MEDIUM VOLTAGE NETWORK COMPONENTS

Splices, Terminations and Other Energy Cable Accessories





ELASPEED™ SPLICE





DESIGN FEATURES

UNIFORM CUTBACK DIMENSIONS

The Elaspeed $^{\text{TM}}$ 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 404-2012, the industry standard for splices. The Elaspeed™ 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

ElaspeedTM 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 Elaspeed™ 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. Elaspeed 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

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

TESTING

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







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ELASPEED™ SPLICE



Product Number	Cable Range	Shielding Braid Size	Shearbolt Range	Insulation Diameter	Insulation Diameter	Jacket Diameter
				Minimum	Maximum	Maximum
5kV Elaspeed™	[™] - 100% Insulatio	on Level (90 mils)			
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 15SIJCe-C	500-1000 1000-1000	2/0 2/0	350-750 500-1000	1.09" 1.26"	1.77" 2.20"	2.24" 2.63"
	^M - 133% Insulatio	7.1		1.26	2.20	2.63
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"
15kV Elaspeed ¹	™ - 100% Insulati	on Level (175 mi	ls)			
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"
15kV Elaspeed 15SDJCe-C	M - 133% Insulation 2 - 2/0	2/0	6-3/0	0.68"	1.13"	1.33"
15SEJCe-C	2 - 4/0	2/0	2-250	0.68	1.15	1.55
15SFJCe-C	3/0 - 500	2/0	1/0-500	0.76	1.42"	1.49
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"
25kV Elaspeed	™ - 100% Insulati	ion Level (260 m	ils)			
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"
	™ - 133% Insulati		_			
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 25SHJCe-C	1 - 4/0 1 - 350	2/0 2/0	1/0-500 1/0-500	0.91"	1.42"	1.88"
25SHJCe-C 25SIPJCe-C	3/0 - 500	2/0	350-750	0.96" 1.09"	1.57" 1.77"	1.96" 2.24"
25SIJCe-C	350 - 1000	2/0	500-1000	1.09	2.20"	2.63"
	™ - 100% Insulat			1.20	2.20	2.00
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"
28kV Elaspeed	™ - 133% Insulati	on Level (345 m	ils)			
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 my be extended upwards
- 3. Prysmian Elaspeed™ 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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ELASPEED™ SPLICE



Part Number	Cable Size Range	Shielding Braid Size	Insulation Diameter Min. Inches	Insulation Diameter Max. Inches	Jacket Diameter Max. Inches
35kV - 100% Insula	ation Level (345 mil)			
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
35kV - 133% Insula	tion Level (420 mil)	1			
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:

- 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 my be extended upwards
- Prysmian Elaspeed™ Splices meet IEEE 404 specifications.
- 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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Size selection is based on typical URD cable parameters:

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- · 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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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 $^{\text{TM}}$ 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 permitivity 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.
- \cdot Eight sheds for 35KV outdoor.

INSTALLATION

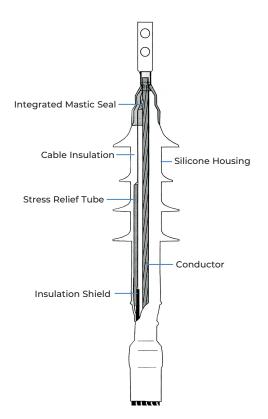
The PCT and the PICT series are designed to give consistent proper positioning of the unit. Additionally, the pull down base gives greater flexibility and sealing when used on jacketed concentric neutral cables.

DESCRIPTION

Prysmian offers a new line of indoor and outdoor polymer terminations available for 5kV, 15kV, 25/28kV and 35kV applications. The ColdFitTM 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

Туре	РСТ15	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) Max. Design Voltage to Ground (kV)	15.0 9.5	22.8 16	30.0 22	8.4 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





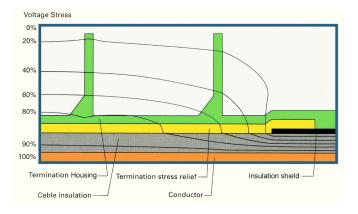
3. Support Core Removal



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 AEIC CS8, compressed conductor. For all other constructions, verify that actual dimensions of the cable fall within Insulation Diameter tolerances.



ColdFit[™] Medium Voltage Cold Shrink Terminations



Ordering Information

ColdFit Indoor Terminations - 5kV to 15kV

Part No.		Range Diameter)	# of 5kV 100%		5kV 133% / 8kV 100%	8kV 133%	15kV 100%	15kV 133%
PICT15 X 1-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
PICT15 X 2-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
PICT15 X 3-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
PICT15 X 5-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
PICT15 X 6-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.		Range Diameter)	# of Sheds	5kV 100%	5kV 133% / 8kV 100%	8kV 133%	15kV 100%	15kV 133%
PCT15 X 1-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
PCT15 X 2-CF	0.67" to 1.10"	17 mm to28 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
PCT15 X 3-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
PCT15 X 5-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*
PCT15 X 6-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 \mathbf{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.		Range Diameter)	# of Sheds	25kV 100%	25kV 133% / 28kV 100%	28kV 133%
PCT25 X 2-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
PCT25 X 3-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
PCT25 X 5-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
PCT25 <mark>X</mark> 6-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%
PCT35 X 3-CF	0.75" to 1.15"	19mm to 24mm	8	1/0 AWG to 2/0 AWG	1/0 AWG
PCT35 X 5-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
PCT35 X 6-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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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





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.







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

 $\textbf{Note} \hbox{: Replace "_" with "CTS" for Copper Tape Shield or LC Shield Cables}$

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	DevitAlle	Nominal Cond	ductor Range*	Compression L	ug Code Equiv.	# - 4 D - 14 -	
Description	Part No.	Min	Max	Min	Max	# of Bolts	Hex Key Size
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 Cmpr /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**	15	00	3	0	4	8 mm

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



 $^{^{}st}$ Unless otherwise noted conductor size listed is stranded/compressed/compact.

 $[\]ensuremath{^{**}}$ For use on 35kV Deadbreak Series. For other applications contact the factory.

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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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.			





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.





Deadbreak T-Bodies

Catal	og ID	Insulation Diameter	35kV 100%	35kV 133%	
600A	900A	(In)	35KV 100%		
635DBH	935DBH	0.85 – 1.05	_	_	
635DBJ	935DBJ	0.98 – 1.115	1/0 AWG	_	
635DBK	935DBK	1.09 – 1.31	3/0 – 4/0 AWG	2 – 2/0 AWG	
635DBL	935DBL	1.18 – 1.465	250 – 350 kcmil	2/0 AWG –250 kcmil	
635DBM	935DBM	1.37 – 1.63	500 – 600 kcmil	350 kcmil	
635DBN	935DBN	1.515 – 1.78	600 – 750 kcmil	500 – 600 kcmil	
635DBP	935DBP	1.725 – 1.935	1000 kcmil	750 kcmil	
635DB_Q	935DBQ	1.90 – 2.12	1250 – 1500 kcmil	1000 – 1250 kcmil	
635DBR	935DBR	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	Cotale v ID	Nominal Conductor Range*		# of Bolts	Hex Key
Description	Catalog ID	Min	Max	# Of Boits	Size
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.



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).

Prompt Easy to implement

Long Term Longer term horizon

Unique Distinctive solution in the market

Smart Combination of Efficiency and

Sustainability



Renewables+ Program



PRY-CAM Testing Services





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By leveraging the Renewable+ Program 5% credit, an on-site PRY-CAM test can be performed once precommissioning 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.

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