

MICROFLEX INDUSTRIAL

PUMP CONNECTORS

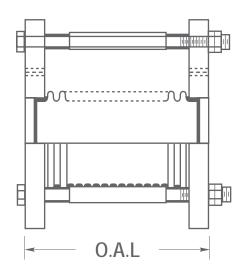
EXPANSION JOINTS > **PUMP CONNECTORS**

DESIGN

Microflex Bellow Type Pump Connectors are designed for use as pump connectors where small axial movements may be encountered along with normal vibration.

Available in 2" - 24" diameters, Microflex MBR and MBS bellows pump connectors are stocked in both popular lengths. A size, type, and material are available to suit most applications for strain relief, misalignment, thermal growth, vibration control, and noise reduction in piping and fluid handling systems.

150# and 300# units with fixed flanges are standard. Units with floating flanges or other special configurations and alloys are available.



FEATURES

- Tie rod restrained to prevent elongation.
- Multi-ply ASTM A240 300 series stainless steel bellows.
- · Flat face carbon steel flanges with 150 lb. drilling.
- Rated 150 PSIG at 850°F 225 PSIG test.
- Positive compression stops.
- Available in two motion series.

OPTIONAL OPTIONS

| T316-L Bellows | B4 |
|-------------------|----|
| Van Stone Flanges | 99 |
| Fixed Liner | LF |
| Removable Liner | LR |

TYPE MBR

MBR: Long Length for greater motion capability or where service conditions limit the use of single arch rubber expansion joints.

| NOMINAL PIPE SIZE | 2 | 2 1/2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 24 |
|----------------------|-----|-------|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-------|
| O.A.L (Inches) | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 10 |
| Axial Compression | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 1 | 1 | 1 1/8 |
| Axial Extension | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 1/2 | 1/2 | 1/2 |
| Lateral Offset | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 3/16 | 1/8 | 1/8 | 1/8 | 1/8 | 1/8 |
| Aprox. Weight (lbs.) | 15 | 17 | 22 | 27 | 31 | 34 | 48 | 67 | 114 | 174 | 200 | 211 | 235 | 315 |

Note: all motions are non-concurrent.

TYPE MBS

MBS: Standard length.

| NOMINAL PIPE SIZE | 2 | 2 1/2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 |
|----------------------|-------|-------|-----|-------|-------|-----|-----|-----|-----|
| O.A.L (Inches) | 3 1/2 | 3 1/2 | 4 | 4 1/2 | 4 1/2 | 5 | 5 | 6 | 6 |
| Axial Compression | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 1/2 | 3/4 | 3/4 |
| Axial Extension | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 | 1/4 |
| Lateral Offset | 1/8 | 1/8 | 1/8 | 1/8 | 1/8 | 1/8 | 1/8 | 1/8 | 1/8 |
| Aprox. Weight (lbs.) | 14 | 16 | 21 | 26 | 29 | 32 | 45 | 63 | 110 |

Note: all motions are non-concurrent

HOW TO ORDER > MICROFLEX BELLOW TYPE PUMP CONNECTORS

Example: 4" MBS with T-316 Bellows, van stone flanges and removable liner.

NOM PIPE SIZE SERIES ADDED OPTIONS

4 - MBS • B3-99-LR

DESIGN

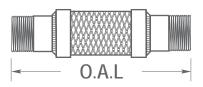
Microflex Braided Pump Connectors are assembled using Microflex close pitch annular metal hose and high strength braid. They are designed for optimum performance in vibration applications where axial motion does not occur.

Available to 4" size threaded or 30" size flanged, Microflex Braided Pump Connectors are a high quality alternative to the "commodity" braided pump connectors that are on the market today. Each Microflex unit is fully tested and has material traceability.

A size, type and material are available to suit most applications for strain relief, lateral misalignment, vibration, and noise reduction in piping and fluid handling systems.

FEATURES

- Two standard hose materials available T321 and T316L SST hose
- Single braided pressure ratings listed

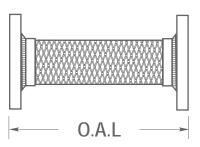


TYPE MPM

Stainless steel hose and braid with NPT pipe nipples welded each end. Optional: hex collars, double braid, stainless steel fittings.

| NOMINAL PIPE SIZE | 1/2 | 3/4 | 1 | 1 1/4 | 1 1/2 | 2 | 2 1/2 | 3 | 4 |
|-------------------|-------|------|-----|-------|-------|--------|-------|-----|-----|
| O.A.L (Inches) | 6 1/2 | 7 | 8 | 8 1/2 | 9 | 10 1/2 | 12 | 14 | 16 |
| 70°F PSIG | 1335 | 1135 | 795 | 610 | 530 | 535 | 395 | 385 | 270 |

Elevated Temperature Service: Multiply 70°F PSIG rating by Temperature Correction Factors.



TYPE MPF

Stainless steel hose and braid with 150 lb. flat face carbon steel plate flanges AWWA class D. Optional: double braid, stainless steel flanges, 150 lb. or 300 lb. forged flanges B16.5.

| NOMINAL PIPE SIZE | 2 | 2 1/2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 |
|-------------------|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| O.A.L (Inches) | 9 | 9 | 9 | 9 | 11 | 11 | 12 | 13 | 14 | 14 | 14 |
| 70°F PSIG | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 110 |

Elevated Temperature Service: Multiply 70°F PSIG rating by Temperature Correction Factors.

| Temperature °F | 70° | 200° | 300° | 450° | 600° | 700° | 850° |
|---------------------|------|------|------|------|------|------|------|
| MPM Stainless Steel | 1.00 | 0.94 | 0.88 | 0.81 | 0.74 | 0.70 | 0.64 |

HOW TO ORDER > MICROFLEX METAL HOSE PUMP CONNECTORS

Example: 4" MBF metal hose pump connectors.

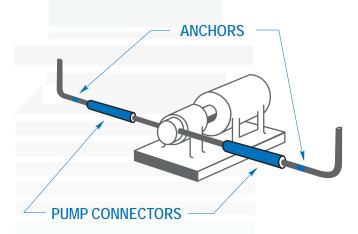
NOM PIPE SIZE SERIE

4 - MPF

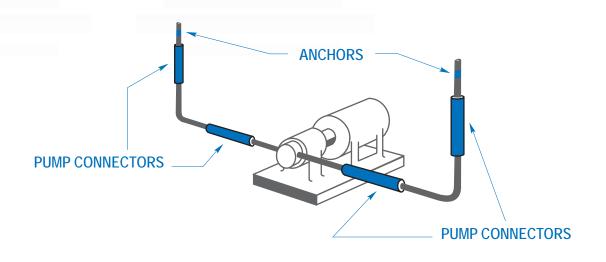
INSTALLATION INSTRUCTIONS

- One end of the pump connector should be attached directly to the equipment.
- The piping immediately adjacent to the opposite end should be securely anchored.
- Do not use the pump connector to support equipment or piping.
- · Do not apply torque in service or to install.
- · Braided hoses are not to be compressed.
- These pump connectors are for constant pressure only.
- · Consult factory for pulsating, surge or shock pressure service.
- Since Microflex Inc. does not control or supervise any additional fabrication, installation or use of our products, we cannot assume responsibility for subsequent performance of the misapplication of the product data in this catalog.

STANDARD INSTALLATION



UNIVERSAL INSTALLATION





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MICROFLEX INDUSTRIAL

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