

Spherical moulded type expansion joints / flexible connectors with zinc electroplated floating steel flanges for easy alignment long radius arch bellow design permits substantial movements in all planes.

Application

Installation of REJFF is recommended as expansion joints within the piping system and at connection points of piping suction discharge.

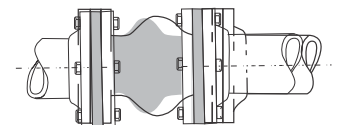
- Compensate for axial transverse and angular pipe movements thereby protecting the system from stresses and damage due to thermal expansion and contraction of piping, minor pipe misalignment and hydraulic surge effects.
- Eliminate need for pipe expansion loops that are expensive and require considerable space.
- Significantly reduce noise and vibration transmitted in the system through pipe walls.
- Allow vibration isolators to function properly, by providing flexibility at equipment connection.
- Cushion water hammer by expanding volumetrically, thus protecting against sudden startup / surge forces or shocks.

Typical examples of usage include

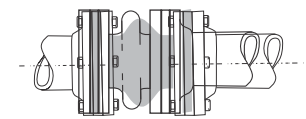
- At inlet and outlet of HVAC equipment - Pumps, AHUs, Chillers, Cooling Tower, Condensers.
- In HVAC chilled / hot water piping - risers, circulation lines, across building expansion joints.
- Process Piping, Power Plants, Water Distribution etc.

Features

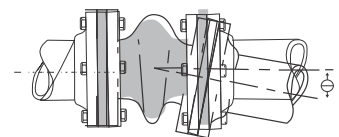
- The bellows are moulded under high pressure and impregnated with multi ply nylon tire cord and spring-steel wire reinforcement. This makes them suitable for both positive pressure and vacuum applications.
- Long radius arch bellow design provides excellent axial, transverse and angular deflection capability.
- Spherical shape of bellow ensures smooth flow of fluid, resulting in negligible pressure drop across the joint.
- Substantial steel-reinforced moulded beads at each end of bellow eliminate the need for gaskets.
- Captive floating flanges facilitate alignment with pipe during installation. These are grooved in order to accommodate the bellow end-beads.
- The floating flanges are epoxy powder coated for corrosion resistance.
- Each unit is individually tested at 150% of rated maximum working pressure before leaving works.
- Due to policy of continual improvement, the specifications are subject to change without prior notice.
- Measurements are subject to 5% tolerance.
- To achieve good results do not over load fitting more than designed parameters as per drawing / catalogue.
- Compliance - As per FSA Standards USA.



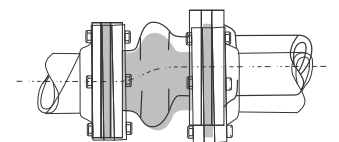
AXIAL
extension



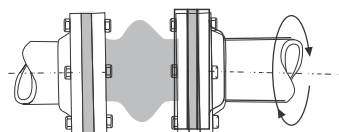
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compression



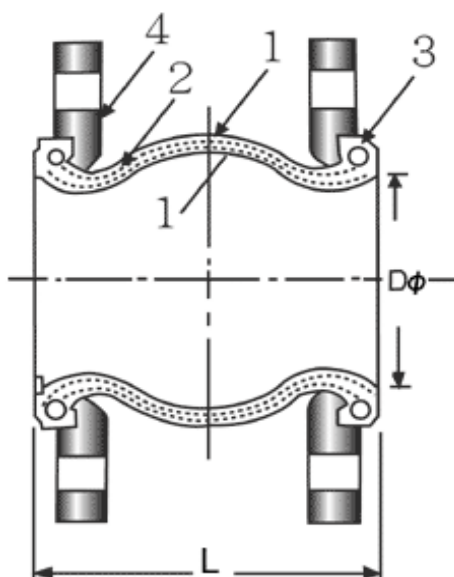
ANGULAR
bending of the centerline



LATERAL
shear or perpendicular to centerline



TORSIONAL
rotation about the centerline, twist



Standard Structure

Item No.	Part	Material
1	Body	CR (Neoprene)/EPDM or NBR
2	Reinforce	Nylon Cord Fabric
3	Wire	Hard Steel Wire
4	Floating Flange	Mild Steel Zinc Plated as per ASTM A36

* Other Polymers available on Request.

Temperature/Pressure Ratings

Maximum temperature	115°C (EPDM/Neoprene or NBR)
Vacuum rating	full vacuum (26"Hg)
Working pressure depends on temperature and at higher temperature, the pressure ratings are reduced slightly	

PN - 10

Nominal Size (I.D.)	Length Nominal f.f.	Flange Dia Nominal	Axial Compression	Movements		Angular Degrees	Expansion Joint Style	BS 10 Table D			Operating Conditions		
				Inches	Inches			Hole Dia	No. of Holes	B.C.D. (Approx)	Pressure Design	Test Pressure	
INS. MM	Inches	Inches	Inches	Inches	Inches			Inches	NOS.	Inches			
1	25	5.91	4.49	0.51	0.47	0.51	15°	REJFF	0.59	4	3.27	10 Bar	15 Bar
1.25	32	5.91	4.76	0.51	0.47	0.51	15°	REJFF	0.59	4	3.43	10 Bar	15 Bar
1.5	40	5.91	5.24	0.51	0.47	0.51	15°	REJFF	0.59	4	3.86	10 Bar	15 Bar
2	50	5.91	5.98	0.51	0.47	0.51	15°	REJFF	0.71	4	4.49	10 Bar	15 Bar
2.5	65	5.91	6.50	0.51	0.47	0.51	15°	REJFF	0.71	4	5.00	10 Bar	15 Bar
3	80	5.91	7.24	0.51	0.47	0.51	15°	REJFF	0.71	4	5.75	10 Bar	15 Bar
4	100	5.91	8.46	0.63	0.47	0.63	15°	REJFF	0.71	4	7.01	10 Bar	15 Bar
5	125	5.91	10.00	0.63	0.47	0.63	15°	REJFF	0.71	8	8.27	10 Bar	15 Bar
6	150	5.91	10.98	0.63	0.47	0.63	15°	REJFF	0.71	8	9.25	10 Bar	15 Bar
8	200	5.91	13.27	0.63	0.47	0.63	15°	REJFF	0.71	8	11.50	10 Bar	15 Bar
10	250	7.87	15.98	0.63	0.59	0.63	15°	REJFF	0.87	8	14.02	10 Bar	15 Bar
12	300	7.87	17.99	0.63	0.59	0.63	15°	REJFF	0.87	12	15.98	10 Bar	15 Bar
14	350	7.87	20.75	0.63	0.59	0.63	15°	REJFF	0.98	12	18.50	10 Bar	15 Bar

Other Available

- **Pressure Rating** - REJFF rated for higher pressures can be supplied. Specify required rating.
- **Bellow Material** - Neoprene/EPDM (standard), (for temperature rating up to 115°C), NBR, Chlorobutyl Hypalon available on request.
- **Flange Drilling** - BS 10 Table-D/ANSI 125/150# (standard); any other standard such ANSI, JIS (specify by name).

Compliance - ASTM F 1123-87 (2004). Testing & Tolerances as per Fluid Sealing Association Standard USA.

Other Flange Drilling Available : BS 10 Table D/E/F, ANSI B16.5 Class 125/150, BS 4504/DIN 2501/BS 4504 PN 16 or as per customer requirement.

PN - 16

Nominal Size (I.D.) INS. MM	Length Nominal f.f. Inches	Flange Dia Nominal Inches	Axial Compression Inches	Movements		Lateral Inches	Angular Degrees	Expansion Joint Style	ANSI 125/150# LBS			Operating Conditions	
				Elongation Inches					Hole Dia Inches	No. of Holes NOS.	B.C.D. (Approx) Inches	Pressure Design	Test Pressure
1	25	5.91	4.25	0.51	0.47	0.51	15°	REJFF	0.59	4	3.11	16 Bar	24 Bar
1.25	32	5.91	4.65	0.51	0.47	0.51	15°	REJFF	0.51	4	3.50	16 Bar	24 Bar
1.5	40	5.91	5.00	0.51	0.47	0.51	15°	REJFF	0.59	4	3.86	16 Bar	24 Bar
2	50	5.91	5.98	0.51	0.47	0.51	15°	REJFF	0.75	4	4.76	16 Bar	24 Bar
2.5	65	5.91	7.01	0.51	0.47	0.51	15°	REJFF	0.75	4	5.51	16 Bar	24 Bar
3	80	5.91	7.52	0.51	0.47	0.51	15°	REJFF	0.75	4	5.98	16 Bar	24 Bar
4	100	5.91	9.02	0.63	0.47	0.63	15°	REJFF	0.75	8	7.52	16 Bar	24 Bar
5	125	5.91	10.00	0.63	0.47	0.63	15°	REJFF	0.91	8	8.50	16 Bar	24 Bar
6	150	5.91	10.98	0.63	0.47	0.63	15°	REJFF	0.91	8	9.49	16 Bar	24 Bar
8	200	5.91	13.50	0.63	0.47	0.63	15°	REJFF	0.91	8	11.73	16 Bar	24 Bar
10	250	7.87	15.98	0.63	0.59	0.63	15°	REJFF	0.98	12	14.25	16 Bar	24 Bar
12	300	7.87	19.02	0.63	0.59	0.63	15°	REJFF	0.98	12	17.01	16 Bar	24 Bar
14	350	7.87	20.98	0.63	0.59	0.63	15°	REJFF	1.10	12	18.74	16 Bar	24 Bar

PN - 20

Nominal Size (I.D.) INS. MM	Length Nominal f.f. Inches	Flange Dia Nominal Inches	Axial Compression Inches	Movements		Lateral Inches	Angular Degrees	Expansion Joint Style	ANSI 125/150# LBS			Operating Conditions	
				Elongation Inches					Hole Dia Inches	No. of Holes NOS.	B.C.D. (Approx) Inches	Pressure Design	Test Pressure
1	25	5.91	4.25	0.51	0.47	0.51	15°	REJFF	0.59	4	3.11	20 Bar	30 Bar
1.25	32	5.91	4.65	0.51	0.47	0.51	15°	REJFF	0.51	4	3.50	20 Bar	30 Bar
1.5	40	5.91	5.00	0.51	0.47	0.51	15°	REJFF	0.59	4	3.86	20 Bar	30 Bar
2	50	5.91	5.98	0.51	0.47	0.51	15°	REJFF	0.75	4	4.76	20 Bar	30 Bar
2.5	65	5.91	7.01	0.51	0.47	0.51	15°	REJFF	0.75	4	5.51	20 Bar	30 Bar
3	80	5.91	7.52	0.51	0.47	0.51	15°	REJFF	0.75	4	5.98	20 Bar	30 Bar
4	100	5.91	9.02	0.63	0.47	0.63	15°	REJFF	0.75	8	7.52	20 Bar	30 Bar
5	125	5.91	10.00	0.63	0.47	0.63	15°	REJFF	0.91	8	8.50	20 Bar	30 Bar
6	150	5.91	10.98	0.63	0.47	0.63	15°	REJFF	0.91	8	9.49	20 Bar	30 Bar
8	200	5.91	13.50	0.63	0.47	0.63	15°	REJFF	0.91	8	11.73	20 Bar	30 Bar
10	250	7.87	15.98	0.63	0.59	0.63	15°	REJFF	0.98	12	14.25	20 Bar	30 Bar
12	300	7.87	19.02	0.63	0.59	0.63	15°	REJFF	0.98	12	17.01	20 Bar	30 Bar
14	350	7.87	20.98	0.63	0.59	0.63	15°	REJFF	1.10	12	18.74	20 Bar	30 Bar

Temperature/Pressure Ratings

Maximum temperature	115°C (EPDM/Neoprene or NBR)
Vacuum rating	full vacuum (26"Hg)
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