

Styles 214, 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)

STYLE 216

- » Custom Option / Engineered Solution for up to 24 inch inner diameter and multiple convolutions

BENEFITS

- » The convolution shape provides extra-long flex life at high temperatures
- » The proprietary contour molding process ensures consistent wall thickness for improved blowout resistance
- » PTFE body withstands corrosion, water, steam, and most chemicals and gases
- » Preset tie rods prevent over-extension
- » Available silicone-free upon request



STANDARD DESIGN

- » Complete assembly includes
 - › Fluorocarbon resin PTFE body
 - › Electroless nickel-plated ductile iron flanges
 - › Polyethylene-covered restriction zinc plated bolts
 - › Stainless steel corrosion-resistant reinforcing rings
- » Standard sizes from 1" (25mm) through 24" (800mm) pipe I.D.
- » Available with 304 or 316 stainless steel flanges and tie rods upon request

PRESSURE 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

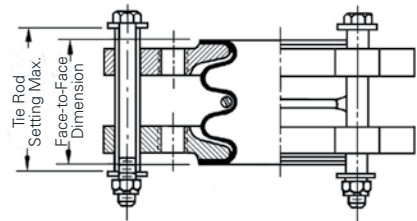
MOVEMENT CAPABILITIES

Style 214 PTFE Flexible Coupling

Pipe Size (Inches)	1	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14	16	18	20	24
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	3-1/16	3-1/4	3-9/16	3-11/16	4-1/8	4-3/16	4-1/8
Max. Axial Movement, + or -	1/4	1/4	1/4	5/16	3/8	1/2	1/2	1/2	1/2	5/8	5/8	21/32	21/32	21/32	11/16	11/16
Max. Transverse Deflection, + or -	1/8	1/8	1/8	1/8	3/16	1/4	1/4	1/4	1/4	3/8	3/8	3/8	3/8	3/8	13/32	13/32

Maximum angular movement approximately 7°.

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

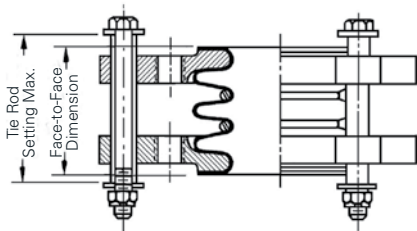


Style 215 PTFE Flexible Coupling

Pipe Size (Inches)	1	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14	16	18	20	24
Nominal Installed Face to-Face	1-3/4	2	2-3/4	3-3/16	3-5/8	3-5/8	4	4	6	4-1/4	4-7/16	4-13/16	4-15/16	5-7/16	5-1/2	5-1/2
Max. Axial Movement, + or -	1/2	1/2	3/4	3/4	1	1	1	1-1/8	1-1/8	15/16	15/16	1	1	1	1-1/16	1-1/16
Max. Transverse Deflection, + or -	1/4	1/4	3/8	3/8	1/2	1/2	1/2	9/16	9/16	9/16	9/16	9/16	9/16	9/16	5/8	5/8

Maximum angular movement approximately 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 ASME B16.5/B16.47 Series A Class 125/150 (standard).

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 factory set to maximum face-to-face working limits, with lock nuts as insurance against over-extension of the expansion joint. The polyethylene covered tie rods eliminate metal to metal contact between the rods and the 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	10	12	14	16	18	20	24
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	18-1/8	20-1/2	23-1/16	25-1/16	27-9/16	30-7/8	35-7/16
Thickness	3/8	3/8	1/2	5/6	5/8	11/16	11/16	11/16	11/16	13/16	13/16	13/16	15/16	1-1/16	1-1/16	1-1/8