



Energy Division

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

# Raychem termination systems for polymeric insulated cables 52/72kV

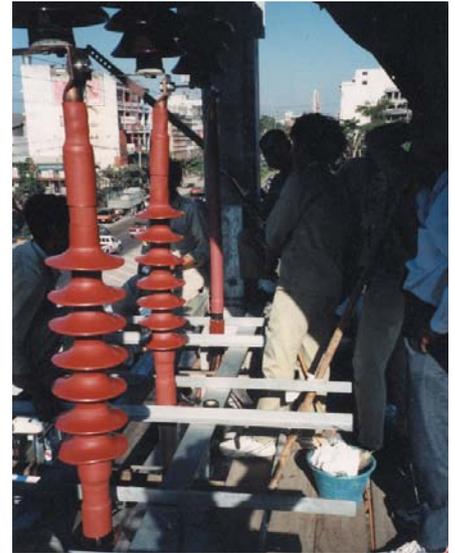
## Application

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.

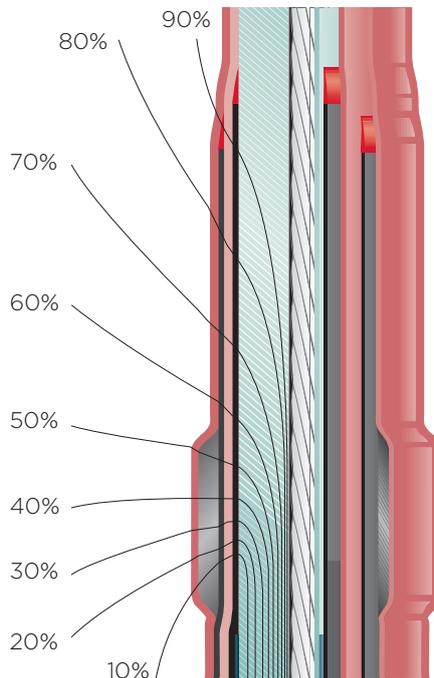
Our heat shrink accessories have been used by utilities and industrial companies around the world for more than 35 years. This ongoing field experience has made Tyco Electronics Energy Division a leader in materials science and technology for high-voltage applications. The Energy Division's materials 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

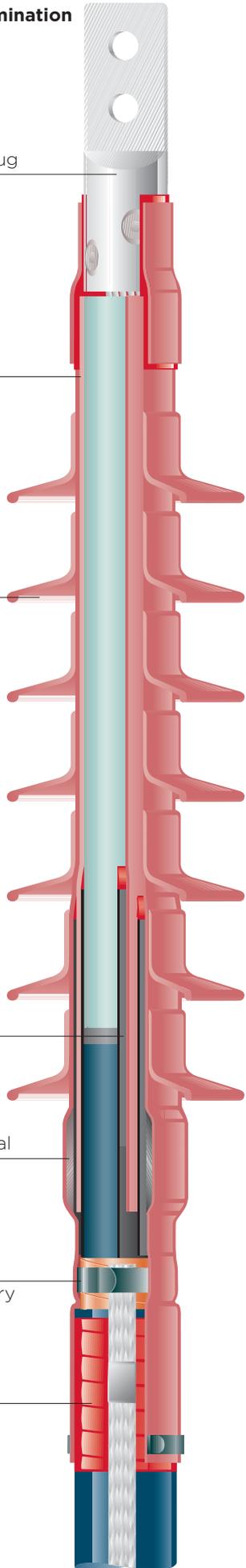
Heat-shrinkable sheds

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 at Tyco Electronics Energy Division. (See brochure EPP-0756 and EPP-0071)



### Add-on

Fiber optic kit  
(See brochure EPP-1623)



Cable clamps



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**Energy Division – innovative and economical solutions for the electrical power industry: cable accessories, connectors & fittings, insulators & insulation, surge arresters, switching equipment, lighting controls, power measurement and control.**

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