## <u>5-35kV ELASPEED™ Splice</u>

# Prysmian



## 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 Elaspeed<sup>™</sup> 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 Elaspeed splice has successfully passed IEEE 404-1993, the industry standard for splices. The Elaspeed 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.

### SMALL PROFILE

Elaspeed<sup>™</sup> 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.

## DESCRIPTION

Elaspeed<sup>™</sup> 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, Elaspeed splices recover to give consistent insulation wall thickness. The Elaspeed core, constructed from ethylene propylene rubber (EPR) insulation, is manufactured on a vertical extruder to ensure complete concentricity to the tightest tolerance possible. The Elaspeed splice is a "complete" splice, containing the splice core, a shielding braid and a jacket.

## WHY USE ELASPEED™ COMPACT SPLICES?

## SPEED

An Elaspeed<sup>™</sup> Splice can be performed in 30 minutes or less, saving time and money over other splices.

## TESTING

All Elaspeed<sup>™</sup> Splices are pre-tested as cable to ensure that the splice will maintain the integrity of the electrical system. The Elaspeed<sup>™</sup> 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

Elaspeed<sup>™</sup> Splices utilize cold shrink technology, which requires no open flames, eliminating the problems associated with handling and transporting gas bottles.

## RELIABILITY AND REPEATABILITY

Elaspeed splices are reliable because they always shrink uniformly, and there is only one part to shrink – the tripleextruded 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.

## Prysmian

**Prysmian Group** 4 Tesseneer Drive, Highland Heights, KY 41076 +1-859-572-8000 / na.prysmiangroup.com ACS-DS-0003-0520

A Brand of Prysmian Group

## 5-15kV ELASPEED<sup>™</sup> Splice

Product Insulation Number 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 Elaspeed	d				90 ו	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
15SIJCE	1.26	32.00	2.44	61.98	1000 MCM	1000 MCM	1000 MCM	1000 MCM
8kV Elaspeed	d				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
15SIJCE_	1.26	32.00	2.44	61.98	1000 MCM	1000 MCM	750 MCM	1000 MCM
15kV Elaspee	d				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

	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
155IJCE_ 1.26 32.00 2.44 61.98 750 MCM 1000 MCM 500 MCM	1000 MCM

Note: Replace "\_" with "CN" for Conentric Neutral Cable Replace "\_" with "CTS" for Copper Tape Shield or LC Shield Cables

#### 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			

## **Prysmian**

A Brand of Prysmian Group

#### lice Part Number Designation

e selection is based on typical URD cable parameters:

- lass B Compressed Round Copper conductor.
- EIC minimum insulation diameters.
- ne-third concentric neutral.
- oncentric neutral wires not being brought out for rounding or fault current protection.
- ncapsulated jacket.
- LPE or EPR Shielded Power Cable.

#### he cable design or installation is based on other ameters, the recommended splice size may change.

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

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

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

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 a "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.

#### Prysmian Group

4 Tesseneer Drive, Highland Heights, KY 41076 +1-859-572-8000 / na.prysmiangroup.com ACS-DS-0003-0520

# Prysmian

## 25-35kV ELASPEED<sup>™</sup> Splice

# Prysmian

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 Elaspeed				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
25SIJCE_	1.26	32.00	2.44	61.98	500 MCM	1000 MCM	350 MCM	1000 MCM
28kV Elaspeed					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
28SIJCE_	1.26	32.00	2.44	61.98	350 MCM	1000 MCM	250 MCM	1000 MCM
35kV Elaspeed					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
35SIJC_	1.26	32.00	2.44	61.98	4/0 AWG	1000 MCM	2/0 AWG	750 MCM

Note: Replace "\_" with "CN" for Conentric Neutral Cable

Replace "\_" with "CTS" for Copper Tape Shield or LC Shield Cables

#### 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		

#### **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.

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 and aluminum, respectively.

## Prysmian

#### Prysmian Group

4 Tesseneer Drive, Highland Heights, KY 41076 +1-859-572-8000 / na.prysmiangroup.com ACS-DS-0003-0520