

MERCER TEFLON® EXPANSION JOINTS

Series
800

Mercer Series 800 PTFE Teflon® Expansion Joints are the Sure and Economical Way to Solve Difficult Expansion and Misalignment

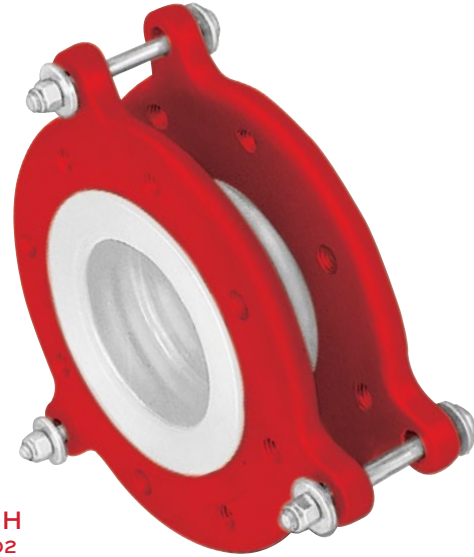
The Teflon® material is corrosive-proof, chemically inert and does not age. Flexibility and flex cycle life is equally exceptional.

The Teflon® body is formed over the full sealing face of the flanges eliminating the need for separate gaskets. The fluid or gas never contacts the floating flanges.

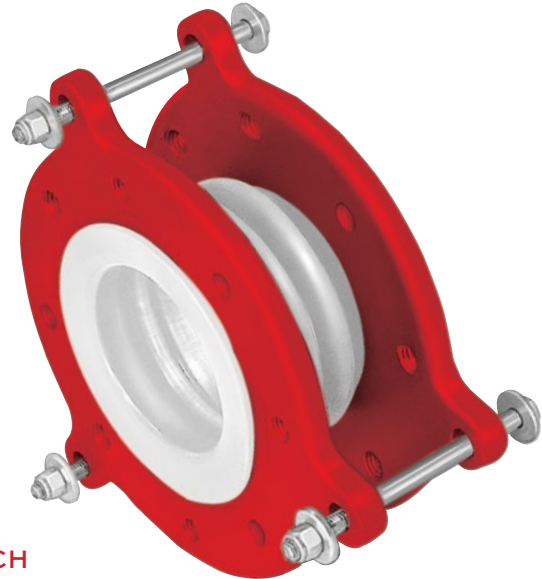
The Series 800 is manufactured in 2, 3 and 5 arch variations designated 802, 803 and 805. Flexibility and allowable movements increase with the number of arches. Teflon® is ideally suited to the following problems:

- Handling Nitric or Sulfuric acid in mining or plating operations
- Providing low spring rates and high flexibility to protect fragile FRP, PVC or glass pipe from damage caused by expansion, contraction or ambient vibration
- Accommodating expansion and contraction in high temperature (to 350°F, 177°C) caustic green, white and black liquor lines in pulp mills
- Preventing pipe line vibration from damaging glass linings in acid and caustic soda pumps
- Providing flexibility to prevent flange leaks caused by the minor explosions in lines from Chlorine generators in bleaching plants of paper mills
- Providing non-contaminating, sterilizable, flexible connectors for the food processing, medical, and chip manufacturing industries

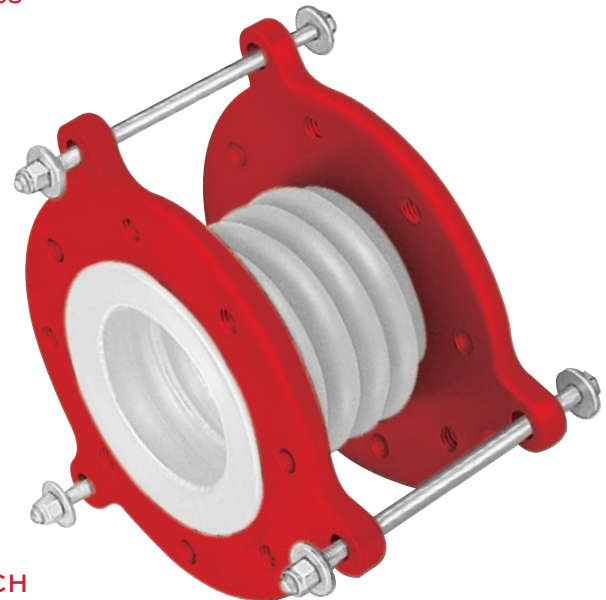
The standard assembly utilizes high strength carbon steel flanges complete with three restraining bolts. The Teflon® is reinforced externally with stainless steel rings between arches. They are also available with stainless steel flanges and stainless steel hardware. There is a Mercer Series 800 Teflon® Expansion Joint to suit your needs.



2 ARCH
Style 802



3 ARCH
Style 803



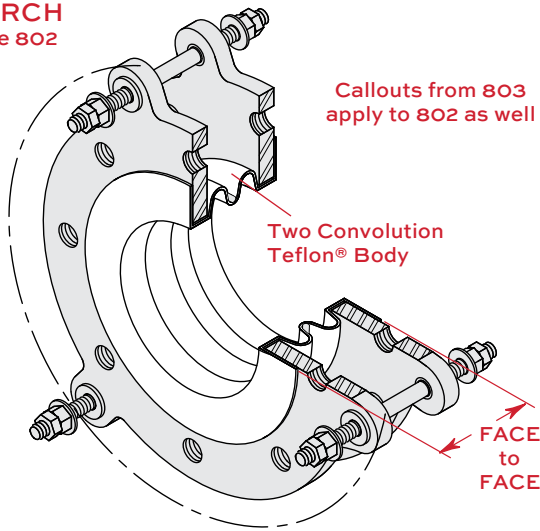
5 ARCH
Style 805

STYLE 800 SERIES MAXIMUM PRESSURE RATINGS

Pipe Size (in) (mm)	Maximum Pressure Ratings up to 100°F (38°C)			
	802 (psig) (kg/cm ²)		803/805 (psig) (kg/cm ²)	
1 25	140	9.8	100	7.0
1 1/2 40	140	9.8	100	7.0
2 50	140	9.8	100	7.0
2 1/2 65	140	9.8	100	7.0
3 80	140	9.8	100	7.0
4 100	130	9.1	100	7.0
5 125	130	9.1	90	6.3
6 150	120	8.4	90	6.3
8 200	110	7.7	85	6.0
10 250	110	7.7	85	6.0
12 300	110	7.7	85	6.0

*Teflon® is a trademark of E.I. DuPont Nemours & Co.

2 ARCH
Style 802



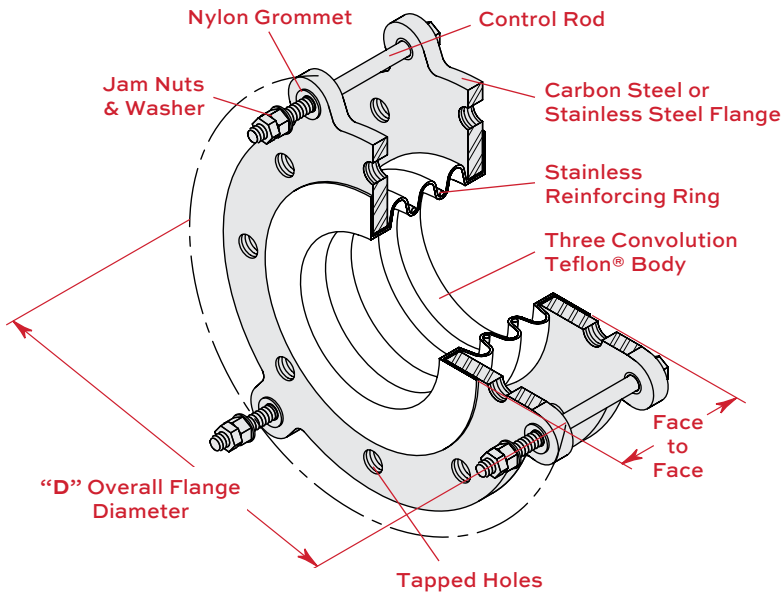
STYLE 802 DIMENSIONS

DIMENSIONS AND ALLOWABLE MOVEMENTS

Size	Flange Dia. D		Face to Face		Axial ±		Max Misalignment		
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	
1	25	6	152	23/8	60	1/4	6	1/8	3
1 1/2	40	6 3/4	172	23/8	60	1/4	6	1/8	3
2	50	8 1/8	206	23/8	60	1/4	6	1/8	3
2 1/2	65	9 3/8	238	23/8	60	3/8	9	1/8	3
3	80	10	254	3 1/2	89	3/8	9	1/8	3
4	100	11 1/8	286	3 1/2	89	1/2	13	1/8	3
5	125	13	330	3 1/2	89	1/2	13	1/8	3
6	150	14	356	4	102	1/2	13	1/8	3
8	200	16 1/4	413	4	102	1/2	13	1/8	3
10	250	19	483	6	152	1/2	13	1/8	3
12	300	22 1/2	572	6	152	1/2	13	1/8	3

All joints are full vacuum rated up to 100°F (38°C)

3 ARCH
Style 803



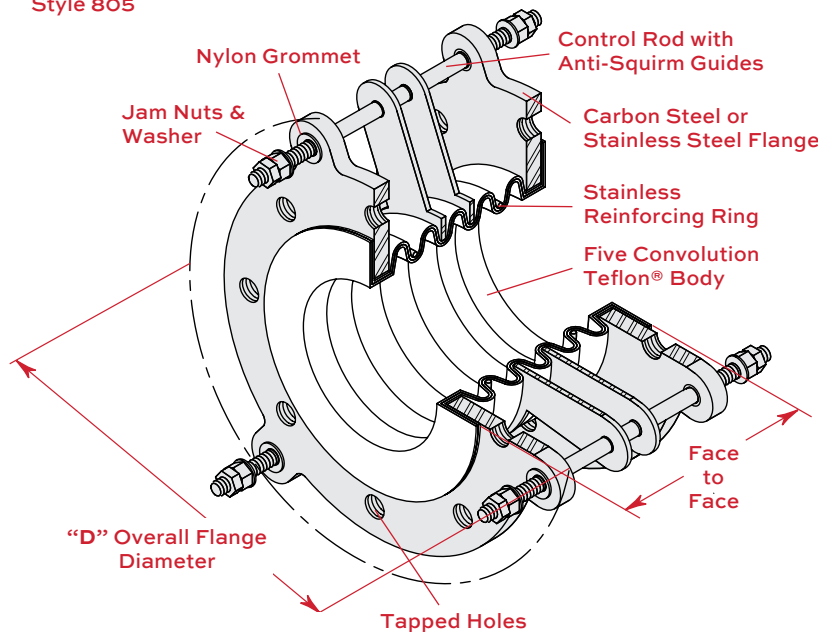
STYLE 803 DIMENSIONS

DIMENSIONS AND ALLOWABLE MOVEMENTS

Size	Flange Dia. D		Face to Face		Axial ±		Max Misalignment		
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	
1	25	6	152	3 1/4	83	1/2	13	1/4	6
1 1/2	40	6 3/4	172	3 1/4	83	1/2	13	1/4	6
2	50	8 1/8	206	3 1/4	83	1/2	13	1/4	6
2 1/2	65	9 3/8	238	3 1/4	83	3/4	19	1/4	6
3	80	10	254	4	102	3/4	19	1/4	6
4	100	11 1/8	286	4	102	1	25	1/4	6
5	125	13	330	4	102	1	25	1/4	6
6	150	14	356	4 1/2	114	1	25	1/4	6
8	200	16 1/4	413	6	152	1 1/8	29	1/4	6
10	250	19	483	6	152	1 1/8	29	1/4	6
12	300	22 1/2	572	7	178	1 1/8	29	1/4	6

All joints are full vacuum rated up to 100°F (38°C)

5 ARCH
Style 805



STYLE 805 DIMENSIONS

DIMENSIONS AND ALLOWABLE MOVEMENTS

Size	Flange Dia. D		Face to Face		Axial ±		Max Misalignment		
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	
1	25	6	152	4	102	3/4	19	1/4	6
1 1/2	40	6 3/4	172	4	102	3/4	19	1/4	6
2	50	8 1/8	206	4	102	1	25	1/4	6
2 1/2	65	9 3/8	238	4	102	1	25	1/4	6
3	80	10	254	5	127	1	25	1/4	6
4	100	11 1/8	286	5	127	1 1/4	32	1/4	6
5	125	13	330	6	152	1 1/4	32	1/4	6
6	150	14	356	6	152	1 1/4	32	1/4	6
8	200	16 1/4	413	8	203	1 3/4	44	1/4	6
10	250	19	483	8	203	1 3/4	44	1/4	6
12	300	22 1/2	572	9	229	2	51	1/4	6

All joints are full vacuum rated up to 100°F (38°C)