

# MEDIUM VOLTAGE NETWORK COMPONENTS

Splices, Terminations and Other Energy Cable Accessories





## DESIGN FEATURES

### UNIFORM CUTBACK DIMENSIONS

The Elasppeed™ 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 Elasppeed™ Splice has successfully passed IEEE 404-2012, the industry standard for splices. The Elasppeed™ 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

Elasppeed™ 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

The new Elasppeed™ 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. Elasppeed Compact Splices are suitable for installation in aerial, direct bury, duct bank and manhole environments. If installed in an aerial environment, a serve wire or basket support should be utilized to support the weight of the cable.

**RUS Listed.**

## WHY USE ELASPEED™ SPLICES?

### 25% SHORTER

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

### TESTING

All Elasppeed™ Splices are pre-tested as cable to ensure that the splice will maintain the integrity of the electrical system. The Elasppeed™ 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

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

### RELIABILITY AND REPEATABILITY

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

# ELASPEED-S™ SPLICE



## DESCRIPTION

Elaspeed-S™ splices are an enhanced version of the Elaspeed™ splice design by integrating a fail-safe sensor to detect voltage in the line where it is installed, granting greater safety to operators during maintenance or test services. When paired with Prysmian PryCAM support it can enable the user to detect Partial Discharge (PD) for 1km in either direction from the joint.

## WHY USE ELASPEED-S™ SPLICES?

- **RELIABLE:** The sensor does not affect the electrical field distribution of the splice and the voltage detector is not affected by the operator's environment (stray capacitance) unlike existing solutions. All Elaspeed core components are extruded like a cable and 100% factory tested.
- **WATERTIGHT:** All Elaspeed™ splices have outstanding moisture and vapor withstand properties. The sensor connector included on the Elaspeed-S™ is watertight (IP68) resulting in the best-in-class splice.
- **SAFETY:** Elaspeed-S™ sensor output signal has a much lower amplitude than the traditional capacitive test point. The voltage detector device includes a self-test function as well as a sensor integrity check function. A tubular circumferential tubular copper braid shields the whole splice core and sensor and the IP68 connector prevents the splicer from touching the active poles.
- **ALL-IN-ONE:** All components (splice core, shielding braid, and jacket) including the sensor are built in a single unit to shrink.
- **SPLICER FRIENDLY:** The Elaspeed-S™ 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. The sensor is pre-installed in the factory and does not require any action during the splice installation. The sensor connector is left accessible after the splice completion and can be used with electrical insulating gloves.
- **SMALL PROFILE:** Elaspeed-S™ 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.
- **TESTING:** The Elaspeed-S™ splice meets and exceeds the stringent IEEE 404 test criteria. The sensor performances are immune to neighboring feeder disturbances (voltage and current) and to its splice feeder load (current load and permanent current in the metallic shield). The sensor withstands the thermal stress due to metallic screen short-circuits according to IEEE 404 in a splice with the neutrals connected outside.

## SPECIFICATIONS AND RATINGS:

- IEEE 404
- RUS Listed



# ELASPEED™ SPLICE



Product Number	Cable Range	Shielding Braid Size	Shearbolt Range	Insulation Diameter		Jacket Diameter
				Minimum	Maximum	Maximum
<b>5kV Elspeed™ - 100% Insulation Level (90 mils)</b>						
15SDJCe-C	3/0 - 250	2/0	6-3/0	0.68"	1.13"	1.33"
15SEJCe-C	250 - 500	2/0	2-250	0.76"	1.26"	1.49"
15SFJCe-C	500-750	2/0	1/0-500	0.91"	1.42"	1.88"
15SHJCe-C	500-750	2/0	1/0-500	0.96"	1.57"	1.96"
15SIPJCe-C	500-1000	2/0	350-750	1.09"	1.77"	2.24"
15SIJCe-C	1000-1000	2/0	500-1000	1.26"	2.20"	2.63"
<b>5kV Elspeed™ - 133% Insulation Level (115 mils)</b>						
15SDJCe-C	2/0 - 250	2/0	6-3/0	0.68"	1.13"	1.33"
15SEJCe-C	4/0 - 350	2/0	2-250	0.76"	1.26"	1.49"
15SFJCe-C	350 - 500	2/0	1/0-500	0.91"	1.42"	1.88"
15SHJCe-C	500 - 500	2/0	1/0-500	0.96"	1.57"	1.96"
15SIPJCe-C	750 - 1000	2/0	350-750	1.09"	1.77"	2.24"
15SIJCe-C	1000 - 1000	2/0	500-1000	1.26"	2.20"	2.63"
<b>15kV Elspeed™ - 100% Insulation Level (175 mils)</b>						
15SDJCe-C	2 - 3/0	2/0	6-3/0	0.68"	1.13"	1.33"
15SEJCe-C	1/0 - 250	2/0	2-250	0.76"	1.26"	1.49"
15SFJCe-C	4/0 - 500	2/0	1/0-500	0.91"	1.42"	1.88"
15SHJCe-C	250 - 500	2/0	1/0-500	0.96"	1.57"	1.96"
15SIPJCe-C	250 - 500	2/0	350-750	1.09"	1.77"	2.24"
15SIJCe-C	750 - 1000	2/0	500-1000	1.26"	2.20"	2.63"
<b>15kV Elspeed™ - 133% Insulation Level (220 mils)</b>						
15SDJCe-C	2 - 2/0	2/0	6-3/0	0.68"	1.13"	1.33"
15SEJCe-C	2 - 4/0	2/0	2-250	0.76"	1.26"	1.49"
15SFJCe-C	3/0 - 500	2/0	1/0-500	0.91"	1.42"	1.88"
15SHJCe-C	4/0 - 500	2/0	1/0-500	0.96"	1.57"	1.96"
15SIPJCe-C	350 - 750	2/0	350-750	1.09"	1.77"	2.24"
15SIJCe-C	500 - 1000	2/0	500-1000	1.26"	2.20"	2.63"
<b>25kV Elspeed™ - 100% Insulation Level (260 mils)</b>						
25SDJCe-C	1 - 1/0	2/0	6-3/0	0.68"	1.13"	1.33"
25SEJCe-C	1 - 2/0	2/0	2-250	0.76"	1.26"	1.49"
25SFJCe-C	1/0 - 350	2/0	1/0-500	0.91"	1.42"	1.88"
25SHJCe-C	2/0 - 500	2/0	1/0-500	0.96"	1.57"	1.96"
25SIPJCe-C	250 - 500	2/0	350-750	1.09"	1.77"	2.24"
25SIJCe-C	500 - 1000	2/0	500-1000	1.26"	2.20"	2.63"
<b>25kV Elspeed™ - 133% Insulation Level (320 mils)</b>						
25SDJCe-C	N/A	2/0	6-3/0	0.68"	1.13"	1.33"
25SEJCe-C	N/A	2/0	2-250	0.76"	1.26"	1.49"
25SFJCe-C	1 - 4/0	2/0	1/0-500	0.91"	1.42"	1.88"
25SHJCe-C	1 - 350	2/0	1/0-500	0.96"	1.57"	1.96"
25SIPJCe-C	3/0 - 500	2/0	350-750	1.09"	1.77"	2.24"
25SIJCe-C	350 - 1000	2/0	500-1000	1.26"	2.20"	2.63"
<b>28kV Elspeed™ - 100% Insulation Level (280 mils)</b>						
25SDJCe-C	4 - 2	2/0	6 - 3/0	0.68"	1.13"	1.33"
25SEJCe-C	4 - 3/0	2/0	6 - 3/0	0.76"	1.26"	1.49"
25SFJCe-C	2/0 - 500	2/0	1/0 - 500	0.91"	1.42"	1.88"
25SHJCe-C	3/0 - 650	2/0	Ask Rep.	0.96"	1.57"	1.96"
25SIPJCe-C	300 - 900	2/0	Ask Rep.	1.09"	1.77"	2.24"
25SIJCe-C	500 - 1500	2/0	Ask Rep.	1.26"	2.20"	2.63"
<b>28kV Elspeed™ - 133% Insulation Level (345 mils)</b>						
25SDJCe-C	N/A	2/0	N/A	0.68"	1.13"	1.33"
25SEJCe-C	4 - 1	2/0	6 - 3/0	0.76"	1.26"	1.49"
25SFJCe-C	2 - 250	2/0	2 - 250	0.91"	1.42"	1.88"
25SHJCe-C	1 - 350	2/0	1/0 - 500	0.96"	1.57"	1.96"
25SIPJCe-C	3/0 - 750	2/0	Ask Rep.	1.09"	1.77"	2.24"
25SIJCe-C	350 - 1500	2/0	Ask Rep.	1.26"	2.20"	2.63"

## Notes:

1. When selecting kits at the top end of the use range, check for proper fit over jacket
2. The selection guide is based on jacketed concentric neutral cables. When using LC or copper tape shield cables, the range may be extended upwards
3. Prysmian Elspeed™ Splices meet IEEE 404 specifications.
4. Contact your Prysmian sales representative for more information, including data on size transition limits
5. 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.

## 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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## Prysmian

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ACS-DS-0006-0624

Part Number	Cable Size Range	Shielding Braid Size	Insulation Diameter Min. Inches	Insulation Diameter Max. Inches	Jacket Diameter Max. Inches
<b>35kV - 100% Insulation Level (345 mil)</b>					
35SHJC	1 - 250	2/0	0.96	1.57	1.97
35SIPJC	1/0 - 500	2/0	1.09	1.77	2.24
35SIJC	4/0 - 1000	2/0	1.26	2.20	2.64
35SJJC	1250 - 2000	4/0	1.77	2.83	3.34
<b>35kV - 133% Insulation Level (420 mil)</b>					
35SHJC	1/0 - 3/0	2/0	0.96	1.57	1.96
35SIPJC	1/0 - 350	2/0	1.09	1.77	2.24
35SIJC	2/0 - 750	2/0	1.26	2.20	2.63
35SJJC	1000 - 2000	4/0	1.77	2.83	3.34

### Notes:

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

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# ColdFit™ Medium Voltage Cold Shrink Terminations



## SPECIFICATIONS AND RATINGS

**IEEE:** IEEE 48 CLASS 1  
RUS Listed

## DESIGN FEATURES

### UNIT CONSTRUCTION

Both the silicone polymer housing and the stress relief material are assembled on a spiral support tube. This enables the installer to apply the termination on the cable with a high degree of ease and accuracy. The top mastic seal is built into the ColdFit™ termination.

### EXTERNAL HOUSING

The silicone polymer housing has a superior memory along with excellent tracking and weathering resistance.

### STRESS CONTROL

Stress control is maintained using a material with a high permittivity constant (High K), which provides a uniform stress relief in critical areas.

### RANGE-COVERING CAPABILITY

The PCT and PICT terminations cover a broad range of cable sizes and voltages with the fewest number of units.

### SHED DESIGN

Three designs for superior performance under all conditions.

- Four sheds for 15KV outdoor.
- Four sheds for 25/28KV outdoor.
- Eight sheds for 35KV outdoor.

### INSTALLATION

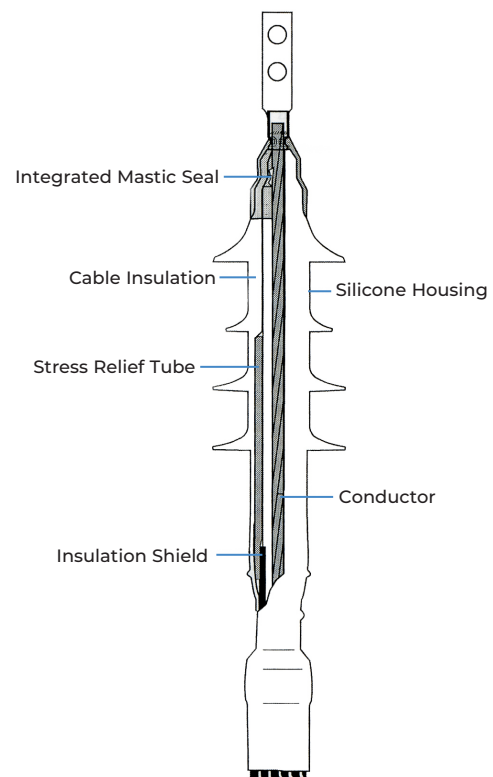
The PCT and the PICT series are designed to give consistent proper positioning of the unit. Additionally, the pull down base gives greater flexibility and sealing when used on jacketed concentric neutral cables.

## DESCRIPTION

Prysmian offers a new line of indoor and outdoor polymer terminations available for 5kV, 15KV, 25/28KV and 35KV applications. The ColdFit™ outdoor PCT (with sheds) and indoor PICT (without sheds) are medium voltage cold shrink polymer terminations designed for fast, easy and reliable installation.

The new ColdFit™ terminations shrink evenly on the cable as the inner support core is removed. The top mastic water seal is built into the ColdFit™ termination. No complicated assembly or heat is required. Simply pull out the support core and allow the termination to shrink in order to create a tight void free interface between the termination and the cable. This also provides a superior moisture seal.

All of the Prysmian PCT and PICT terminations meet or exceed the stringent requirements mandated by the IEEE standard 48 for class 1 specification and can operate continuously at 105° C.



# ColdFit™ Medium Voltage Cold Shrink Terminations

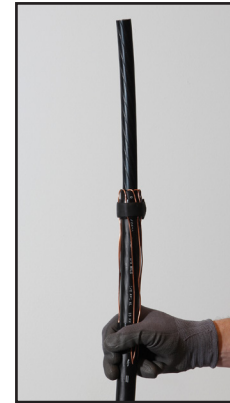


## Technical Specifications

Type	PCT15	PCT25	PCT35	PICT15
Sizes Available *	1,2,3,5,6	2,3,5,6	3, 5,6	1,2,3,5,6
Voltage Rating (kV)	15	25/28	35	15
Number of Sheds	4	4	8	0
Minimum Strike Distance (In)	11.6	14.5	16.8	8.4
Creepage Distance (In)	15.0	22.8	30.0	8.4
Max. Design Voltage to Ground (kV)	9.5	16	22	9.5
(Partial Discharge)	13	21	30	13
Lightning Impulse (BIL)	110	150	200	110
10 Sec Wet (60 Hz) (kV)	45	60	80	--
1 Minute Dry (60 Hz) (kV)	50	65	90	50
6 Hour Dry (60 Hz) (kV)	35	55	75	35
DC Withstand 15 Min. Dry (kV)	75	105	140	75

## Ease of Installation

1. Final Cable Prep



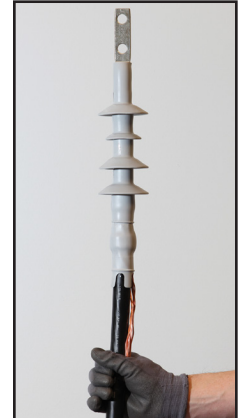
2. Placement of Termination



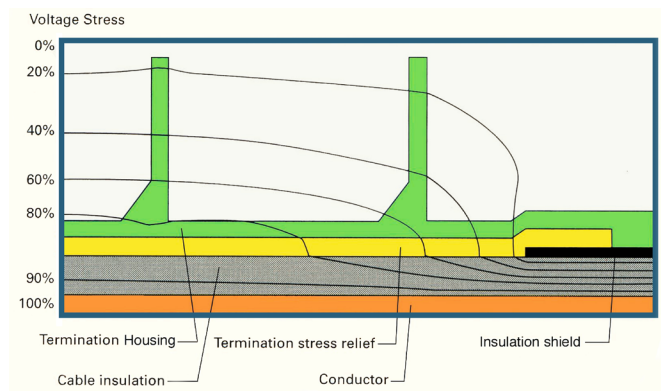
3. Support Core Removal



4. Completed Assembly



## Stress Distribution



The PCT and PICT terminations provide electrical stress control by utilizing a flexible tube with a high permittivity dielectric constant. The stress relief tube is pre-assembled under the polymer housing. As the core is removed, both the tube and the housing shrink onto the cable in exactly the right position. When energized the electrical field is refracted through the stress relief tube and housing as shown above. The mastic top seal is integrated into the termination body.

### PRODUCT NOTES:

The above dimensions are approximate and subject to normal manufacturing tolerances.

All metric (SI) dimensions are derived from a soft conversion.

\*Cable dimensions per AIEC CS8, compressed conductor. For all other constructions, verify that actual dimensions of the cable fall within Insulation Diameter tolerances.



### Prysmian

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# ColdFit™ Medium Voltage Cold Shrink Terminations



## Ordering Information

### ColdFit Indoor Terminations - 5kV to 15kV

Part No.	Cable Range (Insulation Diameter)		# of Sheds	5kV 100%	5kV 133% / 8kV 100%	8kV 133%	15kV 100%	15kV 133%
PICT15X1-CF	0.57" to 0.98"	14.5 mm to 25 mm	None	1/0 to 3/0	#1 AWG to 3/0	#1 AWG to 3/0	#2 AWG to 3/0	#2 AWG to 3/0
PICT15X2-CF	0.67" to 1.10"	17 mm to 28 mm	None	4/0 to 250 kcm	3/0 to 250 kcm	1/0 to 250 kcm	#1 AWG to 250 kcm	#2 AWG to 250 kcm
PICT15X3-CF	0.85" to 1.50"	21.5 mm to 38 mm	None	350 kcm to 500 kcm	250 kcm to 500 kcm	4/0 to 500 kcm	4/0 to 500 kcm	2/0 to 500 kcm
PICT15X5-CF	1.08" to 1.97"	27.5 mm to 50 mm	None	750 kcm to 1000 kcm	750 kcm to 1000 kcm	500 kcm to 1000 kcm	350 kcm to 750 kcm	350 kcm to 750 kcm
PICT15X6-CF	1.41" to 2.56"	36 mm to 65 mm	None	Larger Conductor Sizes Available	Larger Conductor Sizes Available	Larger Conductor Sizes Available	1000 to 1500kcm	1000kcm to 1500kcm

### ColdFit Outdoor Terminations - 5kV to 15kV

Part No.	Cable Range (Insulation Diameter)		# of Sheds	5kV 100%	5kV 133% / 8kV 100%	8kV 133%	15kV 100%	15kV 133%
PCT15X1-CF	0.57" to 0.98"	14.5 mm to 25 mm	4	1/0 to 3/0	#1 AWG to 3/0	#1 AWG to 3/0	#2 AWG to 3/0	#2 AWG to 3/0
PCT15X2-CF	0.67" to 1.10"	17 mm to 28 mm	4	4/0 to 250 kcm	3/0 to 250 kcm	1/0 to 250 kcm	#1 AWG to 250 kcm	#2 AWG to 250 kcm
PCT15X3-CF	0.85" to 1.50"	21.5 mm to 38 mm	4	350 kcm to 500 kcm	250 kcm to 500 kcm	4/0 to 500 kcm	4/0 to 500 kcm	2/0 to 500 kcm
PCT15X5-CF	1.08" to 1.97"	27.5 mm to 50 mm	4	750 kcm to 1000 kcm	750 kcm to 1000 kcm	500 kcm to 1000 kcm	350 kcm to 1000 kcm*	350 kcm to 1000 kcm*
PCT15X6-CF	1.41" to 2.56"	36 mm to 65 mm	4	Larger Conductor Sizes Available	Larger Conductor Sizes Available	Larger Conductor Sizes Available	1000 to 1500 kcm	1000 kcm to 1500 kcm

Replace X with J for Jacketed Concentric Neutral Cables

Replace X with M for Copper Tape Shielded Cables

Replace X with L for LC Shielded Cables

\* For Copper Lugs

The Prysmian Terminations can also be supplied with:

- Copper or aluminum lugs - (1 hole or 2 hole)
- Copper or aluminum pin terminals and also Bi-metallic pin terminals





# ColdFit™ Medium Voltage Cold Shrink Terminations



## ColdFit Outdoor Terminations - 25kV to 28kV 133%

Part No.	Cable Range (Insulation Diameter)		# of Sheds	25kV 100%	25kV 133% / 28kV 100%	28kV 133%
PCT25X2-CF4	0.67" to 1.10"	17 mm to 28 mm	4	#2 AWG to 2/0 AWG	#2 AWG to 2/0 AWG	#2 AWG to #1 AWG
PCT25X3-CF4	0.85" to 1.50"	21.5 mm to 38 mm	4	3/0 AWG to 350 kcm	3/0 to 250 kcm	1/0 to 250 kcm
PCT25X5-CF4	1.08" to 1.97"	27.5 mm to 50 mm	4	250 kcm to 1000 kcm	3/0 to 800 kcm	2/0 to 800 kcm
PCT25X6-CF4	1.41" to 2.56"	36 mm to 65 mm	4	750 kcm to 1500 kcm	500 kcm to 1500 kcm	500 kcm to 1500 kcm

## ColdFit Outdoor Terminations - 35kV

Part No.	Cable Range (Insulation Diameter)		# of Sheds	35kV 100%	35kV 133%
PCT35X3-CF	0.85" to 1.35"	21mm to 34mm	8	1/0 AWG to 2/0 AWG	1/0 AWG
PCT35X5-CF	1.08" to 1.70"	27.5 mm to 41 mm	8	1/0 AWG* to 500 kcm	2/0 AWG to 350 kcm
PCT35X6-CF	1.41" to 2.20"	36 mm to 56 mm	8	400 kcm to 1500 kcm	250 kcm to 1250 kcm

\* For this size termination a shear bolt lug with outer diameter of 1.25" should be used on 1/0-4/0 AWG cables to create a tight seal at the top of the termination.

Replace **X** with J for Jacketed Concentric Neutral Cables

Replace **X** with M for Copper Tape Shielded Cables

Replace **X** with L for LC Shielded Cables

**The Prysmian Terminations can also be supplied with:**

- Copper or Bi-metallic lugs (2 hole Crimp or shear bolt design option)
- Copper or Bi-metallic pin terminals (Crimp or shear bolt design option)



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# 600A/900A Deadbreak Series

(15kV/25kV)



## OVERVIEW

The 600/900 amp Deadbreak Elbow and accessories offer an easy and reliable method of terminating and splicing main feeder circuits. The Deadbreak Elbow is a fully shielded, molded rubber connector.

The Deadbreak Elbow is designed to terminate power cables with copper or aluminum conductors ranging in sizes from #2 AWG to 1250 kcm. It may be installed on any 600-Amp rated (aluminum) apparatus bushing that meets IEEE Standard 386 latest revision for Separable Insulated Connectors. Cable adapters accommodate power cable insulation diameters from 0.530 to 1.935 inches.

*If all-copper components are used, the Deadbreak Elbow assembly has a 900A rating. Otherwise, the assembly is rated for 600A.*

## INTERCHANGEABILITY

The Deadbreak Elbow has been designed and tested to meet the requirement of IEEE Standard 386. Conformance to this industry standard ensures mechanical and electrical interchangeability with other products of manufacturers that are also in conformance with the standard.

### Electrical Ratings MEETS OR EXCEEDS IEEE STANDARD 386 – Latest Revision

Continuous Current Rating (Aluminum Components)	600 amps
Voltage Class	25kV
Max Phase to Ground Voltage – Operating Voltage	15.2kV
Max Phase to Phase Voltage	26.3kV
Basic Impulse Level (1.2x50µs)	125kV
Corona Extinction (3pC)	19kV
AC Withstand Voltage (1 min.)	40kV
DC Withstand Voltage (15 min.)	78kV
24 Hour Overload	1,000 Amps rms
Short-Circuit Time Rating	25,000 Amps rms symmetrical for 0.17 sec. 10,000 Amps rms symmetrical for 3.00 sec.
Corona (3pC)	19kV
AC Withstand (1 min.)	40kV

# 600A/900A Deadbreak Series (15kV/25kV)



## FEATURES

**1. Cable Adapter** - Molded of peroxide cured EPDM rubber. Designed to accept specified cable insulation diameters. Radial pressure exerted on the cable insulation by the cable adapter precludes the presence of corona causing air voids along the cable adapter and cable insulation interface. The outside diameter of the cable adapter is constant for all cable adapter sizes.

**2. Compression Connector** - Aluminum (600 amp). Sized for the specific conductor size. Crimped with standard tools and dies.

**3. Test Point** - Designed to allow voltage indication when readout is made with suitable high impedance measuring devices. Elbows are available with and without this feature.

**4. Insulating Plug Cap** - Molded of conductive peroxide cured EPDM rubber providing a continuous outer shield for the elbow. Snaps tightly over the test point and onto the elbow body.

**5. Epoxy Insulating Plug** - Hex nut located on top of the insulating plug is used to tighten the plug when assembling the elbow.

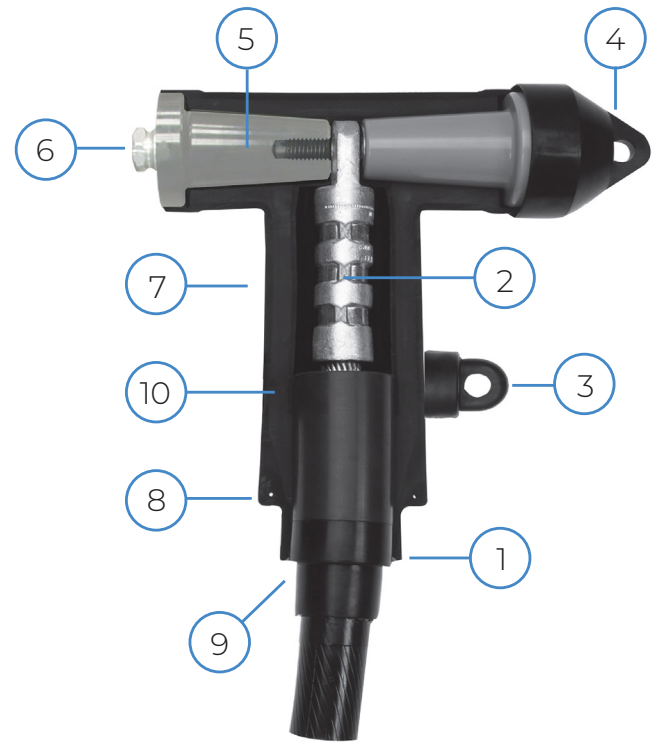
**6. Hex Nut** - One-inch hex head is used to tighten the connection. Can also be used as a capacitive test point. See #3 above.

**7. Molded External Shield** - Conductive, abrasion-resistant shield of peroxide cured EPDM rubber. Provides ground shield continuity and meets the requirements of IEEE Standard 592.

**8. Drain Wire Tab** - Designed to accept a single #14 AWG copper wire that can be inserted into the eye. Provides a static ground to ensure deadfront construction.

**9. Stress Relief Cone** - Designed into the cable adapter providing electrical stress relief at the point of terminating the power cable shield. Controls the electrical field entering the elbow.

**10. EPDM Insulation** - Peroxide cured EPDM rubber.



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## Deadbreak T-Bodies

Part No.	Cable Range Insulation Diameter (In)	5kV 100	5kV 133% / 8kV 100%	8kV 133%	15kV 100%	15kV 133%	25kV 100%	25kV 133%
1525DB_E	0.530 - 0.675	#1 AWG - 2/0 AWG	#2 AWG - 2/0 AWG	#1 AWG - 1/0 AWG	#2 AWG	—	—	—
1525DB_F	0.640 - 0.840	3/0 AWG - 350 kcm	2/0 AWG - 250 kcm	1/0 AWG - 4/0 AWG	#2 AWG - 3/0 AWG	#2 AWG - 1/0 AWG	—	—
1525DB_G	0.760 - 0.950	350 kcm - 500 kcm	4/0 AWG - 350 kcm	4/0 AWG - 250 kcm	2/0 AWG - 250 kcm	#1 AWG - 3/0 AWG	#1 AWG - 2/0 AWG	—
1525DB_H	0.850 - 1.050	500 kcm	350 kcm - 500 kcm	250 kcm - 350 kcm	4/0 AWG - 350 kcm	2/0 AWG - 250 kcm	1/0 AWG - 4/0 AWG	#1 AWG - 1/0 AWG
1525DB_J	0.980 - 1.180	750 kcm	500 kcm	500 kcm	350 kcm - 500 kcm	250 kcm - 350 kcm	4/0 AWG - 250 kcm	1/0 AWG - 4/0 AWG
1525DB_K	1.090 - 1.310	750 kcm	750 kcm	750 kcm	500 kcm	350 kcm - 500 kcm	350 kcm - 500 kcm	3/0 AWG - 250 kcm
1525DB_L	1.180 - 1.465	750 kcm - 1000 kcm	750 kcm - 1000 kcm	750 kcm - 1000 kcm	750 kcm	500 kcm - 750 kcm	500 kcm	250 kcm - 500 kcm
1525DB_M	1.370 - 1.630	—	—	—	1000 kcm - 1250 kcm	1000 kcm	750 kcm	500 kcm - 750 kcm
1525DB_N	1.515 - 1.780	—	—	—	1250 kcm	1000 kcm - 1250 kcm	1000 kcm	750 kcm - 1000 kcm
1525DB_P	1.725 - 1.935	—	—	—	—	—	1250 kcm	1000 kcm - 1250 kcm

**NOTE:** Cable sizes are conservative estimates based on compact cable design. To properly size a kit to cable, reference the **Insulation Diameter** ranges

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

**Example:** For a 1/0 AWG Compact 15kV 100% Cable with CN use body 1525DBCNF-600DB23

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

**Example:** For a 500 kcm 25kV Stranded 133% Cable with LC or Copper Tape Shield use body 1525LBCTSB-600DB33

**Remember to add the required lug to the body part number per the Connector Table.**

## Deadbreak Shear Bolt Connectors

Description	Part No.	Nominal Conductor Range*		Compression Lug Code Equiv.		# of Bolts	Hex Key Size
		Min	Max	Min	Max		
Shear Bolt Lug #3 - 300	CUS600DBSB1	#3	300	6	14	2	5 mm
Shear Bolt Lug 1/0 - 450	CUS600DBSB2	1/0	450 Strd/500 Cmpt	9	17	2	6 mm
Shear Bolt Lug 4/0 - 600	CUS600DBSB3	3/0	600	11	20	2	8 mm
Shear Bolt Lug 350 - 750	CUS600DBSB4	300 Cmpt /350 Cmpt	750 Strd/900 Cmpt	14	23	3	8 mm
Shear Bolt Lug 600 - 1250	CUS600DBSB5	600	1250	20	29	3	8 mm
Shear Bolt Lug 1500	CUS600DBSB6**	1500		30		4	8 mm

**Shear bolt connectors can be used for 600A and 900A applications.**

\* Unless otherwise noted conductor size listed is stranded/compressed/compact.

\*\* For use on 35kV Deadbreak Series. For other applications contact the factory.



**Prysmian**

4 Tessenere Drive, Highland Heights, KY 41076  
na.prysmian.com  
ACS-DS-0002-0624

# 600A/900A Deadbreak Series

(15kV/25kV)



## Deadbreak Compression Connectors

Part No.	Stranded / Compressed	Compact / Solid	Part No.	Stranded / Compressed	Compact / Solid
600DB21	#3	#2	600DB32	450	500/550
600DB22	#2	#1	600DB33	500	600
600DB23	#1	1/0	600DB34	550	650
600DB24	1/0	2/0	600DB35	600	700
600DB25	2/0	3/0	600DB36	650	750
600DB26	3/0	4/0	600DB38	700/750	900
600DB27	4/0	250	600DB39	800	—
600DB28	250	300	600DB40	900	1000
600DB29	300	350	600DB41	1000	—
600DB30	350	400	600DB44	1250	—
600DB31	400	450			



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# 600A/900A Deadbreak Series (35kV)



## OVERVIEW

The 600/900 amp Deadbreak Elbow and accessories offer an easy and reliable method of terminating and splicing main feeder circuits. The Deadbreak Elbow is a fully shielded, molded rubber connector.

The Deadbreak Elbow is designed to terminate power cables with copper or aluminum conductors ranging in sizes from #2 AWG to 1250 kcm. It may be installed on any 600-Amp rated (aluminum) apparatus bushing that meets IEEE Standard 386 latest revision for Separable Insulated Connectors. Cable adapters accommodate power cable insulation diameters from 0.530 to 1.935 inches.

*If all-copper components are used, the Deadbreak Elbow assembly has a 900A rating. Otherwise, the assembly is rated for 600A.*

## INTERCHANGEABILITY

The Deadbreak Elbow has been designed and tested to meet the requirement of IEEE Standard 386. Conformance to this industry standard ensures mechanical and electrical interchangeability with other products of manufacturers that are also in conformance with the standard.

Voltage Ratings	
Voltage Class	35kV
Maximum Voltage Rating (Phase to Ground)	21.1kV
Corona Voltage Level (Partial Discharge Extinction Voltage)	26kV
AC Withstand (1 minute)	70kV
Impulse - Withstand Voltage (BIL)	200kV BIL

Continuous Current Ratings	
Aluminum	600A
Copper	900A

Short-Term Current Ratings	
Aluminum	25kA, 10c. and 10kA, 3s.
Copper	40kA, 10c. and 10kA, 3s.

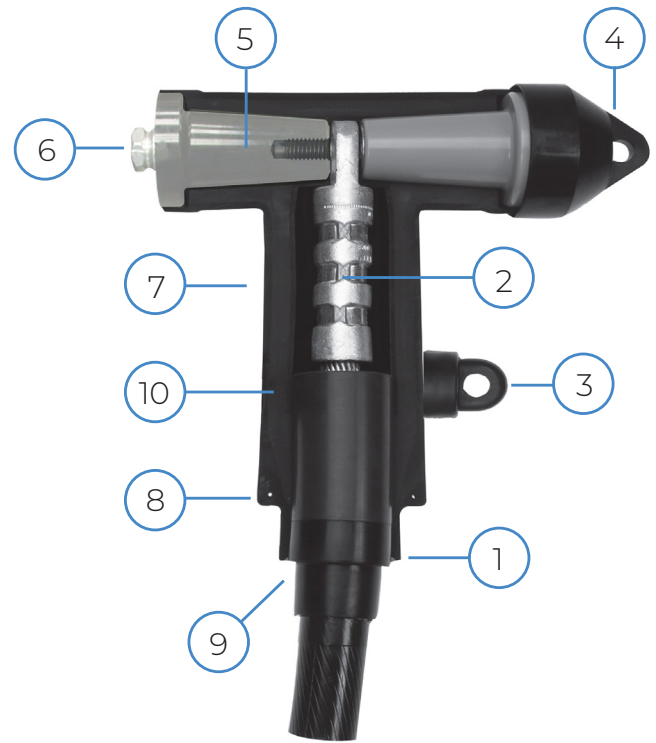


# 600A/900A Deadbreak Series (35kV)



## FEATURES

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- 2. Compression Connector** - Aluminum (600 amp). Sized for the specific conductor size. Crimped with standard tools and dies.
- 3. Test Point** - Designed to allow voltage indication when readout is made with suitable high impedance measuring devices. Elbows are available with and without this feature.
- 4. Insulating Plug Cap** - Molded of conductive peroxide cured EPDM rubber providing a continuous outer shield for the elbow. Snaps tightly over the test point and onto the elbow body.
- 5. Epoxy Insulating Plug** - Hex nut located on top of the insulating plug is used to tighten the plug when assembling the elbow.
- 6. Hex Nut** - One-inch hex head is used to tighten the connection. Can also be used as a capacitive test point. See #3 above.
- 7. Molded External Shield** - Conductive, abrasion-resistant shield of peroxide cured EPDM rubber. Provides ground shield continuity and meets the requirements of IEEE Standard 592.
- 8. Drain Wire Tab** - Designed to accept a single #14 AWG copper wire that can be inserted into the eye. Provides a static ground to ensure deadfront construction.
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- 10. EPDM Insulation** - Peroxide cured EPDM rubber.



# 600A/900A Deadbreak Series (35kV)



## Deadbreak T-Bodies

Catalog ID		Insulation Diameter (In)	35kV 100%	35kV 133%
600A	900A			
635DB__H	935DB__H	0.85 – 1.05	—	—
635DB__J	935DB__J	0.98 – 1.115	1/0 AWG	—
635DB__K	935DB__K	1.09 – 1.31	3/0 – 4/0 AWG	2 – 2/0 AWG
635DB__L	935DB__L	1.18 – 1.465	250 – 350 kcmil	2/0 AWG – 250 kcmil
635DB__M	935DB__M	1.37 – 1.63	500 – 600 kcmil	350 kcmil
635DB__N	935DB__N	1.515 – 1.78	600 – 750 kcmil	500 – 600 kcmil
635DB__P	935DB__P	1.725 – 1.935	1000 kcmil	750 kcmil
635DB__Q	935DB__Q	1.90 – 2.12	1250 – 1500 kcmil	1000 – 1250 kcmil
635DB__R	935DB__R	2.00 – 2.235	1500 kcmil	1250 – 1500 kcmil

**NOTE:** Cable sizes are conservative estimates based on compact cable design. To properly size a kit to cable, reference the **Insulation Diameter** ranges.

**NOTE:** Replace “\_\_” with “CN” for Concentric Neutral Cable or Flat Strap Cables.  
**Example:** For a 1/0 AWG 35kV 100% cable with CN/FSN, use body 635DBCNJ

**NOTE:** Replace “\_\_” with “CTS” for Copper Tape or LC Shield Cables.  
**Example:** For a 1250 kcmil 35kV 100% cable with CTS, use body 635DBCTSQ

**NOTE:** Remember to add the required lug to the body part number per the Connector Table.  
**Example:** 635DBCTSN-600DB35 for 500 kcmil 100% cable

## Deadbreak Shear Bolt Connectors

Description	Catalog ID	Nominal Conductor Range*		# of Bolts	Hex Key Size
		Min	Max		
Shear Bolt Lug #3 - 300	ALSB1L1	#3	300	2	5 mm
Shear Bolt Lug 1/0 - 450	ALSB1L2	1/0	450 Compressed 500 Compact	2	6 mm
Shear Bolt Lug 4/0 - 600	ALSB1L3	3/0	600	2	8 mm
Shear Bolt Lug 350 - 750	ALSB1L4	300 Compressed 350 Compact	750 Compressed 900 Compact	3	8 mm
Shear Bolt Lug 600 - 1250	ALSB1L5	600	1250	3	8 mm
Shear Bolt Lug 1500	ALSB1L6**	1500		4	8 mm

Shear bolt connectors can be used for 600A and 900A applications.

\* Unless otherwise noted, conductor size listed is stranded/compressed/compact.

\*\* For use on 35kV Deadbreak Series. For other applications contact the factory.



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ACS-DS-0011-0524

# 600A/900A Deadbreak Series (35kV)



## Deadbreak Compression Connectors

Part No.	Stranded / Compressed	Compact / Solid	Part No.	Stranded / Compressed	Compact / Solid
600DB21	#3	#2	600DB32	450	500/550
600DB22	#2	#1	600DB33	500	600
600DB23	#1	1/0	600DB34	550	650
600DB24	1/0	2/0	600DB35	600	700
600DB25	2/0	3/0	600DB36	650	750
600DB26	3/0	4/0	600DB38	700/750	900
600DB27	4/0	250	600DB39	800	—
600DB28	250	300	600DB40	900	1000
600DB29	300	350	600DB41	1000	—
600DB30	350	400	600DB44	1250	—
600DB31	400	450			

# Renewables+ Program



## An MV collection cable purchase now means MORE!

Prysmian has embraced the Sustainable Development Goals set out by the United Nations and used them as guide for its sustainability strategy implemented through science-based targets, innovation and sustainable products and community development.

In alignment with this commitment and with the key role that the renewable industry plays, we are now offering the Renewables+ Program. The new “PLUS” program boosts sustainability and maximizes investments by subsidizing spend for additional Prysmian renewable solutions



## Renewables+ Program Details:

For a limited time, the following standard applies to all MV Collection Cable orders:

5% of MV Cable Order is credited towards purchase of MV SPLICE KITS



5% of MV Cable Order is credited towards purchase of PRY-CAM Testing



ALESEA Inventory tracking technology added to all reels of cable purchased



3-year Extended Warranty when MV Cable PLUS Splice Kits and PRY-CAM Testing ordered together



## “PLUS” Benefits

- MAXIMIZE the investment.
- PRY-CAM testing with credits applied.
- Direct impact on CO2 emission reduction.
- Accessories available in large cross sections to support the growing trend toward 1500kcmil conductors.
- Eligibility for warranty extension.
- Concierge desk (details forthcoming).

**P**rompt

Easy to implement

**L**ong Term

Longer term horizon

**U**nique

Distinctive solution in the market

**S**mart

Combination of Efficiency and Sustainability



## PRY-CAM Testing Services



Prysmian's breakthrough PRY-CAM technology for monitoring, condition assessment and asset management of electrical system has already prevented hundreds of failures.

By leveraging the Renewable+ Program 5% credit, an on-site PRY-CAM test can be performed once pre-commissioning is ready to begin.

Our team will reach out at the right time to schedule a meeting with PRY-CAM services to discuss the on-site testing scope and proposal.

## SPOT PD MEASUREMENTS



## COMMISSIONING OF ELECTRICAL SYSTEMS

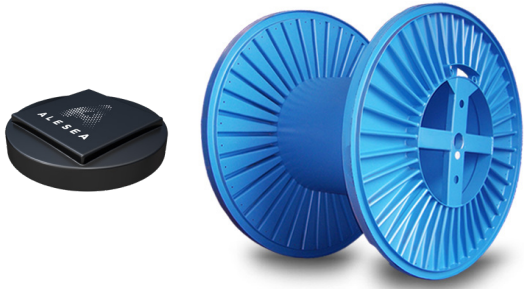


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## Asset Tracking and Reporting Services



**A L E S E A**



Alesea is your virtual assistant for cable inventory management. It turns the cable drum from a simple package into an intelligent asset that helps you to improve your operational efficiency.



### **CABLE INVENTORY VISIBILITY**

View inventory at all your construction sites in real time



### **TRANSPORTATION & DELIVERY TRACKING**

Receive information about delivery status



### **PROACTIVE STOCK PLANNING**

Stay a step ahead of stock requirements and avoid shortages



### **PERFORMANCE METRICS**

Measure partners' service quality using comparable data



### **SECURITY & SAFETY**

Ensure the security and traceability of your goods



### **SUSTAINABILITY BOOST**

Reduce the amount of waste and emissions

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