

mercia flexibles

Flanged Untied Rubber Flexible Connectors



These rubber pump flexible bellows are designed for installation on to vibrating equipment to reduce the transmission of noise and vibration to the attached pipeline system.

SPECIFICATION

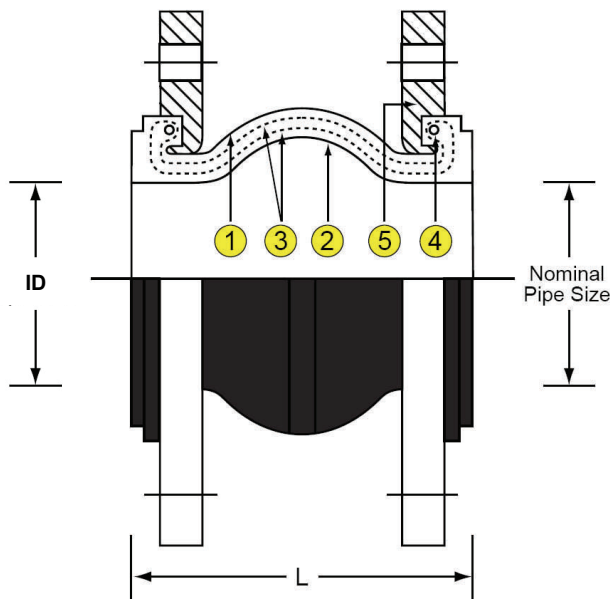
Working Temperature:	-10 to 90°C
Max. Working Pressure:	16 Bar at Ambient
Vacuum Rating:	700mm HG
Applicable Fluids:	Water, Warm Water, Sea Water, Air, Weak Acid
Test Pressure:	1.5 x Working Pressure (24 Bar Max.)
Flanges Standard:	BS4504, PN16 or PN6

The rubber pump flexible connectors should not be used at both their maximum working temperature and pressure simultaneously.

MATERIALS OF CONSTRUCTION

1. Body (Outer Layer):	EPDM
2. Body (Inner Layer):	EPDM
3. Reinforcing Fabric:	Nylon Fabric
4. Wire:	Hard Steel Wire
5. Flange:	Mild Steel

Also available in Nitrile/NBR for Oil service.



Operating Temperature Against Operating Pressure

Operating Temp °C	Ambient	50	60	70	80	90
Max Operating Pressure (Bar)	16	12.4	10	7.5	6.5	5.2

Nominal Pipe Size (mm)	Neutral Length (L) (mm)	Internal Diameter (ID)	Axial Compression (mm)	Axial Elongation (mm)	Lateral Deflection (+ or - mm)	Angular Deflection (+ or - deg)
32	130	29 ± 3	12	10	12	15
40	130	37 ± 3	12	10	12	15
50	130	47 ± 3	12	10	12	15
65	130	62 ± 3	12	10	12	15
80	130	77 ± 3	12	10	12	15
100	130	95 ± 3	12	10	12	15
125	130	120 ± 5	12	10	12	15
150	130	145 ± 5	12	10	12	15
200	130	195 ± 5	12	10	12	15
250	130	245 ± 8	12	10	12	15
300	130	295 ± 8	12	10	12	15

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Flanged Tied Rubber Flexible Connectors



These rubber pump flexible bellows are designed for installation onto vibrating equipment to reduce the transmission of noise and vibration to the attached pipeline system.

SPECIFICATION

Working Temperature:
Max. Working Pressure:

-10 to 90 °C
16 Bar at Ambient
350-400mm sizes: 10 Bar

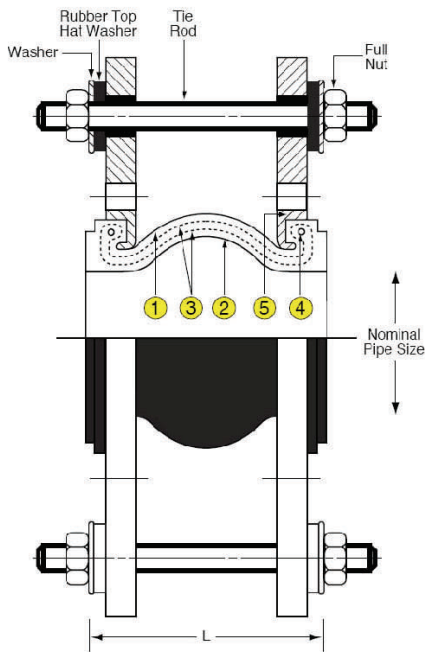
Vacuum Rating:
Applicable Fluids:

700mm HG
Water, Warm Water, Sea Water, Air, Weak Acid
1.5 x Working Pressure (24 Bar Max.)

Test Pressure:

Flanges Standard:

BS4504 PN10, PN16, PN6



MATERIALS OF CONSTRUCTION

1. **Body (Outer Layer):** EPDM
2. **Body (Inner Layer):** EPDM
3. **Reinforcing Fabric:** Nylon Fabric
4. **Wire:** Hard Steel Wire
5. **Oval Flange:** Mild Steel (Plated)

Also available in Nitrile/NBR for Oil service.

Operating Temperature Against Operating Pressure

Operating Temp °C	Ambient	50	60	70	80	90
Max Operating Pressure (Bar)	16	12.4	10	7.5	6.5	5.2

NB (mm)	Neutral Length (L) (mm)	Axial Compression (mm)	Axial Elongation (mm)	Lateral Deflection (+ or - mm)	Angular Deflection (+ or - deg)
32	130	12	2	12	15
40	130	12	2	12	15
50	130	12	2	12	15
65	130	12	2	12	15
80	130	12	2	12	15
100	130	12	2	12	15
125	130	12	2	12	15
150	130	12	2	12	15
200	130	12	2	12	15
250	130	12	2	12	15
300	130	12	2	12	15
350*	266	25	3	18	15
400*	266	25	3	18	15

* 10 Bar

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BSP Female Rubber Flexible Connectors



These rubber pump flexible connectors are designed for installation onto vibrating equipment to reduce the transmission of noise and vibration to the attached pipeline system. They are suitable for use with water, warm water, sea water, air and weak acid.

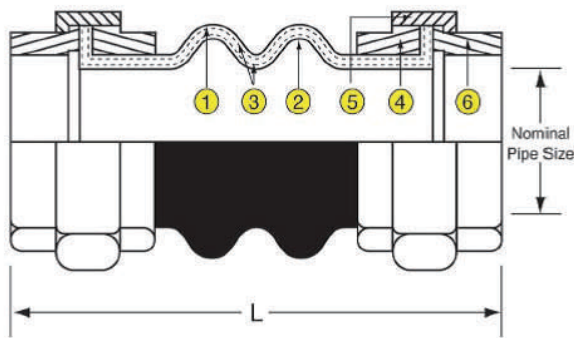
SPECIFICATION

Working Temperature:	-10 to 80°C
Max. Working Pressure:	16 Bar at Ambient Temperature
Vacuum Rating:	500mm HG
Test Pressure:	1.5 x Working Pressure (24 Bar Max.)

MATERIALS OF CONSTRUCTION

1. **Body (Outer Layer):** EPDM
2. **Body (Inner Layer):** EPDM
3. **Reinforcing Fabric:** Nylon Fabric
4. **Union Flange:** Malleable Iron (Galvanised)
5. **Union Nut:** Malleable Iron (Galvanised)
6. **Union Screw:** Malleable Iron (Galvanised)

The rubber pump flexible connectors should not be used at both their maximum working temperature and pressure simultaneously.



Operating Temperature Against Operating Pressure

Operating Temp °C	Ambient	50	60	70	80
Max Operating Pressure (Bar)	16	9.6	7.5	6.2	5

Nominal Diameter (mm)	Neutral Length (L) (mm)	Axial Compression (mm)	Axial Extension (mm)	Lateral (+ or - mm)	Angular (+ or - mm)
15	165	22	6	22	30
20	165	22	6	22	30
25	175	22	6	22	30
32	186	22	6	22	30
40	186	22	6	22	30
50	200	22	6	22	30

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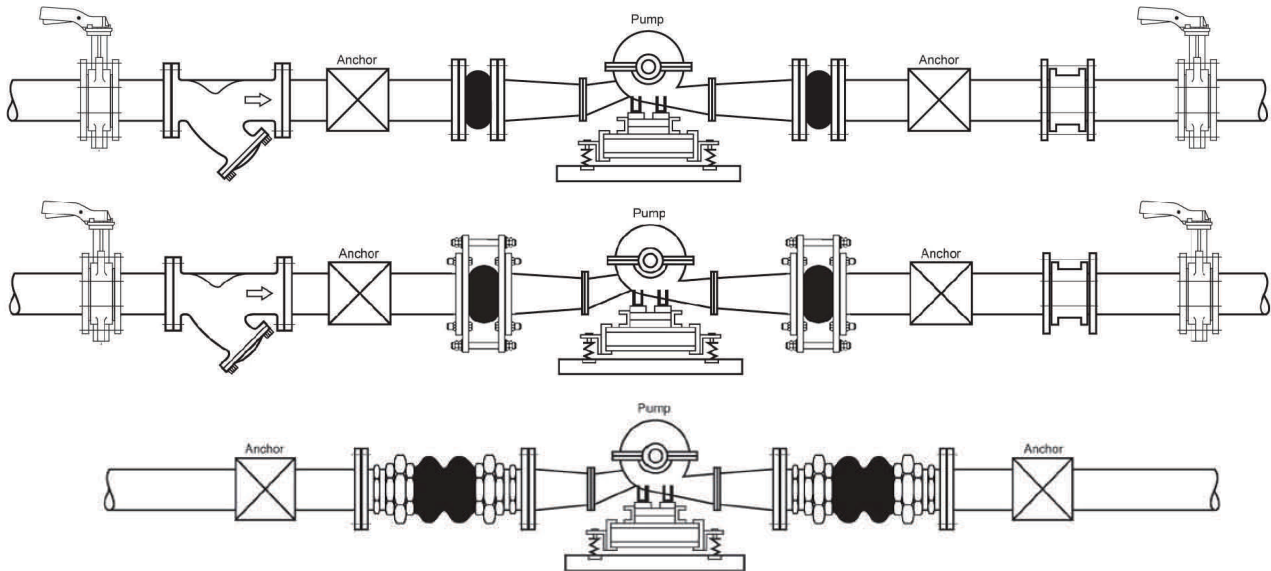
INSTALLATION

Please refer to the Expansion Joint Installation sheet for guidance as to the correct handling and installation of these flexible connectors.

Please Note: The above vacuum rating is based on the installation length without an external load. These products must not be installed 'elongated' on vacuum applications. Please contact the sales office for further information.

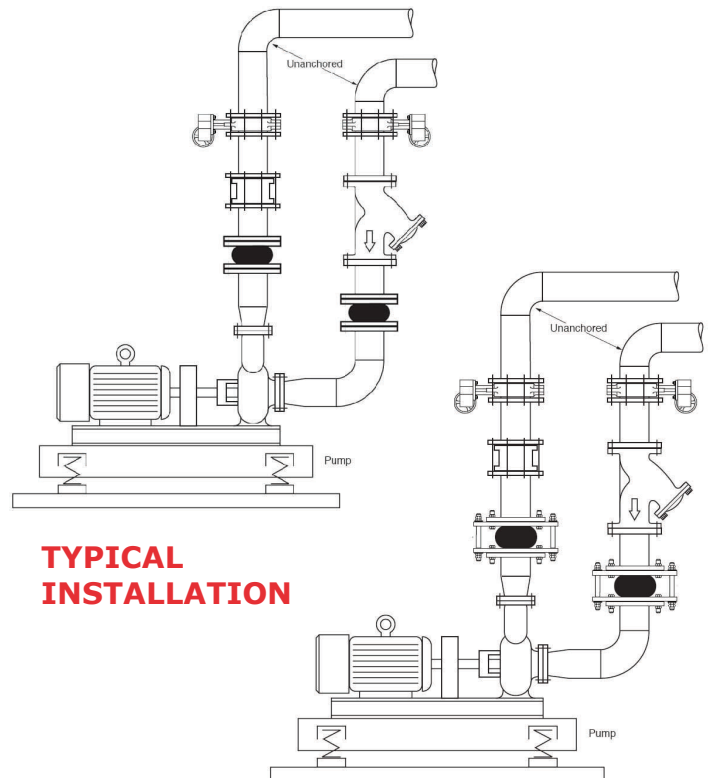
For options such as alternative sizes, end fittings or materials, or to discuss a specific application requirement, please contact the sales office.

The rubber pump flexible connectors should not be used at both their maximum working temperature and pressure simultaneously.



NOTES

- Higher temperatures affect movement and pressure. As temperature increases, rated value must be reduced accordingly.
- Pressures shown are recommended 'operating' - test pressure is 1.5 times 'operating'.
- Vacuum rating is based on neutral installed length without external load. Products shall not be installed 'elongated' on vacuum applications.
- Expansion joints may operate in pipelines or equipment carrying fluids at evaluated temperatures and pressures.
- Normal precautions shall be taken to make sure these parts are installed correctly and inspected regularly.
- Precautions should be taken to protect personnel in event of leakage or splash.
- Bellows for fluids other than those above are available on request.



**TYPICAL
INSTALLATION**

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