

Metraflex®

for pipes in motion

SPECIALTY PIPING PRODUCTS

METRAFLEX

In 1958, the Metraflex founders saw a need for a company that could manufacture and supply a broad range of specialty accessories for piping systems with the emphasis on commercial heating and cooling. Now, more than 40 years later, the Metraflex Company occupies a two story plant covering one-half a city block. We manufacture a wide range of expansion joints, flexible pipe connectors, valves, pipe guides, and other specialties.

DISTRIBUTION

Metraflex markets through a system of some 80 manufacturers' agents covering not only the entire United States but also located throughout the world. Many of these agents inventory Metraflex products for prompt customer service. Primary distribution is direct from the Chicago plant or from warehouse facilities located on the east and west coasts; depending upon product type, quantity, and delivery schedules.

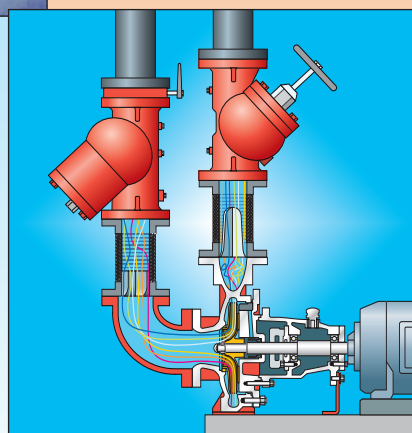
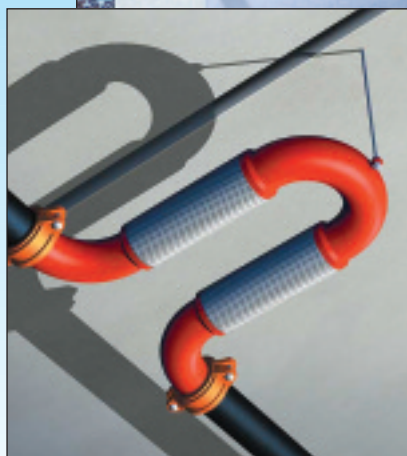
SPECIAL ASSEMBLIES / FABRICATION

Metraflex has the capability to design and manufacture virtually any specialty piping products to meet a customer's specifications. More than capability, we have a sincere interest in undertaking the challenge of engineering products to solve new needs or problems - a desire not universally shared. This is particularly important today, with rapidly changing technology and material cost escalation demanding new and more cost-efficient products and methodology. The requirements of a solar energy system, absorbing seismic energy in a piping system, or a ground source heat pump application represent only three more noticeable examples of the new challenges confronting the mechanical and process piping engineer. To discuss your special product needs, please contact your local representative or reach us directly in Chicago.

COMPLETE PRODUCT DATA

This catalog is intended to present the basic range and application of Metraflex products. Our website (www.metraflex.com), or our complete three-ring binder contain engineering data and more detailed product information on the entire Metraflex product line. Catalogs are available free upon request. To locate a Metraflex agent servicing your area (or the project location) please call or see the agent section of the website.

- Flexible Couplings
- Rubber & Metal Connectors
- Metraloop Expansion Loops
- Hydro-Formed Expansion Joints
- Expansion Compensators
- Pipe Alignment Guides
- Wall Penetration Seals
- Check Valves
- Air Vents
- Butterfly Valves
- Pipeline Strainers
- Suction Diffusers
- FM and UL Ratings



PUMP CONNECTORS

Metraflex
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Flexible Metal Connectors Model ML/SL/Mini

Whether you're using it for water, steam, freon, or air the Metraflex flexible metal connectors are engineered to absorb vibration, compensate for mis-alignment and reduce noise. Available in Bronze, Stainless Steel and Monel... in hose diameters from 2-1/2" to 24". In virtually any length. All types of end connections. Temperatures to 1500°F. UL ratings. Special applications such as high pressure, high velocity, double containment available on special order. **Request Catalog H & B.**

Metrasphere Connectors

Here's a pump connector/expansion joint that combines the strength of the spherical shape, the flexibility of rubber compound and the forgiveness of alignable steel floating flanges. The sphere or globe is stronger; four times as strong as cylindrical or spool type shape. This results from an even distribution of pressure in all directions within the connector. Also, this design imposes less thrust on pipe lines and equipment when pressurized. Floating flanges prevent torsion and possible seepage or weepage at the flange joint. The CableSphere with its integral cable system eliminates the need to anchor piping, and the labor and expense of adding control units in unanchored applications. The MetraSphere and CableSphere come standard in precision molded EPDM and Nylon construction. This assures maximum deflection, elongation and compression... minimizing shock and system hammer. Floating steel flanges are supplied with either tapped or drilled holes. MetraSpheres come in sizes from 1" to 30"... working pressures: 16"HG Vacuum to 225 psi... for temperatures from -20°F to 240°F. Need even more movement? Choose the Doublesphere and DoubleCableSphere. **Request Catalog RUBEJ.**



Flexible Rubber Spool Joints & Flexible Rubber Pipe

Made of reinforced Neoprene or Butyl for 250°F. max. temp. Standard joints available in 14 nominal pipe sizes from 2" to 24" with rated working pressures of 150 psi or 250 psi. Rubber Pipe available in 9 diameters from 2" to 12" in recommended minimum lengths of 12", 18" and 24". Full face rubber sealing surface with steel retaining rings. Control units available for all size units. These joints can be made in virtually any face to face dimension and with multiple arches. Call for information on pipe sizes from 30" to 144". **Request Catalog RUBEJ for detailed specifications.**

CRV® Flex - A More Efficient Design - Eliminate Suction Diffuser

The CRV Flex technology consists of a scientifically designed set of stationary vanes placed in the suction-side pump connector just upstream of an elbow. These vanes eliminate the turbulence normally caused by fluid passing through an elbow by rotating the fluid as it enters the elbow. The fluid negotiates the turn uniformly, and enters the pump with a flat velocity profile. The result is improved pump performance. **Request Catalog CRV Vane.**



Stationary, curved fins rotate flow so it moves smoothly through the elbow.

The Vane Flex™ Pump Connector

The Vane Flex™ Pump Connector provides the same flow straightening value as an equivalent 5 to 10 pipe diameter length of pipe installed on pump discharge. And at the same time provides the stress relief and vibration dampening of a pump connector, in a fraction of the space. **Request Catalog CRV Vane.**

- Hydrodynamic Shaped Vanes
- Full Range of Movement
- Pipe Sizes 2" to 18" Diameter

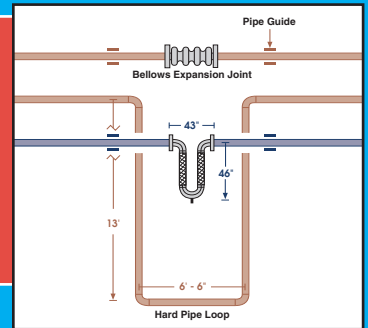


EXPANSION JOINTS & PIPE GUIDES



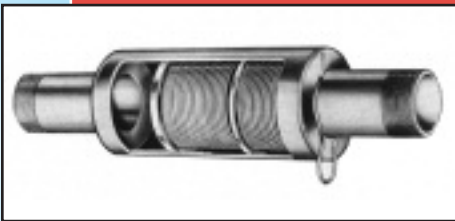
MetraLoop®

The easiest way to compensate for thermal expansion. This flexible expansion loop requires a fraction of the space of hard pipe loops and minimal guiding and anchoring, the MetraLoop is a designer's savior. Pipes run closer, pressure drop is less, and costs are reduced. The MetraLoop is also ideal for seismic applications. **Request Catalog LOOP (HVAC applications) and FIRELOOP (Fire sprinkler applications) for detailed specifications.**



MetraGators

All welded construction and large axial movements are available in these externally pressurized expansion joints. Sizes from 1" to 36", movements of 4", 6" & 8" compression, and pressures to 400 psi make the Metragator a perfect choice for steam or high temperature hot water systems. All end connections are available. Housing material is carbon or stainless steel. Dual end units are constructed for movements of up to 16". **Request Catalog GATOR for detailed specifications.**

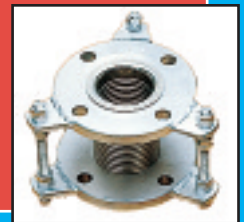


HP Compensator

Designed for building risers and baseboard radiation systems, the HP model expansion compensators come in both 2" and 3" compression versions. Same basic construction as the Metragators in a smaller package. Available in thread, weld, flanged, or grooved ends; 3/4" to 4" size, service to 175 psi @ 750°F...or copper sweat ends; 3/4" to 3" size, service to 150 psi @ 500°F. **Request Catalog HP for detailed specifications.**

Multi-ply Connectors - Model MPTR

Multiple plies of stainless steel form the bellows of the Metraflex MPTR... Vanstoned construction keep all wetted surfaces stainless steel. In some cases, saving the high cost of stainless steel flanges. Short face-to-face in 15 pipe sizes 1-1/2" to 24". Standard face to face dimensions and vibration dampening multi-ply bellows make it an ideal connector when temperatures are too high to use rubber. Ratings to 300 psi. Temperatures to 850°F. Available with 150 or 300 lb. flanges. Integral control rods prevent over extension. **Request Catalog MPTR.**



Style IV Spider Type guide

Matched to pipe size and insulation thickness, the spider guide provides lateral stability to the pipe to prevent "bowing" and to ensure axial pipe movement in and out of the expansion joint. Extended spiders are available. These guides are not designed to support the weight of the pipe. The Metraflex style IV guides are available for pipe 1 inch to 24 inch diameter, insulation thicknesses 0 to 4 inches are standard, larger thicknesses are available, and axial movement up to 12 inches of travel. Add die-electric spacer for copper pipe. **Request Catalog PG 05.**

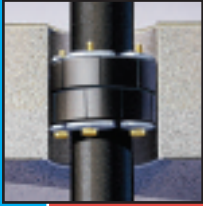


Vibration Isolating Riser Guide Model PGQ

Specifically designed for high rise building applications where mounting guides is difficult. The enhanced lateral stability of the PGQ allows fewer guides to be used and still meet the EJMA guide spacing recommendations. Sound isolating slide bearing with no metal to metal contact between riser pipes and building attachments. Self lubricating and maintenance free. Maximum temperature 250°F. Stock sizes up to 8 inch pipe with 0 to 10 inch axial movement. **Request Catalog Hi-Rise.**



VALVES AND SPECIALTIES



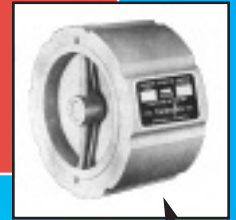
Metraseal

This modular, mechanical wall penetration seal quickly seals any round pipe or conduit passing through a concrete wall or floor. 12 standard link sizes seal virtually any pipe / hole or sleeve combination. Links available in EPDM (standard service), Nitrile (oily service), or Silicone (high temp service). Plated carbon steel or 316 stainless steel hardware. Additional options are Metraseal120 for two hour fire rating, Concentric Seals for offset installations, and Firewalker for two hour fire rating and a unique sliding system that maintains the penetrations integrity while allowing the pipe to slide through the seal. **Request catalog SEAL.**



Silent Check Valves

Eliminate water hammer with Metraflex center guided silent check valves. Built to ANSI 125# or 250# flange class and available in wafer 2" to 10" or globe 2-1/2" to 36" styles. Globe style 2 1/2" thru 10" is designed to permit bolting of butterfly valve to discharge side without interference with check valve disc. **Request Bulletin No. 700 (wafer) No. 900 (globe).**



Double Disc Check Valve

The Metraflex wafer style double disc "Chexx" check valve is designed with minimal pressure drop. Available in sizes 2" thru 48". Standard construction is cast iron body 125# or 250# class, with bronze disc, stainless trim and buna seats. Size 14" and larger standard disc is nickel coated ductile iron. **Request Bulletin No. 2325A.**



Air Vents

Features Stainless Steel spherical float design. Vents air in piping system thru open discharge valve. Rising water raises float to close valve. Valve outlet tapped for safety drain line. Simple design eliminates blow-by and assures long-lasting efficiency. Two sizes for all riser systems. For 150 PSI and 300 PSI. 1/2", 3/4", or 1" inlet. **Request Bulletin No. 1000.**



Butterfly Valves

Specified in pipelines for quick on-off control, for balancing systems, etc. because of their simple, space-saving design, troublefree service and low cost. Metraflex Butterfly Valves are cast iron, bronze disc, and EPDM seat. Lug style can be used for "dead end" service. Available in both wafer and lug styles in sizes from 2" thru 12" diameter. Sizes 8" and larger come standard with gear operator. **Request Bulletin No. 1300.**

Pipe Line Strainers

Y-Type available in both flanged and screwed end styles.. in pipe sizes: 1/4" thru 16". Basket-Type in sizes: 2" thru 20". Stainless steel or monel strainer screens... in mesh sizes for specific requirements. Precision casting feature self-cleaning blow-off outlets. **Request Bulletin No. 1050.**

