

## Shrink-Fit Cable Joints

### The Faster, Easier Way to Splice Medium-Voltage Cables in Direct-Burial, Underground or Overhead Applications.

#### 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

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.



**SFJ115**  
Shrink-Fit Cable Joint



**SFJ415**  
Shrink-Fit Cable Joint



Disposable four-piece plastic support core

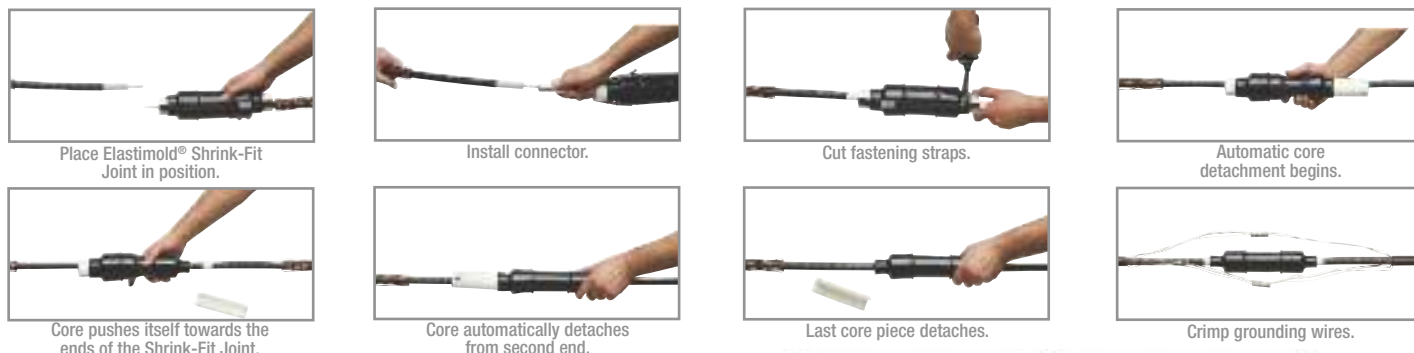
#### Typical Applications

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



## Shrink-Fit Cable Joints

### Installation Sequence



### Ratings

Volt Class	15 kV	25/28 kV	35 kV
Max. Phase-to-Ground Operating Voltage	8.7 kV	14.4 kV	20.2 kV
BIL Impulse Withstand (1.2 x 50µsec. wave)	110 kV	150 kV	200 kV
Corona Extinction Level @ 3.0 pC Sensitivity	13 kV	22 kV	30 kV
DC Withstand during Installation	56 kV	80 kV	100 kV
DC Withstand up to 5 yrs.* — XLPE Insulation	18 kV	25 kV	31 kV
DC Withstand up to 5 yrs.* — EPR Insulation	45 kV	64 kV	80 kV
AC Withstand at 60 Hz for 60 sec.	35 kV	52 kV	69 kV
Continuous Current	Equal to that of cable		
Short-Term Current	Equal to that of cable up to 35 kA		

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

### Dimensions

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

### Insulation Range

Cable Joint Size	Min. (in.)	Max. (in.)	Min. (mm)	Max. (mm)
1	0.620	0.780	15.75	19.81
2	0.815	0.920	20.70	23.37
3	0.935	1.190	23.75	30.23
4	1.210	1.760	30.73	44.70

### How to construct a catalogue number for an Elastimold® Shrink-Fit Cable Joint:

S

F

J

Cable Joint Size

Size Code	Wall Thickness (mils)	Min. Conductor Size*	Max. Conductor Size*
15 kV			
1	175	#2 AWG	3/0 AWG
2		4/0 AWG	250 kcmil
3		350 kcmil	600 kcmil
4		700 kcmil	1000 kcmil
1	220	#2 AWG	1/0 AWG
2		2/0 AWG	4/0 AWG
3		250 kcmil	500 kcmil
4		600 kcmil	1000 kcmil
25/28 kV			
2	260	#1 AWG	2/0 AWG
3		3/0 AWG	350 kcmil
4		500 kcmil	1000 kcmil
35 kV			
3	345	1/0 AWG	4/0 AWG
4		250 kcmil	1000 kcmil

Voltage Rating

15	11 kV
25	25/28 kV
35	35 kV

Connector Type

C	Crimp
---	-------

Conductor

1	Aluminum
2	Copper

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	650 kcmil
360	650 kcmil	750 kcmil
380	750 kcmil	900 kcmil
400	900 kcmil	1000 kcmil
410	1000 kcmil	–

\* Based on the minimum compact AEIC and ICEA cable insulation diameters.

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 your Regional Sales Office.

\* Based on the minimum compact AEC and ICEA cable insulation diameters.  
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 your Regional Sales Office.