

Read installation instructions first before installing. Check parts to ensure that no damage has occurred during transit and that no parts are missing. Also check the diameter of the pipe and the range marked on the coupling to ensure you have the proper size.

## Style EJ403

### Single End Expansion Joint with Limit Rods

**Step 1** • The expansion joint has been assembled and shipped with the slip pipe in the closed (contracted) position. The slip pipe must be properly positioned based on the temperature at the time of installation.

**Step 2** • Check to be certain that the slip pipe is in the closed position. Place reference marks on body and slip pipe for positioning of slip pipe and loosen the bolts so that the slip pipe can be positioned.

**Step 3** • **Note:** do not move the lock nuts on the end of the limit rods. These nuts are located to limit the maximum travel of the joint. If the lock nuts are moved and need to be returned to their proper location, push the slip pipe into the joint until it stops. The distance from the limit ring to the contact side of the lock nuts should equal the maximum travel of the expansion joint. Tighten the nuts in this position.

**Step 4** • The distance the slip pipe is to be withdrawn is calculated by the formula below:



**Step 5** • Tighten the packing gland bolts to 5 - 10 foot pounds to hold the slip pipe in position.

**Step 6** • Install the expansion joint in the pipeline.

**Step 7** • As the pipeline is pressurized, tighten the packing gland bolts to compress the packing. Use sufficient torque to prevent leakage. Tightening further will only cause premature packing wear.

**Step 8** • Expansion joints should be installed in an accessible location for further inspection and maintenance when necessary. As the packing wears in service, adjust the packing gland as necessary to stop leakage.

$$\left\{ \left( \frac{\text{Max. Oper. Temp.} - \text{Installation Temp.}}{\text{Total Temperature Range}} \right) \times (\text{Total Travel of Joint}) \right\} = \text{Amount slip pipe is to be withdrawn}$$

<b>Example:</b>	Maximum Operation Temperature	140°	
	Minimum Operating Temperature	-20°	
	Total Temperature Range	160°	{140° - (-20°)} = 160°
	Installation Temperature	80°	
	Total Travel of Joint	10"	

$$\left\{ \left( \frac{140 - 80}{160} \right) \times (10) \right\} = 3.75 \text{ inches}$$



**Caution:** When reinstalling parts with stainless steel hardware there may be a loss in pressure holding ability due to worn or damaged threads during the original installation.