

# Fittings, Tubing & Nipples

## Medium Pressure

*Pressures to 20,000 psi (1379 bar)*

Since 1945 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.



### *Medium Pressure Fittings, Tubing and Nipples Features:*

- Coned-and-Threaded Connection.
- Available sizes are 1/4", 3/8", 9/16", 3/4", 1" and 1-1/2".
- Fittings manufactured from cold worked 316 stainless steel.
- Tubing is manufactured from dual rated 316/316L and 304/304L cold worked stainless steel.
- Operating Temperatures from -423°F (-252°C) to 1200°F (649°C).
- Anti-vibration connection components available.
- All items available in special material.

The medium pressure series uses Parker Autoclave Engineers medium pressure connection. This coned-and-threaded connection features orifice sizes to match the high flow characteristics of this series.

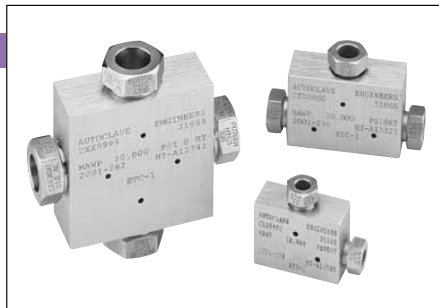


**Fittings, Tubing & Nipples - Medium Pressure**

# Medium Pressure Fittings

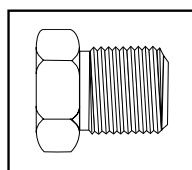
## Pressures to 20,000 psi (1379 bar)

Parker Autoclave Engineers medium pressure fittings, Series SF, are designed for use with Series 20SM medium pressure valves and Parker Autoclave Engineers' medium pressure tubing. They incorporate medium pressure coned-and-threaded connections with orifices sized to match the high-flow Series 20SC valves.

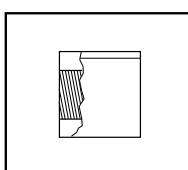


## Connection Components

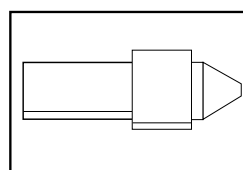
All Parker Autoclave valves and fittings are supplied complete with appropriate glands and collars. To order these components separately, use order numbers listed. When using plug, collar is not required.



**Gland**  
CGLX ( )



**Collar**  
CCLX ( )



**Plug**  
CPX ( )

Add tube size ( )  
1/4" - 40  
3/8" - 60  
9/16" - 90  
3/4" - 120  
1" - 160  
1-1/2" - 240

Example:  
1/4" Gland - CGLX 40

To ensure proper fit use Parker Autoclave Engineers tubing.

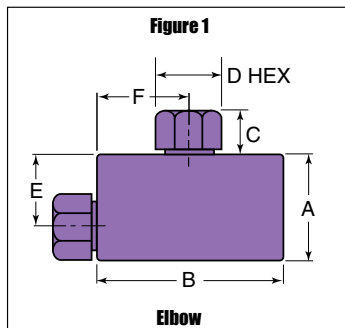
Note: Special material glands may be supplied with four flats in place of standard hex.

Catalog Number	Connection Type	Outside Diameter Tube	Pressure Rating psi (bar)*	Minimum Opening	Dimensions - inches (mm)							Block Thickness	Fitting Pattern
					A	B	C	D Typical	E	F	G Thickness		

### Elbow

CLX4400	SF250CX	1/4 (6.35)	20,000 (1378.93)	0.125 (3.18)	1.12 (28.45)	1.50 (38.10)	0.38 (9.53)	0.50 (12.70)	0.75 (19.05)	0.75 (19.05)		0.62 (15.75)	See Figure 1
CLX6600	SF375CX	3/8 (9.53)	20,000 (1378.93)	0.219 (5.56)	1.38 (35.05)	2.00 (50.80)	0.44 (11.10)	0.62 (15.75)	1.00 (25.40)	1.00 (25.40)		0.75 (19.05)	
CLX9900	SF562CX	9/16 (14.29)	20,000 (1378.93)	0.359 (9.12)	1.75 (44.45)	2.50 (63.50)	0.53 (13.46)	0.94 (23.88)	1.25 (31.75)	1.25 (31.75)		1.00 (25.40)	
CLX12	SF750CX	3/4 (19.05)	20,000 (1378.93)	0.516 (13.11)	2.25 (57.15)	3.00 (76.20)	0.62 (15.75)	1.19 (30.23)	1.50 (38.10)	1.50 (38.10)		1.38 (34.93)	
CLX16	SF1000CX	1 (25.40)	20,000 (1378.93)	0.688 (17.48)	3.00 (76.20)	4.12 (104.65)	0.72 (18.29)	1.38 (35.05)	2.06 (52.32)	2.06 (52.32)		1.75 (44.45)	
CLX24	SF1500CX	1-1/2 (38.10)	15,000 (1034.20)	0.94 (23.80)	4.00 (101.60)	5.75 (146.05)	1.12 (28.45)	1.88 (47.63)	2.88 (73.03)	2.88 (73.03)		2.25 (57.15)	

\*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.  
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For mounting hole option add suffix PM to catalog number. Consult factory for mounting hole dimensions.

Catalog Number	Connection Type	Outside Diameter Tube	Pressure Rating psi (bar)*	Minimum Opening	Dimensions - inches (mm)							Block Thickness	Fitting Pattern
					A	B	C	D Typical	E	F	G Thickness		

### Tee

CTX4440	SF250CX	1/4 (6.35)	20,000 (1378.93)	0.125 (3.18)	1.12 (28.45)	1.50 (38.10)	0.38 (9.53)	0.50 (12.70)	0.75 (19.05)	0.75 (19.05)		0.62 (15.75)	See Figure 2
CTX6660	SF375CX	3/8 (9.53)	20,000 (1378.93)	0.219 (5.56)	1.38 (35.05)	2.00 (50.80)	0.44 (11.10)	0.62 (15.75)	1.00 (25.40)	1.00 (25.40)		0.75 (19.05)	
CTX9990	SF562CX	9/16 (14.29)	20,000 (1378.93)	0.359 (9.12)	1.75 (44.45)	2.50 (63.50)	0.53 (13.46)	0.94 (23.88)	1.25 (31.75)	1.25 (31.75)		1.00 (25.40)	
CTX12	SF750CX	3/4 (19.05)	20,000 (1378.93)	0.516 (13.11)	2.25 (57.15)	3.00 (76.20)	0.62 (15.75)	1.19 (30.23)	1.50 (38.10)	1.50 (38.10)		1.38 (34.93)	
CTX16	SF1000CX	1 (25.40)	20,000 (1378.93)	0.688 (17.48)	3.00 (76.20)	4.12 (104.65)	0.72 (18.29)	1.38 (35.05)	2.06 (52.32)	2.06 (52.32)		1.75 (44.45)	
CTX24	SF1500CX	1-1/2 (38.10)	15,000 (1034.20)	0.94 (23.80)	4.00 (101.60)	5.75 (146.05)	1.12 (28.45)	1.88 (47.63)	2.88 (73.03)	2.88 (73.03)		2.25 (57.15)	

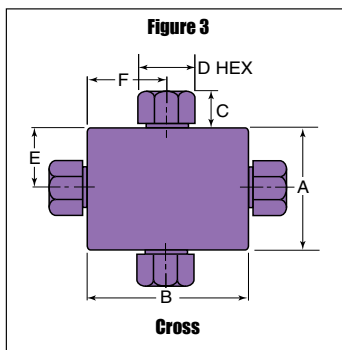
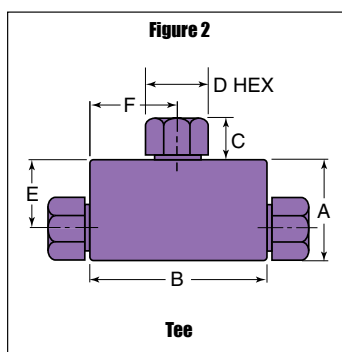
### Cross

CXX4444	SF250CX	1/4 (6.35)	20,000 (1378.93)	0.125 (3.18)	1.50 (38.10)	1.50 (38.10)	0.38 (9.53)	0.50 (12.70)	0.75 (19.05)	0.75 (19.05)		0.62 (15.75)	See Figure 3
CXX6666	SF375CX	3/8 (9.53)	20,000 (1378.93)	0.219 (5.56)	2.00 (50.80)	2.00 (50.80)	0.44 (11.10)	0.62 (15.75)	1.00 (25.40)	1.00 (25.40)		0.75 (19.05)	
CXX9999	SF562CX	9/16 (14.29)	20,000 (1378.93)	0.359 (9.12)	2.50 (63.50)	2.50 (63.50)	0.53 (13.46)	0.94 (23.88)	1.25 (31.75)	1.25 (31.75)		1.00 (25.40)	
CXX12	SF750CX	3/4 (19.05)	20,000 (1378.93)	0.516 (13.11)	3.00 (76.20)	3.00 (76.20)	0.62 (15.75)	1.19 (30.23)	1.50 (38.10)	1.50 (38.10)		1.38 (34.93)	
CXX16	SF1000CX	1 (25.40)	20,000 (1378.93)	0.688 (17.48)	4.12 (104.65)	4.12 (104.65)	0.72 (18.29)	1.38 (35.05)	2.06 (52.32)	2.06 (52.32)		1.75 (44.45)	
CXX24	SF1500CX	1-1/2 (38.10)	15,000 (1034.20)	0.94 (23.80)	5.75 (146.05)	5.75 (146.05)	1.12 (28.45)	1.88 (47.63)	2.88 (73.03)	2.88 (73.03)		2.25 (57.15)	

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For mounting hole option add suffix PM to catalog number. Consult factory for mounting hole dimensions.



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					A	B	C	D Typical	E	F	G Thickness		

### Straight Coupling / Union Coupling

20FX4466	SF250CX	1/4	20,000	0.125	0.62	1.62	0.38	0.50	Straight			See Figure 4
20UFX4466	SF250CX	(6.35)	(1378.93)	(3.18)	(15.75)	(41.15)	(9.53)	(12.70)	Union			
20FX6666	SF375CX	3/8	20,000	0.219	0.75	1.75	0.44	0.62	Straight			
20UFX6666	SF375CX	(9.53)	(1378.93)	(5.56)	(19.05)	(44.45)	(11.10)	(15.75)	Union			
20FX9966	SF562CX	9/16	20,000	0.359	1.00	2.12	0.53	0.94	Straight			
20UFX9966	SF562CX	(14.29)	(1378.93)	(9.12)	(25.40)	(53.85)	(13.46)	(23.88)	Union			
20FX12	SF750CX	3/4	20,000	0.516	1.38	2.50	0.62	1.19	Straight			
20UFX12	SF750CX	(19.05)	(1378.93)	(13.11)	(35.05)	(63.50)	(15.75)	(30.23)	Union			
20FX16	SF1000CX	1	20,000	0.688	1.75	3.50	0.72	1.38	Straight			
20UFX16	SF1000CX	(25.40)	(1378.93)	(17.48)	(44.45)	(88.90)	(18.29)	(35.05)	Union			
15FX24	SF1500CX	1-1/2	15,000	0.94	2.25	5.00	1.12	1.88	Straight			
15UFX24	SF1500CX	(38.10)	(1034.20)	(23.80)	(25.15)	(127.00)	(28.45)	(47.63)	Union			

### Bulkhead Coupling

20BFX4466	SF250CX	1/4	20,000	0.125	0.81	1.88	0.38	0.50	0.53	1.00	0.38	See Figure 5
20BFX6666	SF375CX	3/8	20,000	0.219	0.94	2.00	0.44	0.62	0.62	1.00	0.38	
20BFX9966	SF562CX	9/16	20,000	0.359	1.12	2.38	0.53	0.94	0.78	1.38	0.38	
20BFX12	SF750CX	3/4	20,000	0.516	1.69	2.62	0.62	1.19	0.91	1.88	0.38	
20BFX16	SF1000CX	1	20,000	0.688	1.94	3.50	0.72	1.38	1.50	1.88+	0.38	
15BFX24	SF1500CX	1-1/2	15,000	0.94	2.44	5.00	1.12	1.88	2.00	2.50+	0.38	
		(38.10)	(1034.20)	(23.80)	(61.85)	(127.00)	(28.45)	(47.63)	(50.80)	(63.50)	(9.53)	

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+ distance across flats

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

