## **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, polyethylenecovered 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.

Tempe	214 Pr	essure	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

#### WARNING:

Properties/applications shown throughout this brochure are typical. Your specific application should not be undertaken without independent study and evaluation for suitability. For specific application recommendations consult Garlock. Failure to select the proper sealing products could result in property damage and/or serious personal injury.

Performance data published in this brochure has been developed from field testing, customer field reports and/or in-house testing.

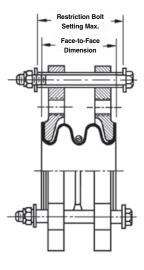
While the utmost care has been used in compiling this brochure, we assume no responsibility for errors. Specifications subject to change without notice. This edition cancels all previous issues. Subject to change without notice.

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## **Movement Capabilities**

#### **Style 214 PTFE Flexible Couplings**

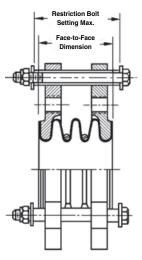
Pipe Size (Inches)	1	1-1/2	2	2-1/2	3	4	5	6	8
Nominal Installed Face to-Face	1-3/8	1-3/8	1-9/16	2-1/4	2-1/4	2-5/8	3-1/4	2-3/4	4
Max. Restriction Bolt Setting	1-1/4	1-5/16	1-15/32	2-7/32	2-1/4	2-23/32	3-5/16	2-3/4	4
Max. Axial Movement + or -	1/4	1/4	1/4	5/16	3/8	1/2	1/2	1/2	1/2
Max. Transverse Deflection,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



Maximum angular movement approximately 7°.

#### **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°.

# 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-toface 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**

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Pipe Size (Inches)	1	1-1/2	2	2-1/2	3	4	5	6	8
Flange Dimensions	F 40/40	0.44/4.0	7.740	0.7/40	0.040	10.11/10	44 44 44 6	10.4/4	45.0/4
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

<sup>\*</sup> Based on unit being in normal installed position with no axial movement or angular deflection.

<sup>\*</sup> Based on unit being in normal installed position with no axial movement or angular deflection.