tyco Electronics

Energy Division
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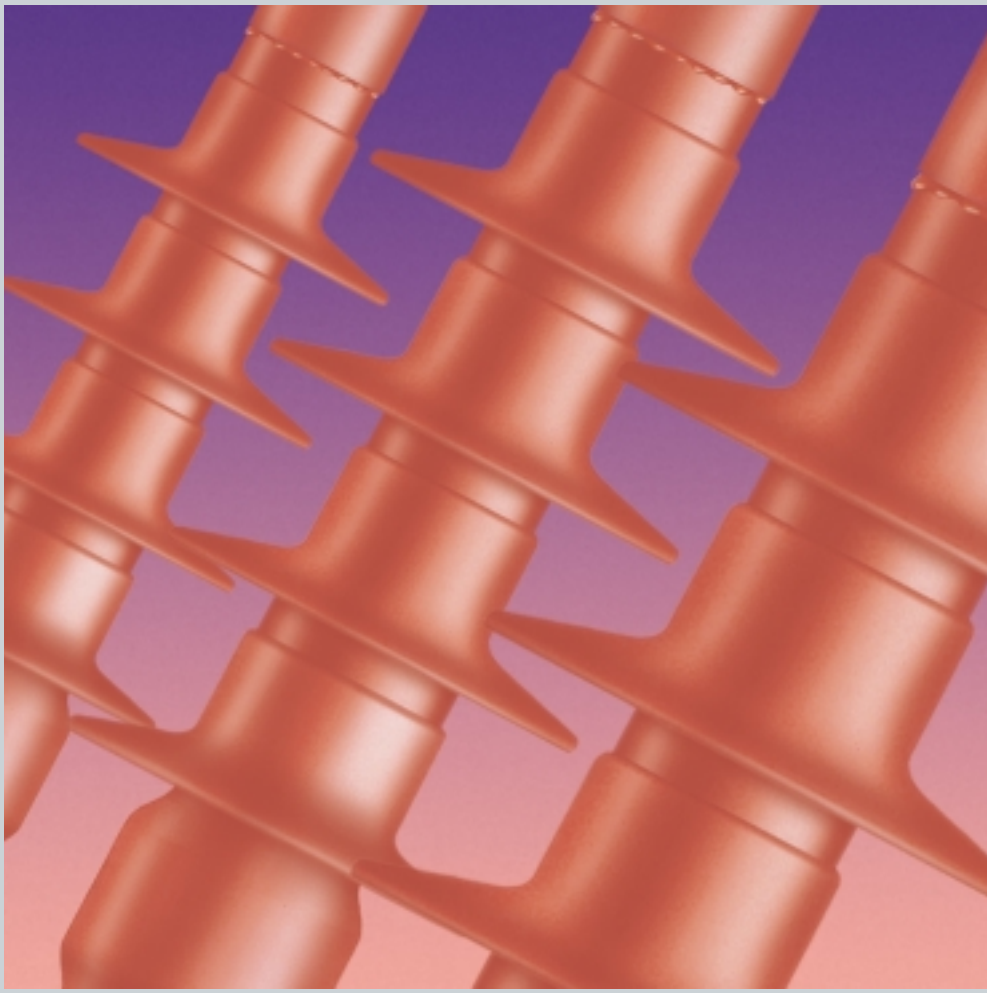
Terminations for Polymeric Insulated Cables up to Um 52 kV



Raychem

Terminations for Polymeric Insulated Cables up to Um 52 kV

Modern Industry
Modern industry requires a versatile and dependable electrical power supply which can be rapidly extended and maintained.
The Energy Division contributes to a high level of efficiency with a cable termination system specially designed for cables up to U_m 52 kV.

Raychem terminations have a range of features which decisively reduce downtime.

Proven Performance
This slim design simplifies connection in confined spaces. Users also choose our system because it has proved its reliability in exhaustive test programs over more than 30 years of successful material performance in the field, even under extreme conditions. The tough but highly flexible materials allow bending and vibration of the terminations.

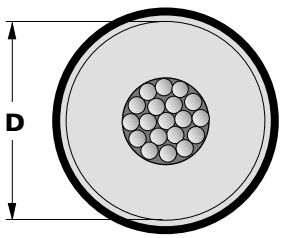
Practical
The practical advantages of the system arise from the heat-shrinkable feature of Raychem termination components, which allow installation by site personnel without special tools or equipment.
Each kit covers a number of cable sizes. Since no curing or vulcanizing is involved the completed termination can be energized immediately after installation.

Technical Service
Careful consideration is given to local operating conditions and our customer service engineers are always at hand with technical advice and assistance. Specific product development, on-site supervision and training of cable fitters in cable preparation and installation are all part of the Energy Division's determination to fulfill its customers total requirements.

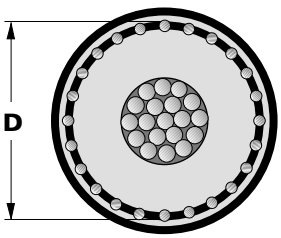
A Complete System
With more than 35 years of experience The Tyco Electronics Energy Division is the leader in heat-shrinkable materials and one of the largest cable accessory manufacturers.
The versatile termination system described here is just one of the range of products made for sealing, insulating, jointing and terminating in the electrical industry.

Selection criteria for Raychem indoor and outdoor IHVT/OHVT terminations for polymeric insulated cables up to Um 52 kV

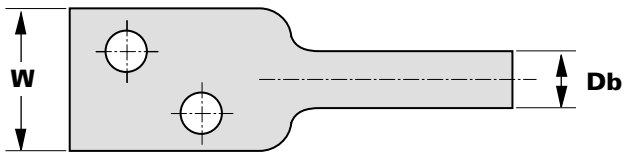
Metal tape shield or lead sheath



Wire shield



Cable lug



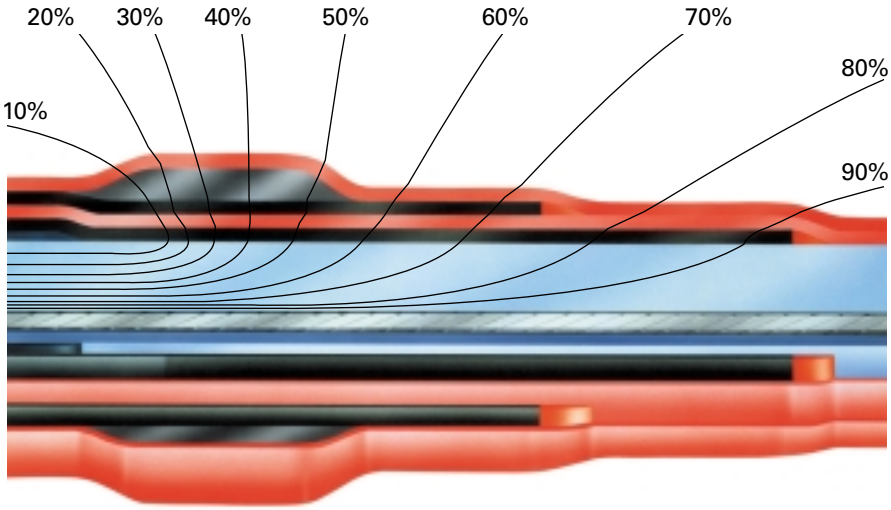
IHVT = Indoor high voltage termination
OHVT = Outdoor high voltage termination

Raychem Kit Number IHVT or OHVT		**Cable size (mm)**		**Cable lug barrel diameter Db(mm)**		**Cable lug width W(mm)**
Wire shield	Metal tape or lead sheath	Dielectric **D**	max over cable jacket	min	max	max
5212	5222	30-45	60	11	22	32
5213	5223	38-52	70	15	30	40
5214	5224	50-65	85	25	50	65
5215	5225	63-77	100	40	70	90

Technical Information

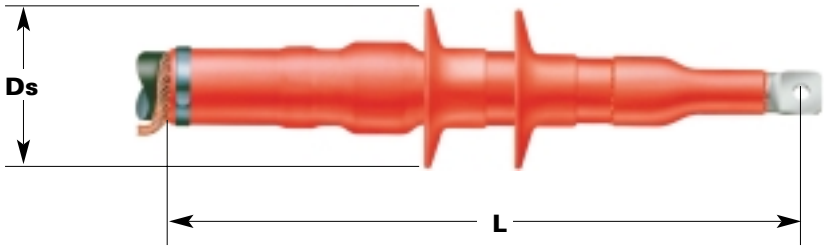
Electrical Stress Control

Screened or shielded power cables require electrical stress control in order to reduce the electrical stresses at the end of the screen and at the termination surface to avoid partial discharge and surface corona under all service conditons. Corona or electrical discharge can ultimately destroy the cable insulation, causing premature failure.
Raychem's stress control sleeves have electrical properties that smooth out the electrical field at the end of the cable.
This stress plot shows the voltage distribution in the termination. Lines of equalpotential illustrate the voltage gradient in the termination.
The lines spread out as they leave the termination, indicating a reducing field intensity.
This is achieved by the unique resistive and capacative properties of the heat-shrinkable material.



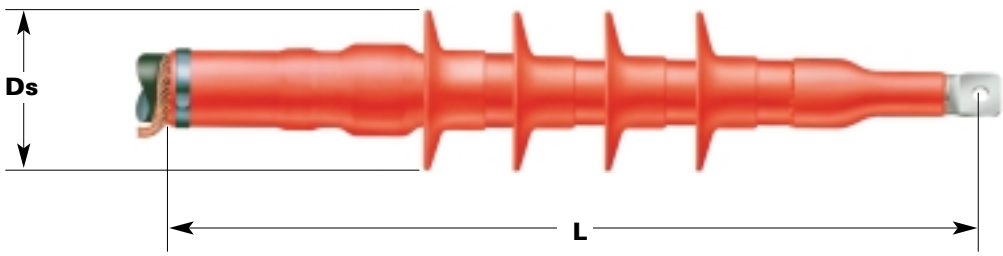
Stress plot of equipotentials

IHVT



Raychem IHVT kit number		Termination dimensions		Creepage length	Approx.weight	Box size
Wire shield	Metal tape or lead sheath	Length **L** (mm)	Shed diameter **Ds** (mm)	min (mm)	(mm)	(kg) (mm)
5212	5222	800	155	970	5.00	1024x209x266
5213	5223	800	175	980	5.00	1024x209x266
5214	5224	800	205	1020	5.50	1024x209x266
5215	5225	800	225	1020	6.30	1024x209x266

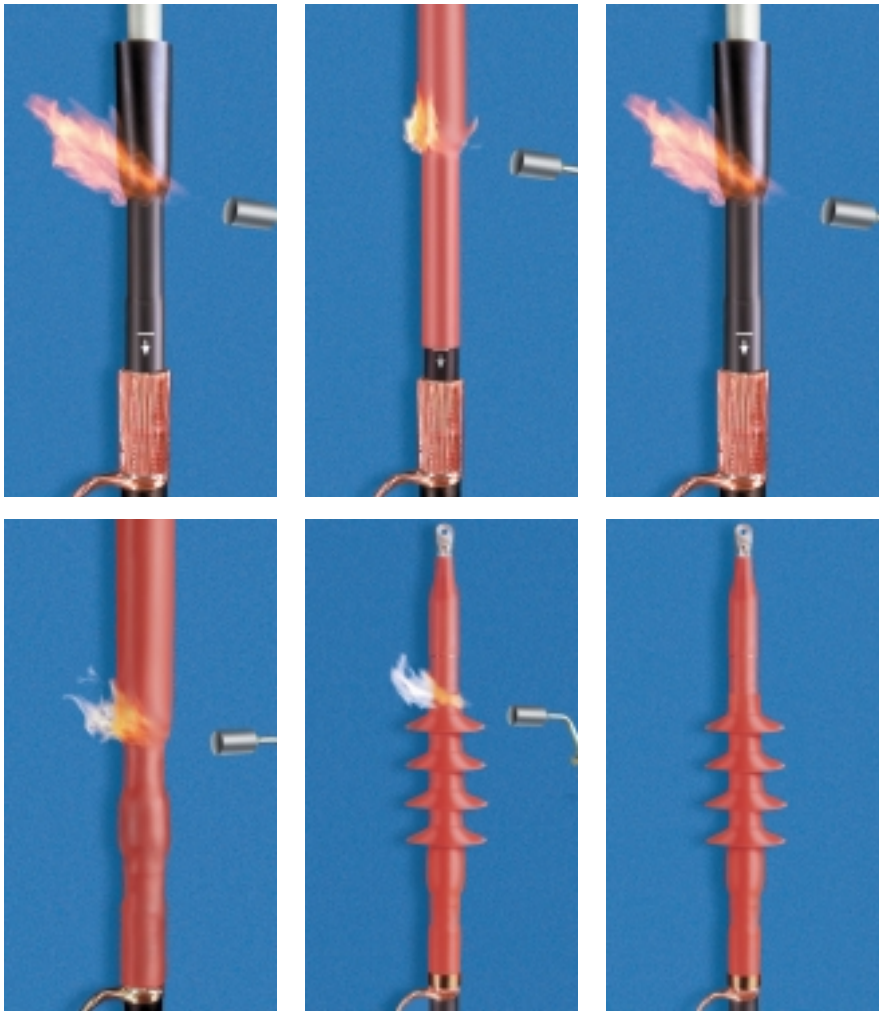
OHVT



Raychem OHVT kit number		Termination dimensions		Creepage length	Approx.weight	Box size
Wire shield	Metal tape or lead sheath	Length **L** (mm)	Shed diameter **Ds** (mm)	min (mm)	(kg)	(mm)
5212	5222	1000	155	1340	5.50	1364x194x250
5213	5223	1000	175	1360	5.75	1364x194x250
5214	5224	1000	205	1430	6.25	1364x194x250
5215	5225	1000	225	1440	7.50	1364x194x250

Installation is easier and more reliable:

The set of pre-engineered components requires no special or expensive tools for installation, only a simple set of standard procedures, no soldering required.



Energy Division – a pioneer in the development of economical solutions for the electrical power industry. Our product range includes: cable accessories, connectors & fittings, electrical equipment, instruments, lighting controls, insulators & insulation enhancement and surge arresters.

For more information and your country contact person, please visit us at:
http://energy.tycoelectronics.com

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