Bioflex Triclover Fittings - Not PTFE Lined

Triclover Fittings

Description

Triclover fitting, not PTFE lined. Hygienic design spigot, all internal (wetted) surfaces polished to <0.375μm (<15μ in) and Electropolished.

Specifications

Generally in accordance with BS4825: Pt 3 or DIN 32676, also others.

Maximum Working Pressures and Temperatures

All sizes 16 Bar (Test Pressure = 24 Bar). Only up to the temperature limit of the rubber seal.

Materials

Spigot in Grade 316 S11 (AISI 316L, or 1.4404), Ferrule in Grade 304 SS.

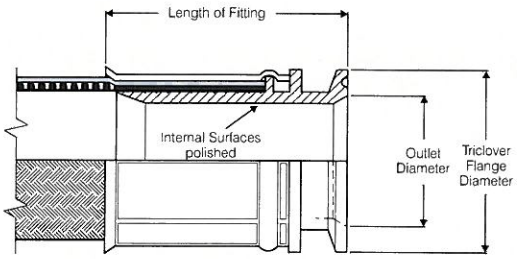
Size of Triclover Fittings

When ordering, it is necessary to determine:

(a) What standard of internal polish is required?
(b) What Triclover Flange Diameter is required?
(c) What is the Hose Size required?
(d) Is the Outlet Diameter for the hose fitting the same as the I/D of the Pipe to which it will be connected?

See the List for the Sizes & Outlet Diameters. If the requirement is not on this list, then please specify the alternative dimensions required.

Non-Lined Triclover Fitting



Standard Hose and Pipe Sizes, and Outlet Diameters

Nominal Hose Size	Standard Triclover Flange Dia.	Pipe I/D Equal to Fitting Outlet Diameter	Nominal Pipe Size (inches = BS4825, DN = DIN 32676)	Length of Fitting
in	mm	mm		mm
1/2"	25.0	9.5 (3/8")	1/2" & DN10	34.5
5/8"	25.0	16.0 (5/8")	3/4"	38.0
3/4"	25.0	16.0 (5/8")	3/4"	47.5
3/4"	34.0	16.0 (5/8")	DN15	47.5
1"	50.5	22.2 (7/8")	1"	47.5
1"	50.5	26.0 (1")	DN25	47.5
1 1/4"	50.5	32.0 (1 1/4")	DN32	62.5
1 1/2"	50.5	34.9	1 1/2"	66.5
1 1/2"	50.5	38.0 (1 1/2")	DN40	66.5
2"	64.0	47.6	2"	69.8
2"	64.0	50.0	DN50	69.8
2"	77.5	60.3	2 1/2"	76.0
2"	91.0	66.0	DN65	76.0
2"	91.0	73.0	3"	76.0
2"	106.0	81.0	DN80	76.0
2"	119.0	97.6	4"	86.0
2"	119.0	100.0	DN100	84.5

= Standard, stocked fittings - the other sizes are available to special order.

Unpolished, Non-Lined Triclover Fittings

In applications where polishing is not required, but the most economical price is required, unpolished and/or purge-welded end fittings to special order can sometimes provide a solution.

Bioflex DIN 11851 Fittings

DIN 11851 Fittings (Male & Female)

Description

DIN 11851 male and female fittings, integral PTFE lined and flared.

The PTFE sealing face is hot moulded into the correct shape, designed to achieve the optimum pressure seal.

Specification

Generally to German DIN 11851 specifications.

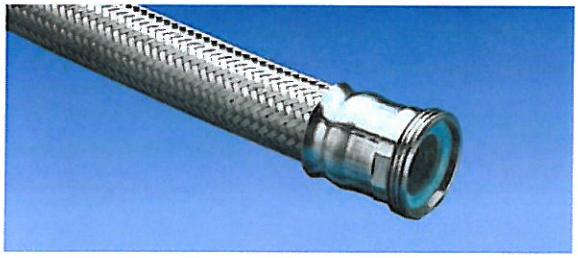
NB: The PTFE lined male fitting is designed to be used without a rubber seal. Please note that when connecting to a PTFE Lined DIN11851 Male, extra spanner tightening of the nut is sometimes required in order to provide a leak free connection.

Materials

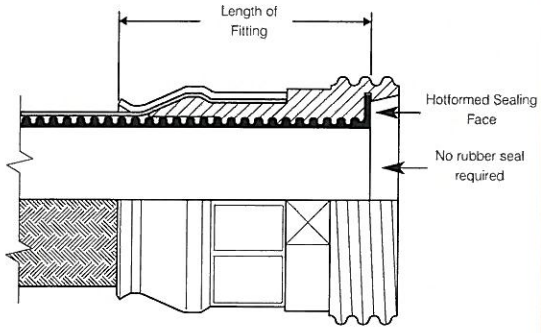
Spigots in Grade 316 SS nuts and ferrules in Grade 304 SS.

Maximum Working Pressures (MWP)

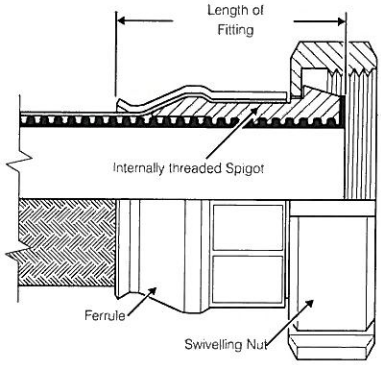
SS Braided, 3/4" to 1 1/4" MWP = 40 Bar.
1 1/2" and 2" MWP = 25 Bar.
PB Braided, MWP as for hose.
Test Pressure = 1.5 x MWP.



DIN11851 Male Fitting



DIN11851 Female Fitting



Nominal Size		Fitting Length (Male) (non rubber covered grades only)		Fitting Length (Female) (non rubber covered grades only)		Weight of Fitting	
						Male	Female
Hose in	Fitting DN	in	mm	in	mm	kg	kg
1/2	15	1 7/8	48.5	1 5/8	41.5	0.13	0.16
3/4	20	2	50.5	1 3/4	44.0	0.18	0.22
1	25	2 1/8	54.5	1 15/16	49.0	0.22	0.36
1 1/4	32	2 3/16	55.5	2	51.0	0.27	0.47
1 1/2	40	2 1/4	58.0	2 1/2	63.5	0.33	0.55
2	50	2 5/8	66.0	2 1/2	64.0	0.58	0.93

Bioflex Non Lined End Fittings

Fixed Male Fittings

Description

Fixed male fitting, BSP taper male thread.

Specifications

Threads to BS21.

Materials

All components are either zinc plated mild steel or Grade 316 SS with a Grade 304 ferrule.

Alternatives (to special order)

NPT, JIC, metric or BSP parallel screwthreads with flat face or 60° internal cone.

Polypropylene males available to special order.

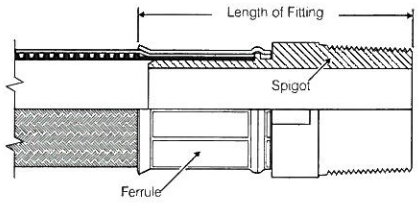
Limitations

Polypropylene Fixed Male Fittings are only usable between -10°C and +50°C, and the Maximum Working Pressure is 80% less.

Maximum Working Pressures (MWP)

As given for the hose. (Test Pressures = MWP x 1.5).

Fixed Male Fitting



Nominal Size		Length		Weight of Fitting (steel)
in	mm	in	mm	kg
3/8	10	2 1/4	57	0.07
1/2	15	2	51	0.10
3/4	20	2 1/2	62	0.16
1	25	2 5/8	66	0.26
1 1/4	32	3 1/2	87	0.40
1 1/2	40	4	100	0.58
2	50	4 1/4	108	0.95

Cone Seat Female Fittings

Description

60° cone seat female union fitting, BSP parallel thread non-lined.

Specifications

Generally to BS5200 and ISO 1179.

Materials

All components are either zinc plated mild steel or Grade 316 SS with a Grade 304 Ferrule.

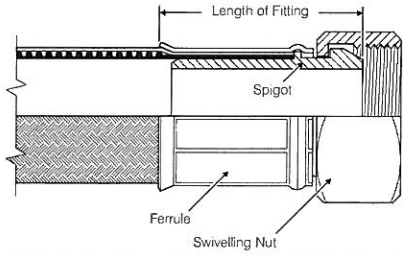
Alternatives (to special order)

These fittings may be supplied with a flat seat or with a metric or NPSM thread. Lug Nut female union (and male) fittings are also available in gun metal or stainless steel. JIC Females can also be supplied. 45° and 90° elbowed fittings also possible.

Maximum Working Pressures

As given for the hose. (Test Pressures = MWP x 1.5).

Cone Seat Female Fitting



Nominal Size		Length		Weight of Fitting
in	mm	in	mm	kg
3/8	10	2	50	0.06
1/2	15	2	49	0.08
3/4	20	2 3/8	60	0.18
1	25	2 1/2	63	0.32
1 1/4	32	2 1/8	54	0.50
1 1/2	40	2 1/8	54	0.58
2	50	2 1/8	55	0.92

Bioflex Standard Flange Fittings

Flange Fittings

Description

Swivel flange fitting, integral PTFE lined and flared.

Specifications

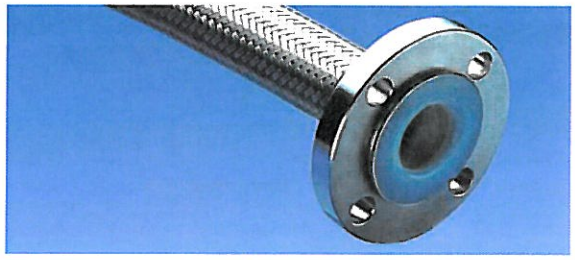
Flanges to ASA 150 (ASME B16.5 Class 150), DIN PN10 or PN16, and BS10 Table E. Other flange ratings to these specifications are also available, and other types of flanges can be supplied.

Materials

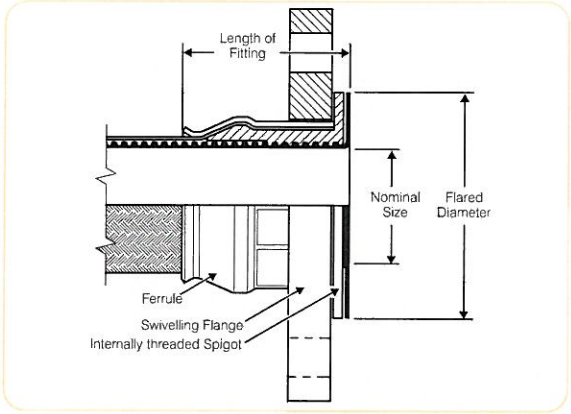
Grade 316 SS Spigot, Grade 304 Flange and Ferrule, except 1", 1½" and 2" PN10 Flanges are Grade 316. Alternative options include grade 316 SS flanges, polypropylene flanges mounted on SS spigots, zinc or nickel plated mild steel flanges, and other materials to special order.

Maximum Working Pressures

These are defined by the flange specification. For standard PN10 and PN40 etc. the Maximum Working Pressures are 10 Bar and 40 Bar respectively. For ASA 150 the Maximum Working Pressure is 230 psi or 16 Bar. Test Pressures are 1.5 times the MWP of the fitting. (Exceptions: when the hose MWP is less than the fitting MWP).



Standard Flange Fitting



Hose Size		Nominal Size of - Flange		Fitting Length		Flared Diameter				Recommended Bolt Tightening Torques		Weight/ Fitting
						ASA 150		DIN PN10				
in	mm	in	mm	in	mm	in	mm	in	mm	ft.lbs	mtr. kgs	kg
½	15	½	15	1 7/16	37.0	1¼	32	1¼	32	8	1.10	0.54
¾	20	¾	20	1 7/16	37.0	1 13/16	43	1 13/16	43	8	1.10	0.88
1	25	1	25	1 5/8	40.5	2	50	2½	63	10	1.40	0.96
1¼	32	1¼	32	1 11/16	43.5	2½	63	3	78	12	1.70	1.36
1½	40	1½	40	1 7/8	47.0	2 7/8	73	3½	88	15	2.10	1.75
2	50	2	50	1 15/16	48.5	3 5/8	92	4	102	25	3.50	2.70
*2	50	2½	65	2¾	70.5	4 1/8	105	4¾	122	30	4.20	4.00
*2	50	3	80	3½	89.0	5	127	5	127	40	5.60	5.20

These are not the correct flared diameters, but they are the maximum diameter to which the PTFE can be flared out for that flange size. If the full size flare diameter is required, consult Aflex Hose for a solution.

*"Step-Up" Flange Fittings on 2" Hose (see list)

Because the 2" Bioflex Hose has better flow rates than both 2½" and 3" Convoluted PTFE hose, it represents a superior alternative when fitted with the larger flanges.

It is, however, necessary to also "Step-Up" the PTFE-lined bore, to ensure a diameter match with the mating connector.

This is best achieved using a solid PTFE Adaptor Plate, as shown in the drawing.

Other sizes can also be "Stepped Up" if required, for example 1" Hose to 2" Flange.

2" to 3" ASA150 Flange Joint