

Raychem heat shrink terminations
for polymeric cables 52 / 72kV

Raychem termination systems for polymeric insulated cables 52/72kV

Application

The Tyco Electronics Raychem 52/72kV terminations are suitable for all climates, areas and environments, even severely polluted areas, and for all installation conditions, including top feed installation.

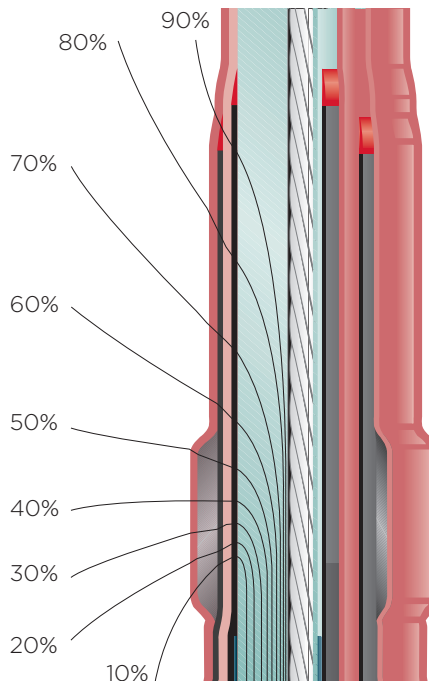
Our heat shrink accessories have been used by utilities and industrial companies around the world for more than 35 years. This ongoing field experience has made Tyco Electronics Energy Division a leader in materials science and technology for high-voltage applications. The Energy Division's materials technology is at the core of the development of our heat shrink terminations. The materials used in Tyco Electronics Raychem cable accessories have been extensively optimized with respect to product design and function, manufacturing and expected service environments.

Features

- Compact and modular design
- Heat-shrinkable stress control sleeves
- Non-tracking, heat-shrinkable outer insulation
- Water- and corrosion-resistant
- Different creepage distances available
- Easy to install
- Suitable for compression and mechanical lugs
- No special or expensive tools
- Lightweight components
- Unlimited shelf life under normal storage conditions
- No oil or compound filling
- Reduced waste for disposal
- Tested in accordance to IEEE 48 and IEC 60840
- Manufactured according to ISO 9001 and ISO 14001



Stress control diagram



Construction and design

72kV Outdoor termination

Torque controlled lug

Insulating and non-tracking heat-shrinkable outer tube

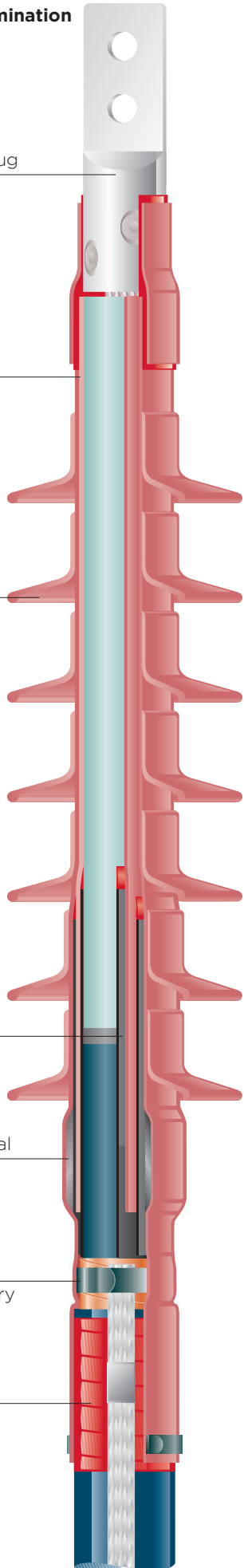
Heat-shrinkable sheds

Heat-shrinkable stress-control tube

Stress-relief material

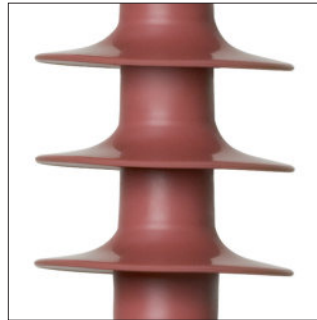
Solderless grounding accessory

Sealant



Torque-controlled lug

- Variety of different rods/palms available
- Body made of tinned aluminum alloy
- Torque-controlled shear-off bolts
- Suitable for aluminum and copper conductors (see brochure EPP-0850)



Sheds

- Due to the installation of several numbers of sheds creepage lengths above 40mm/kV are available and covering the most common and also extreme pollution levels
- Sheds have excellent tracking and erosion resistance characteristics



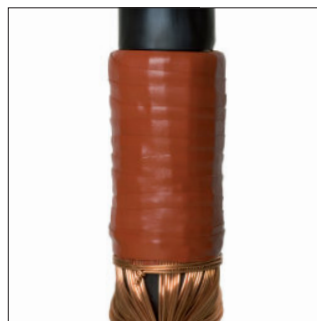
Insulating and non-tracking tube

- Insulating tubes are UV- and water-resistant and perform reliably even when exposed to sudden temperature variations
- Insulating materials conform to Tracking and Erosion Tests as per ASTM D2303 and IEC 112
- Insulating tubes have an excellent tracking and erosion resistance characteristics



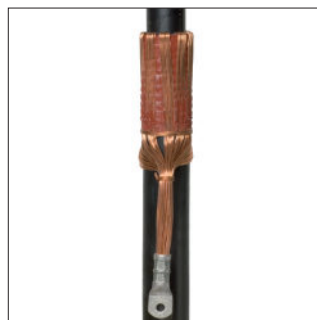
Electrical stress control tube

- Electrical stress control tubes are used to smooth out the electrical field at the cable end; this is achieved by the unique resistive and capacitive properties of the heat-shrink material



Sealant

- Track-resistant sealant that melts during shrinking process results in a reliable barrier against moisture



Solderless grounding connection

- Solderless connection is used to connect metal shields
- Solderless connection can be provided for each available cable construction e.g. copper wires, metal sheath, CAS

Raychem heat shrink terminations for polymeric insulated cables 52/72kV

Technical Information

Application range 52/72kV termination kits

| | Diameter over prepared cable insulation | Diameter over cable sheath |
|----------|---|----------------------------|
| Size 1* | 30 – 45 mm | ≤ 60 mm |
| Size 2 | 38 – 55 mm | ≤ 70 mm |
| Size 3 | 48 – 65 mm | ≤ 80 mm |
| Size 4 | 58 – 77 mm | ≤ 100 mm |
| Size 5** | 70 – 86 mm | ≤ 110 mm |

*No 72kV Long Creepage termination kit available for this size

** Not available for 52kV

Application data 52/72kV termination kits

| Standard terminations | 52kV Indoor | 52kV Outdoor | 72kV Indoor | 72kV Outdoor | 72kV Long creepage |
|-------------------------|-------------|--------------|-------------|--------------|--------------------|
| Termination length | 700mm | 850mm | 950mm | 1200mm | 1500mm |
| Approx. creepage length | 1220mm | 1430mm | 1600mm | 2200mm | 3000mm |
| Number of sheds | 2 | 4 | 4 | 7 | 10 |
| Approx. kit weight | 6kg | 6.5kg | 7kg | 7.5kg | 9.5kg |

Technical data 52/72kV termination

| Standard terminations | 52kV | 72kV |
|---|-------|-------|
| Maximum voltage to ground | 26kV | 40kV |
| Basic impulse level | 250kV | 350kV |
| Max. continuous conductor operating temperature | 90°C | 90°C |
| Max. conductor emergency temperature | 130°C | 130°C |
| Conductor short circuit temperature | 250°C | 250°C |

Tools for XLPE cables

Tools required for cable preparation can also be purchased or rented from Cable Services.



Cable stripper



Gas torch

Add-on

Fiber optic kit



Cable clamps



To place an order or for more information please contact your Cable Services sales team.

Cable Services - Wrexham
Rhosddu Industrial Estate, Rhosrobin,
Wrexham LL11 4YZ.
Tel: 01978 340450
Fax: 01978 311315
Email: sales@cableservices.co.uk

Cable Services - Stone
Unit 2 Douglas Park, Opal Way,
Stone Business Park, Stone,
Staffordshire ST15 0YJ
Tel: 01785 825970
Fax: 01785 825977
Email: central@cableservices.co.uk

Cable Services - Liverpool
43 St. Johns Road,
Liverpool L20 8AZ.
Tel: 0151 9339022
Fax: 0151 9339765
Email: lpool@cableservices.co.uk

Smith Electrical - Glasgow
Unit 14, Block 8,
Thornliebank Industrial Estate,
Glasgow G46 8JH.
Tel: 0141 621 2060
Fax: 0141 638 9996
Email: sales@smithelec.co.uk



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