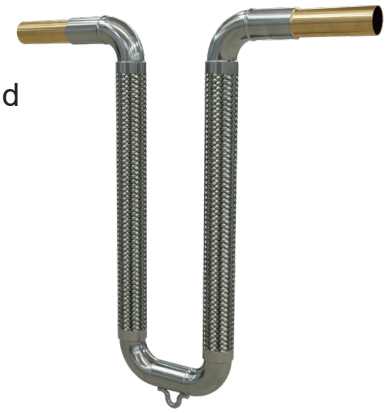
VRF Metraloop®

OPERATION, INSTALLATION AND MAINTENANCE INSTRUCTIONS



General: The VRF Metraloop® consists of two parallel sections of corrugated stainless-steel hose and braid, with stainless steel elbows and a stainless-steel to copper conversion fitting.

Application/Notes:

1. The VRF Metraloop has been specifically designed to be used in a VRF systems. The VRF Metraloop can be used for other applications, however, there are other Metraloops that may be better suited.
2. Metraloops will be shipped with a tag that specifies its rated movement. Confirm that the system movements are within the rating of the Metraloop.
3. Verify that the system pressures do not exceed the published at ratings of the Metraloop found on www. metraflex.com
4. Metraloops can be installed at any point of the pipe run between anchors.
5. The general Metraflex recommendation is that a guide be used on each side of the Metraloop if any of the hanger rods deflect 4° or more due to the pipe movement.
6. The design pressure marked on this component shall not be less than the installed system working pressure or less than the values outlined in ASHRAE 15 for the charged refrigerant. After charging, mark the installed equipment with the refrigerant type and oil used. This component is not suitable for use with ammonia (R717).

Installation:

1. Inspect joint for shipping damage, ensure that the shipping bar is intact.
2. To ensure proper operation, the VRF Metraloop must be cold sprung to the amount of expansion or contraction that it will experience so that it returns to its neutral position during operation. For cold lines the loop must be compressed, and for hot lines it must be extended.
3. 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.
4. Nesting Clearance. Often several Metraloops are nested inside of each other, when this is the case, the installer should verify that there is enough clearance between the Metraloops after insulation to allow for the full expected movement. Refer to the submittal for the nest.
5. When required, Metraloops 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 and or cracking the insulation as the VRF Metraloop moves.
6. Insulation should be selected and installed to avoid moisture entrapment.
7. We recommend that the fitting that is being brazed be cold strapped.
8. Thoroughly flush flux from system.
9. Metraloops are shipped with shipping bars to maintain the Loops neutral position. Shipping bars must be removed after installation.
10. Consult Metraflex for riser applications.