Fittings and Tubing
QS Series

Medium Pressures to 15,000 psi (1034 bar)

Principle of Operation:

Parker Autoclave Engineers has designed and built premium quality valves, fittings and tubing. This commitment to engineering and manufacturing excellence has earned Parker Autoclave Engineers a reputation for reliable, efficient product performance. Parker Autoclave Engineers has long been established as the world leader in high pressure fluid handling components for the chemical/petrochemical, research, and oil and gas industries.

QS Series Compression Sleeve Fittings and Tubing Features:

- QS single bite-type compression sleeve connection for 15,000 psi (1034 bar)
- Available sizes are 1/4, 3/8, 9/16, 3/4 and 1"
- Fittings and tubing manufactured from high strength cold worked 316 stainless steel. Options include 2507® Super Duplex and Inconel 625™
- Molybdenum disulfide-coated gland nuts to prevent galling
- Gland nut positioning mark for assembly
- Connection weep holes for safety and leak detection
- Fast easy make-up of connection
- Operating Temperatures from -100°F (-73°C) to 600°F (316°C)
- 1" QS fitting bodies are 2507® Super Duplex standard

The Medium Pressure QS Series uses Parker Autoclave Engineers' Quick Set bite-type compression sleeve design. This single compression sleeve connection delivers fast, easy make-up and reliable bubble-tight performance in liquid or gas service.

QS Series: Fittings and Tubing

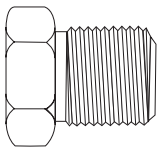
Medium Pressure Fittings - Pressures to 15,000 psi (1034 bar)

Parker Autoclave Engineers Medium Pressure QS Fittings are designed for use with QS Series valves and medium pressure tubing.
These fittings feature improved compression connections with larger orifices for excellent flow capabilities. Parker Autoclave Engineers fittings and components are manufactured of high strength stainless steel.

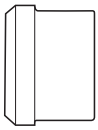
Connection Components:

All valves and fittings are supplied complete with appropriate glands and compression sleeves. To order these components separately, use order numbers listed. When using plug, sleeve is not required.

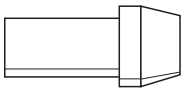
Gland
QSG ( )



Sleeve
QSS ( )



Plug
QSP ( )



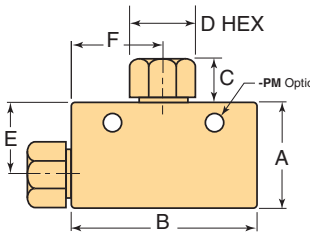
Add tube size ( )
1/4” - 40
3/8” - 60
9/16” - 90
3/4” - 120
1” - 160

Example: 1/4” Gland - QSG 40

To ensure proper fit use Parker Autoclave Engineers tubing.
For mounting hole option add suffix PM to catalog number.
Consult factory for mounting hole dimensions.

Elbow

Catalog Number	Connection Type	Outside Diameter Tube	Pressure Rating psi (bar)*	Minimum Opening inches (mm))	Dimensions - inches (mm)							Block Thickness
					A	B	C	D Typical	E	F	G Thickness	
QSL4400	QSF250	1/4 (6.35)	15,000 (1034)	.016 (3.99)	1.38 (35.05)	2.00 (50.80)	0.52 (13.23)	0.63 (15.88)	1.00 (25.40)	1.00 (25.40)	-	0.75 (19.05)
QSL6600	QSF375	3/8 (9.53)	15,000 (1034)	0.25 (6.35)	1.50 (38.10)	2.00 (50.80)	0.55 (14.00)	0.75 (19.05)	1.00 (25.40)	1.00 (25.40)	-	0.81 (20.62)
QSL9900	QSF562	9/16 (14.29)	15,000 (1034)	0.36 (9.12)	2.19 (55.58)	3.00 (76.20)	0.82 (20.83)	1.19 (30.18)	1.50 (38.10)	1.50 (38.10)	-	1.25 (31.75)
QSL12	QSF750	3/4 (19.05)	15,000 (1034)	0.52 (13.11)	2.94 (74.63)	4.13 (104.78)	1.04 (26.37)	1.50 (38.10)	2.06 (52.40)	2.06 (52.40)	-	1.50 (38.10)
QSL16	QSF1000	1 (25.40)	15,000 (1034)	0.688 (17.48)	3.50 (88.90)	4.75 (120.65)	1.19 (30.18)	1.75 (44.45)	2.38 (60.33)	2.38 (60.33)	-	2.00 (50.80)



Elbow

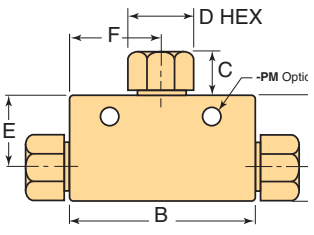
1" QS fitting bodies are 2507 Super Duplex
For mounting hole option add suffix PM to catalog number.
Consult factory for mounting hole dimensions.

*Maximum pressure rating is based on the lowest rating of any component.
Actual working pressure may be determined by tubing pressure rating, if lower.
All dimensions for reference only and subject to change.

For prompt service, Parker Autoclave Engineers stocks select products.
Consult your local representative.

Tee

Catalog Number	Connection Type	Outside Diameter Tube	Pressure Rating psi (bar)*	Minimum Opening inches (mm)	Dimensions - inches (mm)							Block Thickness
					A	B	C	D Typical	E	F	G Thickness	
QST4440	QSF250	1/4 (6.35)	15,000 (1034)	0.16 (3.99)	1.38 (35.05)	2.00 (50.80)	0.52 (13.23)	0.63 (15.88)	1.00 (25.40)	1.00 (25.40)	-	0.75 (19.05)
QST6660	QSF375	3/8 (9.53)	15,000 (1034)	0.25 (6.35)	1.50 (38.10)	2.00 (50.80)	0.55 (14.00)	0.75 (19.05)	1.00 (25.40)	1.00 (25.40)	-	0.81 (20.62)
SQT9990	QSF562	1/2 (12.70)	15,000 (1034)	0.36 (9.12)	2.19 (55.58)	3.00 (76.20)	0.82 (20.83)	1.19 (30.18)	1.50 (38.10)	1.50 (38.10)	-	1.25 (31.75)
QST12	QSF750	3/8 (9.53)	15,000 (1034)	0.52 (13.11)	2.94 (74.63)	4.13 (104.78)	1.04 (26.37)	1.50 (38.10)	2.06 (52.40)	2.06 (52.40)	-	1.50 (38.10)
QST16	QSF1000	1/2 (12.70)	15,000 (1034)	0.68 (17.48)	3.50 (88.90)	4.75 (120.62)	1.19 (30.18)	1.75 (44.45)	2.38 (60.33)	2.38 (60.33)	-	2.00 (50.80)



Tee

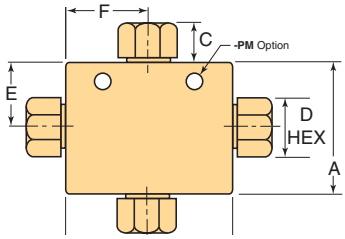
1" QS fitting bodies are 2507 Super Duplex
For mounting hole option add suffix PM to catalog number.
Consult factory for mounting hole dimensions.

*Maximum pressure rating is based on the lowest rating of any component.
Actual working pressure may be determined by tubing pressure rating, if lower.
All dimensions for reference only and subject to change.

For prompt service, Parker Autoclave Engineers stocks select products.
Consult your local representative.

Cross

Catalog Number	Connection Type	Outside Diameter Tube	Pressure Rating psi (bar)*	Minimum Opening inches (mm)	Dimensions - inches (mm)							Block Thickness
					A	B	C	D Typical	E	F	G Thickness	
QSX4444	QSF250	1/4 (6.35)	15,000 (1034)	0.16 (3.99)	2.00 (50.80)	2.00 (50.80)	0.52 (13.23)	0.63 (15.88)	1.00 (25.40)	1.00 (25.40)	-	0.75 (19.05)
QSX6666	QSF375	3/8 (9.53)	15,000 (1034)	0.25 (6.35)	2.00 (50.80)	2.00 (50.80)	0.55 (14.00)	0.75 (19.05)	1.00 (25.40)	1.00 (25.40)	-	0.81 (20.62)
QSX9999	QSF562	9/16 (14.29)	15,000 (1034)	0.36 (9.12)	3.00 (76.20)	3.00 (76.20)	0.82 (20.83)	1.19 (30.18)	1.50 (38.10)	1.50 (38.10)	-	1.25 (31.75)
QSX12	QSF750	3/4 (19.05)	15,000 (1034)	0.52 (13.11)	4.13 (104.78)	4.13 (104.78)	1.04 (26.37)	1.50 (38.10)	2.06 (52.40	2.06 (52.40	-	1.50 (38.10)
QSX16	QSF1000	1 (25.40)	15,000 (1034)	0.68 (17.48)	4.75 (120.65)	4.75 (120.65)	1.19 (30.18)	1.75 (44.45)	2.38 (60.33)	2.38 (60.33)	-	2.00 (50.80)



Cross

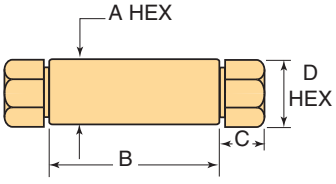
1" QS fitting bodies are 2507 Super Duplex
For mounting hole option add suffix PM to catalog number.
Consult factory for mounting hole dimensions.

*Maximum pressure rating is based on the lowest rating of any component. Actual working pressure may be determined by tubing pressure rating, if lower. All dimensions for reference only and subject to change.

For prompt service, Parker Autoclave Engineers stocks select products. Consult your local representative.

Straight Coupling

Catalog Number	Connection Type	Outside Diameter Tube	Pressure Rating psi (bar)*	Minimum Opening inches (mm)	Dimensions - inches (mm)						
					A	B	C	D Typical			
15F44QQ	QSF250	1/4 (6.35)	15,000 (1034)	0.16 (3.99)	0.75 (19.05)	1.63 (41.28)	0.52 (13.23)	0.63 (15.88)	Straight		
15F66QQ	QSF375	3/8 (9.53)	15,000 (1034)	0.25 (6.35)	0.81 (20.65)	1.75 (44.45)	0.55 (14.00)	0.75 (19.05)	Straight		
15F99QQ	QSF562	9/16 (14.29)	15,000 (1034)	0.36 (9.12)	1.38 (34.93)	2.75 (69.85)	0.82 (20.83)	1.19 (30.18)	Straight		
15F12Q	QSF750	3/4 (19.05)	15,000 (1034)	0.52 (13.11)	1.50 (38.10)	3.75 (95.25)	1.04 (26.37)	1.50 (38.10)	Straight		
15F16Q	QSF1000	1 (25.40)	15,000 (1034)	0.68 (17.48)	2.00† (50.80)	4.00 (101.60)	1.19 (30.23)	1.75 (44.45)	Straight		



Straight Coupling

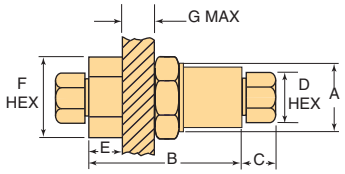
1" QS fitting bodies are 2507 Super Duplex
† Distance across flats
Union Couplings are designed with a removable seat insert allowing disassembly and tubing removal without the necessity of loosening other items in a line.

*Maximum pressure rating is based on the lowest rating of any component. Actual working pressure may be determined by tubing pressure rating, if lower. All dimensions for reference only and subject to change.

For prompt service, Parker Autoclave Engineers stocks select products. Consult your local representative.

Bulkhead Coupling

Catalog Number	Connection Type	Outside Diameter Tube	Pressure Rating psi (bar)*	Minimum Opening inches (mm))	Dimensions - inches (mm)						
					A	B	C	D Typical	E	F	G Thickness
15BF44QQ	QSF250	1/4 (6.35)	15,000 (1034)	0.16 (3.99)	0.88 (22.23)	2.00 (50.80)	0.52 (13.23)	0.63 (15.88)	0.63 (15.88)	1.00 (25.40)	0.38 (9.53)
15BF66QQ	QSF375	3/8 (9.53)	15,000 (1034)	0.25 (6.35)	1.06 (27.00)	2.38 (60.33)	0.55 (14.00)	0.75 (19.05)	0.79 (19.94)	1.38 (34.93)	0.38 (9.53)
15BF99QQ	QSF562	9/16 (14.29)	15,000 (1034)	0.36 (9.12)	1.63 (41.40)	2.63 (66.68)	0.82 (20.83)	1.19 (30.18)	0.91 (22.99)	1.75 (44.45)	0.38 (9.53)
15BF12Q	QSF750	3/4 (19.05)	15,000 (1034)	0.52 (13.11)	1.88 (47.63)	3.50 (88.90)	1.04 (26.37)	1.50 (38.10)	1.50 (38.10)	2.13 (53.98)	0.38 (9.53)
15BF16Q	QSF1000	1 (25.40)	15,000 (1034)	0.68 (17.48)	2.38 (60.33)	5.00 (127.00)	1.19 (30.23)	1.75 (44.45)	2.00 (50.80)	2.50† (63.50)	0.38 (9.53)



Bulkhead Coupling

1" QS fitting bodies are 2507 Super Duplex

† Distance across flats

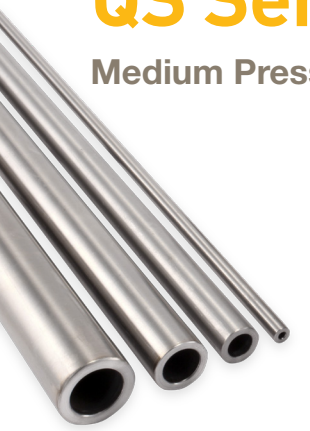
Union Couplings are designed with a removable seat insert allowing disassembly and tubing removal without the necessity of loosening other items in a line.

*Maximum pressure rating is based on the lowest rating of any component. Actual working pressure may be determined by tubing pressure rating, if lower. All dimensions for reference only and subject to change.

For prompt service, Parker Autoclave Engineers stocks select products. Consult your local representative.

QS Series Tubing

Medium Pressure Tubing - Pressures to 15,000 psi (1034 bar)



Parker Autoclave Engineers offers a complete selection of austenetic, cold drawn stainless steel tubing designed to match the performance standards of Parker Autoclave Engineers valves and fittings. Parker Autoclave Engineers medium pressure tubing is manufactured specifically for high pressure applications requiring both strength and corrosion resistance. The tubing is furnished in random lengths between 20 feet (6 meters) and 26.5 feet (8.0 meters). The average is 24 feet (7.3 meters). Medium Pressure Tubing is available in five sizes and a variety of materials.

Inspection and Testing:

Parker Autoclave Engineer's medium pressure tubing is inspected to assure freedom from seams, laps, fissures or other flaws, as well as carburization or intergranular carbide precipitation. The outside and inside diameters of the tubing are subject to special inspection and are controlled within close tolerences to assure proper fit. Sample pieces of tube for each lot are tested to confirm mechanical properties. Hydrostatic testing is also performed on a statistical basis and is conducted at the working pressure of the tube. Parker Autoclave Engineers will perform 100% hydrostatic testing at additional cost if desired.

Special Material:

In addition to the type 316/316L and 304/304L stainless steel tubing listed in this section, Parker Autoclave Engineers also makes available 2507® Super Duplex and Inconel 625™ materials with no loss of pressure rating. Please consult factory for stock availability.

Note: * Trademark names, Please consult factory for stock availabilty.

Tubing Tolerance:

Nominal Tubing Size inches (mm)	Tolerance/Outside Diameter inches (mm)
1/4 (6.35)	.248/.243 (6.30/6.17)
3/8 (9.53)	.370/.365 (9.40/9.27)
9/16 (14.27)	.557/.552 (14.15/14.02)
3/4 (19.05)	.745/.740 (18.92/18.80)
1 (25.40)	.995/.990 (25.27/25.14)

Tubing outside diameter dimensions are not standard commercial sizes.

Tubing outside sizes are specific to Parker Autoclave Engineers design requirements. Parker Autoclave Engineers components will not be compatible with other manufactured tubing.

All dimensions for reference only and subject to change.

Catalog Number	Tube Material	Fits Connection Type	Tube Size inches (mm)			Flow Area in^2 (mm^2)	Working Pressure psi (bar)*			
			Outside Diameter	Inside Diameter	Wall Thickness		-425 to -100°F (-252 to 37.8°C)	200°F (93°C)	400°F (204°C)	600°F (316°C)
MS15-092**	316SS	QSF250	1/4 (6.35)	0.109 (2.77)	.070 (1.78)	0.009 (5.81)	20,000 (1379)	20,000 (1379)	19,250 (1327)	18,050 (1244)
MS15-192**	304SS						20,000 (1379)	18,950 (1307)	17,200 (1186)	17,000 (1172)
MS15-093**	316SS	QSF375	3/8 (9.53)	0.203 (5.16)	0.086 (2.18)	0.032 (20.65)	20,000 (1379)	20,000 (1379)	19,250 (1327)	18,050 (1244)
MS15-193**	304SS						20,000 (1379)	20,000 (1379)	19,250 (1327)	18,050 (1244)
MS15-097	316SS	QSF562	9/16 (14.29)	0.359 (9.12)	0.101 (2.57)	0.101 (2.57)	15,000 (1034)	15,000 (1034)	15,000 (1034)	15,000 (1034)
MS15-098	316SS	QSF750	3/4 (19.05)	0.516 (13.11)	0.117 (2.97)	0.209 (134.84)	15,000 (1034)	15,000 (1034)	14,400 (993)	13,650 (941)
MS15-099	316SS	1000562	1 (25.40)	0.688 (17.48)	0.156 (3.96)	0.371 (239)	15,000 (1034)	15,000 (1034)	14,400 (9934)	13,650 (941)

* Maximum pressure rating is based on the lowest rating of any component. ** Larger inside diameters are available as special order.

Actual working pressure may be determined by tubing pressure rating, if lower. For prompt service, Parker Autoclave Engineers stocks select products. Consult your local representative.

QS Series Nipples

Medium Pressure - Pressures to 15,000 psi (1034 bar)

For rapid system make-up, Parker Autoclave Engineers supplies pre-assembled nipples in various sizes and lengths for Parker Autoclave QSS valves and fittings.

Special Lengths:

In addition to the standard lengths listed in the table below, nipples are available in any custom length. Consult factory.

Materials:

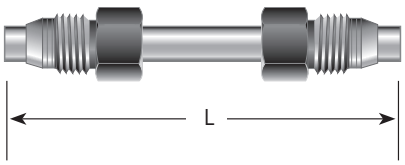
Catalog numbers in table refer to Type 316 Stainless Steel.

Nipple Specifications:

Catalog Number					Fits Connection Type	Tube Size inches (mm)		Working Pressure @ 100°F (37.8°C) psi (bar)
Nipple Length: inches (mm)								
4.00" (101.60)	6.00" (152.40)	8.00" (203.20)	10.00" (254.60)	12.00" (304.80)		Outside Diameter	Inside Diameter	
QNA4404-316	QNA4406-316	QNA4408-316	QNA44010-316	QNA44012-316	QSF250	1/4 (6.35)	0.109 (2.77)	15,000 (1034)
QNA6604-316	QNA6606-316	QNA6608-316	QNA66010-316	QNA66012-316	QSF375	3/8 (9.53)	0.203 (5.16)	15,000 (1034)
	QNA9906-316	QNA9908-316	QNA99010-316	QNA99012-316	QSF562	9/16 (14.29)	0.359 (9.12)	15,000 (1034)
		QNA1208-316	QNA12010-316	QNA12012-316	QSF750	3/4 (19.05)	0.516 (13.11)	15,000 (1034)
		QNA1608-316	QNA16010-316	QNA16012-316	QSF1000	1 (25.40)	0.688 (17.48)	15,000 (1034)

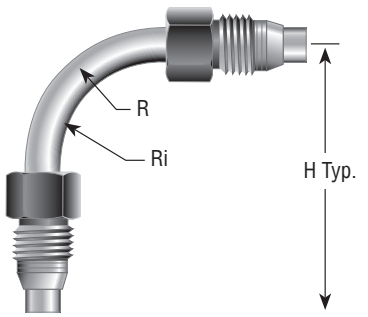
Close Tube Port Connectors:

Model	Size inches (mm)	Fits Connection Type	Dimension "L" inches (mm)
QTS4403.25	1/4 (6.35)	QSF250	3.25 (82.55)
QTS6603.50	3/8 (9.53)	QSF375	3.50 (88.90)
QTS9905.25	9/16 (14.29)	QSF562	5.25 (133.35)
QTS1206.375	3/4 (19.05)	QSF750	6.38 (162.10)



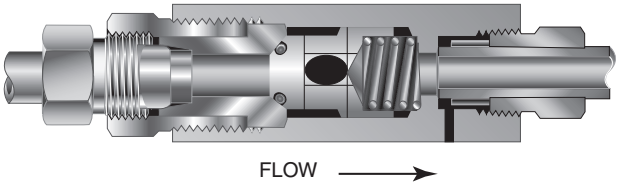
Elbow Tube:

Model	Size inches (mm)	Fits Connection Type	Dimension "H" inches (mm)	Dimension "R" inches (mm)	Dimension "Ri" inches (mm)
QTE44-90	1/4 (6.35)	QSF250	3.25 (82.55)	0.563 (14.30)	0.438 (11.13)
QTE66-90	3/8 (9.53)	QSF375	3.50 (88.90)	0.938 (23.83)	0.75 (19.05)
QTE99-90	9/16 (14.29)	QSF562	7.50 (19.05)	2.906 (73.82)	2.625 (66.68)
QTE12-90	3/4 (19.05)	QSF750	10.00 (254.00)	3.875 (98.43)	3.5 (88.9)
QTE16-90	1 (25.40)	QSF1000	11.50 (292.10)	5.125 (13.30)	4.625 (117.48)



QS Series Check Valves

Medium Pressure Check Valves - Pressures to 15,000 psi (1034 bar)



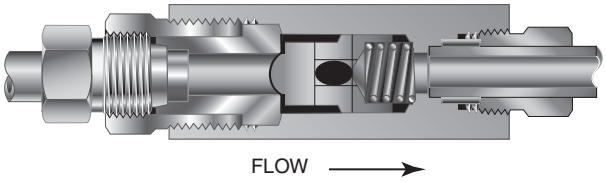
O-Ring Check Valve

Provide unidirectional flow and tight shut-off for liquids and gases with high reliability. When differential drops below cracking pressure*, valve shuts off. (**Not for use as relief valve.**)

Materials: 316 Stainless Steel: Body, cover, poppet, cover gland. 300 Stainless Steel: Spring. Except 1" - see note below. Standard O-ring: Viton, for operation to 400° F (204°C). Buna-N or PTFE available for 250°F (121°C) or 400°F (204°C) respectively; specify when ordering.

Cracking Pressure*: 20 psi (1.38 bar) ±30%. Springs for higher cracking pressures (up to 100 psi (6.89bar)) available on special order for O-ring style check valves only.

Temperature: Minimum operating temperature for standard o-ring check valves 0°F (-17.8°C). For low temperature option to -100°F (-73°C) add suffix -**TO** (PTFE O-ring)



Ball Check Valve

Prevent reverse flow where leak-tight shut-off is not mandatory. When differential drops below cracking pressure, valve closes. With all-metal components, valve can be used up to 650°F (343°C). See Technical Information section for connection temperature limitations. (**Not for use as relief valve.**)

Ball and poppet are an integral design to assure positive, in-line seating without “chatter”. Poppet is designed essentially for axial flow with minimum pressure drop.

Materials: 316 Stainless Steel: body, cover, cover gland, ball poppet. 300 Series Stainless Steel: spring

Temperature: Minimum operating temperature for standard ball check valves -100°F (-73°C).

Basic Repair Kits:

Add “R” to the front of valve catalog first 4 numbers for proper repair kit. (Example: R2B16S). Consult your Parker Autoclave Representative for pricing on repair kits. Refer to the Operation and Maintenance manual for proper maintenance procedures.

CAUTION: While testing has shown O-Rings to provide satisfactory service life, both cyclic and shelf life may vary widely with differing service conditions, properties of reactants, pressure and temperature cycling and age of the O-ring. FREQUENT INSPECTIONS SHOULD BE MADE to detect any deterioration, and O-rings replaced as required.

CAUTION: See Tubing section for proper selection of tubing.

NOTE: For optional material see Needle Valve Options section.

O-Ring Check Valves

Catalog Number	Fits Connection Type	Pressure Rating psi (bar)*	Orifice inches (mm)	Rated Cv	Dimensions - inches (mm)				
					A	B	C	D Typical	Hex
QSO4400	QSF250	15,000 (1034)	.188 (4.78)	.15	3.18 (80.77)	2.56 (65.02)	0.44 (11.18)	0.63 (16.00)	0.81 (20.57)
QSO6600	QSF375	15,000 (1034)	.312 (7.93)	.63	3.56 (90.42)	3.00 (76.20)	0.53 (13.46)	0.75 (19.05)	1.00 (25.40)
QSO9900	QSF562	15,000 (1034)	.359 (9.12)	2.30	5.21 (132.33)	4.50 (114.30)	0.81 (30.18)	1.19 (30.18)	1.75 (44.45)
QSO12	QSF750	15,000 (1034)	.516 (13.11)	4.70	6.40 (162.56)	5.50 (139.70)	1.03 (26.16)	1.50 (38.10)	1.88† (47.75)
QSO16	QSF1000	15,000 (1034)	.688 (17.48)	14.00	8.92 (226.57)	7.52 (191.10)	1.19 (30.23)	1.75 (44.45)	3.00† (76.20)

Ball Check Valves

QSB4400	QSF250	15,000 (1034)	.188 (4.78)	.15	3.18 (80.77)	2.56 (65.02)	0.44 (11.18)	0.63 (16.00)	0.81 (20.57)
QSB6600	QSF375	15,000 (1034)	.312 (7.93)	.63	3.56 (90.42)	3.00 (76.20)	0.53 (13.46)	0.75 (19.05)	1.00 (25.40)
QSB9900	QSF562	15,000 (1034)	.359 (9.12)	2.30	5.21 (132.33)	4.50 (114.30)	0.81 (30.18)	1.19 (30.18)	1.75 (44.45)
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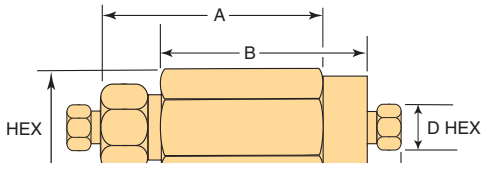


O-Ring Check Valves

Note:
All check valves are furnished complete with connection components unless otherwise specified.

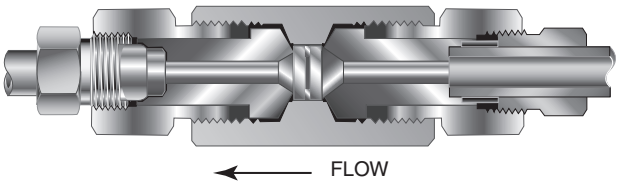
† Distance across flats

1" check valve bodies, cover, and cover gland are 2507 Super Duplex standard.

*Maximum pressure rating is based on the lowest rating of any component. Actual working pressure may be determined by tubing pressure rating, if lower. All dimensions for reference only and subject to change. For prompt service, Parker Autoclave stocks select products. Consult your local representative.

QS Series Line Filters

Low Pressure Line Filter - Pressures to 15,000 psi (1034 bar)

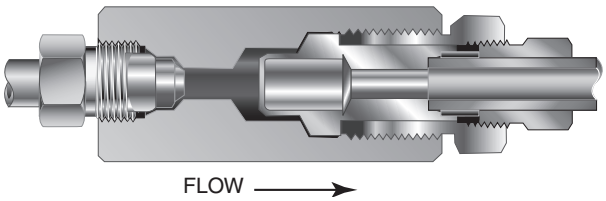


Dual Disc Line Filters

Dual-Disc Line Filters are utilized in numerous industrial, chemical processing, aerospace, nuclear and other applications. With the dual-disc design, large contaminant particles are trapped by the upstream filter element before they can reach and clog the smaller micron-size downstream element. Filter elements can be easily replaced.

Materials: 316 Stainless Steel: Body, covers and gland nuts. Filters: 316L Stainless Steel.

Filter Element: Downstream/upstream micron size 35/65 is standard. 5/10 or 10/35 also available when specified. Other element combinations available on special order.



Cup Type Line Filters

High Flow Cup-Type Line Filters are recommended in low pressure systems requiring both high flow rates and maximum filter surface area. Widely used in the industrial and chemical processing fields, the cup design offers as much as six times the effective filter area as compared to disc-type units. In addition, the filter elements can be quickly and easily replaced.

Materials: 316 Stainless Steel: Body, covers and gland nuts. Filter: 316L Stainless Steel.

Filter Element: 300 Series Stainless Steel sintered cup. Standard elements available in choice of 5, 35 or 65 micron sizes. **Note:** Filter ratings are nominal.

NOTE 1: All filters furnished complete with connection components unless otherwise specified. All dimensions for reference only and subject to change. For optional materials, see Needle Valve Options section

NOTE 2: Parker Autoclave Engineers disc and cup type filters are designed to filter small amounts of process particles. It is recommended that all fluids are thoroughly cleaned prior to entering the higher pressure system.

NOTE 3: Special material filters may be supplied with four flats in place of standard hex.

NOTE 4: Pressure differential not to exceed 1,000 psi (69 bar) in a flowing condition.

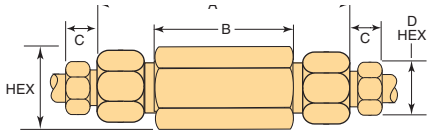
NOTE 5: Larger micron size filter element is installed on the upstream (inlet) side.

Dual Disc Line Filters

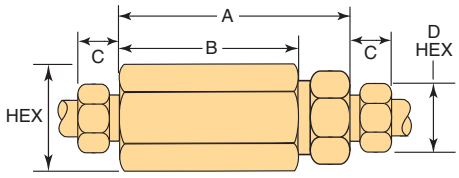
Catalog Number	Pressure Rating psi (bar)*	Orifice inches (mm)	Micron Size**	Connection Size and Type	Effective Filter Elements Area in^2 (mm^2)	Dimensions - inches (mm)				
						A	B	C	D Typical	Hex
SLF2200	15,000 (1034)	.094 (2.39)	35/65	W125	.06 (38.70)	2.31 (58.67)	1.25 (31.75)	0.31 (7.87)	0.50 (12.70)	0.62 (15.74)
SLF2200-5/10			5/10							
SLF2200-10/35			10/35							
SLF4400	15,000 (1034)	.125 (3.18)	35/65	SW250	.15 (96.77)	2.94 (75.56)	1.68 (42.67)	0.44 (11.17)	0.63 (15.88)	0.81 (20.57)
SLF4400-5/10			5/10							
SLF4400-10/35			10/35							
SLF6600	15,000 (1034)	.188 (4.78)	35/65	SW375	.15 (96.77)	2.94 (75.56	1.68 (42.67)	0.53 (13.46)	0.75 (19.05)	1.00 (25.40)
SLF6600-5/10			5/10							
SLF6600-10/35			10/35							
SLF8800	10,000 (689)	.250 (6.35)	35/65	SW500	.25 (161.29)	3.56 (90.42)	1.94 (49.27)	0.53 (13.46)	0.93 (23.62)	1.18 (29.97)
SLF8800-5/10			5/10							
SLF8800-10/35			10/35							

Cut Type Line Filters

SWF4-5	15,000 (1034)	.188 (4.78)	5	SW250	.81 (522.57)	3.18 (80.77)	2.56 (65.02)	0.44 (11.17)	0.63 (15.88)	0.81 (20.57)
SWF4-35			35							
SWF4-65			65							
SWF6-5	15,000 (1034)	.312 (7.92)	5	SW375	.81 (522.57)	3.56 (90.42)	3.00 (76.20)	0.53 (13.46)	0.75 (19.05)	1.00 (25.40)
SWF6-35			35							
SWF6-65			65							
SWF8-5	10,000 (689)	.438 (11.13)	5	SW500	1.53 (987.09)	3.18 (80.77)	2.56 (65.02)	0.53 (13.46	0.93 (23.62)	1.38 (35.05)
SWF8-35			35							
SWF8-65			65							



Dual Disc Line Filters



Cup Type Line Filters

** Larger micron size filter element is installed on upstream (inlet) side. All filters furnished complete with connection components unless otherwise specified.

Other micron sizes available on special order. Change last digits of the catalog number accordingly. For optional materials, see Needle Valve Options section.

The 1/16" Tubing System is a complete system for use with all 1/8" components for pressure to 15,000 psi (1034 bar). Consult factory.

*Maximum pressure rating is based on the lowest rating of any component. Actual working pressure may be determined by tubing pressure rating, if lower. All dimensions for reference only and subject to change.

For prompt service, Parker Autoclave Engineers stocks select products. Consult your local representative.

NOTES:

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NOTES:

High Pressure
Valves • Fittings • Tubing
to 150,000 psi.

Reactors • Vessels
Instrumentation

Air Driven, High Flow,
High Pressure Liquid Pumps

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 **AEROSPACE**	Aircraft Engines Commercial Commerical Transports Military Aircraft Regional Transports	Business and General Aviation Land-Based Weapons Systems Missiles and Launch Vehicles Unmanned Aerial Vehicles	Flight Control Systems & Components Fluid Conveyance Systems Fluid Metering Delivery & Atomization Devices Fuel Systems & Components	Hydraulic Systems & Components Inert Nitrogen Generating Systems Pneumatic Systems & Components Wheels & Brakes
 **CLIMATE CONTROL**	Agriculture Food, Beverage and Dairy Precision Cooling Transportation	Air Conditioning Life Sciences & Medical Processing	Co2 Controls Electronic Controllers Filter Driers Hand Shut-Off Valves Hose & Fittings	Pressure Regulating Valves Refrigerant Distributors Safety Relief Valves Solenoid Valves Thermostatic Expansion Valves
 **ELECTRO-MECHANICAL**	Aerospace Life Science & Medical Packaging Machinery Plastics Machinery & Converting Semiconductor & Electronics Factory Automation	Machine Tools Paper Machinery Primary Metals Textile Wire & Cable	AC/DC Drives & Systems Electric Actuators, Gantry Robots & Slides Electrohydrostatic Actuation Systems Electromechanical Actuation Systems Human Machine Interface	Linear Motors Stepper Motors, Servo Motors Drives & Controls Structural Extrusions
 **FILTRATION**	Food & Beverage Life Sciences Mobile Equipment Power Generation Transportation	Industrial Machinery Marine Oil & Gas Process	Analytical Gas Generators Compressed Air & Gas Filters Condition Monitoring Engine Air, Fuel & Oil Filtration & Systems	Hydraulic, Lubrication & Coolant Filters Process, Chemical, Water Microfiltration Filters Nitrogen, Hydrogen & Zero Air Generators
 **FLUID and GAS HANDLING**	Aerospace Agriculture Bulk Chemical Handling Construction Machinery Food & Beverage Fuel & Gas Delivery	Industrial Machinery Mobile Oil & Gas Transportation Welding	Brass Fittings & Valves Diagnostic Equipment Fluid Conveyance Systems Industrial Hose	PTFE & PFA Hose, Tubing & Plastic Fittings Rubber & Thermoplastic Hose & Couplings Tube Fittings & Adapters Quick Disconnects
 **HYDRAULICS**	Aerospace Aerial lift Agriculture Construction Machinery Forestry	Industrial Machinery Mining Oil & Gas Power Generation & Energy Truck Hydraulics	Diagnostic Equipment Hydraulic Cylinders & Accumulators Hydraulic Motors & Pumps Hydraulic Systems Hydraulic Valves & Controls	Power Take-Offs Rubber & Thermoplastic Hose & Couplings Tube Fittings & Adapters Quick Disconnects
 **PNEUMATICS**	Aerospace Conveyor & Material Handling Factory Automation Life Science & Medical	Machine Tools Packaging Machinery Transportation & Automotive	Air Preparation Brass Fittings & Valves Manifolds Pneumatic Accessories Pneumatic Actuators & Grippers Pneumatic Valves & Controls	Quick Disconnects Rotary Actuators Rubber & Thermoplastic Hose & Couplings Structural Extrusions Thermoplastic Tubing & Fittings Vacuum Generators, Cups & Sensors
 **PROCESS CONTROL**	Chemical & Refining Food, Beverage & Dairy Medical & Dental	Microelectronics Oil & Gas Power Generation	Analytical Sample Conditioning Products & Systems Fluoropolymer Chemical Delivery Fittings, Valves & Pumps High Purity Gas Delivery Fittings, & Valves & Regulators	Instrumentation Fittings, Valves Regulators Medium Pressure Fittings & Valves Process Control Manifolds
 **SEALING and SHIELDING**	Aerospace Chemical Processing Consumer Energy, Oil & Gas Fluid Power General Industrial	Information Technology Life Sciences Military Semiconductor Transportation	Dynamic Seals Elastomeric O-Rings Emi Shielding Extruded & Precision-Cut, Fabricated Elastomeric Seals	Homogeneous & Inserted Elastomeric Shapes High Temperature Metal Seals Metal & Plastic Retained Composite Seals Thermal Management

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! CAUTION !

Do not mix or interchange component parts or tubing with those of other manufacturers. Doing so is unsafe and will void warranty.

Parker Autoclave Engineers Valves, Fittings, and Tools are not designed to interface with common commercial instrument tubing and are designed to only connect with tubing manufactured to Parker Autoclave Engineers AES specifications. Failure to do so is unsafe and will void warranty.

WARNING

FAILURE, IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

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Literature #: **02-1247SE** March 2017

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