

**THE**  
**METRALOOP<sup>®</sup>**

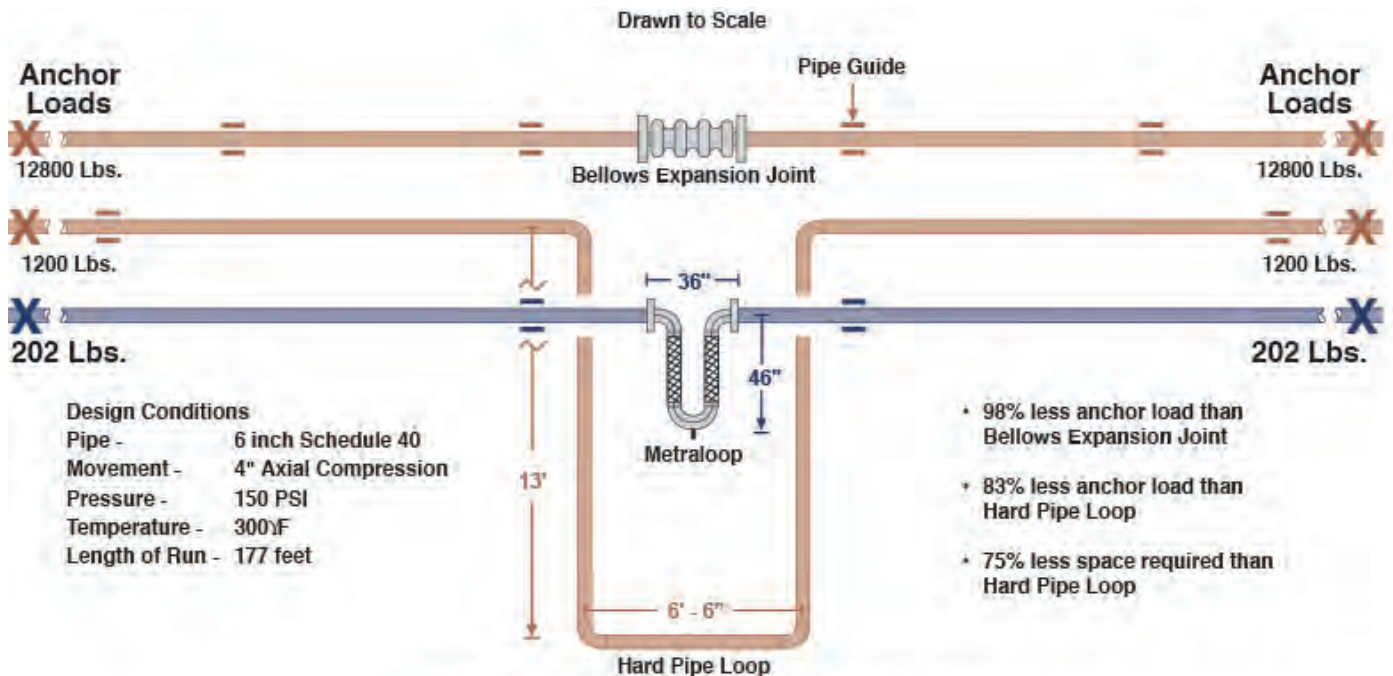
**THERMAL/SEISMIC EXPANSION  
JOINTS FOR EVERY APPLICATION**

**Metraflex<sup>®</sup>**  
*for pipes in motion*



# PROTECT PIPING FROM THERMAL EXPANSION, SEISMIC MOVEMENT, AND BUILDING SETTLEMENT

Metraloops® pioneered by Metraflex are the most dynamic way of allowing available pipe movement. The Metraloop® incorporates proven hose and braid technology into standard piping practices. One of the biggest advantages of using a Metraloop® in lieu of traditional hard pipe loops or bellows expansion joints is the reduced anchor loads. Made of flexible stainless steel hose and braid, it accommodates lateral offset and angular movement. Compared to conventional bellows-type expansion joints and hard pipe loops, Metraloop® exerts a fraction of the anchor load, which requires far fewer pipe guides, and takes less space – all significantly reducing overall project costs.



Metraloop vs Bellows vs Hard Pipe Loop Comparison



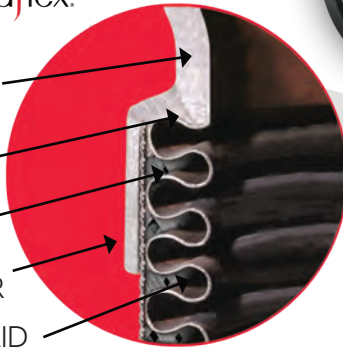
Scan to View Metraflex Metraloop® Selection Online

# MetraLoop<sup>®</sup>

for pipes in motion

By Metraflex.

- CARBON STEEL, COPPER OR STAINLESS STEEL ENDS
- BRAZE OR WELDMENT
- STAINLESS STEEL OR BRONZE FLEXIBLE METALLIC HOSE
- STRESS RELIEVING WELD COLLAR
- STAINLESS STEEL OR BRONZE BRAID



Made of flexible stainless steel hose and braid, the Metraloop<sup>®</sup> accommodates lateral offset and angular movement. As long as the legs are designed with sufficient live length, the offset amount never exceeds the elastic limit of the hose, enabling it to flex indefinitely. With all metallic construction, the Metraloop<sup>®</sup> is designed to last the lifetime of your system.



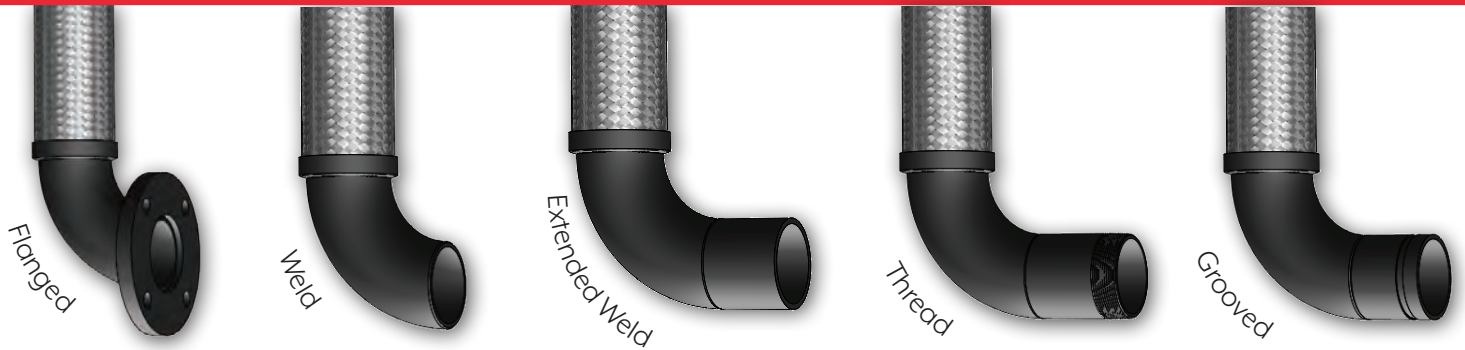
## LOOP TRICKS

As the originator of the flexible loop, Metraflex has been challenged to fit loops in every configuration—from tight corners to crazy angles. We have worked miracles, so don't assume it won't fit without talking with us first. Tight radius elbows and ultra high flexible legs allow for our loops to be squeezed into places most said cannot be done.

For tight pipe runs, any size or number of loops can be designed to nest inside of one another. To order, specify sequence of pipe diameters and corresponding distances between pipe centerlines. Our online configurator easily calculates all the dimensional data needed.

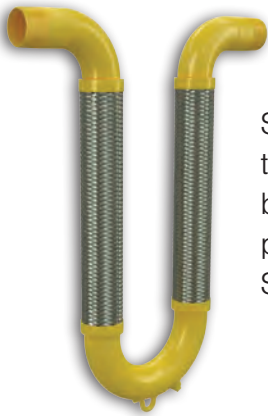
The Metraloop is the ideal joint to accommodate pipe movement in a wide range of applications that include:

- Hot and chilled water
- Plumbing
- Med gas
- Seismic
- Steam and condensate
- Gas/oil
- Fire protection systems



## **METRALOOP<sup>®</sup> STANDARD MODELS**

We offer stock Metraloops<sup>®</sup> in  $\pm 1.5"$  through  $\pm 4"$  movements with either weld, thread, grooved or flanged ends. Just like all Metraloops<sup>®</sup>, these can absorb movement in any direction and be used for both thermal and seismic applications. Metraflex specializes in customization for the perfect fit. Metraloops with carbon steel and stainless steel fittings can be offered in sizes up to 36", for just about any movement. Contact your sales rep for more information on custom loops.



## **AGA/CSA GAS METRALOOP<sup>®</sup>**

Selected sizes, designs and materials of construction for the MetraLoop have been tested and certified by AGA/CSA. for use on gas pipe lines. These Metraloops are being used at seismic joints, building joints and long runs of pipe to minimize the possibility of gas line ruptures. The Metraloop is accepted by the California Office of Statewide Health Planning and Development (OSHPD) for use in hospitals.

## **DWV METRALOOP<sup>®</sup> POOP LOOP II**

For Drain Waste and Vent (DWV) applications that require a listed product, Metraflex offers the Poop Loop 2. It is IAPMO (International Association of Plumbing and Mechanical Officials) listed which is needed for Metraloops in DWV lines where the Uniform Plumbing Code (UPC) compliance is required.



## **VRF METRALOOP<sup>®</sup>**

The VRF (Variable Refrigerant Flow) Metraloop, rated for 700 psi @ 300° F, has been specifically designed by Metraflex to handle the demanding conditions of a VRF system. This Metraloop consists of two parallel sections of corrugated stainless-steel hose and braid, with stainless steel elbows with the Metraflex Exclusive Copper to Stainless Steel Conversion Fitting. Due to the high pressures that VRF systems operate at, the proper installation of the VRF Metraloop is to cold spring the loop so that it returns to its neutral position during operation. This will prolong the life of the loop.



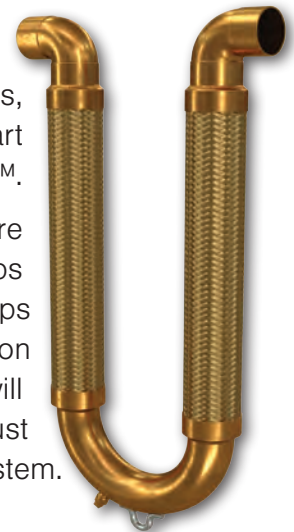
## **FIRELOOP® SEISMIC EXPANSION JOINT**

The Metraflex® Fireloop® seismic expansion joint for fire sprinkler systems is an extremely flexible joint accommodating movement in all directions, providing excellent seismic protection. It meets NFPA 13 guidelines and is UL listed and FM Approved. The Fireloop® expansion joint is capable of movement in all directions with sizes able to accommodate movements up to  $\pm 24$  inches. It should be installed anywhere building or pipe movement is expected, including seismic, thermal movement and building settlement. **Ensure full seismic protection by utilizing our Seismic Breakaway Hanger in your systems.**

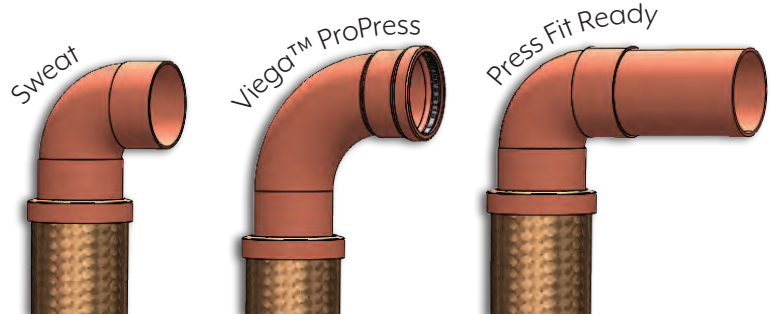
## **COPPER METRALOOP®**

The press fit copper Metraloop joint is the perfect solution to protect your press-fit system when an expansion joint is needed. Metraloop Copper Press Ready expansion joints are compatible with all Press Fit systems, including Viega™, ApolloXpress™, B Press™, Cello Products™, Elkhart Products™, Kem Press™, MM Kembla™ and Nibco™.

Press Fit and Sweat End copper Metraloops with  $\pm 4$ -inch movement are available as Uniform Plumbing Code (UPC) listed. Press Fit end Metraloops include the Viega™ ProPress fittings and other press fit ready Metraloops with copper tube ends. If your press-fit system requires an expansion joint, you need a press-fit Metraloop joint. Metraloop expansion joints will compensate for thermal expansion and contraction without creating thrust loads that can damage your press-fit system.



## **UPC LISTED PRESS FIT & SWEAT ENDS**



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To find your local sales representative, visit  
[www.Metraflex.com/find-a-rep](http://www.Metraflex.com/find-a-rep)