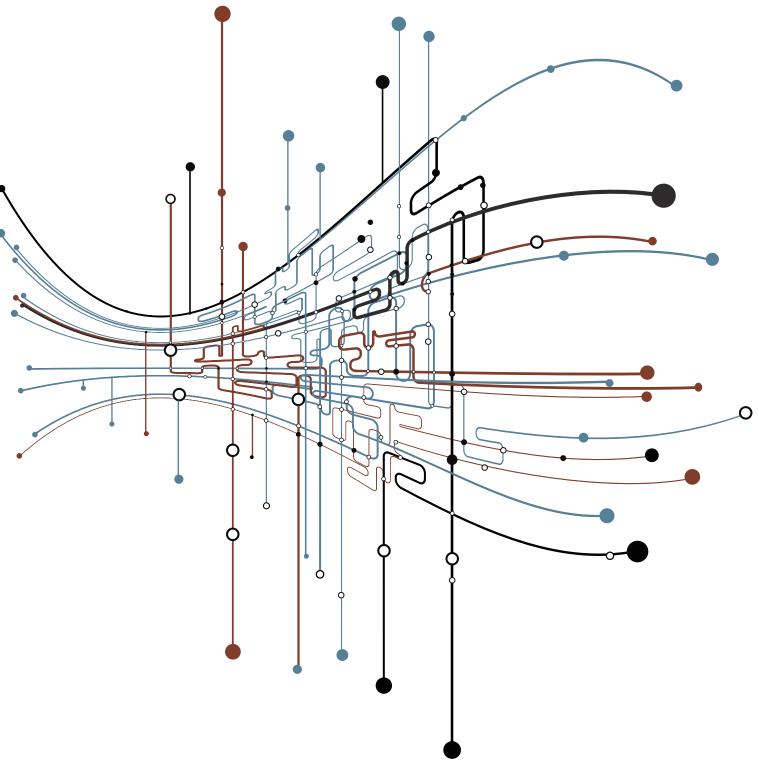




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Electrical Products & Solutions



ABOUT Cotran



Company establishment

Vision

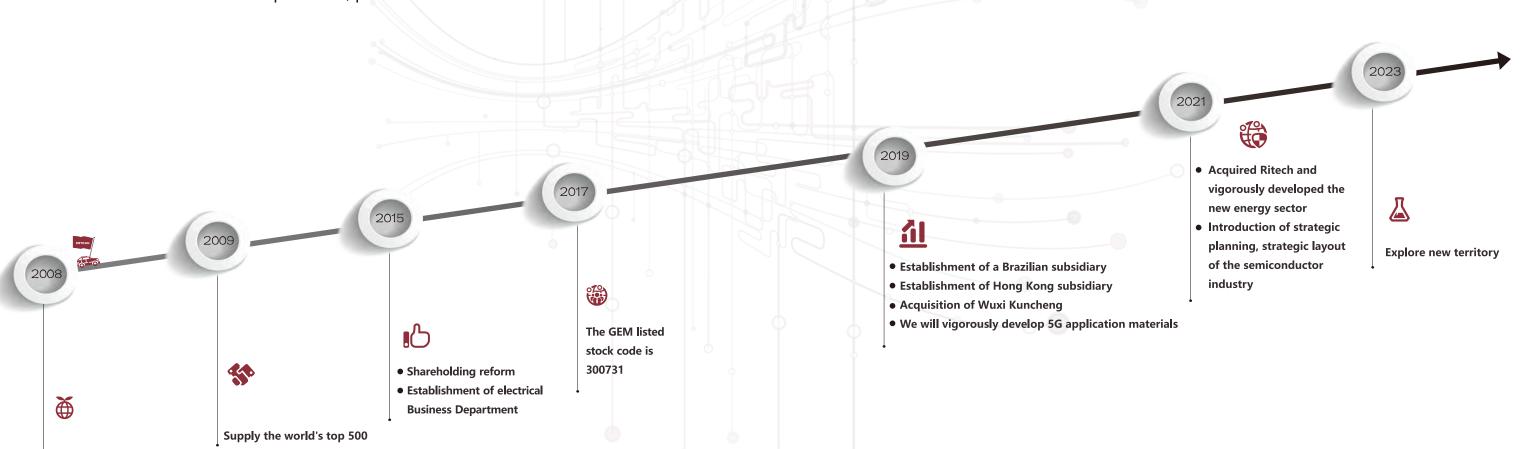
 To be world-class enterprise engaging polymer material application and development

Mission

- To provide satisfying integrated solutions and service of polymer material application and development so as to help costumers succeed
- To help employees to achieve career dreams by building up a mutual career platform

Core Value

- Customer first, employee orientated
- Honest and practical, professional and innovative



COTRAN

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Waterseal Mastic Tape

KC80(9228) is a conformable self-fusing rubber electrical insulating and sealing tape. KC80 consists of ethylene propylene rubber (EPR) and butyl mastic adhesive. It has strong adhesion to copper, aluminum, and cable jackets. It provides excellent water proofing performance and temperature stable at 90 °C, and withstanding of overload temperature up to 130°C.

Feactures

Continuous water proofing

Resistance to high/low temperature

Resistance to ozone, UV, xenon exposure

Highly self-fusing

Resistance to corrosion

New formulation for insulation

Technical Data

Property	Typical Value	Test Method
Tensile strength	1.29MPa	ASTM D 4325
Elongation at break	970%	ASTM D 4325
Dielectric strength	26.5KV/mm	ASTM D 4325
Adhesion (180°, Steel plate)	78.4N/50mm	ASTM D 1000
Ozone ageing	Pass	ASTM D 4388
UV ageing	Pass	ASTM D 4388
Xenon ageing	Pass	ASTM D 4388

Packing

Part No.	Dimension	Color	Rolls/Case
KC80(9228)	51mm×1.65mm×3m	Black	20

Note: Other size is available on request.

Certificates







Fire Proofing Tape

KC70 (777) is fire and electric arc proofing tape and is designed to protect power cable and terminations when exposed to potential failure in cable joints by forming a thick char barrier between flame and the cable. The resulting firewall acts a heat shield and flame barrier, thus protecting the nearby cable and accessories. KC70 (777) has excellent flame-retardant oxygen index, and outstanding self-fusion that similar products worldwide don't have.

Feactures

Self-fusing Flame-retardant Heat resistance Resistance to ozone, UV and xenon exposure

Technical Data

Property	Typical Value	Test Method
Tensile strength	6.1 MPa	GB/T 2951.11-2008
Elongation at break	510%	GB/T 2951.11-2008
Elongation at low temp.	131%	GB/T 2951.11-2008
Self-fusing	Pass	GA 478-2004 5.10
Water-resistance	Pass	GA 478-2004 5.6
Resistant to solvents	Pass	GA 478-2004 5.7~5.9
Oxygen index	54.59%	ASTM D 2863
Flame-retardant (*)	0.93	GA 478-2004 5.11

^{*} Char highness

Packing

Part No.	Dimension	Color	Rolls/Case
KC70(777)	51mmx0.76mmx6m	Black	20

Note: Other size is available on request.

Certificate



KC70







EPR High Voltage Insulation Tape

KC71(923) is a highly conformable, self-fusing ethylene propylene (EPR), high insulating tape. KC71(923) is used for main insulation applications of cable and other electrical devices up to 69kV. Operating temperature rated to 90°C. Emergency overload rating to 130°C.

Features

Highly self-fusing

Withstand 130°C/266°F short-term overload Resistance to ozone, UV, and xenon exposure

Premium EPR raw materials Excellent electrical properties

Technical Data

Property	Typical Value	Test Method
Tensile strength	2.0 MPa	ASTM D 4325
Elongation at break	720%	ASTM D 4325
Dielectric strength	28 kV/mm	ASTM D 4325
Volume resistivity	6.2×10 ¹⁴ Ω.cm	ASTM D 1000
Heat ageing (130°C 168H)	Pass	ASTM D 4325
Ozone ageing	Pass	ASTM D 4388
UV ageing	Pass	ASTM D 4325
Xenon ageing	Pass	ISO 4892-2

Packing

Part No.	Dimension	Color	Rolls/Case
KC71(923)	19mm×0.76mm×9.1m	Black	50
KC71(923)	25mm×0.76mm×5m	Black	50

Note: Other size is available on request.

Certificates



EPR Semi-conducting Tape

KC72(913) semi-conducting tape, is a highly conformable, self-fusing, semi-conducting ethylene propylene rubber (EPR) based, high voltage splicing tape. KC72(913) is used for repairing of XLPE cable terminations and joints or shielding for other devices up to 110KV It retains its conductivity when stretched.

Features

Resistance to ozone, UV, and xenon exposure Withstand 130°C/266°F short-term overload

Semi-conducting
Retains its conductivity when stretched

Technical Data

Property	Typical Value	Test Method
Tensile strength	1.31MPa	ASTM D 4325
Elongation at break	1100%	ASTM D 4325
Volume resistivity	< 7×10 ⁸ Ω·cm	ASTM D 4325
Heat ageing (130°C 168H)	Pass	ASTM D 4325
Ozone ageing	Pass	ASTM D 4325
UV ageing	Pass	ASTM D 4325
Xenon ageing	Pass	ISO 4892-2

KC72



Packing

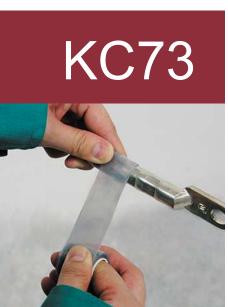
Part No.	Dimension	Color	Rolls/Case
KC72(913)	19mm×0.76mm×4.5m	Black	50

Note: Other size is available on request.

Certificates







Silicone Rubber Electrical Tape

KC73(770) is arc-resistant, anti-tracking, self-fusing silicone rubber tape with wide temperature tolerance of -50°C to 250°C. It has excellent electrical and physical properties in anti-tracking, arc resistance, and weather resistance, which can be applied through 15kV for insulation and sealing for cable and reenter connections. It also provides superior surface anti-tracking performance.

Features

Highly tracking resistance Withstand high/low temperature

Resistance to solvents Resistance to ozone, UV, and xenon exposure

Technical Data

Property	Typical Value	Test Method
Tensile strength	6.76MPa	ASTM D 4325
Elongation at break	480%	ASTM D 4325
Heat ageing (250°C 168H)	Pass	ASTM D 4325
Ozone ageing	Pass	ASTM D 4325
UV ageing	Pass	ASTM D 4325
Xenon ageing	Pass	ISO 4892-2

Packing

Part No.	Dimension	Color	Rolls/Case
KC73(770)	19mm×0.3mm×15m	Grey	50
KC73(770)	19mm×0.5mm×15m	Grey	50
KC73(770)	25mm×0.3mm×15m	Grey	50
KC73(770)	25mm×0.5mm×15m	Grey	50

Note: Other size is available on request.

Certificates



SGS



Metal Shielding Mesh

KC84 is an all-metal, flat, tinned copper open-weave shielding mesh that is compatible with power cable insulations and all high-voltage splicing and terminating materials. It elongates easily to conform and it is temperature stable. It has excellent resistance to oil, flame, corrosion. After immersed in liquid resin, it has good performance of compatibility with different kinds of cable, and good resistance to solvents, UV, ozone, and moisture. The self-lock design makes quicker installation.

Features

All-metal Resistance to ozone, UV, xenon exposure
Oil resistance Resistance to corrosion

Technical Data

Property	Typical Value	Test Method
Thickness	0.4mm	ASTM D 1000
Tensile strength	22ib/in	ASTM D 1000
Elongation at break	70%	ASTM D 1000
Resistivity	Pass	ASTM D 1373
Ozone ageing	Pass	ASTM D 1373
UV ageing	Pass	

Packing

Part No.	Dimension	Color	Rolls/Case
KC84	25mmx 0.4mmx 4.6m	Black	50

Note: Other size is available on request.

COA is an all motal flat tinner

KC84



Certificate







Linerless ERP Self-fusing Tape

KC79(9130) is a highly conformable, linerless ethylene propylene ruber (EPR), insulating tape that provides excellent thermal dissipation of splice heat. It has excellent physical and electrical properties, which help provide immediate moisture seal and void-free seal buildups. KC79(9130) is rated up to 90° C continuous operating temperatures and short-term 130° C overload temperature.

Features

Weather resistance

Wide range of temperature application

Excellent electrical properties

Technical Data

Property	Typical Value	Test Method
Tensile strength	1.70MPa	ASTM D 4325
Elongation at break	700%	ASTM D 4325
Dielectric strength	25KV/mm	ASTM D 4325
Dielectric constant	2.84	ASTM D 4325
Volume resistivity	1×10 ¹⁴ Ω·cm	ASTM D 1000
Ozone ageing	Pass	ASTM D 4325
UV ageing	Pass	ASTM D 4325
Xenon ageing	Pass	ISO 4892-2

Packing

Part No.	Dimension	Color	Rolls/Case
KC79(9130)	19mm×0.76mm×9m	Black	50

Note: Other size is available on request.

Certificates



Ultra-high Voltage Insulating Tape

KC76(962) is a highly conformable, ultra-high voltage insulating ,Ethylene Propylene Ruber (EPR) tape. It provides excellent physical and electrical properties. This product can be used ultra-high voltage (up to 138kV) applications. KC76(962) is rated up to 90 $^{\circ}$ C continuous operating temperatures and short-term 130 $^{\circ}$ C overload service.

Features

Chemicals resistance Resistance to ozone, UV

Technical Data

Property	Typical Value	Test Method
Tensile strength	4.12MPa	ASTM D 4325
Elongation at break	770%	ASTM D 4325
Volume resistivity	$4.73 \times 10^{11} \Omega/25 \text{mm}$	ASTM D 1000
Heat ageing (130°C 168H)	Pass	ASTM D 4325
Ozone ageing	Pass	ASTM D 4325
UV ageing	Pass	ASTM D 4325
Xenon ageing	Pass	ISO 4892-2



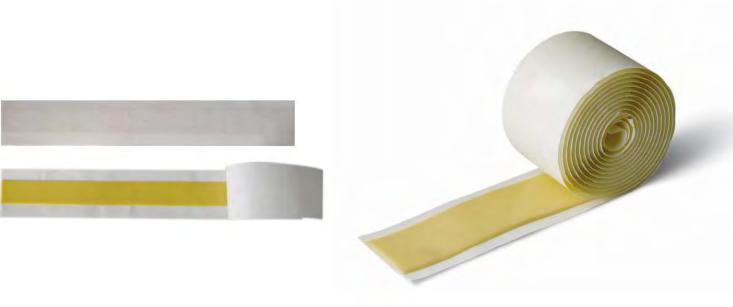
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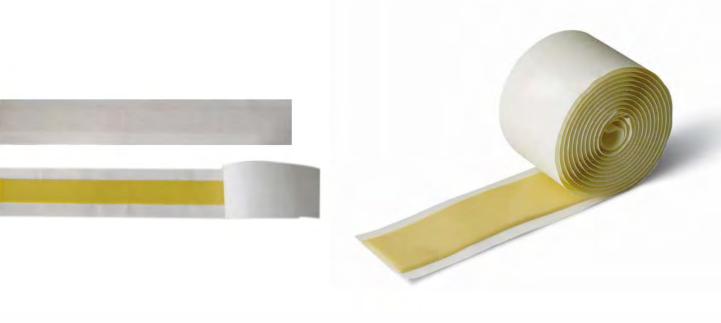
Part No.	Dimension	Color	Rolls/Case
KC76(962)	25mm×0.5mm×9m	Black	50

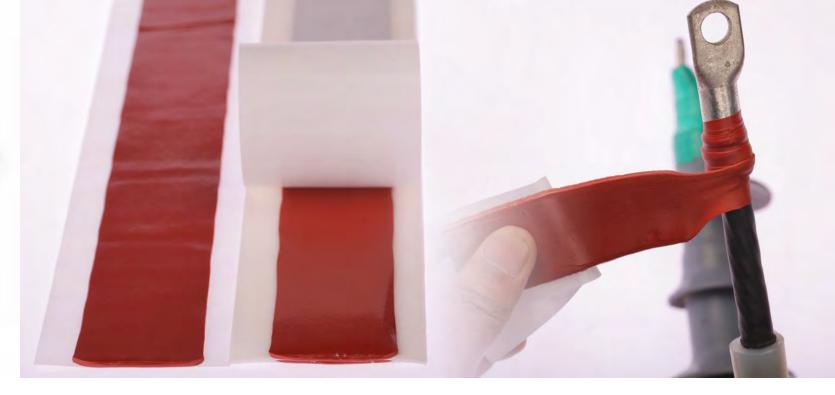
Note: Other size is available on request.

Certificates









KC100



Stress Release Mastic Tape

KC100 is a highly conformable, flexible, self-fusing a stress relieving, nitrile-butadiene rubber (NBR) based mastic tape. It is designed to control electric stress by reshaping the electrical field and build up a voltage gradient across the adjacent cable for cable joints and terminations through 36KV.

Features

Self-fusing Stress relieving Resistance to weather and ageing

Technical Data

Property	Typical Value	Test Method
Volume resistivity	$10^{10} \sim 10^{14} \Omega.mm$	GB/T 1692-2008
Elongation at break	500%	GB/T 528-2009
Dielectric strength	31.93KV/mm	GB/T 1695-2005
Dielectric constant	15~18	GB/T 1693-2007

Packing

Part No.	Dimension	Color	PCS/Case
KC100	30mm×2mm×360mm	Yellow	500

Note: Other size is available on request.

Waterproofing Butyl Tape

KC101 is a highly conformable, flexible, self-fusing butyl-based, water-proofing mastic tape. It provides excellent resistance to varying weather, ageing. Excellent adhesion to metals, cable insulations and jacket makes this tape used in sealant for cable terminations and joints through 36KV.

Features

High adhesion Weather resistance High flexibility High elongation at break

Technical Data

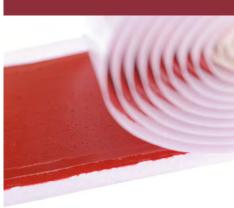
Property	Typical Value	Test Method
Volume resistivity	1×10 ¹⁴ Ωcm	GB/T 1692-2008
Elongation at break	1000%	GB/T 528-2009
Dielectric strength	15KV/mm	GB/T 1695-2005
Adhesion	1N/mm	GBT 2790-1995

Packing

Part No.	Dimension	Color	PCS/Case
KC101	30mm×2mm×360mm	Red	500

Other color; Red, Grey, Black, White Other size is available on request









KC86



Waterproofing Mastic Tape

KC86 (9166) is a highly conformable, flexible, self-fusing butyl-based, water-proofing mastic tape. It provides excellent resistance to varying weather, ageing. It provides excellent adhesion to metals, cable insulations and jacket. Excellent moisture resistance makes this product used for sealant for low voltage cable terminations and joints.

Technical Data

Property	Typical Value	Test Method
Operating Temp	0~32℃	ASTM D 4388
Water Absorption rate	<0.07%	ASTM D 4325
Volume Resistivity	$10^{14}\Omega$	ASTM D 4325
Ozone resistance	Pass	ASTM D 4388
UV resistance	Pass	ASTM D 4388

Packing

Part No.	Dimension	Color	Rolls/Case
KC86 (9166)	63mm×3.18mm×0.6m	Black	50

Note: Other size is available on request.

Electrical Insulation Filler Tape

KC78 is a conformable, flexible, self-fusing butyl-based, water-proofing mastic tape. It provide excellent resistance to varying weather, ageing. It provides excellent adhesion to metals, cable insulations and jacket. This product can be used in sealant as a water-proof filler for low voltage cable terminations and joints.

Technical Data

Property	Typical Value	Test Method
Tensile strength	3.72N/10mm	ASTM D 1000
Elongation at break	>602%	ASTM D 1000
Breakdown voltage	36.1KV	ASTM D 1000
Volume resistivity	1.53x10 ¹³ Ω·cm	ASTM D 1000
Copper corrosion	None	ASTM D 69

Packing

Part No.	Dimension	Color	Rolls/Case
KC78	38mmx3.175mmx1.5m	Black	40

Note: Other size is available on request.

KC78



Certificates



Certificates









PIB Self-fusing Tape

KC74 is a self-fusing, conformable, based on PIB (Polyisobutylene) rubber tape. It is a versatile material for waterproofing, corrosion protection, jointing and repair of cables, used indoors and outdoors through 10kV. Product properties and correct application ensure waterproof connections (for fresh and sea water) in a wide range of temperatures.

Technical Data

Property	Typical Value	Test Method
Tensile strength	1.86MPa	ASTM D 4325
Elongation at break	769%	ASTM D 4325
Dielectric strength	32.9KV/mm	ASTM D 4325
Dielectric constant	2.82	ASTM D 4325
Dissipation factor	0.0015	ASTM D 4325
Heat ageing (130°C 168H)	Pass	ASTM D 4388
Ozone ageing	Pass	ASTM D 4388
UV ageing	Pass	ASTM D 4388
Xenon ageing	Pass	ASTM D 4388
Water absorption	< 0.06%	ASTM D4325

Packing

Part No.	Dimension	Color	Rolls/Case
KC74	19mm×0.51mm×10m	Black	50

Note: Other size is available on request.

Certificates



Vinyl Mastic Tape

KC75 is a self-fusing, conformable, vinyl backing mastic tape. KC75 seals out moisture and protects against corrosion without the need for heating tools or using multiple tapes. KC75 is designed for cable sheath repair, low voltage insulating, conduit repair and protection of CATV components as well as other general taping applications.

Technical Data

Property	Typical Value	Test Method
Adhesion to steel	18.7N/10mm	ASTM D 1000
Adhesion to PE	20.2N/10mm	ASTM D 1000
Dielectric strength	21KV/mm	ASTM D 4325
Volume resistivity	1.66x10 ¹³ Ω	ASTM D 1000
Water Absorption	<0.2%	ASTM D 4325

KC75



Packing

Part No.	Dimension	Color	Rolls/Case
KC75	38mmx0.635mmx6m	Black	40

Note: Other size is available on request.

Certificates













All-Weather Electrical PVC Tape

KC63 (833) is a premium grade, all-weather, vinyl-insulating, conformable, pressure sensitive PVC tape, composed of the high elastic base material and adhesive. It is designed to perform continuously between a temperature range of 18° C to 105° C. It shows superior performance at low temperature. It has excellence resistance to abrasion, moisture, alkalis, acids, corrosion, and varying weather conditions. It provides moisture-tight electrical and mechanical protection with rating voltage up to 600 V. It is UL listed and CSA certified "insulating tape".

Features

High tensile strength Flat High elongation at break W

Flame retardant

Withstand high/low temperature

Technical Data

Property	Typical Value	Test Method
Tensile strength	69.5N/19mm	ASTM D 1000
Elongation at break	280%	ASTM D 1000
Dielectric strength	47.28KV/mm	ASTM D 4325
Adhesion (Steel Plate)	6.82N/19mm	ASTM D 1000
Volume resistivity	$2.76 \times 10^{11} \Omega/25 mm$	ASTM D 1000
Ozone ageing	Pass	ASTM D 1149
UV ageing	Pass	ASTM D 4325
Xenon ageing	Pass	ISO 4892-2
Working temp.	-18 °C to 105 °C	

Packing

Part No.	Dimension	Color	Rolls/Case
KC63(833)	19mm×0.18mm×20m	Black	100

Note: Other size is available on request.

Certificates







Quality Electrical PVC Tape

KC62 (8712) is a high-quality, vinyl-insulating, conformable, pressure sensitive PVC tape, composed of the high elastic base material and adhesive. It is designed to perform continuously between a temperature range of 0°C to 80°C. It provides moisture-tight electrical and mechanical protection with rating voltage up to 600V. It is UL listed and CSA certified "insulating tape".

Features

High elongation at break High tensile Resistance to chemical corrosion Resistance

High tensile strength Flame retardant Resistance to ozone, UV, xenon exposure

Technical Data

Property	Typical Value	Test Method
Tensile strength	50.2N/19mm	ASTM D 1000
Elongation at break	210%	ASTM D 1000
Dielectric strength	50.49KV/mm	IEC 60454-2
Adhesion (Steel plate)	4.4N/19mm	ASTM D 1000
Volume resistivity	2.2×10 ¹¹ Ω/25mm	ASTM D 1000
Flame Resistance	1.1S	ASTM D 1000
Ozone ageing	Pass	ASTM D 1149
UV ageing	Pass	ASTM D 4325
Xenon ageing	Pass	ISO 4892-2
Working temp.	0 °C to 80 °C	

Packing

Part No.	Dimension	Color	Rolls/Case
KC62(8712)	18mm ×0.18mm×20m	Black	100

Note: Other size is available on request.

Certificates







KC62



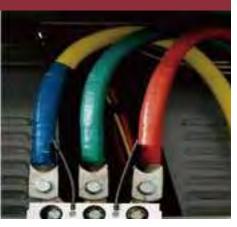














Quality Color Coding Electrical PVC Tape

KC60 (8600) is a pressure-sensitive electrical PVC color coding tape. It is leadless, and flame retardant, and fade-resistant. It is widely used in phase-identification, color-coding of cable connection and piping system. It is also can be used for cable connector of main insulation up to 600V between a temperature range of 0° C to 80° C.

Features

Resistance to fading High elongation at break

Resistance to chemical corrosion Resistance to ozone, UV, xenon exposure

Technical Data

Property	Typical Value	Test Method
Tensile strength	34.8N/19mm	ASTM D 1000
Adhesion (Steel plate)	3.34N/19mm	ASTM D 1000
Elongation at break	190%	ASTM D 1000
Dielectric strength	61.3KV/mm	ASTM D 4325
Dielectric constant	3.06	ASTM D 4325
Volume resistivity	2.33×10 ¹² Ω/25mm	ASTM D 1000
Fading grade	> grade 4	GBT250

Packing

Part No.	Dimension	Color	Rolls/Case
KC60(8600)	19 mm $\times 0.13$ mm $\times 10$ m	Red	200
KC60(8600)	19 mm $\times 0.13$ mm $\times 10$ m	Yellow	200
KC60(8600)	19 mm $\times 0.13$ mm $\times 10$ m	Blue	200
KC60(8600)	19 mm $\times 0.13$ mm $\times 10$ m	Green	200
KC60(8600)	19 mm $\times 0.13$ mm $\times 10$ m	White	200
KC60(8600)	19 mm $\times 0.13$ mm $\times 10$ m	Orange	200
KC60(8600)	19 mm $\times 0.13$ mm $\times 10$ m	Purple	200

Note: Other size is available on request.

Certificates



Armor Tape

KC88 (933) armor tape is made of glass-fiber which is composed by compound material of polymer and inorganic material. It is used for protection of cable joints, repair of electrical and telecom cable, and also applied for repair of all kind of pipes.

Features

Fast hardening Simple installation

High tensile strength Resistance to water and corrosion

Technical Data

Property	Typical Value	Test Method
Time of hardening	5-12min	ASTM D 471
Tensile strength	>450N	ASTM D 1000
Heat ageing	Pass	ASTM D 1373
Corrosion resistance	Pass	ASTM D 1373
compressive strength	≥300N	ASTM F 1536

Packing

Part No.	Dimension	Color	Rolls/Case
KC88(933)	100mm x 3m	Black	20

Note: Other size is available on request.

KC88



Certificate







KC96-Dual



KC96-Dual EPDM Cold Shrink Tube

Cotran KC96-Dual is developed based on the standard KC96 EPDM cold shrink tube, It aims to make sealing and weatherproofing more reliable and stable, and to improve the installation efficiency and performance. With the dual layers structure, built-in silicone tube, no need foam tape or other filling materials any more.

Technical Data

Property	Typical Value	Test Method
IP Grade	IPX8	IEC 60529
Tensile strength	10.75 MPa	ASTM D421
Elongation	680%	ASTM D624
Tear strength	29.71N/mm	ASTM D624

COTRAN Advantage





Applicable to a variety of jumpers



Waterproofness

PROOF IP68

Solution

Item	Color	Application	Package
KC96-Dual	Black	Dual layer structure, design for 1/2' jumper (7/16 DIN.4.3-10) to equipment	50 pcs/Carton

KC96 EPDM Cold Shrink Tube

Cotran KC96 is a open-ended cold shrink ethylene propylene diene monomer (EPDM) rubber sleeve, which is factory pre-expanded and assembled onto a removable core. The core is removed when the tube is position for installation over an in line connection or termination lug. It provides a water proofing tight for terminations and joints.

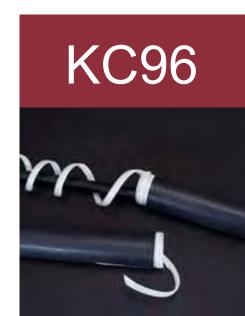
Technical Data

29
421
412
624
4325
412
1149
154

Seletive chart

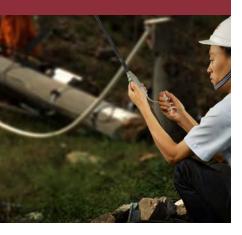
Part No.	Diameter	Cable size (mm)		Length	Wall thickness	
Part NO.	(mm)	Min	Max	(mm)	after shrinkage (mm)	
KC96-20	Ф 20	8	15	90 ~ 500	3.0	
KC96-25	Ф 25	10	20	90 ~ 500	3.0	
KC96-35	Ф 35	13	30	90 ~ 500	3.5	
KC96-40	Ф 40	17.5	33	90 ~ 500	3.5	
KC96-53	Ф 53	25	46	90 ~ 500	3.8	
KC96-70	Ф 70	32	63	90 ~ 500	4.0	
KC96-104	Ф 104	43	94	90 ~ 500	4.2	
KC96-125	Ф 125	46	114	90 ~ 500	4.2	
KC96-150	Ф 150	55	135	90 ~ 500	4.5	

Note: Other size is available on request.





KC97



Silicone Cold Shrink Tube with Mastic

Cotran KC97 is a open-ended with water proofing mastic, cold shrink silicone rubber sleeve, which is factory pre-expanded and assembled onto a removable core. The core is removed when the tube is position for installation over an in line connection or termination lug. The mastic at both ends provides excellent moisture-tight seals for terminations and joints.

Technical Data

Property	Typical Value	Test Method
IP Grade	IPX8	IEC 60529
Tensile strength	9.42 MPa	ASTM D 421
Elongation	960%	ASTM D 412
Tear strength	41.6 N/mm	ASTM D 624
Brittle temperature	<-60°C	ISO 812
Electric strength	24.4 KV/mm	ASTM D 4325
Volume resistivity	4.0×10 ¹⁵ Ω.cm	ASTM D 4325
Thermal ageing	Pass	ASTM D 412
Ozone aging	Pass	ASTM D 1149
UV aging	Pass	ASTM G 154

Packing

Part No.	Dimensions	Color	PCS/Case
KC97-25	Ф25×120mm	Grey	50
KC97-28	Ф28×110mm	Grey	50
KC97-28	Ф28×200mm	Grey	50
KC97-40	Ф40×140mm	Grey	50
KC97-40	Ф40×240mm	Grey	50

Note: Other size is available on request.

Silicone Cold Shrink Tube

Cotran KC92 is a open-ended cold shrink silicone rubber sleeve, which is factory pre-expanded and assembled onto a removable core. The core is removed when the tube is position for installation over an in line connection or termination lug. It provides a water proofing tight for terminations and joints.

Technical Data

Property	Typical Value	Test Method
IP Grade	IPX7	IEC 60529
Tensile strength	9.89 MPa	ASTM D 421
Elongation	910%	ASTM D 412
Tear strength	46.2 N/mm	ASTM D 624
Brittle temperature	<-60°C	ISO 812
Electric strength	24.4 KV/mm	ASTM D 4325
Volume resistivity	4.0×10 ¹⁵ Ω.cm	ASTM D 4325
Thermal ageing	Pass	ASTM D 412
Ozone aging	Pass	ASTM D 1149
UV aging	Pass	ASTM G 154

Seletive chart

Part No.	Diameter (mm)	Cable Size(IIIII) Length I I I I I I I I I I I I I I I I I I		Wall thickness After shrinkage	
	()	Min	Max	(11111)	(mm)
KC92-18	Ф 18	5.7	13	50~ 200	2.5
KC92-25	Ф 25	7.3	21	50~ 300	2.5
KC92-28	Ф 28	9	23	50~ 300	2.5
KC92-40	Ф 40	11.7	35.1	50~ 400	3
KC92-55	Ф 55	18.2	49.2	90~800	3
KC92-60	Ф 60	18.2	53	90~800	3
KC92-70	Ф 70	22.4	63.6	90~800	3
KC92-80	Ф 80	30	72	90~800	3
KC92-90	Ф 90	33	82	90~800	3
KC92-100	Ф 100	39	92	90~800	3

Note: Other size is available on request.

KC92



Cold Shrink Rubber EPDM End Cap



COTRAN cold shrink rubber end caps are usually used for environmentally seal and mechanically protect exposed cable ends using no tools, mastics or tapes. Cold shrink EPDM end caps are close-ended, tubular rubber tube that are factory expanded and loaded onto a removable core. When positioned over the end of a cable, or other cylindrical object, the core is removed to provide a reliable seal that protects your cable ends from environmental damage, like moisture, contamination and corrosion etc.

Feactures

Simple and fast installation, no tools required.

Accommodates size ranges from 11.6mm – 84.6mm.

Seals tight, retains resiliency and pressure even after prolonged years of ageing and exposure.

Water-resistant.

No mastic or tape required.

No torches or heat required.

Resists acids and alkalis.

Resists ozone

Easily removed.

No training required for installation

Technical Properties

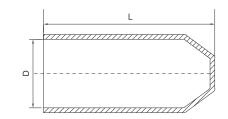
Properties	Test Method	Typical Data
Waterproof	IEC 60529:1989	Pass, IPX7
Shore Hardness	ASTM D224 0 5	35~45
Tensile Strength	ASTM D41-215a	7 MPa
Elongation	ASTM D41-215a	600%
Tear Strength	ASTM D62-40(2012)	27 kN/m
Dielectric Strength	ASTM D14-999(2013)	22.4kV/mm
Environmental protection	IEC 62321	RoHS
UV resistance	ASTM D 4388	Pass
Ozone resistance	ASTM D 4388	Pass

Selection table

Туре	Color	Cable Size(mm)
ECap-1	Black	11.6 – 20.9
ECap-2	Black	15.9 – 30.1
ECap-3	Black	26.0 – 49.2
ECap-4	Black	45.5 – 84.3

Heat Shrink End Cap





Applications

Recommended for applications both in open air and underground power distribution cables with PVC ,lead or XLPE sheaths.

Features

With or without Spiral adhesive coated.

Effectively offering protection against oxidation, ozone,

UV-radiation

Both insulating and conductive type available

Easily to fit into the cable end to ensure environment seal

Shrink ratio 2-2.5:1

Minimum fully shrink temperature: 120°C

Technical properties

Test Items	Test Method	Test Requirements
Tensile strength	ASTM D 2671	12MPa min.
Ultimate elongation	ASTM D 2671	200% min.
Volume resistivity	IEC 93	$10^{14}\Omega$.cm min.
Dielectric strength	IEC 60243	12kV/mm(1.0mm) min.
Water absorption	ISO 62	0.5% max.
Heat shock at 225°C/4hrs	ASTM D 2671	No cracking,dropping
Density	ASTM D 792	1.0∼1.1g/c㎡

Selection table

Size (mm)	L*(±10%)	D*(Min.)	d*(±10%)	Outer Diameter of Cable(mm)
HSEC-15/6	42	15	6	7-13
HSEC-20/8	55	20	8	9-17
HSEC-35/15	80	35	15	16-30
HSEC-55/25	105	55	25	28-48
HSEC-75/40	115	75	40	45-65
HSEC-100/50	145	100	50	55-90
HSEC-120/70	150	120	70	75-110

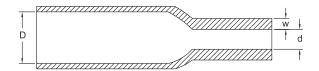
L* = Length of end cap as supplied

D* = Inner diameter as supplied

d* = Inner diameter after fully recovered

1. Busbar Insulation Tube





Medium Wall Busbar Insulation Tube (1kV,10kV-24KV,35kV)

Medium wall busbar insulation tube is made from radiation cross-linked polyethylene. The bus bar tube shows excellent electrical, shrinking and anti-tracking properties. CMBT meets the latest Ro HS and REACH requirements.

Technical properties

Property	Required Value	Typical Value	Testing standard
Tensile strength/MPa	≥8.0	14.7	GB/T 1040
Elongation at break/%	≥300	585	GB/T 1040
Tensile strength after aging/MPa	≥6.4	12.4	GB/T 1040,GB/T 7141
Elongation at break after aging/%	100	358	GB/T 1040,GB/T 7141
Longitudinal changes	0 to -10	-5	ASTM D 2671
Breakdown strength/kV/mm	≥15	21.8	ASTM D 149
Volume resistivity/Ω · cm	≥4.3×10 ¹⁴	6.3×10 ¹⁴	UL 224
Water absorption capacity/%	≤0.5	0.2	ISO 62-1980
Heat shock (160°C, 4 h)	No cracking	No cracking	ЈВ 7829 аррх D

Selective Chart

Toma	After recovered(mm) ype Size As supplied(mm)				Standard Length (m/spool)	
Туре	Size	As supplied(mm)	ID (Max)	Wall Thickness (Min)	Standard Length(m/spoot)	
_	30/15	30	15	3.6	15	
	40/20	40	20	3.6	15	
_	50/25	50	25	3.7	15	
35kV	70/35	70	35	3.7	15	
	100/45	100	45	3.8	15	
	120/50	120	50	3.8	15	
	180/70	180	70	3.8	15	
	15/7	15	7	2.6	30	
	30/15	30	15	2.6	30	
	40/20	40	20	2.6	30	
10-24kV -	50/25	50	25	2.7	30	
10-24KV	70/35	70	35	2.7	30	
	100/45	100	45	2.8	30	
	120/50	120	50	2.8	30	
	180/70	180	70	2.8	30	
	15/7	15	7	1.6	30	
	30/15	30	15	1.6	30	
_	40/20	40	20	1.6	30	
1kV -	50/25	50	25	1.6	30	
TKA	70/35	70	35	1.6	30	
_	100/45	100	45	1.6	30	
	120/50	120	50	1.6	30	
	150/60	150	60	1.6	30	

Note: Other size is available on request.

2. Damaged Cable Repair



Power cable gets damage often during packing, transportation and operation due to external force or extreme conditions, and needs repair. Cotran proposes a series of solutions for cable damage of different levels to save operating cost. It is suggested to choose the repairing kit after inspecting the damaged cable.

Damaged Cable Repair Kit (DCRK)

▲ Apply to ≤40.5KV

Damaged Level	Outer Sheath Damage	Armor Layer Damage	Screen Layer Damage (STA)	Screen Layer Damage (UA)
Part No.	DCRK1	DCRK2	DCRK3	DCRK4
Kit Contents	Cable Jacket Repair Tape; Abrasion-resistant PVC Tape.	Metal Shielding Mesh; Spring Roll; Armor Tape; Water Proofing; Insulating Tape.	Spring Roll; Water Proofing Insulating Tape; Metal Shielding Mesh; Armor Tape; EPR High Voltage Insulating tape.	Abrasion-resistant PVC Tape; Spring Roll; Metal Shielding Tape; Cable Jacket Repair Tape.
Function Repair	Water proofing; corrosion protection	Mechanical protection; Water proofing and corrosion protection; Electrical recovery	Mechanical protection Water proofing and corrosion protection; Screen recovery	Mechanical protection; Water proofing and corrosion protection; Screen recovery

3. Cable Repairing Proceedures



Jacket Damage (DCRK1)

Apply to ≤40.5KV

Main Kit Components



Abrasive Paper



Cable Jacket Repair Tape



Abrasion-resistant PVC Tape





Damaged Cable.



Clean the cable jacket.



Roughen cable jacket with abrasive paper.



Wrap cable jacket repair tape for 3 layers.



Wrap abrasion-resistant PVC tape for 1 layer.



Repairing completed.

2

Cable Amor Damage (DCRK2)

Apply to ≤40.5KV

Main Kit Components



Abrasive Paper



Spring Roll



Metal Shielding Mesh



Water Proofing Insulating Tape



Armor Tape

Procedures



Damage Cable.





Abrase the cable jacket, then wrap water Wrap armor tape around the cable. proofing insulating tape for 3 layers.



Cut off the armor layer, then tighten up with spring roll.





Abrase both ends then wrap shielding

mesh around the cable for 2 layers.

Repairing completed.

CTS Damage (STA Cable) (DCRK3)

Apply to ≤40.5KV

Main Kit Components

Procedures



Abrasive Paper



Spring Roll







Water Proofing





Armor Tape

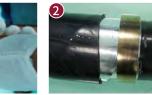
EPR High Voltage Insulating Tape



Damaged Cable.

Wrap around the cable with EPR

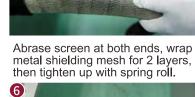
high voltage insulating tape for 2 layers, then wrap water proofing insulating tape for 3 layers.







Wrap armor tape around the cable.



Repairing completed.

4

CTS Damage (UA Cable)(DCRK4)

Apply to ≤40.5V

Main Kit Components



Abrasive Paper



Spring Roll



Metal shielding Mesh



Abrasive-resistant



Cable Jacket Repair Tape

Procedures



Damaged Cable.



Abrase cable jacket repair tape for 3 layers.



Cut off the copper screen layer, tighten up with spring rolls.



Wrap abrasive-resistant PVC tape on both ends.

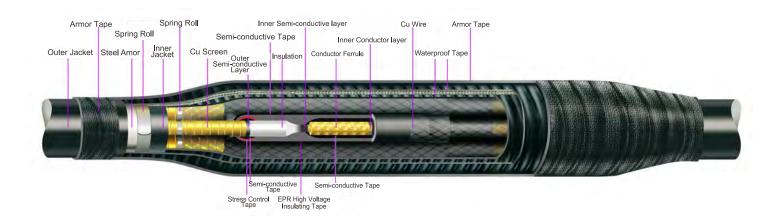


Abrase both ends then wrap with metal shielding mesh and tighten with spring rolls.



Repairing Completed.

4. Wraparound Tape Straight Joint (8.7/15kV-26/35kV)



KC2316 for 8.7/15kV, 18/30kV, 19/33kV, 26/35kV are precisely designed to meet the parameters of international cable and cable accessories standards such as CENELEC HD 629.1 S1, IEEE-48, IEEE-404, IEC60502. Our wraparound tape straight joint offers reliable and consistent performance for longer service life. We provide different solutions where different kinds of cable jointing through 40.5kV.

1. Same Cable Cross Section (WTSJ1)



2. Different Cable Cross Section (WTSJ2)



Adding cable conductor



Using customized cable ferrule

3. Shortage of Cable Length (WTSJ3)



4. Different Type of Cable Jointing (PILC - XLPE) (WTSJ4)



Comparison	Cold Shrink	Heat Shrink	COTRAN Tape Solution	Features
Error Tolerance	Low	Medium	High	Wrap the cable according to the actual size. Size error can be avoided.
Operation Safety	High	Low	High	Fire is no need. Simple installation
Continous Service	Medium	Low	Excellent	Self-fusing tape will fuse with cable to form a void-free, edge-free joint, and achieve same coefficient of expansion.
Water-proofing anti-tracking	Medium	Bad	Excellent	Self-fusing tape will fuse with cable to form a void-free, edge-free joint, and achieve same coefficient of expansion.
Shortage of Cable length	High cost, Complicated in	nstallation	Low cost Simple installation	Add cable conductor and ferrules , then wrap tapes.
Different cable size jointing	High Cost, Complicated i	nstallation	Low cost Simple installation	Add cable conductor or customized ferrules , then wrap tapes.

Procedures



1. Prepare Cable



3. Water-proofing treatment

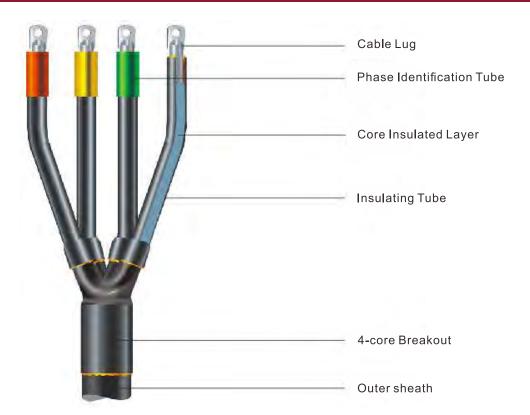


2. Wrap tape around the joint



4. Armor protection treatment

5. Heat Shrinkable Solution (1KV)



Cotran heat shrink terminations and joints are composed of a series of pre-expanded adhesive lined heat shrink tubes and necessary accessories. Heat shrink and provide a excellent waterproof seal and electrical insulation. The terminations and joints are designed to be suitable for SWA/UA, XLPE/PVC/PILC, S/C, multicore cable rated to 0.6/1kV.

Heat Shrink Terminations Main Kit Components

Lug sealing insulation tube	Main insulation tube	Breakout	Braid
Spring roll	Metal shielding mesh	Instruction	

Heat Shrinkable Straight Joints Main Kit Components

Insulation tube	Tube for jacket	Spring roll
Braid	Instruction	Metal shielding mesh

Technical properties

Property	Typical data	Property	Typical data
Hardness	80(ShoreA)	AC voltage withstand	2.5kV
Tensile strength	12MPa	Shrink temperature	120-140"C
Elongation at break	300%	Shrink ratio (dia)	250%
Dielectric strength	20kV/mm	Longitudinal shrinkage	±5%

Selective Chart

Product	Specification	Size of Conductor (mm²)	Product	Specification	Size of Conductor (mm²)
	HT-LV-1/1	10-16		HJ-LV-1/1	10-16
_	HT-LV-1/2	25-50	-	HJ-LV-1/2	25-50
Single-core – termination kits –	HT-LV-1/3	70-120	_	HJ-LV-1/3	70-120
	HT-LV-1/4	150-240		HJ-LV-1/4	150-240
_	HT-LV-1/5	300-500	_	HJ-LV-1/5	300-500
	HT-LV-2/1	10-16		HJ-LV-2/1	10-16
_	HT-LV-2/2	25-50	_	HJ-LV-2/2	25-50
2-cores termination – kits –	HT-LV-2/3	70-120	_	HJ-LV-2/3	70-120
NICS _	HT-LV-2/4	150-240	- tinougnjonic –	HJ-LV-2/4	150-240
_	HT-LV-2/5	300-500	_	HJ-LV-2/5	300-500
	HT-LV-3/1	10-16	_	HJ-LV-3/1	10-16
_	HT-LV-3/2	25-50		HJ-LV-3/2	25-50
3-cores termination – kits –	HT-LV-3/3	10-16	HJ-LV-3/3	70-120	
	HT-LV-3/4	150-240	HJ-LV HJ-LV HJ-LV	HJ-LV-3/4	150-240
_	HT-LV-3/5	HT-LV-3/3 70-120 3-cores straight through joint HT-LV-3/4 150-240 HT-LV-3/5 300-500	HJ-LV-3/5	300-500	
	HT-LV-4/1	10-16		HJ-LV-4/1	10-16
_	HT-LV-4/2	25-50	-	HJ-LV-4/2	25-50
4-cores termination – kits –	HT-LV-4/3	70-120	_	HJ-LV-4/3	70-120
Nics _	HT-LV-4/4	150-240	- tinougnjonic —	HJ-LV-4/4	150-240
	HT-LV-4/5	300-500	_	HJ-LV-4/5	300-500
	HT-LV-5/1	10-16		HJ-LV-5/1	10-16
_	HT-LV-5/2	25-50	-	HJ-LV-5/2	25-50
5-cores termination – kits –	HT-LV-5/3	70-120	G	HJ-LV-5/3	70-120
MG _	HT-LV-5/4	150-240	- unougnjonic —	HJ-LV-5/4	150-240
_	HT-LV-5/5	300-500	_	HJ-LV-5/5	300-500

6. Heat Shrink Solution (10-36KV)



Cotran heat shrink terminations (indoor/outdoor) are precisely designed to meet the parameters of international cable and cable accessories standards such as CENELEC HD 629.1 S1, IEEE-48, IEEE-404, IEC60502. Our heat shrink terminations offers reliable and consistent performance for longer service life. We have designed our heat shrink terminations for single core and 3 cores extruded UA, SWA/STA, CWS/CTW cable and Oil-impregnated paper insulated single core and 3 cores power cables through 36KV.

Main Kit Components

Insulation tube	Anti-track tube	Stress control tube	Breakout Slective
Tube for outer sheath	Rain shed skirt	Sealants	Coding tube
Braid	Silicone grease	Spring roll	Instruction

Heat Shrink Straight Joint

Cotran heat shrink straight through joints are precisely designed to meet the parameters of international cable and cable accessories standards such as CENELEC HD 629.1 S1, IEEE-48, IEEE-404, IEC60502. Our heat shrink straight through joints offers reliable and consistent performance for longer service life. We have designed our heat shrink straight through joint for single core and 3 cores extruded UA, SWA/STA, CWS/CTW cable and Oil-impregnated paper insulated single core and 3 cores power cables through 36KV.

Main Kit Components

Insulation tube	Stress control tube	Semi-conductive/insulation tube	Tube for outer jacket
Metal shielding mesh	Sealants	Braid	Silicone grease
Spring roll	Instruction		

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Technical properties

Dranautur	Typical data			
Property	11kV(8.7/15kV)	24kV (12/20kV)	36kV (26 /35kV)	
AC withstand(under rain)	35KV/1min	48KV/1min	104KV/1min	
AC withstand(without rain)	39KV/5min	54KV/5min	117KV/ 5min	
Impulse withstand	\pm 95KV/10times	\pm 125KV/10times	±200 KV/10 times	
DC withstand	35KV/15min	48KV/15min	104 KV/15min	
Partial discharge test	≤10Pc(15kV)	≤10Pc(20kV)	≤10Pc(45kV)	

Selective Chart

Heat Shrink Accessory for XLPE Insulated Power Cables

Product	Specifi	cation	Size of Conductor	Specification	Size of Conducto
Product	15kV(8.7/15kV)	24kV (12/20kV)	(mm²)	36kV (26/35kV)	(mm²)
	CT-15-HN-1/1	CT-20-HN-1/1	25-50	CT-35-HN-1/1	50-120
Single core indoor	CT-15-HN-1/2	CT-20 -HN-1/2	70-120	CT-35-HN-1/2	150-240
termination kit	CT-15-HN-1/3	CT-20 -HN-1/3	150-240	CT-35-HN-1/3	300-500
	CT-15-HN-1/4	CT-20-HN-1/4	300-500		
	CT-15-HW-1/1	CT-20-HW-1/1	25-50	CT-35-HW-1/1	50-120
Single core outdoor	CT-15-HW-1/2	CT-20-HW-1/2	70-120	CT-35-HW-1/2	150-240
termination kit	CT-15-HW-1/3	CT-20-HW-1/3	150-240	CT-35-HW-1/3	300-500
	CT-15-HW-1/4	CT-20-HW-1/4	300-500		
	CT-15-HJ-1/1	CT-2 0-HJ-1/1	25-50	CT- 35-HJ-1/1	50-120
Single core straight through joint	CT-15-HJ-1/2	CT-2 0-HJ-1/ 2	70-120	CT- 35-HJ-1/2	150-240
	CT-15-HJ-1/3	CT-20 -HJ-1/3	150-240	CT-35-HJ-1/3	300-500
	CT-15-HJ-1/4	CT-20 -HJ-1/4	300-500		
	CT-15-HN-3/1	CT-20-HN-3/1	25-50	CT-35-HN-3/1	50-120
3-cores indoor	CT-15-HN-3/2	CT-20-HN-3/2	70-120	CT-35-HN-3/2	150-240
termination kit	CT-15-HN-3/3	CT-20-HN-3/3	150-240	CT-35-HN-3/3	300-500
	CT-15-HN-3/4	CT-20-HN-3/4	300-500		
	CT-15-HW-3/1	CT-20-HW-3/1	25-50	CT-35-HW-3/1	50-120
3-cores outdoor	CT-15-HW-3/2	CT-20-HW-3/2	70-120	CT-35-HW-3/2	150-240
termination kit	CT-15-HW-3/3	CT-20-HW-3/3	150-240	CT-35-HW-3/3	300-500
	CT-15-HW-3/4	CT-20-HW-3/4	300-500		
	CT-15-HJ-3/1	CT-20-HJ-3/1	25-50	CT-35-HJ-3/1	50-120
3-cores straight	CT-15-HJ-3/2	CT-20-HJ-3/2	70-120	CT-35-HJ-3/2	150-240
through joint	CT-15-HJ-3/3	CT-20-HJ-3/3	150-240	CT-35-HJ-3/3	300-500
	CT-15-HJ-3/4	CT-20-HJ-3/4	300-500		

Heat Shrink Accessory for Oil-Impregnated Paper Insulated Power Cables

Product	Specification	Product	Specification	Size of Conductor
Product	15kV(8.7/15kV)	Product	15kV(8.7/15kV)	(mm²)
	CT-15-HNZ-1/1		CT-15-HNZ-3/1	25-50
Single core indoor	CT-15-HNZ-1/2	3-cores indoor	CT-15-HNZ-3/2	70-120
termination kit	CT-15-HNZ-1/3	termination k it	CT-15-HNZ-3/3	150-240
	CT-15-HNZ-1/4		CT-15-HNZ-3/4	300-500
	CT-15-HWZ-1/1		CT-15-HWZ-3/1	25-50
Single core outdoor	CT-15-HWZ-1/2	3-cores outdoor	CT-15-HWZ-3/2	70-120
termina tion kit	CT-15-HWZ-1/3	termination kit	CT-15-HWZ-3/3	150-240
	CT-15-HWZ-1/4		CT-15-HWZ-3/4	300-500
	CT-15-HJZ-1/1		CT-15-HJZ-3/1	25-50
Single core straight	CT-15-HJZ-1/2	3-cores straight	CT-15-HJZ-3/2	70-120
through joint	CT-15-HJZ-1/3	through joint	CT-15-HJZ-3/3	150-240
	CT-15-HJZ-1/4		CT-15-HJZ-3/4	300-500

7. Cold Shrink Solution (1KV)





Cotran cold shrink terminations and joints are composed of a series of pre-expanded silicone tubes and necessary accessories. The core is removed after the tube is positioned for installation over an inline connection, or terminal lug, allowing the tube to shrink and provide a excellent waterproof seal and electrical insulation. The terminations and joints are designed to be suitable for SWA/UA, XLPE/PVC, Single-core and multi-core cable rated to 0.6/1kV.

Cold Shrink Termination Main Kit Components

Main insulation tube	Breakout	Sealants	PVC coding tape
Spring roll	Braid	Instruction	

Cold Shrink Straight Joints Main Kit Components

Main insulation tube	Main insulation tube ERP insulation tape		Water-proof rubber tape
Spring roll	Armor tape	Braid	Instruction

Technical properties

Property	Typical data
Wet AC voltage withstand	4kV/1min
AC voltage withstand	2.4kV/4h

Selective Chart

Product	Specification	Size of Conductor (mm²)	Product	Specification	Size of Conductor (mm²)
	CT-LV-1/1	10-16		CJ-LV-1/1	10-16
-	CT-LV-1/2	25-50		CJ-LV-1/2	25-50
Single core termination kits	CT-LV-1/3	70-120	Single core straight through join	CJ-LV-1/3	70-120
_	CT-LV-1/4	150-240	_	CJ-LV-1/4	150-240
	CT-LV-1/5	300-500		CJ-LV-1/5	300-500
	CT-LV-2/1	10-16		CJ-LV-2/1	10-16
	CT-LV-2/2	25-50		CJ-LV-2/2	25-50
2-cores termination kits	CT-LV-2/3	70-120	2-cores straight through join	CJ-LV-2/3	70-120
-	CT-LV-2/4	150-240	_ tillough Join _	CJ-LV-2/4	150-240
	CT-LV-2/5	300-500		CJ-LV-2/5	300-500
	CT-LV-3/1	10-16		CJ-LV-3/1	10-16
3-cores termination kits	CT-LV-3/2	25-50		CJ-LV-3/2	25-50
	CT-LV-3/3	70-120	3-cores straight through join	CJ-LV-3/3	70-120
_	CT-LV-3/4	150-240	_	CJ-LV-3/4	150-240
-	CT-LV-3/5	300-500		CJ-LV-3/5	300-500
	CT-LV-4/1	10-16		CJ-LV-4/1	10-16
_	CT-LV-4/2	25-50		CJ-LV-4/2	25-50
4-cores terminatio n kits	CT-LV-4/3	70-120	4-cores straight through join	CJ-LV-4/3	70-120
	CT-LV-4/4	150-240		CJ-LV-4/4	150-240
	CT-LV-4/5	300-500		CJ-LV-4/5	300-500
	CT-LV-5/1	10-16		CJ-LV-5/1	10-16
_	CT-LV-5/2	25-50		CJ-LV-5/2	25-50
5-cores termination kits	CT-LV-5/3	70-120	5-cores straight through join	CJ-LV-5/3	70-120
_	CT-LV-5/4	150-240		CJ-LV-5/4	150-240
_	CT-LV-5/5	300-500		CJ-LV-5/5	300-500

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8. Cold Shrink Solution (11-36KV)



Cold Shrink Termination

Cotran cold shrink terminations (indoor/outdoor) are precisely designed to meet the parameters of international cable and cable accessories standards such as CENELEC HD 629.1 S1, IEEE-48, IEEE-404, IEC60502. Our cold shrink terminations offers reliable and consistent performance for longer service life. We have designed our cold shrink terminations for single core and 3 cores extruded UA, SWA/STA, CWS/CTW cable through 36kV.

Main Kit Components

Termination body	Cold shrink tubes	Breakout	Braid
Spring roll	Sealants	Instruction	

Cold Shrink Straight Joints

Cotran cold shrink straight through joints are precisely designed to meet the parameters of international cable and cable accessories standards such as CENELEC HD 629.1 S1, IEEE-48, IEEE-404, IEC60502. Our cold shrink straight through joints offers reliable and consistent performance for longer service life. We have designed our cold shrink straight joints for single core and 3 cores extruded UA, SWA/STA, CWS/CTW cable through 36kV.

Main Kit Components

Joint body	Metal shielding mesh	Armor tape	Braid
Spring roll	Sealants	Instruction	

Technical properties

Duamantu	Typical data				
Property	11kV(8.7/15kV)	24kV (12/20kV)	30kV (18/30kV)	36kV (26 /35kV)	
AC withstand(under rain)	35 KV/1min	48KV/1min	72 KV/1min	104KV/1min	
AC withstand(without rain)	39 KV/5min	54KV/5min	81 KV/5min	117KV/ 5min	
Impulse withstand	±95KV/10times	\pm 125KV/10times	$\pm 170\mathrm{KV/10times}$	±200 KV/10 times	
DC withstand	35 KV/15min	48KV/15min	72 KV/15min	104 KV/15min	
Partial discharge test	≤10Pc(15kV)	≤10Pc(20 kV)	≤10Pc(30kV)	≤10Pc(45kV)	

Selective Chart

Product	Specific	ation	Size of Conductor	Specific	Specification	
	15kV(8.7/15kV)	24kV (12/20kV)	(mm²)	30kV(18/30 kV)	35kV(26/35kV)	(mm2)
_	CT-15-LN-3/1	CT-24-LN-3/1	25-50	CT-30-LN-3/1	CT-35-LN-3/1	35-70
	CT-15-LN-3/2	CT-24-LN-3/2	70-120	CT-30-LN-3/2	CT-35-LN-3/2	95-185
3-cores indoor termination kit	CT-15-LN-3/3	CT-24-LN-3/3	150-240	CT-30-LN-3/3	CT-35-LN-3/3	240-400
Lemmation Kit	CT-15-LN-3/4	CT-24-LN-3/4	300-400	CT-30-LN-3/4	CT-35-LN-3/4	500-800
	CT-15-LN-3/5	CT-24-LN-3/5	500-800			
_	CT-15-LW-3/1	CT-24-LW-3/1	25-50	CT-30-LW-3/1	CT-35-LW-3/1	35-70
_	CT-15-LW-3/2	CT-24-LW-3/2	70-120	CT-30-LW-3/2	CT-35-LW-3/2	95-185
3-cores outdoor termination kit	CT-15-LW-3/3	CT-24-LW-3/3	150-240	CT-30-LW-3/3	CT-35-LW-3/3	240-400
termination kit	CT-15-LW-3/4	CT-24-LW-3/4	300-400	CT-30-LW-3/4	CT-35-LW-3/4	500-800
	CT-15-LW-3/5	CT-24-LW-3/5	500-800			
_	CT-15-LJ-3/1	CT-24-LJ-3/1	25-50	CT-30-LJ-3/1	CT-35-LJ-3/1	35-70
_	CT-15-LJ-3/2	CT-24-LJ-3/2	70-120	CT-30-LJ-3/2	CT-35-LJ-3/2	95-185
3-cores straight through joint	CT-15-LJ-3/3	CT-24-LJ-3/3	150-240	CT-30-LJ-3/3	CT-35-LJ-3/3	240-400
tillough joint	CT-15-LJ-3/4	CT-24-LJ-3/4	300-400	CT-30-LJ-3/4	CT-35-LJ-3/4	500-800
	CT-15-LJ-3/5	CT-24-LJ-3/5	500-800			
_	CT-15-LN-1/1	CT-24-LN-1/1	25-50	CT-30-LN-1/1	CT-35-LN-1/1	35-70
	CT-15-LN-1/2	CT-24-LN-1/2	70-120	CT-30-LN-1/2	CT-35-LN-1/2	95-185
Single core indoor termination kit	CT-15-LN-1/3	CT-24-LN-1/3	150-240	CT-30-LN-1/3	CT-35-LN-1/3	240-400
terrimation kit	CT-15-LN-1/4	CT-24-LN-1/4	300-400	CT-30-LN-1/4	CT-35-LN-1/4	500-800
	CT-15-LN-1/5	CT-24-LN-1/5	500-800			
_	CT-15-LW-1/1	CT-24-LW-1/1	25-50	CT-30-LW-1/1	CT-35-LW-1/1	35-70
Single core _	CT-15-LW-1/2	CT-24-LW-1/2	70-120	CT-30-LW-1/2	CT-35-LW-1/2	95-185
outdoor termination _	CT-15-LW-1/3	CT-24-LW-1/3	150-240	CT-30-LW-1/3	CT-35-LW-1/3	240-400
kit	CT-15-LW-1/4	CT-24-LW-1/4	300-400	CT-30-LW-1/4	CT-35-LW-1/4	500-800
	CT-15-LW-1/5	CT-24-LW-1/5	500-800			
_	CT-15-LJ-1/1	CT-24-LJ-1/1	25-50	CT-30-LJ-1/1	CT-35-LJ-1/1	35-70
	CT-15-LJ-1/2	CT-24-LJ-1/2	70-120	CT-30-LJ-1/2	CT-35-LJ-1/2	95-185
Single core straight — through joint —	CT-15-LJ-1/3	CT-24-LJ-1/3	150-240	CT-30-LJ-1/3	CT-35-LJ-1/3	240-400
unough joint	CT-15-LJ-1/4	CT-24-LJ-1/4	300-400	CT-30-LJ-1/4	CT-35-LJ-1/4	500-800
	CT-15-LJ-1/5	CT-24-LJ-1/5	500-800			

9. Cast Resin Joints (1KV)





Cotran resin joint kits (CRK), made from polyurethane resin (PUR), are designed for indoor/outdoor (weather exposed), underground applications. CRK is a safe, simple, and reliable jointing solution for both straight type and branch type joints. Excellent electrical and physical properties of CRK make them ideal for insulating and protecting electrical assemblies. The PUR resin also can be suitable for use as adhesives or sealants. Flame retardant PUR is also available.

Feactures

Moisture-resistant High mechanical strength

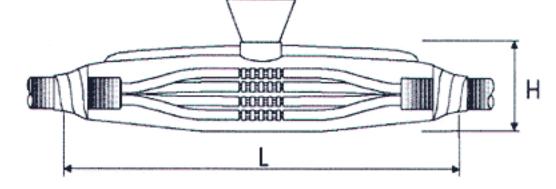
Simple installation Long lasting physical and electrical protection

Main Kit Components

Two-chambered resin
Transparent mould
Gloves
Abrasive paper
Cotran PVC tape
Instruction

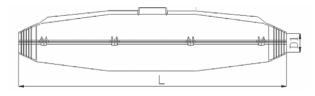


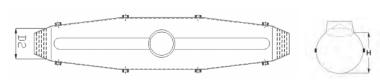




Selective Chart

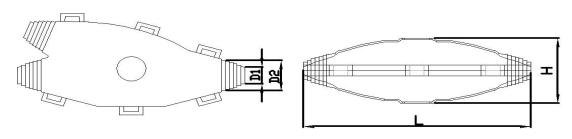
Cast Resin Straight Joint





Cast Resin Joints	Cable Size (mm²)	L(mm)	H(mm)	D1(mm)	D2(mm)
CRK-S1	4x1.5-10	202	36	8	26
CRK-S2	4x10-25	260	47	16	32
CRK-S3	4x35-50	360	55	21	38
CRK-S4	4x50-70	400	70	26	41
CRK-S5	4x95-150	530	100	35	56
CRK-S6	4x185-300	700	125	47	74

Cast Resin Branch Joints



Туре	Main Cable Size mm	BranchCable Size mm²	D1(mm)	D2(mm)	H(mm)	L(mm)
CRK-B1	4x1.52.5	4x1.5	11	20	50	150
CRK-B2	4x4-10	4x4	6	21	60	175
CRK-B3	4x6-25	4x16	9	24	70	225

Polyurethane Resin

Two-chambered Polyurethane Resin (PUR) pack between 180ml/pack to 10 liters /container is available on request. Notes: Polyurethane Resin (PUR) is moisture sensitive. Opened containers must be handled properly to prevent moisture contamination. Shelf life is 12 months when properly stored.

10. Inflatable Duct Sealing System for Power Cable (IDSS)



Inflatable Duct Sealing System for Power Cable (IDSS)

The inflatable duct sealing system (IDSS) is a wraparound, inflatable mastic-lined bladder used to seal empty or filled cable ducts. When inflated to proper air pressure, the IDSS seals the duct, guaranteeing a reliable water block. The IDSS can be installed in cable ducts in manhole, vaults, buildings, cabinets, or anywhere a reliable duct seal is needed. Application include ducts containing multiple copper, coax, or fiber cable, customer premise cable entrance, and air pipes. IDSS can be installed between -40°C to 75°C.

Feactures

Suitable for single, multiple core cable, or without cable 20-year service life Reliable water block

Working temperature -40 $^{\circ}$ C to 75 $^{\circ}$ C Resistance to corrosion Simple installation

Packing

IDSS 24 sets Lubricant 1PC

Inflation tool (Additional required tools) Instruction

Seletive Chart

Part No.	O/D of duct (mm)	Size of IDSS (mm²)	O/D of cable (mm)
IDSS-40	40	120×126	23-7.5
IDSS-50	50	120×180	45.5-7.5
IDSS-63	63	120×230	46.5-7.5
IDSS-75	75	120×280	48.5-8
IDSS-90	90	120×330	64-10.5
IDSS-110	110	120×400	84.5-12.9
IDSS-125	125	140×450	100-35
IDSS-160	160	140×560	129-40
IDSS-180	180	140×650	154-48
IDSS-200	200	140×700	178-56
IDSS-250	250	140×900	210-70
IDSS-300	300	140×1040	240-95

Certificates



11. Wraparound Repair Sleeve





COTRAN CWRS is a wraparound repair sleeve, which is designed to repair damaged cable jackets and protect cable or pipes where need corrosion protection on undamaged ones. It is made from modified cross-linked polyolefin (XLPE) with a hot-melt adhesive. When heating, the sleeve shrinks and the adhesive melts, thereby achieving tightly bonding between the sleeve and the cable. It provides an excellent solution of protection against mechanical stress, harshest environments, moisture and corrosion.

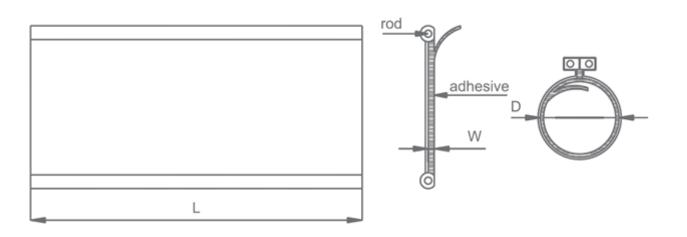
Feactures

IQuick and easy installation IHot melt adhesive forms a durable, moisture resistant seal IFit for wide range of cable sizes IRoHS compliant

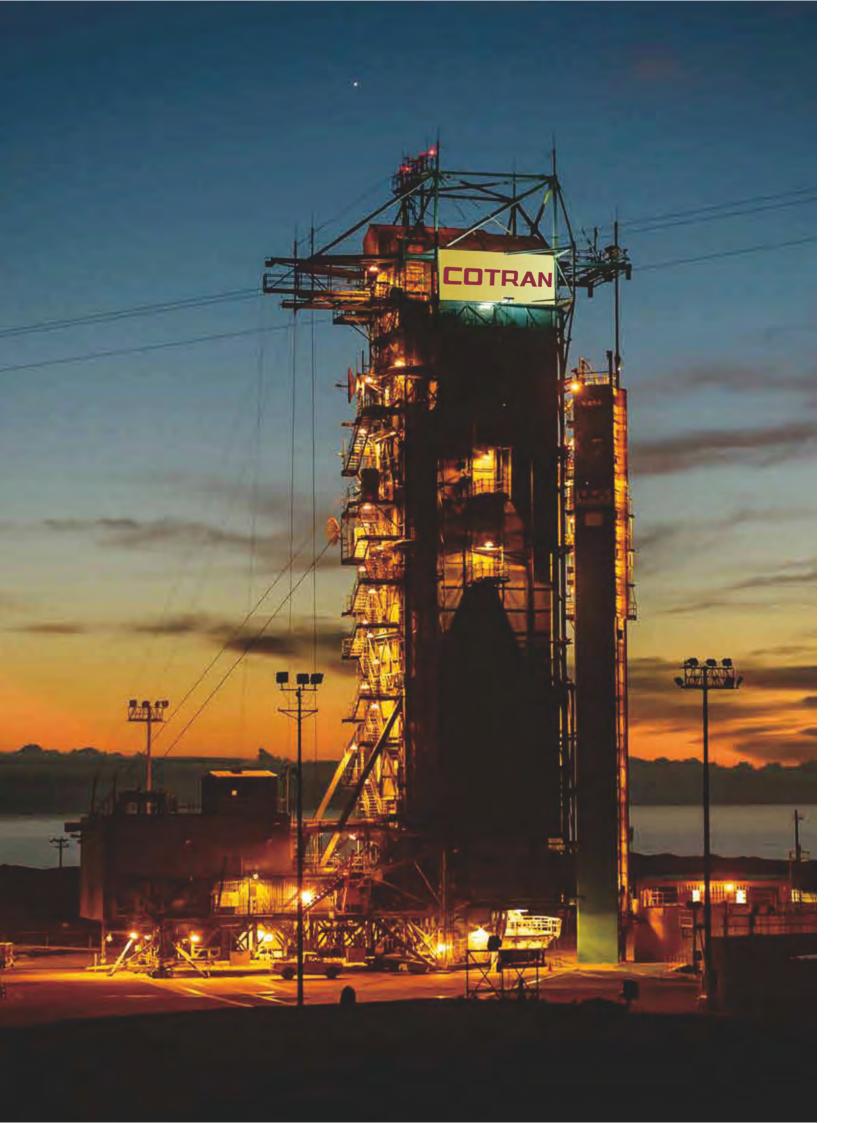
Technical Data

Properties		Test Method	Typical Data	
Tensile Strength		ISO 37	15 MPa min.	
Ultimate Elongation		ISO 37	300% min.	
Density		ISO 1183 Method A	1.0 – 1.2 g/cm ³	
Hardn	Hardness		50 – 70 D	
	7 days at 150°C±2°C	ISO 188		
Accelerated Aging	Tensile Strength	ISO 37	12 MPa min.	
Accelerated Aging	Ultimate Elongation	ISO 37	200% min.	
Thermal Endurance		IEC 60216	120°C	
Low Temperature Flexibility	4 hours at –40°C±3°C	ASTM D2671 Procedure C	No cracking	
Dielectric Strength		IEC 60243	1 mm 180kV/cm min.	
		IEC 00243	3.5 mm 120kV/cm min.	
Volume Resistivity		IEC 60093	$1 \times 10^{12} \Omega$ cm min.	
Dielectric Constant		IEC 60250	5 max.	
Water Absorption	14 days at 23°C±2°C	ISO 62 Method	0.5% max.	

Seletive Chart



	Size			
Type	D/mm	D/m after Shrunk	Length (mm)/L	
CWRS 36/10	36	10	500, 750, 1000, 1500	
CWRS 42/10	42	10	500, 750, 1000, 1500	
CWRS 55/13	55	13	500, 750, 1000, 1500	
CWRS 85/20	85	20	500, 750, 1000, 1500	
CWRS 108/27	108	27	500, 750, 1000, 1500	
CWRS 136/30	136	30	500, 750, 1000, 1500	
CWRS 155/50	155	50	500, 750, 1000, 1500	
CWRS 180/50	180	50	500, 750, 1000, 1500	



COTRAN Partners













Partners































Certificates

- · National High-tech Enterprise
- · ISO9001:2008 certified
- · ISO 14001:2004 certified
- · SGS · KEMA certified UL listed







