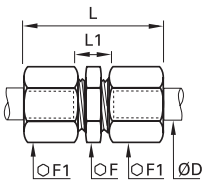
Stainless Steel Compression Fittings

1806 Equal Tube-to-Tube Connector



Stainless steel 316L



ØD		F	F1	L max	L1	kg
6	1806 06 00	12	13	34.5	11	0.025
8	1806 08 00	13	14	38.5	10	0.029
10	1806 10 00	17	19	46	13	0.066
12	1806 12 00	19	22	47	13	0.085
16	1806 16 00	24	27	51	13	0.135

Tel: +45 63 12 83 00 | Email: ps@hymatik.com | www.hymatik.com | Hvidkaervej 27a, DK-5250 Odense SV, Denmark

Stainless Steel Compression Fittings

Manufactured in 316L stainless steel, these fittings combine all the advantages of the "universal" compression fitting with **excellent resistance** to environmental conditions and **corrosive fluids.** They are pressure and temperature-resistant and are able to withstand strong vibration and water hammer.

Product Advantages

For Use in Many Environments

- Manufactured in 316L stainless steel
- Suitable for all environments and fluids
- Resistant to water hammer and vibration
- Excellent sealing and retention of the tube
- Suitable for pneumatic and medium pressure hydraulic applications
- Metallic sealing guarantees maximum service life

Many Tube Options

- Possibility of easily connecting different tube materials and diameters to the same fitting body
- No tube support required for rigid and semi-rigid polyamide tubing below 12 mm



Applications

Food Process
Fluid Transmission
Pneumatics
Automotive Process
Petrochemical
Chemical
Offshore Oil & Gas

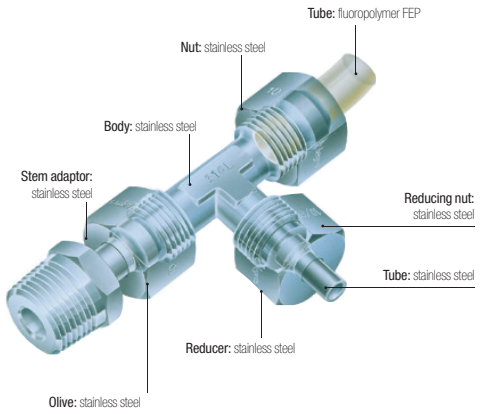
Technical Characteristics

Compatible Fluids	Many fluids
Working Pressure	Vacuum to 400 bar (80 bar in corrosive environments)
Working Temperature	-40°C to +250°C

Tightening Torques	DN	6	8	10	12	16
	daN.m	2	3	4	6.5	9.5

Reliable performance is dependent upon the type of fluid conveyed and tubing being used. Guaranteed for use with a vacuum of 755 mm Hg (99% vacuum).

Component Materials



Silicone-free

Maximum Bore Diameters

The table below shows the recommended compatibility of tube size, BSPP male thread and maximum bore.

Tube O.D	BSPP Thread	Max. Bore
6	G1/8	4
6-8-10	G1/4	7
10-12	G3/8	11
16	G1/2	14

Tube Length for Assembly

Minimum length of tube (L) between 2 fittings.



ØD	L mm	ØD	L mm
4	26.5	10	39
6	26	12	39
8	32	16	46.5

Regulations

DI: 2002/95/EC (RoHS), 2011/65/EC
DI: 97/23/EC (PED)
RG: 1935/2004
RG: 1907/2006 (REACH)
DI: 94/09/EC (ATEX)
FDA: 21 CFR 177.1550
NACE MR0175: compatible materials
ISO 15156-1/-2/-3: compatible materials

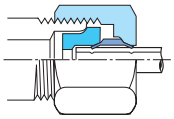
Stainless Steel Compression Fittings

Installation

Fitting

The fitting comprises three parts (body/olive/nut). For assembly procedure, please see Brass Compression Fitting page.

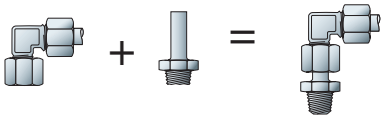
Diagram: Assembled Fitting



A very slight distortion of the tube appears; this shows the fitting has been correctly tightened.

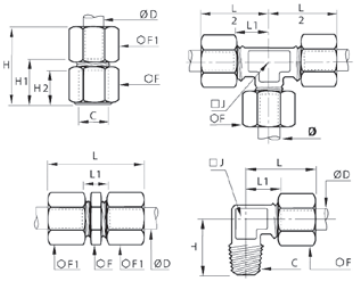
Orientable Elbow Assembly

Elbow **1802** + Adaptor **1820** =



Customised Fittings

If our standard range does not meet your needs, Parker Legris can develop customised solutions for your applications.



Technical Characteristics

The use of Parker Legris stainless steel compression fittings is dependant on the tube material. Tables of recommended working pressure for the different tubes are shown below.

Recommended Tube Type

Semi-rigid polyamide or fluoropolymer tube

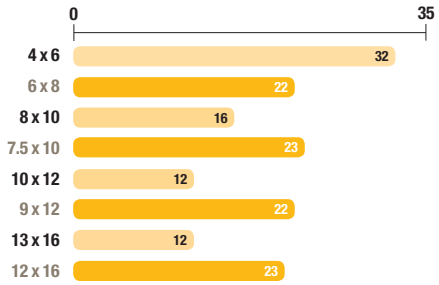
Stainless steel tube
"Thin Wall" cold-drawn seamless, annealed and passivated:
wall thickness tolerance +/-0.1 mm.
For use with "thin wall" stainless steel tube from 6 mm to 16 mm O.D., maximum wall thickness 1 mm.

Recommended Tube/Fitting Assembly Configurations

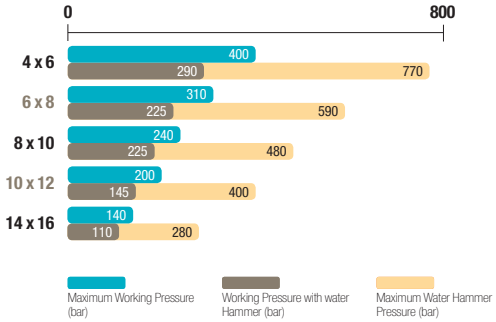
Assembled using Parker Legris olive and nut in stainless steel, with a tube support.

Stainless steel tube
Stainless steel tube: in cold-rolled straight lengths
Coiled annealed stainless tube : reduces working pressure by 35%; do not use if there is vibration.

Semi-Rigid Polyamide Tube
Maximum Working Pressure (bar)



Stainless Steel Tube
Maximum Working Pressure (bar)



Working Pressure Coefficients for Semi-Rigid Tubing

Temperature °C	-40°C / -15°C	-15°C / +30°C	+30°C / +50°C	+50°C/+70°C	+70°C/+100°C
Factor	1.8	1	0.68	0.55	0.31

The above recommendations are given in good faith. However, since each application is different, it is advisable to undertake tests in actual working conditions.