

Fittings and Tubing

Flared Cone Connection Pressures to 22,500 psi (1550 bar)

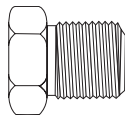
Parker Autoclave Engineers Medium Pressure FC Fittings are designed for use with FC Series valves and medium pressure tubing. These fittings feature improved bite-type compression connections with larger orifices for excellent flow capabilities.

Parker Autoclave Engineers fittings and components are manufactured of high strength stainless steel.

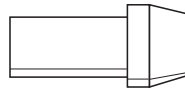


Connection Components

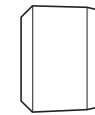
All Parker Autoclave Engineers valves and fittings are supplied complete with appropriate glands and sleeves. To order these components separately, use order numbers listed. When using plug, sleeve is not required.



Gland
FCG ()



Plug
FCP ()



Sleeve
FCS ()

Add tube size ()

1/4" - 40

3/8" - 60

9/16" - 90

3/4" - 120

1" - 160

Example: 1/4 Gland - FCG 40

To ensure proper fit use Parker Autoclave Engineers tubing. Consult factory for mounting hole dimensions.

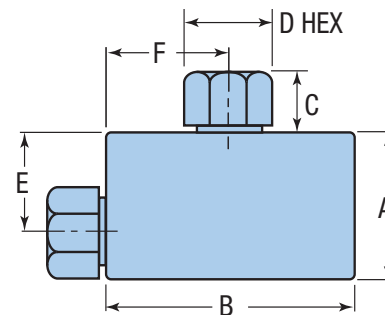
Elbow (see Figure 1)

Catalog Number	Connection Type	Outside Diameter Tube	Pressure Rating psi (bar)*	Minimum Opening	Dimensions - inches (mm)							
					A	B	C	D Typical	E	F	G	Block Thickness
FCL4400	FLC250	1/4 (6.35)	20,000 (1379)	0.11 (2.79)	1.38 (35.05)	2.00 (50.80)	0.36 (9.02)	0.63 (16.00)	1.00 (25.40)	1.00 (25.40)		0.81 (20.57)
FCL6600	FLC375	3/8 (9.53)	20,000 (1379)	0.20 (5.08)	1.75 (44.45)	2.50 (63.50)	0.44 (11.23)	0.81 (20.57)	1.25 (31.75)	1.25 (31.75)		1.00 (25.40)
FCL9900	FLC562	9/16 (14.29)	20,000 (1379)	0.31 (7.87)	2.80 (71.12)	3.00 (76.20)	0.66 (16.84)	1.19 (30.23)	1.75 (44.45)	1.50 (38.10)		1.38 (35.05)
FCL12	FLC750	3/4 (19.05)	20,000 (1379)	0.44 (11.18)	3.00 (76.20)	4.13 (104.90)	0.88 (22.43)	1.50 (38.10)	2.38 (60.45)	2.06 (52.32)		1.75 (44.45)
FCL16	FLC1000	1 (25.4)	20,000 (1379)	0.56 (14.22)	4.50 (114.30)	6.00 (152.40)	0.95 (24.13)	1.75 (44.45)	3.25 (82.55)	3.00 (76.203)		2.25 (57.15)

* = 22,500 psi when using 2507 Super Duplex material

1. Maximum pressure rating is based on the lowest rating of any component. Actual working pressure may be determined by tubing pressure rating, if lower.
2. 1" FC fitting bodies are 2507 Super Duplex as standard
3. Compression Sleeve material is IN718
4. For mounting hole option add suffix PM to catalog number. Consult factory for mounting hole dimensions.

All dimensions for reference only and subject to change. For prompt service, Parker Autoclave Engineers stocks select products. Consult your local representative.



ELBOW - Figure 1

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Flared Cone Connection Pressures to 22,500 psi (1550 bar)

Tee (see Figure 2)

Catalog Number	Connection Type	Outside Diameter Tube	Pressure Rating psi (bar)*	Minimum Opening	Dimensions - inches (mm)							
					A	B	C	D Typical	E	F	G	Block Thickness
FCT4400	FLC250	1/4 (6.35)	20,000 (1379)	0.11 (2.79)	1.38 (35.05)	2.00 (50.80)	0.36 (9.02)	0.63 (16.00)	1.00 (25.40)	1.00 (25.40)		0.81 (20.57)
FCT6600	FLC375	3/8 (9.53)	20,000 (1379)	0.20 (5.08)	1.75 (44.45)	2.50 (63.50)	0.44 (11.23)	0.81 (20.57)	1.25 (31.75)	1.25 (31.75)		1.00 (25.40)
FCT9900	FLC562	9/16 (14.29)	20,000 (1379)	0.31 (7.87)	2.80 (71.12)	3.00 (76.20)	0.66 (16.84)	1.19 (30.23)	1.75 (44.45)	1.50 (38.10)		1.38 (35.05)
FCT12	FLC750	3/4 (19.05)	20,000 (1379)	0.44 (11.18)	3.00 (76.20)	4.13 (104.90)	0.88 (22.43)	1.50 (38.10)	2.38 (60.45)	2.06 (52.32)		1.75 (44.45)
FCT16	FLC1000	1 (25.4)	20,000 (1379)	0.56 (14.22)	4.50 (114.30)	6.00 (152.40)	0.95 (24.13)	1.75 (44.45)	3.25 (82.55)	3.00 (76.203)		2.25 (57.15)

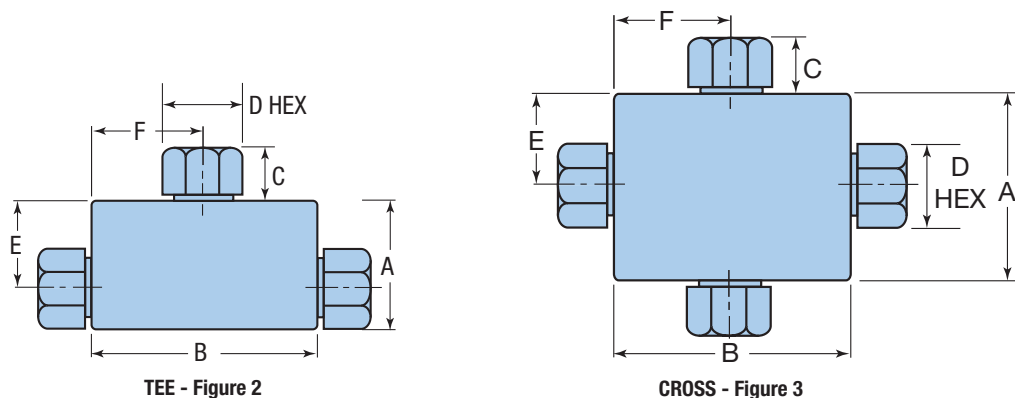
* = 22,500 psi when using 2507 Super Duplex material

Cross (see Figure 3)

Catalog Number	Connection Type	Outside Diameter Tube	Pressure Rating psi (bar)*	Minimum Opening	Dimensions - inches (mm)							
					A	B	C	D Typical	E	F	G	Block Thickness
FCX4400	FLC250	1/4 (6.35)	20,000 (1379)	0.11 (2.79)	2.00 (50.80)	2.00 (50.80)	0.36 (9.02)	0.63 (16.00)	1.00 (25.40)	1.00 (25.40)		0.81 (20.57)
FCX6600	FLC375	3/8 (9.53)	20,000 (1379)	0.20 (5.08)	2.50 (63.50)	2.50 (63.50)	0.44 (11.23)	0.81 (20.57)	1.25 (31.75)	1.25 (31.75)		1.00 (25.40)
FCX9900	FLC562	9/16 (14.29)	20,000 (1379)	0.31 (7.87)	3.50 (88.90)	3.00 (76.20)	0.66 (16.84)	1.19 (30.23)	1.75 (44.45)	1.50 (38.10)		1.38 (35.05)
FCX12	FLC750	3/4 (19.05)	20,000 (1379)	0.44 (11.18)	4.75 (120.65)	4.13 (104.90)	0.88 (22.43)	1.50 (38.10)	2.38 (60.45)	2.06 (52.32)		1.75 (44.45)
FCX16	FLC1000	1 (25.4)	20,000 (1379)	0.56 (14.22)	6.50 (165.10)	6.00 (152.40)	0.95 (24.13)	1.75 (44.45)	3.25 (82.55)	3.00 (76.203)		2.25 (57.15)

* = 22,500 psi when using 2507 Super Duplex material

1. Maximum pressure rating is based on the lowest rating of any component. Actual working pressure may be determined by tubing pressure rating, if lower.
2. 1" FC fitting bodies are 2507 Super Duplex as standard
3. Compression Sleeve material is IN718
4. For mounting hole option add suffix PM to catalog number. Consult factory for mounting hole dimensions.



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Flared Cone Connection Pressures to 22,500 psi (1550 bar)

Straight Coupling (see Figure 4)

Catalog Number	Connection Type	Outside Diameter Tube	Pressure Rating psi (bar)*	Minimum Opening	Dimensions - inches (mm)			
					A	B	C	D Typical
20F44FF	FLC250	1/4 (6.35)	20,000 (1379)	0.11 (2.79)	0.81 (20.57)	2.00 (50.80)	0.36 (9.02)	0.63 (16.00)
20F66FF	FLC375	3/8 (9.53)	20,000 (1379)	0.20 (5.08)	1.00 (25.40)	2.38 (60.45)	0.44 (11.23)	0.81 (20.57)
20F99FF	FLC562	9/16 (14.29)	20,000 (1379)	0.31 (7.87)	1.38 (35.05)	3.00 (76.20)	0.66 (16.84)	1.19 (30.23)
20F12F	FLC750	3/4 (19.05)	20,000 (1379)	0.44 (11.18)	1.75 (44.45)	3.75 (95.25)	0.88 (22.43)	1.50 (38.10)
20F16F	FLC1000	1 (25.4)	20,000 (1379)	0.56 (14.22)	2.25 [†] (57.15)	5.50 (139.70)	0.95 (24.13)	1.75 (44.45)

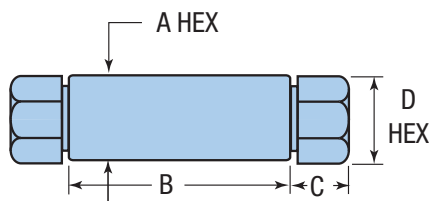
* = 22,500 psi when using 2507 Super Duplex material

Bulkhead Coupling (see Figure 5)

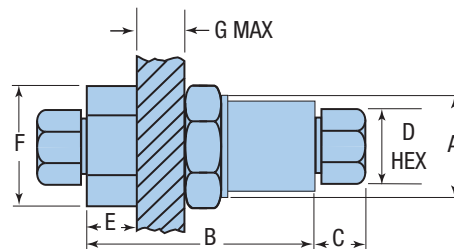
Catalog Number	Connection Type	Outside Diameter Tube	Pressure Rating psi (bar)*	Minimum Opening	Dimensions - inches (mm)						
					A	B	C	D Typical	E	F	G
20BF44FF	FLC250	1/4 (6.35)	20,000 (1379)	0.11 (2.79)	0.81 (20.57)	2.00 (50.80)	0.36 (9.02)	0.63 (16.00)	0.63 (16.00)	1.00 (25.40)	0.38 (9.65)
20BF66FF	FLC375	3/8 (9.53)	20,000 (1379)	0.20 (5.08)	1.00 (25.40)	2.38 (60.45)	0.44 (11.23)	0.81 (20.57)	0.79 (20.07)	1.38 (35.05)	0.38 (9.65)
20BF99FF	FLC562	9/16 (14.29)	20,000 (1379)	0.31 (7.87)	1.38 (35.05)	3.00 (76.20)	0.66 (16.84)	1.19 (30.23)	0.91 (23.11)	1.75 (44.45)	0.38 (9.65)
20BF12F	FLC750	3/4 (19.05)	20,000 (1379)	0.44 (11.18)	1.75 (44.45)	3.75 (95.25)	0.88 (22.43)	1.50 (38.10)	1.50 (38.10)	2.13 (54.10)	0.38 (9.65)
20BF16F	FLC1000	1 (25.4)	20,000 (1379)	0.56 (14.22)	2.25 [†] (57.15)	5.50 (139.70)	0.95 (24.13)	1.75 (44.45)	2.00 (50.80)	2.50 [†] (63.50)	0.38 (9.65)

* = 22,500 psi when using 2507 Super Duplex material

1. Maximum pressure rating is based on the lowest rating of any component. Actual working pressure may be determined by tubing pressure rating, if lower.
2. 1" FC fitting bodies are 2507 Super Duplex as standard
3. Compression Sleeve material is IN718
4. For mounting hole option add suffix PM to catalog number. Consult factory for mounting hole dimensions.
5. [†] Distance across flats
6. Union Couplings are designed with a removable seat insert allowing disassembly and tubing removal without the necessity of loosening other items in a line. Contact factory for availability.



STRAIGHT COUPLING- Figure 4



BULKHEAD COUPLING- Figure 5