

# Bioflex Ultra Integral PTFE Lined Flange Fittings & 'Step-Up' Design

## Flange Specifications

- ANSI B16.5 (also ASME B16.5) Class 150# and 300#
- \*DIN PN10, PN16 and PN40
- JIS 10K
- Other Pressure Ratings and Flange Specifications are also available.  
\*DIN PN10, PN16 and PN40 Flanges all have the same dimensions, and so are fully interchangeable

## Maximum Pressure Ratings for Flange Fittings

- ANSI 150# = 16 Bar (230 psi), ANSI 300# = 41.4 Bar (600 psi)
- DIN PN10 = 10 Bar (145 psi), DIN PN16 = 16 Bar (230 psi)
- DIN PN40 = 40 Bar (580 psi)

## End Fitting Materials

- Flanges in Grade 304 SS
- Flange Retainers in Grade 316L SS
- Ferrules, most in Grade 304 SS, some sizes in Grade 316 SS

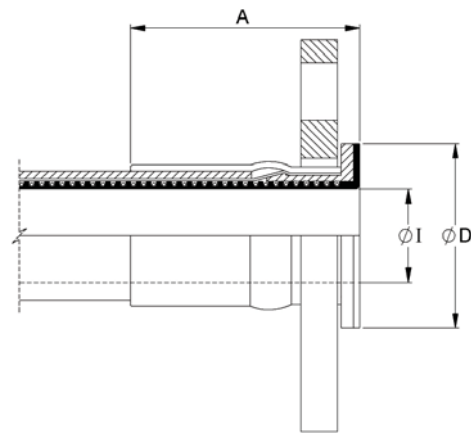
## Alternative Options for Flange Component only:

- Zinc Plated Carbon Steel

## 90° Elbow Flange Fittings

- 90° Elbow Integral PTFE lined Flange Fittings are available for sizes 1", 1 1/2" and 2" - see page 32.

## Integral PTFE Lined Flange Fittings



Nominal Hose Size		*Fitting Length A (Bioflex Ultra RC) ASA		*Fitting Length A (Bioflex Ultra RC) PN		Flared Diameter D				Fitting Inside Dia. & Hose Bore I		Recommended Bolt Tightening Torques		Weight of Fitting	
						ANSI 150#		DIN PN10/16							
in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	ft.lbs	mtr.kgs	Kg	Lbs
1/2	13	2.24	57.0	2.28	58	1.25	32	1.25	32	1/2	13.0	8	1.10	0.54	1.20
3/4	20	1.89	48.0	1.93	49	1.69	43	1.97	50	3/4	19.4	8	1.10	0.88	1.90
1	25	2.40	61.0	2.48	63	2.00	50	2.50	63	1	25.7	10	1.40	0.96	2.10
1 1/4	32	2.24	57.0	2.32	59	2.48	63	3.10	78	1 1/4	32.4	12	1.66	1.15	2.53
1 1/2	40	2.36	60.0	2.44	62	2.875	73	3.50	88	1 1/2	38.9	15	2.10	1.75	3.80
2	50	2.72	69.0	2.91	74	3.625	92	4.00	102	2	51.6	25	3.50	2.70	5.95

\*Fitting Lengths listed are for Bioflex Ultra RC, SI and BK hose grades. Shorter lengths apply for other hose grades.

\*\* The listed Flare Diameters for 1/2", 3/4" and 1" are not full size due to limitations on PTFE flare diameters.

## 'Step-Up' PTFE Lined Flange Fitting Design for Bioflex Ultra Hose

Because Bioflex Ultra Hose has better flow rates than some larger bore sizes of Convuluted PTFE hose, it represents a superior alternative when fitted with the larger size flanges in some applications.

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.

**Example:** a 2" hose to 3" ANSI 150# PTFE Lined Flange Joint >

