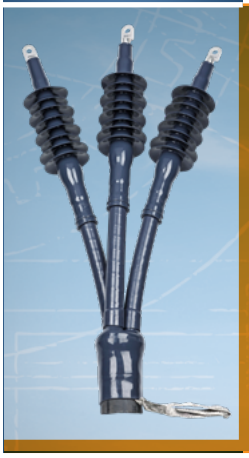


TE's Raychem COLD SHRINK TERMINATIONS CSTI/CSTO

For Polymeric Insulated Cables up to 52 kV

TE's Raychem COLD SHRINK TERMINATIONS CSTI/CSTO

For Polymeric Insulated Cables up to 52 kV

TE's Raychem Cold Shrink Terminations CSTI/O are made from a high performance, liquid silicone material which is specially formulated for excellent tracking and split resistance. The extra-long silicone stress cone is integrated within the termination which ensures correct positioning. As an option, moisture sealing at the lug can be integrated into the termination body, eliminating the need for additional sealing tapes.

They offer a reliable, fast and easy-to-install system to ensure trouble free service and maintain high network reliability. Our key components are pre-expanded on one holdout system, allowing neat installation in compact environment on the prepared cable.

TE's Raychem Cold Shrink Terminations CSTI/O are designed to cover a wide range of applications and to accommodate the variety of cable and conductor types used in the networks. Range-taking mechanical lugs ensuring reliable installation and service can be supplied with the kit.

Product Features

- Easy to install spiral holdout
- Integrated sealing mastic (optional)
- Outstanding weathering, UV and Ozone Resistance
- Chemically resistant
- Resistant to fungi
- Excellent electrical properties, including good tracking resistance and high dielectric strength
- Electrical stress control of the screen cut area using integrated conductive geometrical stress cones
- Hydrophobic (water-repellent)
- Non-flammable
- Self-extinguishing
- Retains performance over wide temperature range -45 to +150°C
- Excellent resistance to splitting and permanent set
- Mechanical lug and compression lug to IEC 61238-1 and GB 9327 can be supplied
- GB 12706.4 requirements which include IEC, BS, VDE, CENELEC HD and other international specifications
- Manufacturing site ISO 9001 & ISO 14001 qualified

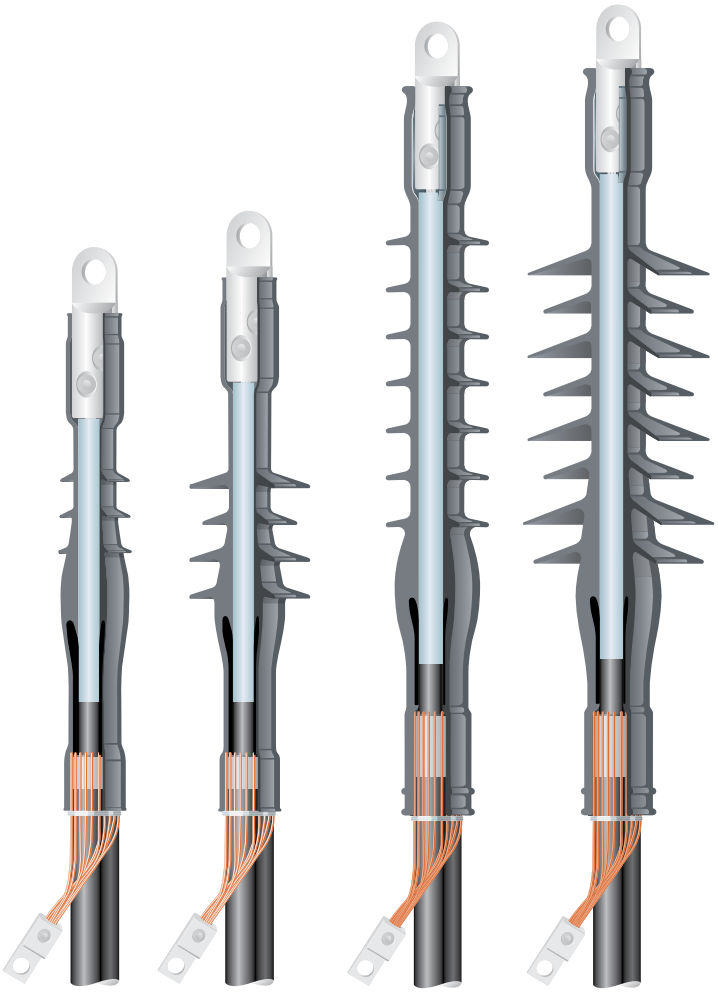
Benefits

- Pre-expanded termination body with integrated stress control deflector
- Single piece silicone termination body with optimal mechanical expansion ratio allows a wide application range
- The extra-long silicone stress cone is integrated with the termination and reduces positioning
- Well-known and easy-to-install holdout system, rip cord pulling direction towards the lug not the bottom of the termination
- Easy to install in tight switchgear compartments
- Accommodates mechanical lug and compression lug

Mechanical Lugs

TE's Raychem Cold Shrink Terminations CSTI/O can be provided with TE's BLMT mechanical lugs to ensure a reliable connection for different conductor materials of shapes and types used in today's network. The preset shear torque of the bolts ensures that the correct contact pressure is always achieved. The specially designed contact surface on the inside of the lug breaks up any oxide layer and ensures reliable service over the entire service life of the termination. Different sizes of mechanical lugs with wide application ranges are available. They have been tested in accordance with IEC-61238-1 Class A and GB 9327.

The installation shear bolt heads can be ruptured manually by usage of ring spanner and or facilitated by the usage of a cordless impact wrench supplied (IT-1000-023).



Pre-expanded silicone termination body

The silicone termination body is delivered in a pre-expanded condition on a spiral holdout system. Silicone materials with excellent mechanical properties allow high expansion forces and therefore guarantee a wide application range. Integrated stress control deflector and sealing mastic on the top end of the termination provide exceptional electrical performance. The termination body can be easily removed from the spiral holdout with low release forces, particularly designed for termination applications.

Electrical stress control

Electrical stress control deflector is fully integrated within the silicone termination body. Conductive cone with an exactly defined geometrical design over the screen cut area provide excellent electrical stress control.

Technical data

VOLTAGE CLASS	(kV)	8.7/15(17.5) kV	12/20(24) kV	26/35(40.5) kV	27.5/52 kV
Cable Insulation Diameter	(mm)	16.0 - 42.3	18.0 - 44.3	28.0 - 58.3	37.0 - 53.0
Cross Section Range	(mm^2)	25 - 630	35 - 630	50 - 800	150 - 400
Max System Voltage U_m	(kV)	17.5	24	40.5	52
Basic Impulse Level	(kV)	95	125	200	250
Partial Discharge at 1.73 U_0	(pC)	<2	<2	<2	≤5
AC Voltage Withstand, 5 min	(kV)	39	54	117	124
DC Voltage Withstand, 15 min	(kV)	35	48	104	110

ORDERING INFORMATION

Voltage class 8.7/15(17.5) kV	Kit Description	Application Range (mm²)	Diameter Over Insulation MIN (mm)	Diameter Over Insulation MAX (mm)	Diameter Over Sheath MAX (mm)
Indoor (1-core cable)	CSTI-10-5015-SC-T	50 - 150	18	26	39
	CSTI-10-1840-SC-T	185 - 400	26	35	49
	CSTI-10-4063-SC-T	400 - 630	34	42	56.5
Outdoor (1-core cable)	CSTO-10-5015-SC-T	50 - 150	18	26	39
	CSTO-10-1840-SC-T	185 - 400	26	35	49
	CSTO-10-4063-SC-T	400 - 630	34	42	56.5
Indoor (3-core cable)	CSTI-10-2535-T	25 - 35	16	19	54
	CSTI-10-5015-T	50 - 150	18	26	72
	CSTI-10-1840-T	185 - 400	26	35	95
	CSTI-10-4050-T	400 - 500	34	42	102
Outdoor (3-core cable)	CSTO-10-2535-T	25 - 35	16	19	54
	CSTO-10-5015-T	50 - 150	18	26	72
	CSTO-10-1840-T	185 - 400	26	35	95
	CSTO-10-4050-T	400 - 500	34	42	102
12/20(24) kV		**(mm²)**	**(mm)**	**(mm)**	**(mm)**
Indoor (1-core cable)	CSTI-24-3595-SC-TT	35 - 95	18	25.1	38
	CSTI-24-1230-SC-TT	120 - 300	25	34.3	48
	CSTI-24-4050-SC-TT	400 - 500	35	40.3	54
	CSTI-24-630-SC-TT	630	42.4	44.3	59
Outdoor (1-core cable)	CSTO-24-3595-SC-TT	35 - 95	18	25.1	38
	CSTO-24-1230-SC-TT	120 - 300	25	34.3	48
	CSTO-24-4050-SC-TT	400 - 500	35	40.3	54
	CSTO-24-630-SC-TT	630	42.4	44.3	59
Indoor (3-core cable)	CSTI-24-3595-TT	35 - 95	18	25.1	72
	CSTI-24-1230-TT	120 - 300	25	34.3	94
	CSTI-24-400-TT	400	35	37.4	99
Outdoor (3-core cable)	CSTO-24-3595-TT	35 - 95	18	25.1	72
	CSTO-24-1230-TT	120 - 300	25	34.3	94
	CSTO-24-400-TT	400	35	37.4	99
26/35(40.5) kV		**(mm²)**	**(mm)**	**(mm)**	**(mm)**
Indoor (1-core cable)	CSTI-35-5070-SC-CN	50 - 70	28	33.4	46.1
	CSTI-35-9530-SC-CN	95 - 300	34	44	56.3
	CSTI-35-4080-SC-CN	400 - 800	45	58	73.5
Outdoor (1-core cable)	CSTO-35-5070-SC-CN	50 - 70	28	33.4	46.1
	CSTO-35-9530-SC-CN	95 - 300	34	44	56.3
	CSTO-35-4080-SC-CN	400 - 800	45	58	73.5
Indoor (3-core cable)	CSTI-35-5095-CN	50 - 95	28	35.1	87.4
	CSTI-35-9530-CN	95 - 300	34	44	109.3
	CSTI-35-400-CN	400	45	45	116.9
Outdoor (3-core cable)	CSTO-35-5095-CN	50 - 95	28	35.1	87.4
	CSTO-35-9530-CN	95 - 300	34	44	109.3
	CSTO-35-400-CN	400	45	45	116.9
27.5/52 kV		**(mm²)**	**(mm)**	**(mm)**	**(mm)**
Indoor (1-core cable)	CSTI-27.5-150-SC	150	39.4	40.8	48.9
	CSTI-27.5-185-SC	185	40.9	42.3	50.5
	CSTI-27.5-240-SC	240	43.1	44.5	52.9
	CSTI-27.5-300-SC	300	45.5	47.5	55
	CSTI-27.5-400-SC	400	48.6	50.6	58.3
Outdoor (1-core cable)	CSTO-27.5-150-SC	150	39.4	40.8	48.9
	CSTO-27.5-185-SC	185	40.9	42.3	50.5
	CSTO-27.5-240-SC	240	43.1	44.5	52.9
	CSTO-27.5-300-SC	300	45.5	47.5	55
	CSTO-27.5-400-SC	400	48.6	50.6	58.3

The application range given in the table is based on polymeric insulated cable according to GB 12706.2.3-2008 standard with stranded circular conductors. Trifurcation system available. Please contact your sales representative

Test reports

The products are type tested in accordance with GB 12706.4-2008 specifications.

te.com/energy

©2018 TE Connectivity Ltd. All Rights Reserved. EPP-3188-10/18-EN

Raychem, TE Connectivity and TE connectivity (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

FOR MORE INFORMATION:
TE Technical Support Centers

USA:	+ 1 800 327 6996
Canada:	+ 1 (905) 475-6222
Mexico:	+ 52 (0) 55-1106-0800
Latin/S. America:	+ 54 (0) 11-4733-2200
France:	+ 33 380 583 200
UK:	+ 44 0870 870 7500
Germany:	+ 49 896 089 903
Spain:	+ 34 916 630 400
Italy:	+ 39 333 250 0915
Benelux:	+ 32 16 351 731
Russia:	+7 495-790 790 2-200
China:	+ 86 (0) 400-820-6015