



## PILC Termination

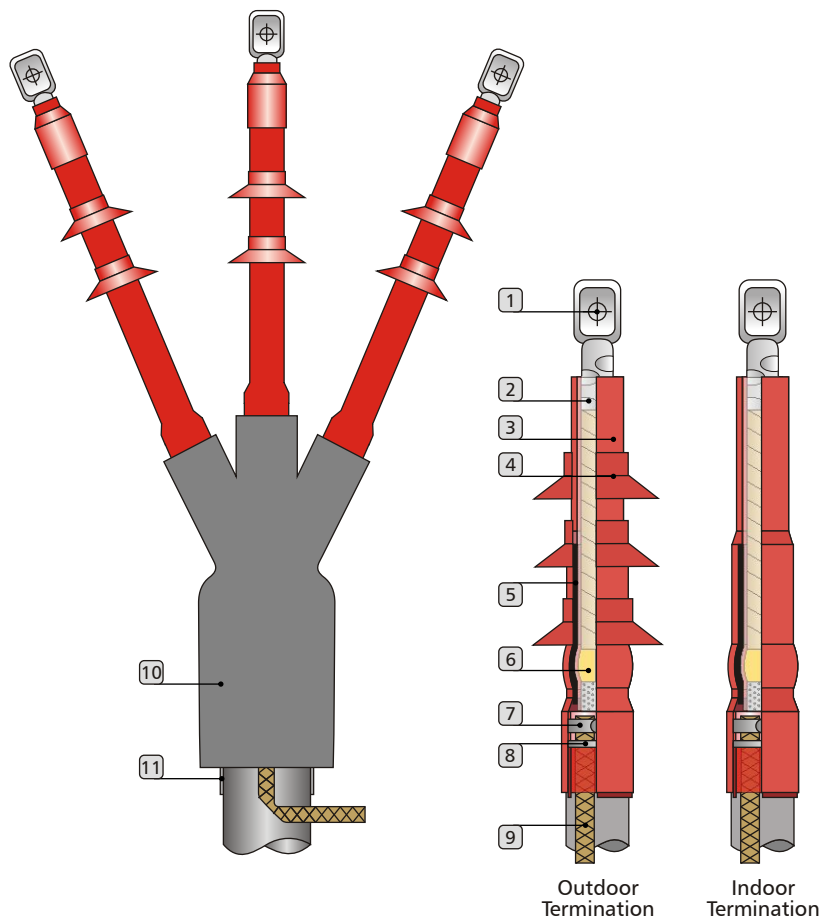


M-Seals Heat Shrinkable cable Terminations for MV PILC cables up to 36 kV, offer a quick and easy solution to terminate Paper Insulated (belted and screened) cables. The critical aspects of oil and moisture sealing in this system are achieved by the combined effect of special hot melt adhesive lined heat shrinkable components and special oil barrier heat shrink tubes. The other aspects of partial discharge and corona are successfully controlled by heat shrinkable stress control and anti-tracking heat shrink technology.

There is no longer a need for lead wiping, compound filling, soldering or plumbing to make oil seals. The expanded components of the termination are internally coated with adhesive. When heated they shrink snugly around the cable diameter and seal it. Corrosion protection and sealing for three core cables is provided by installing a heat shrinkable adhesive lined semi-conducting breakout in the cable crutch. The system offers ease of installation with minimum skills required. All components required for the termination are included in a single kit, which has a prolonged storage life under normal storage conditions. A few sizes of the kits covers the entire range of cables, helping in reducing inventories. The heat shrinkable components are light in weight and are made of specially formulated cross-linked polymeric material with excellent tracking and erosion resistance characteristics. A proper creepage path is obtained within a short overall length of the termination. The kits have been designed to meet various international standards like IS, HD, IEEE, IEC and BS. Our state-of-the-art manufacturing facility, in-house testing laboratories and accreditation to the ISO 9001 quality assurance standard, guarantees the performance of our materials to suit customer requirements.

M-Seal HS Terminations are available for single and multiple core cables for Indoor & Outdoor applications.

- Ease of installation
- Simplified cable preparation
- Outstanding long term reliability
- Effective and reliable stress control
- Excellent mechanical, thermal and electrical characteristics
- Excellent Antitracking outer surface
- Superior resistance to weathering and UV radiation
- Resistant to water and corrosion
- Immediate energization
- Suitable for all conductor shapes and materials



## PILC Termination

- 1 Terminal Connector
- 2 Oil Barrier sleeve
- 3 Anti-Tracking Sleeve
- 4 Rain Shed
- 5 Stress Control Sleeve (Black layer)
- 6 Stress Control Mastic
- 7 Binding wire
- 8 Worm Drive Clamp
- 9 Copper Braid
- 10 Semi Conducting Breakout (with sealant layer)
- 11 Gland Sleeve (Adhesive Lined)

### Number of Rain Sheds per phase

Voltage	Indoor	Outdoor
Upto 17.5kV	–	2
Upto 24kV	–	3
Upto 36kV	1	4

### Minimum performance of M-SEAL Indoor and Outdoor Terminations for MULTI-CORE PILC cables upto 36kV

Tests	Parameters	Test Voltage			Observations	
		12kV	24kV	36kV	Indoor	Outdoor
IAC High voltage test	5 Minutes	25	30	45	No breakdown or flashover	do
Impulse withstand test	10 +VE & 10-VE, 1.2 Micro Second between conductor & screen grounded	75	125	170	No breakdown or flashover	do
Load cycling test	63 Cycles, 5Hr Heating. 3Hr Cooling with Cond.Temp. as per cable specification		at 2.5Uo		No breakdown or flashover	do
DC withstand test	5 Minutes	18	37.5	60	No breakdown or flashover	do

#### Important Notice

Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

#### Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture at the time of purchase. **3M MAKES NO OTHER WARRANTIES**

#### INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



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