

## 5-35 kV ELASPEED™ Compact Splice



### Description

The new Elaseed™ Compact Splice (25% shorter in length) is a low-profile, range-taking, 105°C-operating-temperature cable splice. It is designed to splice tape shield, wire shield, LC shield, UniShield, JCN and flat strap shielded cables. Compact structure allows for installation in confined areas and requires less cable to be prepared. The insulation is made from ethylene propylene rubber (EPR) on a vertical triple extruder which maintains its concentricity to tight tolerances. It is tested as a cable (partial discharge and AC withstand) to ensure long and trouble-free operation under a wide variety of applications and conditions.

### Design Features

#### UNIFORM CUTBACK DIMENSIONS

The Elaseed™ Compact 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™ Compact Splice has successfully passed IEEE 404-2012, the industry standard for splices. The Elaseed™ Compact Splice has passed external water pressure tests of 45 psi. In addition, the tight interface between the cable and splice body can withstand internal pressures up to 30 psi. Internal mastic seals ensure that even cable jacket damage will not allow water to enter the splice area.

#### SMALL PROFILE

Elaseed™ Compact 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.

### Design Features continued...

#### 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™ Compact Splices?

##### 25% SHORTER

Elaseed™ Compact Splices are 25% shorter in length which makes it easier to park in tight manholes, requires less cable to prepare and reduces storage space over traditional splice kits.

##### SPEED

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

##### TESTING

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

##### RELIABILITY AND REPEATABILITY

Elaseed™ Compact Splices are reliable because they always shrink uniformly, and there is only one part to shrink – the triple-extruded body.

##### PRE-PACKAGED WITH SHEARBOLT CONNECTORS

Prysmian Shearbolt connectors are designed to be compatible with Prysmian Elaseed™ Compact Splice Kits. Two superior technologies provide for a quick and easy installation that saves time and cost over traditional methods.

## 5-35kV ELASPEED™ Compact Splices

Product Number	Cable Range	Shearbolt Range	Insulation Diameter		Jacket Diameter
			Minimum	Maximum	
<b>5kV Elaseed™ - 100% Insulation Level (90 mils)</b>					
15SDJCe-C	3/0 - 250	#2-250	0.68"		1.26"
15SEJCe-C	250 - 500	1/0 - 500	0.75"		1.34"
15SFJCe-C	500 - 750	350 - 750	0.91"		1.73"
15SIPJCe-C	750 - 1250	750 - 1250	1.09"		2.05"
<b>5kV Elaseed™ - 133% Insulation Level (115 mils)</b>					
15SDJCe-C	3/0 - 250	#2-250	0.68"		1.26"
15SEJCe-C	4/0 - 500	1/0 - 500	0.75"		1.34"
15SFJCe-C	350 - 750	350 - 750	0.91"		1.73"
15SIPJCe-C	750 - 1250	750 - 1250	1.09"		2.05"
<b>15kV Elaseed™ - 100% Insulation Level (175 mils)</b>					
15SDJCe-C	#2 - 3/0	#6 - 3/0	0.68"		1.26"
15SEJCe-C	1/0 - 250	#2 - 250	0.75"		1.34"
15SFJCe-C	4/0 - 500	1/0 - 500	0.91"		1.73"
15SHJCe-C	250 - 500	1/0 - 500	0.96"		1.81"
15SIPJCe-C	500 - 750	350 - 750	1.09"		2.05"
15SIJCe-C	750 - 1250	750 - 1250	1.26"		2.44"
<b>15kV Elaseed™ - 133% Insulation Level (220 mils)</b>					
15SDJCe-C	#2 - 2/0	#6 - 3/0	0.68"		1.26"
15SEJCe-C*	#2 - 4/0	#2 - 250	0.75"		1.34"
15SFJCe-C	3/0 - 500†	1/0 - 500	0.91"		1.73"
15SHJCe-C	4/0 - 500†	1/0 - 500	0.96"		1.81"
15SIPJCe-C	350 - 750	350 - 750	1.09"		2.05"
15SIJCe-C	750 - 1250	750 - 1250	1.26"		2.44"
<b>35kV Elaseed™ - 100% Insulation Level (345 mils)</b>					
35SHJC-C	1/0 - 250	#2 - 250	0.96"		1.81"
35SIPJC-C	1/0 - 500	1/0 - 500	1.09"		2.05"
35SIJC-C	750 - 1250	750 - 1250	1.26"		2.44"
<b>35kV Elaseed™ - 133% Insulation Level (420 mils)</b>					
35SHJC-C	1/0 - 250	#2 - 250	0.96"		1.81"
35SIPJC-C	1/0 - 500	1/0 - 500	1.09"		2.05"
35SIJC-C	750 - 1250	750 - 1250	1.26"		2.44"

**PRODUCT NOTES:**

For 25kV applications revert to 35kV part numbers.

Sizes are based on AEIC and ICEA specifications for typical compressed conductor, jacketed, 1/3 neutral cables.

\* These kits will not fit #2 solid conductor

† For copper tape sheilded cables this range can be extended to 750kcmil

**Notes:**

- When selecting kits at the top end of the use range, check for proper fit over jacket
- The selection guide is based on jacketed concentric neutral cables. When using LC or copper tape shield cables, the range may be extended upwards
- Prysmian Elaseed™ Compact Splices meet IEEE 404-2012 specifications.
- Contact your Prysmian sales representative for more information, including data on size transition limits
- If Crimp Connectors are used Prysmian must verify the length of the crimp connector.

**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.