DOG LEG

OPERATION, INSTALLATION AND MAINTENANCE INSTRUCTIONS

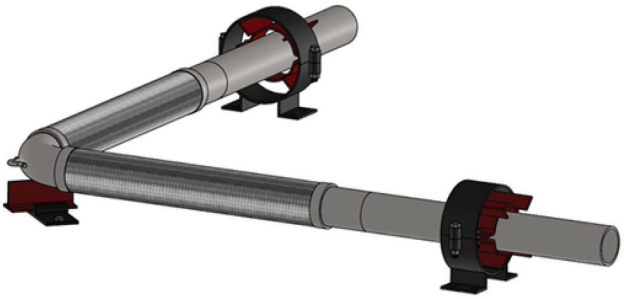
1. **General**
   a. The Metraflex Dog Leg consists of two perpendicular sections of corrugated hose and braid with connecting fittings as specified for project requirements.
   b. The Dog Leg can accommodate axial and lateral movement from both runs of pipe.
   c. The Metraflex Dog Leg is available is standard and custom configurations.
2. **Application**
   a. The Dog Leg is used in a wide range of services from cryogenic to steam and applications such as compensation for thermal expansion and contraction, seismic movement, and building settlement.
   b. Dog Leg will be shipped with a tag that specifies it's rated movement. Confirm that the system movements are within the rating of the Metraloop.
   c. Verify that the system pressures do not exceed the published at ratings of the Dog Leg found on www.metraflex.com
   d. Dog Legs should be installed where shown on contract drawings.
   e. The general Metraflex recommendation is that a guide be used on each side of the Dog Leg.
3. **Installation:**
   a. Inspect joint for shipping damage, ensure that the shipping bar is intact.
   b. During installation, make sure that the sections of flexible hose and braid are protected from damage and overextension. Weld splatter must be kept away from the flexible legs.
   c. Nesting Clearance. Often several Dog Legs are nested inside of each other, when this is the case, the installer should verify that there is enough clearance between the Dog Legs after insulation to allow for the full expected movement. Refer to the submittal for the nest.
   d. When required, Dog Legs should be insulated with flexible unicellular, mineral wool or fiberglass insulation. Ridged insulations should be avoided on the hose element to avoid point loading the hose. Insulation should be selected and installed to avoid moisture entrapment.
   e. For Copper sweat applications, cold strap the fitting that is being soldered or brazed. Thoroughly flush flux from system.
   f. The 90° return fitting must be supported in a way that allows lateral movement.
4. **Testing**
   a. See Metraflex's published data for allowable test pressure.
   b. Metraflex recommends hydrostatic test only. If an air test is performed, appropriate safety precautions must be made.
5. **Steam Precautions:**
   a. For steam applications Metraflex recommends the use of double braiding for the hose.
   b. Metraflex recommends that flexible hose products be only installed in well trapped systems
6. **Maintenance:**
   a. The Metraloop is maintenance free and has no serviceable parts. Periodic visual inspections should be done. Inspections should be made after any seismic event.
   b. Contact Metraflex or your local Metraflex Representative with ANY questions.

7. Support

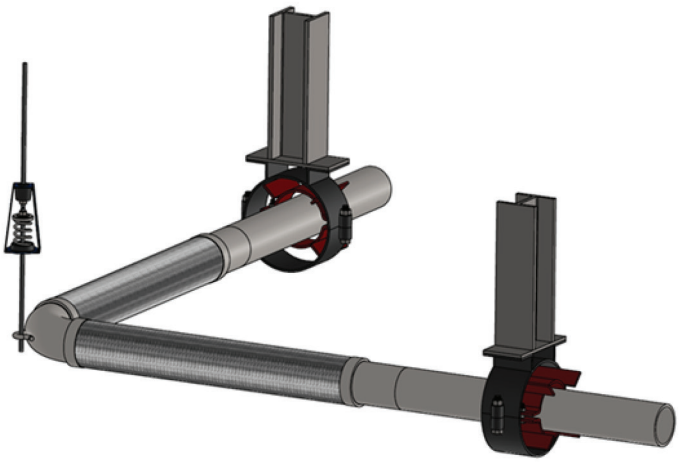
a. For 3” pipe and smaller with 4” movement or less, no additional support for the 90˚ return fitting is required.

b. For larger pipe runs or movements greater than 4”. Support is required for the 90˚ return fitting. Support can be either a spring hanger from above or a slide support from below.

See Details Below:



For horizontal pipe runs of 3” pipe and smaller with 4” movement or less, no additional support for the 90˚ return fitting is required.



For larger pipe runs or movements greater than 4”. Support is required for the 90˚ return fitting. Support can be either a spring hanger from above or a slide support from below.