



## JCM Expansion Joint Installation Instructions

### INSTALLATION RECOMMENDATIONS

Pipe alignment is important for proper functioning of the expansion joint, and to ensure free and concentric movement of the slip pipe through the stuffing box. Alignment guides should be provided to allow free pipe movement along the axis, and to prevent horizontal or vertical movement. The first alignment guide should be placed as close to the joint as is practical, up to maximum of 4 pipe diameters. The distance from the first guide to the second should not exceed 14 pipe diameters. If anchors are used, they too should be located within 4 pipe diameters of the expansion joint. Additional supports are usually required in accordance with standard practice.

Limit rods are required on long pipelines where two or more expansion joints are required and it is impractical to install intermediate anchors between joints. In other words, the limit rods control the amount of outward movement (pipeline contraction) that can take place in any one joint.

Note: All joints except the expansion joint must be restrained joints for the expansion joint to cycle properly.

### INSTALLATION GUIDE

Place the slip pipe to the full entry position in the sleeve body. Withdraw the slip pipe to the calculated value determined by the following formula:

$$\frac{\text{Max. Temp. - Installation Temp.}}{\text{Total Temp. Range - (Max. - Min. Temp)}} \times 10^* = \text{Total Slip Pipe Withdrawal (Inches)}$$

\*If joint is made for movement other than 10", substitute the figure for which joint is designed.

EXAMPLE:

INSTALLATION TEMP. = 80°F  
MAX. OPERATING TEMP. = 130°F  
MIN. OPERATING TEMP. = 30°F

FORMULA CALCULATION:

$$\frac{130 - 80}{130 - 30} \times 10 = \frac{50}{100} \times 10 = 5" \text{ Total Slip Pipe Withdrawal (Inches)}$$

2 - 1/2" Withdrawal on each end of double expansion joint

When the slip pipe is in proper position, tighten the bolts on the packing ring, alternating in a star pattern. Tighten to approximately 20 ft. lbs. or until stuffing box packing is tight enough to prevent leakage.

INT801-0396