



# Stainless Steel Compression Fittings

## 1805 Stud Fitting, Male BSPT Thread

	ØD	C		F	F1	H max	H1	kg
6	R1/8	1805 06 10		12	13	19.5	7.5	0.017
	R1/4	1805 06 13		14	13	19.5	7.5	0.025
8	R1/8	1805 08 10		13	14	21	7	0.019
	R1/4	1805 08 13		14	14	21	7	0.024
10	R1/4	1805 10 13		17	19	25.5	9	0.044
	R3/8	1805 10 17		17	19	25.5	9	0.049
12	R1/2	1805 10 21		22	19	26.5	10	0.076
	R1/4	1805 12 13		19	22	26	9	0.054
16	R3/8	1805 12 17		19	22	26	9	0.058
	R1/2	1805 12 21		22	22	27	10	0.081
	R3/8	1805 16 17		24	27	28.5	9.5	0.086
	R1/2	1805 16 21		24	27	28.5	9.5	0.094

## 1805 Stud Fitting, Male NPT Thread

	ØD	C		F	F1	H max	H1	kg
6	NPT1/8	1805 06 11		12	13	19.5	7.5	0.018
	NPT1/4	1805 06 14		14	13	19.5	7.5	0.027
8	NPT3/8	1805 06 18		19	13	20.5	8.5	0.033
	NPT1/2	1805 06 22		22	13	21.5	9.5	0.049
10	NPT1/8	1805 08 11		13	14	21	7	0.020
	NPT1/4	1805 08 14		14	14	21	7	0.027
12	NPT1/4	1805 10 14		17	19	25.5	9	0.045
	NPT3/8	1805 10 18		19	19	25.5	9	0.055
16	NPT1/2	1805 10 22		22	19	26.5	10	0.083
	NPT1/4	1805 12 14		19	22	26	9	0.056
	NPT3/8	1805 12 18		19	22	26	9	0.061
	NPT1/2	1805 12 22		22	22	27	10	0.087
	NPT3/8	1805 16 18		24	27	28.5	9.5	0.087
	NPT1/2	1805 16 22		24	27	28.5	9.5	0.097

# 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



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

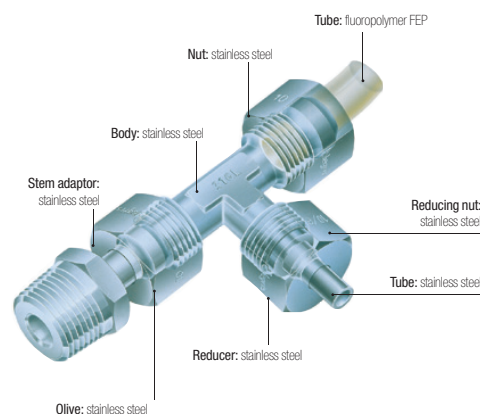
### Applications

## 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

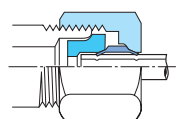
## Stainless Steel Compression Fittings

### Installation

#### Fitting

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

#### Diagram: Assembled Fitting

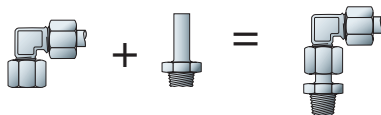


A very slight distortion of the tube appears; this shows the fitting has been correctly tightened.

#### Orientable Elbow Assembly

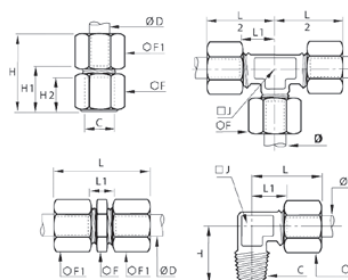
Elbow  
1802

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  $\pm 0.1$  mm.  
For use with "thin wall" stainless steel tube from 6 mm to 16 mm O.D.,  
maximum wall thickness 1 mm.

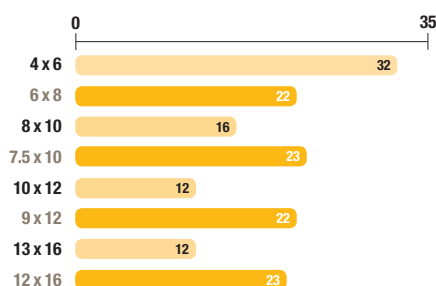
#### Recommended Tube/Fitting Assembly Configurations

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

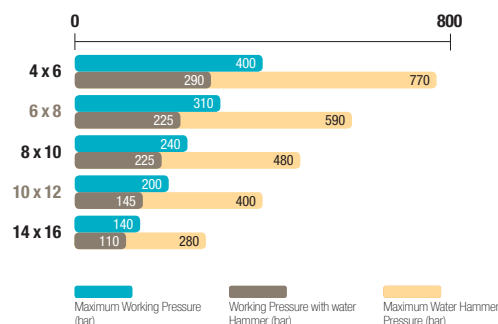
Stainless steel tube

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.