

Heat Shrink Solutions (1.1kV to 36kV)

Heat Shrink Splice / Cable Jointing Kit

Description:

3M Heat Shrink medium voltage joints are available for tape/wire shielded, armoured/unarmoured medium voltage single core and three core polymeric cables. 3M Heat Shrinkable joint utilizes a unique high dielectric constant (High K) stress control tube and mastic for effective grading of electrical stresses. The stress control tube together with the insulating and dual walled (inside insulating & outside semiconducting) tubes forms the splice body.



All the heat shrinkable components are supplied in an expanded state and would shrink effectively on application of heat.

All the grounding connections are solder-less.



Features:

- Available for 1-Core and 3-Core polymeric cables.
- Provides excellent environmental protection and moisture sealing.
- Wide conductor size ranges upto 1000 mm²

Heat Shrink Termination Kit

Description:

3M Heat Shrink medium voltage terminations are available for tape/wire shielded, armoured/unarmoured medium voltage single core and three core polymeric cables. 3M Heat Shrinkable terminations utilize a unique high dielectric constant (High K) stress control tube and mastic for effective grading of electrical stresses. The non tracking heat shrinkable insulating outer tube is optimally designed for reliable environmental protection. The modular heat shrinkable skirts allow installation of the termination in inverted condition if required. For three core cable terminations, a heat shrinkable breakout is provided for environment sealing of the trifurcating crotch area.



All the heat shrinkable components are supplied in an expanded state and would shrink effectively on application of heat.

All the grounding connections are solder-less.

Features:

- Available for 1-core and 3-core polymeric cables.
- Provides excellent environmental protection and moisture sealing.
- Wide conductor size ranges upto 1000 mm²



Heat Shrink Technology

Heat Shrink Technology offers complete range of cable jointing & termination kits for XLPE, PILC, PVC & EPR Cables from 1.1kV to 36kV voltage grades. The kits consist of heat shrinkable tubes, mastics, moulded parts, mastics & other accessories for making a complete termination / splice:

Stress Control Tube

3M Heat Shrink high K Stress Control tubes have been designed for providing electrical stress grading & relief on screen interruptions, which avoids localized stress accumulation leading to failures. 3M SCT tubes are made from specially formulated Polyolefin and provide good balance between electrical and mechanical properties.

Features:

- Good chemical resistance & thermal aging properties
- Split resistant
- Higher shrink ratios ensure versatility/ low inventories

Stress Control Mastic

3M Stress Control Mastics are integral part of Stress grading system used in 3M Heat Shrink cable splicing and termination kits along with 3M heat shrink Stress Control Tubes for providing stress relief on screen interruptions. The self amalgamating, high K & low permittivity mastics provide excellent void filling and stress control.

Features:

- Suitable for both XLPE and PILC cables
- High resistance to humidity and moisture ingress

Dual Wall Tube

3M Heat Shrink Dual Wall Tubes are two layered, co extruded with inner insulating and outer semi-conducting layers. These tubes provide excellent insulation, outer screen continuity and exhibit excellent mechanical and electrical properties.

Features:

- Co-extruded to avoid any air pockets between insulation and screen
- Reduces no. of tubes for heat shrinking in a splice
- Split resistant

Anti-Tracking Tube

3M Heat Shrink Anti-Tracking Tubes have been specially designed to meet the outdoor conditions & performance requirements of medium voltage power cable end terminations. The material resists to splitting and has excellent arc resistance.

Features:

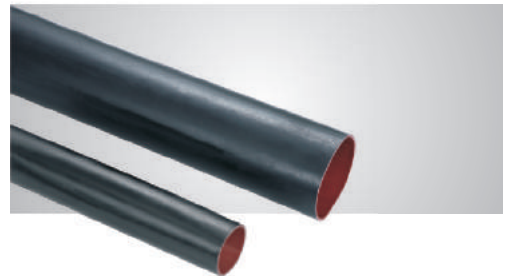
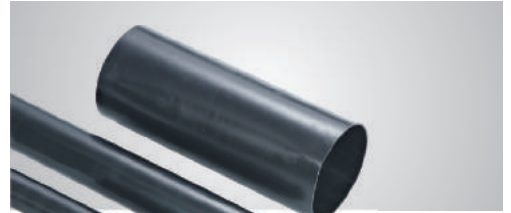
- Suitable for outdoor and indoor applications
- Flexible, conforms to shapes/ core bends
- Halogen free, Self extinguishing

Insulating Tube

3M Heat Shrink Insulating tubes have been designed for providing electrical insulation, protection from mechanical impact and provide atmospheric sealing. These are made from specially formulated Polyolefin and offer outstanding physical, electrical & chemical resistant properties.

Features:

- Excellent thermal aging properties & Best-in-class weather/chemical resistance



Resin Solutions

Scotchcast 450

Kastex now Scotchcast 450 Cable Accessories for Low Voltage PVC / PILC / XLPE Cables have been designed for simplicity in installation and a prolonged service life. Kastex joints and terminations for LV Cables are based on a cast resin system. The casting resin is polyurethane based which has complete compatibility with the cable components.

Features:

- Simple & easy to install
- Provides good mechanical/moisture ingress protection
- Option of crimping ferrules or mechanical connectors
- Tee Joints also available

Taped Joints

Tapex/Taped System of cable jointing follows the time tested technique of rebuilding the cable construction. The system is simple and is based on three components:

- Self Amalgamating Insulating Tapes
- Self Amalgamating Semi-Conducting Tapes
- Non Linear Stress Grading Pads

Features:

- Few Components and no mastics
- Easy to install as it requires no heating
- No tapering of XLPE Insulation
- Cold Flow property
- Thermally compatible with XLPE Insulation
- Provides complete mechanical & moisture protection

RMU Solutions

Screened Tee Separable Connectors

3M Range of Dead Break Screened Separable Connectors are designed for compact SF6 insulated Ring Main Units with Outer Cone bushing Type 'C' & bolted interface according to CENELEC 50180 & 50181.

These kits are available for a XLPE insulated cables of 6.35/11 kV and 12.7/22 kV grades – 400A/630 A applications.

Features:

- Compact in design with inbuilt cable termination.
- Made from Superior Silicone Rubber
- Screened outer surface – No influence of surrounding environment
- Tee Connectors available for multiple cable application
- No heating or taping required
- Maintenance free, simple disconnection & reconnection
- Safe in case of accidental touch
- Watertight Design - Resistant to moisture ingress even under submerged condition
- Provision for cable testing
- Meets IEC 60502-4:1997



Terminal Protector

The Terminal Protector is an insulating barrier system, which can be used in conjunction with any indoor termination. The Terminal Protector is a unique insulating system for providing Phase to Phase and Phase to Earth insulation to power cable terminals where these terminations need to be installed in very compact areas like motor terminal boxes, ring main units, distribution transformers etc. The Terminal Protector comprises of an insulating bellow and grommets. All these components are injection moulded from EPDM / Si rubber.

Features:

- Accommodates a large cable cross section - 25 to 300 sq mm and 400 to 630 sq mm
- Also fits sector shaped cables
- Facilitates direct voltage testing
- Easy to fit, Re-openable, Re-usable
- Can be installed on any termination i.e. Premoulded Heat Shrink etc.
- Can be installed on XLPE, PVC or PILC cable



Aerial Bunched Cable Accessories

The Insulation Piercing Connector (IPC) is used for connecting an insulated conductor with a branch conductor without removing the insulation of the conductor. The application is mainly for insulated Aerial bunched cables. Each connector is in two halves, interconnected with a bolt having a shear head top. The shear head of the bolt shears off at predetermined torque. IPC of this design is when both the main & tap conductors are tightened simultaneously whereby the teeth of the contact plates penetrate the insulation and establish a contact.

| 3M Description | Main to tap Conductor size mm2 |
|----------------|----------------------------------|
| ABCC 01 | 95 - 70 to 25 - 16 |
| ABCC 02 | 95 - 70 to 95 - 70 |
| ABCC 03 | 185 - 120 to 25 - 16 |
| ABCC 04 | 185 - 120 to 185 - 70 |
| ABCC 05 | 95 - 16 to 95 - 16 |
| ABCC 06 | 185 - 70 (35) to 35 - 6 (50 - 6) |
| ABCC 07 | 120 - 16 to 16 - 1.5 |
| ABCC 08 | 95 - 16 to 50 - 10 (6) |
| ABCC 09 | 120 - 6 to 6 - 1.5 |



Dead End Clamps

| | |
|---------------------------------------|------------------------|
| Wedge Type 25-35 mm ² / | 16-25 mm ² |
| 2 Bolted Type 25-70 mm ² / | 25-70 mm ² |
| 3 Bolted Type 70-150 mm ² | 70-120 mm ² |

Suspension Clamps

SCB 25-70 mm²
 SCB 70-210 mm²
 16-120 mm²
 Suspension clamps for Bare Messenger and for Insulated Messenger



Preinsulated Bimetal Lugs & Aluminium Sleeve

| Model No | | Conductor (mm ²) | | RANGE - Type 1 | | RANGE - Type 2 | |
|----------|------|------------------------------|-----------|----------------|-------------|----------------|-------------|
| PBCL 101 | 16 | PIAS 101 | 16 - 16 | PIAS 101 T | 16 - 16 | PIAS 101 T | 16 - 16 |
| PBCL 102 | 25 | PIAS 102 | 25 - 25 | PIAS 102 T | 25 - 25 | PIAS 102 T | 25 - 25 |
| PBCL 103 | 35 | PIAS 103 | 35 - 35 | PIAS 103 T | 35 - 35 | PIAS 103 T | 35 - 35 |
| PBCL 104 | 50 | PIAS 104 | 50 - 50 | PIAS 104 T | 50 - 50 | PIAS 104 T | 50 - 50 |
| PBCL 105 | 54.6 | PIAS 105 | 70 - 70 | PIAS 105 T | 54.6 - 54.6 | PIAS 105 T | 54.6 - 54.6 |
| PBCL 106 | 70 | PIAS 106 | 95 - 95 | PIAS 106 T | 70 - 70 | PIAS 106 T | 70 - 70 |
| PBCL 107 | 95 | PIAS 107 | 120 - 120 | PIAS 107 T | 95 - 95 | PIAS 107 T | 95 - 95 |
| PBCL 108 | 120 | PIAS 108 | 150 - 150 | PIAS 108 T | 120 - 120 | PIAS 108 T | 120 - 120 |
| PBCL 109 | 150 | PIAS 109 | 185 - 185 | PIAS 110 | 16 - 25 | | |
| PBCL 110 | 185 | PIAS 111 | 25 - 35 | | | | |

End Caps

| Model No | Conductor Range (mm ²) |
|----------|------------------------------------|
| CEC 101 | 6 - 95 |
| CEC 102 | 70 - 185 |

Eye Hooks

