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## Standard Specification

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### RECOMMENDED ENGINEERING SPECIFICATION FOR FlexComp™ EXTERNALLY PRESSURIZED EXPANSION COMPENSATORS

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. FlexComp externally pressurized and guided expansion compensators. Provide model PRHPSTLMXMxx carbon steel male NPT ends for carbon steel pipe installations and/or model PRHPCPRFSXFSxx with copper female sweat ends for copper tube installations

##### 1.02 MANUFACTURES / SUPPLIERS

- A. FlexComp externally pressurized expansion compensator(s) shall be supplied by Flex-Hose Co. or pre-approved equal.

#### PART 2 PRODUCTS

##### 2.01 Externally Pressurized expansion compensators

- A. The design shall incorporate a totally enclosed, externally pressurized 300 series stainless steel bellows that is protected from external damage by an external protective shroud designed for full line pressure.
- B. On steel pipe models the bellows shall be isolated from flow impingement by an internal carbon steel sleeve. The internal sleeve for copper tube models shall be made of copper.
- C. Steel pipe models shall have a 200 PSIG (1379 kPa) design operating pressure and 750 degrees F (398° C). Copper tube models shall have a 200 PSIG (1379 kPa) design operating pressure and 400 degrees F (204° C).
- D. As a result of externally pressurized design, the operating pressure shall be transferred to the outside of the bellows through a gap in the internal guide flange and the housing (shroud).
- E. Steel pipe models are to be supplied with male NPT threads and an internal anti-torque device.. Cooper tube models are provided with female copper tube sweat ends.
- F. The bellows shall be laminated (multi-ply) construction to provide a low spring rate with minimal stresses that assure extended life.
- G. The externally pressurized design will eliminate the need for one set of pipe guides on each side of the expansion compensator (4 pipe diameters from the expansion compensator) thus permitting the first set of guides to be at up to 14 pipe diameters from the expansion compensator.
- H. For the Canadian market they must be CSA standard B51 certified, inspected and tested by the Technical Standards and Safety Authority of Canada.
- I. Alternate end fittings may be provided based on application to mating piping, weld end or flanged ends.

##### 2.02 WARRANTY

FlexComp externally pressurized expansion compensator(s) must have a 2-year full product replacement warranty when installed in accordance with all specifications and installation instructions as described by Flex-Hose Co.

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