



## HMMT / HHWE COMPENSATOR FOR CARBON STEEL PIPING

### INSTALLATION PROCEDURES

**Operating Conditions:** 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. Compensators are not designed for lateral, angular movements, or torques. Install only one compensator between anchors. Expansion Compensators are supplied to absorb pipe growth in hot systems. If used for pipe contraction in a chilled system, notify EFP.

**Guides, Supports, Anchors:** 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 expansion compensators. When installing compensators on a vertical application, the traveling end should be installed on the top to allow for proper drainage.

**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 with 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.

**Precautions:** Compensator will develop hydrostatic end loads equal to the pressure time effective area and must be included in anchor load calculations.

### 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?