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PRODUCT
Selection Guide

Cable connection solution service provider

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About XINLAN

With the rapid development of the Chinese economy, new challenges have been posed to the efficient transmission of electricity services and the modernization of smart grids. In the future, environmentally friendly and safe power transmission systems will become the main means of urban grid and power output. Cable accessories, as an indispensable component of high and low voltage cable power transmission, play a particularly critical role.

Xinlan Electric Co., Ltd. is committed to the research, development, production, and sales of 110kV and below power cable accessories (GIS cable accessories, prefabricated cable accessories, cold-shrink cable accessories), IEC medium and high voltage cable connectors, and KMR cable connection invisible restoration technology (fusion splicing); design, construction, and installation technical consulting services for high-voltage cable system engineering.

As a leader in domestic cable accessories, Xinlan Electric always prioritizes ensuring and improving product quality in its corporate development. The company has introduced internationally advanced fully automatic control rubber injection molding machines and has deep cooperation with internationally renowned rubber material manufacturers (Dow, Corning, Dupont), digesting and absorbing advanced production technology for detachable cable accessories in Europe and America. Xinlan Electric has strict testing processes, conducting 100% visual inspection, X-ray inspection, and electrical performance testing (power frequency AC withstand voltage test, partial discharge test, lightning impulse test, shielding resistance test) on products to ensure reliable quality. In 2021, the company launched the Mes system to intelligently manage the entire production process in the workshop, facilitating the digital transformation of the factory.

Xinlan Electric has been rated as a national-level technology enterprise, provincial-level private science and technology enterprise, and has 2 high-tech products, 9 invention patents, and more than 40 utility model patents. The company has become a recommended manufacturing unit for State Grid, Southern Power Grid, urban-rural grid transformation, five major power generation groups, Sinopec, and China Railway Group, and has established strategic partnerships with Fortune 500 companies. It has also been awarded the titles of "Quality, Service, Integrity AAA Enterprise," "National Key Recommended Product for Transmission and Transformation Engineering," and "Top Ten Brands of Chinese Cable Accessories." All series of Xinlan Electric products have obtained national product quality inspection certificates and passed the ISO9001:2015 quality management system certification.

In the future, Xinlan Electric will tirelessly uphold the reputation of the "Xinlan" brand and strive to create the best quality products; always adhere to honesty and strive for professional "one-stop" cable accessory services; based on the advantages of excellent quality and perfect service, continuously consolidate and strengthen its position in the domestic market, and integrate into the international market, gradually becoming a well-known national and even global quality enterprise.

XINLAN ELECTRIC FOUR Advantages

1 Leading R & D strength in China

Xinlan Electric is one of the earliest enterprises in the cable accessory industry to introduce fully imported injection molding equipment, partial discharge, withstand voltage, and lightning surge detection equipment. The company has 2 senior electrical engineers, 8 R&D personnel, 9 invention patents, and more than 40 utility model patents.

2 International standard of lean production

Xinlan Electric strictly produces all its products in accordance with national standards and complies with international standards, and possesses comprehensive testing methods. The company consistently prioritizes ensuring and enhancing product quality in its corporate development. The warranty period for cable accessories is over 20 years, and the fault rate has remained consistently below one in ten thousand for consecutive years!

3 Ultra high technology and reliable quality

Xinlan Electric has introduced internationally leading cable accessory production equipment, absorbed advanced processes, development concepts, and management models in the global cable accessory field, and adopted internationally high-standard main materials to continuously improve and perfect product quality, striving for optimal quality.

4 Intelligent management of the whole process of online MES digital system

Around the new requirements of "digital transformation" in the new era, Xinlan Electric comprehensively launched the Mes production management system in 2021 to intelligently manage the entire production process, establishing a "real-time information channel" between planning and production, comprehensively assisting Xinlan Electric's digital transformation.

Product **CATALOG**

15kV Screen front / rear connector

Type: XLQT-15/630/□
(Front connector)

Type: XLHT-15/630/□
(Rear connector)

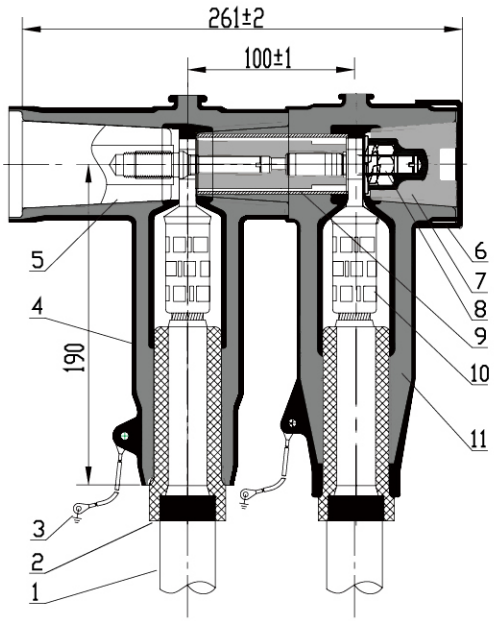
Summary

Shielded front / rear connectors are used for cable branch boxes, ring network cabinets, box transformers, etc, ensuring that the product can realize multi branch power supply. be used for Φ 46/ Φ 56 / 91.5/M16 bushing fully sealed connection, applicable to 8.7/15kV and 12 / 20kV cross-linked cables, with cable section of 25 ~ 500mm^2.

Product features

It can better handle the electric field strength and better electrical performance at the cable fracture. Small space, unique structural design, convenient installation and higher tolerance.

1、Cable
2、Cable adaptor
3、Earthing wire
4、Front connector body
5、Bushing
6、Screen cover
7、Un-screen insulating plug
8、Bolt
9、Copper linking rod
10、Compression lug
11、Rear connector body



24kV Screen front / rear connector

Type: XLQT-24/630/□
(Front connector)

Type: XLHT-24/630/□
(Rear connector)

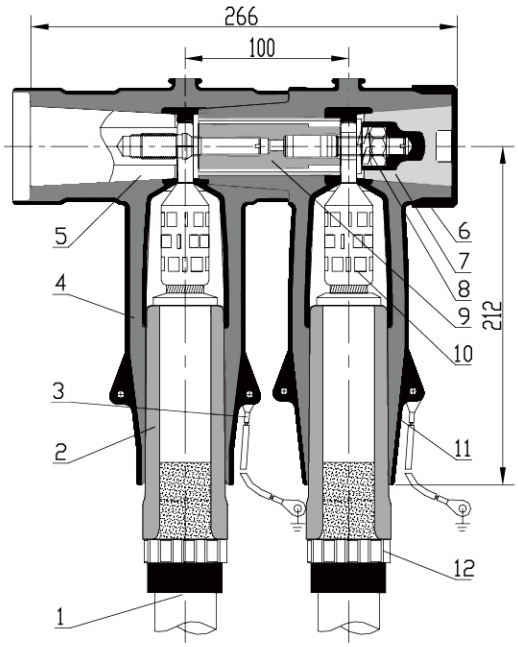
Summary

The shielded front and rear connectors are used for cable branch boxes, ring network cabinets, box transformers, etc. of 20kV distribution system to ensure that the product can realize multi branch power supply. be used for φ 46/ φ 56 / 91.5/m16 bushing fully sealed connection is used for 12 / 20kV and 18 / 30kV cross-linked cables, and the applicable cable section is 35 ~ 500mm ²

Product features

It can better deal with the electric field strength at the cable fracture and has better electrical performance. Small space, unique structural design, convenient installation and higher tolerance.

1、Cable
2、Cable adaptor
3、Earthing wire
4、Front connector body
5、Bushing
6、Screen cover
7、Un-screen insulating plug
8、Bolt
9、Copper linking rod
10、Compression lug
11、Rear connector body
12、Position chain



35kV Screen front / rear connector

Type: XLQT-35/630/□
(Front connector)

Type: XLHT-35/630/□
(Rear connector)

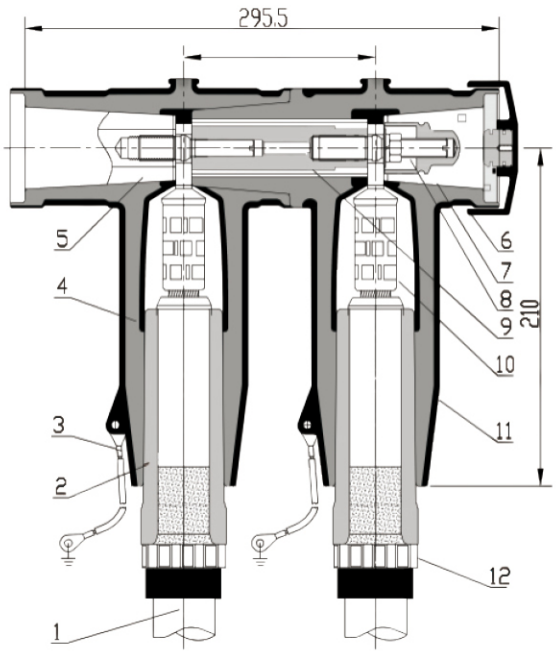
Summary

35kV shielded front and rear connectors are used for cable branch boxes, ring network cabinets, box transformers, etc. of distribution system to ensure that the product can realize multi branch power supply. be used for φ 46/ φ 56 / 91.5/M16 bushing fully sealed connection, used for 26 / 35kV cross-linked cable, applicable to cable section of 35 ~ 500mm ².

Product features

It can better handle the electric field strength and better electrical performance at the cable fracture. Small space, unique structural design, convenient installation and higher tolerance.

1、Cable
2、Cable adaptor
3、Earthing wire
4、Front connector body
5、Bushing
6、Screen cover
7、Screen insulating plug
8、Bolt
9、Copper linking rod
10、Compression lug
11、Rear connector body
12、Position chain



Rear connector w/arrester

Type:
XLHY5WZ-17/45(50)
(Screen type)

Type: XLHY5WZ-26/66
(Rear connectorw/arrester)

Type: XLHY5WZ-34/85
(Front π connectorw/
arrester)

Type: XLY5WZ-51/134
(Rear π connectorw/
arrester)

Summary

The rear lightning arrester provides lightning protection and overvoltage protection for electrical equipment. The lightning arrester adopts a unique disengagement explosion-proof device. Under any grounding mode of neutral point, the disengagement device can act reliably (pop up the valve plate of lightning arrester) when the lightning arrester degenerates in long-term operation or is damaged by lightning. Effectively prevent the explosion of lightning arrester and permanent grounding fault of power system, and ensure the safe operation of power grid.

Notice:

1、XLHY5WZ-17/45 (50) suitable for 15kV distribution system XLQ (H) T-8.7/15kV
2、XLHY5WZ-26/66 suitable for 24kV distribution system XLQ (H) T-12/20kV
3、XLHY5WZ-34/85 suitable for 24kV distribution system XLQ (H) T-18/30kV
4、XLHY5WZ-51/134 suitable for 35kV distribution system XLQ (H) T-26/35kV

Performance parameters of arrester

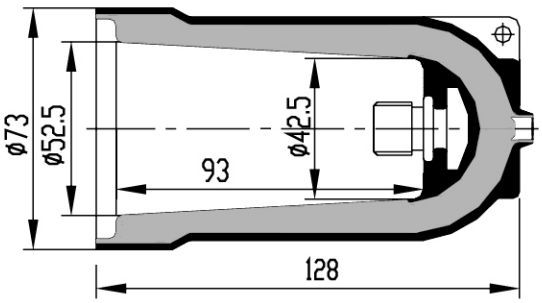
Descripti	XLHY5WZ-17/45(50)	XLHY5WZ-26/66	XLHY5WZ-34/85	XLHY5WZ-51/134
System nominal voltag	10kV(r.m.s)	20kV(r.m.s)	20kV(r.m.s)	35kV(r.m.s)
Rated voltag	17kV	26kV	34kV	51kV
Continuous operation voltag	13.6kV	20.8kV	27.2kV	40.8kV
5kA lightningimpulse current residual volta	45kV	66kv	≤85kV	≤134kV
At D.C.1mA voltage U_{1mA}	≥24kV	≥37kV	≥48kV	≥73kV
Leaking current at D.C.0.75 U_{1mA}	≤50μA	≤50μA	≤50μA	≤50μA
2ms Rectangular current withstand	150A	150A	150A	600A
A.C.withstand voltage test for EPDM housing	42kV	55kV	65kV	95kV

15/24kV Insulation cap

Summary

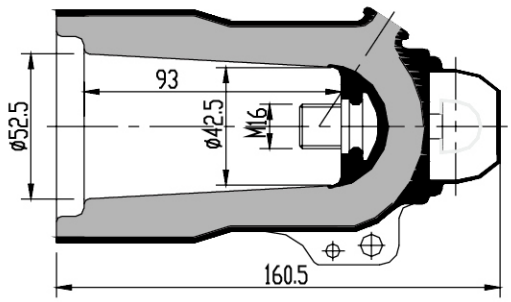
The insulating cap is the live bushing to provide insulation protection, and the non live bushing to provide dust-proof and moisture-proof protection. It can be installed on casing and multi connection socket. When the multi connection combined socket has spare outgoing line, it must be sealed with insulating cap.

Type:XLJYM-15/630
(15kV 630A Insulation cap)



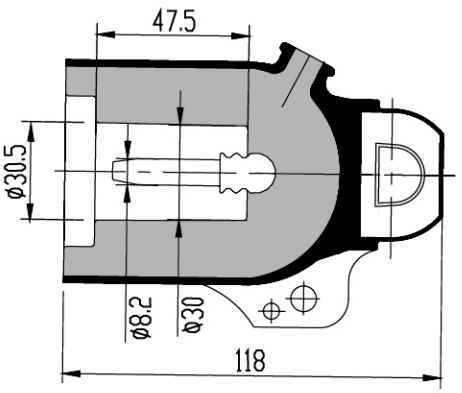
(15kV 630A Insulation cap)

Type: XLJYM-24/630
(24kV 630A Insulation cap)



(24kV 630A Insulation cap)

Type:XLJYM-24/250
(24kV 250A Insulation cap)



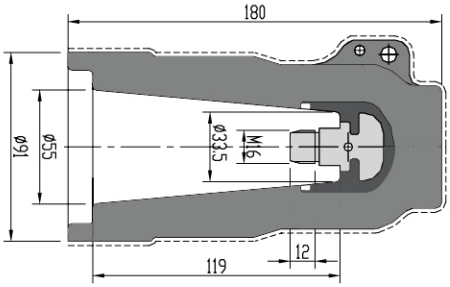
(24kV 250A Insulation cap)

35(40.5)kV Insulation cap

Summary

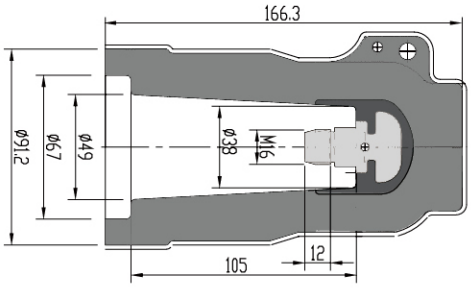
The 35 (40.5) kV insulating cap is a live bushing to provide insulation protection, and the non live bushing to provide dust-proof and moisture-proof protection. It can be installed on casing and multi connection socket. When the multi connection combined socket has spare outgoing line, it must be sealed with insulating cap.

Type: XLJYM-35/600
(35kV 600A Insulation cap)



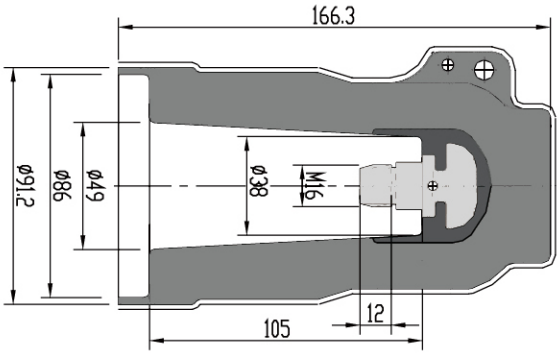
(35kV 600A Insulation cap)

Type:XLJYM-35(40.5)/630(C)
(35kV 630A Insulation cap)(C)



(35kV 630A Insulation cap)(C)

Type:XLJYM-35(40.5)/630(B)
(35kV 630A Insulation cap)(B)



(35kV 630A Insulation cap)(B)

15kV Elbow / In-line connector

Type:XLZT-15/250/□

Type:XLZC-15/250/□

Summary

Through 250A prefabricated elbow cable connector, phase or three-phase cables can be connected with other electrical equipment such as switchgear, transformer, cable junction box and so on.

Suitable for indoor or outdoor installation.

Maximum system working voltage: 24kV.

Continuous rated current: 250A.

Cable characteristics:

-Extruded insulated power cables (XLPE, EPR, etc.)

-Cable conductor section: 25 ~ 120mm ²

Characteristic

Fully shielded and fully sealed separable connections can be provided when matched with suitable sleeves.

It can be used underwater or other harsh environments for a long time.

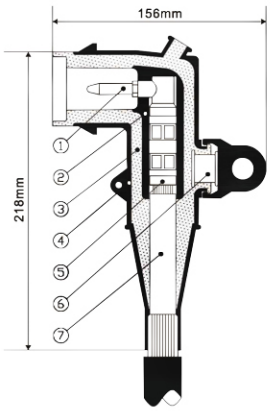
Elbow / in-line connectors have no minimum distance requirements.

It can be installed horizontally, vertically or at any angle.

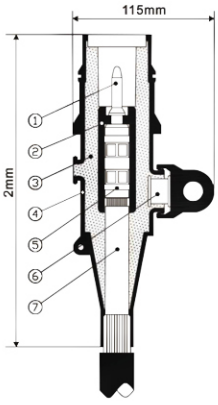
Elbow type / in-line connector has built-in capacitance test point, and live indicator can be installed to realize line status display.

Technical parameter

Applicable cable grade	8.7/10kV 8.7/15kV 12/20kV
Applicable cable section	25~120mm²
Rated voltage	15kV
Rated current	250A
AC withstand voltage (AC 5min)	39kV
partial discharge ($2U_0$)	15.1kV≤5pC
Lightning impulse withstand voltage	95kV
Thermal stability current	12.5kA 1S



1、Conductive plug
2、Inner equalizing layer
3、Insulating layer
4、Outer shielding layer
5、Crimping terminal
6、Electricity test point
7、XLPE cable



1、Conductive plug
2、Inner equalizing layer
3、Insulating layer
4、Outer shielding layer
5、Crimping terminal
6、Electricity test point
7、XLPE cable

15kV American front connector

Type: XLQT-II-15/600/□ (15kV)
(American T-type front joint)

Type: XLQT-II-15/600/□ (15kV)
(American T-II front joint)

Summary

T-type / T-II connector is used for the main network system of cable branch box or as the incoming and outgoing cable connector of ring network cabinet, which can be connected with 600A high-voltage bushing and multi connection combined socket, or combined with 600A bus bushing and elbow plug to form multi-channel cable branches. The product is equipped with an electric inspection head. The rated current is 600A, and the applicable cable section is 25 ~ 400mm ², apply Φ 40/ φ 52 / 80 / 5 / 8 "casing.

Product features

It is a fully insulated, fully sealed and fully shielded product. With the introduction of international advanced post injection insulation layer technology, the electrical performance index is higher and the use is safer and more reliable. The assembly of T-II connector and elbow plug is 30mm shorter than the traditional structure, which not only fully meets the installation space requirements of ring main cabinet, but also further reduces the structural size of cable branch box.

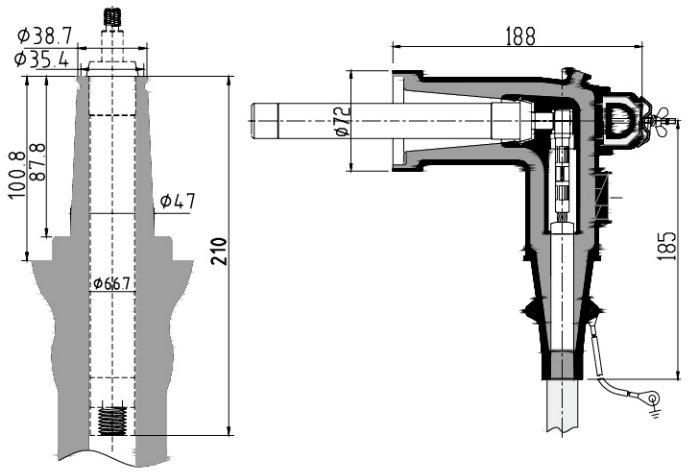
2mm thick uniform outer shielding layer with surface resistance < 1000 Ω / cm is the most advanced prefabricated cable joint in the world.

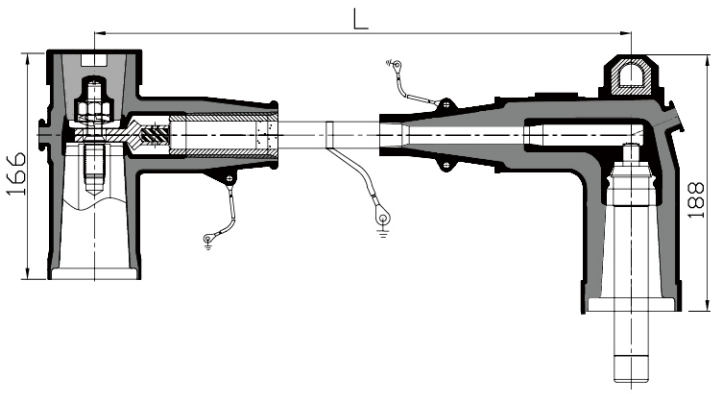
15kV
Elbow PT plug

Type: XLZT-15/200/□

Summary

It is used for fully insulated, fully shielded and fully sealed connection on the high voltage side of JDZ12A-10R transformer for providing operating power supply or metering protection for electric operating mechanism. The applicable cable section is 25 ~ 120mm ², The plug-in connection is very simple and has a reliable anti loosening device.





Special PT plug bridge

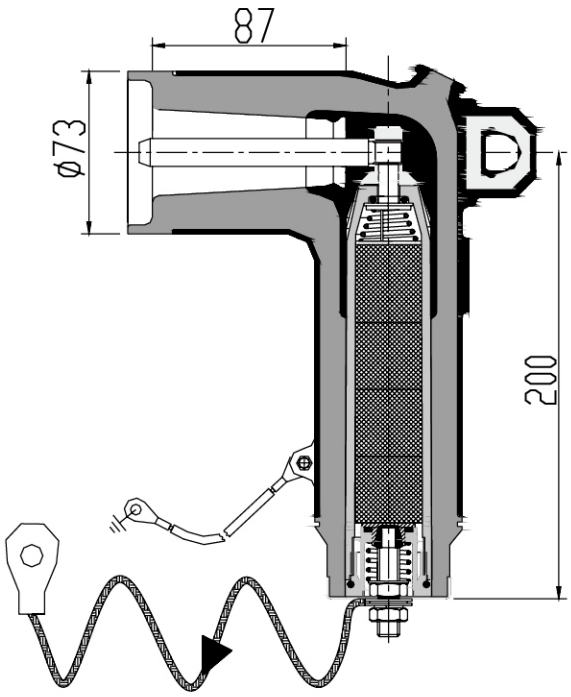
A
B
C
D
E
F
G

15kV
Elbow arrester

Type:HY5WZ5-17/45(50)

Summary

Elbow arrester provides lightning protection and overvoltage protection for electrical equipment. When in use, it is directly inserted into the double-way sleeve or T-II joint. The lightning arrester adopts a unique disengagement explosion-proof device. Under any grounding mode of neutral point, the disengagement device can act reliably (pop up the valve plate of lightning arrester) when the lightning arrester degenerates in long-term operation or is damaged by lightning. Effectively prevent the explosion of lightning arrester and permanent grounding fault of power system, and ensure the safe operation of power grid.

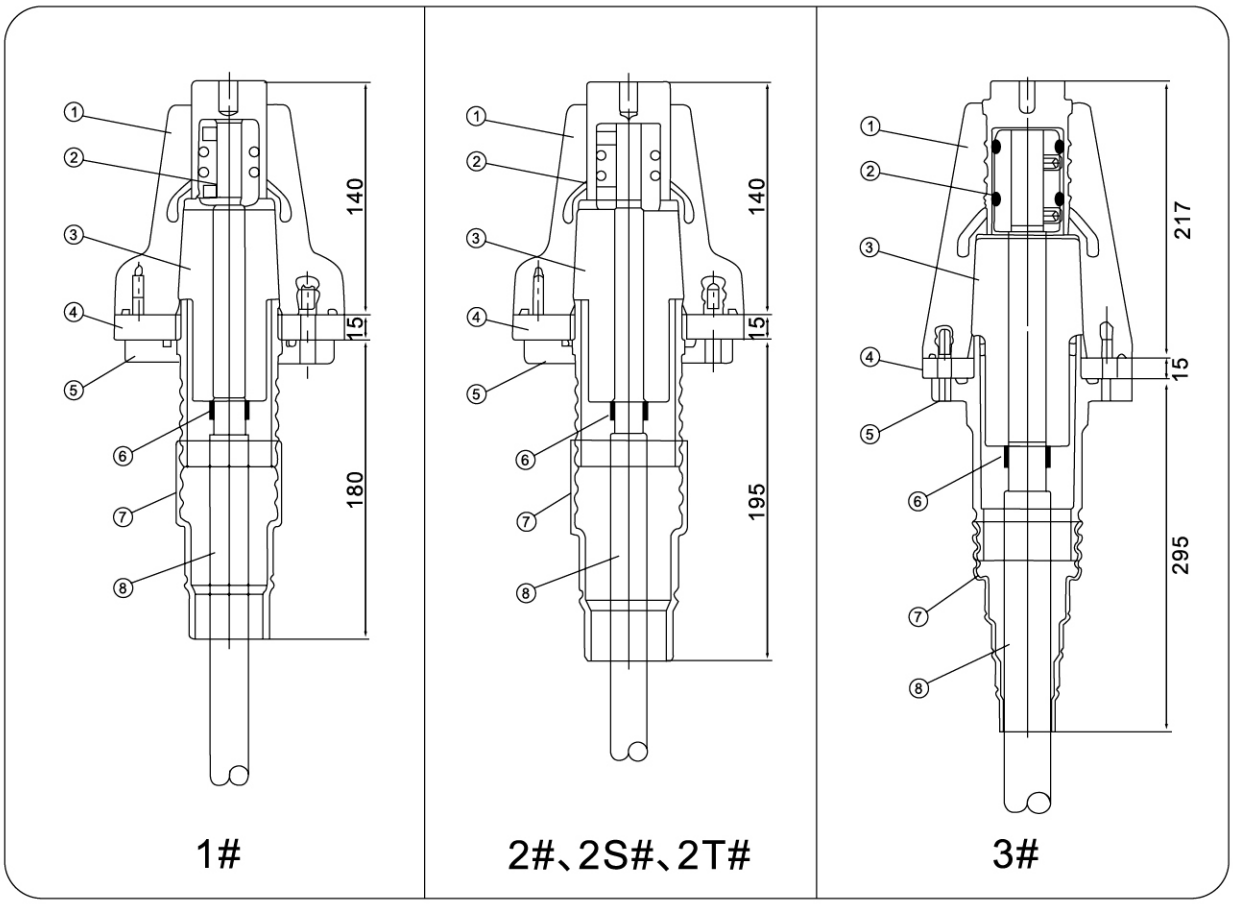


XCBN-35(40.5)kV
35kV Internal cone plug-in terminal

Supporting sockets: 1 #, 2 #, 2S #, 3#

Application

The advantages of 35kV internal cone plug-in terminals are very prominent in high-voltage systems; Make the installation site simpler and the factory testing software more economical and secure; Reduce complex gas or insulation oil treatment work on GIS and transformers.



Design diagram

(1) 35kV inner cone socket, (2) contact copper parts, (3) 35kV inner cone plug-in terminal, (4) inner cone socket mounting plate, (5) inner cone protective shell (6) Semi conductive strip step, (7) protective sleeve, (8) power cable

Reference standards

IEC 60502.4	IEC60137
IEC 600994-2006	GB/T12706.4-2008
EN50181:2010	GB/T4109-2008
HD629.1S2:2006	

Technical parameter

Model specifications	ACBN-35(40.5)-1#	ACBN-35(40.5)-2#	ACBN-35(40.5)-2S#	ACBN-35(40.5)-3#
Rated voltage (kV)	35	35	35	35
Rated current (A)	630	800	1250	1250
Power frequency withstand voltage (kV/5min)	117	117	117	117
Partial discharge (kV ≤ 10pC)	45	45	45	45
Lightning impulse voltage (kV)	200	200	200	200
Thermal stable current (kA/2s)	23	23	23	23
Dynamic stable current (kA/10ms)	83	83	83	83
Cable cross-section range (mm^2)	50-150	50-400	50-400	50-630
Installation hole center diameter (mm)	94	102	95	130

Ordering notice

● Rated voltage: 12kV ☐ ; 24kV ☐ ; 35kV ☐ ;
Cable model and specification: 8.7/15 (17.5) kV ☐ ; 12/20 (24) kV ☐ ; 18/2024) kV ☐ ; 19/33 (36) kV ☐ ; 26/35 (40.5) kV ☐ ;
Conductor material: copper ☐ ; Aluminum ☐ ;
Conductor cross-sectional area: 25 ☐ ; 35 ☐ ; 50 ☐ ; 70 ☐ ; 95 ☐ ; 120 ☐ ; 150 ☐ ; 185 ☐ ; 240 ☐ ; 300 ☐ ; 400 ☐ ; 500 ☐ ; 630 ☐ ;
Please mark a "√" in the box after the corresponding selection.
● If there are special requirements, please consult and confirm the plan.

Corresponding table of stress cone inner hole and cable

35kV1# Inner cone	Inner hole diameter (mm)	Φ18.5	Φ21	Φ23	Φ25	Φ27	Φ30	Φ33	
	Insulation diameter (mm)	20-22.4	23.1-25.5	26.2-27.8	28.5-28.6	30.7-32.5	33.1-35.1	36.1-39.6	
	8.7/15kV cross-section (mm^2)	70-95	120-150	185	240	300	400	500	
	12/20kV cross-section (mm^2)	50-70	95-120	150	185	240	300	400	
	18/30k V (19/33)		35	50-70	95	120-150	185	240-300	
	26/35kV cross-section (mm^2)					50	70-95	120-150	
35kV2# Inner cone	Inner hole diameter (mm)	Φ18.5	Φ21	Φ23	Φ25	Φ27	Φ30	Φ33	Φ37
	Insulation diameter (mm)	20-22.4	23.1-25.5	26.2-27.1	28.5-28.6	30.7-31.9	33.1-35.1	36.1-39.6	40.2-47.1
	8.7/15kV cross-section (mm^2)	70-95	120-150	185	240	300	400	500-630	
	12/20kV cross-section (mm^2)	50-70	95-120	150	185	240	300	400-500	630
	18/30kV (19/33)		35	50-70	95	120-150	185	240-300	400-500
	26/35kV cross-section (mm^2)					50	70-95	120-185	240-400
35kV3# Inner cone	Inner hole diameter (mm)				Φ27	Φ30.5	Φ33	Φ38.5	Φ40.5
	Insulation diameter (mm)	16.2-20	21.7-24.7	26.2-28.5	33.1-36.1	33.4-35.1	36.5-39.6	41.9-44.1	47.1-50.3
	8.7/15kV cross-section (mm^2)				300-400	500-630			
	12/20kV cross-section (mm^2)				240-400	500	630		
	18/30kV (19/33)				120-185	240-300	400	500-630	
	26/35kV cross-section (mm^2)				35-50	70-95	120-185	240-300	400-500

XMT-35(40.5)kV
35kV Inner cone bulkhead

Supporting sockets: 1 #, 2 #, 2S #, 3#

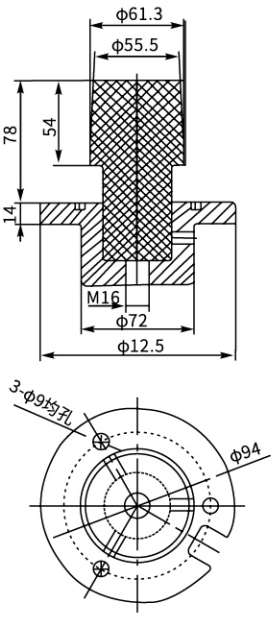
Application

The 35kV inner cone gland provides insulation protection for the 35kV ring main unit. When there are spare outgoing lines in the 35kV GIS system, they must be sealed with the 35kV inner cone gland.

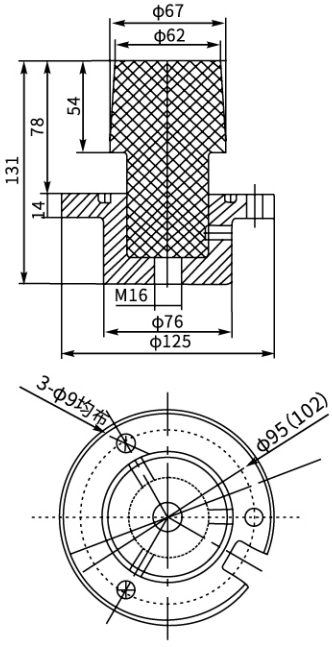
Reference standards

GB/T 12706.4
IEC 60502-4

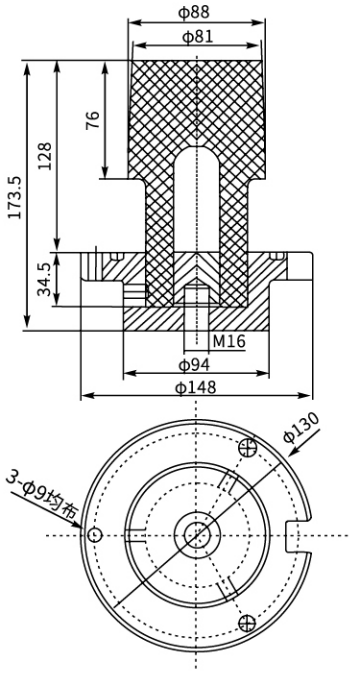
Design diagram



XMT-35-1#
35kV1 # Bulkhead



XMT-35-2# (2S#)
35kV2#Bulkhead



XMT-35-3#
35kV3#Bulkhead

Design diagram

Product model	Rated voltage (kV)	Power frequency withstand voltage	Partial discharge	Installation hole diameter (mm)
XMT-35(40.5)-1#	35	117kV/5min	45kV/≤10pC	Φ94
XMT-35(40.5)-2#	35	117kV/5min	45kV/≤10pC	Φ102
XMT-35(40.5)-2T#	35	117kV/5min	45kV/≤10pC	Φ102
XMT-35(40.5)-(2S#)	35	117kV/5min	45kV/≤10pC	Φ95
XMT-35(40.5)-3#	35	117kV/5min	45kV/≤10pC	Φ130

XHY5WT-51/134
35kV Internal cone insertion lightning arrester

XHY5WZ-51/134
35kV Internal cone insertion lightning arrester

Application

The internal cone plug-in lightning arrester provides lightning protection and overvoltage protection for C-GIS equipment, effectively ensuring the safe operation of the power grid.

Technical characteristics

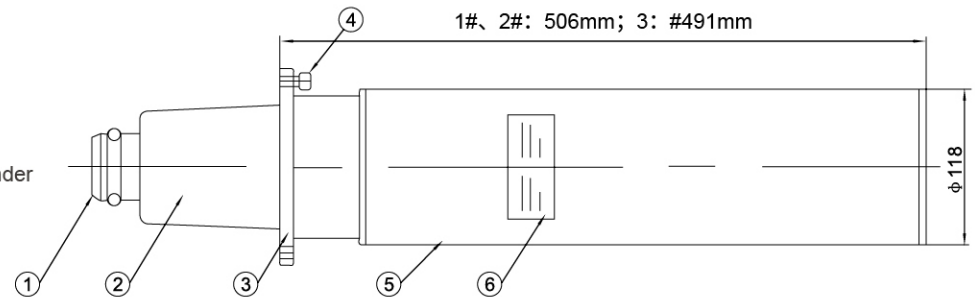
The metal shell is shielded, and the lower end is equipped with an energy release valve, which is fully sealed and has a large flow capacity.

Reference standards

GB11032-2010
IEC 60099-4:2006

Design diagram

(1) Contact
(2) Stress cone
(3) Installing flanges
(4) Grounding bolt
(5) Explosion proof metal cylinder
(6) Product nameplate



Model description

Name \ Model	XHY5WT-42/120	XHY5WZ-51/134	Other customized models
System nominal voltage (kV)	27.5	35	
Rated voltage (kV)	42	51	
Continuous operating voltage (kV)	34	40.8	
Residual voltage under lightning impulse current (kV)	120	134	
Voltage U1mA ≥ (kV) under DC 1mA	65	73	
Leakage current under 075U1mA ≤ (A)	50	50	
2ms square wave shock capacity (A)	600	600	
Voltage corresponding to partial discharge (≤ 10pC)	36	43	

XNC-35(40.5)kV
35kV Inner cone socket

Supporting sockets: 1 #, 2 #, 2S #, 3#

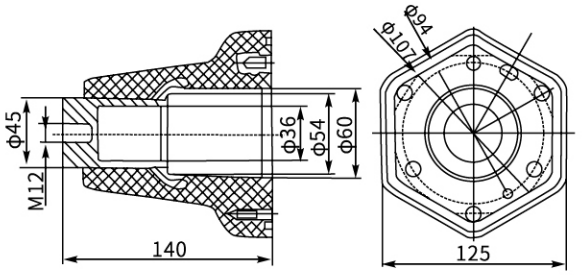
Application

The 35kV inner cone insulated socket is suitable for high-voltage connection in C-GIS cabinets and can effectively seal the SF6 gas medium inside the cabinet; Compact design, suitable for indoor and outdoor use, fully insulated, maintenance free, and connection size in accordance with DIN47637 standard.

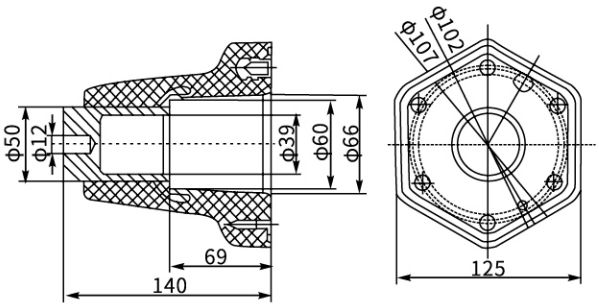
Reference standards

GB/T 12706.4
IEC 60502-4

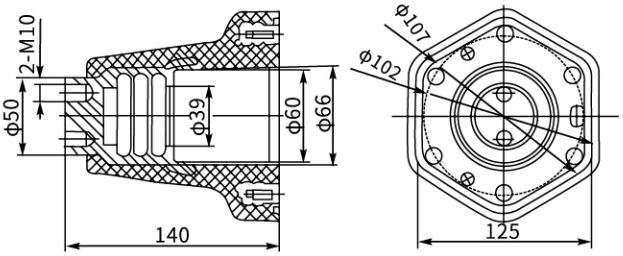
Design diagram



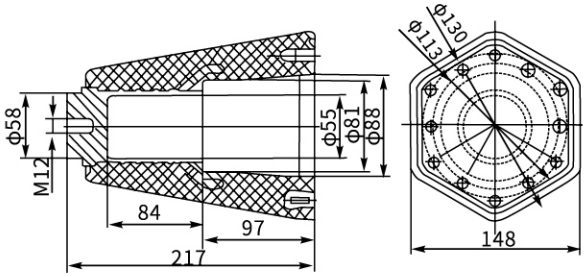
XNC-1
1 # Inner cone socket



XNC-2
2 # Inner cone socket



XNC-2T
2T # Inner cone socket



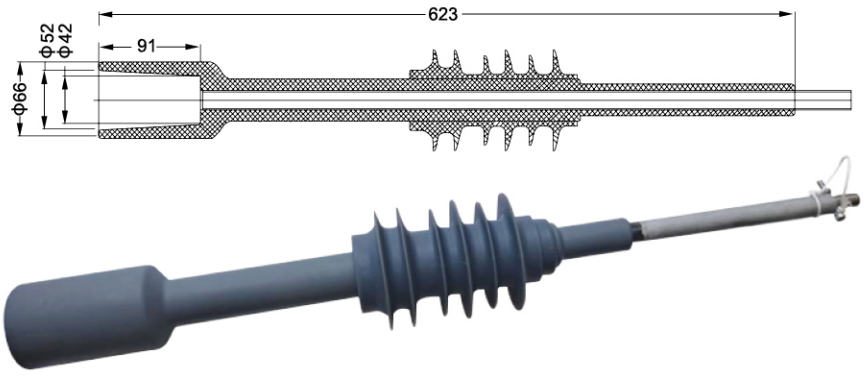
XNC-3
3 # Inner cone socket

Technical parameter

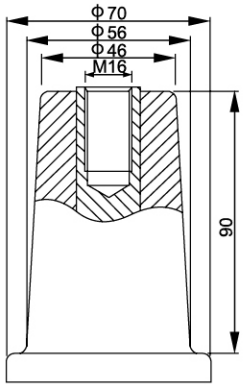
Product model	Rated voltage (kV)	Rated current (A)	Power frequency withstand voltage	Partial discharge
XNC-1 1#	35	630	117kV/5min	45kV/≤10pC
XNC-2 2#	35	800	117kV/5min	45kV/≤10pC
XNC-2T 2T#	35	1600	117kV/5min	45kV/≤10pC
XNC-3 3#	35	1250	117kV/5min	45kV/≤10pC

15kV
Unshielded outer conical sleeve test terminal (C)

Technical parameter:AC power frequency withstand voltage 55kV
Product characteristics:Unshielded structure, which can be used for integrated penetrating CT insertion, which is convenient for testing



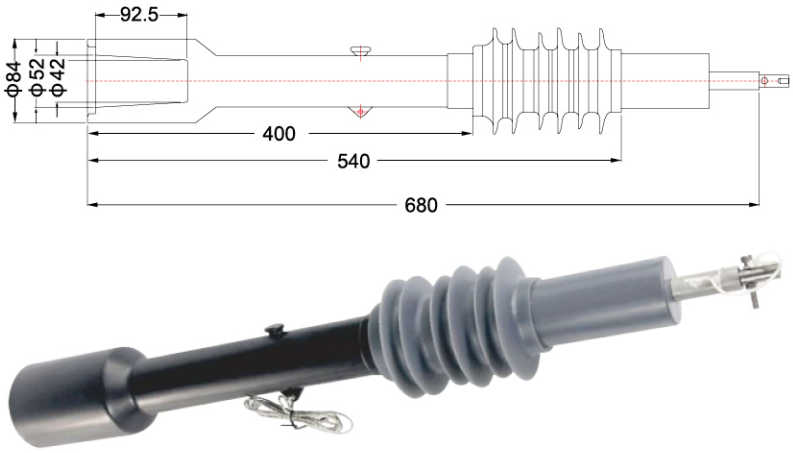
Type:XLSYZD-15/630



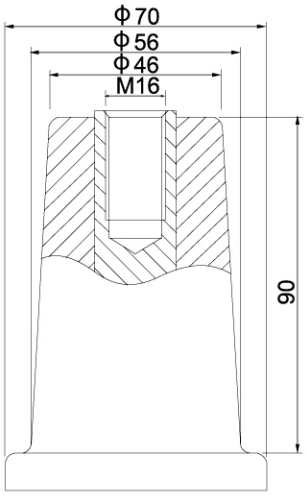
Interface C

24kV
Shielded outer conical sleeve test terminal (C)

Technical parameter:AC power frequency withstand voltage 81kV
Product characteristics:Covered shielding structure, low test noise.



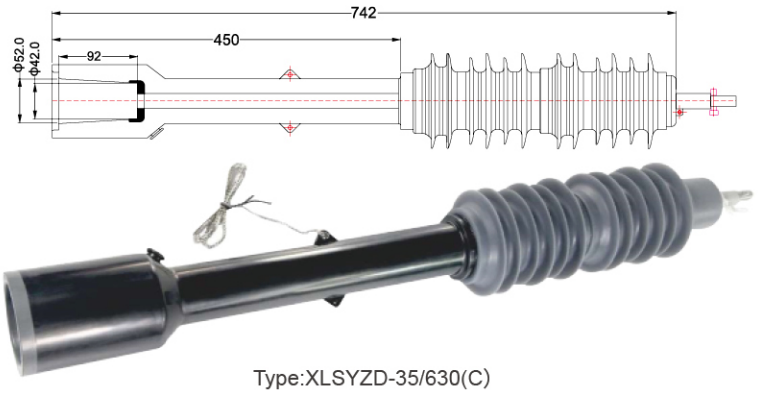
Type:XLSYZD-24/630



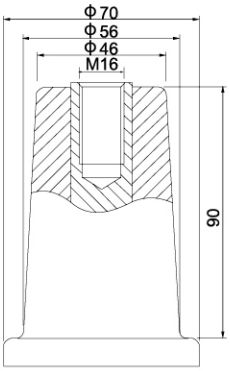
Interface C

35kV
Shielded outer conical sleeve test terminal (C)

Technical parameter:AC power frequency withstand voltage 105kV



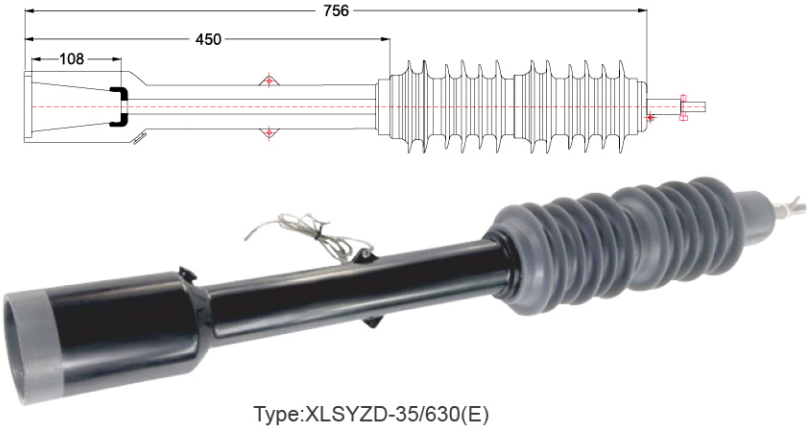
Type:XLSYZD-35/630(C)



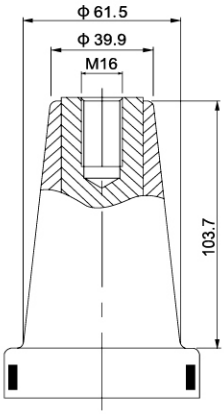
Interface C

35kV
Shielded outer conical sleeve test terminal (E)

Technical parameter:AC power frequency withstand voltage 105kV



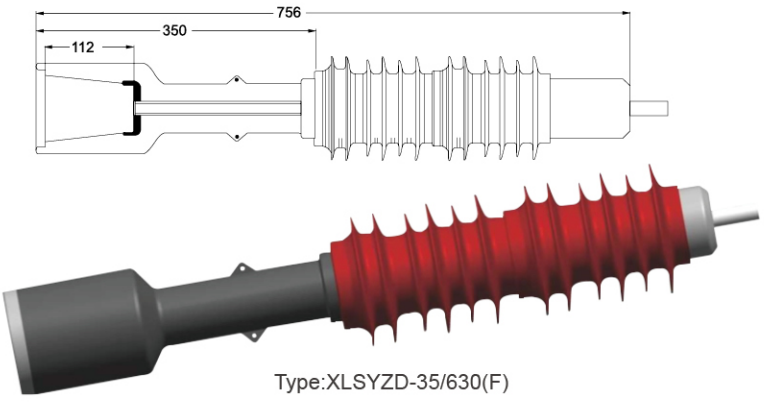
Type:XLSYZD-35/630(E)



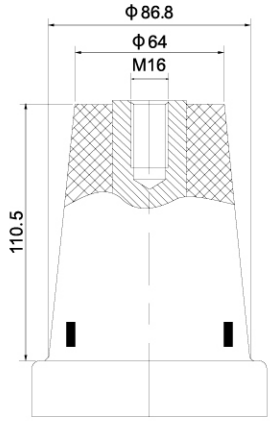
Interface E

35kV
Shielded outer conical sleeve test terminal (F)

Technical parameter:AC power frequency withstand voltage 105kV

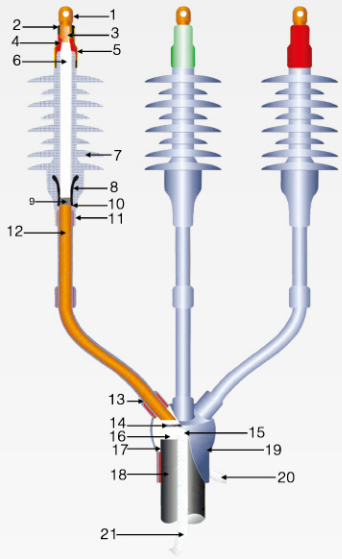


Type:XLSYZD-35/630(F)



Interface F

Analysis of cold shrink components



Three-core cold shrink termination (Internal) external assembly diagram

1、Terminal Lug
2、J-20 Mastic Tape
3、Cable Core
4、Sealant
5、Sealing Tube
6、Terminal Body
7、Main Insulation Layer
8、Stress Cone
9、Semiconductor Layer
10、Semiconductive Shielding Layer
11、Sealant
12、Copper Shielding Tape
13、Cold Shrink Insulation Tube
14、Inner Liner
15、Constant Force Spring
16、Steel Armor
17、Cable Outer Sheath
18、Cold Shrink Three-Branch Sleeve
19、Shield Grounding Wire
20、Steel Armor Grounding Wire

Summary

The outer insulation material of the terminal for cable accessories is made of high-quality silicone rubber material, which has excellent water repellency. When water droplets fall on it, they roll off at any time, without forming a conductive water film, and it possesses self-healing properties against water repellency. Additionally, it has strong insulation, resistance to tracking, corrosion resistance,and UV resistance. The greatest advantage is its ability to ensure long-term stable performance,with a long lifespan equal to that of the cable.

The terminal head of the cable accessory has a unique material formulation and manufacturing process, ensuring a tight fit with the main insulation of the cable and providing constant and lasting radial pressure to the cable, resulting in minimal partial discharge, high initial voltage, and insulation withstand level higher than existing standards, breathing in unison with the cable.

According to the national standard GB50168-92 "Specification for Construction and Acceptance of Cable Lines", Article 6.1.3 stipulates: When making plastic insulated power cable terminations and joints, care should be taken to prevent dust and debris from entering the insulation. Work should be strictly prohibited in foggy or humid conditions. If environmental factors are not considered during production, dust and impurities may enter the insulation of the cable head, leading to the formation of gaps, partial discharge in strong electric fields, and ultimately insulation breakdown,resulting in cable failure. In moist environments, cables are prone to moisture ingress, causing a decrease in overall insulation resistance. Moreover, moisture ingress can lead to the formation of gaps and localized discharge.

Power cooling technology

Cold shrink cable accessories are components made of elastic materials (commonly silicone rubber and EPDM rubber) that are injection molded and vulcanized inside injection molding equipment. These components are then expanded and lined with plastic spiral support structures to form various cable accessories. During on-site installation, these pre-expanded components are placed on the treated end or joint of the cable, and the internal plastic spiral support is pulled out, pressing tightly against the cable insulation to form the cable accessory. Because cold shrink cable accessories rely on elastic retraction force at room temperature, unlike heat shrink cable accessories that require heat for contraction, they are colloquially referred to as cold shrink cable accessories. Early cold shrink cable terminations only used additional insulation with silicone rubber cold shrink components, while the electric field treatment still used stress cone or stress tape winding methods.

Nowadays, cold shrink stress control tubes are generally used, ranging from 10kV to 35kV. Cold shrink cable joints for 1kV level use cold shrink insulation tubes for enhanced insulation, while those for 10kV level use cold shrink insulation components with internal and external semiconductive shielding layers. Cold shrink three-branch sleeves are used at the bifurcation of three-core cable terminations.

Cold shrink cable accessories have the advantages of small size, easy operation, quick installation without the need for special tools, wide applicability, and few product specifications. Compared with heat shrink cable accessories, they do not require heat and do not pose the risk of internal layer separation after installation due to movement or bending, as they rely on elastic pressure. Compared with prefabricated cable accessories, although they both rely on elastic pressure to ensure interface characteristics, cold shrink cable accessories do not correspond one-to-one with cable cross-sections and have fewer specifications.

It must be pointed out that before installation on the cable, prefabricated cable accessory components are not under tension, while cold shrink cable accessories are under high tension. Therefore, it is necessary to ensure that during the storage period, cold shrink components do not undergo obvious permanent deformation or relaxation of elastic tension. Otherwise, after installation on the cable, sufficient elastic pressure cannot be guaranteed, thereby affecting interface characteristics.

Analysis of cold shrink components

Product characteristics

Utilizing the most advanced cold shrink technology, no need for fire or special tools. During installation, simply pull out the cable core, and the elastic material will quickly shrink and adhere tightly to the desired installation location.

Silicone rubber has excellent insulation and high elasticity. It maintains suitable radial pressure on the cable throughout its service life, ensuring a tight interface without the risk of breakdown due to cable breathing. The stress control part is integrated with the main insulation, effectively addressing the problem of electric stress concentration on the outer shielding surface of the cable, ensuring reliable insulation and safe operation. All products are manufactured and formed in the factory. No special training is required for installation, the operation is simple, and no fire is needed, saving time and effort. With automatic resetting technology, installation is easy and sweat-free, greatly reducing quality accidents caused by improper operation, and solving the problem of insufficient shrinkage or difficult installation of prefabricated cable accessories.

The cold shrink tube is seamless and has a smooth and beautiful appearance.

Resistant to pollution, aging, and excellent water repellency, with superior cold and heat resistance.Particularly suitable for high-altitude, cold, humid, salt-spray, and heavily polluted areas. Installation does not require open flame and is especially suitable for flammable and explosive.

Model and its meaning

□ LSY - □ / □ - □

- □ — Product type
- LSY — Cold shrink cable accessories
- □ — Voltage level
- □ — Applicable cable core number
- □ — Applicable cable cross-sectional number

1~10kV:1、20~50mm² 2、70~120mm² 3、150~240mm² 4、300~400mm²

20kV:1、35~70mm² 2、95~185mm² 3、240~400mm²

35kV:1、50~95mm² 2、120~185mm² 3、240~400mm² 4、500-630mm

1 - Single Core 2 - Two Cores 3 - Three Cores 4 - Four Cores 5 - Five Cores

1-0.6/1.0kV 10-6/10kV~8.7/15kV

20-12/20kV~18/20kV 35-21/35kV~26/35kV

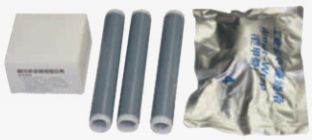
W - Outside Terminal N - Inside Terminal J - Intermediate Joint

Example: 1. "NLSY - 10/3.2" indicates a 10 kV cold shrink inside terminal suitable for a three-core cable with a cross-sectional area of 70 - 120mm^2.

2."JLSY - 35/1 .3"indicates a 35 kV cold shrink intermediate joint suitable for a single-core cable with a cross-sectional area of 240-400mm^2.

1kV Cold shrinkable cable accessories

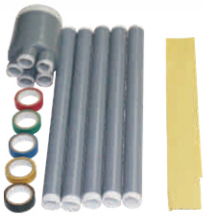
Three-core cable termination



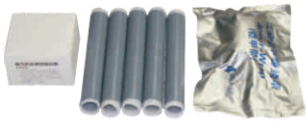
Three-core cable intermediate Joint

Four-core cable termination

Four-core cable intermediate Joint



Five-core cable termination



Five-core cable intermediate Joint

Summary

Applicable to 0.6/1kV polyvinyl chloride, cross-linked polyethylene, rubber-plastic Insulated single core, two cores, three cores, four cores, five cores power cables.

Technical parameters

Name	Model	Applicable cable cross-sectional area (mm^2)	Unit
Three-core cable termination	LSY-1/3.0	10-16	Set
	LSY-1/3.1	25-50	Set
	LSY-1/3.2	70-120	Set
	LSY-1/3.3	150-240	Set
	LSY-1/3.4	300-400	Set
Three-core cable Intermediate joint	JLSY-1/3.0	10-16	Set
	JLSY-1/3.1	25-50	Set
	JLSY-1/3.2	70-120	Set
	JLSY-1/3.3	150-240	Set
	JLSY-1/3.4	300-400	Set
Four-core cable termination	LSY-1/4.0	10-16	Set
	LSY-1/4.1	25-50	Set
	LSY-1/4.2	70-120	Set
	LSY-1/4.3	150-240	Set
	LSY-1/4.4	300-400	Set
Four-core cable Intermediate joint	JLSY-1/4.0	10-16	Set
	JLSY-1/4.1	25-50	Set
	JLSY-1/4.2	70-120	Set
	JLSY-1/4.3	150-240	Set
	JLSY-1/4.4	300-400	Set
Five-core cable termination	LSY-1/5.0	10-16	Set
	LSY-1/5.1	25-50	Set
	LSY-1/5.2	70-120	Set
	LSY-1/5.3	150-240	Set
	LSY-1/5.4	300-400	Set
Five-core cable Intermediate joint	JLSY-1/5.0	10-16	Set
	JLSY-1/5.1	25-50	Set
	JLSY-1/5.2	70-120	Set
	JLSY-1/5.3	150-240	Set
	JLSY-1/5.4	300-400	Set

Main pilot projects

No.	Test Items	Standard requirements	Test results
1	High-frequency voltage withstand test	4kV for 1 minute without flashover or breakdown	Passed
2	High-frequency voltage withstand test	2.4kV for 4 hours without flashover or breakdown	Passed

10kV Cold shrinkable cable accessories

10kV Three-core cold shrink inside terminal

10kV Three-core cold shrink outside terminal

10kV Three-core cold shrink intermediate join

Summary

10kV Series cold shrink power cable accessories.

Applicable scope

Applicable for voltage levels of 3.6/6kV, 6/6kV, 6/10kV, 8.7/10kV, 8.7/15kV single-core, three-core cross-linked power cables for terminal treatment and intermediate connections, providing sealing, insulation, and stress relief. Especially suitable for use in flammable and explosive areas such as oil fields, chemical plants, and mines.

Technical parameters

Name	Model	Applicable cable cross-sectional area (mm^2)
10kV Single-core cold shrink inside terminal	NLSY-10/1.1	25-50
	NLSY-10/1.2	70-120
	NLSY-10/1.3	150-240
	NLSY-10/1.4	300-400
10kV Single-core cold shrink outside terminal	WLSY-10/1.1	25-50
	WLSY-10/1.2	70-120
	WLSY-10/1.3	150-240
	WLSY-10/1.4	300-400
10kV Three-core cold shrink inside terminal	NLSY-10/3.1	25-50
	NLSY-10/3.2	70-120
	NLSY-10/3.3	150-240
	NLSY-10/3.4	300-400
10kV Three-core cold shrink outside terminal	WLSY-10/3.1	25-50
	WLSY-10/3.2	70-120
	WLSY-10/3.3	150-240
	WLSY-10/3.4	300-400
10kV Single-core cold shrink intermediate joint	JLSY-10/1.1	25-50
	JLSY-10/1.2	70-120
	JLSY-10/1.3	150-240
	JLSY-10/1.4	300-400
10kV Three-core cold shrink intermediate joint	JLSY-10/3.1	25-50
	JLSY-10/3.2	70-120
	JLSY-10/3.3	150-240
	JLSY-10/3.4	300-400

Main pilot projects

No.	Test Items	Standard requirements	Test results
1	High-Frequency Voltage Withstand Test	39kV for 5min without flashover or breakdown	Passed
2	Partial Discharge Test	At 15kV, discharge ≤10pc	Passed
3	Impulse Voltage Test	At 95kV, ±10 times without flashover or breakdown	No flashover or breakdown
4	Constant Pressure Load Cycling(in air)	Conductor voltage applied at 23kV, heated to 95-100°C, where temperature stabilizes for 2h, cooled for 3h, repeated for a total of 3 cycles	No breakdown and determined by the following test results
5	Partial Discharge (conductor temperature highest +5-10°C during normal operation)	At 15kV, discharge ≤10pc	Passed
6	Constant Pressure Load Cycling Test	Conductor voltage applied at 23kV, heated to 95-100°C, where temperature stabilizes for 2h, cooled for 3h, repeated for a total of 3 cycles	No breakdown and determined by the following test results
7	Partial Discharge (conductor temperature highest +5-10°C and environmental temperature)	At 15kV, discharge ≤10pc	Passed
8	Thermal Stability Test	At 23kA, short-circuited twice, no visible damage	Passed
9	Dynamic Stability Test	At 81kA, short-circuited once, no visible damage	Passed
10	Impulse Voltage Test	At 95kV, ±10 times	No flashover or breakdown
11	AC Voltage Withstand Test	At 23kV, 5min	No flashover or breakdown
12	Moisture Test	11kV，300h	No occurrence of breakdown, flashover, and overcurrent release
13	Salt Spray Test	11kV，1000h	No occurrence of breakdown, flashover, and overcurrent release

20kV Cold shrinkable cable accessories

20kV Three-core cold shrink inside terminal

20kV Three-core cold shrink outside terminal

20kV Three-core cold shrink intermediate join

Summary

20kV Series cold shrink power cable accessories.

Applicable scope

Applicable for voltage levels of 12/20kV, 18/20kV, 18/30kV single-core, three-core cross-linked power cables for terminal treatment and intermediate connections, providing sealing, insulation, and stress relief. Advanced post-injection technology better solves partial discharge problems, ensuring safe and reliable operation. Especially suitable for use in flammable and explosive areas such as oil fields, chemical plants, and mines.

Technical parameters

Name	Model	Applicable cable cross-sectional area (mm^2)
20kV Single-core cold shrink inside terminal	NLSY-20/1.1	35-70
	NLSY-20/1.2	95-185
	NLSY-20/1.3	240-400
20kV Single-core cold shrink outside terminal	WLSY-20/1.1	35-70
	WLSY-20/1.2	95-185
	WLSY-20/1.3	240-400
20kV Three-core cold shrink inside terminal	NLSY-20/3.1	35-70
	NLSY-20/3.2	95-185
	NLSY-20/3.3	240-400
20kV Three-core cold shrink outside terminal	WLSY-20/3.1	35-70
	WLSY-20/3.2	95-185
	WLSY-20/3.3	240-400
20kV Single-core cold shrink intermediate joint	JLSY-20/1.1	35-70
	JLSY-20/1.2	95-185
	JLSY-20/1.3	240-400
20kV Three-core cold shrink intermediate joint	JLSY-20/3.1	35-70
	JLSY-20/3.2	95-185
	JLSY-20/3.3	240-400

Main pilot projects

No.	Test Items	Standard requirements	Test results
1	High-Frequency Voltage Withstand Test	54kV for 5min without flashover or breakdown	Passed
2	Partial Discharge Test	At 20kV, discharge ≤10pc	Passed
3	Impulse Voltage Test	At 125kV, ±10 times without flashover or breakdown	No flashover or breakdown
4	Constant Pressure Load Cycling	Conductor voltage applied at 35kV, heated to 95-100°C, where temperature stabilizes for 2h, cooled for 3h, repeated for a total of 3 cycles	No breakdown and determined by the following test results
5	Partial discharge (maximum conductor temperature during normal operation plus 5-10 ℃)	At 20kV, discharge ≤10pc	Passed
6	Constant voltage load cycle test	Apply a voltage of 23kV to the conductor and heat it to 95-100 ℃ , where the temperature stabilizes for 2 hours and cools for 3 hours, for a total of 3 cycles	No breakdown and determined by the following test results
7	Partial discharge (at the highest temperature of the conductor during normal operation plus 5-10 ℃ and ambient temperature)	At 20kV, discharge ≤10pc	Passed
8	Thermal stability test	At 23kA, short circuit twice without visible damage	Passed
9	Dynamic stability test	Short circuit once at 81kA without visible damage	Passed
10	Impulse voltage test	1255kV 下，±10 次	No flashover, no breakdown
11	Ac withstand voltage	30kV 下，5min	No flashover, no breakdown
12	Moisture test	15kV，300h	No breakdown, flashover, or overcurrent release occurs
13	Salt spray test	15kV，1000h	No breakdown, flashover, or overcurrent release occurs

35kV Cold shrinkable cable accessories

35kV Three-core cold shrink inner terminal

35kV Three-core cold shrink outer terminal

35kV Three-core cold shrink intermediate join

Summary

35kV Cold shrink cable accessories

Applicable scope

Suitable for terminal processing and intermediate connection of single-core and three-core cross-linked power cables with voltage levels of 21/31.5kV and 26/35kV, providing sealing, insulation, and stress relief functions, particularly suitable for use in flammable and explosive environments such as oil, chemical, and mining industries.

Technical parameters

Name	Model	Applicable cable cross-sectional area (mm^2)
35kV Single-core cold shrink inner terminal	NLSY-35/1.1	50-95
	NLSY-35/1.2	120-185
	NLSY-35/1.3	240-400
	NLSY-35/1.4	500-630
35kV Single-core cold shrink outer terminal	WLSY-35/1.1	50-95
	WLSY-35/1.2	120-185
	WLSY-35/1.3	240-400
	WLSY-35/1.4	500-630
35kV Three-core cold shrink inner terminal	NLSY-35/3.1	50-95
	NLSY-35/3.2	120-185
	NLSY-35/3.3	240-400
	NLSY-35/3.4	500-630
35kV Three-core cold shrink outer terminal	WLSY-35/3.1	50-95
	WLSY-35/3.2	120-185
	WLSY-35/3.3	240-400
	WLSY-35/3.4	500-630
35kV Single-core cold shrink intermediate joint	JLSY-35/1.1	50-95
	JLSY-35/1.2	120-185
	JLSY-35/1.3	240-400
	JLSY-35/1.4	500-630
35kV Three-core cold shrink intermediate joint	JLSY-35/3.1	50-95
	JLSY-35/3.2	120-185
	JLSY-35/3.3	240-400
	JLSY-35/3.4	500-630

Main pilot projects

No.	Test Items	Standard requirements	Test results
1	High-Frequency Voltage Withstand Test	105kV for 1 minute without flashover or breakdown	Pass
2	Partial Discharge Test	Discharge ≤10pc at 39kV	Pass
3	Constant Pressure Load Cycling (in air)	Conductor voltage of 23kV applied, heated to 95-100°C with temperature stabilization for 2 hours, cooled for 3 hours, repeated 3 times	No breakdown and evaluated results from the following tests
4	Impulse Voltage Test	±10 times without flashover or breakdown at 250kV	No flashover, no breakdown
5	AC Withstand Voltage Test	15 minutes at 156kV	No flashover, no breakdown
6	AC Withstand Voltage Test	4 hours at 104kV	No flashover, no breakdown

Communication cold shrink tubing

Summary

Communication shrink tubing is a highly elastic rubber product used for insulation sealing and waterproof and moisture-proof protection at cable connections, widely used in communication base stations, coaxial cable joints, 5G equipment and other fields.

Material and Structure

Material characteristics: Communication cold shrink tubing is mainly made of silicone rubber or ethylene propylene diene monomer (EPDM);

Silicone rubber: resistant to high and low temperatures (-60 ℃ ~200 ℃), UV resistant, excellent flexibility, suitable for sealing in dynamic environments.

EPDM: High mechanical strength, resistant to puncture, oil and chemical corrosion, with an expansion ratio of over 4 times, suitable for complex environments. Some products have built-in adhesive structure to enhance sealing and extend service life (up to 10 years or more).

Structural design: The cold shrink tubing is pre expanded on a withdrawable core rope (support tube) during production. During installation, only the core rope needs to be positioned and withdrawn, relying on the elasticity of the material to form a tight wrapping.

Main application scenarios

Communication field: Waterproof sealing of 4G/5G base station antenna connectors, feeder connectors, and coaxial cable connections. Protection of exposed joints such as wireless communication towers and outdoor subsystems.

Power and cables: insulation protection for the middle or terminals of medium and low voltage power cables and optical cables. Other scenarios that require sealing, such as tool handles and pipeline repairs

Technical parameter

Tensile strength: ≥ 11.8MPa;
Elongation at break: ≥ 600%.
Dielectric strength: 19.1kV/mm;
Temperature resistance range: -55℃ ~+150℃

Comparative advantages with traditional heat shrink tubing

Safety: No need for open flames, suitable for fire-resistant environments such as oil and natural gas.

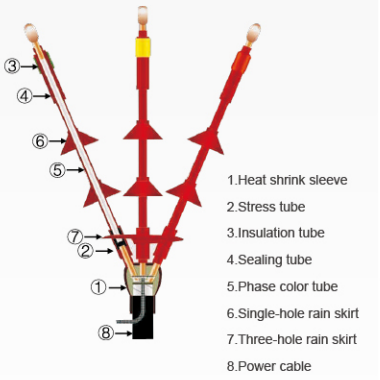
Efficiency: Shorten installation time by more than 50% and reduce labor costs.

Adaptability: The elastic memory function can adapt to the thermal expansion and contraction of cables, avoiding seal failure

Specification selection

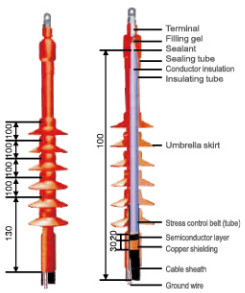
Inside diameter	Scope of application (mm)	Shrinkage length (mm)	Thickness after shrinkage (mm)	Colour
φ25	6.3~21	90~500	3	Black/Grey
φ32	10~26	90~500	3	Black/Grey
φ35	12~30	90~500	3	Black/Grey
φ40	12.7~33	90~500	3	Black/Grey
φ44	12.7~38	90~500	3	Black/Grey
φ53	22~46	90~500	3	Black/Grey
φ65	32~58	90~500	3.5	Black/Grey
φ80	37~72	90~500	4	Black/Grey

Heat shrink components analysis



10kV three-core heat shrink terminal cross-section diagram

35kV three-core outdoor terminal



35kV single-core outdoor terminal installation diagram

Model and its meaning

□ RSY □ - □ / □ · □

- Applicable cable cross-sectional number
- Applicable cable core number
- Voltage level
- Cable type
- Heat shrink cable accessory
- Product type

1~10kV:1、20~50mm² 2、70~120mm² 3、150~240mm² 4、300~400mm²

20kV:1、35~70mm² 2、95~185mm² 3、240~400mm²

35kV:1、50~95mm² 2、120~185mm² 3、240~400mm² 4、500-630mm

1 - Single Core 2 - Two Cores 3 - Three Cores 4 - Four Cores 5 - Five Cores

1-0.6/1.0kV 10-6/10kV~8.7/15kV

20-12/20kV~18/20kV 35-21/35kV~26/35kV

Y-Cross-linked polyethylene cable

W-External terminal N-Internal terminal J-Middle joint

Example: 1. "WRSY-10/1.3" indicates a 10kV cross-linked polyethylene insulated cable with heat shrinkable external terminal suitable for single-core cables with a cross-sectional area of 150-240mm².

2."JRSY- 1/3 .2" indicates a 1kV rubber-insulated cable with heat-shrinkable joint, suitable for three-core cables with a cross-sectional area of 70-120mm².

1kV, 10kV, 20kV, 35kV heat shrink cable terminations, middle joint series products, integrated with waterproofing, stress control, shielding, and insulation. They have excellent electrical and mechanical properties and can be used for a long time in various harsh environments. They are lightweight, easy to install, and widely used in power, petrochemical, metallurgy, railway ports, and construction fields.

1kV Heat shrinkable cable accessories

Five-core cable terminal

Four-core cable terminal

Four-core cable middle joint

Five-core cable middle joint

Summary

Applicable to 0.6/1kV polyvinyl chloride, cross-linked polyethylene, rubber-insulated single-core, two-core, three-core, four-core, and five-core power cables.

Technical parameters

Name	Model	Applicable Cable Cross-sectional Area (mm^2)	Unit	Insulation tube length (mm)
Three-core cable terminal	RSY-1/3.0	10-16	Set	
	RSY-1/3.1	25-50	Set	
	RSY-1/3.2	70-120	Set	
	RSY-1/3.3	150-240	Set	
	RSY-1/3.4	300-400	Set	
Four-core cable terminal	RSY-1/4.0	10-16	Set	
	RSY-1/4.1	25-50	Set	
	RSY-1/4.2	70-120	Set	
	RSY-1/4.3	150-240	Set	
	RSY-1/4.4	300-400	Set	
Five-core cable terminal	RSY-1/5.0	10-16	Set	
	RSY-1/5.1	25-50	Set	
	RSY-1/5.2	70-120	Set	
	RSY-1/5.3	150-240	Set	600
	RSY-1/5.4	300-400	Set	800
Three-core cable middle joint	JRSY-1/3.0	10-16	Set	
	JRSY-1/3.1	25-50	Set	1000
	JRSY-1/3.2	70-120	Set	
	JRSY-1/3.3	150-240	Set	
	JRSY-1/3.4	300-400	Set	
Four-core cable middle joint	JRSY-1/4.0	10-16	Set	
	JRSY-1/4.1	25-50	Set	
	JRSY-1/4.2	70-120	Set	
	JRSY-1/4.3	150-240	Set	
	JRSY-1/4.4	300-400	Set	
Five-core cable middle joint	JRSY-1/5.0	10-16	Set	
	JRSY-1/5.1	25-50	Set	
	JRSY-1/5.2	70-120	Set	
	JRSY-1/5.3	150-240	Set	
	JRSY-1/5.4	300-400	Set	

Main pilot projects

Test Items	Test method	Test results
1-minute high-frequency voltage (wet state)	4kV no flashover, no breakdown	4kV, 1min, the combination specimen under wet conditions does not flashover or breakdown
Load cycling test	The conductor is heated to 90-95°C, each cycle is 8h, including 5h of heating and 3h of cooling, a total of three cycles	Complete three load cycling tests as required by the standard
High-frequency voltage test	2.4kV no flashover, no breakdown	2.4kV, 4h, the combination specimen does not flashover or breakdown

10kV Heat shrinkable cable accessories

10kV three-core heat shrink sleeve terminal

10kV three-core heat shrink external terminal

10kV single-core heat shrink middle joint

Summary

10kV Single-core heat shrink middle joint

Technical parameters

Name	Model	Applicable cable cross-sectional area (mm^2)
10kV single-core heat shrink sleeve terminal	NRSY-10/1.1	25-50
	NRSY-10/1.2	70-120
	NRSY-10/1.3	150-240
	NRSY-10/1.4	300-400
10kV single-core heat shrink external terminal	WRSY-10/1.1	25-50
	WRSY-10/1.2	70-120
	WRSY-10/1.3	150-240
	WRSY-10/1.4	300-400
10kV three-core heat shrink sleeve terminal	NRSY-10/3.1	25-50
	NRSY-10/3.2	70-120
	NRSY-10/3.3	150-240
	NRSY-10/3.4	300-400
10kV three-core heat shrink external terminal	WRSY-10/3.1	25-50
	WRSY-10/3.2	70-120
	WRSY-10/3.3	150-240
	WRSY-10/3.4	300-400
10kV single-core heat shrink middle joint	JRSY-10/1.1	25-50
	JRSY-10/1.2	70-120
	JRSY-10/1.3	150-240
	JRSY-10/1.4	300-400
10kV three-core heat shrink middle joint	JRSY-10/3.1	25-50
	JRSY-10/3.2	70-120
	JRSY-10/3.3	150-240
	JRSY-10/3.4	300-400

Main pilot projects

Test Items	Test method	Test results
1-minute high-frequency voltage (wet state)	45kV no flashover, no breakdown	45kV, 1min, the combination specimen under wet conditions does not flashover or breakdown
Load cycling test	The conductor is heated to 90-95°C, each cycle is 8h, including 5h of heating and 3h of cooling, a total of three cycles	Complete three load cycling tests as required by the standard
4-hour high-frequency voltage test	52kV no flashover, no breakdown	52kV, 4h, the combination specimen does not flashover or breakdown
Impact test	105kV, positive and negative polarity each 10 times no flashover, no breakdown	105kV, positive and negative polarity each 10 times, the combination specimen does not flashover or breakdown
Partial discharge test	13kV discharge quantity is not greater than 20pc	The discharge quantity of phases a, b, and c is 2pc at 13kV.

20kV Heat shrinkable cable accessories

20kV three-core heat shrink cable indoor termination

20kV three-core heat shrink cable outdoor termination

20kV three-core heat shrink cable intermediate joint

Summary

20kV series heat shrink power cable accessories.

Technical parameters

Name	Model	Applicable cable cross-sectional area (mm^2)
20kV single-core heat shrink cable indoor termination	NRSY-20/1.1	35-70
	NRSY-20/1.2	95-185
	NRSY-20/1.3	240-400
20kV single-core heat shrink cable outdoor termination	WRSY-20/1.1	35-70
	WRSY-20/1.2	95-185
	WRSY-20/1.3	240-400
20kV three-core heat shrink cable indoor termination	NRSY-20/3.1	35-70
	NRSY-20/3.2	95-185
	NRSY-20/3.3	240-400
20kV three-core heat shrink cable outdoor termination	WRSY-20/3.1	35-70
	WRSY-20/3.2	95-185
	WRSY-20/3.3	240-400
20kV single-core heat shrink cable intermediate joint	JRSY-20/1.1	35-70
	JRSY-20/1.2	95-185
	JRSY-20/1.3	240-400
20kV three-core heat shrink cable intermediate joint	JRSY-20/3.1	35-70
	JRSY-20/3.2	95-185
	JRSY-20/3.3	240-400

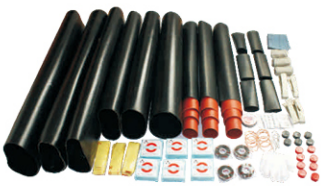
Main pilot projects

Test Items	Test method	Test results
1-minute AC voltage withstand test (wet)	35kV: No flashover, no breakdown	35kV: 1-minute AC voltage withstand test (wet), no flashover, no breakdown for the combined test samples
Load cycling test	The conductor is heated to 90-95°C, each cycle lasts 8 hours, with 5 hours of heating and 3 hours of cooling, for a total of three cycles	Complete three cycles of load cycling tests as per standard requirements
4-hour AC voltage withstand test	65kV: No flashover, no breakdown	65kV: 4-hour combined test samples show no flashover, no breakdown
Impulse voltage test	250kV: No flashover, no breakdown for each polarity 10 times	250kV: Combined test samples show no flashover, no breakdown for each polarity 10 times
Negative polarity 15-minute DC voltage withstand test	156kV: No flashover, no breakdown	156kV: 15-minute combined test samples show no flashover, no breakdown
Partial discharge test	Discharge under 39kV is not greater than 20 pc	Discharge for phases a, b, and c under 39kV is 4 pc.

35kV Heat shrinkable cable accessories

35kV three-core heat shrink cable indoor termination

35kV three-core heat shrink cable outdoor termination



35kV three-core heat shrink cable intermediate joint

Summary

35kV series heat shrink power cable accessories

Technical parameters

Name	Model	Applicable cable cross-sectional area (mm^2)
35kV single-core heat shrink cable indoor termination	NRSY-35/1.1	50-95
	NRSY-35/1.2	120-185
	NRSY-35/1.3	240-400
	NRSY-35/1.4	500-630
35kV single-core heat shrink cable outdoor termination	WRSY-35/1.1	50-95
	WRSY-35/1.2	120-185
	WRSY-35/1.3	240-400
	WRSY-35/1.4	500-630
35kV three-core heat shrink cable indoor termination	NRSY-35/3.1	50-95
	NRSY-35/3.2	120-185
	NRSY-35/3.3	240-400
	NRSY-35/3.4	500-630
35kV three-core heat shrink cable outdoor termination	WRSY-35/3.1	50-95
	WRSY-35/3.2	120-185
	WRSY-35/3.3	240-400
	WRSY-35/3.4	500-630
35kV single-core heat shrink cable intermediate joint	JRSY-35/1.1	50-95
	JRSY-35/1.2	120-185
	JRSY-35/1.3	240-400
	JRSY-35/1.4	500-630
35kV three-core heat shrink cable intermediate joint	JRSY-35/3.1	50-95
	JRSY-35/3.2	120-185
	JRSY-35/3.3	240-400
	JRSY-35/3.4	500-630

Main pilot projects

Test Items	Test method	Test results
1-minute AC voltage withstand test (wet)	35kV: No flashover, no breakdown	35kV: 1-minute AC voltage withstand test (wet), no flashover, no breakdown for the combined test samples
Load cycling test	The conductor is heated to 90-95°C, each cycle lasts 8 hours, with 5 hours of heating and 3 hours of cooling, for a total of three cycles	Complete three cycles of load cycling tests as per standard requirements
AC voltage withstand test	65kV: No flashover, no breakdown	65kV: 4-hour combined test samples show no flashover, no breakdown
Impulse voltage test	250kV: No flashover, no breakdown for each polarity 10 times	250kV: Combined test samples show no flashover, no breakdown for each polarity 10 times
Negative polarity 15-minute DC voltage withstand test	156kV: No flashover, no breakdown	156kV: 15-minute combined test samples show no flashover, no breakdown
Partial discharge test	Discharge under 39kV is not greater than 20 pc	Discharge for phases a, b, and c under 39kV is 4 pc.

XDRS-1kV Heat shrinkable Busbar sleeve

Summary

XDRS heat shrinkable sleeve is made of Polythene and others material which have some advantages of pliability, flame-repellent, shrink fasthigh stability, Bright Color and so on. Being used in Cable, special sleeves, and so on. It reliably protects wires, solder joints terminalsconnections and comnonents trom most industrial fuels solvents and chemicals. Wires and cables casing have protective efect, and also havefame-retardant, Electromagnetic shieldina functions, Connectors, Backshells, Terminal Block, Cable Support, Contacts, Wire, Conduits, Circuit Breakers RelaXS Switchesand so on.

Features

Shrink ratio:2:1.3:1
Temperature:-55℃ -125℃
Shrinkage temperature:85℃ -125℃
Color: black,red,yellow, green, blueSpecial colors can be customized according to the color card provided by customers.Function and application: Electric insulation, Machine Guarding, Making the connector box and so on.Application area: Power Industry

Type& Specification

Item No.	Inner Dia (mm)	Thickness(mm)	Package (m/roll)
XDRS-Φ 1/0.5	1.3±0.3	0.185± 0.05	400
XDRS-Φ1.5/0.75	1.8±0.3	0.19±0.05	400
XDRS-Φ2/1	2.3±0.3	0.2±0.05	400
XDRS-Φ2.5/1.25	2.8±0.3	0.2±0.05	400
XDRS-Φ3/1.5	3.3+0.3	0.2±0.05	400
XDRS-Φ3.5/1.75	3.8±0.3	0.2±0.05	400
XDRS-Φ4/2	4.3±0.3	0.21±0.05	400
XDRS-Φ4.5/2.25	4.8±0.3	0.21±0.05	200
XDRS-Φ5/2.5	5.3±0.3	0.21±0.05	200
XDRS-Φ6/3	6.4±0.3	0.21±0.05	200
XDRS-Φ7/3.5	7.4±0.4	0.21±0.05	100
XDRS-Φ8/4	8.4+0.4	0.21±0.05	100
XDRS-Φ9/4.5	9.4+0.4	0.24±0.05	100
XDRS-Φ10/5	10.5±0.5	0.24±0.05	100
XDRS-Φ11/5.5	11.5±0.5	0.24±0.05	100
XDRS-Φ12/6	12.5±0.5	0.25±0.05	100
XDRS-Φ13/6.5	13.5±0.5	0.25±0.05	100
XDRS-Φ14/7	14.5±0.5	0.26±0.05	100
XDRS-Φ15/7.5	15.5+0.5	0.27±0.05	100
XDRS-Φ16/8	16.5±0.5	0.29±0.05	100
XDRS-Φ18/9	18.5±0.5	0.29±0.05	100
XDRS-Φ20/10	20.5±0.5	0.31±0.07	100
XDRS-Φ25/12.5	25.8±0.8	0.35±0.07	100
XDRS-Φ30/15	30.8±0.8	0.37±0.07	25
XDRS-Φ35/12.5	35.8±0.8	0.39±0.07	25
XDRS-Φ40/20	41±1.0	0.39±0.07	25
XDRS-Φ45/22.5	45±1.0	0.39±0.07	25
XDRS-Φ50/25	51±1.0	0.41±0.07	25
XDRS-Φ60/30	60±1.0	0.42±0.07	25
XDRS-Φ70/35	71±1.0	0.43±0.07	25
XDRS-Φ80/40	81±1.0	0.45±0.07	25
XDRS-Φ90/45	91±1.0	0.50±0.07	25
XDRS-Φ100/50	101±2.0	0.55±0.07	25
XDRS-Φ120/60	121±2.5	0.57±0.07	25
XDRS-Φ150/75	150±3.0	0.60±0.07	25

Tech Data

Property Item	Test Method	Typical Value
Tensile Strength	ASTMD638	≥10Mpa
Elongation At Break	ASTMD638	≥330%
Tensile Strength Alter Ageing	ASTMD638	≥8Mpa
Elonganon After Ageing	ASTMD638	≥250%
Longitudinal Shrink Ratio	ASTM D2671	±5%
Dielectric Constant	ASTM D2671	≥180Ω.cm
Dielectric Strength	ASTM D149	≥25kv/mm
Volume Remt1v11y	ASTM D257	> 1014Ω.cm
20C'Volume Res1suv1ty	ASTM D257	> 1014Ω.cm
Water Absorption	ASTM D570	≤0.2%

XDRS-HL Yellow-green heat shrinkable busbar sleeve

Summary

Yellow-Green heat shrinkable sleeve is made of environmentally friendly polyolefin material,which have some advantages of pliability,flame.repellent, shrink fast, high stability, bright Color and so on.Being used in cable, special sleeves, and so on.

Features

Shrink ratio:2:1.3:1
Temperature:-55℃ -125℃
Shrinkage temperature:85℃ -125℃
Color: Yellow and Green

Type& Specification

Size(mm)	Before Shrink(mm)		Before Shrink(mm)		Package
	Inner Diameter (mm)	Wall Thickness (mm)	Inner Diameter (mm)	Wall Thickness (mm)	(m/roll)
Φ1.0	1.5±0.3	0.15±0.08	≤0.65	0.28±0.10	200
Φ1.5	2.0±0.3	0.18±0.08	≤0.85	0.32±0.10	200
Φ2.0	2.5±0.3	0.18±0.08	≤1.00	0.4±0.10	200
Φ2.5	3.0±0.3	0.18±0.08	≤1.30	0.4±0.10	200
Φ3.0	3.5±0.4	0.18±0.08	≤1.50	0.4±0.10	200
Φ3.5	4.0±0.4	0.22±0.08	≤1.80	0.42±0.10	200
Φ4.0	4.5±0.4	0.25±0.08	≤2.00	0.45±0.10	200
Φ5.0	5.5±0.4	0.25±0.08	≤2.50	0.55±0.10	100
Φ6.0	6.5±0.4	0.28±0.08	≤3.00	0.55±0.10	100
Φ8.0	8.5±0.5	0.28±0.10	≤4.00	0.6±0.10	100
Φ10	10.5±0.5	0.30±0.10	≤5.00	0.6±0.10	100
Φ12	12.5±0.5	0.30±0.10	≤6.00	0.65±0.10	100
Φ14	14.5±0.5	0.35±0.12	≤7.00	0.7±0.10	100
Φ15	15.5±0.6	0.40±0.12	≤7.50	0.75±0.10	100
Φ16	17.0±0.6	0.40±0.12	≤8.00	0.75±0.10	100
Φ18	19.0±0.7	0.40±0.15	≤9.00	0.8±0.15	100
Φ20	22.0±0.7	0.40±0.15	≤10.00	0.82±0.15	100
Φ22	24.0±0.7	0.40±0.15	≤11.00	0.82±0.15	100
Φ25	26.0±0.7	0.55±0.15	≤12.50	1±0.15	50
Φ28	29.0±0.7	0.55±0.15	≤14.00	1±0.15	50
Φ30	31.5±0.7	0.55±0.15	≤15.00	1.05±0.15	50
Φ35	36.5±0.7	0.55±0.15	≤17.50	1.15±0.15	50
Φ40	41.5±0.7	0.55±0.15	≤20.00	1.20±0.15	50
Φ50	51.0±0.7	0.55±0.15	≤25.00	1.20±0.15	25
Φ60	≥60	0.60±0.15	≤30.00	1.5±0.2	25
Φ70	≥70	0.65±0.15	≤35.00	1.6±0.2	25
Φ80	≥80	0.70±0.15	≤40.00	1.7±0.2	25
Φ90	≥90	0.75±0.15	≤45.00	1.9±0.2	25
Φ100	≥100	0.80±0.20	≤50.00	2.10±0.2	25

Tech Data

Property Item	Test Method	Typical Value
Tensile Strength	ASTM D2671	≥10.4Mpa
Elongation At Break	ASTM D2671	≥200%
Dielectric Strength	IEC 243	≥15kv/mm
Volume Resistivity	IEC 93	≥1×1014Ω.cm
Tensile Strength After Aging	UL224 158℃ ×168hr	≥7.3
Elongation After Aging	UL224 158℃ ×168hr	≥100%
Heat Shock	UL224 250℃ ×4hr	No cracking
Flame retardance	UI224	VW-1

XMPG-High Voltage heat shrinkable busbar sleeve

Summary

XMPG high voltage heat shrinkable:busbar sleeve is a good insulation resistance,aging resistance of theheat shrinkable tube, widely used in high voltage swith gear, powerplant, substation busbars insulationprotection, you can play against small animal short circuit, preventing maintenance personnel strayed intoelectrically charged space, to prevent condensation flashover, increased white insulation, effectivelyreduce the bus rowthe distance between phases, and on the around to extend the life of bus row.

Features

Products meet the ROHS environmental directives
Temperature:-55℃ -125℃
Shrinkagetemperature:100℃ -130℃
Color: red,yellow,green, black, and other colors.

Type& Specification

Item No.	10KV Before shrink(mm)		20KV Before Shrink(mm)		30KV Before Shrink(mm)	
	Inner Diameter	Wall Thickness	Inner Diameter	Wall Thickness	Inner Diameter	Wall Thickness
XMPG-Φ20/10	20±0.8	1.0±0.2	20±0.9	1.4±0.3	20±1.0	1.8±0.3
XMPG-Φ25/12.2	25±0.8	1.0±0.2	25±0.9	1.4±0.3	25±1.0	1.8±0.3
XMPG-Φ30/15	30±1.0	1.0±0.2	30±1.0	1.4±0.3	30±1.0	1.8±0.3
XMPG-Φ40/20	40±1.0	1.0±0.2	40±1.0	1.4±0.3	40±1.0	1.8±0.3
XMPG-Φ50/25	50±2.0	1.2±0.2	50±2.0	1.5±0.3	50±2.0	1.8±0.3
XMPG-Φ55/27.5	55±2.0	1.2±0.2	55±2.0	1.5±0.3	55±2.0	2.0±0.3
XMPG-Φ65/32.5	65±3.0	1.2±0.2	65±3.0	1.5±0.3	65±3.0	2.0±0.3
XMPG-Φ75/37.5	75±3.0	1.2±0.3	75±3.0	1.5±0.3	75±3.0	2.0±0.3
XMPG-Φ85/42.5	85±3.0	1.2±0.3	85±3.0	1.5±0.3	85±3.0	2.0±0.3
XMPG-Φ100/50	100±4.0	1.2±0.3	100±4.0	1.5±0.3	100±4.0	2.0±0.3
XMPG-Φ120/60	120±4.0	1.2±0.3	120±4.0	1.5±0.3	120±4.0	2.0±0.3
XMPG-Φ150/75	150±4.0	1.2±0.3	150±4.0	1.5±0.3	150±4.0	2.0±0.3
XMPG-Φ180/90	180±4.0	1.2±0.3	180±4.0	1.8±0.3	180±4.0	2.2±0.3
XMPG-Φ200/100	200±5.0	1.2±0.3	200±5.0	1.8±0.3	200±5.0	2.0±0.3
XMPG-Φ230/115	230±5.0	1.2±0.3	230±5.0	1.8±0.3	230±5.0	2.0±0.3
XMPG-Φ250/125	250±5.0	1.2±0.3	250±5.0	1.8±0.3	250±5.0	2.0±0.3
XMPG-Φ300/150	300±5.0	1.2±0.3	300±5.0	1.8±0.3	300±5.0	2.0±0.3

Remark:10KV 20KV Standard Package 25m/r,1m/pc;35KV Standard Package 20m/r,1m/pc.

Tech Data

Property Item	Test Method	Typical Value
Tensile Strength	ASTM D638	≥10Mpa
Elongation At Break	ASTM D638	≥330%
Tensile Strength After Ageing	ASTM D638	≥8Mpa
Elongation After Ageing	ASTM D638	≥250%
Longitudinal Shrink Ratio	ASTM D2671	±5%
Dielectric Constant	ASTM D2671	≥18Ω·cm
Dielectric Strength	ASTM D149	≥25kv/mm
Volume Resistivity	ASTM D257	＞1014Ω·cm
20℃ Volume Resistivity	ASTM D257	＞1014Ω·cm
Oxygenation Index	ASTM D2863	≥27%
Water Absorption	ASTMD570	≤0.2%
Density	ASTM D 792	1.22g/cm^2
Flame retardance	UL 224	VW-1
Completely Temperature Shrinkage	ASTM D792	130±5°C

XMPH-1/10/20/35kV Heat shrinkable insulating cover

Summary

Heat Shrinkable Insulation Protective Cover is widely used at the busbarconnection and the terminals on the transformer,it can avoid shortcircuit,clectric shock and to prolong the usage of electrical equipment.It has the advantage of good flexibility,good sealing,waterresistance,high and low temperature-resistance,wear-resistance etc.

Features

Voltage: 1kV,10kv,20kv,35kV
Color: Red,Green,Yellow,Black,Blue
Special color can be customized.

Type& Specification

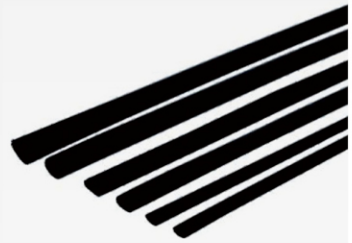
Item No.	Size	Type I			Type T			Type L		
	(AxB)	L	W	H	L	W	H	L	W	H
XMPH-20	20x8	90	25	35	95	25	35	70	25	35
XMPH-30	30x8	95	35	55	105	35	55	70	35	55
XMPH-40	40x8	125	45	55	140	45	55	75	45	55
XMPH-50	50x8	135	55	65	155	55	65	90	55	65
XMPH-60	60 x8	165	65	65	165	65	65	100	65	65
XMPH-70	70x8	175	75	65	175	75	65	120	75	65
XMPH-80	80x10	185	85	65	195	85	65	130	85	65
XMPH-90	90x10	195	95	65	205	95	65	135	95	65
XMPH-100	100x10	200	105	65	215	105	65	140	105	65
XMPH-120	120x10	235	125	65	245	125	65	165	125	65
XMPH-150	150x10	260	155	65	285	155	65	195	155	65

Remark:L=length; W=width; H=height; A=width of busbar; B=thickness of busbar
Accept custom for special specification.

Tech Data

Item No.	Index/Typical Value
Volume Resistivity(Q cm)	$1x10^{16}\Omega cm$
Dielectric Strength(kw/mm)	≥15kw/mm
Tensile Strength(Mpa)	≥10.4Mpa
Elongation(%)	≥200%

XSBG-(3X)(4X) Dual wall heat shrink polyolefin tubing with adhesive



Summary

It has super properties sealing performance of product and insulation performanceTypical applications are environment sealing of electrical components such as wiresplices and harness in automobile and communication industry.

Features

Shrink ratio:3:1.4:1
Temperature:-55℃ -125℃
Standard shrinkage temperature: 100℃
Color:Black,Special color can be customized.
Military standard, soft, flame retardant, sealing,moisture-proof, waterproof.

Type& Specification

Size		Supply Size	Retraction size			Package	
Diameter (mm)	Diameter (nch)	Min ID. (mm)	Max ID. (mm)	Total Recovered Wall Thickness (mm)	Recovered wall Thickness of Adhesive(mm)	Standard ength(m)	Standard Length (m/roll)

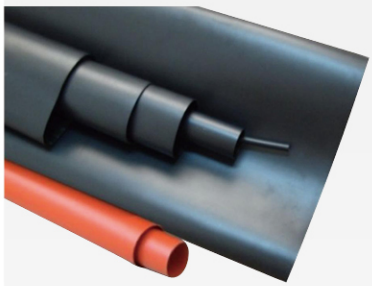
XSBG-3X

3/1	1/8	3	1.0	1.00	0.5	1.22	200
4.8/1.5	3/16	4.8	1.5	1.00	0.5	1.22	100
6/2	1/4	6.0	2.0	1.00	0.5	1.22	100
9/3	3/8	9.0	3.0	1.40	0.6	1.22	50
12/4	1/2	12.0	4.0	1.60	0.8	1.22	25
19/6	3/4	19.0	6.0	2.15	0.8	1.22	25
24/5	1	24.0	8.0	2.40	1.0	1.22	25
40/13	11/2	40.0	13.0	2.40	1.0	1.22	25
50/17	2	50.0	17	2.40	1.0	1.22	25

XSBG-3X

4/1	3/16	4.0	1.0	1.00	0.5	1.22	100
6/1.5	1/4	6.0	1.5	1.00	0.5	1.22	100
8/2	5/16	8.0	2.0	1.00	0.5	1.22	50
12/3	1/2	12.0	3.0	1.40	0.6	1.22	25
16/4	5/8	16.0	4.0	1.60	0.8	1.22	25
24/6	1	24.0	6.0	2.15	0.8	1.22	25
32/8	11/4	32.0	8.0	2.40	1.0	1.22	25
52/13	2	52.0	13.0	2.40	1.0	1.22	—

XZG-Medium/heavy wall heat shrink tubing



Summary

Medium/Heavy wall heat shrinkable tubing with hot melt adhesive, having properties of excellent insulating, environmental sealing, and resistant to impact and abrasion. It is designed for applications to seal and protect electrical splices, cable terminations andl joints where electrical insulation and water proof are required. 3:1 shrink ratio allows it easily fit over irregular shape and large connectors.Flame-retardant, with hot melt adhesive,soft, higher mechanical properties, Excellent resistance towater seal and insulation, moistureproof, waterproof, ageing resistance.

Features

Shrink ratio:≥3:1

Temperature:-55℃ -105℃

Shrinkage temperature:85℃ -125℃

Standard color: Black

Standard Length: 1.22m/pc

Gluing Method: direct coating.spiralHigh electrical insulation, Superior mechanical property, Waterproof, Anti-aging .

Type& Specification

Item No.	XZG-Medium Wall			VHG1-Heavy Wall			XTG(6X)-Heavy Wall		
Size (mm)	ID Before Shrink (mm)	ID Aafter Shrink (mm)	THK After Shrink (mm)	ID Before Shrink (mm)	ID Aafter Shrink (mm)	THK After Shrink (mm)	ID Before Shrink (mm)	ID Aafter Shrink (mm)	THK After Shrink (mm)
Φ9	9	3	1.6	9	3	1.8	19	3.2	3.2
Φ12	12	4	1.8	12	4	2.4	33	5.5	3.4
Φ22	22	6	2.3	22	6	2.7	45	7.4	3.6
Φ33	33	8	2.5	33	8	3.2	51	8.3	4.3
Φ40	40	12	2.6	40	12	4.1	70	11.7	4.8
Φ55	55	16	2.7	55	16	4.1	90	17.1	4.8
Φ65	65	20	2.9	65	20	4.1	120	22.9	4.8
Φ75	75	22	2.9	75	22	4.1	235	40	4.8
Φ85	85	25	2.9	85	25	4.3			
Φ95	95	30	3	95	30	4.3			
Φ105	105	33	3	105	33	4.3			
Φ115	115	35	3	115	35	4.3			
Φ130	130	40	3	130	40	4.3			
Φ140	140	43	3	140	43	4.3			
Φ160	160	50	3	160	50	4.3			
Φ180	180	60	3	180	60	4.3			
Φ200	200	65	3	200	65	4.3			
Φ235	235	70	3	235	70	4.3			
Φ265	265	75	3	265	75	4.3			

Tech Data

Property Item	Test Method	Typical Value
Operating Temperature	IEC216	-55°C -+110°C
Tensile Strength	ASTMD 2671	≥14MPa
Elongation At Break	ASTMD 2671	≥400%
Tensile Strength AfterAgeing(150℃ /168h)	ASTMD 2671	≥12MPa
Elongation After Ageing(150℃ /168h)	ASTMD 2671	≥300%
Longitudinal Shrink Ratlo	UL 224	0~10%
Dielectric Strength	IEC 243	≥20KV/mm
Volume Resistivity	IEC 93	≥102.cm
Thermal shock	ASTMD 2671	No cracking

XRSW Wraparoond sleeve / heat shrinkable cable repair sleeve

Summary

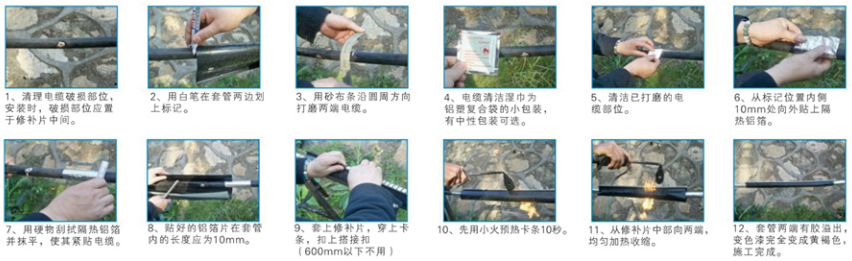
The cable repair sleeve is used to quickly repair the damaged cable sheath, which can simply and quickly sealand insulate the damaged cable outer sheath. It is a covering type sheath repair sleeve, which is simple inconstruction, has a wide range of size selectivity, and is suitable for various occasions. This product is suitable for sheath repair and sealing insulation from sinale- core cables to five- core power cablesof 35kV and below, and can be used with high - voltage insulating tapes, insulating waterproof tapes and otherproducts.

Type& Specification

Item No.	Size			Applicable Cable Inner Dia.(mm^2)
	Before Shrink (mm)	Dia. After Shrink (mm)	Length (mm)	
XRSW28/6-500	28	6	500	7~12
XRSW36/10-500	36	10	500	12~20
XRSW50/15-600	50	15	600	20~40
XRSW 60/18-700	60	18	700	30~50
XRSW70/22-800	70	22	800	40~60
XRSW80/25-900	80	25	900	50~70
XRSW100/30-900	100	30	900	60~90
XRSW135/35-900	135	38	900	70~120
XRSW164/45-900	164	45	900	80~150
XRSW185/55-900	185	55	900	90~160
XRSW200/60-900	200	60	900	100~180
XRSW220/65-900	220	65	900	120~200

Note: it can be supplied according to the specifications and engths required by customers. Forthe convenience of packaging and transportation,it generally does not exceed 1.75 meters.Conventional set components: heat shrinkable sheet with glue, metal clip, clip buckle, cable cleaning bag, thermal insulation aluminum foil.sanding cloth strip.Optional accessories: high voltage insulating tape, horseshoe grease tape, branch card (for making T joint).

Product specifications and installation Instructions



Reinforced Heat-Shrinkable Wrap-around Sleeve is a high performance fiberglass reinforced sleeve specifically it desigened for girth weldcorrosion protection on pipes used in directional drilling applications, Reinforced Heat-Shrinkable Wrap-around Sleeve desianed to protectgirth welds against corrosion and is the optimum joint protection for PE and FBE coated pipes used in directional driing applications. Thereinforcement gives the backing greater wear resistance. During installation,the radiation cross-linked outer layer forms a tough againstmechanical damage and moisture transmission, A wear cone is then applied over the leading edge ofthe sleeve, sleeve is simply wraparoundthe damaged cable area,quickly repaired.

Type& Specification

ItemNo.	Max Outer Diameter(mm)	Min Outer Diameter(mm)	Cable Spacing (mm)	Cable logarithm (0.5 wire diameter)
32/11-250	32	11	250	10~50
42/15-300	42	15	300	25~100
50/18-400	50	18	400	50~150
62/22-500	62	22	500	150~200
75/25-50	75	25	500	200~400
92/30-500	92	30	500	400~600
122/38-500	122	38	500	600~1000
160/55-500	160	55	500	1000~1200
175/60-500	175	60	500	1400~1800
200/65-500	200	65	500	2000~2400

XRSD Heat shrrk insula ton tape

Summary

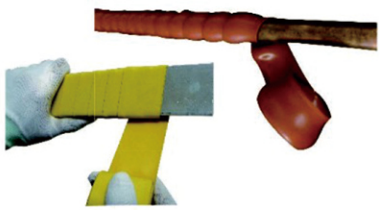
XRSD product is with hot melt adhesive lining of the insulation of the belt. When heating, inner melt and outer contraction, adhesion between the layers into a whole, with performance of high strength and aging resistance.

Application: insulation of overhead bare wire, insulation and protection of busbar in high and low voltage switchgear, repair of broken sheath of power cable, and insulation and repair of other electrical equipment, pipeline corrosion protection.

Features

Shrinkage temperature:120°C -130°C

Remark :1)When wrapping, lap 50%; 2)Other sizes and colors can be customized.



Tech Data

Property Item	Test Value	Test Method
Breakdown strength	27-30KV/mm	GB1048
Power frequency withstand voltage	42KV/mm	GB311
Lighting shock	75kv±10times	GB311
Thermal stability electricity	31.5kA	GB2706-89
Dynamic stability electricity	80.0KA.Peak	GB2706-89
Volum resistivity	10x1014Ω.cm	GB1044
Dielectric constant	2.5-3.5	GB1049
Oxygen index	≥28	GB1406
Absorption rate	≤0.1%	GB1406
Low temperature toughness	-55°C ±2°C ,	GB1034
Corrosion test	23°C ±2°C Temperature 95%	
Tensile strength	≥14.0Mpa	GB1040
Elongation at break	≥400%	GB1040
Working temperature range	-55°C -105°C	
Accelerated aging test	168°C 7 days (pass)	GB1040

Type& Specification

ItemNo.	Voltage Level(kV)	Width(mm)	Thickness(mm)	Package Length(m)
XRSD-01	1	50	0.40-0.50	10
XRSD-10	10	50	0.80-1.00	5
XRSD-35	35	50	1.40-1.60	5

XGJD
Silicore adhesive tape

Features

1. It has the same aging resistance, ozone resistance and UV resistance as the general-purpose tape;
2.Excellent flame retardant performance, in line with UL94-V standard;
3.The electrical performance is better than the general type;
4. Excellent physical properties, good tensile resilience, strong covering force, low temperature performance

Application

1. Insulation protection with high flame retardant requirements, wrapping of cable joints andswitch cabinet bus bars;
2.Fireproof cable covering;
3. Protective dressing in harsh environments such as mining and chemical industry

Instructions

Appropriately stretch the tape,½ forward lap winding to form a squeezing effect.the start and end positions need to be completely overlapped and wound.
Color:Red,Yellow,Blue,Green
Size:0.8mmx50mmx5m:0.5mmx25mmx5m
Other sizes can be customized.

Tech Data

No.	Property Item	Test Value	Test Method
1	Hardness	53A	ASTM D2240
2	Tensile strength	7.2MPaA	ASTM D2240
3	Elongation	520%	ASTM D2240
4	Self-bonding strength	6.3N/cm	ASTM D2240
5	Flame retardant grade	94V0	
6	Oxygen index	38%	
7	Volum resistivity	2.4x10	
8	Breakdown voltage	30KV/mm	ASTM D149
9	Bibulous rate	0.35%	
10	Water resistant	720hr no loosening, no water between layers	Soaking in 25℃ water

XZGH
Self-curing tape

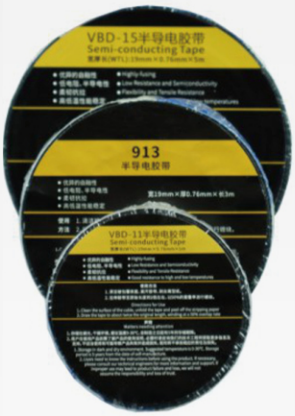
Summary

It is suitable for insulation and waterproofing and repairing of lead clips, bare wires, busbars, tubemothers, various joints, towers, metal exposed points, etc., with voltage levels of 10 kV and belowespecially suitable for insulation and waterproofing of irregular-shaped ioints and repair.

Features

1.room temperature curing;
2,The original state is soft, has good compliance with irregular surfaces, and has strongadaptability tointerface deformation and cracking:
3,No heating, no open flame, no special tools, no need to remove screws, suitable for constructionin various environments, fast and convenient, and short time;
4,Environmental protection, no volatilization, no corrosion to the surface of the adhesive, no impact on the environment and human body;
5,Excellent aging resistance, high and low temperature resistance, ozone and ultraviolet resistance;goodflame retardant properties,
6,The flame retardant level can reach UL94-V1; in addition to the regular black, the red, yellow andgreen colors combine insulation and identification into one.
Size:1.8mmx80mmx600mm:1.8mmx90mmx600mm

XBD
Semi-conducting tape



Summary

Semi-conductive self-adhesive tape is an electrical material widely used in the power industry. It is mainly used for cableterminals and joints to make shielding layers, and can also be used for shielding structures required by other facilities.

Application

Used for shielding layer of 110kv and below cable joints to recover high-voltage cables and equipment electric field shielding.

Tech Data

No.	Property Item	Test Value	Test Method
1	Thickness	0.76mm	ASTM D 4325
2	Tensile strength	1.31MPa	ASTM D 4325
3	Elongation at break	1100%	ASTM D 4325
4	Volum resistivity	< 7x108Ω.cm	ASTM D 4325
5	Resistance under tension	1.36x105 Ω	ASTM D 1000
6	Insulation resistance test	1.07x105Ω	ASTM D 1000
7	Self-financing	Warping length:0.4mm	ASTM D 4325
8	Water resistant	0.17%	ASTM D570 -98
9	Heat exposure (130℃ / 168 h)	Pass	ASTM D 4325
10	Ozone resistance (70 h)	Pass	ASTM D 4325
11	UV aging resistant (1000h)	Pass	ASTM D 4325
12	Anti-light aging (1000h)	Pass	ISO 4892-2:2013

Instructions

1.Unfold the tape and peel off the release paper;

2. Stretch the tape to about 2 times the original length, and wrap it at a 50% overlap rate.

Notice

1.The ambient temperatureis 10℃ ~40℃

2. There is no oil mist, sand and strong wind pollution around the construction;

3.The metal surface should be kept dry during construction;

4. During outdoor construction, the weather conditions should be good, no rain orsnow.etc.

5. Suitable protective gloves should be worn during construction, and all safety andlabor protection preparations should be made.

XFSM
Heat shrinkable cable end cap

Features

Shrinkage Temperature:120°C

Working Temperature:-55°C~110°C

EnvironmentalStandard:RoHS

Standard Color: Black

Sealing,waterproof and moisture-proof, and UV radiation resistant

Type & Specification

Item No.	Size(mm) B/A-L	Thickness (mm)(±5%)	Diameter of Cables (mm)
XFSM-1	Φ12/4-40	2.6	4~10
XFSM-2	Φ14/5-45	2.6	5~12
XFSM-3	Φ20/6-55	2.8	6~16
XFSM-4	Φ25/8.5-68	2.8	10~20
XFSM-5	Φ35/16-83	3.3	17~30
XFSM-6	Φ40/16-83	3.3	18~32
XFSM-7	Φ55/26-103	3.5	28~48
XFSM-8	Φ75/36-120	4.0	45~68
XFSM-9	Φ100/52-140	4.0	55~90
XFSM-10	Φ120/60-150	4.0	65~110
XFSM-11	Φ145/60-150	4.0	70~130
XFSM-12	Φ160/82-150	4.2	90~150
XFSM-13	Φ200/90-160	4.2	100~180
XFSM-14	Φ14/5-55	2.2	5~12
XFSM-15	Φ42/15-110	3.3	18~34
XFSM-16	Φ55/23-140	3.8	25~48
XFSM-17	Φ62/23-140	3.8	25~55
XFSM-18	Φ75/36-150	4.0	40~68
XFSM-19	Φ75/36-170	4.2	45~68
XFSM-20	Φ105/45-150	4.2	50~90

Tech Data

Property Item	Test Method	Test Value
Tensile strength(Mpa)	ASTM D 2671	≥14
Elongation at break (%)	ASTM D 2671	≥400
Elongation at rupture after aging (Mpa)	UL224 158°C x168hr	≥300
Thermal Shock	UL224 250°C x4hr	Not breakdown,not cracking
Cold bending	UL224VW-1x4hr	Not cracking
Breakdown strength(kV/mm)	IEC 243	≥15
Withstand voltage	UL2242500V	2500V no breakdown
Volume resistivity(Ω·cm)	IEC 93	≥1x1014
Corrosion resistance	UL224158°C x168hr	Pass
Flame retardant	UL224VW-1	Pass

XZT
Heat shrinkable breakout

Summary

The heat shrinkable breakout is mainly used to seal the fork of the cable core, which playsthe role ofwaterproof,moisture-proof and mechanical protection.

Application

Suitable forinsulation,waterproofsealing and oil separation sealing protection at the branch of the cable core.

Type

Two cores,three cores, four cores, five cores

Specification

0#(1-16mm²);1#(25-50mm);2#(70-120mm);3#(150-240mm);4#(300-400mm)

Color

Black、Red

Type & Specification

Item No.	Size	Applicable CableSection Size(mm²)	Before Shrink(mm)		After Shrink (mm)	
			Root	Branch	Root	Branch
XZT-2	XZT-1/2.0	10-16	28.0	11.0	12.0	3.0
	XZT-1/2.1	25-50	43.0	16.0	19.0	5.0
	XZT-12.2	70-120	62.0	26.0	23.0	8.0
	XZT-1/2.3	150-240	78.0	40.0	43.0	14.0
	XZT-1/2.4	300-400	80.0	43.0	45.0	16.0
XZT-3	XZT-1/3.00	10-16	44.0	19.0	18.0	3.5
	XZT-1/3.0	25-50	52.0	26.0	26.0	7.0
	XZT-10/3.1	25-50	75.0	32.0	38.0	9.0
	XZT-10/3.2	70-120	88.0	40.0	46.0	13.0
	XZT-10/3.3	150-240	112.0	50.0	55.0	15.0
	XZT-10/3.4	300-400	152.0	65.0	70.0	24.0
XZT-4	XZT-1/4.0	10-16	32.0	13.0	20.0	5.0
	XZT-1/4.1	25-50	44.0	19.0	23.0	7.0
	XZT-1/4.2	70-120	58.0	26.0	31.0	9.0
	XZT-1/4.3	150-240	73.0	32.0	39.0	11.0
	XZT-1/4.4	300-400	90.0	40.0	45.0	14.0
XZT-5	XZT-1/5.0	10-16	42.0	12.0	20.0	3.0
	XZT-1/5.1	25-50	53.0	16.0	27.0	5.0
	XZT-1/5.2	70-120	78.0	26.0	37.0	8.0
	XZT-1/5.3	150-240	96.0	32.0	45.0	10.0
	XZT-1/5.4	300-400	110.0	40.0	48.0	13.0

XFSJ-30
Water proof Insulation Composite tape

Summary

Size:51mmx1.65mmx3m
Color: Black
Working Temperature:-40°C-90°C
Appearance: Double-layer structure
(composed of high-performance elastic insulatingmaterialand waterproof sealant)

Features

Good self-melting, suitable for special waterproof and moisture-proof insulation sealing.easy to stretch and wrap, strong plasticity, very convenient for wrapping irregular joints,forming a squeezing and tightening effect; can be used for outdoor operations, used withPVC tape.

Application

Used for waterproof insulation protection at the joints of communication equipmentbase stations, antennas, peeping lines, etc.: waterproof sealing of the ends and jointsof communication cables, used for urban distribution network reconstruction.waterproofing of connections and branch clips for overhead insulated wires , Sealingand insulation; cable joint processing of underwater submersible motors, jointprocessing of urban street lamps and geographical cables; places where open flamescannot be used in mining, oilfield, chemical and electric power complex facilities.

Tech Data

Property Item	Test Value	Test Method
Tensile strength (Mpa)	2.0Mpa	GB/T528-92
Elongation at break (%)	1000%	GB/T528-92
Volume resistivity(Ω·cm)	≥1x10^{14}Ω·cm	GB/T1692-92
Relative Dielectric Constant	2~3	GB/T1693-81
Power Frequency Dielectric Strength	30kV	GB/T1695-81
180 Degree Peel Strength	30N/cm	GB/T2790-95
Waterproof	Pass	GB/T2790-95
Heat Stress Cracking	Not breakdown,not cracking	GB/T2790-95
Heat Resistance	100°C	GB/T2790-95

XFHD-33
Self-adhesive fireproof tape

Size:0.76mmx60mmx5m
Color: Black
Remark:Specifications and colors can be customized

Features

Excellent fire and arc resistance:Good self-adhesive.non-toxic.odorless,non-polluting Oxygenindex 54,much higher than the national standard(N45)

Application

Fire protection of power cables of high and low voltage power supply lines in substations, subwaystunnels,chemical or mining industries, buildings, etc.