

Flared Cone Connection

For High Pressure Instrument Tube Applications



No Anti-vibration Gland Needed!

Parker Autoclave Engineers has taken a variety of in-house technologies and has created a patent-pending simple to use tool that is as safe as a Cone & Thread connection without any of the vibration sensitivity. Using just a hydraulic press and two dies, the connection is made using a similar pre-set process as the Parker MPI (Medium Pressure Inverted) and Autoclave Engineers QSS (Quick Set Sleeve) ferrule style connections with one extra step that flares the tube. This extra step allows for primary sealing on the internal diameter of the flare with a back up secondary seal on the front of the sleeve.



Contact Information:

Parker Hannifin Manufacturing Ltd.
**Instrumentation Products Division,
Europe**
Pottington Business Park
Barnstaple

phone +44 (0) 1271 313131
ipd@parker.com

www.parker.com/ipd

Product Features:

- 22,500 psi (2507 SD) or 20,000 psi (316 SS) working pressures
- Flared Tubing Prevents Tube Extraction
- Double Metal to Metal Sealing Surfaces (First Seal is on ID of Tube Flare, Second Seal is Between Compression Sleeve and Fitting or Valve body)
- Wide Temperature Range from -100°F (-73°C) to 600°F (316°C), and -50°F (-45°C) to 600°F (316°C) for 2507 SD
- Single Inconel 718 Compression Sleeve Reduces Assembly Errors
- No Anti-vibration gland fitting needed - vibration is controlled in the standard design



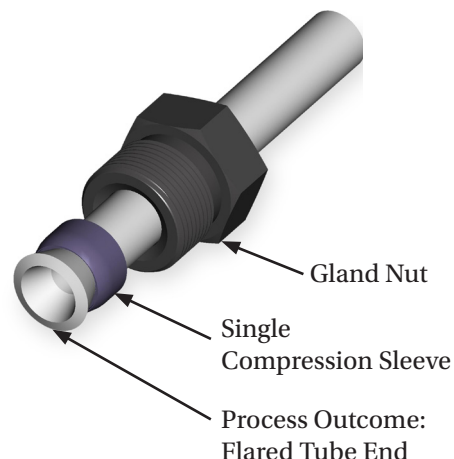
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Valves, Fittings, Adapters and Tubing

The process is simple:

1. Cut the tubing square and deburr
2. Slide on Gland Nut
3. Slide on Compression Sleeve
4. Set Compression Sleeve using Die Set "A" to charted hydraulic pressure
5. Form Flare using Die Set "B" to charted hydraulic pressure

Instructions are simple, intuitive, and easy to accomplish. One end can be formed and installed in as little as 2 minutes as compared to 15-20 with Cone and Thread type connections. Once formed, only a torque wrench is needed to properly complete the connection in the fitting or valve.



System Components Flow/Pressure			2507 SD Working Pressure psi/bar**	316 SS Working Pressure psi/bar**
Connection	Orifice Diameter in (mm)	Flow Area in ² (mm ²)	Temperature	Temperature
			-50 ° to 600°F (-45° to 316°C)	-100° to 600°F (-73° to 316°C)
1/4"	0.109 (2.77)	0.009 (5.81)	22,500 (1550)	20,000 (1379)
3/8"	0.203 (5.16)	0.032 (20.65)	22,500 (1550)	20,000 (1379)
9/16"	0.312 (7.92)	0.076 (49.03)	22,500 (1550)	20,000 (1379)
3/4"	0.438 (11.13)	0.151 (97.42)	22,500 (1550)	20,000 (1379)
1"	0.562 (14.27)	0.248 (160.00)	22,500 (1550)	20,000 (1379)

* Flow area is minimum "system" flow area including tubing

** Maximum Working pressure is based on lowest rating of any system component

Connection Sizes

Connection Type	FC250	FC375	FC562	FC750	FC1000
Tube O.D.	1/4"	3/8"	9/16"	3/4"	1"
316 SS Pressure Rating PSI	20,000	20,000	20,000	20,000	20,000
2507 SD Pressure Rating PSI	22,500	22,500	22,500	22,500	22,500

For part numbering please refer to the main product catalogue.

