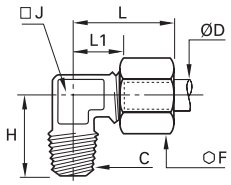
Stainless Steel Compression Fittings

1809 Stud Elbow, Male BSPT Thread



Stainless steel 316L

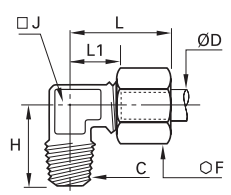


ØD	C		F	H	J	L max	L1	kg
6	R1/8	1809 06 10	13	18	8	25.5	13.5	0.021
	R1/4	1809 06 13	13	23	10	25.5	13.5	0.030
8	R1/8	1809 08 10	14	20.5	10	28.5	14.5	0.027
	R1/4	1809 08 13	14	23	10	28.5	14.5	0.031
10	R1/4	1809 10 13	19	25	12	32.5	16	0.050
	R3/8	1809 10 17	19	25.5	12	32.5	16	0.058
	R1/2	1809 10 21	19	32	18	36.5	20	0.091
12	R1/4	1809 12 13	22	26	14	34	17	0.067
	R3/8	1809 12 17	22	27	14	34	17	0.070
	R1/2	1809 12 21	22	32	18	37	20	0.098
16	R3/8	1809 16 17	27	28.5	18	39.5	21	0.107
	R1/2	1809 16 21	27	31.5	18	39.5	21	0.114

1809 Stud Elbow, Male NPT Thread



Stainless steel 316L



ØD	C		F	H	J	L max	L1	kg
6	NPT1/8	1809 06 11	13	19.5	8	25.5	13.5	0.022
	NPT1/4	1809 06 14	13	25.5	10	25.5	13.5	0.031
	NPT3/8	1809 06 18	13	28	12	27	15	0.046
	NPT1/2	1809 06 22	13	34	12	29	17	0.072
8	NPT1/8	1809 08 11	14	22	10	28.5	14.5	0.028
	NPT1/4	1809 08 14	14	25.5	10	28.5	14.5	0.033
10	NPT1/4	1809 10 14	19	27.5	12	32.5	16	0.052
	NPT3/8	1809 10 18	19	28	12	32.5	16	0.061
	NPT1/2	1809 10 22	19	35	18	36.5	20	0.096
12	NPT1/4	1809 12 14	22	28.5	14	34	17	0.069
	NPT3/8	1809 12 18	22	29.5	14	34	17	0.074
	NPT1/2	1809 12 22	22	35	18	37	20	0.102
16	NPT3/8	1809 16 18	27	31	18	39.5	21	0.110
	NPT1/2	1809 16 22	27	34.5	18	39.5	21	0.116

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

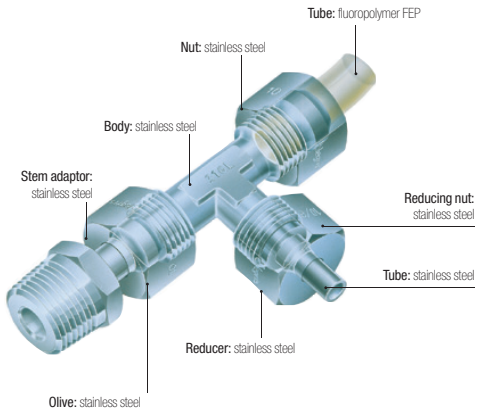
Technical Characteristics

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

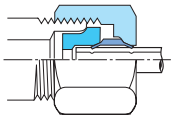
Stainless Steel Compression Fittings

Installation

Fitting

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

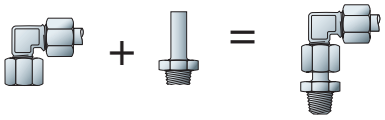
Diagram: Assembled Fitting



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

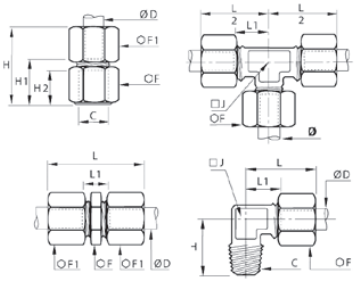
Orientable Elbow Assembly

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

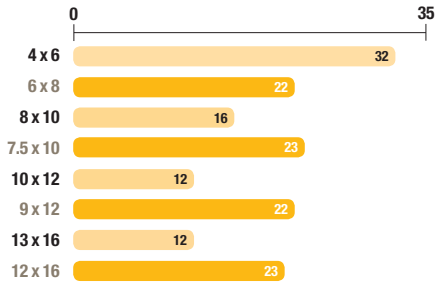
Stainless steel tube
"Thin Wall" cold-drawn seamless, annealed and passivated:
wall thickness tolerance +/-0.1 mm.
For use with "thin wall" stainless steel tube from 6 mm to 16 mm O.D., maximum wall thickness 1 mm.

Recommended Tube/Fitting Assembly Configurations

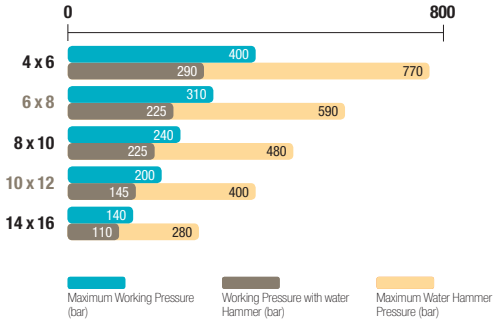
Assembled using Parker Legris olive and nut in stainless steel, with a tube support.

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.