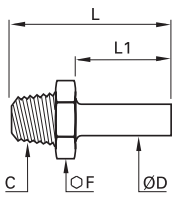
Stainless Steel Compression Fittings

1820 Stud Standpipe, Male BSPT Thread



Stainless steel 316L

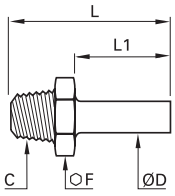


ØD	C		F	L	L1	kg
6	R1/8	1820 06 10	12	26.5	15	0.009
	R1/4	1820 06 13	14	31	15	0.017
8	R1/8	1820 08 10	12	28.5	17	0.008
	R1/4	1820 08 13	14	33	17	0.016
10	R1/4	1820 10 13	14	36	20	0.016
	R3/8	1820 10 17	17	36.5	20	0.025
	R1/2	1820 10 21	22	41	20	0.052
12	R1/4	1820 12 13	14	36	20	0.016
	R3/8	1820 12 17	17	36.5	20	0.022
	R1/2	1820 12 21	22	41	20	0.048
16	R3/8	1820 16 17	17	39.5	23	0.022
	R1/2	1820 16 21	22	44	23	0.038

1820 Stud Standpipe, Male NPT Thread



Stainless steel 316L



ØD	C		F	L	L1	kg
6	NPT1/8	1820 06 11	12	26.5	15	0.009
	NPT1/4	1820 06 14	14	31	15	0.019
8	NPT1/8	1820 08 11	12	28.5	17	0.009
	NPT1/4	1820 08 14	14	33	17	0.019
10	NPT1/4	1820 10 14	14	36	20	0.018
	NPT3/8	1820 10 18	19	36.5	20	0.032
	NPT1/2	1820 10 22	22	41	20	0.060
12	NPT1/4	1820 12 14	14	36	20	0.019
	NPT3/8	1820 12 18	19	36.5	20	0.028
	NPT1/2	1820 12 22	22	41	20	0.053
16	NPT3/8	1820 16 18	19	39.5	23	0.027
	NPT1/2	1820 16 22	22	44	23	0.042

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

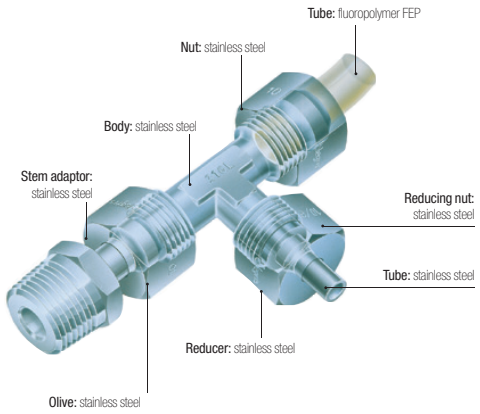
Technical Characteristics

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

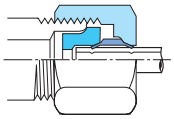
Stainless Steel Compression Fittings

Installation

Fitting

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

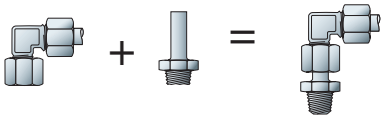
Diagram: Assembled Fitting



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

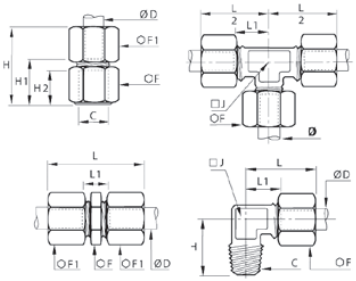
Orientable Elbow Assembly

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

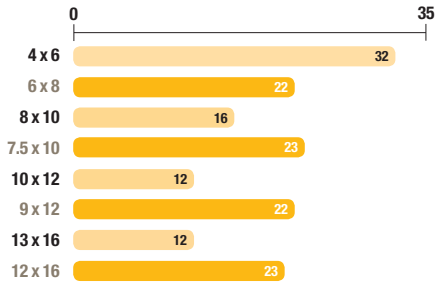
Stainless steel tube
"Thin Wall" cold-drawn seamless, annealed and passivated:
wall thickness tolerance +/-0.1 mm.
For use with "thin wall" stainless steel tube from 6 mm to 16 mm O.D., maximum wall thickness 1 mm.

Recommended Tube/Fitting Assembly Configurations

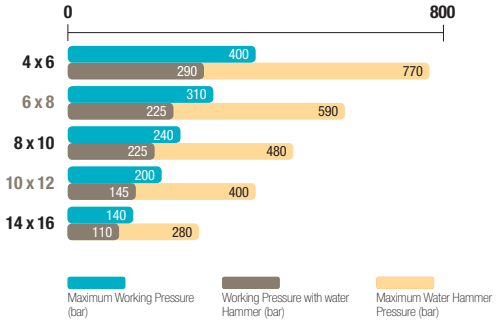
Assembled using Parker Legris olive and nut in stainless steel, with a tube support.

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.