## Thomas@Betts

# TYPE XJG-TB EXPANSION JOINT Installation Instructions

### **APPLICATION**

XJG-TB Expansion Joints are used with rigid metal conduit and IMC, to couple together (2) two sections of conduit subject to longitudinal movement.

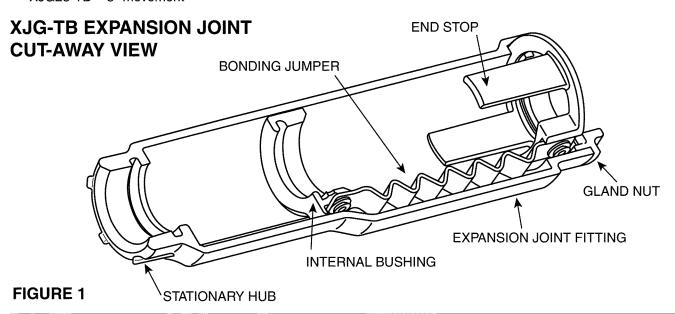
#### **XJG-TB Expansion Joints are installed:**

- · Without the need for unit disassembly.
- Internally grounded therefore it does not require an external bonding jumper when used indoors or outdoors.
- On long conduit runs to permit linear movement caused by thermal expansion and contraction.
- · On long conduit runs to prevent buckling and ensuing failures.

XJG-TB Expansion Joints are UL Listed (UL Std. 514B) and CSA Certified (CSA Standard C22.2 No.18) as an effective grounding means (i.e., the path to ground is permanent and continuous), for the telescopic sections of the conduit. A metallic packing ring ensures the entire conduit system remains a continuous electrical conductor. The internal grounding method uses a flexible bonding jumper that is bolted on a movable bushing. The other end is mounted to a fixed end stop that is clamped on the body and secured in place by the gland nut. These joints are weatherproof and approved for use indoors and outdoors without an external bonding jumper. XJG-TB Expansion Joints meet the requirements of Article 250.98 of the National Electrical Code, providing an electrically continuous raceway, requiring no additional bonding means.

XJG-TB Expansion Joints permit the conduit to move either 2 inches or 4 inches from center of fitting, in either direction. This results in a total movement of either 4 inches or 8 inches. Example:

XJG24-TB = 4" movement XJG28-TB = 8" movement



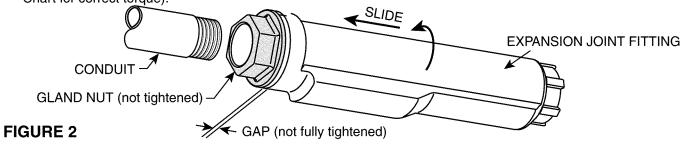
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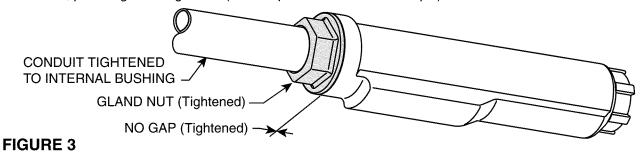
The XJG-TB Expansion Joints are delivered pre-assembled. The installer only has to thread in both ends of the conduit as described in the installation instructions below.

#### INSTALLATION INSTRUCTIONS

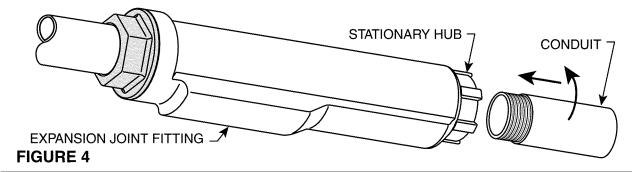
1) No disassembly required. The gland nut comes from the factory partially tightened to allow easy insertion of conduit. Slide the fitting, gland nut end first, onto the conduit as shown in Figure 2, until it stops at the internal bushing. Hand tighten the expansion joint fitting on the conduit. Finish tightening with a pipe wrench (see Torque Chart for correct torque).



2) Tighten gland nut using a pipe wrench, as shown in Figure 3. This will compress the Teflon packing around the conduit, providing a rain tight seal (see Torque Chart for correct torque).



3) Thread the next piece of conduit into the stationary hub on the expansion joint fitting, as shown in Figure 4, and tighten with pipe wrench.



4) Allow for movement in either direction by positioning the internal bushing in the middle of the expansion joint fitting (XJG-TB), as shown in Figure 5.

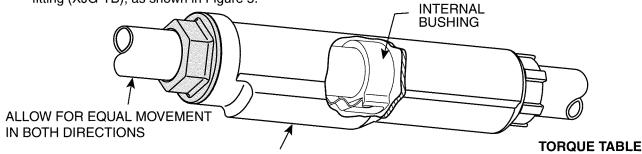


FIGURE 5

**EXPANSION JOINT FITTING** 

 
 Trade Size
 Torques

 3/4 (21) & smaller
 90.4 N·m (800 lbf-in)

 1", 1-1/4" & 1-1/2" (27, 35, and 41)
 113 N·m (1000 lbf-in)

 2" (53) & larger
 181 N·m (1600 lbf-in)