

5-35kV ELASPEED™

ACCESSORIES



Applications

Elaseed™ splices utilize cold shrink technology – widely recognized as the leading edge “delivery system” for cable accessories. No special tools or torches are required. Cold shrinking the splice ensures concentric splice recovery. Even in tight installation spaces, Elaseed splices recover to give consistent insulation wall thickness. The Elaseed core, constructed from ethylene propylene rubber (EPR) insulation, is manufactured on a vertical extruder to ensure complete concentricity to the tightest tolerance possible. The Elaseed splice is a “complete” splice, containing the splice core, a shielding braid and a jacket.

Specifications and ratings

IEEE- IEEE 404

Options

- Alternative shield/neutral connection systems (constant force spring, LC connector, etc.)
- Unjacketed splice
- #3 AWG, #1/0 AWG, #4/0 AWG or no shielding braid
- Copper and transition connectors (aluminum is standard)

Design Features

UNIFORM CUTBACK DIMENSIONS

The Elaseed splice is expanded to allow ‘parking’ on one side of the splice area, over the cable jacket. Installer errors during cable preparation are minimized, because cutbacks for jacket, shield, semiconductor and insulation are identical for both cables to be spliced.

WATERTIGHT INSTALLATION

Major accessory users are concerned that ingress of water in damaged cable jackets and unsealed splices can lead to premature failures. The Elaseed splice has successfully passed IEEE 404-1993, the industry standard for splices. The Elaseed splice also passes pressure tests at an external pressure of 45 psi. Internal mastic seals ensure that even cable jacket damage will not allow water to enter the splice area.

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Design Features continued...

SMALL PROFILE

Elaseed splices behave like EPR cable when it comes to bending in tight manhole situations. Splices can be bent to the same radius as the cable on which it is applied. This small profile consumes less racking space as well.

RANGE-TAKING CAPABILITY

The splice can easily accommodate different types of insulation (EPR to XLPE), different insulation thicknesses (175 mil to 220 mil, or 260 mil to 345 mil), as well as different conductor sizes and metals.

Why use Elaseed Splices?

SPEED

An Elaseed splice can be performed in 30 minutes or less, saving time and money over other splices.

TESTING

All Elaseed splices are pre-tested as cable to ensure that the splice will maintain the integrity of the electrical system. The Elaseed EPR insulation system provides the highest dielectric strength over the full voltage range as well as the highest BIL available from any splice technology.

SAFETY

Elaseed splices utilize cold shrink technology, which requires no open flames, eliminating the problems associated with handling and transporting gas bottles.

RELIABILITY AND REPEATABILITY

Elaseed splices are reliable because they always shrink uniformly, and there is only one part to shrink – the triple-extruded body. Tight manhole spaces can create difficulty in assuring that the multiple layers of heat shrink splices receive adequate heating over the entire cable radius. No matter how many splices must be installed, the last splice will be as reliable as the first. The physical effort associated with push-on and tape splices is eliminated with the simple cold shrink technique.

5-15kV ELASPEED™

ACCESSORIES

| Product Number | Insulation Minimum Diameter | | Jacket Maximum Diameter | | Conductor Size at 100% Insulation Level | | Conductor Size at 133% Insulation Level | |
|---------------------|-----------------------------|-------|-------------------------|-------|---|----------|---|----------|
| | (in.) | (mm) | (in.) | (mm) | Minimum | Maximum | Minimum | Maximum |
| 5kV Elspeed | | | | | 90 mils | | 115 mils | |
| 15SDJBE | 0.68 | 17.27 | 1.26 | 32.00 | 3/0 AWG | 250 MCM | 2/0 AWG | 250 MCM |
| 15SEJCE | 0.75 | 19.05 | 1.34 | 34.04 | 250 MCM | 350 MCM | 4/0 AWG | 350 MCM |
| 15SFJCE | 0.91 | 23.11 | 1.73 | 43.94 | 500 MCM | 500 MCM | 350 MCM | 500 MCM |
| 15SHJCE | 0.96 | 24.38 | 1.81 | 45.97 | 500 MCM | 750 MCM* | 500 MCM | 500 MCM |
| 15SIPJCE | 1.09 | 27.69 | 2.05 | 52.07 | 500 MCM | 1000 MCM | 750 MCM | 1000 MCM |
| 8kV Elspeed | | | | | 115 mils | | 140 mils | |
| 15SDJBE | 0.68 | 17.27 | 1.26 | 32.00 | 2/0 AWG | 250 MCM | 1/0 AWG | 250 MCM |
| 15SEJCE | 0.75 | 19.05 | 1.34 | 34.04 | 4/0 AWG | 350 MCM | 3/0 AWG | 250 MCM |
| 15SFJCE | 0.91 | 23.11 | 1.73 | 43.94 | 350 MCM | 500 MCM | 350 MCM | 500 MCM |
| 15SHJCE | 0.96 | 24.38 | 1.81 | 45.97 | 500 MCM | 750 MCM | 350 MCM | 500 MCM |
| 15SIPJCE | 1.09 | 27.69 | 2.05 | 52.07 | 750 MCM | 1000 MCM | 500 MCM | 1000 MCM |
| 15kV Elspeed | | | | | 175 mils | | 220 mils | |
| 15SDJBE | 0.68 | 17.27 | 1.26 | 32.00 | 2 AWG | 3/0 AWG | 2 AWG | 2/0 AWG |
| 15SEJCE | 0.75 | 19.05 | 1.34 | 34.04 | 1/0 AWG | 250 MCM | 2 AWG | 4/0 AWG |
| 15SFJCE | 0.91 | 23.11 | 1.73 | 43.94 | 4/0 MCM | 500 MCM | 3/0 AWG | 500 MCM |
| 15SHJCE | 0.96 | 24.38 | 1.81 | 45.97 | 250 MCM | 500 MCM | 4/0 AWG | 500 MCM |
| 15SIPJCE | 1.09 | 27.69 | 2.05 | 52.07 | 500 MCM | 750 MCM | 350 MCM | 750 MCM |

Splice Part Number Designation

Size selection is based on typical URD cable parameters:

- Class B Compressed Round Copper conductor.
- AEIC minimum insulation diameters.
- One-third concentric neutral.
- Concentric neutral wires not being brought out for grounding or fault current protection.
- Encapsulated jacket.
- XLPE or EPR Shielded Power Cable.

If the cable design or installation is based on other parameters, the recommended splice size may change.

The "15" in the splice part number indicates the rated voltage for the splice. Note that 15kV splices are used for 5kV and 8kV. This splice will simply provide more protection for the respective voltage classes.

The "D", "E", "F", "H", "IP" or "I" in the splice part number denotes the size parameter of the splice. All of the splices for 5 thru 28kV have a built in electrode for stress control, which is denoted by the small "e" in the part number.

The "J" in the splice part number indicates a jacketed splice. Splices may be ordered without a jacket, in which case the "J" would not be included in the splice part number.

The "B" and "C" in the part number indicates the equivalent metallic ground shield size.

- "B" is equal to #3 AWG.
- "C" is equal to 1/0 AWG.
- All of the splices are supplied with C size shield, with the exception of the smallest "D" size splice which has a B size shield.
- Splices may be ordered without a ground shield, in which case the Letter B or C should not be included in the part number.

Splice Selection and Ordering

When selecting splice kits at the top end of the use range, check for proper fit over jacket. If standard splicing practice includes bringing out the neutral wires for grounding and/or fault protection, this will significantly increase the overall diameter of the cable and can change the recommended splice size.

Conductor connectors can be supplied in the splice kits for copper, aluminum and transition sizes. To indicate the size of the connector to be included in the kit add the following for Class B compressed stranding:

- For a Class B compact conductor or a solid conductor add "-C" or "-S", respectively.
- To indicate the conductor metal for the connector add "-CU" or "-AL" for copper & aluminum, respectively.

PRODUCT NOTES:

s Items are Prysmian authorized stock.
The above dimensions are approximate and subject to normal manufacturing tolerances.
All metric (SI) dimensions are derived from a soft conversion.

| Conductor Size | Option Code | Conductor Size | Option Code |
|----------------|-------------|----------------|-------------|
| 2 AWG | -2 | 250 MCM | -250 |
| 1 AWG | -1 | 350 MCM | -350 |
| 1/0 AWG | -1/0 | 500 MCM | -500 |
| 2/0 AWG | -2/0 | 750 MCM | -750 |
| 3/0 AWG | -3/0 | 1000 MCM | -1000 |
| 4/0 AWG | -4/0 | | |

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25-35kV ELASPEED™

ACCESSORIES

| Product Number | Insulation Minimum Diameter | | Jacket Maximum Diameter | | Conductor Size at 100% Insulation Level | | Conductor Size at 133% Insulation Level | |
|-----------------------|-----------------------------|-------|-------------------------|-------|---|----------|---|---------|
| | (in.) | (mm) | (in.) | (mm) | Minimum | Maximum | Minimum | Maximum |
| 25kV Elasppeed | | | | | 260 mils | | 320 mils | |
| 25SDJBE | 0.68 | 17.27 | 1.26 | 32.00 | 1 AWG | 1/0 AWG | N/A | N/A |
| 25SEJCE | 0.75 | 19.05 | 1.34 | 34.04 | 1 AWG | 2/0 AWG | N/A | N/A |
| 25SFJCE | 0.91 | 23.11 | 1.73 | 43.94 | 1/0 AWG | 350 MCM | 1 AWG | 4/0 AWG |
| 25SHJCE | 0.96 | 24.38 | 1.81 | 45.97 | 2/0 AWG | 500 MCM | 1 AWG | 350 MCM |
| 25SIPJCE | 1.09 | 27.69 | 2.05 | 52.07 | 250 MCM | 500 MCM | 3/0 AWG | 500 MCM |
| 28kV Elasppeed | | | | | 280 mils | | 345 mils | |
| 28SDJBE | 0.68 | 17.27 | 1.26 | 32.00 | N/A | N/A | N/A | N/A |
| 28SEJCE | 0.75 | 19.05 | 1.34 | 34.04 | 1 AWG | 2/0 AWG | N/A | N/A |
| 28SFJCE | 0.91 | 23.11 | 1.73 | 43.94 | 1 AWG | 350 MCM | 1/0 AWG | 4/0 AWG |
| 28SHJCE | 0.96 | 24.38 | 1.81 | 45.97 | 1/0 AWG | 500 MCM | 1/0 AWG | 250 MCM |
| 28SIPJCE | 1.09 | 27.69 | 2.05 | 52.07 | 4/0 AWG | 500 MCM | 2/0 AWG | 350 MCM |
| 35kV Elasppeed | | | | | 345 mils | | 420 mils | |
| 35SHJC | 0.96 | 24.38 | 1.81 | 45.97 | 1 AWG | 250 MCM | 1/0 AWG | 3/0 AWG |
| 35SIPJC | 1.09 | 27.69 | 2.05 | 52.07 | 1/0 AWG | 500 MCM | 1/0 AWG | 350 MCM |
| 35SIIJC | 1.26 | 32.00 | 2.44 | 61.98 | 4/0 AWG | 1000 MCM | 2/0 AWG | 750 MCM |

Splice Part Number Designation

Size selection is based on typical URD cable parameters:

- Class B Compressed Round Copper conductor.
- AEIC minimum insulation diameters.
- One-third concentric neutral.
- Concentric neutral wires not being brought out for grounding or fault current protection.
- Encapsulated jacket.
- XLPE or EPR Shielded Power Cable.

If the cable design or installation is based on other parameters, the recommended splice size may change.

The "25" in the splice part number indicates the rated voltage for the splice. The "D", "E", "F", "H", "IP" or "I" in the splice part number denotes the size parameter of the splice. All of the splices for 5 thru 28kV have a built in electrode for stress control, which is denoted by the small "e" in the part number.

The "J" in the splice part number indicates a jacketed splice. Splices may be ordered without a jacket, in which case the "J" would not be included in the splice part number.

The "B" and "C" in the part number indicates the equivalent metallic ground shield size.

- "B" is equal to #3 AWG.
- "C" is equal to 1/0 AWG.

- All of the splices are supplied with C size shield, with the exception of the smallest "D" size splice which has a B size shield.

- Splices may be ordered without a ground shield, in which case the Letter B or C should not be included in the part number.

Splice Selection and Ordering

When selecting splice kits at the top end of the use range, check for proper fit over jacket. If standard splicing practice includes bringing out the neutral wires for grounding and/or fault protection, this will significantly increase the overall diameter of the cable and can change the recommended splice size.

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| 1 AWG | -1 | 350 MCM | -350 |
| 1/0 AWG | -1/0 | 500 MCM | -500 |
| 2/0 AWG | -2/0 | 750 MCM | -750 |
| 3/0 AWG | -3/0 | 1000 MCM | -1000 |
| 4/0 AWG | -4/0 | | |

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