Styles 214 and 215

These PTFE concentric spool-type flexible couplings are designed to reduce noise and compensate for expansion, contraction and minor piping misalignment in chemical processing, air conditioning and heating systems.

Style 214

- Two convolutions
- Temperature: -100°F (-70°C) to +450°F (+230°C)
  Pressure: To 178 psig (12 bar),
  Full vacuum to +350°F (+180°C)

Style 215

- Three convolutions
- Temperature: -100°F (-70°C) to +450°F (+230°C)
  Pressure: To 132 psig (9 bar),
  Full vacuum to +180°F (+80°C)

Benefits

- Convolution shape provides extra-long flex life at high temperatures
- Proprietary contour molding process ensures consistent wall thickness for blowout resistance
- PTFE body withstands corrosion, water, steam, and most chemicals and gases
- Preset restriction bolts prevent over-extension
- Available silicone-free

Design

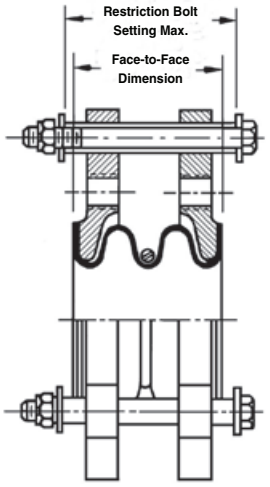
- Complete assembly includes fluorocarbon resin PTFE body, plated ductile iron flanges, polyethylene-covered restriction bolts and corrosion-resistant reinforcing rings
- Standard sizes from 1" (25 mm) through 8" (200 mm) pipe I.D.

Pressure and Vacuum Rating

Garlock PTFE expansion joints and couplings have pressure ratings high enough to handle most applications. As the pipe size gets larger, Garlock increases the bellows thickness and the strength of the reinforcing rings to compensate for the change in internal forces. This permits the same high pressure rating for all sizes.

Temperature		214 Pressure		215 Pressure	
		psi	bar	psi	bar
50°F	10°C	178	12	132	9
100°F	50°C	165	11	120	8
150°F	65°C	150	10	103	7
200°F	90°C	130	9	90	6
250°F	120°C	110	8	75	5
300°F	150°C	92	6	60	4
350°F	180°C	78	5	50	3.5
400°F	205°C	65	4.5	42	3
450°F	230°C	60	4	35	2

Movement Capabilities

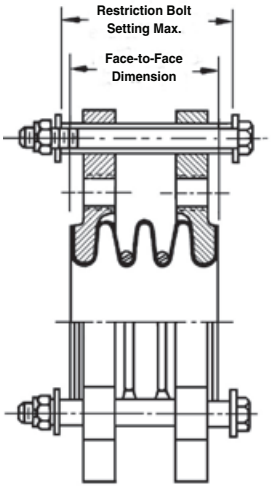


Style 214 PTFE Flexible Couplings

Pipe Size (Inches)	1	1-1/2	2	2-1/2	3	4	5	6	8
Nominal Installed Face to-Face	1-3/8	1-3/8	1-9/16	2-1/4	2-1/4	2-5/8	3-1/4	2-3/4	4
Max. Restriction Bolt Setting	1-1/4	1-5/16	1-15/32	2-7/32	2-1/4	2-23/32	3-5/16	2-3/4	4
Max. Axial Movement + or -	1/4	1/4	1/4	5/16	3/8	1/2	1/2	1/2	1/2
Max. Transverse Deflection, + or -*	1/8	1/8	1/8	1/8	3/16	1/4	1/4	1/4	1/4

Maximum angular movement aproximately 7°.

* Based on unit being in normal installed position with no axial movement or angular deflection.



Style 215 PTFE Flexible Couplings

Pipe Size (Inches)	1	1-1/2	2	2-1/2	3	4	5	6	8
Nominal Installed Face to-Face	1-3/4	2	2-3/4	3-3/16	3-5/8	3-5/8	4	4	6
Max. Restriction Bolt Setting	1-7/8	2-5/32	3-5/32	3-9/16	4-1/4	4-1/4	4-9/16	4-5/8	6-5/8
Max. Axial Movement + or -	1/2	1/2	3/4	3/4	1	1	1	1-1/8	1-1/8
Max. Transverse Deflection, + or -*	1/4	1/4	3/8	3/8	1/2	1/2	1/2	9/16	9/16

Maximum angular movement aproximately 14°.

* Based on unit being in normal installed position with no axial movement or angular deflection.

PTFE Control Units and Flanges

All PTFE joints and couplings are furnished with ductile iron flanges and control units ready for immediate installation on the job site. Flanges in other alloys are available by special order.

Flanges are protected to resist atmosphere corrosion and are tapped to 150 lbs. ANSI Standard drilling.

Control units are assembled with flanges to prevent joints from excessive axial elongation. They are designed to accept the static pressure thrust in the piping system.

Tie rods are set at the factory at the maximum face-to-face working limits, with lock nuts as insurance against overextension of the expansion joint. The tie rods are covered with polyethylene to eliminate metal-to-metal contact between the rods and flanges—the most frequent cause of noise transmission and electrolysis.

Flange Dimensions and Drilling

Pipe Size (Inches)	1	1-1/2	2	2-1/2	3	4	5	6	8
Flange Dimensions									
Outside Diameter	5-13/16	6-11/16	7-7/16	8-7/16	9-3/16	10-11/16	11-11/16	13-1/4	15-3/4
Thickness	3/8	3/8	1/2	5/6	5/8	11/16	11/16	11/16	11/16
ANSI Std. Drilling									
Bolt Circle Dia.	3-1/8	3-7/8	4-3/4	5-1/2	6	7-1/2	8-1/2	9-1/2	11-3/4
No. Bolt Holes	4	4	4	4	4	8	8	8	8
Bolt Hole Thread	1/2-13	1/2-13	5/8-11	5/8-11	5/8-11	5/8-11	3/4-10	3/4-10	3/4-10