# GARFLEX® 8100

GARFLEX® expansion joints feature rugged yet flexible nylon tire cord reinforcement in a molded, spherical bellows design that ensures exceptional burst pressure ratings. The streamlined flowing arch design reduces turbulence and allows smooth, quiet flow without the restricted movement you'll find with a filled arch design.

#### **BENEFITS**

- » Flowing arch design prevents sediment buildup and reduces turbulence
- » Floating flanges can be rotated to accommodate torsional misalignment
- » Can be installed against flat or raised face pipe flanges without the need for gaskets or spacers
- » Molded spherical bellows accommodate up to one inch of axial movement and transverse deflection
- » The nylon-reinforced nitrile provides the support needed for higher pressure applications without sacrificing flexibility while also providing resistance to most hydrocarbons, oils, and gasoline.

#### STANDARD DESIGN

- » Tube
  - Nitrile bellows with rugged nylon tire cord reinforcement ensure strength without sacrificing flexibility
  - Incorporates a flowing arch design to eliminate product buildup
- » Cover
  - The homogeneous layer of neoprene rubber can withstand the rigors of weathering and ozone.
- » Flanges
  - > Ductile iron flanges with a rust-resistant coating

Note: Style 8100 expansion joints are supplied with rotating flanges drilled to ASME B16.5/B16.47 Series A Class 125/150 (standard).

\* Retaining Rings for 10"/12" ID joints have control units built in.

### **BELLOW SIZES**

Nominal	Nominal Bellow I.D. (inch)								
F-F (in.)	2	2.5	3	4	5	6	8	10	12
5	•	•	•	•	•	•	•	•	•
6	•	•	•	•	•	•	•	NA	NA
8	NA	NA	NA	NA	NA	NA	NA	•	•

## **CERTIFICATIONS AND COMPLIANCE**

- » ABS Type Approved (2" 12" ID)
- » ISO 15540 Fire Safe\*\*\*
- » ASTM F1123 Compliant
- » 46CFR56 (USCG)
- \*\*\* Requires use of fire safe cover





### **TEMPERATURE / PRESSURE RATING**

Nylon-Reinforced Nitrile

OPERATING TE	MPERATURE	PRESSURE		
°F	°C	psi	bar	
up to 122°	up to 50°	232	16	
123° - 158°	50° - 70°	174	12	
159° - 194°	70° - 90°	139	9.5	
195° - 210°	90° - 100°	70	5	
211° - 230°	100° - 110°	25	1.7	

#### **VACUUM RATING\***

PIPE	I.D.	VACUUM		
Inch	mm	in. Hg	mm Hg	
2 - 2-1/2	50 - 63	23	575	
3	75	20	500	
4	100	17	425	
5 - 6	125 - 150	11	275	
8	200	8	200	
10 - 12	250 - 300	5	125	

<sup>\*</sup> At nominal FF dimensions only.

# **MOVEMENT CAPABILITIES**

	MOVEMENT		
Type Movement	Inch	mm	
Compression	1	25	
Elongation	1	25	
Transverse Deflection (at recommended installed position)	±1	±25	

Movements are non-concurrent.

	PIPE	Max.	
Type Movement	Inch	mm	Allowed
	2	50	35°
	2-1/2 - 3	63 - 75	30°
Angular Deflection (at recommended installed	4	100	25°
position)	5 - 6	125 - 150	20°
	8	200	15°
	10 - 12	250 - 300	10°