

Medium Voltage (MV) Accessories Catalog

Linking Accessories to Cable Solutions



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*THE LOW-PROFILE, COLD-SHRINK, RANGE-TAKING,
105°C-OPERATING-TEMPERATURE CABLE SPLICE*

Prysmian introduces its latest cold-applied splice technology into the North American medium voltage cable accessories market. The Elaspeed® splice is quick and easy to install, saving time and cost over alternative methods.

The Elaspeed® is not a molded splice. It is manufactured in exactly the same way as extruded dielectric cable. The core is constructed from ethylene propylene rubber (EPR) on a vertical triple extruder which maintains its concentricity to the tightest tolerances possible. It is then tested as a cable to ensure long and trouble-free operation under a wide variety of applications and conditions.

The Elaspeed® splice has the highest physical and dielectric properties and it utilizes the Prysmian Eprotenax™ insulation system.

When manufacturing is complete, all components that are integral to the splice (conductor electrode, high permittivity layer, insulation, semi-conductive insulation shield, metallic shield and jacket) are expanded onto a self-ejecting support tube, which when released allows the splice to shrink onto the cable creating a tight circumferential interface.

Why use Elaspeed®?

Testing

The Elaspeed® splices meet or exceed the stringent test criteria of IEEE 404. The core of each Elaspeed® splice is factory tested to ensure the splice will maintain the integrity of the electrical cable system on which it is installed.

Safety

The Elaspeed® splice is installed without the use of heat or open flames, which can be hazardous in many locations.

Watertight

The circumferential pressure of the Elaspeed® jacket in conjunction with the cold flow properties of the mastic supplied with the splice kit, will not allow any ingress of water. 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.

Installation

The Elaspeed's® self-ejecting tube along with its integral construction design, makes it quick, easy and less costly to install.

Compatibility

The Elaspeed® splice is compatible with all solid dielectric extruded shielded cables. It also can be used with all types of metallic shielding.

Range Taking Capability

A major advantage of the Elaspeed® splice is its versatility. The splice series covers a wide range of sizes from #2 AWG to 1000 kcmil and voltages from 5kV thru 35kV. Individual splices are capable of joining cables of different insulation thickness and conductor sizes.

Small Profile

Elaspeed® 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. Also, its small profile consumes noticeably less installation space.

Reliability

Elaspeed® splices are reliable, because they always shrink uniformly, and there is only one complete unit to shrink. No matter how many splices are installed, the last splice will be as reliable as the first.

Electrical characteristics

Strong physical properties and moisture resistance are only some of the improved Elasppeed® splice characteristics when compared to alternative splice designs. The Eprotenax™ insulation utilized in Elasppeed® splices has been used in service up to 150kV and in medium voltage applications since 1963.

A fundamental measure of expected splice performance is its reaction to severe electrical conditions. Elasppeed® splices meet or exceed the requirements of IEEE 404 as shown below:

Basic Impulse Level

Voltage Class	IEEE 404 Test Level	Elasppeed™ Splice
15kV	110kV	150kV
25kV	150kV	170kV
35kV	200kV	220kV

Elasppeed® splices have been used on EPR insulated electrical systems where the conductor temperature has been maintained at 105°C for a complete test sequence.

Request copies of IEEE Transaction Paper #95 UM01 6-6 PWRD.

Design flexibility

Elasppeed® splices are available with several alternative shield/neutral connection systems. These include constant force springs, LC Shield® connection jumper kits or a combination of these shield connectors.

Further design flexibility is provided through the use of separate jackets over Elasppeed® splice cores, allowing the installer to connect existing concentric neutral wires before jacketing the splice.

These options may permit further inventory reduction by reducing the number of items in stock.

Qualification test copies are available on request. Contact your Prysmian representative.



Breaking the internal connection of the support tube



Support tube in self-ejecting mode



Connecting the shield braid to the cable metallic shield



Applying sealing mastic



Jacket recovery



The completed installation

MV 1/C Straight Splice

Part Number	Cable Size Range	Shielding Braid Size	Insulation Diameter Min. Inches	Insulation Diameter Max. Inches	Jacket Diameter Max. Inches
15kV - 100% Insulation Level (175mil)					
15SDJBe	2 - 3/0	1/0	0.68	1.13	1.34
15SEJCe	1/0 - 250	1/0	0.75	1.26	1.49
15SFJCe†	4/0 - 500	1/0	0.91	1.42	1.89
15SHJCe†	250 - 500	1/0	0.96	1.57	1.97
15SIPJCe	500 - 750	2/0	1.09	1.77	2.24
15SIJCe	750 - 1000	1/0	1.26	2.20	2.64
15kV - 133% Insulation Level (220 mil)					
15SDJBe	2 - 2/0	1/0	0.68	1.13	1.34
15SEJCe*	2 - 4/0	1/0	0.75	1.26	1.49
15SFJCe	3/0 - 500†	1/0	0.91	1.42	1.89
15SHJCe	4/0 - 500†	1/0	0.96	1.57	1.97
15SIPJCe	350 - 750	2/0	1.09	1.77	2.24
15SIJCe	500 - 1000	1/0	1.26	2.20	2.64
25kV - 100% Insulation Level (260 mil)					
25SDJBe	1 - 1/0	1/0	0.68	1.13	1.34
25SEJCe	1 - 2/0	1/0	0.75	1.26	1.49
25SFJCe**	1/0 - 350	1/0	0.91	1.42	1.89
25SHJCe	2/0 - 500	1/0	0.96	1.57	1.97
25SIPJCe	250 - 500	2/0	1.09	1.77	2.24
25SIJCe	500 - 1000	1/0	1.26	2.20	2.64
25kV - 133% Insulation Level (320 mil)					
25SFJCe	1 - 4/0	1/0	0.91	1.42	1.89
25SHJCe	1 - 350	1/0	0.96	1.57	1.97
25SIPJCe	3/0 - 500	2/0	1.09	1.77	2.24
25SIJCe	350 - 1000	1/0	1.26	2.20	2.64
35kV - 100% Insulation Level (345 mil)					
35SHJC	1 - 250	1/0	0.96	1.57	1.97
35SIPJC	1/0 - 500	1/0	1.09	1.77	2.24
35SIJC	4/0 - 1000	1/0	1.26	2.20	2.64
35SJJC	1250 - 2000	4/0	1.77	2.83	3.34
35kV - 133% Insulation Level (420 mil)					
35SHJC	1/0 - 3/0	1/0	0.96	1.57	1.96
35SIPJC	1/0 - 350	1/0	1.09	1.77	2.24
35SIJC	2/0 - 750	1/0	1.26	2.20	2.63
35SJJC	1000 - 2000	4/0	1.77	2.83	3.34

* These kits will not fit #2 solid conductor

** Splice kit will not fit 1/0 solid conductor

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

Getting the right connector number (if required):

Connectors can be included by adding the appropriate part number suffix:

Conductor Size Part Number Suffixes

Conductor Size	Suffix	Conductor Size	Suffix
2	-2	250	-250
1	-1	350	-350
1/0	-1/0	500	-500
2/0	-2/0	750	-750
4/0	-4/0	1000	-1000

Also, specify your preference of copper (-CU) or aluminum (-AL).

Example:

A copper connector for a splice kit for a 750 kcmil conductor, 15kV with 100% insulation level, would be 15SIJCe-750-CU.

Notes:

- 1) When selecting kits at the top end of the use range, check for proper fit over jacket. Also consider the increased diameter associated with CN wire folded back over cable 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) The lower case "e" in the part numbers 15 thru 28kV indicates the splices have a built-in electrode. This eliminates the need to apply high permittivity mastic over the connector. The three larger (H, IP, I and J) 35kV splices are supplied with high permittivity mastic.
- 4) Prysmian Elaseed splices meet IEEE 404 specifications.

Contact your Prysmian sales representative for more information such as data on size transition limits or for conductor sizes not shown.





DESIGN FEATURES

UNIFORM CUTBACK DIMENSIONS

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

Elasppeed™ 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.

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™ Compact Splice (25% shorter in length) is a low-profile, range-taking, continuous use at 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.

WHY USE ELASPEED™ COMPACT SPLICES?

25% SHORTER

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

TESTING

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

RELIABILITY AND REPEATABILITY

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

MV 1/C Compact Splice

Product Number	Cable Range	Shielding Braid Size	Shearbolt Range	Insulation Diameter		Jacket Diameter
				Minimum	Maximum	
5kV Elaseed™ - 100% Insulation 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	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"
5kV Elaseed™ - 133% Insulation Level (115 mils)						
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 Elaseed™ - 100% Insulation Level (175 mils)						
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 Elaseed™ - 133% Insulation Level (220 mils)						
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"
25kV Elaseed™ - 100% Insulation Level (260 mils)						
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	350-750	1.26"	2.20"	2.63"
25kV Elaseed™ - 133% Insulation Level (320 mils)						
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"

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.

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.

MV Branch Joints & Live End Caps

Prysmian’s branch joint (or also commonly called a “wye” splice) is an excellent method for splitting the main feeder cable into two cables that can be directed to other loads.

The branch joint utilizes the Elaseed™ technology (with EPR insulation) and a shear bolt connector to make a very quick and reliable connection. The branch joint can accommodate several conductor sizes (4/0 AWG to 500 kcmil up to 15kV) allowing one joint to fill many applications while maintaining a continuous operating temperature of 105 °C. Prysmian’s Branch Joints meet IEEE 404 specifications.

Connectors can be supplied in the kit as required.

MV Branch Joints

Part Number	Cable Size Range	Voltage
15WY4/0-500	4/0 AWG - 500 kcmil	Up to 15kV
15WY4/0-500	4/0 AWG - 500 kcmil	Up to 15kV
15WY500-750	500 kcmil - 750 kcmil	Up to 15kV
15WY750-750	750 kcmil - 750 kcmil	Up to 15kV



Prysmian has expanded its cold shrink technology to include a live end cap. This provides the customer the flexibility of installing medium voltage cable that can be fully energized but spliced or terminated at a later time. Typically this is performed after a MV Branch Joint where the extra cable end is not ready within the network to carry load.

MV Live End Cap

Part Number	Cable Size Range	Voltage
15SFJCe-EC	4/0 AWG - 500 kcmil	Up to 15kV



MV Transition Splices

Prysmian MV transition splices are designed to give the reliability required when splicing three or single conductor paper lead cable (PILC) to three or one solid dielectric polymeric cables.

The major cold shrink components of the splice kits are manufactured from specialty formulated EPR materials. These components when installed shrink uniformly to create a joint that not only can withstand high electrical stresses, but also performs well against high physical stresses caused by internal oil pressure and external water pressure. Additionally, the trifurcating break

out boot and splice jackets exhibit excellent resistance to abrasion. Prysmian's Transition splice meets or exceeds IEEE 404 and covers voltages from 5kV to 28kV. Connectors can be supplied in the kit as required.

Note: The sizes shown are based on industry standard 100% cable insulation levels. Because of the variables covering many PILC cables, please contact Prysmian with cable details before making a final kit selection.

Part Number	Cable Size Range
3/C 15kV Splices	
15-E-T3	PILC (1/0 - 4/0 AWG) to 1/C (1/0 - 250 kcmil)
15-F-T3	PILC (4/0 - 500 kcmil) to 1/C (4/0 - 600 kcmil)
15-IP-T3	PILC (500 - 750 kcmil) to 1/C (350 - 750 kcmil)
3/C 25kV Splices	
25-E-T3	PILC (#1 - 1/0 AWG) to 1/C (#1 - 2/0 AWG)
25-F-T3	PILC (4/0 - 350 kcmil) to 1/C (4/0 - 500 kcmil)
25-IP-T3	PILC (350 - 750 kcmil) to 1/C (250 - 750 kcmil)
1/C 15kV Splices	
15-E-T1	PILC (1/0 - 4/0 AWG) to 1/C (1/0 - 250 kcmil)
15-F-T1	PILC (4/0 - 500 kcmil) to 1/C (4/0 - 600 kcmil)
15-IP-T1	PILC (500 - 750 kcmil) to 1/C (350 - 750 kcmil)
1/C 25kV Splices	
25-E-T1	PILC (#1 - 1/0 AWG) to 1/C (#1 - 2/0 AWG)
25-F-T1	PILC (4/0 - 350 kcmil) to 1/C (4/0 - 500 kcmil)
25-IP-T1	PILC (350 - 750 kcmil) to 1/C (250 - 750 kcmil)





SPECIFICATIONS AND RATINGS

IEEE: IEEE 48 CLASS 1

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

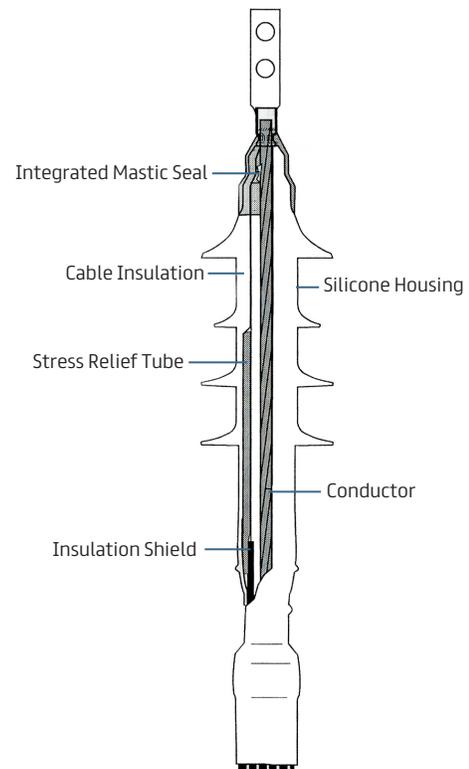
The PCT and the PICT series are designed to give consistent proper positioning of the unit. Additionally, the pull down base gives greater flexibility and sealing when used on jacketed concentric neutral cables.

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.

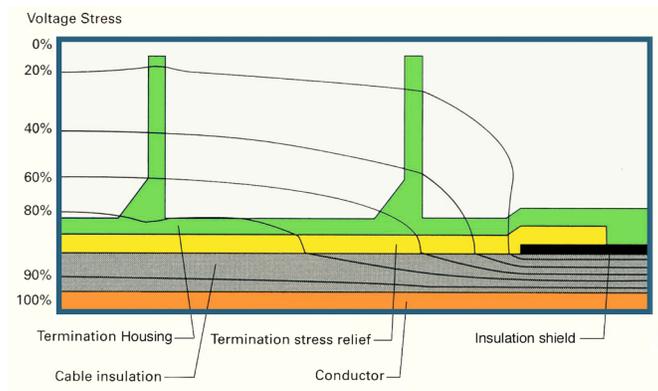
All of the Prysmian PCT and PICT terminations meet or exceed the stringent requirements mandated by the IEEE standard 48 for class 1 specification and can operate continuously at 105° C.



Technical Specifications

Type	PCT15	PCT25	PCT35	PICT15
Sizes Available *	1,2,3,5,6	2,3,5,6	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

Stress Distribution



PRODUCT NOTES:

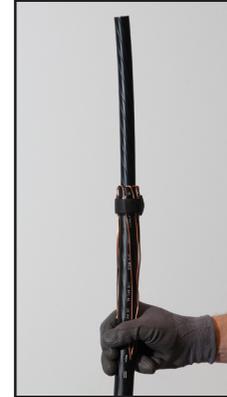
The above dimensions are approximate and subject to normal manufacturing tolerances.

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.

Ease of Installation

1. Final Cable Prep



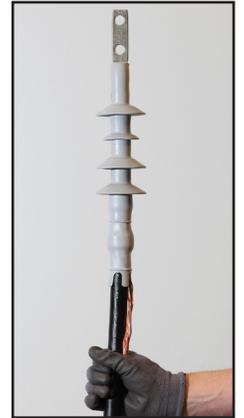
2. Placement of Termination



3. Support Core Removal



4. Completed Assembly



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.

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

Ordering Information

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"	22 mm to 34 mm	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 500 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 aluminum lugs - (1 hole or 2 hole)
- Copper or aluminum pin terminals and also Bi-metallic pin terminals

Aluminum & Copper Compression Connectors

Prysmian can supply a complete kit that can also include connectors. Both aluminum and copper are available.

Non-standard sizes available upon request.

Aluminum Compression Connectors

Part Number	Fits Conductor
2 - AL	#2 AWG
1/0 - AL	1/0 - AWG
2/0 - AL	2/0 - AWG
3/0 - AL	3/0 - AWG
4/0 - AL	4/0 - AWG
250 - AL	250 - MCM
350 - AL	350 - MCM
500 - AL	500 - MCM
750 - AL	750 - MCM
1000 - AL	1000 - MCM
1250 - AL	1250 - MCM

Copper Compression Connectors

Part Number	Fits Conductor
2 - CU	#2 AWG
1/0 - CU	1/0 - AWG
2/0 - CU	2/0 - AWG
3/0 - CU	3/0 - AWG
4/0 - CU	4/0 - AWG
250 - CU	250 - MCM
350 - CU	350 - MCM
500 - CU	500 - MCM
750 - CU	750 - MCM
1000 - CU	1000 - MCM
1250 - CU	1250 - MCM

Aluminum Compression 2-Hole Lugs

Part Number	Fits Conductor
2 - AL2L	#2 AWG
1/0 - AL2L	1/0 - AWG
2/0 - AL2L	2/0 - AWG
3/0 - AL2L	3/0 - AWG
4/0 - AL2L	4/0 - AWG
250 - AL2L	250 - MCM
350 - AL2L	350 - MCM
500 - AL2L	500 - MCM
750 - AL2L	750 - MCM
1000 - AL2L	1000 - MCM
1250 - AL2L	1250 - MCM

Copper Compression 2-Hole Lugs

Part Number	Fits Conductor
2 - CU2L	#2 AWG
1/0 - CU2L	1/0 - AWG
2/0 - CU2L	2/0 - AWG
3/0 - CU2L	3/0 - AWG
4/0 - CU2L	4/0 - AWG
250 - CU2L	250 - MCM
350 - CU2L	350 - MCM
500 - CU2L	500 - MCM
750 - CU2L	750 - MCM
1000 - CU2L	1000 - MCM
1250 - CU2L	1250 - MCM

Aluminum Compression Connector



Aluminum Two-Hole Lug



Copper Compression Connector



Copper Two-Hole Lug



Shearbolt® Connectors

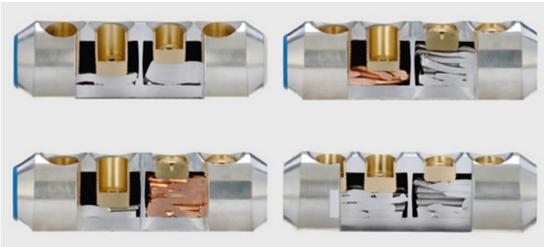


RATINGS

- ANSI C119.4-2004
- ANSI Class 2 (40% RBS)
- Dual-Rated (AL/CU)

ELECTRICAL PROPERTY

- Current Cycle Test - Class A @ 284°F (140°C) Conductor
- Mechanical Pullout Test -Class 2



STEPLESS TECHNOLOGY

The stepless Shearbolt has no pre-set shear points in the threads and makes use of the maximum number of bolt threads possible to apply a compressive force to the conductor. The stepless technology ensures that the bolt will shear off below the surface of the connector, eliminating the need for filing sharp metal edges.

HEX KEY BOLTS

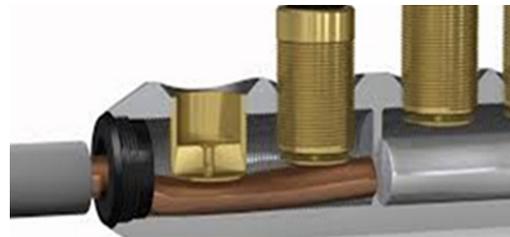
No special tools are required to install the connector since the shearbolts are equipped with hex key fittings. Only 5 mm, 6 mm, or 8 mm standard hex keys are needed.

OVERVIEW

Prysmian Mechanical Shearbolt Connectors are designed to cover a wide range of conductor sizes from 6 AWG to 1250 kcmil. Individual sizes cover ranges from 6 AWG-3/0, 2 AWG-250 kcmil, 1/0 AWG-500 kcmil, 350-750 kcmil, 500-1000 kcmil and 750-1250 kcmil. The unique stepless Shearbolt design has no predetermined breaking points in the connector thread. Bolts always break flush with the surface of the connector body.

The design provides excellent performance and features not found in other mechanical connectors. They meet ANSI C119.4 and withstand the 40% pull out force (ANSI Class 2) required by IEEE-404. No compression dies or mechanical crimp tooling are required for installation. Following cable preparation, simply slide the connector over the conductor and tighten the bolts until they shear off.

Prysmian Mechanical Shearbolt Connectors are dual-rated (AL/CU) and tin-plated to resist corrosion. Compatible with the full line of Prysmian Elaseed™ cold-applied splice kits, they offer the best medium voltage cable splicing solution.



FRICTION DISC

As the bolt is tightened, the friction disc at the base of the bolt makes contact with the conductor and no longer rotates. The bolt rotates freely above the friction disc without putting torque on the conductor. This allows the shearbolt to apply the optimum amount of contact force without damaging even finely stranded conductors.

COMPATIBILITY

Prysmian shearbolt connectors are designed to be compatible with Prysmian Elaseed™ cold-applied splice kits. Two superior technologies provide for a quick and easy installation that saves time and cost over tradition methods.

FEATURE	ADVANTAGE	BENEFIT
Wide application range	Reduced number of connectors to accommodate cable sizes from #6 to 1,250 kcmil	Reduces accidental use of the wrong connector
Each connector covers multiple conductor sizes	Range-taking in each connector	Reduced inventory
Step-less shearhead bolts	Installs with simple ratchet-type socket wrench or cordless impact wrench	Eliminates need for heavy crimp tooling and special dies
Bolts are continuous shearing	Bolts shear at or below the connector surface	No time-consuming filing is needed
Friction disk stops rotating upon conductor contact	Provides increased contact force	Will not damage fine stranded conductors
Compact, smooth body design	Compatible with Prysmian Cold Shrink Elaseed™ Splices	An engineered system providing years of trouble-free performance
Torque-controlled shearhead bolts	Sheared head gives positive indication of correct installation	Provides positive feedback that the connection is fully tightened
Heavy-duty design	Connector bodies are made of high strength, tin-plated aluminum alloy	Provides long service life under normal operation conditions with reserve capacity.
Centering rings for small diameter conductors	Minimizes voltage stresses at transition from connector body to cable insulation.	No separate metal inserts required – less parts to handle.
Factory filled oxide-inhibiting compound	Abrades and penetrates the conductor oxides	Generates low initial contact resistance and long term reliability
Knurled Inner bore	Unique profile breaks through oxides and grips conductor strands	Generates low contact resistance & increases mechanical pullout strength. Meets Class 2, 40% RBS of the conductor.
Solid center stop	Mechanical barrier is impervious to oil	Accommodates transition applications from polymeric to PILC cable
Dual-rated	Designed and tested for use on both aluminum and copper conductors	Ideal for aluminum to copper conductor transitions
No crimping required	No crimping dies, crimp tooling or calibration of crimp tool required	Easy installation - particularly in confined spaces
Transitions between conductor sizes	One connector can easily accommodate size transitions	Eliminates use of adapters that can impede electrical conductivity

Shear Bolt Connectors

Catalog Description	Part Number	Connector Range AWG / kcmil	Connector Length w/Centering Rings Inches (mm)	Connector O.D. Inches (mm)	Hex Key Size	Number of Bolts
6-3/0-ALSB	CUS53825	#6 to 3/0	2.95 (75)	.95 (24)	5 mm	2
2-250-ALSB	CUS53821	#2 to 250	4.41 (112)	1.10 (28)	5 mm	4
1/0-500-ALSB	CUS53783	1/0 to 500	5.12 (130)	1.38 (35)	6 mm	4
350-750-ALSB	CUS53826	350 to 750	6.93 (176)	1.65 (42)	8 mm	6
500-1000-ALSB	CUS53919	500 to 1000	7.83 (199)	2.05 (52)	8 mm	6
750-1250-ALSB	CUS53828	750 to 1250	10.15 (258)	2.10 (53)	8 mm	8
1250-1500-ALSB	CUS54040	1250 to 1500	9.69 (246)	2.36 (60)	8 mm	8

Two Hole Shear Bolt Lugs

Catalog Description	Part Number	Connector Range AWG / kcmil	Connector Length w/Centering Rings Inches (mm)	Connector O.D. Inches (mm)	Hex Key Size	Number of Bolts
2-250-ALSB2	CUS53939	#2 to 250	5.98 (152)	1.10 (28)	5 mm	2
4/0-500-ALSB2	CUS53829	4/0 to 500	6.32 (161)	1.38 (35)	6 mm	2
500-750-ALSB2	CUS53942	500 to 750	7.54 (192)	1.65 (42)	8 mm	3
750-1000-ALSB2	CUS53943	750 to 1000	8.37 (213)	2.05 (52)	8 mm	3
1000-1250-ALSB2	CUS53945	1000 to 1250	8.37 (213)	2.05 (52)	8 mm	3
1250-1500-ALSB2	CUS53913	1250 to 1500	9.09 (231)	2.36 (60)	8 mm	4

Grounding Braid Kits

Prysmian provides grounding kits that can be used on a variety of cable designs. Please call Prysmian to help identify the proper grounding kit for the intended cable. Grounding kits include all of the necessary components.

Standard grounding kits include a 24-inch tin-coated flat copper braid with a solder block. Mastic and a constant force spring are also included to complete the grounding assembly.

Standard Grounding Kits

Part Number	Description
GB224	#2 AWG copper braid, 24 inches long
GB424	#4 AWG copper braid, 24 inches long
GB624	#6 AWG copper braid, 24 inches long
GB824	#8 AWG copper braid, 24 inches long

Constant Force Springs Size Range

Part Number	Useful Size Range – Inches
CFS1	0.55 to 0.87
CFS2	0.73 to 1.14
CFS3	0.93 to 1.46
CFS4	1.22 to 1.97
CFS5	1.73 to 2.76
CFS6	2.28 to 3.70

Getting the right part number

The part number is completed by specifying the proper constant force spring and adding this to the end of the number sequence. For shield diameters where two or three sizes are available, select the spring closest to the middle of the range.

Example:

For a grounding kit requiring a #4 AWG braid that will be used on a cable with a shield OD of 1.25", the finished product number is GB424-CFS3.

Prysmian can also provide special grounding kits that would include longer braids as required.

Please contact your local representative for assistance.

AIRGUARD® Splice Grounding Kits

Part Number	Description
AGJ-GB460	AIRGUARD® Splice Grounding Kit

For AIRGUARD™ splices, the kit includes two mechanical connectors for grounding the AIRGUARD™ layer, four clamps and 60 inches of #4 AWG flat tin coated copper braid.

Please specify the size of cable when ordering so that the proper clamps can be provided.

AIRGUARD® Termination Grounding Kits

Part Number	Description
AGT-GB460	AIRGUARD® Termination Grounding Kit

For AIRGUARD™ terminations, the kit includes one mechanical connector for grounding the AIRGUARD™ layer, two clamps and 60 inches of #4 AWG flat tin coated copper braid.

Please specify the size of the cable when ordering so that the proper clamps can be provided.

Prysmian’s patented LC Shield® Connectors are an industry standard for grounding cables with longitudinally corrugated copper tape shields. The corrugated copper element is sized accordingly and also utilizes the same corrugations per inch as the cable to maximize the surface area of the connection. Two constant force springs are applied around the connector to complete the assembly.

Prysmian also offers LC Shield® Connectors with a drain wire that can be attached to a separable connector (pre-molded elbow).

LC Shield® Connectors

Part Number	Description
52-80-104	#1 AWG copper wire welded to a tin-coated LC Shield® adaptor which can be trimmed to size.
52-80-120	#2 AWG copper wire welded to a tin-coated LC Shield® adaptor which can be trimmed to size. Also included is a #12 tin-coated copper drain wire for separable connectors.

Note: LC Shield® connectors should be trimmed to create a 1/4 inch gap when wrapped around the LC Shield® of the cable to which it will be applied. This will allow for proper clearances for expansion and contraction of the cable through out its service life.

52-80-104



52-80-120



OVERVIEW

Prysmian is proud to offer some of the industry's finest cable preparation tools. The tools can be used to remove cable jackets on concentric neutral cable, flat strap neutrals, PILC cables and AIRGUARD™ cables.

Jacket Stripper

Part Number Inches (mm)	Cable OD Range	
	Inches	mm
PG2-MV/C079L079 (2020)	0.80 – 1.40	20 – 36
PG3-MV/C039L070 (1018)	1.00 – 2.00	25 – 51
PG3-MV/C110L130 (2833)	1.00 – 2.00	25 – 51
PG4-MV/C110L130 (2833)	1.85 – 3.00	47 – 76
PG5-MV/C138L138 (3535)	2.55 – 3.70	65 – 94
PG6-MV/C138L138 (3535)	3.14 – 4.90	80 – 124

Note: The last number within the part number indicates the blade depth. The first two digits indicate the depth in millimeters of cut for the circumferential cut and the last two digits indicate the depth in millimeters of cut for the longitudinal cut.

Example: The PG4-MV/C110L130 contains four circumferential blades (MTC4 type) with a depth of 0.110 inches (2.8 mm) and one longitudinal blade (MTL4 type) with a depth of 0.13 inches (3.3 mm).

Replacement Blades

Part Number Inches (mm)	Quantity
MTC3-039 (1)	Four blades per tool
MTL3-070 (1.8)	One blade per tool
MTC3-110 (2.8)	Four blades per tool
MTL3-130 (3.3)	One blade per tool
MTC4-110 (2.8)	Four blades per tool
MTL4-130 (3.3)	One blade per tool
MTC5-138 (3.5)	Four blades per tool
MTL5-138 (3.5)	One blade per tool
MTC6-138 (3.5)	Four blades per tool
MTL6-138 (3.5)	One blade per tool

Other Tools

Part Number	Description
EVP	Lead Lifting Tool
DSP	Semicon Lifting Tool
MF3-60	Jacket, Semicon & Insulation Removal Tool



PG Jacket Stripper



Lead Lifting Tool

The following accessories are available through Prysmian for convenient access to materials associated to terminating and splicing MV cable.

Constant Force Springs (See page 22 for proper sizes)

Part Number	Description
CFS1	Constant Force Spring
CFS2	Constant Force Spring
CFS3	Constant Force Spring
CFS4	Constant Force Spring
CFS5	Constant Force Spring
CFS6	Constant Force Spring

Heat Shrink Tubing

Part Number	Description
53728	Heat Shrink Tube – 1 inch Diameter
53729	Heat Shrink Tube – 1.5 inch Diameter
53730	Heat Shrink Tube – 2 inch Diameter

The Seller warrants that for a period of one (1) year from the date of delivery (the "Warranty Period"), the Goods manufactured and provided by Seller provided hereunder shall comply in all material respects with the requirements and specifications of the Purchase Order and be free from defects due to faulty cable or accessory design, materials or workmanship. Notwithstanding the foregoing, the Seller shall not be held responsible for defects caused by lack of maintenance, unintended use, misuse, abuse, neglect, improper or unsuitable installation, external accidents, alterations or repairs made or performed by any person or entity not under the control of Seller, or any other causes beyond the reasonable control of the Seller.

Third party warranties will pass directly to the owner.

The foregoing warranties shall only be effective provided that the following conditions precedent have been met by Buyer:

(i) The Goods are used in accordance with conditions covered by the design specifications and operated within recognized and applicable industry specifications and standards.

(ii) The Goods are maintained and operated in accordance with Seller's recommended procedures, test protocols and with prudent industry practices.

During the Warranty Period, the Seller shall, at its sole option and within a reasonable period of time, repair or replace an, Goods which are reasonably rejected by the Buyer as failing to conform to the requirements and specifications of the Purchase Order the liability

of the Seller shall in no case include the cost of removal, installation or reinstallation of any Good supplied by the Seller, nor shall Seller's liability extend to the cost of labor to remove and install Goods to be repaired or replaced here under.

All the replacements by the Seller under the foregoing provisions shall be free of charge F.O.B. point called for in the Purchase Order. Goods for which replacement has been made under the foregoing provision shall become the property of the Seller and be returned to the Seller by the Buyer F.O.B. Delivery Point as giving in the Purchase Order.

Any claim for breach of Seller's warranties shall be deemed waived unless written notice of such claim is given to Seller within the warranty period, within thirty (30) days after the date on which the claimed defect is discovered.

THE WARRANTIES AND REMEDIES SET FORTH ABOVE CONSTITUTE THE SOLE WARRANTIES OF THE SELLER AND THE BUYER'S SOLE REMEDIES IN THE EVENT OF A BREACH OF SUCH WARRANTIES BY THE SELLER.

THE WARRANTIES SET FORTH ABOVE ARE IN LIEU OF, AND SELLER DISCLAIMS ANY AND ALL OTHER WARRANTIES, WRITTEN OR ORAL, STATUTORY OR AT COMMON LAW, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SELLER SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR INDIRECT DAMAGES INCURRED BY BUYER OR ANYONE CLAIMING THROUGH BUYER.

REV. 04-15-V10

TERMS & CONDITIONS

Prysmian shall have the right at any time prior to delivery or collection of the products to change their specification in accordance with industry specifications.

Please contact the Sales Office for lead times and details of minimum order quantities. Special delivery requirements for example a.m. next day deliveries, will be charged at cost. This cost will be confirmed at time of order.

For further information please contact our sales office:

Prysmian Power Cables & Systems USA, LLC

Accessories Division
4 Tesseneer Drive
Highland Heights, KY 41076

Prysmian Group

4 Tesseneer Drive
Highland Heights, KY 41076
na.prysmiangroup.com

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