



HBFFS COMPENSATOR

INSTALLATION PROCEDURES

Operating Conditions: HBFFS Expansion Compensators are supplied for 2" and 3" axial travel. Consult the purchase specification for allowable travel for the product purchased. Be certain that the system conditions and test conditions do not exceed these values

Guides, Supports, Anchors: HBFFS Expansion Compensators are designed for applications where the principal movement is axial to the centerline of the compensator, and the system includes guides, supports, and anchors. All expansion compensators require guiding & anchoring in accordance with EJMA (Expansion Joint Manufacturers Association) guidelines.

Flow Direction: The flow can be either direction for HBFFS Expansion Compensators. When installing HBFFS joints on a vertical application, **the traveling end should be installed on the top to allow for proper drainage.**

Brazing & Soldering: HBFFS copper tube end compensators incorporate soft solder brazed joints in the manufacturing process. Do not exceed 1000 ° F during installation. **Apply flux sparingly. HBFFS compensators have stainless steel components, and the flux used to prepare a copper joint is very corrosive to stainless steel. Exposing the stainless steel components to flux will lead to premature failure.**

**** ALL FLUX MUST BE FLUSHED IMMEDIATELY ! ****

Shipping Restraints: External restraints are installed at the factory to insure installation at the correct length and alignment. Leave these restraints installed until after the installation of the compensator is complete – but they must be removed prior to pressure testing. Do not remove shipping bar before the installation on guides & anchors. **CAUTION: they are not designed to react to the pressure thrust of the compensator – they must be removed prior to testing.** *Normally, the shipping restraints are installed by welding and brazing – carefully remove any excess weld or braze metal.*

Testing: Compensator may be one-time tested to 225 psig. Do not exceed maximum pressure or temperature during operation. EFP recommends hydrostatic test will all the air in the system removed. If an air test is preformed, appropriate safety precautions must be made. Do not test until compensator is properly anchored and guided. The shipping bar is not designed to restrain the hydrostatic end load that will be developed by the compensator under pressure.

Post Installation Inspection

1. Inspect the expansion joint for damage
2. Is the compensator installed at the at the correct location; and are anchors, guides and supports installed in accordance with the system design?
3. Are the guides and support free to allow the movement of the compensator?
4. Are the Shipping Restraints removed?
5. Has the flux been removed from the inside from the inside of the compensator?