



Shrink-Fit Cable Joints

Splice Medium-Voltage Cables Fast — No Ripcords, No Heat!

For over 50 years, the Elastimold® brand has been associated with reliable, high-quality, pre-molded power cable splices that are designed to stand the rigors of the toughest utility applications. These products provide a cost-effective method to splice medium voltage cables using a “push-on” motion, and allowing cable neutrals to be solidly connected across the body of the splice without the use of any external braids. For those who prefer a more range-taking solution without the use of any physical force to install, the only options available have been cumbersome heat-shrink products that require multiple steps and the use of an open flame that may not result in uniform cable coverage, or over-designed cold-shrink products that either use awkward, entangling ripcords or expensive braid/jacket combinations that do not offer the ability to solidly connect neutrals across the splice.

Now there's a faster and easier way to splice medium-voltage cables — one that combines all of the convenience and flexibility of a pre-molded splice, with the range-taking ease of installation offered in a cold- or heat-shrink product, but without the use of ripcords, heat or excessive force. Introducing, the NEW Elastimold® Shrink-Fit Cable Joints from Thomas & Betts!

The Shrink-Fit Cable Joints are made of the same molded EPDM elastomer as our other Elastimold® cable accessories. This high-performance material offers more durability than silicone for direct burial. The joints feature a four-piece plastic support core, which is placed over the cable for installation of the splice. The support core is then easily removed with the supplied tool, allowing the elastomer joint to contour over the spliced cable for a uniform seal every time.

Each Elastimold® Shrink-Fit Cable Joint covers a wide range of cable sizes, features an insulated, semi-conductive shield and can be used with either a standard aluminum or optional copper compression splice. Optional kits are available for neutral, shielding and jacket restoration.

Features

- Automatic core removal without ripcords or heat required for installation
- High-quality molded EPDM elastomer housing withstands the elements in harsh direct-burial, vault, manhole and overhead applications
- Four sizes support a wide range of cable and conductor sizes
- IEEE 404 rated shrink-fit cable joint



SFJ115 Shrink-Fit Cable Joint



SFJ415 Shrink-Fit Cable Joint



Disposable four-piece plastic support core

Typical Applications

- Direct Burial
- Handhole/Pullbox
- Manhole
- Vault
- Overhead

Installation Sequence



Place Elastimold® Shrink-Fit Joint in position.



Install connector.



Cut fastening straps.



Automatic core detachment begins.



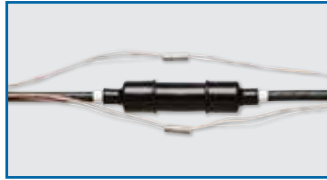
Core pushes itself towards the ends of the Shrink-Fit Joint.



Core automatically detaches from second end.



Last core piece detaches.

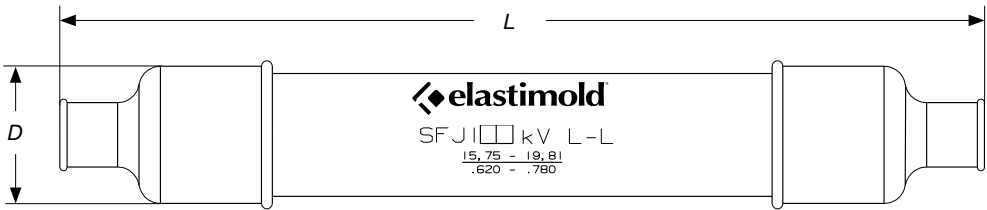


Crimp grounding wires.

Ratings

Voltage Class	15kV	25/28kV	35kV
Max. Phase-to-Ground Operating Voltage	8.7kV	14.4kV	BG or $\frac{5}{8}$
BIL Impulse Withstand (1.2 x 50µsec. wave)	110kV	150kV	BG or $\frac{5}{8}$
Corona Extinction Level @ 3.0 pC Sensitivity	13kV	22kV	BG or $\frac{5}{8}$
DC Withstand during Installation	56kV	80kV	C
DC Withstand up to 5 yrs.* — XLPE Insulation	18kV	25kV	31kV
DC Withstand up to 5 yrs.* — EPR Insulation	45kV	64kV	80kV
AC Withstand at 60 Hz for 60 sec.	35kV	52kV	69kV
Continuous Current	Equal to that of cable	Equal to that of cable	Equal to that of cable
Short-Term Current	Equal to that of cable up to 35kA	Equal to that of cable up to 35kA	Equal to that of cable up to 35kA

*Reference: AEC CS6 and CS8, section L.2.



Ratings

Cable Joint Size	Depth (in.)	Length (in.)
1	1.85	11
2	2.12	16
3	2.4	18
4	2.6	18

Insulation Range

Cable Joint Size	Minimum (in.)	Maximum (in.)	Minimum (cm)	Maximum (cm)
1	0.610	0.860	15.49	21.84
2	0.805	1.060	20.44	26.92
3	0.935	1.355	23.75	34.41
4	1.210	1.920	30.73	48.76

The following diagram shows how to construct a catalog number for an Elastimold® Shrink-Fit Cable Joint:

Connector Size		
X Code	Conductor Size (AWG or kcmil)	
	Stranded/ Compressed	Solid/ Compact
210	—	#2 AWG
220	#2 AWG	#1 AWG
230	#1 AWG	1/0 AWG
240	1/0 AWG	2/0 AWG
250	2/0 AWG	3/0 AWG
260	3/0 AWG	4/0 AWG
270	4/0 AWG	250 kcmil
280	250 kcmil	300 kcmil
290	300 kcmil	350 kcmil
300	350 kcmil	400 kcmil
310	400 kcmil	500 kcmil
330	500 kcmil	600 kcmil
360	650 kcmil	750 kcmil
380	750 kcmil	900 kcmil
400	900 kcmil	1000 kcmil
410	1000 kcmil	—

Note: Each kit contains shrink-fit housing on removable core, splice connector, lubricant, installation instructions and crimp chart. For ordering information on optional neutral, shielding and jacket restoration kits, please contact Thomas & Betts Customer Service.