UNF/UNY SERIES
EXPANSION UNIONS

APPLICATION
Expansion unions may be used indoors or outdoors, in threaded rigid metal** conduit systems, in ordinary or hazardous locations to provide for length adjustment. They can be installed in conduit runs to simplify installation of conduit between fixed elements in a conduit system, to compensate for uneven stubups or conduit that is cut too short, and to compensate for thermal expansion and/or contraction of a conduit system.
** Suitable with Intermediate Metal Conduit in non-hazardous locations.

INSTALLATION
Between fixed elements of a conduit system:

1. INSTALL UNIFIED UNION ON TO CONDUIT
2. INSERT UNION WITH CONDUIT INTO POSITION
3. THREAD SLEEVE END INTO CONDUIT
4. PULL CONDUIT TOWARD HUB, THREADING INTO HUB AND TIGHTEN SLEEVE ONTO CONDUIT TO COMPLETE ASSEMBLY

All statements, technical information and recommendations contained herein are based on information and tests we believe to be reliable. The accuracy or completeness thereof are not guaranteed. In accordance with Crouse-Hinds “Terms and Conditions of Sale”, and since conditions of use are outside our control, the purchaser should determine the suitability of the product for his intended use and assumes all risk and liability whatsoever in connection herewith.
Compensate for uneven stub-ups:

Note: It is recommended that fittings be installed with sleeve down, as shown, when it is likely to be subjected to rain or washdown.

1. Measure offset distance and select proper size of fittings.
2. Thread unions onto stub-ups with sleeve end down, then securely tighten.
3. Assembly complete: pull unions toward box and thread into hubs, sleeve fully extended to compensate for uneven stub-ups.

Compensate for thermal expansion and/or contraction:

Both steel and aluminum conduit systems will expand or contract with changes in temperature. Expansion unions can be used to compensate for this type thermal expansion/contraction, thereby reducing stress on all elements of the conduit system.

1. Determine the amount of adjustment needed through calculation or measurement.
2. Select the proper number and type of unions needed from the Crouse-Hinds ECM 4000 or 4700 catalog.
3. The following examples are provided for guidance when unions are intended to compensate for the thermal expansion and contraction.
   a. If installed on one of the hottest days of the year the unions should be nearly fully closed.
   b. If installed on one of the coldest days of the year the unions should be nearly fully extended.
   c. If installed when the temperature is halfway between the expected extremes the union should be extended about halfway.

   CAUTION
   These unions are not intended to compensate for rapid cyclical axial movement of the conduit.

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