requirements.

Safety issues may develop due to the misunderstanding of the relationship between the maximum working pressure ratings of industrial hose assembly components, as well as how to obtain a maximum working pressure rating for a fabricated industrial hose assembly.

It is important to recognize that the pressure rating of any hose assembly is that of the lowest rated component. The three components of an industrial hose assembly that are subject to a maximum working pressure rating are the hose, the coupling/coupling end connection, and the hose-to-coupling attachment device. Many OEM- and distributor-fabricated assemblies incorporate the three components manufactured by different companies: These components are not designed and tested together as a compatible system. Confusion may occur because the hose is often boldly marked with its maximum rated working pressure while the coupling and/or attachment device are generally unmarked or difficult to read. Therefore, the pressure

rating for the assembly may incorrectly be assumed to be the pressure rating of the hose.

Parker has tested, qualified and validated a group of specific hoses and specific couplings. When fabricated according to Parker-specified procedure and criteria, Parker certifies the assembly pressure rating to be equal to that of the hose. These hose, coupling and attachment specifications are available online in the CrimpSource® section of the Parker Hose Products Division website: www.parker.com/crimpsource.

 **WARNING!** When using components or assembly procedures not prescribed in the CrimpSource® specifications, the working pressure of the hose assembly may be less than the working pressure of the hose. Couplings and attachment devices that fall into this category are inserts/stems and bands or clamps; inserts and crimped brass ferrules; screw-together reattachable couplings; internally expanded couplings; and swaged couplings. Coupling end connections may also fall into this category. For these items, contact the hose or coupling manufacturer to determine the maximum working pressure rating of a specific hose or coupling and end connection. To determine an attachment device rating, test and validate the entire assembly.

 **WARNING!** When using components or assembly procedures not prescribed in the CrimpSource® specifications, it is the responsibility of the assembler to ensure the integrity and compatibility of the components and to inform the end user of the assembly's maximum working pressure rating by permanently marking the assembly with that rating.

Critical Applications

While many industrial hose applications are potentially dangerous, some are of particular concern because their danger may not be readily apparent. This is especially true for applications involving untrained or inexperienced operators.

Chemical Hose

A chemical hose system failure could cause the release of poisonous, corrosive, or flammable material resulting in property damage, serious bodily injury or death. All reputable manufacturers of chemical hose recommend specific hose constructions to handle various chemicals. Refer to the chemical guides in this catalog, or contact Parker for technical assistance before using or recommending a hose product. Refer to ARPM publication IP-11-7 "Manual for Maintenance, Testing, and Inspection of Chemical Hose."

Handling

- Use care to prevent mishandling. Crushing or kinking of the hose can cause severe damage to the reinforcement.
- Use proper hose suspension equipment when lifting or dragging a hose to ensure that the recommended curvature is not exceeded. Avoid sharp bends at the end fittings and at manifold connections.

Operation

- Use safety precautions such as wearing eye or face protection, rubber gloves, boots, and other types of protective clothing.
- Monitor pressures and temperatures to ensure that the hose is not exposed to conditions above specified limits.
- Do not allow chemicals to contact the exterior of the hose or allow hose to lie in a pool of chemicals since the hose cover may not have the same level of corrosion resistance as the tube. Corrosive materials that come into contact with the reinforcing material will cause reduced service life and premature hose failure.

Temperature

Do not use chemical hose at pressures or temperatures exceeding those as specified for the product. Many chemical resistance guides are based on temperatures of 70°F (21°C). Elevated temperatures can change the chemical resistance ratings. Many chemicals will become more aggressive as temperatures increase, reducing the ability of hose compounds to withstand them. Contact Parker for chemical compatibility data at elevated temperatures. If no data exists, end users are required to perform compatibility testing at the desired temperature.

Couplings

- At any operating temperature, couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- At operating temperatures of 125°F and above, install only permanently attached couplings.
- Do not use internally expanded couplings with chemical hoses incorporating thermoplastic tubes. Refer to chemical hoses that incorporate a MXLPE tube.

Gasoline Dispenser Hose

Millions of consumers operate gasoline pumps every day, increasing the concern for the safe use of dispensing equipment, including the hose. Since gasoline dispenser

hoses are subject to frequent abuse, hose selection must include consideration of the rigors of the application. For maximum service life, select only the highest quality, most thoroughly tested UL listed hose and establish a regular inspection and maintenance program. Refer to ARPM publication IP-11-8 "Manual for Maintenance, Testing, and Inspection of Petroleum Service Station Gasoline Dispensing Hose and Hose Assemblies."

Note: To avoid fuel contamination do not use gasoline dispenser or farm pump hose to fuel aircraft.

LP Gas (Propane) Hose

Many accidents involving LP Gas occur due to selection of an incorrect hose for the application. LP Gas hose must be specially designed and compounded to handle the media, with a perforated cover to prevent gas build-up amidst the layers of the hose.

 **WARNING!** Use ONLY LP Gas hose for LP Gas service. LP Gas possesses volatile characteristics that may produce fire or explosions causing property damage, serious bodily injury or death.

- Do not use LP Gas hose for anhydrous ammonia service. It may fail suddenly and quickly. Anhydrous ammonia hose and LPG hose are frequently used in proximity and may be accidentally switched.
- Use only Parker permanent crimp couplings when fabricating LP Gas hose assemblies. Refer to CrimpSource® at www.parker.com/crimpsource. Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- Do not use with couplings containing o-rings, which may dry out, crack and fail over time. Do not use with male swivel couplings or other couplings containing hidden o-rings.
- Do not use with screw-together reattachable couplings (except hose Series 7233).

LP Gas hose is designed to allow a limited amount of permeation of LP Gas through the wall of the hose when in service. The permeation is apparent when the hose is moist or in water, and bubbles may be perceived as leakage. However, a legitimate propane leak creates a frosting or icing on the surface of the hose or coupling. To verify the integrity of a hose in service, perform a hydrostatic test on the assembly; immediately remove from service any hose that fails the test. In the transfer of LP Gas, the allowable permeation rate is controlled by the Underwriters Laboratories Standard UL21 for LP Gas Hose.

Department of Transportation (DOT) and LP Gas Hose

LP Gas hose assemblies installed on on-road vehicles must meet DOT requirements. Parker factory assemblies 3/4" ID and larger undergo pressure testing as standard procedure (smaller sizes are tested per customer request), one of the fittings is etched with a unique DOT certification number, and a document incorporating the identical certification number accompanies each assembly. Metal DOT identification bands are also available/attached for an additional charge at customer request. Contact Parker.

NOTE: When using LP Gas hose in a mobile application such as delivery or service vehicles, the inspection procedures detailed in DOT regulation 49CFR 180.416 must be strictly followed.

Natural Gas and LP Gas Hose

The molecules of natural gas are small, enhancing their ability to permeate through standard rubber or PVC hose constructions. The permeation process is more rapid as the working pressure increases, and natural gas accumulates with potentially dangerous consequences. Series 7132, 7132XTC, 7170, 7231, 7232, and 7233 LP Gas hoses may be used for natural gas service to a 350 psi maximum, but **ONLY** under ALL of the following conditions:

- Use only in a well-ventilated environment: Outdoors, or indoors with significant continuous air movement.
- Do not use LP Gas hose to replace fixed/rigid pipe where that material is more appropriate due to reduced permeation, overall strength and durability. Use rigid pipe, non-permeable tubing or hose with barrier constructions to convey natural gas whenever possible.

Compressed Natural Gas (CNG) and LP Gas Hose

- Do not use LP gas hose for CNG engine applications in on-road vehicles, or for high pressure CNG dispenser/transfer applications (typically 2900 psi or greater). In other applications—where CNG is regulated to pressures within the rating of the hose—apply guidelines for natural gas applications stated above. Always review and adhere to all applicable government and industry regulations and standards prior to installing LP gas hose in a CNG or natural gas application.

Petroleum Transfer Hose

- Do not use for oil or fuel transfer service in or on open water. Hose damage or failure may result in spillage and environmental damage. Use hose specifically

designed for this application.

- Do not immerse in fuel. The hose cover compound may not be of sufficient grade to resist attack by the fuel. Use hose specifically designed for this application.

Steam Hose

Water changes to hot water and phases of steam when subjected to heat and pressure. The greater the pressure, the higher the temperature required to achieve and maintain a steam phase. If steam escapes, dangerous quantities of heat may be released very suddenly. Refer to ARPM publication IP-11-1 "Guide for Use, Testing and Inspection of Steam Hose."



WARNING! Use ONLY steam hose for steam service. Hot water, low pressure steam and high pressure steam may escape explosively and will scald skin, eyes and lungs, which may lead to severe bodily injury or death.

- Many steam systems incorporate detergents or rust inhibitors which may attack steam hose. Prior to using a steam hose with detergents or rust inhibitors, refer to the chemical guides in this catalog, or contact Parker.
- Parker recommends using permanent crimp couplings when fabricating steam assemblies. Refer to CrimpSource® at www.parker.com/crimpsource. Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.
- Drain steam hose after each use to reduce the possibility of hose popcorning while in service.

The chart at the right represents the three forms of water when subjected to various combinations of heat and pressure. The red line represents the point at which hot water becomes saturated steam. The area below the red line is hot water; the area above the red line is superheated steam.

Welding Hose

Many accidents involving welding hose occur due to selection of an incorrect hose for the application. Welding hose must be specially designed and compounded to handle the media, with rubber compounds able to handle fuel gas and oxygen. Due to the extreme volatility of gases, the varying compatibility of gases with the various grades of hose, and the rough environment of many welding applications, it is crucial to select the correct welding hose. Refer to ARPM publications IP-7, "Specifications for Rubber Welding Hose" and IP-11-5, "Guide for Use, Maintenance and Inspection of Welding

Critical Applications (Continued)

Hose.” Also refer to the Compressed Gas Association publications E-1, “Standard for Rubber Welding Hose and Hose Connections for Gas Welding, Cutting and Allied Processes” and Safety Bulletin SB-11 “Use of Rubber Welding Hose.”

⚠ WARNING! Welding gases possess volatile characteristics that may produce fire or explosions causing property damage, serious bodily injury or death. Use Grades R and RM ONLY with acetylene fuel gas; do not use with any other fuel gases.

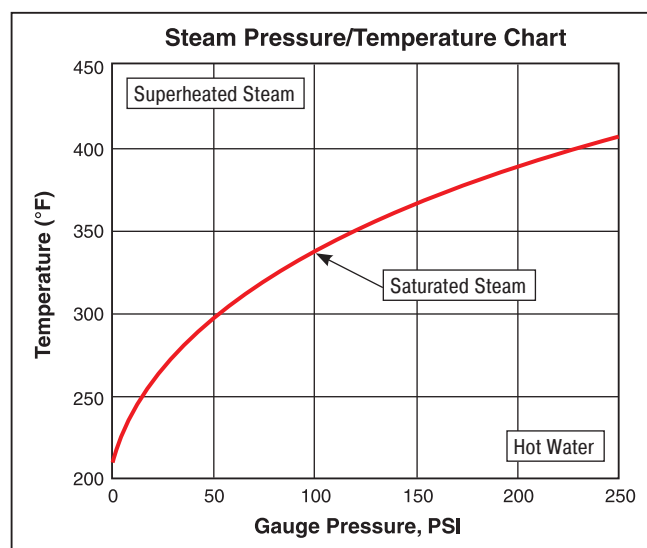
- Replace all assemblies that show signs of abrading, abuse, age, damage or fatigue. Do not attempt to re-couple, repair or splice hose assemblies.
- Fabricate hose assemblies using only crimped-on ferrules at least one inch long to ensure coverage and support of the coupling stem inside the hose.
- Couplings attached with bands or clamps may reduce the working pressure of the hose assembly to less than the maximum rated working pressure of the hose. Refer to the NAHAD Industrial Hose Assembly Guidelines.

PVC / Thermoplastic Hose and Tubing

Thermoplastic polymer compounds are designed to resist deterioration when exposed to a wide range of commercial chemicals and environmental conditions. The resistance to attack is based on many factors, including temperature, pressure, chemical concentration, exposure to ultraviolet light, velocity of the media and duration of exposure/service (intermittent or constant). The user is solely responsible for making the final selection of the hose and tubing, and meeting all endurance, maintenance, performance, safety and warning requirements of the application.

NOTE: The rated maximum working pressures listed in this catalog for thermoplastic hose and tubing are based upon a pressure test temperature of 68°F (20°C) unless stated otherwise.

⚠ WARNING! As temperature increases or decreases, burst pressure, safe working pressure, coupling retention properties, and other safety characteristics of the hose or tubing can significantly decrease. Failure to consider how temperature and other conditions affect hose and tubing performance may cause property damage, serious bodily injury or death.



Guidelines for Cleaning and Sanitizing Food Hoses

The cleaning and sanitizing suggestions set forth below are guidelines only.

It is necessary that all applicable government regulations pertaining to the cleaning and sanitizing of the food hoses and food hose assemblies be followed and adhered to and which governmental regulations supersede the guideline contained herein.

The life of the hose is affected by the cleaning and sanitizing process due to the mechanical and chemical stresses which occur during the cleaning and sanitizing procedure. The service period of rubber hoses is dependent on their formulation and the environment of use which in turn is influenced by the product, process temperature, cleaning, bactericidal compounds, and time of exposure. Users should frequently monitor the physical condition of the rubber hose material product contact surfaces. Such observations are necessary to determinate the actual sanitary service period of rubber hoses. It is further recommended that the rubber hose be replaced before surface imperfections or sloughing occurs. Routine replacement schedules should be established and followed.

Food hose users should be guided by their own, if applicable, or specific industry cleaning and sanitizing procedures and standards. For example, the wine industry may have different standards than the dairy industry and any standards applicable to a specific industry supersede the guideline contained herein.

The cleaning and sanitizing of food hoses and hose assemblies is intended to remove any food particles or residues including detergents and/or disinfectants that may be the source of harmful bacteria microorganisms or other sources of contamination. The effectiveness of the guidelines contained herein are dependent upon the practices and care taken by the users.

CLEANING AND SANITIZING STEPS

1. FREQUENCY

The frequency of the cleaning and sanitizing cycle is to be conducted based on the users internal and/or industry guidelines. Some food and beverage media may require more frequent cleaning and sterilization than others. Be sure to follow all applicable industry requirements. It is advisable that all Parker hoses are to be cleaned and or sanitized prior to initial use.

2. WASHING

First step in the process is to rinse the hoses with hot potable water. It is advisable to flush the hose as soon as possible after transference of the media and to drain the hoses completely for the next step. A potable water flush should be followed by utilizing the appropriate detergent for the media that was conveyed in the hose. Proper disinfection media should be utilized where necessary. The cleaners and sanitizers must be chemically compatible with the hose liner along with the appropriate temperature limits to maintain the integrity of the hose.

3. CLEANING/DISINFECTING

Select the appropriate detergent and disinfectant for the media. For an application such as with in-place cleaning, chemical compatibility of the hose should be verified. Please adhere to the detergent and disinfectant guidelines and recommendations per the manufacturer's instructions of the cleaning product along with applicable regulations and industry requirements. Following the cleaning product manufacture guideline as to concentrations, soak time, and temperature will aid in proper use of the cleaning chemical. Also, be mindful of any waste and disposal regulations and guidelines required for these procedures.

After cleaning the hose with detergent it is advisable to rinse the hose with potable water to prepare the hose for sterilization by either with steam or with chemical solution.

Steam can be categorized as a disinfectant, where its effectiveness in eliminating bacteria and other contaminants varies according to the material/products being conveyed and the procedure employed by the users.

Chemical disinfectant such as caustic soda, nitric acid, per-acetic, phosphoric acid, chloroacetic acid or other acids suitable for disinfecting food hoses must be carefully selected to ensure optimal effectiveness while also assuring maximum safety and health. When selecting a disinfectant, it is necessary to pay strict attention to concentration levels, temperature, cycle time, etc. The type of product/material being conveyed is to be taken into consideration when selecting a specific disinfectant.

After completion of the disinfecting treatment with a chemical solution, the hose must be flushed with potable water for a sufficient amount of time to eliminate any chemical residue from the disinfecting treatment. Refer to all chemical manufacturer's instructions.

4. PROCESS CONTROLS

The result of the cleaning and sanitizing process must be regularly checked to ensure that all contamination and residuals have been eliminated. It is advisable that any non-conformance to cleaning/sanitization procedures or industry guidelines is addressed in a corrective action.

Guidelines Chart for Cleaning and Sanitizing Food Hoses

	Medium	Hose Tube	Concentration	Temperature
RINSING	Hot Water	NR /NBR / SILICONE EPDM / BIIR / UPE / PTFE	–	Max 90° C
PHYSICAL DISINFECTANT	Steam	NR / NBR	–	Max 110° C Max 10 min
		EPDM / BIIR / UPE / PTFE	–	Max 130° C Max 30 min
		SILICONE	–	Max 135° C Max 18 min
CHEMICAL DISINFECTANT	Acid (i.e. Nitric Acid)	NR /NBR / SILICONE	0.1%	Max 65° C
			2%	Max 25° C
		EPDM / BIIR / UPE / PTFE	0.1%	Max 85° C
			3%	Max 25° C
	Alkaline Solution (i.e. Caustic Soda)	NR /NBR / SILICONE	2%	Max 65° C
			4%	Max 25° C
		EPDM / BIIR / UPE / PTFE	2%	Max 85° C
			5%	Max 25° C
	Disinfectant (i.e. Peracetic Acid)	NR /NBR / SILICONE	1%	Max 25° C
		EPDM / BIIR / UPE / PTFE		Max 40° C

The life of the hose is affected by the cleaning and sanitizing process due to the mechanical and chemical stresses which occur during the cleaning and sanitizing procedure. The service life of rubber hoses is directly dependent on frequency and time of exposure to PHYSICAL and CHEMICAL disinfectants. Users should frequently monitor the physical condition of the rubber hose material product contact surfaces. Such observations are necessary to determinate the actual sanitary service period of rubber hoses.

The present tabulation is based on tests and on generally available sources, and believed to be reliable. However, must be used as a guidance only since it does not take in consideration all variable that may be encountered in actual use such as and not limited to duration of exposure and stability of the fluid and possible contamination.

Industry Publications

Listed below are the titles of publications issued by the Association for Rubber Products Manufacturers (ARPM). Information concerning the latest edition, prices, ordering procedure, etc., may be obtained by contacting them as shown below:



Association for Rubber Products Manufacturers (ARPM)

7231 Shadeland Station Way, Suite 285
Indianapolis, IN 46256

Phone: 317-863-4072

Fax: 317-913-2445

Web: www.arpminc.com

Publication Number	Title
IP-2	Hose Handbook
IP-7	Specifications for Rubber Welding Hose
IP-8	Specifications for Rubber Hose for Oil Suction and Discharge
IP-14	Specifications for Anhydrous Ammonia Hose
IP-11	Complete Set of Hose Technical Bulletins
IP-11-1	Technical Bulletin – Guide for Use, Testing and Inspection of Steam Hose
IP-11-2	Technical Bulletin – Manual for Use, Maintenance, Testing and Inspection of Anhydrous Ammonia Hose
IP-11-4	Technical Bulletin – Manual for Maintenance, Testing and Inspection of Oil Suction and Discharge Hose
IP-11-5	Technical Bulletin – Guide for Use, Maintenance and Inspection of Welding Hose
IP-11-7	Technical Bulletin – Manual for Maintenance, Testing and Inspection of Chemical Hose
IP-11-8	Technical Bulletin – Manual for Maintenance, Testing and Inspection of Petroleum Service Station Gasoline Dispensing Hose and Hose Assemblies

PARKER-HANNIFIN CORPORATION

OFFER OF SALE

1. Definitions. As used herein, the following terms have the meanings indicated.

Buyer:	means any customer receiving a Quote for Products.
Buyer's Property:	means any tools, patterns, plans, drawings, designs, specifications materials, equipment, or information furnished by Buyer, or which are or become Buyer's property.
Confidential Information:	means any technical, commercial, or other proprietary information of Seller, including, without limitation, pricing, technical drawings or prints and/or part lists, which has been or will be disclosed, delivered, or made available, whether directly or indirectly, to Buyer.
Goods:	means any tangible part, system or component to be supplied by Seller.
Intellectual Property Rights:	means any patents, trademarks, copyrights, trade dress, trade secrets or similar rights.
Products:	means the Goods, Services and/or Software as described in a Quote.
Quote:	means the offer or proposal made by Seller to Buyer for the supply of Products.
Seller:	means Parker-Hannifin Corporation, including all divisions, subsidiaries and businesses selling Products under these Terms.
Seller's IP:	means patents, trademarks, copyrights, or other intellectual property rights relating to the Products, including without limitation, names, designs, images, drawings, models, software, templates, information, any improvements or creations or other intellectual property developed prior to or during the relationship contemplated herein.
Services:	means any services to be provided by Seller.
Software:	means any software related to the Goods, whether embedded or separately downloaded.
Special Tooling:	means equipment acquired by Seller or otherwise owned by Seller necessary to manufacture Goods, including but not limited to tools, jigs, and fixtures.
Terms:	means the terms and conditions of this Offer of Sale.

2. Terms. All sales of Products by Seller will be governed by, and are expressly conditioned upon Buyer's assent to, these Terms. These Terms are incorporated into any Quote provided by Seller to Buyer. Buyer's order for any Products whether communicated to Seller verbally, in writing, by electronic data interface or other electronic commerce, shall constitute acceptance of these Terms. Seller objects to any contrary or additional terms or conditions of Buyer. Reference in Seller's order acknowledgement to Buyer's purchase order or purchase order number shall in no way constitute an acceptance of any of Buyer's terms or conditions of purchase. Any Quote made by Seller to Buyer shall be considered a firm and definite offer and shall not be deemed to be otherwise despite any language on the face of the Quote. Seller reserves all rights to accept or reject any purported acceptance by Buyer to Seller's Quote if such purported acceptance attempts to vary the terms of the Quote. If Seller ships Products after Buyer issues an acceptance to the Quote, any additional or different terms proposed by Buyer will not become part of the parties' business relationship unless agreed to in a writing that is signed by an authorized representative of Seller, excluding email correspondence. If the transaction proceeds without such agreement on the part of Seller, the business relationship will be governed solely by these Terms and the specific terms in Seller's Quote.

3. Price; Payment. The Products set forth in the Quote are offered for sale at the prices indicated in the Quote. Unless otherwise specifically stated in the Quote, prices are valid for thirty (30) days and do not include any sales, use, or other taxes or duties. Seller reserves the right to modify prices for any reason and at any time by giving ten (10) days prior written notice. Unless otherwise specified by Seller, all prices are F.C.A. Seller's facility (INCOTERMS 2020). All sales are contingent upon credit approval and full payment for all purchases is due thirty (30) days from the date of invoice (or such date as may be specified in the Quote). Under any circumstances, Buyer may not withhold or suspend payment of any amounts due and payable as a deduction, set-off or recoupment of any amount, claim or dispute with Seller. 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. Seller reserves the right to require advance payment or provision of securities for first and subsequent deliveries if there is any doubt, in Seller's sole determination, regarding the Buyer's creditworthiness or for other business reasons. If the requested advance payment or securities are not provided to Seller's satisfaction, Seller reserves the right to suspend performance or reject the purchase order, in whole or in part, without prejudice to Seller's other rights or remedies, including the right to full compensation. Seller may revoke or shorten any payment periods previously granted in Seller's sole determination. The rights and remedies herein reserved to Seller are cumulative and in addition to any other or further rights and remedies available at law or in equity. No waiver by Seller of any breach by Buyer of any provision of these terms will constitute a waiver by Seller of any other breach of such provision.

4. Shipment; Delivery; Title and Risk of Loss. All delivery dates are approximate, and Seller is not responsible for damages or additional costs resulting from any delay. All deliveries are subject to our ability to procure materials from our suppliers. 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 carrier at Seller's facility. Unless otherwise agreed prior to shipment and for domestic delivery locations only, Seller will select and arrange, at Buyer's sole expense, the carrier and means of delivery. When Seller selects and arranges the carrier and means of delivery, freight and insurance costs for shipment to the designated delivery location will be prepaid by Seller and added as a separate line item to the invoice. Buyer shall be responsible for any additional shipping charges incurred by Seller due

to Buyer's acts or omissions. Buyer shall not return or repackage any Products without the prior written authorization from Seller, and any return shall be at the sole cost and expense of Buyer.

5. Warranty. The warranty for the Products is as follows:

(i) Goods are warranted against defects in material or workmanship for a period of twelve (12) months from the date of delivery or 2,000 hours of use, whichever occurs first; (ii) Services shall be performed in accordance with generally accepted practices and using the degree of care and skill that is ordinarily exercised and customary in the field to which the Services pertain and are warranted for a period of six (6) months from the date of completion of the Services; and (iii) Software is only warranted to perform in accordance with applicable specifications provided by Seller to Buyer for ninety (90) days from the date of delivery or, when downloaded by a Buyer or end-user, from the date of the initial download. All prices are based upon the exclusive limited warranty stated above, and upon the following disclaimer: EXEMPTION CLAUSE; DISCLAIMER OF WARRANTY, CONDITIONS, REPRESENTATIONS: THIS WARRANTY IS THE SOLE AND ENTIRE WARRANTY, CONDITION, AND REPRESENTATION, PERTAINING TO PRODUCTS. SELLER DISCLAIMS ALL OTHER WARRANTIES, CONDITIONS, AND REPRESENTATIONS, WHETHER STATUTORY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THOSE RELATING TO DESIGN, NONINFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE. SELLER DOES NOT WARRANT THAT THE SOFTWARE IS ERROR-FREE OR FAULT-TOLERANT, OR THAT BUYER'S USE THEREOF WILL BE SECURE OR UNINTERRUPTED, UNLESS OTHERWISE AUTHORIZED IN WRITING BY SELLER, THE SOFTWARE SHALL NOT BE USED IN CONNECTION WITH HAZARDOUS OR HIGH-RISK ACTIVITIES OR ENVIRONMENTS. EXCEPT AS EXPRESSLY STATED HEREIN, ALL PRODUCTS ARE PROVIDED "AS IS".

6. Claims; Commencement of Actions. Buyer shall promptly inspect all Products upon receipt. No claims for shortages will be allowed unless reported to Seller within ten (10) days of delivery. Buyer shall notify Seller of any alleged breach of warranty within thirty (30) days after the date the non-conformance 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.

7. LIMITATION OF LIABILITY. IN THE EVENT OF A BREACH OF WARRANTY, SELLER WILL, AT ITS OPTION, REPAIR OR REPLACE THE NON-CONFORMING PRODUCTS, RE-PERFORM THE SERVICES, OR REFUND THE PURCHASE PRICE PAID WITHIN A REASONABLE PERIOD OF TIME. IN NO EVENT IS SELLER LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING ANY LOSS OF REVENUE OR PROFITS, 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 PAID FOR THE PRODUCTS.

8. Confidential Information. Buyer acknowledges and agrees that Confidential Information has been and will be received in confidence and will remain the property of Seller. Buyer further agrees that it will not use Seller's Confidential Information for any purpose other than for the benefit of Seller and shall return all such Confidential Information to Seller within thirty (30) days upon request.

9. Loss to Buyer's Property. Buyer's Property will be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer ordering the Products manufactured using Buyer's Property. Also, Seller shall not be responsible for any loss or damage to Buyer's Property while it is in Seller's possession or control.

10. Special Tooling. Seller may impose a tooling charge for any Special Tooling. Special Tooling shall be and remain Seller's property. In no event will Buyer acquire any interest in the Special Tooling, even if such Special Tooling has been specially converted or adapted for manufacture of Goods for Buyer 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 owned by Seller in its sole determination at any time.

11. Security Interest. To secure payment of all sums due from Buyer, Seller retains a security interest in all Products delivered to Buyer and, Buyer's acceptance of these Terms 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 Seller's security interest.

12. User Responsibility. Buyer, through its own analysis and testing, is solely responsible for making the final selection of the Products and assuring that all performance, endurance, maintenance, safety and warning requirements of the application of the Products are met. Buyer must analyze all aspects of the application and follow applicable industry standards, specifications, and any technical information provided with the Quote or the Products, such as Seller's instructions, guides and specifications. If Seller provides options of or for Products based upon data or specifications provided by Buyer, Buyer is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the Products. In the event Buyer is not the end-user of the Products, Buyer will ensure such end-user complies with this paragraph.

13. Use of Products. Indemnity by Buyer. Buyer shall comply with all instructions, guides and specifications provided by Seller with the Quote or the Products. If Buyer uses or resells the Products in any way prohibited by Seller's instructions, guides or specifications, or Buyer otherwise fails to comply with Seller's instructions, guides and specifications, Buyer acknowledges that any such use, resale, or non-compliance is at Buyer's sole risk. Further, 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, intellectual property

infringement or any other claim, arising out of or in connection with: (a) improper selection, design, specification, application, or any misuse of Products; (b) any act or omission, negligent or otherwise, of Buyer; (c) Seller's use of Buyer's Property; (d) damage to the Products from an external cause, repair or attempted repair by anyone other than Seller, failure to follow instructions, guides and specifications provided by Seller, use with goods not provided by Seller, or opening, modifying, deconstructing, tampering with or repackaging the Products; or (e) Buyer's failure to comply with these Terms, including any legal or administrative proceedings, collection efforts, or other actions arising from or relating to such failure to comply. Seller shall not indemnify Buyer under any circumstance except as otherwise provided in these Terms.

14. Cancellations and Changes. Buyer may not cancel or modify, including but not limited to movement of delivery dates for the Products, 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 and any additional expense. Seller, at any time, may change features, specifications, designs and availability of Products.

15. Assignment. Buyer may not assign its rights or obligations without the prior written consent of Seller.

16. Force Majeure. Seller is not liable for delay or failure to perform any of its obligations by reason of any events or circumstances beyond its reasonable control. Such circumstances include without limitation: accidents, labor disputes or stoppages, government acts or orders, acts of nature, pandemics, epidemics, other widespread illness, or public health emergency, cyber related disruptions, cyber-attacks, ransomware sabotage, delays or failures in delivery from carriers or suppliers, shortages of materials, sudden increases in the price of raw material or components, shutdowns or slowdowns affecting the supply of raw materials or components, or the transportation thereof, oil shortages or oil price increases, energy crisis, energy or fuel interruption, war (whether declared or not) or the serious threat of same, riots, rebellions, acts of terrorism, embargoes, fire or any reason whether similar to the foregoing or otherwise. Seller will resume performance as soon as practicable after the event of force majeure has been removed. All delivery dates affected by an event of force majeure shall be tolled for the duration of such event of force majeure and rescheduled for mutually agreed dates as soon as practicable after the event of force majeure ceases to exist. The right to allocate capacity is in the Seller's sole discretion. An event of force majeure shall not include financial distress, insolvency, bankruptcy, or other similar conditions affecting one of the parties, affiliates and/or subcontractors. An event of force majeure in the meaning of these Terms means any circumstances beyond Seller's control that permanently or temporarily hinders performance, even where that circumstance was already foreseen. Buyer shall not be entitled to cancel any orders following its claim of an event of force majeure.

17. Waiver and Severability. Failure to enforce any provision of these Terms will not invalidate that provision; nor will any such failure prejudice either party's right to enforce that provision in the future. Invalidation of any provision of these Terms shall not invalidate any other provision herein and, the remaining provisions will remain in full force and effect.

18. Duration. Unless otherwise stated in the Quote, any agreement governed by or arising from these Terms shall: (a) be for an initial duration of one (1) year; and (b) shall automatically renew for successive one-year terms unless terminated by Buyer with at least 180-days written notice to Seller or if Seller terminates the agreement pursuant to Section 19 of these Terms.

19. Termination. Seller may, without liability to Buyer, terminate any agreement governed by or arising from these Terms for any reason and at any time by giving Buyer thirty (30) days prior written notice. Seller may immediately terminate, in writing, if Buyer: (a) breaches any provision of these Terms, (b) becomes or is deemed insolvent, (c) appoints or has appointed a trustee, receiver or custodian for all or any part of Buyer's property, (d) files a petition for relief in bankruptcy on its own behalf, or one is filed against Buyer by a third party, (e) makes an assignment for the benefit of creditors; or (f) dissolves its business or liquidates all or a majority of its assets.

20. Ownership of Rights. Buyer agrees that (a) Seller (and/or its affiliates) owns or is the valid licensee of Seller's IP and (b) the furnishing of information, related documents or other materials by Seller to Buyer does not grant or transfer any ownership interest or license in or to Seller's IP to Buyer, unless expressly agreed in writing. Without limiting the foregoing, Seller retains ownership of all Software supplied to Buyer. In no event shall Buyer obtain any greater right in and to the Software than a right in a license limited to the use thereof and subject to compliance with any other terms provided with the Software. Buyer further agrees that it will not, directly or through intermediaries, reverse engineer, decompile, or disassemble any Software (including firmware) comprising or contained within a Product, except and only to the extent that such activity may be expressly permitted, either by applicable law or, in the case of open source software, the applicable open source license.

21. Indemnity for Infringement of Intellectual Property Rights. Seller is not liable for infringement of any Intellectual Property Rights except as provided in this Section. 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 a third-party claim that one or more of the Products infringes the Intellectual Property Rights of a third party in the country of delivery of the Products by Seller to Buyer. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of any such claim, and Seller having sole control over the defense of the claim including all negotiations for settlement or compromise. If one or more Products is subject to such a claim, Seller may, at its sole expense and option, procure for Buyer the right to continue using the Products, replace or modify the Products to render them non-infringing, or offer to accept return of the Products and refund the purchase price less a reasonable allowance for depreciation. Seller has no obligation or liability for any claim of

infringement: (i) arising from information provided by Buyer (including Seller's use of Buyer's Property); or (ii) directed to any Products for which the designs are specified in whole or part by Buyer; or (iii) resulting from the modification, combination or use in a system of any Products. The foregoing provisions of this Section constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for claims of infringement of Intellectual Property Rights.

22. Governing Law. These Terms, the terms of any Quote, 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 the sale and delivery of the Products.

23. Entire Agreement. These Terms, along with the terms set forth in the Quote, forms the entire agreement between the Buyer and Seller and constitutes the final, complete and exclusive expression of the terms of sale and purchase. In the event of a conflict between any term set forth in the Quote and these Terms, the terms set forth in the Quote shall prevail. All prior or contemporaneous written or oral agreements or negotiations with respect to the subject matter shall have no effect. No modification to these Terms will be binding on Seller unless agreed to in a writing that is signed by an authorized representative of Seller, excluding email correspondence, 'clickwrap' or other purported electronic assent to different or additional terms. Sections 2-25 of these Terms shall survive termination or cancellation of any agreement governed by or arising from these Terms.

24. No 'Wrap' Agreements/No Authority to Bind. Seller's clicking any buttons or any similar action, such as clicking "I Agree" or "Confirm," to utilize Buyer's software or webpage for the placement of orders, is NOT an agreement to Buyer's Terms and Conditions. NO EMPLOYEE, AGENT OR REPRESENTATIVE OF SELLER HAS THE AUTHORITY TO BIND SELLER BY THE ACT OF CLICKING ANY BUTTON OR SIMILAR ACTION ON BUYER'S WEBSITE OR PORTAL.

25. Compliance with Laws. Buyer agrees to comply with all applicable laws, regulations, and industry and professional standards, including those of the United States of America, and the country or countries in which Buyer may operate, including without limitation the U.S. Foreign Corrupt Practices Act ("FCPA"), the U.S. Anti-Kickback Act ("Anti-Kickback Act"), U.S. and E.U. export control and sanctions laws ("Export Laws"), the U.S. Food Drug and Cosmetic Act ("FDCA"), and the rules and regulations promulgated by the U.S. Food and Drug Administration ("FDA"), each as currently amended. Buyer agrees to indemnify, defend, and hold harmless Seller from the consequences of any violation of such laws, regulations and standards by Buyer, its employees or agents. Buyer represents that it is familiar with all applicable provisions of the FCPA, the Anti-Kickback Act, Export Laws, the FDCA and the FDA and certifies that Buyer will adhere to the requirements thereof and not take any action that would make Seller violate such requirements. Buyer represents and agrees that Buyer will not make any payment or give anything of value, directly or indirectly, to any governmental official, foreign political party or official thereof, candidate for foreign political office, or commercial entity or person, for any improper purpose, including the purpose of influencing such person to purchase Products or otherwise benefit the business of Seller. Buyer further represents and agrees that it will not receive, use, service, transfer or ship any Products from Seller in a manner or for a purpose that violates Export Laws or would cause Seller to be in violation of Export Laws. Buyer agrees to promptly and reliably provide Seller all requested information or documents, including end-user statements and other written assurances, concerning Buyer's ongoing compliance with Export Law. acceptance of these Terms 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 Seller's security interest.

Basic Hose Constructions



Construction Elements

A hose is generally composed of three elements, each with an important role in the overall performance of that hose. The three elements are:

The Tube must be compatible with and able to contain the media being conveyed. Many different materials are used for tube construction, depending upon the media the hose is designed to transmit.

The Reinforcement is the strength member of the hose. It enables the hose to withstand internal and external pressure and abuse. The reinforcement may be applied by several methods, and consists of synthetic yarns, wire or a combination of these. If suction or vacuum capability is a requirement, a helix wire may be part of the reinforcement.

The Cover protects the reinforcement from abuse or damage. The cover is usually a rubber compound selected for its resistance to the environment, although, in some cases the reinforcement will also act as the cover. Typical considerations in selecting a cover stock are the need to resist abrasion, ozone, weather and sunlight, chemical or oil spillage, etc.

Construction Methods

Several methods are used to manufacture Parker hose. Application factors such as size and pressure requirements determine the selection of any particular hose style. The following is a description of the various construction methods employed by Parker.



Non-Mandrel

Non-mandrel hose is constructed by passing long lengths of extruded tube material through a machine which adds the reinforcement in braided or spiraled layers. In this method, the hose is not built on a mandrel, therefore lengths are not restricted to the lengths of the mandrels.

Typical Size Range: 1-1/2" ID and smaller

Typical Uses: Air, water or general purpose service where operating conditions are not severe



Advantages: Economy and long lengths

Disadvantages: Requires wider ID and OD tolerance range than mandrel made hose, limited pressure capabilities

Rigid Mandrel

Hose produced by this method is supported on a rigid metal mandrel and is handled horizontally during production. While a rigid mandrel limits the hose length, it ensures good control of the inside diameter. It also offers sufficient support to the tube that either wire or textile reinforcement may be applied at high tensions, which is necessary in high pressure constructions. After the cover is applied, the hose may be wrapped with nylon tape for curing, giving the familiar "wrapped" finish to the cover.

Typical Size Range: 3/4" ID and larger

Typical Uses: Air, chemical and petroleum transfer, LPG, steam, water



Advantages: Close tolerances on inside diameter, high pressure ratings, good length stability

Disadvantages: Higher cost than non-mandrel; lengths restricted to length of mandrels

Flexible Mandrel

The flexible mandrel method combines the long-length advantage of non-mandrel hose with the close inside diameter tolerances and high pressure ratings of rigid mandrel hose. This is achieved by building the hose on a long length mandrel made of flexible plastic or rubber.

Typical Size Range: 1-1/2" ID and smaller

Typical Uses: High pressure, air, water, LPG

Advantages: Long lengths, close tolerances on I.D., higher pressure ratings than non-mandrel produced hose

(Continued)

Basic Hose Constructions (*Continued*)



Disadvantages: Higher cost than non-mandrel hose; not available in ID sizes as large as rigid mandrel hose

Wrapped Ply – Machine Built

The wrapped ply construction is the oldest method of making hose, applying all hose components (tube, reinforcement and cover) in spiral strips on a rigid mandrel. After a tube is in place on the mandrel, layers or plies of bias cut fabric reinforcement are wrapped around the tube. The cover is applied and the hose is wrapped in nylon tape prior to curing. This process is capable of producing a hose for suction service when a helix wire(s) is incorporated.

Size Range: 1/2" through 30" ID

Typical Uses: Air; suction and discharge service for chemicals, dry materials, oil and water, conduit

Advantages: Good inside diameter tolerances, many special constructions available without large minimum



production runs, special ends available, wide size range

Disadvantages: Higher cost compared to non-mandrel and flex mandrel; pressure and length limitations

Wrapped Ply – Hand Built

Wrapped ply hose may be hand built when the diameter is too large for the building machine or where special built-in ends are desired. The plies are laid on by an operator rather than an automated machine process, allowing hand-forming of built-in ends.

Size Range: 1/2" through 60" ID

Typical Uses: Oil suction and discharge, sand suction, acid suction and discharge

Advantages: Special ends can be built into the hose; wide size range; special constructions available in small quantities

Disadvantages: Relatively expensive due to high labor content

Age Control of Hose (Shelf Life)

The Parker warranty takes precedence over guidelines established by other industry organizations regarding the recommended shelf life of industrial hose. To achieve maximum shelf life, employ proper storage and handling practices and techniques, such as:

- Storage in the original shipping container such as a box, coil, or reel. Hose stored on a reel or in a coil should have its plastic wrapping kept intact.
- Storage in temperatures of 100°F (38°C) or less.
- Avoidance of ozone (electrical discharges or fields), water, extreme humidity, corrosive chemicals and ultraviolet radiation (direct sunlight).
- Use on a first-in, first-out (FIFO) basis determined by the manufacturing date on the hose.

For further information pertaining to age control of hose, contact Parker or refer to the current ARPM Hose Handbook, IP-2.

Electrical Properties of Rubber Hose

Electrical Conductivity

Industrial hoses generally fall into three categories: conductive, nonconductive, or somewhere in-between. Because of its unique properties, it is possible for rubber to be nonconductive at low voltage and conductive at high voltage. When using a hose in an application that has electrical resistance requirements (low electrical resistance for conductive applications or high electrical resistance for nonconductive applications), always select a hose that is specifically designed to meet the specific need. Since conductivity or nonconductivity is not a consideration for many applications, electrical resistance ratings do not exist for many hoses.

Conductive Hose

Static electricity is generated by the flow of material (even some liquids) through a hose. As the material flows, molecules collide and generate friction, which creates minute amounts of electrical charge (excess electrons). The charge accumulates potential energy at the delivery end of the hose (coupling/nozzle). The amount of charge increases with material volume and linear velocity, coarseness of the material, and length of the hose. If not properly grounded, the accumulated charge (potential energy) will seek its own ground. The charge will be attracted to external materials in proximity (such as a steel storage container); if not properly grounded, the electrons may arc (jump) to the external material, igniting volatile materials in the hose, or in proximity to the hose.

Electrically conductive wires and conductive rubber components are used in hose to prevent static electricity build-up and discharge as a spark. Electrical engineers differ in opinion on the effects of static electricity and the means of dissipating it. In handling gasoline and other petroleum-based liquids, recognized national associations and companies have conflicting opinions on the need for conductive hoses. Until a consensus is reached among all associations, laboratories and users, and a standard practice is established, it is essential that the user determine the need for static bonded hose based on (a) the intended use of the hose, (b) instructions from the company's safety division, (c) the insurer, and (d) the laws of the localities and states in which the hose will be used.

Some types of hose include a helical or static wire(s). This wire can be used for electrical continuity provided that proper contact is made and maintained between it and the hose couplings.

Nonconductive Hose

Nonconductive hose constructions are those that resist the flow of electrical current. In some specific applications, especially around high voltage electrical lines, it is imperative for safety that the hose be nonconductive. Unless the hose is designed particularly to be nonconductive and is so branded, do not conclude that it is nonconductive. Many black rubber compounds are inherently and inadvertently conductive. Nonconductive hose is usually made to a qualifying standard that requires it to be tested to verify the desired electrical properties. The hose is frequently (but not necessarily) non-black in color and clearly branded to indicate it is designed for nonconductive applications.

NOTE 1: Parker industrial hose generally uses the non-conductivity standard originally developed by Alcoa Aluminum: A minimum resistance of one megaohm per inch at 1,000 volts D.C.

NOTE 2: SAE has a separate standard for nonconductivity for high pressure hydraulic applications. Part of the standard requires that nonconductive hose feature an orange cover.

NOTE 3: Nonconductive hoses contain little/no conductive rubber compounds, static wires, helical wires, or wire reinforcement. Therefore, a nonconductive hose would not be recommended for an application requiring an "anti-static/static dissipating/conductive" hose.

 **WARNING!** Unless a hose is described as, or specifically and clearly branded to be conducting or nonconducting, assume that the electrical properties are uncontrolled.

Force to Bend / Minimum Bend Radius

The amount of force required to bend a hose and the minimum bend radius are important factors in hose design and selection. The minimum bend radius is defined as the radius to which the hose can be bent in service without damaging or appreciably shortening the life of the product, and is measured to the inside of the curvature of the bend. The bend radius for a given application must be equal to or greater than the rated minimum bend radius. Bending the hose to a smaller bend radius than minimum may kink the hose and result in premature failure.

Perhaps more important in determining flexibility, the force-to-bend is defined as the amount of force required to induce bending around a specified radius. The less force that is required, the easier the product is to maneuver in the field. Different hose constructions may require significantly different forces to attain the same minimum bend radius. Generally, the preferred hose is the more flexible hose, provided all other properties are essentially equivalent.

Oil and Fuel Resistance

Rubber compounds are available in different formulations, blends and grades. Compounds are selected by hose design engineers based on the intended application

of the hose. For instance, a hose recommended for multipurpose applications that may include hydraulic or lubrication oil service generally contains a lower grade of tube compound. Conversely, a hose recommended for a more rigorous application, such as highly refined fuel service, contains a higher grade of compound, often within the same compound family.

Rubber hose is used to convey petroleum products both in the crude and refined stages. The aromatic content of refined gasoline is often adjusted to control the octane rating. The presence of aromatic hydrocarbons in this fuel generally has a greater effect on rubber components than do aliphatic hydrocarbons. Aromatic materials in contact with rubber tend to soften it and reduce its physical properties. For long-lasting service, the purchaser of fuel hose should inform the hose manufacturer of the aromatic content of the fuel to be handled so that the proper tube compound can be recommended for the specific application.

The effect of oil on rubber depends on a number of factors that include the type of rubber compound, the composition of the oil, the temperature and duration of exposure. Rubber compounds can be classified to their degree of oil resistance based on their physical properties after exposure to a standard test fluid. In this ARPM classification, the rubber samples are immersed in IRM 903 oil at 212°F (100°C) for seventy hours. [See

General Formula for Minimum Hose Length (given hose bend radius and degree of bend required)

$$\frac{\text{Angle of Bend}}{360^\circ} \times 2 \pi r = \text{Minimum length of hose to make bend.}$$

r = Given bend radius of hose.

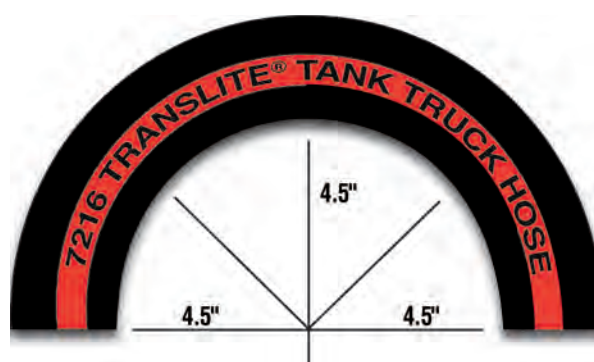
Example: To make a 90° bend with 2" I.D. hose.
Given $r = 4.5$ inches.

$$\frac{90}{360} \times 2 \times 3.14 \times 4.5 = .25 \times 2 \times 3.14 \times 4.5 = 7'' \text{ (minimum length of hose to make bend without damage to hose)}$$

The bend radius for a given application must be equal to or greater than the rated minimum bend radius. Bending the hose to a smaller bend radius than minimum may kink the hose and result in premature failure.

General Formula for Minimum Hose Length (allowing relief from couplings)

$$\text{Overall Length (OAL)} = (2 \times \text{Length of Coupling}) + (2 \times \text{Hose OD}) + (\text{Angle}/360) \times 2 \pi r$$



The minimum bend radius is measured to the inside of the curvature.

ASTM Method D-471 for a detailed description of the oil and the testing procedure.) As a guide to users of hose in contact with oil, the oil resistance classes and a corresponding description are listed on the next page.

Physical Properties After Exposure to Oil

Class	Volume Change Maximum	Tensile Strength Retained
Class A (High Oil Resistance)	+25%	80%
Class B (Medium/High Oil Resistance)	+65%	50%
Class C (Medium Oil Resistance)	+100%	40%

The above ARPM guideline does not imply compatibility with all oil based fluids. There are many grades of rubber compounds that meet ARPM Class A oil resistance requirements. Some compound grades will be fine for multipurpose applications, while higher grades would be required for more rigorous applications.

Oil resistant hoses for multipurpose service tend to be more economical than hoses specifically designed and recommended for highly refined fuel service. These multipurpose hoses, even if they feature an ARPM Class A tube, are not necessarily recommended for use with highly refined fuels. Furthermore, many chemical resistance charts represent data developed from testing of a typical grade of compound used for that family of fluids. For example, “nitrile” may show compatibility with gasoline, but the nitrile that was tested is likely the nitrile used in gasoline dispenser hose, as opposed to the nitrile commonly used in multipurpose hose.

When selecting a hose for highly refined fuels such as aviation fuel, biodiesel, diesel, ethanol, gasoline or kerosene, be guided by the hose manufacturer’s recommendation to use a hose designed and manufactured for

that specific application and/or fluid. Contact Parker for further information.

Suction and Vacuum

Hose is constructed with high adhesion between the tube and the carcass to prevent tube separation. Most hose is used for pressure service; however, some applications require the hose to resist collapse in suction and vacuum service. Such hose is subjected to crushing forces because the atmospheric pressure outside the hose is greater than the internal pressure. The hose can collapse and restrict the flow unless the hose is constructed to resist these pressure differentials. The most common method of preventing hose collapse is to build a helical member(s) (wire or thermoplastic) into the hose body. The size and spacing of the helix depends on the size of the hose and the pressure differential. In applications approaching a perfect vacuum, most of the plies of reinforcement are applied over the helix.

Suction hose must be specifically designed for the service for which it is used. Each element—tube, reinforcement, size, spacing, and location of the helix—must be carefully considered. While suction hose is generally used to convey liquids, vacuum hose carries air under a partial vacuum. Vacuum hose is reinforced to resist collapse and maintain its shape under rough

Coupling Thread Compatibility

Industrial hose couplings have threads which are usually one of the various “pipe” threads. All pipe threads are commonly referred to by the generic name of Iron Pipe Thread or IPT. There are several different types of IPT threads and you must know specifically what they are to ensure compatibility with mating threads.

IPT Thread Compatibility Chart

Description	Seal	Thread (Female)	Compatible Threads (Male)
American Standard Tapered Pipe Thread	Thread Seal (with Sealing Compound)	NPT	NPT NPTF
American Standard Tapered Dryseal Pipe Thread	Thread Seal (Dryseal)*	NPTF	NPTF NPT
American Standard Straight Pipe Thread for mechanical joints (includes 2 female types, depending on sealing method, and one male type compatible with both females)	Washer or Mechanical Ground Joint	NPSM	NPSM NPT NPTF
American Standard Straight Pipe Threads for hose couplings and nipples	Washer	NPSH	NPSH NPT NPTF

*When NPTF Threads are used more than once, they require sealing compound after the first use.

In addition, there are various other thread types that may be found on industrial hose couplings. These types are generally not compatible with any other thread types:

Type	Description	Seal
GHT	Garden Hose Thread	Washer seal
API	American Petroleum Institute Thread	Thread seal
JIC (37°)	Joint Industry Council	Mechanical seal
SAE (45°)	Society of Automotive Engineers	Mechanical seal
NF	Welding Hose Threads-Left Hand and Right Hand	Mechanical seal
CHT	Chemical Hose Thread (for booster hoses)	Gasket seal

Media Compatibility

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Metal/Coupling Corrosion Resistance Table	549
Names and General Properties of Hose Materials	519
PVC Temperature / Pressure Chart	548
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Silicone Hose and Chemical Table	550

Visit our hose overview chart (page 318) for a listing of industrial hoses along with industry standards.

Due to continual product improvements, Parker reserves the right to alter specifications without prior notice.

Chemical Guides Introduction

The Chemical Guides in this section are offered as a general indication of the compatibility of the various compounds incorporated in Parker hose with the chemicals, fluids and media listed. The basis for the ratings includes actual service experience, the advice of various polymer suppliers, and the considered opinion of our chemists. When in doubt, a sample of the compound should always be tested with the particular chemical and temperature it is to handle.

Some of the variables that affect the resistance of a compound to a chemical attack are:

- 1. Temperature of the Media Transmitted:** Higher temperatures increase the affect of chemicals on compounds. The amount of increase depends upon the polymer and the chemical. A compound quite suitable at room temperature might fail very quickly at higher temperatures. Working pressures in this catalog are recommended in accordance with ARPM design safety factors at ambient temperatures. Do not operate outside hose temperature limits. Even within hose temperature limits, end fittings and hose size can affect performance at higher temperatures.
- 2. Service Conditions:** A rubber compound usually swells when exposed to a chemical. Within a given percent of swell, a hose tube may function satisfactorily if the hose is in a static condition, but may fail quickly if the hose is subject to flexing.
- 3. The Grade or Blend of the Rubber Compound:** Basic polymers are sometimes mixed or blended to enhance a particular property for a specific service. As an example, the nitrile used as the tube material for Parker aircraft fueling hose varies in its makeup from the nitrile used in the tube of Day-Flo® Special Purpose hose. Consequently, the reaction to a particular chemical may therefore be somewhat different. When in doubt, a sample of the compound should always be tested with the particular chemical it is going to handle.

Names and General Properties of Hose Materials

Refer to the guides on the following pages for specific applications.

Common Name	ASTM Designation D 1418-64	Composition	General Properties	Primary Hose Elements
Butyl / Chlorobutyl	IIR	Isobutene-Isoprene	Very good weathering resistance, low permeability to air. Good physical properties. Poor resistance to petroleum based fluids.	Tube / Cover
Chlorinated Polyethylene (CPE)	CM	Chloropolyethylene	Good long term resistance to UV and weathering. Good oil and chemical resistance. Excellent flame resistance. Good low temperature impact resistance.	Tube
Cross Linked Polyethylene (XLPE)	XPE	Cross Linked Polyethylene	Excellent resistance to most solvents, oils and chemicals. Do not confuse with chemical properties of standard polyethylene.	Tube
EPDM	EPDM	Ethylene Propylene Diene	Good general purpose polymer. Excellent heat ozone, and and weather resistance. Not oil resistant.	Tube / Cover
Epichlorohydrin	ECO	Ethylene Oxide Chloromethyl	Excellent oil and ozone resistance. Fair flame resistance and low permeability to gases. Good low temperature properties.	Tube / Cover
Ethyl Vinyl Acetate (EVA)		Ethylene Vinyl Acetate	Good abrasion and chemical resistance. Lightweight.	Tube / Cover
FKM	FKM	Fluorocarbon Rubber	Excellent high temperature resistance, particularly in air or oil. Very good chemical resistance.	Tube / Cover
Fluorinated Ethylene Propylene / Polytetra-Fluoroethylene	FEP / PTFE	Fluorinated Ethylene Propylene / Polytetra-Fluoroethylene	Excellent chemical, solvent, and heat resistance, inert to most materials. Smooth anti-adhesive surface – easily cleaned.	Tube
Modified XLPE (MXLPE)		Proprietary	Excellent chemical resistance with good heat properties.	Tube
Natural Rubber	NR	Isoprene	Excellent physical properties, including abrasion resistance. Not oil resistant.	Tube
Neoprene	CR	Chloroprene	Excellent weathering resistance. Good oil resistance. Good physical properties.	Tube / Cover
Nitrile / Buna-N	NBR	Nitrile-Butadiene	Excellent oil resistance. Good physical properties.	Tube / Cover
Nylon		Nylon	Excellent chemical resistance. Good temperature resistance.	Tube
Poly Vinyl Chloride (PVC)		Poly Vinyl Chloride	Good abrasion, chemical and weathering resistance. Lightweight. Poor oil and temperature resistance.	Tube / Cover, Tubing
Poly Vinyl Chloride / Polyurethane (PVC/PU)		Poly Vinyl Chloride/ Polyurethane Blend	Good abrasion, chemical and weathering resistance.	Tube / Cover
Polyurethane (PU)	AU	Polyurethane	Good abrasion, chemical and weathering resistance.	Tube / Cover
SBR	SBR	Styrene-Butadiene	Good physical properties, including abrasion resistance. Not oil resistant. Poor weathering and ozone resistance.	Tube / Cover
TPV		Thermoplastic Vulcanizate	Excellent chemical and ozone resistance. Good flexibility. Lightweight.	Tube, Tubing
Ultra-High Molecular Weight Polyethylene (UHMWPE)	UHMW	Ultra-High Molecular Weight Polyethylene	Excellent chemical and heat resistance.	Tube

Refined Fuel / Hose Compatibility Table

LEGEND

A: Acceptable for use with the designated fuel, and can be interchanged/used with other “A” media in the same row.

D: Acceptable for use with the designated fuel, but only for DEDICATED service with that designated fuel.

Not interchangeable/for use with any other fuel—prior to or subsequent to—use with the dedicated fuel.

X: Not acceptable for use with the designated fuel in any application.

NOTES: “A” or “D” ratings do not imply compliance with government or industry regulations or specifications in any application.

Series	Tube	Av Gas	Non-Regulat- ed Gasoline Service	Ethanol			Diesel Fuel	Biodiesel	
				To E100	To E15	To E85		To B20	To B100
389	Nitrile	D	A	D	A	A	A	A	X
395	Nitrile	D	A	D	A	A	A	A	X
397	Nitrile	D	A	D	A	A	A	A	A
7094/7095	Nitrile	X	X	X	X	X	X	X	X
7102	Nitrile	D	A	D	A	A	A	D	X
7107	Nitrile	X	X	X	X	X	X	X	X
7107 (2" only)	Nitrile	D	A	D	A	A	A	D	X
7114	Nitrile	D	A	D	A	A	A	D	X
7124	Nitrile	D	D	D	A	A	A	D	X
7134/7187	Nitrile	X	X	X	X	X	X	X	X
7137	Nitrile	X	X	X	X	X	X	X	X
7165	Nylon	D	A	A	A	A	A	A	A
7174	Nitrile	D	D	D	A	A	A	D	X
7175	Nitrile	D	D	D	A	A	A	D	X
7204	Nitrile	D	A	A	A	A	A	A	X
7208E	Nitrile/SBR	X	X	X	X	X	X	X	X
7212	Nitrile	X	A	X	A	D	A	D	X
7213E	Nitrile/SBR	X	X	X	X	X	X	X	X
7216/7217	Nitrile	D	A	D	A	A	A	D	X
7216E	Nitrile	D	A	D	A	A	A	D	X
7219	Nitrile	D	A	A	A	A	A	A	X
7234	Chloroprene	X	X	D	X	X	X	X	X
7280	Nitrile	D	D	D	A	A	A	D	X
7282	Nitrile/THV Barrier	D	D	D	A	A	A	D	X
7301	Chloroprene	X	X	D	X	X	X	X	X
7311N/7311NXT	Nitrile	D	A	D	A	A	A	D	X
7331/7331XT	Nitrile	D	A	D	A	A	A	D	X
7396/7397	Nitrile	D	A	D	A	A	A	D	X
7705	Nitrile	A	A	A	A	A	A	A	A
7775	Nitrile	D	A	D	A	A	A	D	D
7776	Nitrile	D	A	D	A	A	A	D	D
7776CT	Nitrile	D	A	D	A	A	A	D	D
7777	Nitrile	D	A	D	A	A	A	D	D
SS107/SS107R	Nitrile	D	A	D	A	A	A	D	D
SS269	Nitrile/SBR	X	X	X	X	X	X	X	X
SWC325	Nitrile	D	A	D	A	A	A	D	D
SW387	Nitrile	D	A	D	A	A	A	D	D
SW569	Nitrile	D	D	D	D	D	D	D	D
SWC316/SWC316R	Nitrile	D	A	D	A	A	A	D	D
SWC609/SWC609R	Nitrile	D	A	D	A	A	A	D	D

Some biodiesel, diesel fuel and gasoline hoses must also meet industry or government standards for regulated applications, such as SAE engine fuel lines or UL gasoline dispenser service. The user is solely responsible for making the final determination if an industry or government (local, state or federal) standard or regulation applies to the application. Contact Parker for more information.

Hose and Chemical Table

Refer to *Names and General Properties of Hose Materials* table.

⚠ WARNING! The following data is based on tests and believed to be reliable; however, the tabulation should be used as a guide ONLY, since it does not take into consideration all variables, such as elevated temperatures, fluid contamination, concentration, etc., that may be encountered in actual use. All critical applications should be tested. Refer to the Safety & Technical Information section of this catalog for safety, handling and use information.

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

Thermoplastic hose and tubing achieve their optimum physical properties at room temperature, 68°F (20°C). As thermoplastic materials are exposed to increased ambient temperatures, they soften and their physical properties change. For hose and tubing, heat sharply reduces the available working pressure and coupling retention. In all cases, test the product in a controlled, secure and safe environment, and consider all operating conditions prior to use.

NOTES:

- Data for PVC/thermoplastic materials based on 68°F unless otherwise noted.
- Data for other materials based on 70°F unless otherwise noted.

Key: E = Excellent • G = Good • C = Conditional • Blank = No Data • X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA**	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU**	PVC**	PVC/PU***	SBR	TPV**	UHMWPE	XLPE
Acetal		C	G	C	G		E	X	G	C	X					C		E	E
Acetaldehyde		X	E	X	E	G	E	X		X	X	E	X	X	X	X	G	G	E
Acetamide		G	E	G	E		E	G	E	C	E					X		E	E
Acetate Solvents		X	C	X	E	C	E	X	G	C	X		C	X	X	X		E	E
Acetic Acid, 10%	E	E	E	G	E	E	E	E		G	G	X	X	E	G	G	E	E	E
Acetic Acid, 30%		G	G	C	E	E	E	C	G	X	X			G	G	X		E	E
Acetic Acid, 50%	E	E	G	C	E	C	E	G		X	C	X	X	G	G	G	C	E	G
Acetic Acid, 80%						C							X	C	C				
Acetic Acid, Glacial	E	C	G	C	G	X	E	X		X	X	X	X	C	C	C	G	E	E
Acetic Acid, Vapors						G							X	G	G				
Acetic Anhydride	E	E	G	G	G	C	E	X		C	X	X	X	X	X	X	E	G	E
Acetic Ester		X	G	X	E		E	X	G	X	X					X		E	E
Acetic Ether		C	G	X	E		E	X	G	X	X					X		E	E
Acetic Oxide		E	G		G		E	X		X			G				G		E
Acetone	G	X	E	X	E	C	E	X		X	X	E	X	X	X	C	G	E	C
Acetone Cyanohydrin		C	E	G	E		E	X		C	X		X			E	E	G	E
Acetonitrile		G	E	E	E		E	X		G	X	E					X		
Acetophenone		X	G	X	E		E	X		X	X		X			X	G	X	X
Acetyl Acetone	G	X	E	X	E		E	X		X	X		X			X	G	E	E
Acetyl Chloride	E	X	X	X	C		E	G		X	X	X	X			X	G	G	G
Acetyl Oxide	E	E	G	G	G		E	X		C	X		X			X	E	E	E
Acetylene	G	C	E	E	E	X	E	E		G	E	E	G	C	C	C	C	E	E
Acetylene Dichloride		X	C	X	C		E	G		X	X	E						X	
Acetylene Tetrachloride		X	X	X	X		E	E		X	X		X			X	X		
Acrolein		G	E	C	E		E	X		G	C		X			C	C	X	E
Acrylic Acid	E	G	X	X	X		E	X		X	X		X			X			X
Acrylonitrile	E	C	X	X	E		E	X		C	X	E	X	C	C	C	G	C	C
Di(2Ethylhexyl) Adipate		X	E	X	G		E	C		X	X								
Adipic Acid		G	X	E	E	E	E	E		E	E		E	G	G	E	G		E
Air		E	E	E	E		E	E	E	E	E					E		E	E
Air, +300°F	G	G	G	G	G		E	E		X	G		G			X	E	X	
Alcohol, Aliphatic		E	E	E	E		G	C	E	E	E					G		E	E
Alcohol, Aromatic		X	X	C	X		E	E	G	C	C					X		E	E
Alk-Tri		X	X	X	X		E	E		X	X		X			X	X		E
Allyl Alcohol		E	E	E	E	E	E	G		E	E	C	X	X	X	G	G	E	E
Allyl Bromide		X	X	X	X		E	G		X	X					X		G	G
Allyl Chloride	G	X	X	X	X	C	E	G		X	G	G	X	X	X	G		E	G
Alum	E	E	E	E	E	E	E	E	E	E	E	G	G	E	E	G	E	E	E
Alum, Papermakers							E	E										G	
Aluminum Acetate	E	G	E	C	E		E	E	E	C	C		X			G	E	E	E
Aluminum Chloride	C	E	E	E	E	G	E	E	E	E	E	X	G	E	E	E		E	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Aluminum Fluoride	X	E	E	E	E	G	E	E		G	E	G	C	G	G	E	E	E	E
Aluminum Formate		X	G	E	E		E	X		X	X		X			E		E	
Aluminum Hydroxide		E	E	E	E	G	E	E		E	E	G	G	E	E	G	E	E	
Aluminum Nitrate						E							C	E	E				
Aluminum Nitrate (AQ)	E	E	E	E	E		E	E		E	E		C			E	E	E	E
Aluminum Oxychloride						G								E	E				
Aluminum Phosphate		E	E	E	E		E	E	E	E	E					E		E	E
Aluminum Sulfate	E	E	E	E	E	E	E	E	E	E	E	E	G	E	E	E	E	E	E
Alums, NH3-CR-K	G	E	E	E	E		E	E		E	E	X	G			E	E	E	E
Amines, Mixed		X	G	G	G			X		G	X		X			C		E	
Amino Xylene	X	X	G	X	E		E	X		X	X		X			X	G		
Aminobenzene	G	X	G	X	G		E	E		X	X	C	X			X	G		
1-Aminobutane		C	X	X	C		E	X		X	C		X			X			
Aminodimethylbenzene	C	C	G	X	X		E	X		X	X					X			
Aminoethane		C	G	X	E		E	X		C	X		X			C			
2-Aminoethanol		G	E	G	G		E	X		G	X		C			X			
1-Aminopentane	C	X	G	E	E		E	X		G	C		C			G	C		
O-Aminotoluene	G																		
Ammonia (AQ)						E						E	X	C	C			E	C
Ammonia Anhydrous												G						E	E
Ammonia Gas												C						E	
Ammonia Gas, Dry						E							X	C	C				
Ammonia Liquid		E	E	E	E	E	E	E	E	G	G		X	X	X	G		E	E
Ammonia Water		G	G	G	E		E	G	E	G	C					G		E	E
Ammonium Carbonate		E	E	E	E	E	E	E	E	E	C	G	E	E	E	E		E	E
Ammonium Chloride	G	E	E	E	E	E	E	E	E	E	E		G	E	E	E	E	E	E
Ammonium Fluoride, 25%						G							C	X	X				
Ammonium Hydroxide	E	E	E	E	E		E	E		G	E	G	X				E	E	E
Ammonium Hydroxide, 28%						E							C	C	C				
Ammonium Metaphosphate		E	E	E	E	E	E	E	E	E	E		G	E	E	E		E	E
Ammonium Nitrate	G	E	E	E	E	E	E	E	E	E	E	G	G	E	E	E	E	E	E
Ammonium Persulfate		E	E	E	G	E	E	E	E	E	X		G	E	E	X		E	E
Ammonium Phosphate		E	E	E	E	E	E	E	E	E	E		G	G	G	E		E	E
Ammonium Phosphate, Dibasic	E	E	E	E	E		E	E		E	E	C				E	E	E	E
Ammonium Phosphate, Neutral						E							G	E	E				
Ammonium Sulfate	E	E	E	E	E	E	E	E	E	E	E	G	E	E	E	G		E	E
Ammonium Sulfide		E	E	E	E	E	E	E	E	E	E		E	E	E	E		E	E
Ammonium Sulphite		E	E	E	E		E	E		E	E		X			E			E
Ammonium Thiocyanate		E	E	E	E	E	E	E	E	E	E		G	E	E	E		E	E
Ammonium Thiosulphate		E	E	E	E		E	E		E	E	E	X			E	E		E
Amyl Acetate	X	X	C	X	E	X	E	X		X	X	G	X	X	X	X	G	E	C
Amyl Acetone		X	G	X	G		E	X		X	X					X			E
Amyl Alcohol	E	E	E	E	E	G	E	E		E	E	E	X	C	C	G	E	E	E
Amyl Amine		C	G	C	C		E	X		C	C					G			
Amyl Borate		C	E	E	E		E	E	C	E	E					E		E	E
Amyl Bromide		X	X	X	C		E	G		X	X								
Amyl Chloride	C	X	X	X	X	X	E	E		X	X	E	C	X	X	X	X	X	X
Amyl Chloronaphthalene		E	E	E	E		E	E	C	E	E					E		E	E
Amyl Ether		C	X	X	X		E			X	X								
Amyl Napthalene		E	E	E	E		E	E	C	E	E					E		E	E
Amyl Oleate		E	G	E	G		E	C	G	E	E					E		E	E
Amyl Phenol		E	E	E	E		E	E	C	E	E					E		E	E
Anethol	X	X	X	X	X		E	G		X	X	G				X		G	G

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Aniline	X	X	E	X	G	X	E	G		X	X	C	X	X	X	X	G	E	E
Aniline Chlorohydrate						X							X	X	X				
Aniline Dyes	X	G	G	C	G		E	G		G	X	X	X			G	G	E	E
Aniline Hydrochloride		X	G	X	G	X	E	G	E	G	G		X	X	X	C		E	E
Aniline Oil	G	X	G	X	C		E	C		X	X		X			X			
Animal Fats		C	C	C	G		E	E		X	E	E	C			X	C	E	E
Animal Grease		X	X	C	C		E	E	E	X	E					X		E	E
Animal Oils		X	C	X	C	C	E	E	E	X	E		G	C	C	X		E	E
Ansul Ether		X	X	X	C		E	X	G	X	X					X		E	E
Anthraquinone						E								E	E				
Anthraquinonesulfonic Acid						E							X	E	E				
Antifreeze		E	E	E	E		E	E	E	E	E					E		E	E
Antimony Chlorides		G	E	X	E		E	E			G	C	E						E
Antimony Pentachloride		X	X	X	X		E	E	E	X	G					X		G	G
Antimony Trichloride						E							E	E	E				
Apple Juice or Sauce														E					
Aqua Regia	G	X	X	X	C	X	E	E		X	X	X	X	C	C	X	X	G	X
Argon		X	G	G	E		E	E		X	E	E	E			E		E	E
Aromatic Hydrocarbons		X	X	X	X		E	E		X	X			X		X			
Arquad		E	E	E	E		E	E	E	E	E					E		E	E
Arsenic Acid	E	E	E	E	E		E	E		E	E	E	X			E	E	E	E
Arsenic Acid, 80%						G							X	E	E				
Arsenic Chloride		X	X	E	X		E	X		X	C					X		X	X
Arsenic Trichloride		X	X	E	X		E	X		X	E					X		X	X
Arylsulfonic Acid													X	C	C				
Asphalt	G	X	X	C	X	X	E	E		X	G	E	G	C	C	X	G	E	X
ASTM Fuel A	E	G	X	G	X		E	E		X	E	E	G	C	C	X	X	G	G
ASTM Fuel B	G	G	X	X	X		E	E		X	X	E	G	X	X	X	X	G	G
ASTM Fuel C	C	X	X	X	X		E	E		X	G	E	X	X	X	X	X	G	G
ASTM Oil #1		G	X	E	X		E	E		X	E	E	E	C	C	X	X	E	E
ASTM Oil #2		C	X	E	X		E	E		X	E					X			
ASTM Oil #3		C	X	G	X		E	E		X	E		X	C	C	X			
ASTM Oil #4		X	X	X	X			E		X	G		X			X		E	E
Automatic Transmission Fluid		C	X	G	X		E	E		X	E	G	G			X	X	E	E
Aviation Gasoline		X	X	X	X		E	E		X	E		X			X		E	E
Banana Oil	X	C	X	X	E		E	X		X	X	G	X			X	G	E	X
Barium Carbonate		E	E	E	E	E	E	E	E	E	E		E	E	E	E		E	E
Barium Chloride	G	E	E	E	E	E	E	E	E	E	E	G	E	E	E	E		E	E
Barium Hydroxide	G	E	E	E	E	E	E	E	E	E	E	G	E	E	E	E		E	E
Barium Sulfate		E	E	E	E	E	E	E	E	E	E		E	E	E	E		E	E
Barium Sulfide		E	E	E	E	E	E	E	E	E	E		E	E	E	G		E	E
Beer		E	E	G	E		E	E		E	E	E	G	E		E	E	E	X
Beet Sugar Liquors	G	E	E	G	E	E	E	E		E	E	G	X	E		E	E	E	E
Benzal Chloride			G				E				X	E						E	E
Benzaldehyde	C	X	G	X	E	C	E	X		X	X	E	X	X	X	X	X	E	E
Benzene	C	X	X	X	X	X	E	G		X	X	G	X	X	C	X	X	G	E
Benzene Carboxylic Acid	G	X	E	E	X		E	E		X	X		X			X	E		
Benzene Sulphonic Acid		G	X	G	X		E	E	E	X	X					X		E	E
Benzine		X	X	G	X		E	E		X	E	G	C			X	G		E
Benzine Solvent		C	X	X	X		E	E		X	E					X			
Benzoic Acid		X	X	G	X	G	E	E	G	X	X	E	X	G	G	X	E	E	E
Benzoic Aldehyde		X	G	X	E		E	X	E	X	X					X		E	E
Benzol	C	X	X	X	X	X	E	G		X	X	G	X	X	C	X	X	G	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Benzotrichloride		X	X	X	E		G	E		X	X					X		G	G
Benzyl Acetate		G	E	E	E		E	X		X	X		X			E		E	E
Benzyl Alcohol	E	G	G	G	G		E	E		X	X	C	X			X	X	E	E
Benzyl Chloride	X	X	X	X	X		E	E		X	X		X			X	X	E	E
Benzyl Ether		X	G	X	C		E	X		X	X		G			X			
Bismuth Carbonate						E							E	E	E				
Black Liquor						E								E	E				
Black Sulfate Liquor	C	G	G	G	G		E	E		G	G	C	X			G	E	E	
Blast Furnace Gas		C	C	E	C		E	E	E	C	C					C		E	E
Bleach Solutions		G	G	X	G		E	G	E	X	X	C	X			X		G	G
Bleach, 12.5% Active CL						G							C	G	G				
Borax Solution	C	E	E	E	E		E	E		E	E	G	E			E	E	E	E
Bordeaux Mixture		E	E	E	E		E	E	E	G	E		E	E	E	G		E	E
Boric Acid	X	E	E	E	E	E	E	E		E	E	G	E	E	E	E	E	E	E
Boron Trifluoride						E							E	E	E				
Brake Fluid DOT #3	E	G	E	C	E		E	X		X	X	E	X	X	X	E	G		
Brine	G	E	E	E	E	E	E	E		E	E	G	G	E	E	E	E	E	E
Bromacil					E														
Bromic Acid						G							X	E	E				
Bromine		C	X	X	X		E	E	G	X	X					X		X	G
Bromine Water		E	C	G	C	X	E	E		X	C		X	X	X	X		E	E
Bromine, Liquid						X							X	X	X				
Bromobenzene	X	X	X	X	X		E	E		X	X		X			X		C	C
1-Bromobutane		X	X				E	G		X	X								
Bromochloromethane	X	X	X	X	G		E	C		X	X								
Bromoethane		X	X	X	X		E	E		C	G		X			X			
3-Bromopropene		X	X	X			E	G		X	X								
Bromotoluene	X	X	X				E	G		X						X			X
Bugdioxane																			E
Bunker Oil		X	X	X	X		E	E		X	E		G			X		E	E
Butadiene		X	X	X	X	X	E	G		X	X		X	C	C	X		E	E
N-Butanal		C	G	C	G		E	X		X	X		C						
Butane		X	X	C	X	X	E	E		X	E	E	X	C	C	X		E	E
Butanoic Acid		C			G		E	G											
Butanol (Butyl Alcohol)	G	E	G	E	G		E	E		E	E	G	X			E	G	E	E
Butanol, Primary						G							C	X	X				
Butanol, Secondary						G							C	X	X				
Butanone	G	X	E		E		G				X	G	X				X	E	E
Butoxyethanol		X	E	X	E		E			X	C		E						
Butter		E	E	G	E			E		C	E			C		C			
Butyl Acetate	C	X	X	X	X	X	X	X		X	X	G	X	X	C	X		E	E
Butyl Acrylate		X	X	X	X		E	X		X	X							G	G
Butyl Alcohol (Butanol)	G	E	G	E	G	E	E	E		E	E	G	C	C	C	E	G	E	E
Butyl Aldehyde		C	G	C	G		E	X					C				G	E	E
Butyl Amine		C	C	X	C		E	X	E	G	C					C		E	E
N-Butylamine		X	X	X	C		E	X		X	X		X			X			
T-Butyl Amine		X			G														
Butyl Benzene		X	X	X	X			E		X	X					X		E	E
N-Butylbenzene		X					E	E		X	X								E
Butyl Benzyl Phthalate		X	E				E	C		X						X		E	E
Butyl Bromide		X	X	X	X			G		X	X					X		G	G
N-Butylbromide		X	X				E	G		X	X								G
Butyl Butyrate		X	C	X	G			C		X	X					X		G	G

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
N-Butylbutyrate		X	E	X	E		E	E		X	X					X			
N-Butylcarbinol	E	E	E	E	E		E	E		E	G	E	X			E	E		
Butyl Carbitol		C	E	C	E		E	G		X	C					X		E	G
Butyl Cellosolve		X	E	X	G		E	X		X	C			X	X	X	E	E	E
Butyl Chloride		X	C				E	E		X								C	G
Butyl Ether		X	X	X	X		E	X		X	X		G			X		E	E
Butyl Ether Acetaldehyde		X	G				E	X		X		X						E	E
Butyl Ethyl Acetaldehyde		X	C	X	X			X		X	X					X		E	E
Butyl Ethyl Ether		X	X				E			X	G							E	E
Butyl Oleate		X	G	X	G		E	E		X	X					X			
Butyl Phenol						X								C	C				
Butyl Phthalate		X	G		E		E	C		X						X			E
Butyl Stearate		X	X	X	X		E	E		X	G		G			X		E	E
Butylene		X	X	C	X		E	E		X	E	G	C	C	C	X			
Butyraldehyde		X	G	X	C		E	X	G	X	X		X			X		E	E
Butyric Acid		C	G	X	G		E	G		X	X		G			X		E	E
Butyric Acid, 20%						X							C	C	C				
Butyric Anhydride		G	C				E			C	C								E
Butyraldehyde							E	X	G									E	E
Cadmium Acetate		E	E				E			X								E	E
Calcium Acetate		C	E	G			E	X		E	G		X			X		E	E
Calcium Aluminate		E	E				E	E		E	E								E
Calcium Bichromate		C	E				E												G
Calcium Bisulfate		E	G	E	G		E	E	E	C	E					C		E	E
Calcium Bisulfide				C	X		E	E			E	G	C			G			
Calcium Bisulfite		E	E	E	E	E	E	E	E	E	E		E	E	E	E		E	E
Calcium Carbonate		E	E	E	E	E	E	E	E	E	E		E	E	E	E		E	E
Calcium Chlorate						E							G	E	E				
Calcium Chloride	G	E	E	E	E	E	E	E		E	E	E	E	E	E	E		E	E
Calcium Hydroxide	G	G	E	E	E	E	E	E		E	E	E	E	E	E	E		E	E
Calcium Hypochlorite	G	E	E	C	E	G	E	E		X	X	X	X	E	E	X		C	C
Calcium Nitrate		E	E	E	E	E	E	E		E	E	E	X	E	E	E		E	E
Calcium Sulfate		E	E	E	E	E	E	E	E	E	E		E	E	E	E		E	E
Calcium Sulfide	X	E	E	E	E		E	E		X	E	E	E			X		E	E
Calcium Sulfite		E	E	E	E		E	E	E	E	E					E		E	E
Caliche Liquor		E	E	E	E		E	E	E	E	E					E		E	E
Cane Sugar Liquors		E	E	E	E	G	E	E	E	E	E			E		E		E	E
Caprylic Acid		G	C				E			C	C							E	E
Carbamide		E	G	G			E			E	G								
Carbitol		G	E	C	G		E	G		X	G	E	X			G		E	E
Carbitol Acetate		X	G	X	G			X		X	X					X		E	E
Carbolic Acid	G	X	G	X	X		E	E		X	X	X	X			X	X	E	E
Carbon Bisulfide		X	X	X	X	X	E	E		X	X			X	X	X			
Carbon Dioxide		G	G	G	G		E	G		G	E	E	E			G		E	E
Carbon Dioxide (AQ)						E							E	E	E				
Carbon Dioxide Gas, Wet						E							E	E	E				
Carbon Disulfide		X	X	X	X		E	X		X	X	X	X			X		E	C
Carbon Monoxide	G	E	E	E	E	G	E	E		C	E	E	G	E	E	G	E	E	E
Carbon Tetrachloride	C	X	X	X	X	X	E	E		X	C	X	X	X	C	X	X	G	E
Carbon Tetrafluoride		X	X	X	X		E			X	C					X		C	C
Carbonic Acid	X	E	E	G	E	G	E	G		E	G	G	E	C	G	G	X		E
Casein						E							E	E	E				
Castor Oil	G	E	G	E	G	C	E	E		E	E	G	G	E	E	E	C	E	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Catsup														E					
Caustic Potash		E	E	G	E	C	E	C	E	E	E		C	E	E	G		E	E
Caustic Soda			E	E	E	G	E	G				G	C	E	E		E		
Cellosolve		G	E	X	E	C	E	C	E	G	X		G	C	G			E	E
Cellosolve Acetate		X	G	X	G		E	X		X	X	G	X			X		E	E
Celluguard		X	E	E	E		E	E		E	E	G	E			E			
Cellulube		X	G	X	E			C		C	X					X		E	E
Cetylic Acid	G	C	G	G	G		E	E		E	E	C	E			G	E		
China Wood Oil	C	E	X	E	X		E	E		X	E	G	C			X			
Chloracetic Acid						X							X	E	E				
Chloral Hydrate						C							G	E	E				
Chlordane		C	X	C	X			E		X	G	G	C			X			
Chloric Acid, 20%													X	E	E				
Chlorinated Hydrocarbons		X	X	X	X	X	E	E		X	X		X	X	X	X			
Chlorinated Solvents	X	X	X	X	X		E	E		X	X	X	X			X		X	G
Chlorine Dioxide		C	X	X	X			E		X	X					X		G	G
Chlorine Gas		X	X	X	X		E	E		X	X					X			
Chlorine Gas, Dry						X							X	G	G				
Chlorine Gas, Moist						X							X	C	C				
Chlorine Water Solutions		X	X	X	X		E	C	E	X	X					X		G	E
Chlorine Water, 2%						G							C	G	G				
Chlorine Water, Saturated						E							C	C	C				
Chloroacetic Acid		G	G	X	G		E	G		X	X	X	X			X	X	E	E
Chloroacetone		X	X	C	E		E	X		X	X		X			X		E	E
Chlorobenzene						X	E	E	G				X	X	X			G	G
Chlorobenzene, Mono, Di, Tri		X	X	X	X		E	E	G	X	X	E	X			X	X	C	E
Chlorobutadiene		X	X	X	X			E		X	X					X		G	G
Chlorobutane		X	C				E	E		X	X		C					G	G
Chloroethylbenzene	X	X	X		X		E	E		X			G			X		E	E
Chloroform	X	X	X	X	X	X	E	G		X	X	X	X	X	X	X	X	E	C
Chloropentane		X	C				E	E		X						X		E	E
Chlorophenol		X	X	C	X		E	E	G	X	X					X		E	E
2-Chlorophenol	G	X	X	X	X		E	E		X	X	X	X			X	X		G
2-Chloropropane		X	X	X	X		E	E		X	X	X	X			X	X		E
Chloropropanone		X	C	X	C		E	X		X	X					X			
3-Chloropropene		X	C	X	X		E	G		X	G					E			
Chlorosulfonic Acid	X	X	X	X	X		E	X		X	X	X	X			X	X	X	X
Chlorothene		X	X	X	X		E	E	E	X	X					X		G	G
Chlorotoluene		X	X	X	X		E	E		X	X	E	X			X		G	G
Chlorox		G	G	G	G		E	E		X	G	X	X			X		E	G
Chlorsulfonic Acid						X							X	C	C				
Chrome Alum						E							E	E	E				
Chrome Plating Solutions		X	X	X	X					X	X					X			
Chromic Acid	X	X	G	X	X		E	E		X	X	X	X			X	X	X	E
Chromic Acid, 50%						C							X	C	C				
Chromium Trioxide	X	X	G	X	X		E	E		X	X	X	X			X	X		
Cider						E								E					
Cinnamene		X	X	X	X		E	G		X	X		C			X			
Citric Acid	X	E	E	E	E	E	E	C		E	E	G	E	E	E	E	E	E	E
Coal Oil		C	X	G	X		E	E		X	E	E	C				X	E	C
Coal Tar		X	X	C	X	X	E	E		X	G		C	X	X	X	X	E	E
Coal Tar Naphtha		X	X		X		E	E		X	X		X			X			E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Cobalt Chloride		E	E	E	E		E	E		E	E		C	G	E	E		E	E
Coconut Oil		C	G	C	G	C	E	E		X	E		C	G	E	X		E	E
Cod Liver Oil		G	E	G	E		E	E	E	X	E					X		E	E
Coke Oven Gas		X	X	X	X		C	E		X	X	C	X			X			E
Coolanol		G	X	G	X			E		X	E		X			X			
Copper Arsenate		E	E	E	E		E	E	E	E	E					E		E	E
Copper Chloride	X	G	E	G	E	E	E	E		G	E	X	G	E	E	E		E	E
Copper Cyanide		G	E	E	E	E	E	E		E	E	X	E	E	E	E		E	E
Copper Fluoride, 2%						E							E	E	E				
Copper Hydrate		G	E				E	C		C	G							E	
Copper Hydroxide		G	E				E	C		C	G					G			E
Copper Nitrate		E	E	E	E					E	E					E			
Copper Nitrate						E	E	E	E				E	E	E			E	E
Copper Sulfate	X	E	E	E	E	E	E	E		G	E	G	G	E	E	G		E	E
Copper Sulfide		E	E	E	E		E	E		C	E					E		E	E
Corn Oil		G	G	C	X		E	E		X	E	G	E	E		X	E	E	E
Cottonseed Oil	G	G	C	C	C	E	E	E		X	G	E	E	G	E	X		E	E
Creosote (Coal Tar)		X	X	X	X		E	E		X	G	X	C			X		E	E
Creosote (Wood)		C	X	G	X		E	E		X	E					X		E	
Cresols		X	X	X	X	X	E	E		X	X	X	X	X		X	X	E	G
Cresote						X								X	X				
Cresylic Acid		X	X	X	X		E	G		X	X	X	X			X		E	G
Cresylic Acid, 50%						X							X	X	C				
Crotonaldehyde		X	E	X	E		E	X		X	X		X			C		E	E
Crude Oil, Sour						X							E	C	C				
Crude Oil, Sweet						X							E	C	C				
Cumene		X	X	X	X		E	E		X	X		X			X		E	E
Cupric Carbonate		E	E	E			E	E		C	E							E	E
Cupric Chloride		E	E	G	E		E	E	E	C	E					C		E	E
Cupric Hydroxide		G	E				E	C		C	G								
Cupric Nitrate		E	E	E	E		E	E	E	G	E					C		E	E
Cupric Sulfate		E	E	E	E		E	E		G	E	G	X			E		E	E
Cutting Oil		G	X	G	X		E	E		X	E		E			X			
Cyclohexane		X	X	X	X	C	E	E		X	G	E	G	X	X	X	X	E	E
Cyclohexanol		G	X	G	X	E	E	E		X	G	E	C	X	X	X	X	E	E
Cyclohexanone		X	X	X	C	E	E	X		X	X	E	X	X	X	X	X	E	X
Cyclopentane		X	X	E	X		E	E		X	G							E	E
Cyclopentanol		X	X					G		X	G					X		E	E
Cyclopentanone		X	X				E	X		X	X								E
Cyclopentyl Alcohol		X	X					G		X	G					X		E	E
P-Cymene	X	X	X	X	X		E	E		X	X		X			X		E	E
DDT In Deionized Kerosene		X	X	C	X		E	E	G	X	E	E	G			X		E	E
Decahydronaphthalene		X	X	X	X		E	E		X	X	E	X			X	X		
Decahydroxynaphthalene	C																		
Decalin		X	X	X	X		E	E	X	X	X	G	X			X	X	X	E
Decane		X	X	X	X			A		X	G					X		E	E
1-Decanol		E	X	X	X		E	G		X	E		E			X			E
Decyl Alcohol		E	X	X			E	G		X	E							E	E
Decyl Aldehyde		X	C				E	X		X								E	E
Decyl Butyl Phthalate		X	E				E	C		X	X							E	E
Decyl Carbinol		E	E				E	G		E	E								
Developing Fluid, Photo		E	G	E	G		E	E		E	E	E				G		E	E
Dextrin						E							E	E	E				

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Dextron		X	X	G	X			E		X	E		G			X			
Dextrose						E							E	E					
Diacetone Alcohol		X	E	X	E		E	X		X	X		X			X		E	C
Diacylmethane	G	X	E	X	E		E	X		X	X		X			X	E		
Diallylphthalate	G																		
Diammonium Phosphate	E	E	E	E	E		E	E		E	E	E				E			
Diamyl Naphthalene		X	E				E	C		X									E
Diamyl Phenol		X	X				E	E		X	X					X			E
Diamylamine		C	E		E		E	X		G	G		X			X			
Diamylene		X	X	X			E	E		X	C	G							E
Diazo Salts						E								E	E				
Dibenzyl Ether		X	G	X	C		E	X		X	X		G			X		E	E
Dibenzylsebacate		X	G	X	G		E	G	E	C	X					X		E	E
Dibromobenzene		X	X				E	E		X								G	E
Dibromomethane		X	X	X	C		E	G		X	X						X		
Dibutyl Ether		X	X	X	X		E	X		X	X		X			X		E	E
Dibutyl Phthalate		X	C	X	E		E	C		X	X	E	X			X		E	E
Dibutyl Sebacate		X	G	X	G		E	E		X	X		X			X		E	E
Dibutylamine		X	X	X	X		E	X		X	X		X			X		E	
Dicalcium Phosphate		E	E				E	E		E	E								E
Dichloro Difluoro Methane	C	E	X	G	C		E	G		X	C	G	E			E	X		
Dichloro Ethylene		X	C	X	X		E	G				C	C				X		
Dichloroacetic Acid		X	C				E	X		G			C					E	E
Dichlorobenzene						X								X	X				
Ortho-Dichlorobenzene		X	X	X	X		E	E		X	X	E	X			X	X		
P-Dichlorobenzene		X	X	X	X		E	E	G	X	X					X		X	X
Para-Dichlorobenzene		X	X	X	X		E	E		X	X		X			X			G
Ortho-Dichlorobenzol		X	X	X	X		E	E		X	X	E	X			X	X		X
Dichlorobutane		X	X	X	C		E	E		X	G		X			X		E	G
Dichloroethane	X	X	C	X	X		E	G		X	X	C	X			X	X		E
Dichloroethyl Ether		X	X				E			X	X					X			E
Dichloroethylene		X	X	X	X		E	E	X	X	X					X		C	C
Dichlorohexane		X	X				E	E		X								E	E
Dichloroisopropyl Ether		X	C	X	C			C		X	X					X		E	E
Dichloromethane		X	X	G	C		E	G		X	X	C				X	X	E	E
Dichloropentane		X	X	X			E	E		X	X		X			X		E	E
Dichloropropane		X	X	X			E	E		X	X							E	E
Dichloropropene							E	E										E	E
Dichlorotoluene	X																		
Diesel Oil	E	C	X	C	X		E	E		X	E	E	C	C	C	X	X	E	G
Diethanolamine		C	E		E		E			G		G				X		E	
Diethyl Benzene		X	X	X	X		E	E	G	X	X					X		E	E
Diethyl Ether		X	X	X	X	X	E	X		X	X	E	E	X	X	X	E	G	
Diethyl Ketone		X	G	X	E		E	X		X									G
Diethyl Oxalate		X	X	X	X		E			X	X								E
Diethyl Phthalate		X	E				E	C		X								E	E
Diethyl Sebacate		C	G	X	G		E	G		X	X		X			X	E		
Diethyl Sulfate		X	G	E	E		E	X		X	X		X			E			
Diethyl Triamine		C	E				E			G	G								
Diethylamine		X	G	G	G					G	C					G			
Diethylamine		C	G	G	G		E	X		G	C		C			G		E	C
Diethylbenzene		X	X	X	X		E	E		X	X		X			X		E	E
Diethylene Dioxide		X	G	X	G		E	X	E	X	X					X		E	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to **Names and General Properties of Hose Materials** table.

**Key: E = Excellent G = Good C = Conditional
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Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Diethylene Glycol		E	E	E	E	G	E	E		E	E	E	X	G	G	E		E	E
Diethylene Oxide			X		E		E			E	E								
Diethylene Triamine		C	E		E		E			G			X			X	E	E	
Diglycolic Acid						E								E	E				
Dihydroxy Diethyl Ether		E	E	E	E		E	E	E	E	E					E		E	E
Dihydroxy Succinic Acid		E	G	C	G		E	E		E	G		E						
Diisobutyl Ketone		X	G	X	E		E	X		X	X		X			X		E	E
Diisobutylene		X	X	C	X		E	E		X	E		X			X		E	E
Diisododecyl Phthalate		X	E		E		E	C		X						X		E	E
Diisododecyl Phthalate		X	E	X	E		E	C		X	X			X					
Diisooctyl Adipate		X	E	X	E		E	C		X	X					X		E	E
Diisooctyl Phthalate		X	E		G		E	C		X								E	E
Diisopropanolamine		C	E				E			G	G								
Diisopropyl Benzene		X	X	X	X		E	E	G	X	X					X		E	E
Diisopropyl Ether		C	X	X	X		E	X		X	G		G			X			E
Diisopropyl Ketone		X	E	X	E		E	X		X	X		X			X			E
Dilauryl Ether		C	D	X	X		E	C	G	X	C					X		E	E
Dimethyl Phenols (DMP)		X	X	X	X		E	X	E	X	X					X		C	C
Dimethyl Phthalate		X	G	X	G		E	G	E	X	X		X			X	G	E	E
Dimethyl Sulfate		X	G	X	X		E	X	X	X	X					X		E	X
Dimethyl Sulfide		X	C	X	X		E	C	E	X	X					X		G	G
Dimethylamine		X	G	X	X	X	E	X			X	E	X	X	X			E	X
Dimethylaniline	C	X	X	X	G		E	X			X		X			X		G	G
Dimethylbenzene	C	X	X	X	X		X	E			X	G	X			X	X	E	
Dimethylbutane	G																		
Dimethylcarbinol		E	E	E	G		E	E		E	G							E	
Dimethylformamide (DMF)		C	C	C	C		E	X	E	C	X					C		E	E
Dimethylketone	G	X	E	X	E		E	X			X	E	X			C	E	E	
Dinitrobenzene		X	C	C	C		E	E	G	X	X					X		E	E
Dinitrotoluene		X	X	X	X		E	G	E	X	X					X		E	E
Diocetyl Adipate (DOA)		X	E	X	G		E	C		X	X							E	
Diocetyl Phthalate (DOP)		X	G	X	G	G	E	G		X	X	E	X	X	X	X		E	E
Diocetyl Sebacate (DOS)		X	G	X	G		E	G	E	X	X					X		E	E
Dioxalanes		X	X	X	G		E	X	G	X	X		X			X		E	E
Dioxane		X	G	X	G		E	X		X	X	E	X			X		E	E
1,4 Dioxane		X	G	X	G		E	X		X	X	E	X			X	X		E
Dipentene		X	X	X	X		E	E		X	G		X			X			
Dipentylamine		C	E		E		E	X		G	G		X			X			
Diphenyl		X	X	X	X			A		X	X					X		E	E
Diphenyl Oxide		C	X	X	X			A		X	X					X		E	E
Di-P-Mentha-1,8-Diene		X	X	X	X		E	E		X	G		X			X			
Dipropyl Ketone		X	G	X	G		E	X	E	X	X					X		E	E
Dipropylamine		C	E				E			G	G								
Dipropylene Glycol		E	E				E	E		E	E								
Disodium Phosphate		E	E		E	E	E	E		E	E		E	E	E			E	E
Divinyl Benzene		X	X				E	E		X						X		E	E
Dodecyl Benzene		X	X	X	X		E	E	G	X	X					X		E	E
Dodecyl Toluene		X	X	X	X		E	E	G	X	X					X		E	E
Dowell Inhibitor	G																		
Dowfax 2A1 Solvent	E																		
Dowfax 2A1 TA	E																		

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

**Key: E = Excellent G = Good C = Conditional
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Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Dowfax 6A1 Solvent	G																		
Dowfax 6A1 Ta	E																		
Dowfume W 40, 100%		C	D	C	C			C		X	X					X		G	G
Dow-Per		X	X	X	X		E	E	G	X	C					X		E	E
Dowtherm A & E	X	X	X	X	X		E	E	E	X	X	X	X			X		E	E
Dowtherm S.R.I.		E	E	E	E		E	E	E	E	E					E		E	E
Dry Cleaning Fluids		X	X	X	X		E	E			C	E	X			X		G	X
Ducgkiriebaane			X																
Duro AW16, 31					X		E				E	E							
Duro FR-HD					X		E				E	E							
Epichlorohydrin		C	C	X	G		E	X	G	X	X					X		G	G
Ethanoic Acid	E	C	G	G	E		E	X		X	C	X	X			G	C	E	E
Ethanolamine		X	G	G	G		E	X		G	G	E	C			X		E	E
Ethanol (Ethyl Alcohol)	G	E	E	E	E		E	C		E	E	G	X			E	E	E	E
2 (2Aminoethylamino) Ethanol		G	E							G	G								
2 (2Ethoxyethoxy) Ethanol		X	G	X	G		E	X		X	X	E	X			X	X		
2-Ethoxyethanol		X	G	X	G		E	X		X	X		X			X	X		
Ethers	G	X	X	X	C	X	E	X		X	X	E	X	X	C	X		C	
Bis (2-Chloroethyl) Ether		X	X				E			X	X					X			
Ethyl Acetate	G	X	G	X	E	C	E	X		X	X	E	X	X	C	X	E	E	G
2-Ethoxyethyl Acetate	X	X	G	X	G		E	X		X	X	G	X			X	X		
2 (2Ethoxyethoxy) Ethyl Acetate	X	X	G	X	X		E	X		X	X		X			X	X		
Ethyl Acetoacetate		X	G	X	G		E	X		C	X					C		E	E
Ethyl Acetone		X	G	X	G		E	X		X	X					X			
Ethyl Acrylate		X	G	X	G		E	X		X	X		X	X	X	X		E	G
Ethyl Alcohol (Ethanol)	G	E	E	E	E		E	E		E	E	G	X			E	E	E	E
Ethyl Alcohol, 1%-50%						G								G	G				
Ethyl Alcohol, 50%-98%						C								C	C				
Ethyl Aldehyde	E	C	G	X	E		E	C		X	X	G	X			E	E	E	E
Ethyl Aluminum Dichloride		X	X				E	G		X	X								G
Ethyl Benzene		X	X	X	X		E	E		X	X		X			X		E	X
Ethyl Benzoate		C	G	C	G			C		X	G					X		E	E
Ethyl Bromide		X	X	X	X		E	E		C	G		X			X			X
Ethyl Butanol		E	E	E	E		E	G	E	E	E							E	E
Ethyl Butyl Acetate		G	E				E	X		X	X							E	E
Ethyl Butyl Ketone		X	G				E	X		X	X								E
2-Ethyl (Butyraldehyde)		X	G				E	X		X	X								E
Ethyl Cellulose		G	G	G	G		E	X		G	G	C	G			G		E	E
Ethyl Chloride	X	C	E	X	E	X	E	E		C	E	E	C	X	X	G	X	G	C
Ethyl Dichloride		X	X	X	X		E	G	G	X	X		X			X		G	G
Ethyl Diisobutylthio-Carbamate										E						E		E	
Ethyl Ether	G	X	X	X	X	X	E	X		X	X	G	C	X	X	X		C	C
Ethyl Formate		G	G	G	G		E	E		X	X					X		E	E
Ethyl Hexanol		E	E	E	E		E	G	E	E	E					E		E	E
2-Ethyl-1-Hexanol		E	G	E	E		E	E		G	E		X			E	E		E
2-Ethylhexanoic Acid		G	C				E			C	C								
2-Ethylhexyl Acetate		G	E				E	X		X	X								
Ethyl Iodide		X	C	X	C		E	G		X	X							G	E
Ethyl Methyl Ketone		X	G	X	G		E	X	E	C	X					X		E	E
Ethyl Oxalate		X	X	X	C		E	E		C	X		E			X		E	E
Ethyl Phthalate		X	E				E			X	X							E	
Ethyl Propyl Ether		X	X	X	X			C	E	X	X					X		E	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
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Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Ethyl Propyl Ketone		X	G	X	G		E	X	G	X	X					X		E	E
Ethyl Silicate		G	E	E	E		E	E		G	E		X			G		E	E
Ethyl Sulfate		X	G	D	G		E	X	E	X	X					X		E	E
Ethylamine		C	G	X	E		E	X		C	X	E	X			C		E	E
Ethylene		C	X	G	X			E		X	E					X		E	E
Ethylene Bromide		X	X	X	X	X	E	E	G	X	X		X	E	X	X		G	G
Ethylene Chloride	X	C	C	X	X	X	E	G	G	X	X	G	X	X	X	X	X	C	X
Ethylene Chlorohydrin		C	G	G	G		E	E		C	X	E						E	E
Ethylene Diamine		G	E	E	E		E	X		G	G	E	X			G		E	E
Ethylene Dibromide		X	X	X	C		E	G		X	X		X			X		G	G
Ethylene G Monobutyl Ether		C	E	C	E		E	X		X	C		X			X			E
Ethylene G Monoethyl Acetate		X	E	X	E		E	E		C	C		X						
Ethylene G Monoethyl Ether																			E
Ethylene G Monomethyl Ether		G	E	E	G		E	X		X	C								E
Ethylene Glycol	G	E	E	E	E	E	E	E		E	E	E	G	E	E	E	E	E	E
Ethylene Oxide	X	X	X	X	C	X	E	X		X	X	E	X	X	X	X		E	G
Ethylene Trichloride		X	X	X	X		E	E	G	X	C					X		G	G
Fatty Acids		C	X	G	X	C	E	E		X	E	E	C	E	E	X	X	E	E
Ferric Bromide		E	E				E	E		E	E							E	E
Ferric Chloride	X	E	E	E	E	E	E	E		E	E	X	E	E	E	E		E	E
Ferric Nitrate		E	E	E	E	E	E	E		E	E	E	E	E	E	E		E	E
Ferric Sulfate	X	E	E	E	E	E				E	E		E	E	E	E			
Ferrous Acetate		E	E				E	X		X	X								E
Ferrous Ammonium Sulfate		E	E	E	E			A		E	E					E		E	E
Ferrous Chloride		G	G	G	E	E	E	E		E	E	E	G	E	E			E	E
Ferrous Hydroxide		G	E	E	E		E	C	E	G	G					C		E	E
Ferrous Sulfate		E	E	E	E	E	E	E		E	E	G	E	E	E	E		E	E
Fish Oil		E	E	E	X		E	E		X	E					X		E	E
Fish Solubles						E							E	E	E				
Fluoboric Acid		E	G	E	E		E	E		E	E		X			E		C	C
Fluorine		X	X	X	E		G	E		X	X	X	X					C	X
Fluorine Gas, Dry						X							X	X	X				
Fluorine Gas, Wet						X							X	X	X				
Fluoroboric Acid						E							E	E	E				
Fluorosilic Acid		E	E	E	E	G	E	C	E	E	E		X	E	E	G	C	C	G
Foric Acid						E							X	E	E				
Formaldehyde	G	G	E	G	E		E	E			C	G	X			C	E	E	E
Formaldehyde (40% AQ)						E								X	G				
Formalin	G	G	E	G	E		E	E			C	G	X			C	E	E	E
Formamide		E	E	E	E		E	X	E	E	E					E		E	E
Formic Acid	X	E	E	E	E	E	E	X		C	C	X	X			E	E	E	E
Freon 11		E	X	G	X			E		G	E					X		E	E
Freon 12	C	E	C	E	C	G	E	G		C	E	E	E	C	G	E	X		E
Freon 13		E	E	E	E			E		E	E					E		E	E
Freon 21		X	X	G	X			X		X	X					X		E	E
Freon 22	C	E	X	E	E		E	C		C	X	G	X			E	X		
Freon 31		G	E	E	E			X		G	X					G		E	E
Freon 32		E	E	E	E			C		E	E					E		E	E
Freon 112		G	X	G	X			E		X	G					X		E	E
Freon 113		E	X	E	X		E	G		X	E	E	G			G	X	E	E
Freon 114		E	E	E	E			G		E	E					E		E	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
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Freon 114B2		E	X	E	X			G		X	G					C		E	E
Freon 115		E	E	E	E			G		E	E					E		E	E
Freon 13B1		E	E	E	E			E		E	E					E		E	E
Freon 142B		E	E	E	E			X		E	E					E		E	E
Freon 152A		C	E	E	E			X		E	E					E		E	E
Freon 218		E	E	E	E			E		E	E					E		E	E
Freon 502			E	E	E			G		E	G	E				E			
Freon BF		G	X	G	X			E		X	G					X		E	E
Freon C316		E	E	E	E			E		E	E					E		E	E
Freon C318		E	E	E	E			E		E	E					E		E	E
Freon MF		B	X	C	X			E		X	E					G		E	E
Freon TA		E	E	E	E			C		E	E					E		E	E
Freon TC		E	E	E	G			E		X	E					G		E	E
Freon TF		E	E	E	E			E		C	E					G		E	E
Freon TMC		G	G	G	G			E		G	G					C		E	E
Freon T-P35		E	E	E	E			E		E	E					E		E	E
Freon T-WD 602		G	E	G	G			E		C	E					G		E	E
Fructose						E							E	E					
Fruit Juices & Pulp						E							E	E					
Fuel Oil	E	C	X	G	X	X	E	E		X	E	G	C	G	G	X		E	E
Fumaric Acid		G	X	G	X		E	E	E	E	E					E		E	E
Furaldehyde	E	C	E	C	G		E	X		X	X	C	X			X	E		
Furan		X	X	X	X		E	C		X	X		X			X			
Furfural	E	C	E	C	G	X	E	X		X	X	E	X	X	X	X	E	E	E
Furfuryl Alcohol		X	G	X	G	X	E	C		X	X	G	X			X	E	E	C
Gallic Acid		G	G	G	G	E	E	E		E	G	G	X	E	E	G		E	C
Gallotannic Acid		E	G	E	E		E	E		E	E	E	E					E	E
Gas, 100 Octane		X	X	C	X					X	E					X			
Gas, Coal				E	E			E			X	E	G						
Gas, Coke Oven													G	G	G				
Gas, Natural, Dry						X							C	C	C				
Gas, Natural, Wet						X							C	C	C				
Gasoline	E	X	X	X	X	X	E	G	G	X	E	G	C	X	X	X		G	G
Gasoline, 100 Octane							E	E				G	C				X	C	
Gasoline, Sour						X							E	C	G				
Gelatin		E	E	E	E		E	E	E	E	E					E		E	E
Gelatine						E							E	E	E				
Glacial Acrylic Acid																			E
Gluconic Acid		G	C				E			X	C							E	
Glucose		E	E	G	E	E	E	E		E	E	E	C	E	E	E		E	E
Glue		E	G	E	E		E	C	E	G	E					G		E	E
Glycerine	E	E	E	E	E	E	E	E		E	E	E	C	E	E	E	X	E	E
Glycerol	E	E	E	E	E		E	E		E	E	E	C			E	X	E	E
Glycogenic Acid		G	C				E			X	C								
Glycolic Acid, 30%						E							X	E	E				
Glycols		E	E	E	E	E	E	E	E	E	E	E	X	E	E	E	G	E	E
Glyconic Acid		G	C				E			X	C							E	
Glycyl Alcohol	E	E	E	E	E		E	E		E	E	G	C			E	X		
Grease													E	E	E				
Grease, Petroleum Base	E	X	X	C	X		E	E		X	E	E	E			X	X	E	G
Green Liquor						E								E	E				
Green Sulfate Liquor		G	E	G	E		E	E		G	G	X	E			G		E	E
Halon 1211				E							E								

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to **Names and General Properties of Hose Materials** table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Halowax Oil		X	X	X	X		E	E	E	X	X					X		E	E
Helium		E	E	E	E		E	E		E	E	E	E			E			
1-Hendacetal	E																		
Heptachlor In Petroleum Solvents		X	X	G	X		E	E	G	X	G					X		E	E
Heptachlor In Petroleum Solvents, Water Spray		X	X	G	X			E		X	G					X		E	E
Heptaldehyde		X	X				E	X		X	E								
Heptanal		X	X				E	X		X	E							E	E
Heptane	E	G	X	G	X	X	E	E		X	E	E	G	C	G	X		E	G
Heptane Carboxylic Acid		G	C				E			X	C								
Heptanoic Acid	E																		
Heptanone	C																		
Hexadecanoic Acid	G	C	G	G	G		E	E		E	E	C	E			G	E		
Hexadecanol						X													
Hexaldehyde		C	G	E	E		E	X		X	X		G			X		E	E
Hexane		E	X	E	X		E	E		X	E	E	G	C	C	X	E	E	G
Hexanol		G	C	G	G		E	E		E	G	E	X			E		E	E
Hexanol, Tertiary						C							G	C	C				
Hexene		G	X	G	X		E	E		X	G		G			X			E
Hexyl Alcohol		G	C	G	G		E	G		E	G	E	X			E		E	E
Hexyl Methyl Ketone		X	G				E	X		X	X								E
Hexylamine		C	G				E	X		C	C								
Hexylene		X	X	G	C		E	E		X	E					X		G	G
Hexylene Glycol		E	E	E	C		E	E		E	E								
Histowax	E																		
Hydraulic Fluid, Petroleum	E	G	X	G	X		E	E	E	X	E	E				X	X	E	E
Hydraulic Fluid, Phosphate Ester Base		X	E	X	E		E	X	E	X	X					X		E	E
Hydraulic Fluid, Poly Alkylene Glycol Base		E	E	E	E			E		G	E					G		E	E
Hydrazine		G	E	G	E		E	E		X	G	X				G			E
Hydrobromic Acid	X	E	E	X	E		E	E		E	X	X	X			X		E	E
Hydrobromic Acid, 20%						G							X	E	E				
Hydrochloric Acid	X	C	E	C	C		E	C	E	C	C	X	C			X	E	E	E
Hydrochloric Acid, 10%						E							X	E	E				
Hydrochloric Acid, 48%						G							X	E	E				
Hydrocyanic Acid	X	E	G	G	E		E	E		G	G	G	X			G	E	E	E
Hydrofluoric Acid	X	E	G	C	C		E	G		C	C	X	X			C	X	E	E
Hydrofluoric Acid, 60%						E							X	G	G				
Hydrofluosilicic Acid	X	E	E	G	E		E	E		E	G	X	C	G	G	G		G	E
Hydrogen						C							C	C	C				
Hydrogen Bromide, Dry						E													
Hydrogen Chloride, Anhydrous	E											X						E	E
Hydrogen Chloride, Dry						E													
Hydrogen Cyanide						C							X	C	C				
Hydrogen Dioxide, 10%		G	C	X	G		E	E		G	C	X						E	E
Hydrogen Gas	C	E	E	E	E		E	E		G	E	E	E			G		E	E
Hydrogen Peroxide, 3%		C	C	C	E		E	E	E	X	C					X		E	E
Hydrogen Peroxide, 10%		E	G	X	G	G	E	E		G	C	C	G	E	E	C		G	G

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Hydrogen Peroxide, 30%	X	X	X	X	C	G	E	E	E	X	X	X	C	E	E	X		E	E
Hydrogen Peroxide, 50%						X							C	E	E				
Hydrogen Peroxide, 90%	X	X	X	X	C	X	E	G		X	X	X	C	X	X	X		G	G
Hydrogen Phosphide						E								E	E				
Hydrogen Sulfide (AQ)						E								E	E				
Hydrogen Sulfide, Dry						E								E	E				
Hydrogen Sulfide, Wet	X	E	E	E	E		E	C		X	C	C	C			X		E	E
Hydroquinone		C	G	X	G	E	E	X	E	G	X		E	E	E	G		E	E
Hydroxy Benzene		C	G	X	C		E	E		X	X		C						
2-Chloro-1-Hydroxy-Benzene	C																		
Hydroxyisobutyronitrile	E																		
Hydroxytoluene	E																		
Hypochlorous Acid		E	G	G	G	C		E		G	X		C	E	E	G		E	E
Hyvar XI					E														
Iminodi-2-Propanol	E																		
Iminodiethanol	E																		
Ink Oil, Linseed Oil Base		G	G	G	G		E	E	G	X	G					X		E	E
Inks						E													
Insulating Oil		X	X	G	X		E	E	E	X	E					X		E	E
Iodine		G	G	X	G		E	E		X	G	X	X			G		E	X
Iodine in Alcohol						X							X	X	X				
Iodine Pentafluoride		X	X	X	X		E	X		X	X		X			X		C	C
Iodoform				X	X					X	E					X			
IRM-902	E	X	X	G	X		E	E		X	E	E	G			X	X	E	E
IRM-903		G	X	C	X		E	E		X	E	E	E			X	X	E	E
Iron Acetate		X	E	X	G		E	X	E	X	X					X		E	E
Iron Hydroxide		G	E	E	G		E	C	E	C	G					C		E	E
Iron Salts		E	E	E	E		E	E	E	E	E					E		E	E
Iron Sulfate		E	E	E	E		E	E	E	E	E					E		E	E
Iron Sulfide		E	E	E	E		E	E	E	E	E					E		E	E
Isobutane	G	E	E	E	E		E	G		E	G					E		E	E
Isobutyl Acetate		X	E	X	G		E	X	G	X	X					X		E	E
Isobutyl Aldehyde		X	G	X	G		E	X		C	X					X		E	E
Isobutyl Chloride		X	X	X	X		E	G	G	X	X					X		G	G
Isobutyl Ether		X	X	X	X		E	X		X	X					X		E	E
Isobutylamine		C	E				E	X		C	X								
Isobutylbromide		X	X				E	G		X	X								
Isobutylcarbinol		E	E	E	E		E	E		E	E		C						
Isobutylene		X	X	X	X		E	E	G	X	E					X		E	E
Isocyanates								G			G	G	G					E	E
Isomyl Acetate		X	E	X	G		E	X	G	X	X					X		E	E
Isomyl Alcohol		E	E	E	E		E	E	E	E	E					E		G	E
Isomyl Bromide		X	X	X	X		E	G		X	X					X		G	G
Isomyl Butyrate		X	C	X	C		E	X	G	X	X					X		G	G
Isomyl Chloride		X	C	X	X		E	G	G	X	X					X		G	G
Isomyl Ether		X	X	X	X		E	X		X	X					X		E	E
Isomyl Phthalate		X	E	X	G		E	C		X	X					X		E	E
Isooctane	E	G	X	G	X		E	E		X	E	E	G	C	C	X	X	E	E
Isopentane		X	X	E	X		E	E	G	X	E					X		G	G
Isopropyl Acetate		X	G	X	G		E	X		X	X	G	X	X		X		E	E
Isopropyl Alcohol (Isopropanol)		E	E	G	E	E	E	E		E	E	E	X	E	E	E		E	E
Isopropyl Amine		C	E	E	G		E	X	G	G	G					C		E	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to **Names and General Properties of Hose Materials** table.

**Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended**

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTEE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Isopropyl Benzene		X	X	X	X		E	E	G	X	X					X		E	E
Isopropyl Chloride		X	X	X	X		E	G		X	X					X		G	G
Isopropyl Ether		C	X	X	X		E	X		X	G	E	G			X		E	E
Isopropyl Toluene		X	X	X	X		E	E		X	X					X		E	E
Jelly														E					
Jet Fuels (JP1-JP6)		X	X	X	X		E	E		X	E	C	C	X	X	X	X	E	E
JP-4 Oil		X	X	X	X		E	E		X	E	C	C			X	X		
Kerosene	G	X	X	C	X	X	E	E		X	E	E	G	X	C	X	X	E	E
Ketones	G	C	G	X	E	C	E	X		C	X	E	X	X	X	G	X	C	X
Kraft Liquor						G								E	E				
Lacquer Solvents	C	X	X	X	X	C	E	X		X	X	E	X	X	X	X		G	G
Lacquers		X	C	X	X		E	X	E	X	X					X		G	G
Lactic Acid, 28%						E							C	E	E				
Lactic Acid, Cold	X	E	E	E	E		E	E		E	E	E	G			E		E	E
Lactic Acid, Hot		C		X	X		E	E		X	X	X				X			
Lard		G	C	G	G	G	E	E		X	E	E	C	E	E	X	E	E	E
Lauric Acid													C	E	E				
Lauryl Alcohol		E	E	E	E		E	G	E	E	E					E		E	E
Lauryl Chloride						C							E	E	E				
Lauryl Sulfate						X							E	E	E				
Lavender Oil		X	X	X	X		E	E		X	G		X			X		G	G
Lead Acetate		C	E	G	E	E	E	E		E	G	G	C	E	E	X		E	E
Lead Arsenate						E								E	E				
Lead Nitrate		C	E	E	E	E	E	E		E	E			E	E	E		E	
Lead Sulfamate		G	E	E	E			E		G	G					G		E	E
Lead Sulfate		E	E	G	E		E	E		E	E	G						E	E
Lead Tetra-ethyl						E								E	E				
Lemon Juice														E	E				
Ligroin		X	X	E	X		E	E	G	X	E					X		E	E
Lime		E	E	E	E		E	E		E	E	E	G						E
Lime Bleach		G	E	G	E		E	E		E	E	G				E			
Lime Sulfur						G								E	E				
Lime Sulfur, Wet		G	E	E	C		E	E		C	E	G						E	E
Lime Water		E	E	E	E			E		X	C					X		E	
Limonene		X	X	X	X		E	E		X	X								
Lindol		G	E	X	E			E		X	X					X		E	E
Linoleic Acid		X	X	C	X		E	G		X	G		C	E	E	X		E	E
Linseed Oil	G	G	G	E	C	C	E	E		X	E	E	G	E	E	X		E	C
Liquid Soap		E	E	E	E		E	E	E	E	E					E		E	E
Liquors, Chemical						E								E	E				
Lubricating Oils, SAE	G	X	X	C	X	X	E	E		X	E	E	E	G	G	X	X	E	X
Lye		E	E	E	E			X		E	G					G		E	E
Lye Solutions	C	E	E	E	E		E	G		E	C	G	G			G	C	E	E
Magnesium Acetate		E	E	X	E		E	X		X	X		X			X			E
Magnesium Carbonate		E	E	E	E	E	E	E	E	E	E		E	E	E	E		E	E
Magnesium Chloride	G	E	E	E	E	E	E	E		E	E	E	E	E	E	E		E	E
Magnesium Hydrate		E	E	G	E		E	G		E	G		E					E	
Magnesium Hydroxide	G	E	E	E	E	E	E	E		E	E	E	C	E	E	G		E	E
Magnesium Nitrate		E	E	E	E	E	E	E	E	E	E		E	E	E	E		E	E
Magnesium Sulfate	G	E	E	E	E	E	E	E		G	E	E	C	E	E	G		E	E
Magnesium Sulfite		E	E	E	E			E		E	E					G			
Malathion 50 In Aromatic Solvents		X	X	C	X		E	E	E	X	C					X		E	E
Maleic Acid		X	X	X	E		E	E		X	C	X	C			X		E	C
Maleic Acid (25% AQ)						E							C	E	E				

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Maleic Anhydride		X	X	X	X		E	E		X	X					X			E
Malic Acid		G	X	G	X	G	E	E		E	E	X	C	E	E			E	E
Manganese Sulfate		E	G	E	E		E	E		G	E		E					E	E
Manganese Sulfide		E	E	G	G		E	E	E	C	E					E		E	E
Manganese Sulfite		E	E	G	G		E	E	E	C	E					E		E	E
MAPP				E	G						E					G			
Mayonnaise														E					
Mercuric Chloride		E	E	C	E	G	E	E	E	G	G		G	G	G	G		E	E
Mercuric Cyanide						G								X	X				
Mercurous Nitrate						G							G	G	G				
Mercury	G	E	E	E	E	G	E	E		E	E	E	E	G	G	E		E	E
Mercury Vapors		E	E	C	E		E	E		C	E					E			
Mesityl Oxide		X	C	X	G		E	X		X	X		X			X		E	E
Methacrylic Acid		C	G	G	G			X		X	X					X		E	E
Methallyl Alcohol		E	E				E	G		E	E	X						E	E
Methallyl Chloride	C											E						G	X
Methane		G	X	G	X		E	E		X	E					X		E	E
Methanoic Acid	X	E	E	E	E		E	X		C	C	X	X			E	E	E	C
Methanol (Methyl Alcohol)	G	E	E	E	E		E	C		E	E	G	X			E	E	E	C
Methoxy Ethanol	E																		
Methoxyethoxy Ethanol																			
Methyl Acetate		C	G	C	G	X	E	X		X	X	E	X	X	X	X		E	E
Methyl Acetoacetate		X	G	X	G		E	X		X	X		X						E
Methyl Acetone		X	G	X	E		E	X		C	X							E	
Methyl Acetylene Propadiene				E	G						E					G			
Methyl Acrylate		X	G	C	G		E	X	E	C	X					X		E	E
Methyl Allyl Alcohol		E	E				E	G		E	E								
Methyl Allyl Chloride	C	X	X					X		X						X			G
Methyl Amyl Carbinol		E	E				E	G		E	E								E
Methyl Benzene	C	X	X	X	X		E	E		X	X	E	X			X	X	E	X
Methyl Bromide		X	C	X	C	X	E	E		X	G	E	X	X	X	X	X	G	X
Methyl Butane		X	X	X	X		E	E			E		G						
1-Bromo-3 Methyl Butane		X	X	X	X		E	G		X	X								
1-Chloro-3-Methyl Butane		X	C	X	X		E	E		X	X	E							
Methyl Butanol	E	E	E	E	E		E	E		E	E	E	X			G	E	G	E
Methyl-2-Butanol	E	E	E					F		E						E			E
Methyl-2-Butanone	X	X	G	X	C		E	X		X	X	E	X			X			E
Methyl Butyl Ketone		X	E	X	E		E	X		X	X	E	X			X		E	
Methyl Carbitol		E	E				E			X	C								E
Methyl Cellosolve		C	G	G	G		E	X		X	C	E	X			X		E	E
Methyl Chloride	C	X	X	X	X	X	E	E		X	X	C	X	X	X	X	X	E	X
Methyl Cyanide		G	E	E	E		E	X		G	C	E							
Methyl Cyclohexane		X	X	X	X		E	G		X	X					X		G	G
Methyl Ethyl Ketone (MEK)	G	X	E	X	E	C	E	X		X	X	G	X	X	X	X	C	X	G
Methyl Formate		C	G	G	G		E	C	E	C	X					C		G	G
Methyl Hexanol		E	E				E	G		E	E							E	E
Methyl-2-Hexanone	C	X	G					X		X						X			E
Methyl Isoamyl Ketone	C					C								X	X				
Methyl-4-Isopropyl Benzene	C																		
Methyl Methacrylate		X	C	X	X		E	X		X	X	C	X			X	C	G	G
Methyl Normal Amyl Ketone		X	G				E	X		X	X								E
Methyl-2-Pentanol		E	E	E	E		E	C		G	G								
Methyl-2-Pentanone	X	X	C	X	G		E	X		X	X	G	X			X	X		

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Methyl-3-Penten-1-One	C																		
Methyl 1-2,4-Pentanediol	E																		
Methyl-1-Propanol		E	E	E	E		E	E		E	G		X			E			
1-Bromo-2 Methyl Propane		X	X	X			E	G		X	X								
1-Chloro-2-Methyl Propane		X	X				E	G		X	X								
3-Chloro-2-Methyl Propane	G																		
Methyl-2-Propen-1-OL		E	E	E	E		E	C		G	G								
Methyl Propyl Ether		G	X				E			X	X								E
Methyl Salicylate			G	X	C		E	G		X	X								
Methyl Styrene	C																		
Methyl Sulfate													E	E	E				
Methyl Sulfide		X	C				E			X	X								
Methyl Sulfuric Acid						E							X	E	E				
Methyl Tertiary Butyl Ether (MTBE)	X		G	X			G	X			X					X		G	
Methylallyl Acetate		G	E				E	X		X	X								E
Methylamyl Alcohol		E	E	E	E		E	C		G	G								E
Methylated Spirit						E													
Methylene Bromide		X	X	X	X		E	C		X	X							G	
Methylene Chloride		X	X	X	C	X	E	G		X	X	C	X	X	C	X	X	E	C
Methylhexyl Ketone		X	G				E	X		X	X								E
Methylisobutyl Carbinol		E	E	E	E		E	C		G	G								C
Methylisobutyl Ketone	X	X	C	X	G		E	X		X	X	G	X			X	X	E	E
Methylisopropyl Ketone	X	X	G	X	C		E	X		X	X	E	X			X			E
Methylacetonitrile		C	E	G			E	X		C	X		X				E		
Methylphenol		C	X	X	X		E	E		X	X		X						
Methylpropyl Carbinol		E	E				E	G		E	E								
Methylpropyl Ketone		X	G	X	G		E	X		X	X					X			E
Mil-A-6091		E	E	E	E			E		E	G		X			E			
Mil-E-9500		E	E	E	E			E		E	E		X			E			
Mil-F-16884		C	X	C	X			E		X	E		C			X			
Mil-F-17111		X	X	G	X			E		X	E		C			X			
Mil-F-25558B		G	X	G	X			E		X	E		G			X			
Mil-F-25576C		C	X	C	X			E		X	E		C			X			
Mil-F-7024A		X	X	X	X			E		X	E		G			X			
Mil-G-10924B		G	X	X	X			E		X	E		G			X			
Mil-G-25013D		G	X	G	X			E		X	E		C			X			
Mil-G-25537A		G	X	G	X			E		X	E		G			X			
Mil-G-4343B		G	C	G	C			E		C	G		E			C			
Mil-G-5572		X	X	X	X			E		X	E		G			X			
Mil-G-7711A		X	X	X	X			E		X	E		E			X			
Mil-H-13910B		G	G	G	E			E		G	G		X			E			
Mil-H-19457B		X	E	X	E			C		X	X		X			X			
Mil-H-22251		G	E	G	E			E			G					G			
Mil-H-27601A		C	X	G	X			E		X	G		C			X			
Mil-H-5606B		G	X	G	C			E		X	E		G			X			
Mil-H-6083C		G	X	G	X			E		C	E		G			X			
Mil-H-8446B		C	X	G	X			E		X	G		C			X			
Mil-J-5161F		X	X	X	X			E		X	G		C			X			

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

**Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended**

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Mil-L-17331D		G	X	G	X			E		X	E		E			X			
Mil-L-2104B		C	X	G	X			E		X	E		E			X			
Mil-L-21260		G	X	G	X			E		X	E		E			X			
Mil-L-23699A		C	X	C	X			E		X	G		C			X			
Mil-L-25681C		G	E	G	E			E		G	G		C			G			
Mil-L-3150A		G	X	G	X			E		X	E		G			X			
Mil-L-3545B		C	X	G	X			E		C	G		C			X			
Mil-L-4339C		X	X	X	X					X	E					X			
Mil-L-6082C		G	X	G	X			E		X	E		E			X			
Mil-L-6085A		X	X	X	X			E		X	G		C			X			
Mil-L-7870A		X	X	G	X			E		X	E		X			X			
Mil-L-9000F		C	X	G	X			E		X	E		C			X			
Mil-L-9236B		X	X	X	X			E		X	G		X			X			
Mil-O-5606								E			E								
Mil-O-7808		X	X	X	X		E	E		X	G		X			X			
Mil-P-27402		G	E	G	E						G					G			
Mil-S-3136B Type 1 Fuel		G	X	G	X			E		X	E		G			X			
Mil-S-3136B Type 2 Fuel		X	X	X	X			E		X	C		G			X			
Mil-S-3136B Type 3 Fuel		X	X	X	X			E		X	C		G			X			
Mil-S-3136B Type 4 Oil, low swell		E	X	E	X			E		X	E		E			X			
Mil-S-3136B Type 5 Oil, med swell		G	X	G	X			E		X	E		G			X			
Mil-S-3136B Type 6 Oil, high swell		X	X	X	X			E		X	E		G			X			
Mil-S-81087		E	E	E	E			E		E	E		E			E			
Milk						G								E					
Mineral Oil	G	E	X	E	X	C	E	E		X	E	E	E	G	E	X	X	E	E
Mineral Spirits		G	X	X	X		E	E		X	E	E	G			X		E	E
Mobile HFA					X		E				E	E							
Molasses						E							E	E	E				
Molten Sulfur		E	G	E	E		E	E		G	G		G					X	X
Monobutyl Ether		X	X	C	X		E	X		X	C		X			X			E
Mono-Chloroacetic Acid	X	X	G	E	C		E	G		C	X	X	X			X	X		E
Monochlorobenzene		X	X	X	X		E	E		X	X	G	X	X	X	X	X	G	X
Monochlorodifluoromethane	C	E	X	E	E		E	X		C	X	C				E	X		C
Monoethanol Amine		C	G	G	G		E	X		G	G	E	X			G		E	E
Monoethyl Amine		C	G	X	E		E	X		C	X	G	X			C			C
Monomethylamine		C	C	C	E		E	C		C	G	E							E
Monomethylether		C	E	E	E			C		G	E					G		E	E
Monovinyl Acetate		C	G	X	C			E		X	X					X		E	E
Morpholine				X	X		E				X	E							
Motor Oil		G		G	X		E	E			E	G	G					E	E
MTBE	X		G	X			G	X			X					X		G	
Muriatic Acid	X	C	C	C	C		E	C	E	C	C	X	C			X	E	E	E
Na-K					X		X				X								
Naphtha	E	X	X	X	X	X	E	E		X	E	E	C	X	C	G	X	E	E
Naphthalene	C	X	X	X	X	X	E	E		X	X	E	G	X	X	X	C	E	X
Naphthenic Acids	E	X		X	X		E	E		X	G					X			
Neatsfoot Oil		G	G	G	G		E	E	E	X	E					X		E	E
Neohexane		X	X				E	E		X	E								E
Neon Gas		E	E	E	E		E	E		E	E	E	E	E	E	E	E		E
Nickel Acetate		X	E	G	E	E	E	X		E	G		X	E	E	X		E	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to **Names and General Properties of Hose Materials** table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA**	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Nickel Chloride	X	E	E	G	E	E	E	E		E	E	X	C	E	E	E		E	E
Nickel Nitrate		E	E	E	E	E	E	E		E	E	G	E	E	E			E	E
Nickel Plating Solution		G	G	C	G					E	G					X			
Nickel Sulfate	X	E	E	E	E	E	E	E		G	E	G	C	E	E	G		E	E
Nicotine						E							C	E	E				
Nicotine Acid						E							C	E	E				
Nietylene										E									
Niter Cake		E	E	E	E		E	E	E	E	E					E		E	E
Nitric Acid, 1-10%	X	G	E	G	E	G	E	X		X	X	C	X	E	G	X	E	E	E
Nitric Acid, 10%-25%	X	G	G	X	E		E	X		X	X	X	X			X		E	E
Nitric Acid, 25%-40%	X	C	C	X	G	C	E	C		X	X	X	X	G	G	X		G	G
Nitric Acid, 40%-60%	X	X	X	X	X	C	E	C		X	X	X	X	G	G	X		C	C
Nitric Acid, 70%						X							X	X	X				
Nitric Acid, Anhydrous						X							X	X	X				
Nitric Acid, Conc (16N)	X	X	X	X	X		E	E		X	X	X	X			X	X	E	G
Nitric Acid, Red Fuming	X	X	C	X	X		E	C		X	X	X	X			X	X	X	X
Nitrolotriethanol		E	G	X	E		E	X		G	C		X			G			
Nitrobenzene	C	X	G	X	X	X	E	C		X	X	C	X	X	X	X		E	X
Nitroethane		C	G	C	G		E	X		G	X		X			G	E	E	E
Nitrogen		E	E	E	E		E	E	E	E	E	E	E			E		E	E
Nitrogen Tetraoxide		X	X	X	X		E	X		X	X					X		X	X
Nitromethane		C	G	X	G		E	X		G	X	E	X			C		E	E
Nitropropane		C	E	C	G		E	X	E	C	X					C		E	E
Nitrous Oxide Gas		E	E	G	E		E	E	E	E	E	C	G			E		E	E
N-Nonyl Alcohol		E	E				E	G		E	E								
Nonanoic Acid		X	E				E			X	E								
N-Serv							E	E				E							C
Nuto H					X		E				E	E							
Nyvac Light					E		E				X	E							
Octadecanoic Acid		X	G	G	C		E	C	E	X	E					X		E	E
Cis-9-Octadecenoic Acid	X	G	X	C	C		E	E		X	E	E	G			X			E
Octane		X	X	G	X		E	E	G	X	E					X		G	G
N-Octane		X	X	C	X		E	E		X	E		X			X		G	E
Octanoic Acid		G	C				E			C	C								
2-Octanone		X	G	X	G		E	X		X	X		X			X			
Octyl Acetate		E	E				E	X		X	X							E	
Octyl Alcohol		G	G	G	G		E	G		G	G		X			G		E	E
Octyl Aldehyde		X	C				E	X		X	X								E
Octyl Amine		C	E				E	X		C	C								C
Octyl Carbinol		E	E				E	G		E	E								E
Octylene Glycol		E	E	E	E		E	E	E	E	E							E	C
Oil, Petroleum	G	G	X	G	X	G	E	E		X	E	G	G	E	E	X	C	E	E
Oils & Fats						G							E	E	E				
Oleic Acid	X	G	X	C	C	X	E	E		X	E	E	G	G	G	X		E	E
Oleum	X	X	X	X	X	X	E	G		X	X	X	X	X	X	X		X	X
Olive Oil		G	G	G	G		E	E	E	X	E	E	E			X		G	C
Orange Juice														E					
Orthoxylene	C	X	X	X	C		E	E		X	X	G	X			X	X		X
Oxalic Acid	X	E	E	G	E	G	E	E		C	G	E	C	E	E	G	E	C	C
Oxydiethanol	E											X							E
Oxygen						G							E	E	E				
Oxygen, Cold		G	E	E	E		E	E	E	G	C					C		E	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Oxygen, Hot		X	E	E	E		E	E		G	C					C		E	E
Ozone		E	G	C	E	X	E	E		X	X	C	E	C	C	X		G	C
Paint Thinner		X	X	X	X		E	G	G	X	X	G	X			X		E	E
Palm Oil		G	E	G	G		E	E	E	X	E					X		E	E
Palmitic Acid	G	C	G	G	G		E	E		E	E	C	E			G	E	E	G
Palmitic Acid, 10%						E							X	E	E				
Palmitic Acid, 70%						C							X	C	C				
Papermakers Alum		E	E	E						E	E								
Para Methoxypropenyl Benzene	X	X	X				E	G		X		G							
Paraffin		X	X	E	X	C	E	E	E	X	E		E	E	E	X		X	X
Paraffin Wax		X	X	G	X			E		X	E	E	G			E		E	X
Paraformaldehyde		G	G	G	G		E	C		D	G					X		E	E
Paraldehyde		X	E	C	E		E	X		C	C								E
Paraxylene		X	X	X	X		E	E		X	C	E	C						X
Peanut Oil		G	C	G	X		E	E	E	X	E					X		E	E
Pelargonic Alcohol		E	E				E	G		E	E								E
Pentachloroethane		X	X	X			E	E		X	X								E
Pentadione	G																		
Pentamethylene		X	X	E	X		E	E		X	G								
Pentane		C	X	C	X		E	E		X	E	G	C	C	C	X		G	G
Pentanol		E	E	E	E		E	G		E	E		C						
Pentanone		X	G	X	G		E	X		X	X								E
4-Hydroxy-4-Methyl-2-Pentanone		C	E	C	E		E	X		C	X	G	X			C			E
Pentasol		E	E	E	E		E	G		E	G		X			G			E
Pentyl Acetate		X	G	X	E		E			X	X	G	X			X	X		
Pentyl Alcohol	E	E	E	E	E		E	E		E	G	E	X			E	E		
Pentyl Bromide							E	G											
Pentyl Chloride	C	X	X	X	X		E	E		X		E	C			X			G
Pentyl Ether		C					E				C								
Pentylamine		C	G	X	X		E	X		C	C								
2,4-Di-Sec-Pentylphenol	E																		
Peracetic Acid, 40%													X	X	X				
Perchloroethylene														X	X				
Perchloric Acid		E	G	E	G		E	E	B	G	X					X		E	E
Perchloric Acid, 10%						G							X	G	G				
Perchloric Acid, 70%						G							X	C	C				
Perchloroethylene	C	X	X	X	X		E	E		X	C	E	X			X	X	G	X
Perchloromethane			X	X			E			X	X								
Petrol						X								X	X				
Petrolatum		C	X	E	X			E		X	E					X		E	E
Petroleum Crude		G	X	G	X		E	E		X	E	G	E			X		E	G
Petroleum Ether		X	X	C	X	X	E	E		X	E	E	G	C	C	X		E	C
Petroleum Oils	G	G	X	G	X		E	E		X	E	G	G			X	C	E	C
Phenbo													X					E	
Phenol		X	G	X		X	E	E		X	X	X	X	X	X	X	X	E	C
Phenolsulfonic Acid		X	C				E	X		X	X		G					G	G
Phenylamine		X	E	X	G		E	E		X	X		C						
Phenylbromide		X	X	X	X		E	G		X	X		X						
Phenylbutane	C																		
Phenylchloride		X	X	X	X		E	E		X	X		X						E
Phenylethylene		X	X	X	X		E	G		X	X		C			X			
Phenylhydrazine		C	G	X	C			E		C	X			X	X	X		E	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to **Names and General Properties of Hose Materials** table.

**Key: E = Excellent G = Good C = Conditional
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Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Phenylhydrazine Hydrochloride														C	C				
Phenylmethane		X	X	X	X		E	E		X	X		X						
Phenylmethanol		G	G	X	G		E	E		X	X	C	X			X	X	E	E
Phenylmethyl Acetate		G	E				E	X		X								E	E
Phorone		X	E	X	G		E	C	E	X	X					X		E	E
Phosgene, Gas						C								C	C				
Phosgene, Liquid														X					
Phospahte Esters	G	X	E	X	E		E	C		X	X	E	X			X	E		
Phosphoric Acid, 10%	X	E	G	E	E	E					E		X	E	E	G			
Phosphoric Acid, 10%-85%	X	E	G	E	E	E	E	E		G	X	X	X			G		E	E
Phosphorous Pentoxide						G								C	C				
Phosphorous Trichloride		X	E	X	E	C	E	E		X	X			X	X	X		E	E
Phosphorus, Yellow						X								G	G				
Photographic Developers						E							C	C	C				
Photographic Emulsions						E								C	C				
Photographic Fixers						E								C	C				
Di(2Ethylhexyl) Phthalate		X	G	X	G		E	G		X	X	E	X			X			
Pickling Solution		C	C	C	C		E	G	G	C	C					C		E	E
Picric Acid						G							X	X	X				
Picric Acid, H2O Solution	X	E	C	C	C					C	C					G			
Picric Acid, H2O Solution							C	E				X	G				X		E
Picric Acid, Molten		G	C	C	C		E	C	G	C	C					C		X	X
Pine Oil		X	X	X	X		E	E		X	G		E			X		E	X
Pinene		X	X	X	X		E	E		X	G		G			X		E	E
Piperidine		X	X	X	X		E	X	C	X	X					X		G	G
Pitch		C	X	G	X		E	C	G	X	G			G	G	X		E	E
Plating Solution, Brass						C							E	E	E				
Plating Solution, Cadmium						C							E	E	E				
Plating Solution, Chrome		C	E	G	E		E	G	E	X	G					X		E	E
Plating Solution, Chromium						X							G	G	G				
Plating Solution, Copper						C							E	E	E				
Plating Solution, Gold						C							E	E	E				
Plating Solution, Iridium						C							E	E	E				
Plating Solution, Lead						C							E	E	E				
Plating Solution, Nickel						C							E	E	E				
Plating Solution, Rhodium						C							E	E	E				
Plating Solution, Silver						C							E	E	E				
Plating Solution, Tin						C							E	E	E				
Plating Solution, Zinc						C							E	E	E				
Poly Chlorinated Biphenol							E	E											
Polyethylene Glycol	E	E	E	E	E		E	E	E	E	E		X			E		E	E
Polyol Ester				G								G							
Polypropylene Glycol		E	E				E	E		E	E								
Polyvinyl Acetate Emulsion (PVA)		G	E	G	E		E	C		C	C					C		E	E
Potassium Acetate		C	E	G	E		E	C		E	G	G	X			X		E	E
Potassium Acid Sulfate						G							E	E	E				
Potassium Antimonate						E							E	E	E				
Potassium Bichromate						E							E	E	E				
Potassium Bisulfate		E	E	E	E		E	E		E	E	G				G		E	E
Potassium Bisulfite		E	E	E	E	E	E	E		E	E	G	E	E	E	G		E	E
Potassium Bisulphate						E								G	E				
Potassium Borate, 1%						E							E	E	E				
Potassium Bromate, 10%						E							E	E	E				

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

**Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended**

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU****	SBR	TPV***	UHMWPE	XLPE
Potassium Bromide		E	E	E	E	E	E	E	E	E	E	E	E	E	E	E		E	E
Potassium Carbonate		E	E	E	E	E	E	E	E	E	E	E	C	E	E	E		E	E
Potassium Chlorate						E							G	E	E				
Potassium Chloride	G	E	E	E	E	E	E	E		E	E	E	E	E	E	E		E	E
Potassium Chromate		C	G	E	E		E	E		G	E	G	G			G		E	E
Potassium Chromate, 40%						E							G	E	E				
Potassium Cuprocyanide						E								E	E				
Potassium Cyanide	G	E	E	G	E	C	E	E		E	E	E	E	C	C	E		E	E
Potassium Dichromate	X	E	E	E	E		E	E		C	E	G	G			G		G	G
Potassium Dichromate, 49%						E							G	E	E				
Potassium Ferricyanide						E							E	E	E				
Potassium Fluoride						E							E	E	E				
Potassium Hydrate		E	E	G	G		E	C		G	G	G	G			G		E	E
Potassium Hydroxide	X	E	G	G	E		E	G		G	G	G	C			G	G	E	E
Potassium Hydroxide, 10%						E							C	E	E				
Potassium Hydroxide, 20%						E							X	E	E				
Potassium Hydroxide, 35%						G							X	E	E				
Potassium Hypochlorite						E							X	G	G				
Potassium Nitrate		E	E	E	E	E	E	E		E	E	E	E	E	E	E		E	E
Potassium Perborate						E							E	E	E				
Potassium Perchlorite						G							G	E	E				
Potassium Permanganate		X	E	X	E		E	E	E	X	X					X		E	E
Potassium Permanganate, 10%						X							G	G	E				
Potassium Permanganate, 5%		G	E	E	E		E	E		E	C	X	X			G		E	G
Potassium Persulfate						E							E	E	E				
Potassium Phosphate						E													
Potassium Silicate		E	E	E	E		E	E		E	E	G	E			E		E	E
Potassium Sulfate		E	E	E	E	E	E	E		E	E	E	E	E	E	G		E	E
Potassium Sulfide		E	E	E	E	E	E	E		G	E	E	E	E	E	G		E	E
Potassium Sulfite		E	E	E	E		E	E		G	E	E	E			G		E	E
Potassium Thiosulfate						E							E	E	E				
Power Steering Fluid													E	E	E				
Prestone Antifreeze							E	E				G	X				E	E	E
Producer Gas		G	X	G	X		E	E		X	E		E			X			
Propane						X							C	C	C				
Propanediol		E	C	C	E		E	E		E	E		G			E			
Propanetriol	E	E	E	E	E	E	E	E		E	E	G	C			E	X	E	E
Propanol (Propyl Alcohol)						E	E	E				E	X	E	E		E	E	E
1-Amino-2-Propanol		C	E				E	X		G	G								
Propanolamine	E																		
Propanone	G	X	E	X	E		E	X		C	X	E	X			C	E	E	C
Chloro-2-Propanone		X	X	C	E		E	X		X	X		X			X			
Propargyl Alcohol						E								E	E				
Propen-1-OL							E	G										E	E
Propenediamene	E																		
Propenenitrile			X	X			E			G	X								
Propenyl Alcohol		E	E	E	E		E	G		E	E							E	E
Propenylanisole		X	X				E	G		X	X								
Propionic Acid		G	E	C	E		E	X		E	C		X			X			E
Propionitrile			E	G	E		E	X		E	X						X		

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to **Names and General Properties of Hose Materials** table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Propyl Acetate		X	G	X	E		E	X		X	X		X			X		E	E
Propyl Alcohol (Propanol)		E	E	E	E	E	E	E		E	E	E	X	E	E	E	E	E	E
Propyl Aldehyde		X	G				E	X		C	X							E	E
Propyl Benzene	C																		
Propyl Chloride		X	C				E	G		X	X							E	E
Propyl Ether	E																		
Propyl Nitrate		X	G	X	G		E	X		X	X		X			X			
Propylene		X	X	X	X		E	E		X	X		X			X			
Propylene Diamine		C	E				E			G	G								
Propylene Dichloride		X	X	X	X	X	E	G		X	X		X	X	X	X		G	G
Propylene Glycol	E	E	E	E	E	E	E	E		E	E	G	X			E	X	E	E
Prune Juice														E					
Pydraul Hydraulic Fluids		D	G	D	G		E	C	E	X	X	G	X			X		G	G
Pyranol		X	X	X	X			E		X	C					X		E	E
Pyridine		X	G	X	G		E	X	G	X	X					X		E	E
Pyroligneous Acid		G	G	G	G			E		C	C					C		E	E
Pyrrole		X	G	X	C			C		C	X					G		E	E
Quintolubric 822 Series			X	X	X			G		X	G								
Rape Seed Oil		G	E	G	G		E	E	E	X	G					X		G	G
Red Oil	X	G	X	C	C		E	E		X	E	E	G			X		E	C
Resorcinol				X	G		E	E				X	X			G	X		E
Rosin Oil		G	X	E	X			E		X	E					X		E	E
Rotenone And Water		E	E	E	E			E		E	E					E		E	E
SAE Oil #10	G	X	X	C	X		E	E		X	E	E	E			X	X		C
Salicylic Acid		E	E	X	E	E	E	E	E	E	X					G		E	E
Sea Water		E	E	G	E	E	E	E	E	E	E	E	C	E	E	E	E	E	E
Selenic Acid						G							X	E	E				
Sewage		E	G	G	E		E	E		G	E	G	X			G	G	X	E
Shortening G						E								G					
Silicate Esters		G	C	E	X		E	E		X	G	G	E			X		C	
Silicate of Soda		E	E	E	E		E	E		E	E	E						E	E
Silicic Acid						E							X	E	E				
Silicone Fluids						E													
Silicone Grease		E	E	E	E		E	E		E	E	E	E			E		G	E
Silicone Oil		E	E	E	E		E	E		C	E	E	E			E		E	E
Silver Cyanide						E							E	E	E				
Silver Nitrate		E	E	E	E	E	E	E		E	G	E	E	E	E	E		E	E
Silver Plating Solutions						E							E	E	E				
Skelly Solvent		C	X	G	X			E		X	E					X		E	E
Skydrol Hydraulic Fluids		X	E	X	E		E	X	E	X	X					X		E	E
Soap Solutions	G	E	G	G	E	G	E	E		G	E	E	E	E	E	G	E	E	E
Soda Ash	G	E	E	E	E		E	E		E	E	G	G			E		E	E
Soda Lime		G	E	G	E		E	G		E	G		C					E	E
Soda, Caustic	C	E	E	E	E		E	X		G	C	G	G			E	C	E	E
Sodium Acetate		C	E	G	E	E	E			E	G	G	X			X		E	E
Sodium Acid Sulfate						E							E	E	E				
Sodium Aluminate		E	E	E	E		E	E		G	E	G				G		E	E
Sodium Antimonate						E							E	E	E				
Sodium Arsenite						E							E	E	E				
Sodium Benzoate						E							E	E	E				
Sodium Bicarbonate		E	E	E	E	E	E	E		E	E	E	E	E	E	E		E	E
Sodium Bisulfate	X	E	E	E	E	E	E	E		E	G	C	E	E	E	G		E	E
Sodium Bisulfite		E	E	E	E	E	E	E		E	E	E	E	E	E	G		E	E
Sodium Borate		E	E	E	E		E	E		E	E	E	G			E		E	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

**Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended**

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Sodium Bromide						E							E	E	E				
Sodium Carbonate	G	E	E	E	E	E	E	E	E	E	E	G	E	E	E	E		E	E
Sodium Chlorate						E							G	G	G				
Sodium Chloride	G	E	G	E	E	E	E	E		E	E	E	E	E	E	E	C	E	E
Sodium Chromate		C	E	C	G		E	C		X	X					X		G	G
Sodium Cyanide	G	E	E	E	E	E	E	E		E	E	E	G	E	E	E		E	E
Sodium Dichromate		G	E	G	C	E	E	E		C	E	G	G	E	E	G		E	E
Sodium Ferrocyanide						E							E	E	E				
Sodium Fluoride		E	E	E	E	E	E	E	E	E	E		E	E	E	E		E	E
Sodium Hydrate		G	E	G	E		E	G		E	G	G	C			G			E
Sodium Hydrochlorite		E	G	C	G		E	E		C	C	G	C			G			E
Sodium Hydroxide	C	E	E	G	E		E	C		E	C	G	C			G	C	E	E
Sodium Hydroxide, 10%						E							G	E	E				
Sodium Hydroxide, 35%						E							C	E	E				
Sodium Hydroxide, 50%														G					
Sodium Hypochlorite	X	G	G	C	G	E	E	C		X	X	X	C	E	E	C	C	E	G
Sodium Metaphosphate		G	G	G	E		E	E		E	E	E	G			E		G	E
Sodium Nitrate	G	E	E	G	E	E	E	E		G	G	E	G	E	E	G		E	E
Sodium Nitrite		E	E	E	E	E	E	E	E	E	E		E	E	E	E		E	E
Sodium Perborate	X	G	E	G	E		E	E		G	G	G	G			G		E	E
Sodium Peroxide	X	G	E	G	E		E	E		G	G	X	X			G		E	E
Sodium Phosphate		E	E	C	E		E	E		E	E	E	E			E		E	E
Sodium Phosphate, Acid						E							U	G	G				
Sodium Silicate	G	E	E	E	E	E	E	E		E	E	E	G	E	E	E		E	E
Sodium Sulfate	G	E	E	E	E	E	E	E		G	E	E	E	E	E	G		E	E
Sodium Sulfide	G	E	E	E	E	E	E	E		G	E	E	E	E	E	G		E	E
Sodium Sulfite		E	E	E	E	E	E	E		G	E	E	E	E	E	G		E	E
Sodium Thiosulfate		E	E	E	E	E	E	E		E	E	G	E	E	E	G		E	E
Soft Drinks						G								E					
Soya Oil														E					
Soybean Oil	G	E	C	E	X		E	E		X	E	E	G	G		X		E	E
Stannic Chloride	X	C	G	C	E	E	E	E		G	E	C	G	E	E	E		E	E
Stannic Sulfide		E	E				E			E	E								E
Stannous Chloride		E	G	E	C	E	E	E		E	E	G	C	E	E	E		E	
Stannous Sulfide		E	E				E			E	E								E
Starch						E													
Stearic Acid	G	C	G	G	G	E	E	E		C	E	E	E	C	C	G	E	E	E
Stoddard Solvent	G	X	X	C	X	C	E	E		X	E	E	G	C	C	X	X	E	E
Styrene Monomer		X	X	X	X		E	G		X	X	E	C			X		G	G
Sugar Solutions		E	E	E	E	E	E	E	E	E	E					E		E	E
Sulfamic Acid		E	E	G	X		E	E		G	C		X						C
Sulfite Liquors		E	E	G	G		E	E		G	G					G		E	E
Sulfonic Acid		C	X	C	X		E	X		X	X					X		G	G
Sulfur		F	F	X	F		E	G		X	X			G	G	X		E	X
Sulfur, Molten		E	E	E	E					G	G					G			
Sulfur Chloride	G	C	X	C	X		E	E		X	C	C	C			X		E	E
Sulfur Dioxide		C	G	X	E		E	E		C	X	X				C		G	C
Sulfur Dioxide Gas, Dry						E								E	E				
Sulfur Dioxide Gas, Wet						X								C	C				
Sulfur Dioxide, Liquid														C	C				
Sulfur Hexafluoride		E	E	E	E		E	E	E	E	E					E		E	E
Sulfur Trioxide		B	C	C	C		E	E	G	X	C					C		D	G

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to **Names and General Properties of Hose Materials** table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Sulfur Trioxide, Dry		C	G	X	G		E	E		C	X	X	G			X		X	G
Sulfur, Molten							E	E										E	C
Sulfuric Acid, 1%-60%						G								E	E				
Sulfuric Acid, 70%						C								E	E				
Sulfuric Acid, 95%						X								X	X				
Sulfuric Acid, 95% Fuming						X								C	C				
Sulfuric Acid, 25%	X	E	G	E	E		E	E		G	E	X	X			G	E	E	E
Sulfuric Acid, 25%-50%	X	G	G	E	E		E	E		G	E	X	X			G		E	E
Sulfuric Acid, 50%-96%	X	C	X	C	G		E	E		X	C	X	X			X		E	E
Sulfuric Acid, 60% (200°F)	X		X	X	X			C			X	X				X		X	X
Sulfuric Acid, Conc. 96%-98%	X	X	X	X	X		E	G		X	X	X	X			X		E	C
Sulfuric Acid, Fuming	X	X	X	X	X		E	G		X	X	X	X			X		X	X
Sulfurous Acid, 10%	X	E	E	G	E	E	E	E		G	C	X				G		E	E
Sulfurous Acid, 10%-85%	X	E	E	C	G		E	G		G	C	X	X			C		X	E
Sulfurous Acid, 30%						X													
Sulphur Trioxide						X								E	E				
Sutan							E	F											E
Tall Oil		C	X	C	X		E	E		X	E		E			X		E	G
Tallow		C	G	G	E	E	E	E		C	E	E	E			X		E	E
Tannic Acid	X	E	E	E	E	E	E	E		E	E	G	E	E	E	G	E	E	E
Tanning Extracts						E													
Tanning Liquors						C								E	E				
Tar, Bituminous	G	C	X	C	X		E	E	E	C	G	G	G			X		E	E
Tar, Camphor	C	X	X	X	X		E	E	E	X	X	E	G			X	C	E	X
Tartaric Acid	X	E	G	E	C	E	E	E		E	E	E	E	E	E	G	E	E	E
Tea, Brewed						G								E					
Telone 2																			E
Terpinol	E	X	C	X	C		E	E	E	X	G	G	G			X		G	G
Tertiary Butyl Alcohol		G	G	G	G		E	E		G	G		X			G		E	E
Tertiary Butyl Amine		X			G														
Tertiary Butyl Mercaptan		X	X	X	X		E	E		X	X		X			X			
Tetrachlorobenzene		X	X				E	G		X	X		G						G
Tetrachloroethane		X	X	X	X		E	E		X	X		X			X	C	C	
Tetrachloroethylene		X	X	X	X		E	E		X	C	E	X			X		G	X
Tetrachloromethane		X	X	X	X		E	E		X	X	E	C					C	X
Tetrachloronaphthalene		X	X				E	G		X	X							G	
Tetraethyl Lead		X	X	C	X		E	E	G	X	G		G	G	G	X		E	E
Tetraethylene Glycol		E	E				E	E		E	E								
Tetraethylorthosilicate			E	X			E			X	X								
Tetrahydrofuran (THF)		X	G	X	X		E	X		X	X	G	X			X	X	C	X
Tetrahydrofurane						X							X	X	X				
Thionyl Chloride		X	X	X	X	X	E	G		X	X		X	X	X	X		E	
Tin Chlorides		E	G	C	E		E	E		E	E	C	G	E	E			E	E
Tin Tetrachloride		E	E	E	E		E	E	E	E	E					E		E	E
Titanium Tetrachloride		X	X	X	X		E	E		X	C		X	E	E	X		G	X
Titanium Trichloride						X													
Toluene	C	X	X	X	X	X	E	E		X	X	E	X	X	C	X	X	E	X
Toluene Diisocyanate (TDI)		X	E	X	E		E	G		C	C					C		E	E
Toluidine		X	X				E	G		X	X								
Tomato Juice						C								E					
Toxaphene		X	X	G	X			E		X	G					X		E	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to *Names and General Properties of Hose Materials* table.

Key: E = Excellent G = Good C = Conditional
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Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Transformer Oils, Chlorinated Phenyl Base Askerels		X	X	X	X		E	E	G	X	X					X		G	G
Transformer Oils, Petroleum Base		G	X	G	X		E	E	E	X	E		E			X		E	E
Transmission Fluid													E	E	E				
Transmission Fluids, A		X	X	C	X		E	E	E	X	G	G	E			X		A	A
Transmission Fluids, B		X	X	X	X			E		X	C					X		A	A
Tri (2-Hydroxyethyl) Amine		E	G	X	E		E	X		G	C		X			G			
Tributyl Amine		C	E				E			G	G								
Tributyl Phosphate		X	G	X	E		E	X		C	X	G	X	X	X	X		E	E
Tricetin		G	E	G	E			X		E	G					G		E	E
Trichloroacetic Acid		C	G	X	G		E	X		C	C	X	X			X		E	E
Trichlorobenzene		X	X	X		X	E	G		X	X		X	X	X	X			
Trichloroethane		X	X	X	X		E	E		X	X	E	X			X			
Trichloroethylene	C	X	X	X	X	X	E	E		X	X	G	X	X	C	X	X	C	X
Trichloromethane	X	X	X	X	X		E	E		X	X	C	X			X	X	C	C
Trichloropropane		X	X	X	X		E	E		X	X					X		E	E
Trichlorotoluene							E			X	X								
Tricresyl Phosphate (TCP)		X	E	C	E	X	E	E		C	X	G	X	X	X	X		E	E
Triemethyl Propane														C	C				
Triethanolamine		E	G	X	E	C	E	X		G	C	E	X	C	G	G		E	E
Triethylamine			C	G	E		E	E		G	E	E	X	G	G	X			
Triethylene Glycol		E	E				E	E		E	E								E
Trihydroxybenzoic Acid		G	G	G	G		E	E		E	G	G	X			G		G	
Trimethyl Pentanes, Mixed	E	C	X	C	X		E	E		X	E	E	G			X	X	E	
Trimethyl Pentene	E											E						E	
Trimethylamine	E						E											E	E
Trinitrotoluene (TNT)		G	X	G	X			G		X	X					X		X	X
Triphenyl Phosphate		C	E	C	G		E	C		X	X					X		E	E
Trisodium Phosphate		E	E	E	E					E	E					E			
Tritoyl Phosphate		X	E	X	E		E	E		X	X	G	X			X		E	
Tung Oil	C	E	X	E	X		E	E		X	E	G	C			X		E	E
Turbine Oil		G	X	G	X			E		X	G					X		E	E
Turpentine		X	X	X	X	X	E	E		X	G		E	C	G	X		G	E
Ucon Hydrolube Oils		X	E	G	E		E	E	E	X	E					X		E	E
UDMH		E	E	G	E		E	X		E	G		X			X		C	C
1 Undecanol		E	E	E	E		E	G		E	E					E			E
Undecyl Alcohol		E	E	E	E		E	G	E	E	E					E		E	E
Uran		E	G	G	G			C		G	G					C		E	E
Urea		E	E	G	E	E	E	E		E	G	E	G	E	E			E	E
Urethane Formulations							E				E	E							
Uric Acid							E					G	X				E		E
Urine						E							E	E	E				
Varnish	C	X	X	X	X	X	E	E		X	G	E	C	X	X	X		E	
Vegetable Oils		G	C	C	C	X	E	E		X	E	G	E	G	G	X		E	G
Versilube F44		E	E	E	E		E	E		E	E	E	E			E			
Versilube F55		E	E	E	X		E	E		E	E	E	E			E			
Vinegar		E	E	G	E	E	E	E		G	G	C	C	E		G		E	E
Vinegar Acid	G																		
Vinyl Acetate		C	E	X	G	X	X	E		X	X		X	X	X	X		E	E
Vinyl Benzene		X	X	X	X		E	G		X	X		C			X		E	G
Vinyl Chloride														X	X				
Vinyl Chloride, Gas			X		G		E			G		E						C	E
Vinyl Cyanide	E	C	X	C	X		E	C		C	X	E	X			C	X		
Vinyl Ether		G	X				E	X		X	G							E	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

(Continued on the following page)

Hose and Chemical Table (Continued)

Refer to **Names and General Properties of Hose Materials** table.

Key: E = Excellent G = Good C = Conditional
Blank = No Data X = Not Recommended

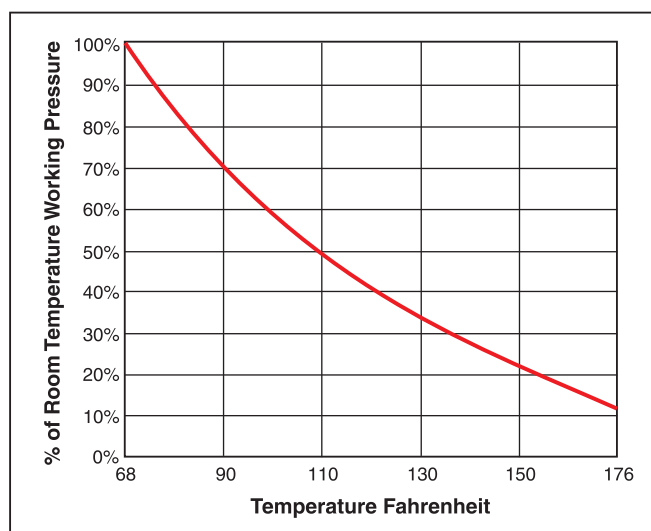
Chemical Or Material Conveyed	CPE	CSM	Chlorobutyl	Chloroprene	EPDM	EVA***	FEP/PTFE	FKM	MXLPE	Natural	Nitrile	Nylon	PU***	PVC***	PVC/PU***	SBR	TPV***	UHMWPE	XLPE
Vinyl Styrene		X	X				E	E		X						X		E	E
Vinyl Toluene		X	X				E	E		X	X							E	E
Vinyl Trichloride		X	X	X			E	E		X	X							E	E
Vital, 4300, 5310					X		E				X	E							
VM&P Naphtha		X	X	C	X		E	E		X	C								X
Water	G	E	E	G	E		E	E	E	E	E	E	E	E		G	E	E	E
Water, Acid						E							G	E	E				
Water, Boiling		E	E	G	E		G	G			G	X	G	E	E	G	G	X	X
Water, Demineralized						E							E	E	E				
Water, Detergent Solution		E	E	G	E		E	E	G	G	E	E	G	E	E	G		E	E
Water, Distilled						E							E	E	E				
Water, Fresh						E	E	E	E				G	E	E			E	E
Water, Potable						E								E	E				
Water, Salt		G	E	E	E	E	E	E	E	E	G		G	E	E	G		E	E
Water, Soda							E					E					E	E	E
Wemco C		X	X	G	X					X	E					X			
Whey						G								E					
Whiskey		E	E	E	E		E	E		E	E	E	X	C		E		E	E
White Gasoline						X							E	E	E				
White Liquor		E	G	E	C			E		E	E			E	E	E		E	E
White Oil		X	X	G	X		E	E		X	E		E			X		E	X
White Pine Oil		X	X	X	X			E		X	G					X			
Wines		E	E	E	E		E	E		E	E	E	X	G		E		E	G
Wood Alcohol		E	E	E	E		E	C		E	E		X			E		E	E
Wood Oil		C	C	G	X		E	E		X	E	G	C			X		E	E
Xenon		E	E	E	E		E	E		E	E		E			E			
Xylene, Xylol	C	X	X	X	X	X	E	E		X	X	G	C	X	C	X	X	C	X
Xylidine		X	G	X	C		E	C		X	C					X		G	G
Zeolites		E	E	E	E			E		E	E					E			
Zinc Acetate		C	E	G	E		E	C		E	G	X	X			X			E
Zinc Carbonate		E	E	E	E		E	E		E	E		E					E	E
Zinc Chloride	X	E	E	E	E	E	E	E		E	E	C	G	E	E	E		E	E
Zinc Chromate		C	E			E	E						E	E	E				G
Zinc Cyanide						E							E	E	E				
Zinc Nitrate						E							E	E	E				
Zinc Sulfate	X	E	E	E	E	E	E	E		E	E	E	G	E	E	G		E	E

***Refer to the PVC and Thermoplastic Temperature/Pressure chart in this section.

PVC and Thermoplastic Temperature / Pressure Chart

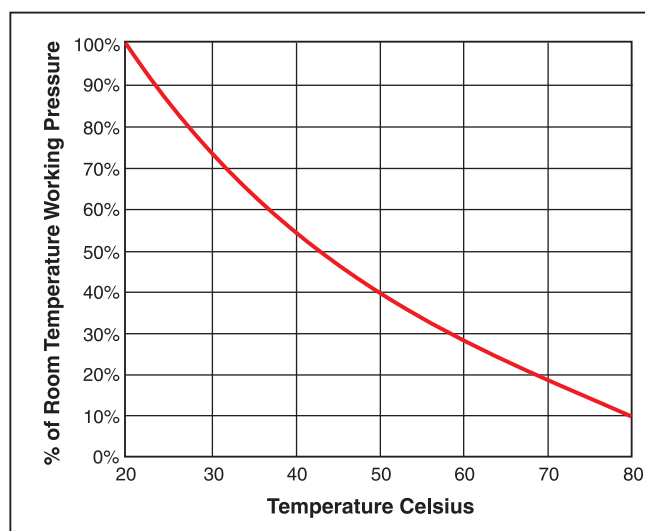
Effects of Elevated Temperatures on PVC / Thermoplastic Hose and Tubing

Thermoplastic hose and tubing achieve their optimum physical properties at room temperature, 68°F (20°C). As thermoplastic materials are exposed to increased ambient temperatures, they soften and their physical properties change. For hose and tubing, heat sharply reduces the available working pressure and coupling retention. The charts below illustrate this effect. In all cases, test the product in a controlled, secure and safe environment, and consider all operating conditions prior to use.



Example from the Fahrenheit Chart

If Working Pressure at 68°F is 200 PSI, then the WP at 110°F is $200 \times 50\%$, or 100 PSI.



Example from the Celsius Chart

If Working Pressure at 20°C is 14 bar, then the WP at 50°C is $14 \times 40\%$, or 5.6 bar.

For further information, refer to the Parker Safety Guide No. 4400-B.1 previously in this section and the Parker User Responsibility Statement on the inside front cover of in this catalog.

Metal/Coupling Corrosion Resistance Table

⚠ WARNING! The following data has been compiled from generally available sources and should not be relied upon without consulting and following the specific recommendations of the manufacturer regarding particular coupling materials.

Key: E = Excellent • G = Good • C = Conditional • Blank = No Data • X = Not Recommended

Chemical Or Material Conveyed	Aluminum	Brass	Carbon Steel	Stainless Steel 202, 302, 304, 308	Stainless Steel 316	Stainless Steel 410, 416, 430
Acetate, Solvents, Crude	C	C		E	E	G
Acetate, Solvents, Pure	E	E		E	E	E
Acetic Acid	X	X	X	G	G	G
Acetic Acid Vapors	C	X	X	G	G	X
Acetic Anhydride	G	X	X	G	G	X
Acetone	E	E	E	E	E	E
Acetylene	E	X	E	E	E	E
Alcohols	E	G	E	E	E	E
Aluminum Sulfate	X	X	X	C	G	X
Alums	C	C	X	C	G	X
Ammonia Gas	C	X	E	E	E	E
Ammonium Chloride	C	X	X	C	C	X
Ammonium Hydroxide	G	X	X	E	E	C
Ammonium Nitrate	G	X	E	E	E	E
Ammonium Phosphate		X		E	E	E
Ammonium Phosphate, Acid		C		G	E	C
Ammonium Phosphate, Neutral	C	C	X	E	E	E
Ammonium Sulfate	X	X	X	G	G	G
Asphalt	E	E	E	E	E	E
Beer	E	E	X	E	E	E
Beet Sugar Liquors	E	G	C	E	E	G
Benzene, Benzol	E	E	E	E	E	E
Benzine	E	E	E	E	E	E
Biodiesel	E	X	G	E	E	E
Borax		E	G	E	E	E
Boric Acid	E	C	C	G	E	C
Butane, Butylene	E	E	E	E	E	E
Butadiene	E	E	E	E	E	E
Calcium Bisulfate		X		G	E	X
Calcium Hypochlorite	X	X	X	C	G	C
Cane Sugar Liquors	E	E	E	E	E	E
Carbon Dioxide, Dry	E	E	E	E	E	E
Carbon Dioxide, Wet, (AQ)	E	E	G	E	E	E
Carbon Disulfide	G	C	G	E	E	G
Carbon Tetrachloride	C	E	E	E	E	E
Chlorine, Dry	X	X	G	G	E	G
Chlorine, Wet	X	C	X	X	C	X
Chromic Acid	X	X		G	G	C
Citric Acid	E	X	X	X	E	C
Coke Oven Gas	G	C	E	E	E	E
Copper Sulfate	X	X	X	E	E	E
Core Oils		E		E	E	E
Cottonseed Oil	E	C	C	E	E	E
Creosote	E	C	G	E	E	E
Ethers	E	C	C	E	E	E
Ethylene Glycol		G	G	E	E	E

Chemical Or Material Conveyed	Aluminum	Brass	Carbon Steel	Stainless Steel 202, 302, 304, 308	Stainless Steel 316	Stainless Steel 410, 416, 430
Ferric Chloride	X	X	X	X	X	X
Ferric Sulfate	X	X	X	E	E	C
Formaldehyde, 50%	G	G	C	E	E	C
Formic Acid	X	G	X	E	E	E
Freon	E	E	C	E	E	E
Furfural	E	G	E	E	E	E
Gasoline, Refined	E	E	E	E	E	E
Gasoline, Sour	C	C	E	E	E	C
Gelatin	E	C	X	E	E	X
Glucose	E	E	E	E	E	E
Glue	E	E	E	E	E	E
Glycerine or Glycerol	E	G	E	E	E	E
Hydrochloric Acid, 37%	X	X	X	X	C	X
Hydrocyanic Acid, 10%	E	X	X	E	E	X
Hydrofluoric Acid	X	X	X	X	X	X
Hydrogen	E	E	E	E	E	E
Hydrogen Fluoride		C		X	E	X
Hydrogen Peroxide	E	X	C	G	E	E
Hydrogen Sulfide, Dry	C	C	C	G	C	C
Hydrogen Sulfide, Wet	X	X	X	G	E	X
Lacquers, Lacquer Solvents	E	G	C	E	E	E
Lactic Acid	C	X	X	C	G	E
Lime, Sulfur	G	X	G	E	G	E
Linseed Oil	E	E	E	E	E	E
Magnesium Chloride	X	C	C	G	X	X
Magnesium Hydroxide	X	G	E	E	E	E
Magnesium Sulfate	C	G	G	E	E	E
Mercuric Chloride	X	X	X	X	X	X
Mercury	X	X	E	E	E	E
Milk	X	C	X	E	E	G
Molasses	G	E	G	E	E	G
Natural Gas	E	G	E	E	E	E
Nickel Chloride	X	X	X	C	G	E
Nickel Sulfate	X	C	X	G	E	C
Nitric Acid	C	X	X	G	G	G
Oleic Acid	E	C	X	G	E	G
Oxalic Acid	X	X	X	G	E	C
Oxygen	E	E	E	E	E	E
Palmitic Acid	E	E	C	G	E	C
Petroleum Oils, Sour		C		E	E	C
Petroleum Oils, Refined	E	E	E	E	E	E
Phosphoric Acid, 25%	X	X	X	C	E	C
Phosphoric Acid, 25%-50%	X	X	X	X	G	C
Phosphoric Acid, 50%-85%	X	X	X	X	G	C

(Continued on the following page)

Silicone Hose and Chemical Table

⚠ WARNING! The following data is based on tests and believed to be reliable; however, the tabulation should be used as a guide **ONLY**, since it does not take into consideration all variables, such as elevated temperatures, fluid contamination, concentration, etc., that may be encountered in actual use. All critical applications should be tested. Refer to the Safety & Technical Information section of this catalog for safety, handling and use information.

Key: E = Excellent • G = Good • C = Conditional • X = Not Recommended • I = Insufficient Data

Chemical or Material Conveyed	Rating	Chemical or Material Conveyed	Rating	Chemical or Material Conveyed	Rating	Chemical or Material Conveyed	Rating
Acetic acid, dilute, 10%	G	Castor oil	E	Hydraulic fluids: Water glycol	E	Potassium hydroxide	C
Acetic acid glacial	C	Cellosolve acetate	X	Hydrobromic acid	X	Potassium sulfate	E
Acetic acid anhydride	I	CFC-12	I	Hydrochloric acid	X	Propane	X
Acetone	X	China wood oil, tung oil	X	Hydrocyanic acid	G	Sewage	G
Acetylene	C	Chlorine, dry/wet	X	Hydrofluoric acid	X	Soap solution	E
Air 68°F (20°C)	E	Chlorinated solvents	X	Hydrofluosilicic acid	I	Soda ash, sodium carbonate	E
Air 150°F (65°C)	E	Chloroacetic acid	I	Hydrogen gas 140°F (60°C)	C	Sodium bicarbonate, baking soda	E
Aluminum chloride 150°F (65°C)	E	Chlorosulfonic acid	X	Hydrogen peroxide	E	Sodium bisulfate	E
Aluminum fluoride 150°F (65°C)	G	Chromic acid	C	Hydrogen sulfide, dry	X	Sodium chloride	E
Aluminum sulfate 150°F (65°C)	E	Citric acid	E	Hydrogen sulfide, wet	X	Sodium cyanide	E
Alums 150°F (65°C)	E	Coke oven gas	G	Isobutyl alcohol	E	Sodium hydroxide to 50% at 140°F	E
Ammonia gas, anhydrous	I	Copper chloride 150°F (65°C)	E	Isopropyl alcohol	E	Sodium hypochlorite	G
Ammonia 10%water solution	E	Copper sulfate 150°F (65°C)	E	Isooctane	X	Sodium metaphosphate	E
Ammonia 30%water solution	C	Corn oil	E	Kerosene	X	Sodium nitrate	X
Ammonium chloride	C	Cottonseed oil	E	Lacquers	X	Sodium perborate	G
Ammonium hydroxide	C	Creosote, coal tar	C	Lacquers solvents	X	Sodium peroxide	C
Ammonium nitrate	E	Creosote, coal tar wood	X	Lactic acid	E	Sodium phosphate, monobasic	X
Ammonium phosphate monobasic	E	Creosols, cresylic acid	I	Linseed oil	E	Sodium phosphate, dibasic	X
Ammonium phosphate dibasic	E	Dichlorobenzene	X	Lubricating oil, crude	C	Sodium phosphate, tribasic	X
Ammonium phosphate tribasic	E	Dichloroethylene	X	Lubricating oil, refined	C	Sodium silicate	E
Ammonium sulfate	E	Diesel fuel	X	Magnesium chloride 150°F (65°C)	E	Sodium sulfate	E
Amyl acetate	X	Diethanolamine 20%	X	Magnesium hydroxide 150°F (65°C)	G	Sodium sulfide	E
Amyl alcohol	X	Diethylamine	G	Magnesium sulfate 150°F (65°C)	E	Sodium thiosulfate, hypo	I
Aniline, Aniline oil	X	Diisopropylamine	I	Mercuric chloride	E	Soybean oil	E
Aniline, dyes	X	Diethylphthalate	X	Mercury	E	Stannic chloride	G
Asphalt	I	Ethers	X	Methyl alcohol, methanol	E	Steam 450°F (230°C)	I
Barium chloride 150°F (65°C)	E	Ethyl acetate	G	Methyl chloride	X	Stearic acid	E
Barium hydroxide 150°F (65°C)	E	Ethyl alcohol	E	Methyl ethyl ketone	X	Sulfur	G
Barium sulfide 150°F (65°C)	E	Ethyl cellulose	C	Methyl isopropyl ketone	C	Sulfur chloride	C
Beer	E	Ethyl chloride	C	Milk	E	Sulfur dioxide, dry	G
Beet sugar liquors	E	Ethyl glycol	E	MTBE	I	Sulfur trioxide, dry	G
Benzene, Benzol	X	Ferric chloride 150°F (65°C)	E	Mineral oils	E	Sulfuric acid, 10%	X
Benzene, petroleum ether	X	Ferric sulfate 150°F (65°C)	G	Natural gas	C	Sulfuric acid, 11% - 75%	X
Benzene, petroleum naphtha	X	Formaldehyde	G	Nickel chloride 150°F (65°C)	E	Sulfuric acid, 76% - 95%	X
Black sulfate liquor	E	Formic acid	C	Nickel sulfate 150°F (65°C)	E	Sulfuric acid, fuming	X
Blast furnace gas	E	Fuel oil	X	Nitric acid, crude	X	Sulfurous acid	X
Borax	G	Furfural	X	Nitric acid, diluted 10%	C	Tannic acid	G
Boric acid	E	Gasoline, unleaded	X	Nitric acid, concentrated 70%	X	Tar	G
Bromine	X	Gasoline + MTBE	X	Nitrobenzene	C	Tartaric acid	E
Butane	X	Gelatin	E	Oleic acid	X	Toluene, Toluol	X
Butyl acetate	X	Glucose	E	Oleum	I	Trichloroethylene	X
Butyl alcohol, Butanol	C	Glue	E	Oxalic acid	G	Turpentine	X
Calcium bisulfate	C	Glycerine, glycerol	E	Oxygen	X	Urea, water solution	E
Calcium chloride	E	Green sulfate liquor	E	Palmitic acid	X	Vinegar	E
Calcium hydroxide	E	HFC-134	I	Perchloroethylene	C	Vinyl acetate	X
Calcium hypochlorite	C	Hydraulic fluids: Petroleum	C	Petroleum oils and crude 200°F (95°C)	X	Water, acid mine	E
Caliche liquors	G	Hydraulic fluids: Phosphate ester alkyl	X	Phosphoric acid, crude	C	Water, fresh	E
Cane sugar liquors	E	Hydraulic fluids: Phosphate ester aryl	X	Phosphoric acid, pure 45%	C	Water, distilled	E
Carbolic acid, phenol	X	Hydraulic fluids: Phosphate ester blends	X	Picric acid, molten	X	Whiskey and wines	E
Carbon dioxide, dry-wet	E	Hydraulic fluids: Silicate ester	X	Picric acid, water solution	I	Xylene, xylol	X
Carbon disulfide	X			Potassium chlorite	E	Zinc chloride	E
Carbon monoxide 140°F (60°C)	E			Potassium cyanide	E	Zinc sulfate	E
Carbon tetrachloride	X						



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