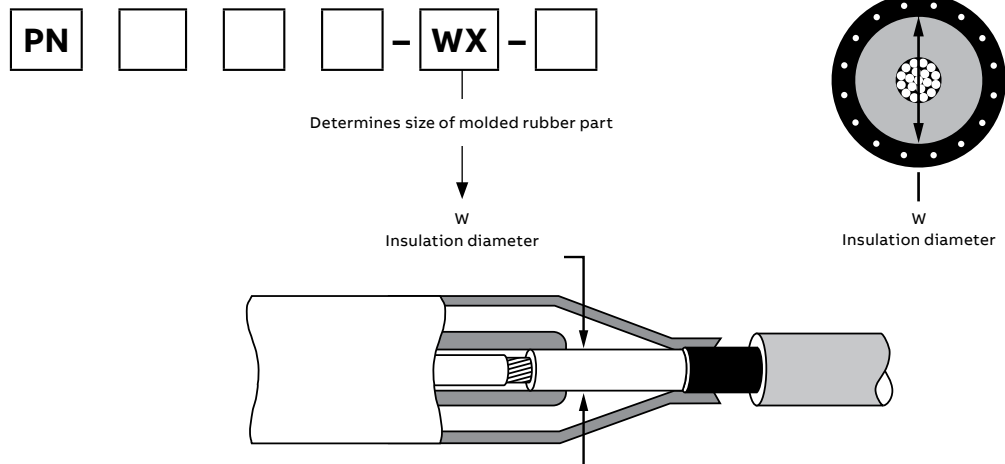


Medium-voltage cable accessories technical information

How to specify size-sensitive products



Insulation diameter selection guide

Elastimold elbows, cable joints and terminations are designed for application on XLP, EPR and other solid-dielectric insulated power cables. These components are constructed of molded elastomer and rely on an interference fit with the cable insulation diameter in order to maintain proper dielectric strength, creep path integrity and a water seal. Elastimold components are available in a wide range of sizes in order to accommodate a variety of cable insulation diameters.

Selection of size-sensitive components requires determining the cable insulation diameter. This can be done in several ways:

- A. Refer to the cable manufacturer's spec sheet for dimensions.
- B. Measure the cable.
- C. If the cable conforms to AEIC or ICEA standards and is:
 1. 15 kV, 175-mil wall thickness, use the table on page A50.
 2. 15 kV, 220-mil wall thickness, use the table on page A51.

3. 25 kV, 260-mil wall thickness, use the table on page A52.
4. 35 kV, 345-mil wall thickness, use the table on page A52.

After the cable insulation diameter minimum and maximum have been determined:

1. Locate the W table indicated in the catalog number selection chart.
2. Complete the ordering information by selecting and inserting the symbol (given in the W table) into the catalog number.

Medium-voltage cable accessories technical information

Ordering examples

AEIC

To complete the information required to order a K655LR-W0X elbow for use on standard AEIC 1000 kcmil compressed stranding aluminum 25 kV cable with 0.260" thick insulation wall:

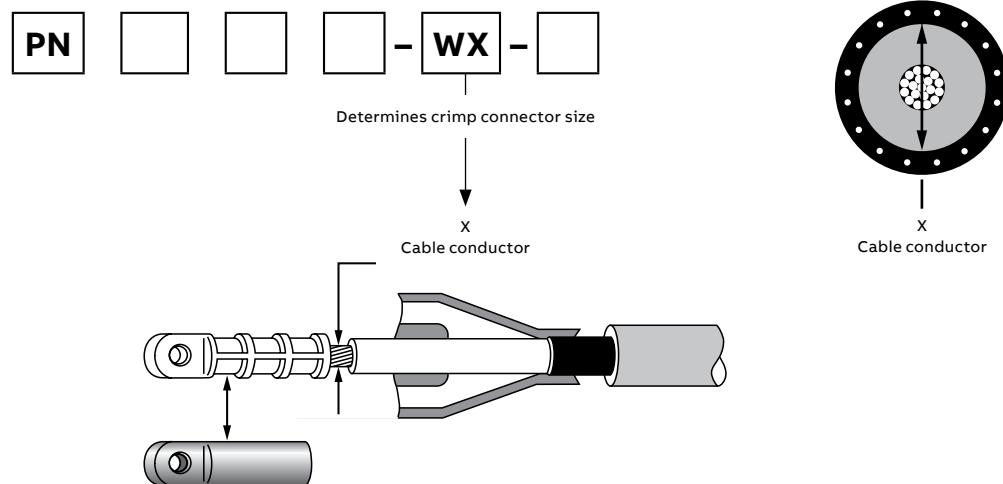
- A. Determine that the insulation diameter (for AEIC cable in the table on pages A50 to A52) is 1.645–1.770".
- B. For this elbow, the catalog number selection chart on page A19 indicates to use Table W7 for elbow sizing and Table X6 for connector sizing.
- C. From Table W7, the symbol for W is N.
- D. From Table X6, the symbol for X is 410.
- E. The completed catalog number, therefore, is K655LR-N0410.

ICEA

To complete the information required to order a K655LR-W0X elbow for use on standard ICEA 1000 kcmil compressed stranding aluminum 25 kV cable with 0.260" thick insulation wall:

- A. Determine that the insulation diameter (for ICEA cable in the table on pages A50 to A52) is 1.645 – 1.740".
- B. For this elbow, the catalog number selection chart on page A19 indicates to use Table W7 for elbow sizing and Table X6 for connector sizing.
- C. From Table W7, the symbol for W is N.
- D. From Table X6, the symbol for X is 410.
- E. The completed catalog number, therefore, is K655LR-N0410.

Medium-voltage cable accessories technical information



Connector selection guide

Elastimold elbows, cable joints and terminations are furnished with crimp-style cable connectors. As standard, these connectors are constructed with a tin-plated aluminum barrel filled with an oxide inhibitor. Most aluminum barrel connectors are universal and are designed for use on either aluminum or copper conductor cable.

When specified, all copper crimp-style connectors can be furnished. These connectors are only for use on copper conductor cable and are not for use with aluminum conductor cables. Bi-metallic connectors are constructed with a copper top and an aluminum barrel. Bi-metal connectors can be used on either aluminum or copper conductor cable and are furnished as standard with 200 A loadbreak elbows and 200 A deadbreak elbows. PCT and R2T terminators are furnished with rod connectors.

Aluminum connectors used in PCJ cable joints are rated as follows:

- Aluminum conductor to aluminum conductor, cable rated
- Aluminum conductor to copper conductor, cable rated equal to the aluminum cable

Copper connectors used in PCJ cable joints are rated as follows:

- Copper conductor to copper conductor, cable rated

Selecting and ordering the proper crimp connector requires determining information relative to the cable conductor as follows:

- Conductor size in AWG or kcmil
- Conductor type (stranded, compressed, compact or solid)
- Conductor material (aluminum or copper)

After the cable conductor information has been determined:

1. Locate the X table indicated in the catalog number selection chart.
2. Complete the ordering information by selecting and inserting the symbol (given in the X table) into the catalog number.

See the ordering examples on page A48 for further information.