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- Although this catalogue has been proofread many times for accuracy, it is for reference only
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Lean Production, High Quality!
Specializing in Cable Accessories for 20 years



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# **Product Catalogue**

- High Voltage Power Cable Accessories
- Welding Cable Joint
- Cold Shrinkable Cable Accessories
- Heat Shrinkable Cable Accessories
- Heat Shrinkable Tube/Bus-bar Tube
- Elbow Connector

**HUAYI CABLE ACCESSORIES Co., Ltd.** 



# ENTERPRISE DEVELOPMENT COURSE ()

## 2020 HUAYI CABLE ACCESSORIES Co., Ltd.

Won the title of "AAA Credit Enterprise" Passed the Evaluation of "Small and Medium Technology Enterprises in Zhejiang Province"

Passed the T-type Connector Test Device, Cold Shrinkage Cable Accessories, Silicone Rubber Materials, Nuclear Power Plant Cable Termination and Other National Invention

2016

Passed the Clean Production Audit and Acceptance, and won the title of "Three-level Enterprise of Safety Production Standardization"

Passed the Three System Certification and Radiation Safety Processing Won the title of "Yueqing City

2004

Won the title of "Star Enterprise"
Won the title of "Good quality and
Credit Standing Demonstrating Corporation"
Won the title of "Zhejiang Province
Excellent Demonstration Corporation of
Law-abiding Business Quality"
Won the title of "Zhejiang Province
High-tech Industry Technology
Innovation Key Enterprises"

2003

YUEQING HUAYI CABLE ACCESSORIES Co.,Ltd.

YUEQING HUAYI Heat-Shrinkable Material Co.,Ltd.

YUEQING TONGDA CABLE ACCESSORIES Co., Ltd.

YUEQING WANDA CABLE ACCESSORIES Co., Ltd.

LiuShi Low Voltage E Appliance Business Department





#### **About Us**

- ▲Foundation: 2000
- ▲ Business scope: R&D, manufacturing and sales of power cable accessories, polymer material radiation modified, cable connector box and other equipment.
- ▲ Application area: Key application in the electric power, electronics, petroleum, chemical industry, construction, communications and other fields.
- ▲ Standard: GBT11017.3, GB/T12706.4, IEC60804, IEC60502
- ▲ Performance characteristics: Excellent electrical performance and good mechanical properties, and light weight, easy installation, aging resistance, adapt to high temperature and cold conditions.
- ▲ Production capacity: Company products cover 110kV and below voltage grade cable accessories, has 4 sets of electron accelerator production equipment and undertake external product irradiation processing capacity.
- ▲ Sales network: Wenzhou as the center, we have agents throughout the country. Products are also exported to Britain, Japan, South Korea, Singapore, Russia, India, Iraq, Pakistan, Vietnam and other more than 50 countries.
- ▲Enterprise spirit: Rigorous, passion, innovation, integrity, gratitude, and win-win.

HUAYI CABLE ACCESSORIES CO., LTD. (formerly Yueqing HEAG cable accessories co., LTD.) was established in March 2000, the registered capital of 51.58 million RMB. It has an independent factory site with the building area of 27000 square meters, the land area of more than 14300 square meters. Product testing equipment is complete, with nano electron accelerator, injection moulding machine, rubber molding machine and other production and manufacturing equipment. Also it has high pressure screening test center, fully meet the needs of product inspection and testing. It passed IS09001: 2015 quality management system, ISO14001 environmental management system and OHSAS18001 occupational health and safety management system and the national production safety standardization certification, full implementation "6S" production management system, dedicated to provide customers with stable quality, reliable performance and high added value high quality products.

We specialize in power cable accessories, electric power facilities of bus-bar heat shrinkable tube, special-shaped heat-shrinkable products and silicone rubber safety shield electric contact, etc. We also has electron accelerator production equipment which can undertake external irradiation ability. Products are tested qualified by the national electric power industry electrical equipment quality inspection and test center and met the requirements of GB/T12706 standard. HUAYI brand cable accessories products through continuous research and development, to reach the domestic and foreign advanced level, at home and abroad enjoy a high visibility, products sold throughout the country.



# **Company Qualifications**











# **Production & Testing Equipment**











# Professional Equipment Creates Excellent Quality>>









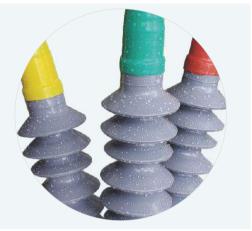




# HYR5

# ■ Usage Scenario











(A)	Electron Accelerator Irradiation Processing Center	01
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#### Overview

The processing of electron accelerator radiation (hereinafter referred to as irradiation) refers to the use of high energy electron accelerator, radiation to the surface or internal processing, physical or chemical reaction in the processing object, so as to change some properties of the object processing technology. Polymer materials radiation crosslinking is form chemical bonds between polymer long chain or onlookers strong physical combining site, so that the physical properties, chemical properties of polymer for improvement.

Radiation crosslinking of the main products are heat shrinkable materials, wire and cable insulation materials and polyethylene foam. Polymer materials radiation crosslinking, the line into the reticular structure, the corresponding changes in its performance. From can melt into not melting, high temperature resistance and high temperature intensity has obvious increase; Form new connections between molecular keys, to prevent the molecular relative slip, enhance rigidity; So that after irradiation processing, the product have characteristics of good flame retardant, cold resistant, heat resistant, radiation resistant, resistant to bad environment etc., widely used in electricity, electronics, petroleum, automotive, and other industrial fields.

Our company now has more than one irradiation accelerator, has a full set of production and testing equipment, has large quantities of irradiation conditions and leading irradiation technology advantage, provide irradiation crosslinking wire and cable, heat shrinkable materials irradiation processing business.





### ■ Performance feature

Irradiation processing technology collection of electronic technology, high energy nuclear physics technology, vacuum technology, computer technology, radiation chemical technology and wire and cable manufacturing technology at an organic whole. High-energy electron beam produced by electron accelerator, the role within the polymer, the polymer molecular structure is changed, the original linear macromolecules into insoluble don't melt three-dimensional network structure. The main characteristics of its products are:

- Good heat resistance: Such as to allow for a long time after irradiation crosslinking polyethylene material working temperature can be raised from 60-70 °C to 90-150 °C, short circuit temperature from 160 °C to 250 °C.
- Improve the carrying capacity of cable: The conductor cross section carrying capacity increases about 20%-50%.
- With excellent insulation properties and electrical performance.
- · High mechanical strength, aging resistance and chemical stability and good environmental stress cracking resistance.
- Improve the flame retardant performance.
- High safety and long performance life which can be up to 40 years.

#### ■ Irradiation Processing Main Items

Irradiation Type				Irradiati	on Range	
		Material	Wall Thickness(mm²)	Conductor Cross- sectional Area(mm²)	Diameter(mm²)	Length(mm)
Building		PE				
Photovoltaic Wire Electronic Wire		PVC	0.4.4	0.0.70	Ф0.3~ Ф15	Continuous
Electronic Cable Automotive Wire		Rubber Silicon Rubber	0.1~4	0.3~70	Electronic Wiring (Width):30	Continuous
Air Wire					(Width).50	
600V Heat Shrinkable Tube		Polyolefins	0.1~1.5		Ф0.3~ Ф100	Continuous
1kV Heat Shrinkable Bus-bar Tube		Polyolefins	0.5~1.8			
10kV/35kV Heat Shrinkable Bus-bar Tube		Polyolefins	1.2~3.5		Ф10~ Ф100	Continuous
Cable	Heat Shrinkable Tube	Polyolefins	0.5~5.5		Ф6~ Ф350	2000
Accessories	Breakout/ Rainshed/ Sealing cap	Polyolefins	1.0~4.5		Ф6~ Ф300	
Others		It		electronic chips, triod emiconductor crystal g	le, small SCR, self-hea arden, etc	aling fuse,

## ■ Ordinary PE wires and Irradiation XPLE wire Performance Comparison

Item	Before Irradiation	After Irradiation
Working Temperature	70-90°C	1 5 0 °C
Short Circuit Temperature	120-150°C	2 5 0 °C
Thermal Elongation	>300%	<40-140%
Gel Content		75-85%
Thermal Aging Tensile Strength (130°C, 168 hours)	≥ 8.5 MP a	≥ 12 MP a
Thermal Elongation at break (130°C, 168 hours)	≥ 150%	≥ 280%
Carrying Capacity	100%	120%-150%
Working Life	20 years	30-50 years

#### ■ Product Introduction

The main varieties of 110kV and above XLPE insulated cable termination are: Outdoor termination, GIS termination (installed in fully enclosed combined appliances) and transformer termination (installed in transformer oil tanks). Prefabricated Rubber Stress Cone Termination and Prefabricated Intermediate Joint are main type of high voltage crosslinked cable accessories used in China.

Our 110kV series products meet the requirements of IEC60840 and GB/T11017.3, the product adopts special electric field analysis software to optimize the design, and they are made of high quality materials and advanced production technology, it ensures uniform electric field, stable performance and reliable operation.

### ■ Technical specification

Test item	Parameters
Power frequency withstand voltage	160kV/15min
Partial Discharge	96kV≤1.5pc
Creepage Distance	≥4100mm
Pollution Severity	Grade IV





### ■ Type Table

Product Name	Item Code	Specification
		1×240
		1×300
		1×400
64/110kV Outdoor Termination	YJZWY4-64/110kV	1×500
with Porcelain Insulator for 64/110kV XLPE Cable		1×630
		1×800
		1×1000
		1×1200



# 110kV Power Cable Accessories

## ■ Type Table

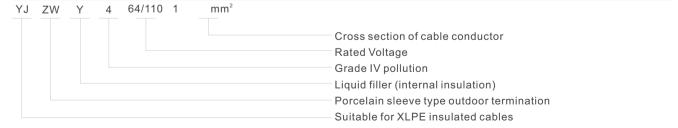
Product Name	Item Code	Specification
		1×240
		1×300
		1×400
64/110kV Outdoor Termination with Composite Insulator		1×500
for 64/110kV XLPE Cable	YJZWY4-64/110kV	1×630
		1×800
		1×1000
		1×1200
	1×24	1×240
		1×300
		1×400
64/110kV Pre-Fabricated Dry Outdoor	YJZWGG4-64/110kV	1×500
Termination for 64/110kV XLPE Cable	YJZWGG4-64/110KV	1×630
		1×800
		1×1000
		1×1200
		1×240
		1×300
		1×400
64/110kV Dry Insulated GIS	YJZGG-64/110kV	1×500
Termination for 64/110kV XLPE Cable		1×630
		1×800
		1×1000
		1×1200
		1×240
		1×300
		1×400
64/110kV Pre-Fabricate Insulating Joint/ Straight Through Joint	YJJTI2-64/110kV (Straight Joint/ Insulated Joint)	1×500
for 64/110kV XLPE Cable	(Guaigin John Mariator John)	1×630
		1×800
		1×1000
		1×1200
Three Phase (four hole)	JX-B4	35kV
Direct Grounding Box	JA-D4	64/110kV
Three Phase (four hole)	JBX-B4	35kV
Protective Grounding Box	20V-D4	64/110kV
Three Phase (four hole) Cross-interconnection	JHX-B4	35kV
Protective Grounding Box (coaxial cable)	5 2 .	64/110kV



### ■ Product Introduction

64/110kV (240mm2~1600mm2) XLPE Power cable accessories conform to IEC60840 and GB/T11017.3 requirements. Product design absorbs advanced concepts at home and abroad, the product adopts special electric field analysis software to optimize the design, it ensures uniform electric field, stable performance and reliable operation.

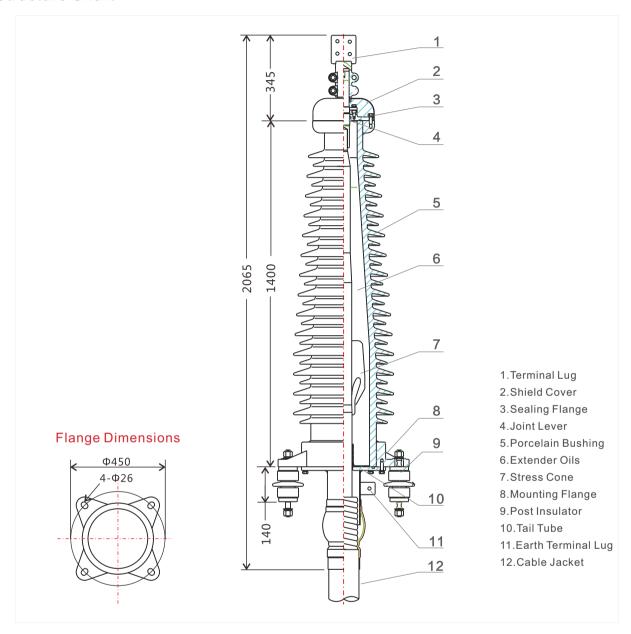
#### Product Model



#### Product Features

- Porcelain sleeve adopts high Strength Electric Porcelain, It has good weather resistance, leakage resistance and electrical corrosion resistance, especially suitable for coastal areas with severe salt fog and bad natural environment area;
- The structure of large and small rain shed, reasonable design of creepage distance, with good anti Pollution Flashover property, easy to maintain;
- Multiple sealing design structure, avoid flooding, oil leakage and other possible phenomena during installation or operation;
- Prefabricated stress cone is made of high quality imported liquid silicone rubber material with excellent electrical performance;
- All prefabricated stress cones are 100% factory tested as per standard in the factory.

#### Structure Chart



Test Item	Parameters		Test Item	Parameters
Rated Voltage U <sub>0</sub> /U	64/110kV		External Insulation	High strength electric porcelain with rain shed
Maximum Operating Voltage Um	126kV	Porcelain	Creepage Distance	≥4100mm
Impulse Voltage Tolerance Level	550kV	Bushing	Mechanical Strength	Horizontal Load≥2kN
Insulating Filler	Polyisobutene		Maximum Internal Pressure	2MPa
Conductor connection	Crimping	Polluti	on Tolerance Level	Grade IV
Applicable Ambient Temperature -40°C~+50°C		Installation Site		Outdoor, Vertical±15°
Altitude	(Should be indicated ≤1000m when exceeds 1000m)	Weight		About 200 kg
Product Standard	duct Standard GB/T11017.3 IEC60840		e Cable Conductor Section	240mm <sup>2</sup> -1600mm <sup>2</sup>



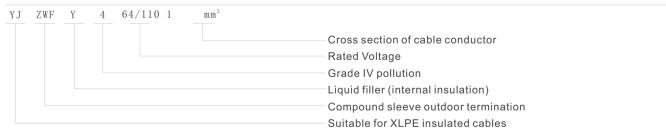
# 64/110kV Outdoor Termination with Composite Insulator for 64/110kV XLPE Cable



#### ■ Product Introduction

The external insulation of the composite termination is composed of a glass fiber reinforced epoxy resin tube and a silicone rubber rainshed, aluminum alloy flanges with strong corrosion resistance are installed at both ends. It is the best substitute for porcelain covers and has gradually been accepted all over the world.

#### ■ Product Model

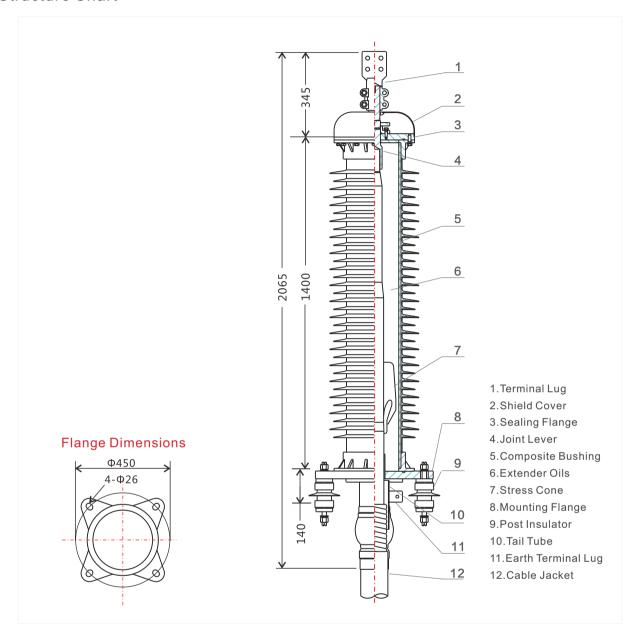


#### Product Features

- Safety explosion-proof, It won't explode from internal flashover, effectively reduce the risk of failure, and especially suitable for densely populated areas or places with concentrated electrical equipment;
- Silicone rubber has good stain resistance and aging resistance;
- Light weight, about half of the weight of the porcelain sleeve termination, easy to install;
- Good seismic performance;
- Not easy to damage, easy to transport and install, improve efficiency;
- All prefabricated stress cones are 100% factory tested as per standard in the factory.



#### Structure Chart



Test Item	Parameters		Test Item	Parameters
Rated Voltage U <sub>0</sub> /U	64/110kV		External Insulation	High strength electric porcelain with rain shed
Maximum Operating Voltage Um	126kV	Porcelain	Creepage Distance	≥4100mm
Impulse Voltage Tolerance Level	550kV	Bushing	Mechanical Strength	Horizontal Load≥2kN
Insulating Filler	Polyisobutene	sobutene		2MPa
Conductor connection	Crimping	Polluti	on Tolerance Level	Grade IV
Applicable Ambient Temperature -40°C~+50°C		Installation Site		Outdoor, Vertical±15°
Altitude	(Should be indicated ≤1000m when exceeds 1000m)	Weight		About 200 kg
Product Standard	GB/T11017.3 IEC60840	Applicabl	e Cable Conductor Section	240mm <sup>2</sup> -1600mm <sup>2</sup>

## 64/110kV Pre-Fabricated Dry Outdoor Termination for 64/110kV XLPE Cable



#### Product Introduction

Prefabricated dry termination is made of stress cone and silicone rubber insulation material. The stress cone was designed and optimized by finite element analysis software, made of electrically conductive silicone rubber, it make the electric field distribution at cable shield port improved.

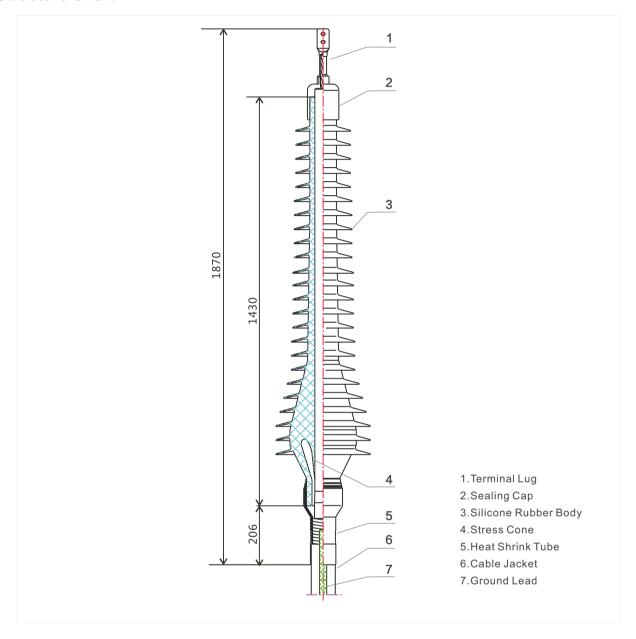
#### ■ Product Model



#### Product Features

- High quality imported silicone rubber injection molding, High Strength, High Elasticity, Aging Resistance. It has good Leakage Resistance,
   Corrosion Resistance and Hydrophobic Performance, and with high Anti-pollution Flashover Performance, it can also maintain good electrical performance under heavy pollution conditions;
- Seamless manufacturing process, improve the mechanical and physical properties and electrical properties of products;
- Light weight, about 1/8~1/10 of the weight of the porcelain sleeve termination, fewer parts, easy installation;
- Silicone rubber dry structure, no oil and gas filling, no pollution to the environment;
- $\bullet \ \ \text{Flexible seismic, no combustion, explosion danger, operation free of maintenance;}$
- Not easy to damage, easy to transport and install;
- Flexible installation position and direction, can be installed on the pillar or overhead tower, vertical or incline installation;
- All prefabricated stress cones are 100% factory tested as per standard in the factory.

#### Structure Chart



Test Item	Parameters	Test Item	Parameters
Rated Voltage U <sub>0</sub> /U	64/110kV	The Terminal Body	Integral Prefabricated Dry Structure
Maximum Operating Voltage Um	126kV	Conductor connection	Crimping
Impulse Voltage Tolerance Level	550kV	Creepage Distance	≥4100mm
Applicable Ambient Temperature	-40°C~+50°C	Pollution Tolerance Level	Grade IV
Altitude	≤1000m	Weight	About25kg
Product Standard	GB/T11017.3 IEC60840	Applicable Cable Conductor Section	240mm <sup>2</sup> -1600mm <sup>2</sup>

## 11



# 64/110kV Dry Insulated GIS Termination for 64/110kV XLPE Cable



### ■ Product Introduction

Dry GIS termination adopts the combined structure of stress cone and epoxy tubing, and the prefabricated stress cone surface is close to the inner wall of the epoxy tubing through spring assembly, so as to achieve reasonable interface pressure. It is suitable for installation to SF6 gas insulated switchgear, GIS combined appliances and transformers and other equipment to realize the electrical connection between cables and electrical equipment. The dimensions and supply range of mounting interfaces are in accordance with IEC60859.

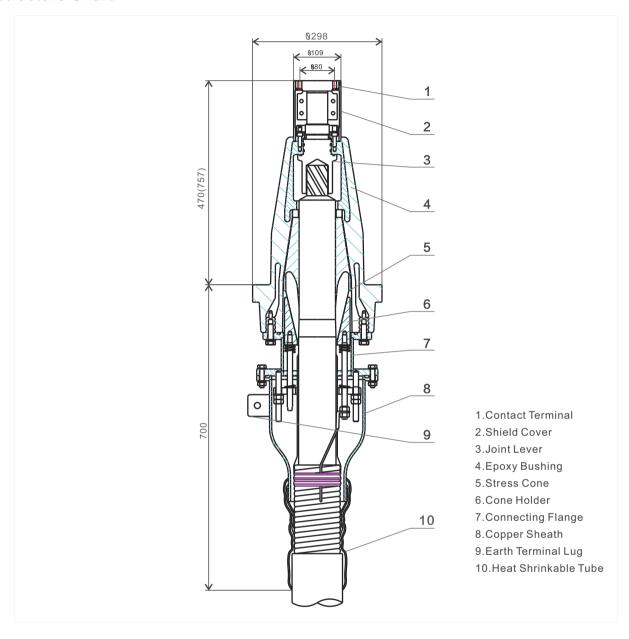
#### Product Model



#### ■ Product Features

- Silicone rubber dry structure, no oil and gas filling, no pollution to the environment;
- The design of stress cone compression spring assembly can provide constant and durable interface pressure to the cone body;
- Compact structure, easy installation, reliable performance;
- All electrical connections and insulating parts of the terminal are placed in the metal shell, fully shielded and maintenance-free;
- Suitable for indoor/outdoor use, because the terminal is not in contact with the atmospheric environment, environmental conditions, pollution level and altitude can be considered unlimited;
- Stress cone and epoxy casing are 100% factory tested as per the factory standard.

#### Structure Chart



Test Item	Parameters	Test Item	Parameters
Rated Voltage U <sub>0</sub> /U	64/110kV	Height of the Insertion	757mm or 470mm
Maximum Operating Voltage Um	126kV	Conductor connection	Crimping
Impulse Voltage Tolerance Level	550kV	Weight	About 60kg
Applicable Ambient Temperature	-40°C~+50°C	Applicable Cable Conductor Section	240mm <sup>2</sup> -1600mm <sup>2</sup>
Product Standard	GB/T11017.3 IEC60840		

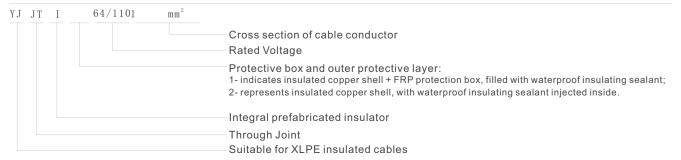
## 64/110kV Pre-Fabricate Insulating Joint/ Straight Through Joint for 64/110kV XLPE Cable



#### Product Features

- The body of joint adopts high quality imported silicone rubber, with high strength, elasticity, tear resistance and excellent heat aging performance;
- The body of joint is a whole prefabricated structure, high pressure shielding, stress cone and insulation injection into one, excellent performance, easy to test, installation;
- The body of joint is analyzed and optimized by finite element software, the field intensity distribution is more reasonable, with high insulation safety margin;
- The difference of the insulation joint and the straight joint is only in the field installation of the shielding treatment, the insulation joint is one end of the insulation, the rest of the shielding, and the straight joint is fully shielded;
- The product adopts completely closed structure, high mechanical strength and sealing performance; The insulated copper shell for joint protection is made of high strength T2 copper, the outer surface molded high density PE material is used for insulation and anti-corrosion, with good mechanical protection and waterproof sealing performance, to ensure long-term, safe and reliable operation of the joint under harsh environment. In addition according to the need can be equipped with FRP protection box;
- Special installation tools make installation more convenient.

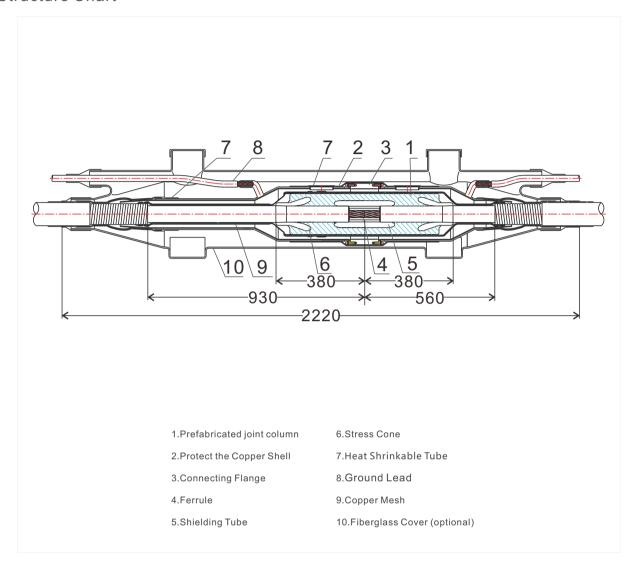
#### ■ Product Model





## 64/110kV Pre-Fabricate Insulating Joint/ Straight Through Joint for 64/110kV XLPE Cable

#### Structure Chart



Test Item	Parameters	Test Item	Parameters
Rated Voltage U0/U	64/110kV	Connector Body	Monolithic Prefabricated Construction
Maximum Operating Voltage Um	126kV	Protective Casing	PE is applied externally and waterproof sealant is injected internally
Impulse Voltage Tolerance Level	550kV	Insulated Joint, Metal Sheath	a) DC Voltage : 25kV b) Impulse voltage (interphase) : 75kV
Conductor connection	Crimping	Weight	About 80kg
Product Standard	GB/T11017.3 IEC 60840	Applicable Cable Conductor Section	240mm <sup>2</sup> -1600mm <sup>2</sup>

JX Grounding Box



**JBX Grounding Protection Box** 



**JHX Cross-connection Box** 

#### Product Introduction

JX Grounding Box and JBX Grounding Protection Box are suitable for direct grounding or protection grounding of metal protective layer of single core cross-linked cable of high voltage (35kV, 66kV, 110kV, 220kV). The JX Ground Box is used for the direct grounding of the metal cover of the three-phase single-core cable. The JBX Ground Box is used for the protection grounding of the metal cover of the three-phase single-core cable.

JHX Cross Connection Box is suitable for high voltage (35kV, 66kV, 110kV, 220kV) grade of single core cross-linked cable metal protective layer of cross connection protection grounding, It can limit the increase of over-voltage on both sides of metal sheath and insulating joint, It can control the induced voltage of the metal sheath, reduce or eliminate the ring current in the sheath, and improve the transmission capacity of the cable, prevent the cable sheath from being broken down, ensure the safe and reliable operation of the cable.

#### Product Features

- The box body is made of stainless steel, with high mechanical strength and good sealing and waterproof performance;
- T2 copper busbar is used for the internal terminal board, with small contact resistance and excellent conductivity;
- The protective layer protector has reliable performance, which can prevent the over-voltage of the cable protective layer and ensure the normal work of the cable. The protector adopts two sealing and one forming, with good sealing performance;
- The Ground Protection Box and the Cross-interconnection Box can be equipped with a counter, leakage discharge detector, automatically record the discharge times under the action of over-voltage, monitoring the leakage current of the protector;
- Compact structure, easy installation;
- Can be mounted on the wall, can also be directly buried installation, according to user requirements, design and processing of vertical (cabinet) box, installed on the ground;
- Products in the factory according to the standard 100% factory inspection.



# **Grounding Box**

# Technical Parameter JX Grounding Box, JBX Grounding Protection Box, and JHX Cross-connection Box

Test Item	Parameters
Direct-current Withstand Voltage Test	20kV, 1min, No Flashover, No Breakdown
Impulse Voltage Test	40kV, Positive and Negative polarity 10 times each, No Flashover, No Breakdown
Executive Standard	DI508 DL509 Gb11032
Insulation Resistance between the connection bar and the shell	≥20MΩ
Contact Resistance of the connection bar	<20µΩ
Applicable grounding or coaxial cable section	25mm²-300mm²

#### ■ BHQ series Cable Protector Technical Parameters

Model	Applicable Cable System Voltage\kV	Effective Value of Rated Voltage\kV	Effective Value of Continuous Operating Voltage\kV	Nominal Discharge Current\kA	Dc Reference Voltage U1mA\kV
BHQ-7/400	35、66、110	2.8	2.24	10	≥4.0
BHQ-7/600	110、220	2.8	2.24	10	≥4.0
BHQ-7/400	110、220	4.0	3.2	10	≥5.8

Model	Leakage Current at 0.75U1mA\µA	Residual Voltage of Nominal Discharge Current (peak)\kV	2ms Square Wave Current (peak)\A	Partial Discharge Power at 1.05Uc \pC	4/10µs High Current Tolerance\kA
BHQ-7/400	≤25	≤7	400	≤10	100
BHQ-7/600	≤25	≤7	600	≤10	100
BHQ-7/400	≤25	≤10	400	≤10	100





#### Overview

Welded cable joint has the characteristics of good waterproof performance, excellent electrical conductivity, reliable insulation performance, and no partial discharge phenomenon, high voltage, small volume, long service life.

It is a cable accessory whose electrical and mechanical properties are closest to the power body. The product passed the test of National Wire and Cable Quality Testing Center and met the requirements of GB/T12706.4 national standard.

#### Technical specification

Test Item	Parameters
Ac Withstand Voltage(kV/min)	55/5
Partial Discharge(kV)	15, Not Detected(Background Interference0.65pc)
Impulse Voltage Test(kV)	±115, 10 times each (95-100°C)
Constant Pressure Load Cycle Test(Uo)	2.5, 30 cycles in air (8 hours per cycle)
Constant Pressure Load Cycle Test(Uo)	2.5,60 cycles(8h per cycle)in 1m deep water
Conductor Short Circuit Thermal Stability Test(kA)	43.0/3 seconds, 2 times, No Damage(400mm)
Conductor Short Circuit Dynamic Stability Test(kA)	186.4/10millisecond,1 time(400mm²)



#### Exothermic welding of conductors

Welding Type Power Cable Joint is a new cable connection mode. It's our company independent research and development, with independent intellectual property rights of power cable connection technology. Welded cable joint has the characteristics of good waterproof performance, excellent electrical conductivity, reliable insulation performance, and no partial discharge phenomenon, high voltage, small volume, long service life. It is a cable accessory whose electrical and mechanical properties are closest to the power body. The product passed the test of National Wire and Cable Quality Testing Center and met the requirements of GB/T12706.4 national standard.







#### Restore the semi-conductive layer

Weld type power cable joint, the conductor connection adopts aluminum exothermic welding, so that the conductor is welded together completely, so that the cable restores its original structure, does not change the original characteristics of the cable, the service life of mechanical and electrical performance is equivalent to the original cable.

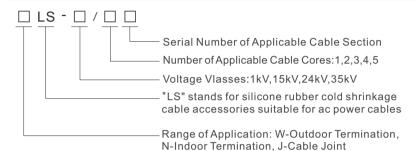
#### Type Table

Product Name	Item Code	Applicable Cable Section
	JMM-15/3.1	25 35 50
400VThere Core Welding Turn Cohle leint	JMM-15/3.2	70 95 120
10kV Three Cores Welding Type Cable Joint	JMM-15/3.3	150 185 240
	JMM-15/3.4	300 400 500
	JMM-15/1.1	25 35 50
10kV Single Core Welding Type Cable Joint	JMM-15/1.2	70 95 120
Toky diligie dore welding Type Cable John	JMM-15/1.3	150 185 240
	JMM-15/1.4	300 400 500

#### Overview

Rubber is known to have "elastic memory" properties, like a spring. Cold shrinkage technology, also known as pre-expansion technology, the elastic rubber in the elastic range of pre-support, set into the plastic support strip to be fixed. When installing, as long as the support strip is removed, the elastic body rapidly shrinks and tightens on the cable body. The cold shrinkage products manufactured by our company are all bonded with special sealing adhesive to make the overall sealing and avoid operation accidents caused by atmospheric environment. The silicone rubber used for raw materials has excellent insulation and high resilience, and will not cause electrical breakdown due to the breathing action of the cable during operation after installation. The products are widely used in electric power industry, communication industry, military industry, metallurgy, coal mining, petrochemical industry and other fields.

#### ■ Product Model



Noted: Serial Number of Cable Section:

"0": 10-16mm<sup>2</sup>

"1": 25-50mm<sup>2</sup>

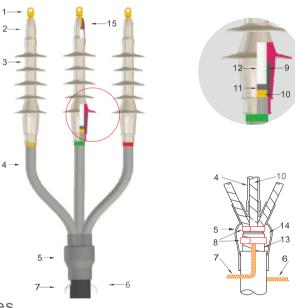
"2": 70-120mm<sup>2</sup>

"3": 150-240mm<sup>2</sup>

"4": 300-500mm<sup>2</sup>

Example: "WLS-15/3.1" stands for 15kV outdoor cold shrinkage terminal, suitable for three-cores cable with a section of 25-50mm<sup>2</sup>

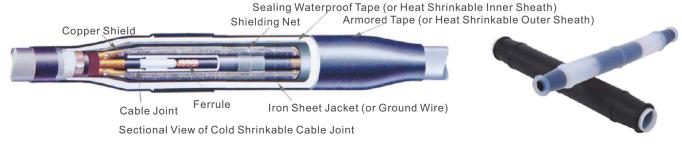
### ■ Structure Drawing of 10kV Three Cores Shrinkage Termination



- 1.Terminal Lug
- 2.Sealing Tube
- 3.Terminal Tube
- 4. Jacket Tube
- 5.Breakout
- 6. Shielding Ground Wire
- 7.Steel-armoured ground Wire
- 8. Constant Force Spring
- 9.Stress Cone
- 10.Copper Shielding Layer
- 11.Semi-conductive Layer
- 12.Insulating Layer
- 13.Armor Layer
- 14.Filler Adhesive
- 15. Rubber Self-adhesive Tape

#### Product Features

- Full shrinkage automatic reset technology, installation without special tools, construction and installation is simple and quick;
- · No open flame, no heating, safe and reliable;
- The cable body has persistent radial pressure, good sealing and waterproof, to ensure long-term reliable operation.







## ■ Range of Application

Suitable for 0.6/1kV, XLPE, Rubber insulated Single Core, Two Cores, Three Cores, Four Cores, Five Cores power cables.

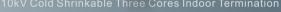
Test item	Parameters
Wet Power Frequency Withstand Voltage Test	4kV/1min
4h Power Frequency Withstand Voltage Test	2.4kV/4h



# ■ Type Table

Product Name	Item Code	Applicable Cable Section(mm²)	Product Name	Item Code	Applicable Cable Section(mm²)
	LS-1/1.0	10-16		JLS-1/1.0	10-16
	LS-1/1.1 25-50 JLS-1/1.1 25	25-50			
Single Core Termination	LS-1/1.2	70-120	Single Core Straight Joint	JLS-1/1.2	70-120
	LS-1/1.3	150-240		JLS-1/1.3	150-240
	LS-1/1.4	300-400		JLS-1/1.4	300-400
	LS-1/2.0	10-16		JLS-1/2.0	10-16
	LS-1/2.1	25-50		JLS-1/2.1	25-50
Two Cores Termination	LS-1/2.2	70-120	Two Cores Straight Joint	JLS-1/2.2	70-120
	LS-1/2.3	150-240		JLS-1/2.3	150-240
	LS-1/2.4	300-400		JLS-1/2.4	300-400
	LS-1/3.0	10-16		JLS-1/3.0	10-16
	LS-1/3.1	25-50	Three Cores Straight Joint	JLS-1/3.1	25-50
Three Cores Termination	LS-1/3.2	70-120		JLS-1/3.2	70-120
	LS-1/3.3	150-240		JLS-1/3.3	150-240
	LS-1/3.4	300-400		JLS-1/3.4	300-400
	LS-1/4.0 1	10-16		JLS-1/4.0	10-16
	LS-1/4.1	25-50		JLS-1/4.1	25-50
Four Cores Termination	LS-1/4.2	70-120	Four Cores Straight Joint	JLS-1/4.2	70-120
	LS-1/4.3	150-240		JLS-1/4.3	150-240
	LS-1/4.4	300-400		JLS-1/4.4	300-400
	LS-1/5.0	10-16		JLS-1/5.0	10-16
	LS-1/5.1	25-50		JLS-1/5.1	25-50
Five Cores Termination	LS-1/5.2	70-120	Five Cores Straight Joint	JLS-1/5.2	70-120
	LS-1/5.3	150-240		JLS-1/5.3	150-240
	LS-1/5.4	300-400		JLS-1/5.4	300-400







10kV Cold Shrinkable Three Cores Indoor Termination 10kV Cold Shrinkable Three Cores Outdoor Termination

## Range of Application

Suitable for 8.7/10kV, XLPE insulated Single Core, Three Cores power cables.

Test item	Parameters
Wet Power Frequency Withstand Voltage Test (Outdoor)	35kV/1min
Dry Power Frequency Withstand Voltage Test (Indoor)	39kV/5min
Impact Pressure Test	95kV 1.2/50 μ s+10 times
Partial Discharge Test	≤10pc (1.73Uo)

Product Name	Item Code	Applicable Cable Section(mm²)	Product Name	Item Code	Applicable Cable Section(mm
	NLS-15/1.1	25-50		NLS-15/3.1	25-50
	NLS-15/1.2	70-120		NLS-15/3.2	70-120
Single Core Indoor Termination	NLS-15/1.3	150-240	Three Cores Indoor Termination	NLS-15/3.3	150-240
	NLS-15/1.4	300-400	١	NLS-15/3.4	300-400
	NLS-15/1.5	500-630		NLS-15/3.5	500-630
	WLS-15/1.1	25-50	Three Cores Outdoor Termination	WLS-15/3.1	25-50
	WLS-15/1.2	70-120		WLS-15/3.2	70-120
Single Core Outdoor Termination	WLS-15/1.3	150-240		WLS-15/3.3	150-240
	WLS-15/1.4	300-400		WLS-15/3.4	300-400
	WLS-15/1.5	500-630		WLS-15/3.5	500-630
	JLS-15/1.1	25-50		JLS-15/3.1	25-50
	JLS-15/1.2	70-120	Three Cores Straight Joint	JLS-15/3.2	70-120
Single Core Straight Joint	JLS-15/1.3	150-240		JLS-15/3.3	150-240
	JLS-15/1.4	300-400		JLS-15/3.4	300-400
	JLS-15/1.5	500-630		JLS-15/3.5	500-630



## ■ Range of Application

Suitable for 12/20(24)kV, XLPE insulated Single Core, Three Cores power cables.

Test item	Parameters
Wet Power Frequency Withstand Voltage Test (Outdoor)	48KV (72KV) /1min
Dry Power Frequency Withstand Voltage Test (Indoor)	54KV (81KV) /1min
Impact Pressure Test	125kV 1.2/50 μ s+10times
Partial Discharge Test	≤10pc (1.73Uo)

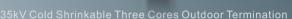




## ■ Type Table

Product Name	Item Code	Applicable Cable Section(mm²)	Product Name	Item Code	Applicable Cable Section(mm²)
	NLS-24/1.1	25-50		NLS-24/3.1	25-50
	NLS-24/1.2	70-120	Three Cores Indoor Termination	NLS-24/3.2	70-120
Single Core Indoor Termination	NLS-24/1.3	150-240		NLS-24/3.3	150-240
	NLS-24/1.4	300-400		NLS-24/3.4	300-400
	NLS-24/1.5	500-630		NLS-24/3.5	500-630
	WLS-24/1.1	25-50	Three Cores Outdoor Termination	WLS-24/3.1	25-50
	WLS-24/1.2	70-120		WLS-24/3.2	70-120
Single Core Outdoor Termination	WLS-24/1.3	150-240		WLS-24/3.3	150-240
	WLS-24/1.4	300-400		WLS-24/3.4	300-400
	WLS-24/1.5	500-630		WLS-24/3.5	500-630
	JLS-24/1.1	25-50		JLS-24/3.1	25-50
	JLS-24/1.2	70-120		JLS-24/3.2	70-120
Single Core Straight Joint	JLS-24/1.3	150-240	Three Cores Straight Joint	JLS-24/3.3	150-240
	JLS-24/1.4	300-400		JLS-24/3.4	300-400
	JLS-24/1.5	500-630		JLS-24/3.5	500-630







35kV Cold Shrinkable Single Core Outdoor Termination

## ■ Range of Application

Suitable for 21/35kV, 26/35kV XLPE insulated Single Core, Three Cores power cables.

Test item	Parameters
Wet Power Frequency Withstand Voltage Test (Outdoor)	104kV/1min
Dry Power Frequency Withstand Voltage Test (Indoor)	117kV/5min
Impact Pressure Test	250kV 1.2/50 μs+10 times
Partial Discharge Test	≤10pc (1.73Uo)

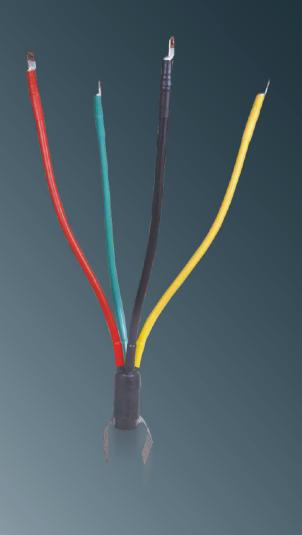


## ■ Type Table

Product Name	Item Code	Applicable Cable Section(mm²)
	NLS-35/1.1	35-120
	NLS-35/1.2	150-240
Single Core Indoor Termination	NLS-35/1.3	300-500
	NLS-35/1.4	630
	WLS-35/1.1	35-120
Single Core Outdoor Termination	WLS-35/1.2	150-240
	WLS-35/1.3	300-500
	WLS-35/1.4	630
	JLS-35/1.1	35-120
Single Core Straight Joint	JLS-35/1.2	150-240
	JLS-35/1.3	300-500
	JLS-35/1.4	630
	NLS-35/3.1	35-120
Three Cores Indoor Termination	NLS-35/3.2	150-240
	NLS-35/3.3	300-500
	WLS-35/3.1	35-120
Three Cores Outdoor Termination	WLS-35/3.2	150-240
	WLS-35/3.3	300-500
	JLS-35/3.1	35-120
Three Cores Straight Joint	JLS-35/3.2	150-240
	JLS-35/3.3	300-500



# 1kV Heat Shrinkage Cable Accessories



## ■ Range of Application

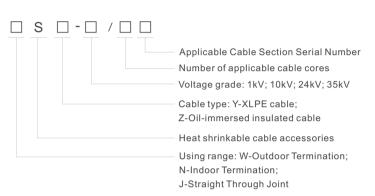
Suitable for 0.6/1kV, XLPE, Rubber insulated Single Core, Two Cores, Three Cores, Four Cores, Five Cores power cables.

Test item	Parameters
Wet Power Frequency Withstand Voltage Test	4kV/1min
Power Frequency Withstand Voltage Test	2.4kV/4h

#### Overview

The production of heat-shrinkable cable accessories needs to go through a series of processes such as Mixing  $\rightarrow$  Forming  $\rightarrow$  Irradiation  $\rightarrow$  Expansion  $\rightarrow$  Gluing. Shape memory effect of polymer materials is the basic principle of fabricating heat-shrinkable materials. The characteristics of the polymer material itself give the heat shrinkable cable accessories with good electrical and mechanical properties, light weight, easy installation and other advantages. The product is waterproof, stress control, shielding, insulation in one, can be used in a variety of harsh environmental conditions for a long time. Widely used in Electric Power Industry, Petroleum Industry, Chemical Industry, Metallurgy, Railway, Port, Construction and other fields.

#### Product Model



Number of Applicable Cable Cores: 1,2,3,4,5

Noted: Serial Number of Cable Section:

"0": 10-16mm<sup>2</sup>

"1": 25-50mm<sup>2</sup>

"2": 70-120mm<sup>2</sup>

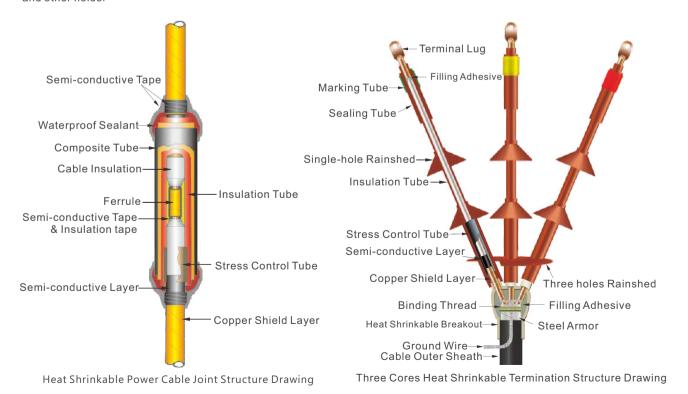
"3": 150-240mm<sup>2</sup>

"4": 300-500mm<sup>2</sup>

Example: "WSY-10/3.1" stands for 10kV outdoor heat shrinkage termination, suitable for three-cores cable with a section of 25-50mm<sup>2</sup>

#### Product Features

The product is waterproof, stress control, shielding, insulation in one, can be used in a variety of harsh environmental conditions for a long time, with good electrical and mechanical properties, light weight, easy installation and other advantages. Widely used in Electric Power Industry, Petroleum Industry, Chemical Industry, Metallurgy, Railway, Port, Construction and other fields.



■|华依电缆附件



Product Name	Item Code	Applicable Cable Section(mm²)	Product Name	Item Code	Applicable Cable Section(m
Single Core Cable Termination	SY-1/1.0	10-16		JSY-1/1.0	10-16
	SY-1/1.1	25-50		JSY-1/1.1	25-50
	SY-1/1.2	70-120	Single Core Straight Joint	JSY-1/1.2	70-120
	SY-1/1.3	150-240		JSY-1/1.3	150-240
	SY-1/1.4	300-500		JSY-1/1.4	300-500
	SY-1/2.0	10-16		JSY-1/2.0	10-16
	SY-1/2.1	25-50		JSY-1/2.1	25-50
Two Cores	SY-1/2.2	70-120	Two Cores Straight Joint	JSY-1/2.2	70-120
Cable Termination	SY-1/2.3	150-240		JSY-1/2.3	150-240
	SY-1/2.4	300-500		JSY-1/2.4	300-500
	SY-1/3.0	10-16	Three Cores Straight Joint	JSY-1/3.0	10-16
	SY-1/3.1	25-50		JSY-1/3.1	25-50
Three Cores	SY-1/3.2	70-120		JSY-1/3.2	70-120
Cable Termination	SY-1/3.3	150-240		JSY-1/3.3	150-240
	SY-1/3.4	300-500		JSY-1/3.4	300-500
	SY-1/4.0	10-16		JSY-1/4.0	10-16
	SY-1/4.1	25-50		JSY-1/4.1	25-50
Four Cores	SY-1/4.2	70-120	Four Cores Straight Joint	JSY-1/4.2	70-120
Cable Termination	SY-1/4.3	150-240		JSY-1/4.3	150-240
	SY-1/4.4	300-500		JSY-1/4.4	300-500
Five Cores Cable Termination	SY-1/5.0	10-16		JSY-1/5.0	10-16
	SY-1/5.1	25-50		JSY-1/5.1	25-50
	SY-1/5.2	70-120	Five Cores Straight Joint	JSY-1/5.2	70-120
	SY-1/5.3	150-240		JSY-1/5.3	150-240
	SY-1/5.4	300-500		JSY-1/5.4	300-500



### ■ Range of Application

Suitable for 6/10kV, 8.7/10kV, XLPE insulated Single Core, Three Cores power cables.

### ■ Technical specification

Test item	Parameters
Wet Power Frequency Withstand Voltage Test (Outdoor)	35kV/1min
Dry Power Frequency Withstand Voltage Test (Indoor)	39kV/5min
Impact Pressure Test	95kV 1.2/50 μ s+10 times
Partial Discharge Test	≤10pc (1.73Uo)



Product Name	Item Code	Applicable Cable Section(mm²)
	NSY-10/1.1	25-50
Single Core Indoor Termination	NSY-10/1.2	70-120
	NSY-10/1.3	150-240
	NSY-10/1.4	300-500
	WSY-10/1.1	25-50
Single Core Outdoor Termination	WSY-10/1.2	70-120
	WSY-10/1.3	150-240
	WSY-10/1.4	300-500
	JSY-10/1.1	25-50
Single Core Straight Joint	JSY-10/1.2	70-120
J	JSY-10/1.3	150-240
	JSY-10/1.4	300-500
	NSY-10/3.1	25-50
Three Cores Indoor Termination	NSY-10/3.2	70-120
	NSY-10/3.3	150-240
	NSY-10/3.4	300-500
	WSY-10/3.1	25-50
hree Cores Outdoor Termination	WSY-10/3.2	70-120
	WSY-10/3.3	150-240
	WSY-10/3.4	300-500
	JSY-10/3.1	25-50
Three Cores Straight Joint	JSY-10/3.2	70-120
	JSY-10/3.3	150-240
	JSY-10/3.4	300-500
	NSZ-10/3.1	25-50
Three Cores Indoor	NSZ-10/3.2	70-120
Oil Immersion Termination	NSZ-10/3.3	150-240
	NSZ-10/3.4	300-500
	WSZ-10/3.1	25-50
Three Cores Outlines	WSZ-10/3.2	70-120
Three Cores Outdoor Oil Immersion Termination	WSZ-10/3.3	150-240
	WSZ-10/3.4	300-500
	JSZ-10/3.1	25-50
Three Cores Oil Immersion	JSZ-10/3.2	70-120
Straight Joint	JSZ-10/3.3	150-240
	JSZ-10/3.4	300-500



### ■ Range of Application

Suitable for 12/20kV, 18/20kV XLPE Insulated Single Core, Three Cores power cables.

### ■ Technical specification

Test item	Parameters
Wet Power Frequency Withstand Voltage Test (Outdoor)	48KV(72KV)/1min
Dry Power Frequency Withstand Voltage Test (Indoor)	54KV(81KV)/1min
Impact Pressure Test	125kV 1.2/50 μ s+10 times
Partial Discharge Test	≤10pc(1.73Uo)



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Product Name	Item Code	Applicable Cable Section(mm²)
	NSY-24/1.1	25-50
Single Core Indoor Termination	NSY-24/1.2	70-120
emgre core mass. remmaner	NSY-24/1.3	150-240
	NSY-24/1.4	300-500
	WSY-24/1.1	25-50
	WSY-24/1.2	70-120
Single Core Outdoor Termination	WSY-24/1.3	150-240
	WSY-24/1.4	300-500
	JSY-24/1.1	25-50
0 0	JSY-24/1.2	70-120
Single Core Straight Joint	JSY-24/1.3	150-240
	JSY-24/1.4	300-500
	NSY-24/3.1	25-50
Three Cores Indoor Termination	NSY-24/3.2	70-120
	NSY-24/3.3	150-240
	NSY-24/3.4	300-500
	WSY-24/3.1	25-50
Three Cores Outdoor Termination	WSY-24/3.2	70-120
Tillee Cores Outdoor Termination	WSY-24/3.3	150-240
	WSY-24/3.4	300-500
	JSY-24/3.1	25-50
Three Cores Straight Joint	JSY-24/3.2	70-120
	JSY-24/3.3	150-240
	JSY-24/3.4	300-500







35kV heat shrinkable three cores outdoor termination

### ■ Range of Application

Suitable for 21/35kV, 26/35kV XLPE insulated Single Core, Three Cores power cables.

### ■ Technical specification

Test item	Parameters
Wet Power Frequency Withstand Voltage Test (Outdoor)	104kV/1min
Dry Power Frequency Withstand Voltage Test (Indoor)	117kV/5min
Impact Pressure Test	250kV 1.2/50 μ s+10 times
Partial Discharge Test	≤10pc (1.73Uo)



Product Name	Item Code	Applicable Cable Section(mm²)	
	NSY-35/1.1	50-120	
Single Core Indoor Termination	NSY-35/1.2	150-240	
	NSY-35/1.3	300-500	
	WSY-35/1.1	50-120	
Single Core Outdoor Termination	WSY-35/1.2	150-240	
	WSY-35/1.3	300-500	
	JSY-35/1.1	50-120	
Single Core Straight Joint	JSY-35/1.2	150-240	
	JSY-35/1.3	300-500	
	NSY-35/3.1	50-120	
Three Cores Indoor Termination	NSY-35/3.2	150-240	
	NSY-35/3.3	300-500	
	WSY-35/3.1	50-120	
Three Cores Outdoor Termination	WSY-35/3.2	150-240	
	WSY-35/3.3	300-500	
	JSY-35/3.1	50-120	
Three Cores Straight Joint	JSY-35/3.2	150-240	
	JSY-35/3.3	300-500	



#### ■ Range of Application

The product is suitable for heat-shrinkable power cable straight through joint, which can replace the combination of insulating tube and semi-conductive tube, effectively eliminate the gap between layers, and improve the operation reliability of the straight through joint.

### ■ Technical specification

Test item	Parameters
Water Absorption (%)	≤0.2
Tensile Strength (Mpa)	≥12
Elongation at Break (%)	≥400
Breakdown Strength (kV/mm)	≥20
Inner Volume Resistivity ( $\Omega$ .cm)	≥1×10 <sup>14</sup>
Outer Volume Resistivity (Ω.cm)	≤1×10 <sup>4</sup>

### ■ Type Table

Product length range: ≤1000mm

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Product Name	Item Code	Inside Diameter before shrinkage (mm)	Inside Diameter after shrinkage (mm)	Wall Thickness after shrinkage (mm)
	FHG-35/13	≥35	13	6.0
	FHG-45/15	≥45	15	6.0
Heat Shrinkable	FHG-55/20	≥55	20	6.0
Composite Tube	FHG-65/25	≥65	25	6.0
Composite rube	FHG-85/30	≥85	30	7.0
	FHG-100/38	≥100	35	7.0
	FHG-120/45	≥120	40	7.0











Three Cores

Four Cores

Five Cores

### ■ Technical Specification

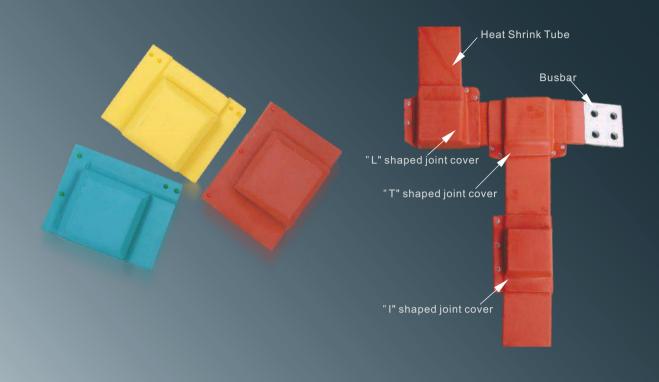
Test Item	Parameters
Hardness (Shaw A)	90
Tensile Strength (Mpa)	≥10
Elongation at Break (%)	≥300
Shrink Temperature (°C)	120~140
Radial Shrinkage Ratio (%)	250
Length Shrinkage Ratio (%)	±5



Due do et Nome	Item Code	Inner Diameter (mm)		Wall Thickness (mm)	
Product Name	item code	Big End	Small End	Big End	Small End
	ZT-2.1	28 2	15.5 0.5	2.3 0.3	1.2 0.2
Two Cores Breakout	ZT-2.2	47 2	26.0 0.5	2.3 0.3	1.2 0.2
	ZT-2.3	72 3	40 1	2.3 0.3	1.2 0.2
	ZT-3.1	54 2	24.0 0.5	2.3 0.3	1.3 0.2
	ZT-3.2	54 2	26.0 0.5	2.4 0.3	1.3 0.2
Three Cores Breakout	ZT-3.3/3.1M	71 3	30.0 0.5	2.4 0.3	1.3 0.2
	ZT-3.4/3.2M	89 4	38 1	2.4 0.3	1.4 0.2
	ZT-3.5/3.3M	108 5	49 2	2.4 0.3	1.4 0.2
	ZT-3.6/3.4M	130 5	67 3	2.5 0.3	1.5 0.3
	ZT-4.0	32 2	13.0 0.5	2.3 0.3	1.3 0.2
	ZT-4.1	42 2	16.0 0.5	2.4 0.3	1.3 0.2
Four Cores Breakout	ZT-4.2	60 2	26.0 0.5	2.4 0.3	1.3 0.2
	ZT-4.3	70 3	33 1	2.4 0.3	1.4 0.2
	ZT-4.4	90 4	39 1	2.4 0.3	1.4 0.2
	ZT-5.0	34 2	11.0 0.5	2.3 0.3	1.3 0.2
Five Cores Breakout	ZT-5.1	51 2	16.0 0.5	2.3 0.3	1.3 0.2
1 IVO COICS DIGAROUL	ZT-5.2	80 4	26.0 0.5	2.4 0.3	1.4 0.2
	ZT-5.3	95 4	32 1	2.5 0.3	1.5 0.3

Note: Mark M is 10kV three cores heat shrinkable breakout

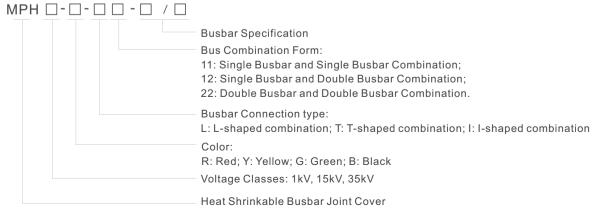
## **Busbar Joint Cover**



#### Range of Application

The busbar joint heat shrinkable cover is also called busbar box, made of radiation crosslinked polyolefin material. The busbar box has the functions of electrical insulation, welding spot anti-rust and anti-corrosion, mechanical protection and reducing phase spacing, ensure the safe operation of the power grid, excellent electrical performance, physical performance and chemical performance, can deal with the safety protection of transformers. Widely used in power plant, substation busbar connection, power transformer terminal insulation protection and safety protection.

#### Product Model





### ■ Technical Specification

Test Item	Parameters	
Tensile Strength	>12MPa	
Breakdown Strength	≥25kV/mm	
Volume Resistivity	>10 <sup>14</sup> \O.cm	
Water Absorption	≤0.1%	
Operating Temperature	-55°C∼+105°C	
Protection Grade	IP44	
Color	Red, Green, Yellow, Black	

### ■ Order Sample

Product Model	Specification	Applicable busbar specifications (Width * Thickness) (mm)	Note
MPH-R-L 22	100 10/100 10	100 10;100 10	Red; The joint is in the shape of "L": 100*10 double busbar and 100*10 double busbar lap
MPH-Y-T12	100 10/80 10	100 10;80 10	Yellow; The joint is in the shape of "T": 100*10 single busbar and 80*10 double busbar lap
MPH-G-I11	120 10/120 10	120 10;120 10	Green; The joint is in the shape of "I": 120*10 single busbar and 100*10 single busbar lap
MPH-R-X22	100 10/100 10	100 10;100 10	Red; The joint is in the shape of "X": 100*10 double busbar and 100*10 double busbar lap

<sup>☆</sup>The company can provide customers with all kinds of heat shrinkable bus bar joint cover, because the combination of bus bar joint in various forms, be sure to specify the specification and combination of busbar when ordering.



### ■ Range of Application

Suitable for Electric Power Industry, Aviation Industry, Electronics Industry, Communication Industry, Automobile Industry and other fields, with insulation, waterproof sealing, corrosion resistance, aging resistance and other characteristics.

### ■ Technical Specification

Test Item	Parameters
Water Absorption (%)	≤0.2
Tensile Strength (Mpa)	≥14
Elongation at Break (%)	≥400
Breakdown Strength (kV/mm)	≥18
Volume Resistivity (Ω.cm)	≥1*10 <sup>14</sup>
Peel Strength (N/cm)	≥40

Standard color: Black. Special color needs to be customized

Product Length:  $\phi 3.2/1-\phi 39/13.5$  specifications of the product can be continuous length can also be segmented length.  $\phi 3.2/1-\phi 39/13.5$  specifications of the product can be segmented length.



Product	Product Item Code name	Inside Diameter before shrinkage ( mm)	Inside Diameter after shrinkage ( mm)	Wall Thickness after shrinkage (mm)		
name				The Total Thickness	Bondline Thickness	
	SBG- $\phi$ 3.2/1	3.2	1.0	1.0	0.3	
	SBG- $\phi$ 4.8/1.5	4.8	1.5	1.2	0.4	
	SBG- $\phi$ 6.4/2.2	6.4	2.2	1.4	0.5	
	SBG-φ9.5/3.2	9.5	3.2	1.65	0.6	
	SBG- ф 12.7/4.2	12.7	4.2	1.7	0.6	
	SBG-φ19.1/6.3	19.1	6.3	2.0	0.7	
	SBG- $\phi$ 25.4/8.5	25.4	8.5	2.2	0.7	
Dual Wall	SBG-φ30/10.5	30	10.2	2.5	0.8	
Tube	SBG-φ39/13.5	39	13.5	2.5	0.8	
	SBG-φ50/17	50	17	2.8	0.5	
	SBG-φ64/21	64	21	3.0	0.5	
	SBG- ф75/25	75	25	3.0	0.5	
	SBG-φ80/26.7	80	26.7	3.0	0.5	
	SBG-φ90/30	90	30	3.0	0.5	
	SBG-φ100/34	100	34	3.0	0.5	
	SBG- φ 125/42	125	42	3.0	0.5	

Remark:

The length of the Dual wall Tube are:

- 1. 1.22M/pcs
- 2. 25M/Roll

If there is special need, can be customized according to customer requirements.



# **Heat Shrinkable Sealing Cap**



## ■ Technical Specification

Test Item	Parameters
Sealing Performance (Kpa)	70±2
Tensile Strength (Mpa)	≥11
Elongation at Break (%)	≥350
Water Absorption (%)	≤0.2

### Type Table

Item Code	Inside Diameter before shrinkage (mm)	Inside Diameter after shrinkage (mm)	Length before shrinkage(mm)	Applicable Cable Outer Diameter (mm)
RSM-15/6	≥15	≪6	42	7-13
RSM-20/8	≥20	≪8	55	9-17
RSM-35/15	≥35	≤15	80	16-30
RSM-55/25	≥55	≤25	105	28-48
RSM-75/40	≥75	≪40	115	45-65
RSM-100/50	≥100	≤50	145	55-90
RSM-120/70	≥120	<b>≤</b> 70	150	75-110

## Composite Insulation Heat Shrinkable Tape



#### Overview

Composite insulation heat shrinkable tape is suitable for insulation protection of non-free end or special-shaped charged body, repair of cable outer sheath after damage, insulation of charged body spacing or insufficient distance from the ground to the outside, insulation protection of bare wires or trees or buildings, anti-condensation and anti-corrosion protection of charged body.

### ■ Technical Specification

Test Item	Parameters
Hardness (Shaw A)	≤90
Tensile Strength (Mpa)	≥12
Elongation at Break (%)	≥400
Breakdown Strength (kV/mm)	≥20
Volume Resistivity (Ω.cm)	≥1*10 <sup>14</sup>
Peel Strength (N/cm)	≥50

### ■ Type Table

Product Name	Item Code	
Composite Insulation Heat Shrinkable Tape	FJRD-10/50*5000*1.2	



#### Overview

1kV flame retardant heat shrinkable thin tube has good flame retardant performance, excellent electrical insulation performance, aging resistance and softness. It can be completely shrunk by high-heat blow dryer, widely used in communication electronics, aviation and military industry and other fields, playing the role of insulating electrical lines, waterproof and moisture-proof sealing.

### ■ Technical Specification

Test Item	Parameters		
Flame Retardation	VW-1		
Radial Shrinkage Ratio	>50%		
Longitudinal Shrinking Ratio	<10%		
Tensile Strength	>15MPa		
Breakdown Strength	≥25KV/mm		
Volume Resistivity	>10 <sup>14</sup> Ω.cm		
Water Absorption	≤0.1%		
Usage Temperature	-55°C∼+105°C		
Initial Shrinkage Temperature	90°C		
Elongation at Break	>300%		
Color	Red, Green, Yellow, Blue, Black, Greenyellow		



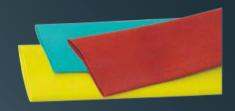
y po 10010	Inside Diameter	Inside Diameter	Wall Thickness
Item Code	before shrinkage (mm)	after shrinkage (mm)	after shrinkage(mm)
ф 1.0/0.5	>1.0	≤0.7	0.30±0.05
ф 1.5/0.75	>1.5	≤0.9	0.30±0.05
Ф2.0/1.0	>2.0	≤1.2	0.32±0.05
Ф2.5/1.25	>2.5	≤1.4	0.32±0.05
Ф3.0/1.5	>3.0	≤1.7	0.32±0.05
Ф3.5/1.75	>3.5	≤1.9	0.32±0.05
Ф4.0/2.0	>4.0	≤2.2	0.35±0.05
Ф5.0/2.5	>5.0	≤2.7	0.35±0.05
Ф6.0/3.0	>6.0	≤3.2	0.35±0.05
Ф7.0/3.5	>7.0	≤3.7	0.38±0.05
Ф8.0/4.0	>8.0	≤4.2	0.38±0.05
Ф9.0/4.5	>9.0	≤4.7	0.40±0.08
Ф 10/5	>10	≤5.2	0.40±0.08
Ф 12/6	>12	≤6.2	0.50±0.08
Ф 14/7	>14	≤7.2	0.50±0.08
ф 15/7.5	>15	<b>≤</b> 7.7	0.55±0.08
Ф 16/8	>16	≤8.2	0.55±0.08
Ф 18/9	>18	≤9.2	0.55±0.08
Ф20/10	>20	≤10.2	0.60±0.08
Ф 22/11	>22	≤11.2	0.60±0.08
Ф25/12.5	>25	≤13	0.65±0.10
Ф30/15	>30	≤15.5	0.65±0.10
Ф35/17.5	>35	≤18	0.70±0.10
Ф40/20	>40	≤20.5	0.75±0.10
Ф 50/25	>50	≤25.5	0.80±0.10
Ф60/30	>60	≤30.5	0.85±0.10
Ф70/35	>70	≤35.5	0.90±0.10
Ф80/40	>80	≤40.5	0.95±0.10
Ф90/45	>90	≤45.5	1.0±0.1
Ф100/50	>100	≤51	1.1±0.1
Ф120/60	>120	≤61	1.1±0.1
Ф150/75	>150	≤76	1.15±0.1
Ф180/90	>180	≪90	1.2±0.1
Ф200/100	>200	≤100	1.2±0.1

Remark: Please indicate your choice of color when ordering.





10kV Heat Shrinkable Continuous Sleeve



35kV Heat Shrinkable Continuous Sleeve





#### Overview

Heat shrinkable continuous busbar tube is a good electrical insulation and safety protection material. It can effectively reduce the distance between bus row and ground, prolong the service life of the busbar; Prevent short circuit accidents caused by foreign body lap and animal crawling; Prevent electric shock, pollution, condensation and flashover. It's mainly used for insulation protection and safety protection of bus bar in high and low voltage switchgear, power plant and substation. It has the characteristics of convenient installation, and long service life.

### ■ Technical Specification

Test Item	Parameters		
Flame Retardancy: Oxygen Index	>30		
Hardness (Shaw A)	<80		
Radial Shrinkage Ratio	>50%		
Longitudinal Shrinking Ratio	<5%		
Elongation at Break	>400%		
Tensile Strength	>12MPa		
Breakdown Strength	≥25KV/mm		
Volume Resistivity	$>10^{14}\Omega$ .cm		
Usage Temperature	-55°C∼+125°C		
Complete Shrink Temperature	120°C ∼140°C		
Color	Red, Green, Yellow		



Item Code	Applicable Busbar Width	Inside Diameter before shrinkage	Inside Diameter after shrinkage	Wall Thickness before shrinkage	Wall Thickness after shrinkage
MPG10-20/10	15~20	20	10	1.1 0.3	2.1 0.1
MPG10-25/12.5	20~30	25	12.5	1.1 0.3	2.1 0.1
MPG10-30/15	30~40	30	15	1.1 0.3	2.1 0.1
MPG10-40/20	40~50	40	20	1.1 0.3	2.1 0.1
MPG10-50/25	50~60	50	25	1.1 0.3	2.2 0.1
MPG10-65/32.5	60~70	65 2	32.5	1.1 0.3	2.2 0.1
MPG10-75/37.5	80~90	75 2	37.5	1.1 0.3	2.2 0.1
MPG10-85/42.5	90~100	85 2	42.5	1.2 0.3	2.3 0.1
MPG10-100/50	120	100 3	50	1.2 0.3	2.4 0.1
MPG10-120/60	140	120 3	60	1.2 0.3	2.4 0.1
MPG10-150/75	180	150 5	75	1.2 0.3	2.5 0.1
MPG10-200/100	200	200 5	100	1.2 0.3	2.5 0.1
MPG35-25/12.5	20~30	25	12.5	1.5 0.5	2.9 0.1
MPG35-30/15	30~40	30	15	1.5 0.5	2.9 0.1
MPG35-40/20	40~50	40	20	1.5 0.5	3.0 0.1
MPG35-50/25	50~60	50	25	1.5 0.5	3.1 0.1
MPG35-65/32.5	60~70	65 2	32.5	1.6 0.5	3.2 0.2
MPG35-75/37.5	80~90	75 2	37.5	1.6 0.5	3.2 0.2
MPG35-85/42.5	90~100	85 2	42.5	1.6 0.5	3.3 0.2
MPG35-100/50	120	100 3	50	1.7 0.5	3.3 0.2
MPG35-120/60	140	120 3	60	1.7 0.5	3.4 0.2
MPG35-150/75	180	150 5	75	1.8 0.5	3.5 0.2
MPG35-200/100	200	200 5	100	1.8 0.5	3.5 0.2

Remark: Please indicate your choice of color when ordering.



## Heat Shrinkable Bulk Items





Heat Shrinkable Insulation Tube

Heat Shrinkable Rain shed

### ■ Technical Specification

Test Item	Parameters		
Hardness (Shaw A)	90		
Strength of Extension (Mpa)	≥12		
Elongation at Break (%)	≥400		
Volume Resistivity ( $\Omega$ .cm)	≥1×10 <sup>14</sup>		
Breakdown Strength (kV/mm)	≥25		
Permittivity (ε)	<2.5		
Shrinkage Temperature (°C)	120~140		
Radial Shrinkage Ratio (%)	250		
Length Shrinkage Ratio (%)	±5		
Oxygen Index (OI)	≥27		

## F

### ■ Heat Shrinkable Insulation Tube Type Table

Product Name	Item Code	Inside Diameter before shrinkage	Inside Diameter after shrinkage	Wall Thickness after shrinkage	Length	Color
	JY1-12/5	12	6	1.2 0.1		Red,
	JY1-20/8	20	9	1.5 0.1		
1kV Heat Shrinkable Insulation Tube	JY1-30/10	30	11	1.5 0.1	600 or 1000	Green, Yellow,
modiation rube	JY1-40/14	40	15	2.0 0.1		Blue, Black
	JY1-50/18	50	19	2.0 0.1		
	JY10-30/10	30 1	12	2.4 0.1 650 or 10		) Red
10kV Heat Shrinkable	JY10-35/14	35 1	15		050 1000	
Insulation Tube	JY10-40/18	40 1	18		650 or 1000	
	JY10-50/20	50 1	20			
	JY35-50/20	50 1	20			
35kV Heat Shrinkable	JY35-60/25	60 1	25	0.0.04	000 4000	D. d
Insulation Tube	JY35-70/30	70 1	30	2.8 0.1	800 or 1000	Red
	JY35-75/35	75 1	35			

### ■ Heat Shrinkable Rain Shed Type Table

Product Name	Item Code	Specification	The Neck Diameter(mm)	The Neck Wall Thickness(mm)
	1#	ф 35/14	ф 36.0 ± 0.5	1.6 0.2
10kV Single-hole Rain Shed	2#	ф 50/20	φ 47.0 ± 0.5	1.6 0.2
	3#	ф70/32	ф 67.0 ± 0.5	1.8 0.2
10kV Three-hole	1#	ф 35/14	φ 32.0±0.5	1.7 0.2
Rain Shed	2#	ф 50/21	ф 50.0 ± 0.5	1.8 0.2
	00#	ф 28/8	φ 28.0±0.5	1.5 0.2
Low Voltage Single-hole	01#	ф 35/12	ф 35.0 ± 0.5	1.6 0.2
Rain Shed	02#	ф 50/20	φ 48.0 ± 0.5	1.6 0.2
	03#	ф 60/20	φ 58.0±0.5	1.5 0.2



## Silicone Rubber Insulation Cover







#### Overview

Silicone rubber insulation cover is made of high polymer material with strong anti-aging property and imported silicone rubber. The product has good electrical insulation, waterproof sealing and safety protection performance. It is mainly suitable for insulation safety protection of electrical equipment connection such as power transformer junction post, indoor/outdoor switch and bus bar. It can effectively prevent the occurrence of electric shock, pollution and condensation flashover phenomenon; Prevent short circuit accidents caused by foreign body lap and animal crawling; Reduce air and harmful gases to conductive materials corrosion, prolong the service life of electrical equipment. It has the characteristics of easy installation, excellent environmental adaptability and long service life.



## Silicone Rubber Insulation Cover

### ■ Type Table

. , po . o					
Order NO.	Item Code	Applicable fittings and connection mode	Screw Diameter	Wire	Product Usage
G002	HZ20-DC01	Connection Terminal, Horizontal line.	M12	1 wire	Transformer high voltage incoming lin- or silicone rubber arrester
G003	HZ20-EB02	Wire Clamps, Connection Terminal, Diagonal line.	M12	1 wire	Transformer high voltage feed line
G004	HZ20-CB01	1#-2# Wire Clamps, Horizontal line.	M12	1 wire	Transformer high voltage feed line
G005	HZ20-DC02	Connection Terminal, Horizontal line.	M12	1 wire or 2 wires	Transformer high voltage feed line
G006	HZ20-DB01	3#-4# Wire Clamps, Diagonal line.	M12	1 wire	Transformer high voltage feed line
B001	HZ30-DC01	Connection Terminal, Horizontal line.	M12	1 wire	Silicone rubber arrester
D001	HZ20-DC03	Connection Terminal, Horizontal line.	M12-M201	1 wire or 2 wires	Transformer low voltage feed line
D003	HZ10-BB01	Rod type oil wire clamps, Diagonal line.	M12	1 wire	20~250KVA Transformer low voltage feed line
D004	HZ10-CB01	Rod type oil connection terminal, Diagonal line.	M12	1 wire	20~250KVA Transformer low voltage feed line
D007	HZ10-DC02	Connection Terminal, Horizontal line.	M12	1 wire or 2 wires	Transformer low voltage feed line
D008	HZ10-FC01	Busbars, Horizontal line.	M12-M20	1 wire	Transformer low voltage feed line
D009	HZ10-EC01	Wire Clamps, Horizontal line.	M12	1 wire	20~250KVA Transformer low voltage feed line
D012	HZ10-CA02	Rod type oil wire clamps, Vertical line.	M12	1 wire	20~250KVA Transformer low voltage feed line
D013	HZ10-BB02	Rod type oil wire clamps, Diagonal line.	M14-M20	1 wire	315~500KVA Transformer low voltage feed line
D014	HZ10-CB02	Rod type oil connection terminal, Diagonal line.	M14-M20	1 wire	315~500KVA Transformer low voltage feed line
D015	HZ10-EB03	Wire Clamps, Diagonal line.	M14-M20	1 wire	Transformer low voltage feed line
D017	HZ10-DC03	Connection Terminal, Horizontal line.	M14-M20	1 wire or 2 wires	Transformer low voltage feed line
D019	HZ10-EC02	Connection Terminal, Horizontal line.	M14-M20	1 wire	315~500KVA Transformer low voltage feed line
G006	HZ20-EA01	Wire Clamps, Vertical line.	M12	1 wire	Transformer low voltage feed line
G007	HZ20-BB02	Screw oil wire clip, Diagonal line.	M12	1 wire	Transformer low voltage feed line

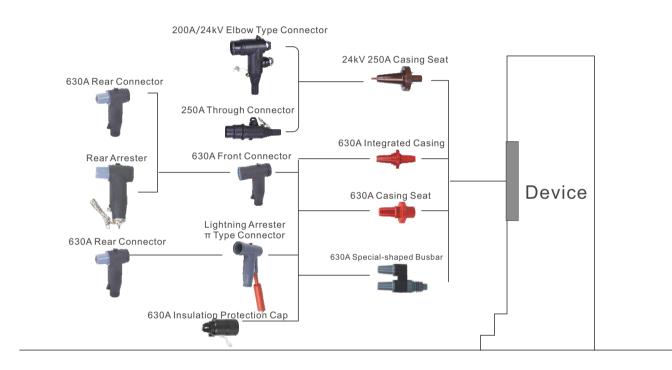
#### Remark

In addition to the above models listed in the selection table, our company also produces a variety of silicone rubber insulation shields such as D002, GW12, RW07, RW10 and special specifications can be customized.

### G

#### ■ Executive Standard

- DIN47636.7.1990 with Power cable detachable accessory set protruding from cone, dimensions of tube and separable coupling devices Um up to 35kV;
- ANSIIEEE592-1900 Exposed semiconductor sheath for high voltage cable joints and separable insulated connectors;
- IEC60502 Extruded insulated power cables and accessories for rated voltage from 1kV (Um=1.2kV) to 30kV (Um=35kV);
- IEC61442 Test method for accessories of power cables with rated voltage from 6kV (Um=7.2kV) to 30kV (Um=35kV);
- GB12706-2002 Extruded insulated power cables and their accessories for rated voltage 1kV (Um=1.2kV) to 35kV (Um=40.5kV);
- GB311.1-1997 High voltage transmission and distribution equipment insulation coordination;
- GB/41.9-1999 Technical conditions of high pressure casing;
- GB11032-2010 Ac non gap metal oxidation arrester;



Test Item	12kV Parameters	24kV Parameters	35kV Parameters
Rated Voltage	8.7kV/14.4kV	15.2kV/26.3kV	26kV/35kV
Power Frequency Withstand Voltage	42kV/1min	55kV/5min	117kV/5min
DC Withstand Voltage	53kV/15min	78kV/15min	104kV
Lightning Shock Withstand Voltage	95kV	125kV	215kV
Partial Discharge Voltage <10PC	13kV	22kV	45kV

Current Performance	250A	600A
Thermal Stable Current	16kA 1S	30kA 2S
Dynamic Stable Current	40kA	105kA



## 12/24kV European Type Front Connector

HY JB-1 2/630(PTC/Q-8.7/1 5-630A)



#### Overview

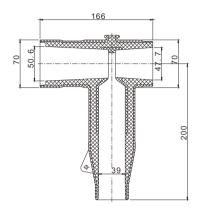
12kV European-style front connector is directly connected with the inlet and outlet bushings of the switch cabinet and the wall bushings of the cable branch box to provide fully insulated safe lines for the switch cabinet and cable branch box. The tail can be directly blocked with insulation plug, or can be extended to connect the rear connector or rear arrester.

#### Product Features

- Fully shielded and fully sealed separable connections are provided when the product is fitted with an appropriate casing or plug;
- It can run for a long time under water and other harsh conditions;
- The built-in capacitance test point is used to measure the line live state, and must be used with live display;
- There is no minimum interphase installation distance requirement;
- Installation can be vertical, horizontal, or any Angle.



## 12/24kV European Type Front Connector



#### ■ Product Model



### Type Table

#### 12kV Type Table

Item Code	Cable Sectional Area(mm²)	Outer Diameter of Cable Insulation Layer(mm)
HY JB-12/630-1	25	16.6
111 3B-12/030-1	35	17.6
HY JB-12/630-2	50	19
111 3B-12/030-2	70	20.6
HY JB-12/630-3	95	22.2
	120	23.6
HY JB-12/630-4	150	25.2
111 3B-12/030-4	185	26.7
HY JB-12/630-5	240	29
HT JB-12/030-3	300	31.2
HY JB-12/630-6	400	34.4
111 00-12/000-0	500	37.2

#### 24kV Type Table

Item Code	Cable Sectional Area(mm²)	Outer Diameter of Cable Insulation Layer(mm)
	35	18.6
HY JB-24/630-1	50	19.6
	70	21
HY JB-24/630-2	95	22.6
	120	24.2
	150	25.6
	185	27.2
HY JB-24/630-3	240	28.7
	300	31.1
HY JB-24/630-4	400	33.2

生休电缆附件 HUAYI CABLE ACCESSORIES



## 12/24kV European Type Rear Connector

HY JBK-12/630(PTC/H-8.7/15-630A)



#### Overview

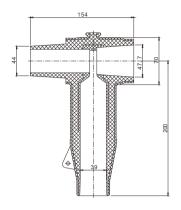
The 630A European-style rear connector can be connected to European-style front connector or another European-style rear connector to provide extended cable connection loop (branch). It cannot be connected directly to casing seat and through-wall casing. Its tail can be plugged directly with insulation plug, or it can be extended to connect another European rear plug or rear connector arrester.

#### Product Features

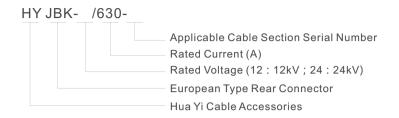
- Fully shielded and fully sealed separable connections are provided when the product is fitted with an appropriate casing or plug;
- It can run for a long time under water and other harsh conditions;
- The built-in capacitance test point is used to measure the line live state, and must be used with live display;
- There is no minimum interphase installation distance requirement; Installation can be vertical, horizontal, or any Angle.



## 12/24kV European Type Rear Connector



#### ■ Product Model



#### ■ Type Table

#### 12kV Type Table

Item Code	Cable Sectional Area(mm²)	Outer Diameter of Cable Insulation Layer(mm)
HY JBK-12/630-1	25	16.6
HY JBK-12/030-1	35	17.6
HY JBK-12/630-2	50	19
HT JBK-12/030-2	70	20.6
HY JBK-12/630-3	95	22.2
	120	23.6
UV IDK 12/620 4	150	25.2
HY JBK-12/630-4	185	26.7
LIV IDV 10/620 F	240	29
HY JBK-12/630-5	300	31.2
HY JBK-12/630-6	400	34.4
	500	37.2

#### 24kV Type Table

	Item Code	Cable Sectional Area(mm²)	Outer Diameter of Cable Insulation Layer(mm)
	35	18.6	
	HY JBK-24/630-1	50	19.6
		70	21
	HY JBK-24/630-2	95	22.6
		120	24.2
		150	25.6
		185	27.2
	HY JBK-24/630-3	240	28.7
		300	31.1
	HY JBK-24/630-4	400	33.2

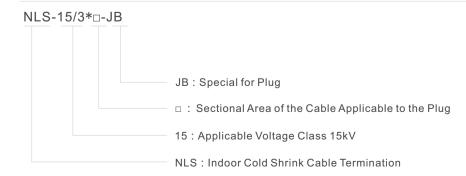




#### Overview

The full set of products to the most advanced cold shrinkage technology, without fire and special tools, just pull out the core, the elastomer will quickly shrink and close to the required installation site.

#### ■ Product Model





## $12kV \pi$ Type Touch-able Front/Rear Connector

HY QJT-12/630 HY HJT-12/630

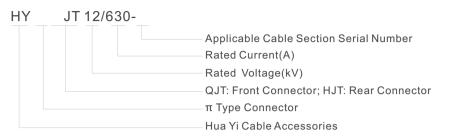


#### Overview

 $12 \text{kV} \, \pi$  type touch-able front/rear connector is applied to ring network cabinet, cable branch box of the main network system or box transformer ring network system, as the incoming and outgoing cable connection. It can be connected to 630A busbar wire, and can also be connected to multiple groups by connect touch-able rear connector to form multiple loops. The type  $\pi$  touch-able front connector rated current 630A, suitable for XLPE power cable with 25-500mm2 cross section.

#### ■ Product Features

- The unique stress cone structure can effectively disperse the electric field stress and solve the electric field stress problem at the cable shielding layer cut off;
- Incoming line and cable joint integral structure, reduce cabinet space;
- Full Sealing, Full Insulation, Full Protection, Easy Maintenance, Anti Flooding, Anti Pollution.



#### $\pi$ Type Front Connector Type Table

Item Code	Cable Sectional Area(mm²)	Outer Diameter of Cable Insulation Layer(mm)
HY QJT 12/630-1	25	16.6
111 Q31 12/030-1	35	17.6
HY QJT 12/630-2	50	19
HT QJ1 12/030-2	70	20.6
HY QJT 12/630-3	95	22.2
	120	23.6
HY QJT 12/630-4	150	25.2
HY QJI 12/630-4	185	26.7
HY QJT 12/630-5	240	29
HY QJI 12/030-5	300	31.2
HY QJT 12/630-6	400	34.4
	500	37.2

#### $\pi$ Type Rear Connector Type Table

Item Code	Cable Sectional Area(mm²)	Outer Diameter of Cable Insulation Layer(mm)
LIV LLIT 40/000 4	25	16.6
HY HJT 12/630-1	35	17.6
HY HJT 12/630-2	50	19
ПТ ПЛ1 12/030-2	70	20.6
HY HJT 12/630-3	95	22.2
	120	23.6
UV U IT 12/620 /	150	25.2
HY HJT 12/630-4	185	26.7
HY HJT 12/630-5	240	29
ПТ ПЛ1 12/030-3	300	31.2
HY HJT 12/630-6	400	34.4
	500	37.2



## 12kV Special-Shaped Busbar

HYYMP-12/630



#### Overview

Special-shaped busbar is applied to cable branch box with SF6 load switch or vacuum circuit breaker. It is divided into European type and American type, with two, three and four connections. It can be composed of 630 joint, 630A hybrid joint and European 630A joint with umbrella skirt. It can be composed of 630 joint, 630A hybrid joint and European 630A joint with umbrella skirt. It can be connected with switch connecting end through cross joint and T-joint to achieve full insulation and full sealing.

#### Product Features

- Flexible structure, meet a variety of wiring;
- Full insulation, full sealing, high safety performance.



## ■ Type Table

Item Code	Rated Current	Branch
HY YMP2-12/630		2
HY YMP3-12/630	630A	3
HY YMP4-12/630		4

Rated Current(A)

Rated Voltage(kV)

Special Shaped Busbar

Hua Yi Cable Accessories

Branch

■ Product Model

HYYMP- -12/630

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## 12kV European Type Front Arrester

HY QBLQ-17/50(PTC/QB YH5WS-17/50) HY QBLQ-17/45(PTC/QB YH5WZ-17/45) HY QBLQ-17/45(PTC/QB YH5WZ-10/27)



#### Overview

The 630A European type front arrester can be directly connected to the casing seat, through the wall casing, etc., to provide reliable over voltage protection for the power system.

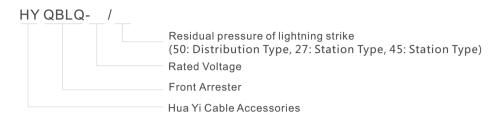
#### ■ Product Features

- The valve plate inside the lightning arrester has good nonlinearity, so that the arrester has the characteristics of residual low pressure and large flow rate;
- When the product is used, the response time is fast and the steep wave is flat;
- It can effectively prevent lightning strike, operation shock and over voltage protection, and ensure the operation of transmission and transformation equipment.



## 12kV European Type Front Arrester

#### ■ Product Model



### ■ Technical Specification

Test Item	Parameters
Rated Voltage	15kV
Continuous Running Voltage	13.6kV
Dc 1mA Reference Voltage	24kV
Residual Pressure of Steep Wave Impact	51.8kV
Residual Pressure of Lightning Strike	45kV
Residual Pressure of Operating Shock	35kV
High Current Shock Resistance	65kA

#### ■ Type Table

Item Code	Applicable cable section(mm²)
HY QBLQ-17/50(PTC/QB YH5WS-17/50)	25-400
HY QBLQ-17/45(PTC/QB YH5WZ-17/45)	
HY QBLQ-17/45(PTC/QB YH5WZ-10/27)	

## 12kV European Type Rear Arrester

HY HBLQ-17/50(PTC/HB YH5WS-17/50) HY HBLQ-17/45(PTC/HB YH5WZ-17/45) HY HBLQ-17/45(PTC/HB YH5WZ-10/27)



#### Overview

The European type rear arrester can provide reliable over voltage protection for the power system. The shielded rear arrester's outer semi-conductive layer ensures the safety of installation and maintenance personnel and the safe operation of the equipment, at the same time, it's UV resistance, resistance to wire aging, waterproof, moisture-proof performance to ensure that the product can operate safely and reliably in harsh environment.

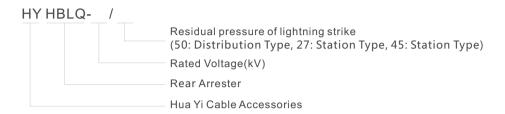
#### ■ Product Features

- It has good insulation performance, Corona Resistance and Electric Trace Resistance;
- With Flame Retardant, Self-extinguishing and excellent Heat Resistance;
- It can strengthen the ability of cable accessories to use electrical system;
- It can effectively prevent lightning strike, operation shock and over voltage protection, and ensure the operation of transmission and transformation equipment.



# 12kV European Type Rear Arrester

## ■ Product Model



## ■ Technical Specification

Test Item	Parameters
Rated Voltage	15kV
Residual Pressure of Steep Wave Impact	51.8kV
Residual Pressure of Lightning Strike	45kV
Residual Pressure of Operating Shock	35kV
High Current Shock Resistance	65kA

Item Code	Applicable cable section(mm²)
HY HBLQ-17/50(PTC/HB YH5WS-17/50)	
HY HBLQ-17/45(PTC/HB YH5WZ-17/45)	25-400
HY HBLQ-17/45(PTC/HB YH5WZ-10/27)	



#### Overview

12kV integrated bushing provides interface for 630A European-style joint products, which is mainly used for SF6 load switch branch box to connect with European-style front and rear joint and other products. The body of the product is made of high quality epoxy resin.

## ■ Product Features

- The design of rain shed structure increases creepage distance and improves the electrical performance of equipment;
- With good Flame Retardant;
- The inner layer has the advantages of low melting point, waterproof sealing and high adhesion;
- With strong electrical safety performance.

## ■ Product Model

HY JCTG-12/630 Rated Current(A) Rated Voltage(kV) Integrated bushing Hua Yi Cable Accessories

## ■ Technical Specification

Test Item	Parameters
Rated Voltage	15kV
Rated Current	630A
Power Frequency Withstand Voltage	42kV/1min
Lightning Shock Withstand Voltage	95kV
Minimum Corona Starting Voltage	11kV
24 hours Overloading	1000A
Short-time Withstand Current	25kV/0.17S 10kV/3s

华依电缆附件



## 12/24kV Two-Side Bushing

HY DJTG-12/630 HY DJTG-24/630



#### Overview

Mainly used for European cable branch box, ring network switch cabinet, connected with European front plug, can be connected with live indicator, display bus live state. The body of the product is made of high quality epoxy resin and has good mechanical and electrical properties.

## ■ Product Features

The body of the product is made of high quality epoxy resin and has good mechanical and electrical properties.

## Type Table

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Product Name	Item Code
12kV Two-Side Bushing	HY DJTG-12/630
24kV Two-Side Bushing	HY DJTG-24/630

## 4. 体电缆附件

## ■ Product Model



## ■ Technical Specification

Test Item	Parameters
Rated Voltage	12kV
Rated Current	630A
Power Frequency Withstand Voltage	65kV/1min
Partial Discharge	17.2kV 5pc
Induction Capacitance	18 3pf



## 12/24kV Casing Seat for Inflatable Cabinet

HY TGZ-12/630 HY TGZ-24/630



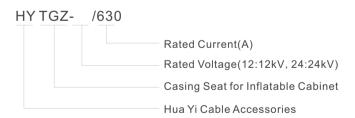
## Overview

The casing seat of the inflatable cabinet provides an interface for the 630A cable connector, which is mainly used for outdoor ring network switchgear and other equipment. It is installed on the inflatable cabinet, and is connected with the 630A type cable connector, which is the 630A inlet and outlet line, and is connected with the shielded bolt type cable connector.

#### ■ Product Features

- The product is made of epoxy resin and purple copper rod, which has good mechanical and electrical properties;
- The suitable medium is insulating oil or SF6 gas.
   The induction point on the bushing can be directly grounded or connected to the live display.

#### ■ Product Model



Product Name	Item Code
12kV Casing Seat for Inflatable Cabinet	HY TGZ-12/630
24kV Casing Seat for Inflatable Cabinet	HY TGZ-24/630



## 12/24kV Insulation cap

HY JYM-12/630 HY JYM-24/630



#### Overview

12/24KV 630A insulation cap is an accessory with point bushing, providing insulation cover for live bushing, dust-proof and moisture-proof cover for joints without live bushing. 630A insulation caps can be installed on 630A bushing, bus bar, and wall hanging devices. If spare outgoing cables are reserved for bus bars and cable connectors, use 630A insulation caps to seal them. The product has the advantages of full insulation, full sealing, safe and reliable, convenient installation, simple operation and so on.

## ■ Technical Specification

Test Item	Parameters
Rated Voltage	15kV
Rated Current	630A
Power Frequency Withstand Voltage	42kV/1min
Lightning Shock Withstand Voltage	95kV
DC Withstand Voltage	52kV/15min
Minimum Corona Starting Voltage	11kV

## ■ Product Model



Product Name	Item Code
12kV Insulation Cap	HY JYM-12/630
24kV Insulation Cap	HY JYM-24/630

**HY HBLQ-34/90** 



#### Overview

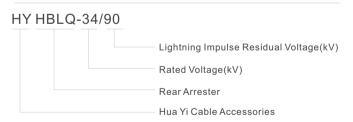
24kV European rear surge arrester provides reliable over-voltage protection for electrical systems. The shielded rear surge arrester's outer semi-conductive layer ensures the safety of installation and maintenance personnel and the safe operation of the equipment.

Meanwhile, its special performance of anti-ultraviolet, anti-aging, waterproof and moisture-proof ensures the safe and reliable operation of the product in bad environment.

#### ■ Product Features

- Excellent insulation performance, corona resistance and electric trace resistance.
- It has flame retardant, self-extinguishing and excellent heat resistance.
- It can strengthen the use ability of cable accessories to electrical system fluctuation.
- It can effectively prevent lightening strike, operation shock and over-voltage protection to ensure the operation of transmission and transformation equipment.

## ■ Product Model



U



## 35kV Two-side Bushing

HY DJTG-35/630



## Overview

35kV two-side bushing is used for 35kV cable tap box, providing intermediate connection for 35kVT type cable joint.

## ■ Product Features

- The unique stress cone structure can effectively evacuated electric field stress.

  • Solve the electrical stress problem at the cutting
- of cable shielding layer.
- Incoming line and cable joint integral structure, reduce cabinet space.
- Fully sealed, fully insulate, fully protected, maintenance-free, resistant to flooding and pollution.

## ■ Product Model





## 35kV T Cable Connector

HY TT-35/630



#### Overview

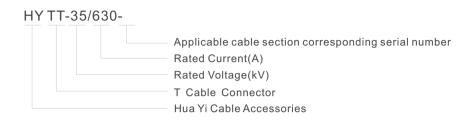
Connect single-phase or three-phase insulated cable with transformer, switch cabinet, branch box and other equipment through 630A prefabricated connector. Expand rear connector or rear surge arrester to realize multi-way installation and provide over-voltage protection. The product is suitable for indoor and outdoor installation, can be connected to the cable specifications, cable type fault indicator can also be installed on the cable, can quickly and accurately find out the fault point.

## ■ Product Features

- · Provides a fully screened and fully submersible separable connection when mated with the proper bushing or plug.
- It can run under water and other harsh conditions for a long time.
- Built-in capacity test point to determine the circuit status or install a fault indicator.
- No minimum phase clearance requirements.
- Mounting can be vertical, horizontal, or any angle in between.



## Product Model



## ■ Technical Specification

Test Item	Parameters
Rated Current	630A
Overload Current	1000A/24H
Short-time Withstand Current	27kA/4S
Rated Voltage	40kA/0.2S
Maximum Interphase Voltage	35kV
Maximum Relative Ground Voltage	40.5kV
Power Frequency Withstand Voltage	117kV/1min
Lighting Impulse Withstand Voltage	200kV
Minimum Corona Starting Voltage	26kV

Item Code	Cable Sectional Area(mm²)	Outer diameter of cable insulation layer(mm)
HY TT-35/630-1	35	29
111 11-33/030-1	50	31
HY TT-35/630-2	70	32.6
ПТ 11-35/030-2	95	34.2
HY TT-35/630-3	120	35.6
	150	37.2
LIV/TT 25/020 4	185	38.7
HY TT-35/630-4	240	41.1
LIV/TT 05/000 5	300	43.2
HY TT-35/630-5	400	46.4
HY TT-35/630-6	500	49.2



## 35kV Rear Arrester

**HY HBLQ-51/134** 



## Overview

35kV European type rear surge arrester can provide reliable over-voltage protection for electrical equipment wind power substation cable tap box.

## ■ Technical Specification

Product Name	Item Code
Lightning impulse residual voltage	185kV
Sealing test	Qualified

## ■ Product Model

HY HBLQ-51/134	
	Lightning impulse residual voltage(kV)
	Rated Voltage(kV)
	RearArrester
	Hua Yi Cable Accessories

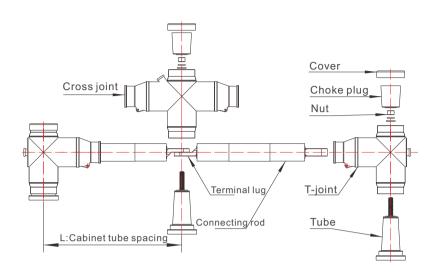
#### Overview

The top expansion bus connector is used for the top expansion connection of SF6 insulated metal switchgear, realizing full sealing and full insulation connection between the load switch and bus, completely avoiding the fatal defect brought by high voltage exposure in bad weather, and it is easy to install and high reliability. The length of the bus can be customized according to customer requirements, and the end of the bus is fixed with terminals and bushing.\suitable for electrical system with rated current up to 1250A.

#### ■ Product Model







Note: The length of bus for European cross joint and T-joint can be customized according to customer requirements.

Product Name	Item Code
	HY-MLQD-12/630 ( T-joint )
	HY-MLQS-12/630 ( Cross joint )
	HY-MLQX-12/630 ( The connector bus )



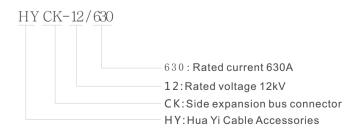
# 12kV Side Expansion Bus Connector



## Overview

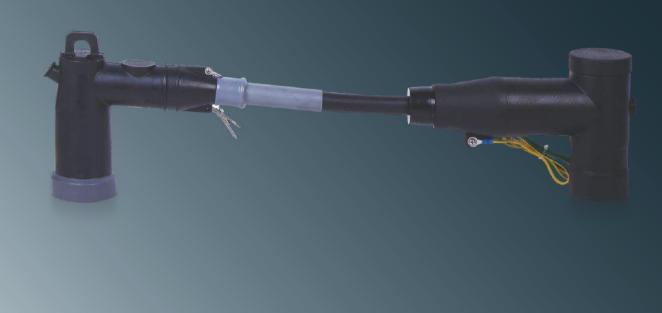
The side expansion bus connector is used to connect the side expansion of the ring cabinet to provide multi-branch serial connections for the expansion of the ring cabinet.

## ■ Product Model





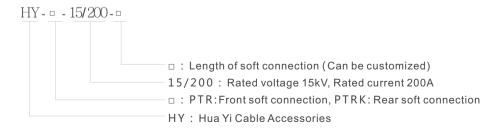
## 15kV PT Soft Connection



## Overview

PT Soft Connection is based on the cable connection by modifying the appearance of both ends of the cable end evolved. It is on the basis of the cable end on the outer surface of the semi-conductive shielding of the cable end, full sealing of the product. A plug head can be installed at the rear end of the cable head, and the front connector is usually used. PT soft connector can be customized according to customer's actual requirements.

#### ■ Product Model



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## **American 200A Cable Accessory Series**

#### Standard

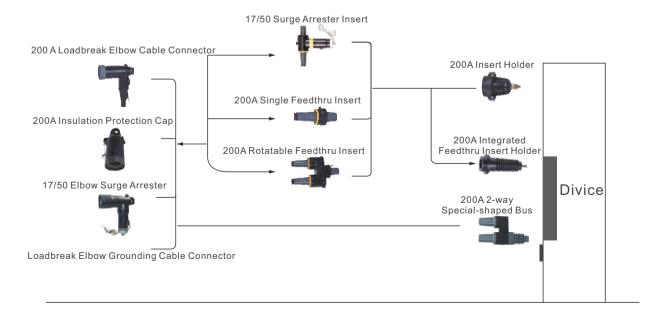
- ANSI IEEE std386-2006 more than 600V separable insulated connector systems for power distribution systems;
- ANSI IEEE592-1990 Exposed semiconducting shields on high-voltage cable joints and separable insulated connectors;
- IEC60502 Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um = 1,2 kV) up to 30 kV (Um = 35 kV);
- IEC61442 Test methods for accessories for power cables with rated voltages from 6 kV (Um = 7,2 kV) up to 30 kV (Um = 35 kV);
- GB12706-2002 Power cables with extruded insulation and their accessories or rated voltages from 1 kV (Um = 1,2 kV) up to 35 kV (Um = 40.5 kV);
- GB311.1-1997 Insulation co-ordination for high voltage transmission and distribution equipment;
- GB/T41.9-1999 High pressure casing technology conditions;
- GB11032-2010 Metal-oxide surge arresters without gaps for a.c. systems;
- DIN47636-7-1990 Bushing for separable accessories for power cable with protruding cone; Um up to 35kV, dimensions of the arrangement for bushings and separable connectors.

## ■ Voltage Feature

Test Item	15kV	25kV	35kV
Rated voltage	8.7kV/14.4kV	15.2kV/26.3kV	26kV/35kV
Power frequency voltage withstand	42kV/1min	55kV/5min	117kV/5min
DC voltage withstand	53kV/15min	78kV/15min	104kV
Lightning impulse voltage withstand	95kV	125kV	215kV
Partial discharge voltage < 10PC	13kV	22kV	45kV

## Current performance

Test Item	200AMP	600AMP
Load operating current	Can perform 10 times of breaking and closing operation at 14.4kV and 200A	
Fault closing current	It can pass one fail-close operation at 14.4kV and 10000A/0.175	
Thermal stable current	16kA 1s	30kA 2S
Dynamic stable current	40kA	105kA





## 15kV Elbow Cable Connector

HY ZT-15/200



## Overview

15kV 200A elbow cable connector is fully-shield and shield and insulated plug-in termination for connecting underground cable to distribution power system of pad-mound transformer, surrounding power supply branch, cable branch box equipped with load bushings. Installed in T-II type cable head the 200A outlet side,200A bus-bar and American box single-pass (or double pass) bushing joints and load transfer joint, etc.

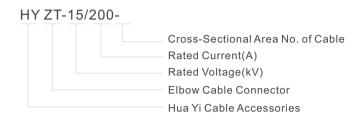
#### Product Features

- Test point can install live display to check the live status of the equipment and meet the requirements of the nuclear phase of the line.
- It can be operated with live, but cannot cut off short circuit current.
- It's suitable for XLPE cable with sectional area 35mm<sup>2~</sup> 150mm<sup>2</sup>.
- It can be used as load switch to switch off 200A current.

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## ■ Product Model



## ■ Technical Specification

Test Item	Parameters
Wet power frequency voltage withstand	12kV/1min
Dry power frequency voltage withstand	42kV/1min
Power frequency withstand voltage for a long time	35kV/4h
Impulse voltage withstand	95kV 10 times
Partial discharge	13kV 20pc

Item Code	Cable Sectional Area (mm²)	Outer diameter of cable insulation layer(mm)
HY ZT-15/200-1	35	17.6
HY Z1-15/200-1	50	19
HY ZT-15/200-2	70	20.6
	95	22.2
HY ZT-15/200-3	120	23.6
	150	25.2

## 15kV PT Elbow Cable Connector

HY PT-15/200

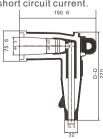


#### Overview

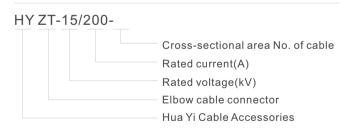
Elbow cable connector is used to provide power for electric operation mechanism ,or fully insulation, fully shield, fully sealing for the high voltage side of the mutual inductor JDZ12A-10R. It is suitable for 15kV 35~50mm² XLPE.

#### ■ Product Features

- Fully insulation, fully shield, fully sealing.
- The connection is very simple, with a reliable anti-loose device.
- The rod connector is equipped with arc extinguishing material, so it can be operated in a live state, but cannot cut off short circuit current.



## ■ Product Model



## ■ Technical Specification

Test Item	Parameters
Rated voltage	15
Maximum interphase voltage	14.4
Maximum relative ground voltage	8.3
Power frequency withstand voltage	42/1min
Lighting impulse withstand voltage	95
Initial corona voltage	11



# 15kV Bushing Connector

HY DTTG-15/200



#### Overview

15kV bushing connector threads into a universal bushing well to provide the same function as an integral load break bushing. Using bushing inserts makes field installation and replacement possible and efficient. Bushing insert and elbow connectors comprise the essential components of all load break connections. It is mainly used as the high-voltage electrical connection for American box, outdoor ring network cabinet. Bushing insert is used with bushing holder that makes it possible to on-site installation and replacement.

## ■ Product Model



## Product Features

- The inner hexagon of the bushing insert makes installation more convenient. With the use of the installation tool, it can be tightly installed to the bushing holder to avoid any potential damage;
- The yellow position ring of the product can directly reflect whether the sealing header is installed properly;
- The advanced design inside the bushing insert ensures that the arc can be destroyed normally when it id disconnected from plug head.



# 15kV Bushing Extender Holder

**HY JCTGZ-15/200** 



#### Overview

15kV bushing extender holder is designed for transformers, outdoor surrounding cable supply cabinet and switch cabinet. Insulated for 200A outgoing line. It connects with bushing joint, rotatable feedthru insert or surge arrester.

## ■ Product Model



## ■ Product Features

- Excellent mechanical and electrical performance;
- The special rainshed structure increases the creepage distance and effectively improves the electrical performance of the equipment.



#### Overview

15kV/200A bus-bar acts as a bus in the cable branch. It can combine cable plug head, elbow surge arrester, 200A insulated protective cap as a cable branch lines. Its internal arc extinguishing medium, and elbow plug head with energy band load plug.

#### Product Features

- Full insulation, full sealing, high quality;
- Effectively eliminate the cable connector plug type arc, ensure the safe operation of equipment;
- Conductive strip made of copper which ensures smooth current and good cooling.

## ■ Product Model



Item Code	Branch
HY MP 2-15/200	2
HY MP 3-15/200	3
HY MP 4-15/200	4



## 15/25kV Bushing Holder

HY TGZ-15/200 HY TGZ-25/200



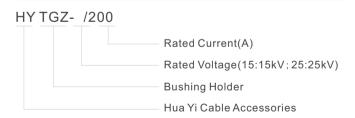
## Overview

15/25kV bushing holder provides interfaces for 200A cable joint, it is mainly used for American box, outdoor ring net switch cabinets and other equipment. It is installed in the side of the American box change and high voltage winding connection and installed in the outdoor ring on 200A line side. It also connects to the common cable accessories including single bush joint, two-way bushing joints, etc.

#### ■ Product Features

- Excellent mechanical and electrical performance;
- The semi-conductive layer outside the surface of the products is uniform and the surface grounding is more effective without shedding;
- Internal arc extinguishing structure, matched with elbow plug, can break 200A load current;
- Excellent electrical conductivity, small contact resistance when matched with time-type plug.

#### ■ Product Model



Product Name	Item Code	Rated Voltage
15kV 200A Bushing Holder	HY TGZ-15/200	15kV
25kV 200A Bushing Holder	HY TGZ-25/200	25kV

## 15/25kV Insulated Cap

HY JYM-15/200 HY JYM-25/200



## Overview

15kV/25kV insulated cap is as an attachment to the charged casing accessories, to provide insulation for charged casing insulating sleeve, to provide dust-proof and moisture-proof envelope for uncharged joint. 200A insulation cap can be installed in 200A bush, bus-bar and hanging device. When the bus-bar and cable joint reserve have a spare line, must be sealed it with the 200A insulated cap.

#### ■ Product Features

- Excellent electrical properties, tear resistance, ozone resistance, oxidation resistance, corrosion resistance, high mechanical strength;
- The interlayer gap is avoided and partial discharge is minimized;
- Has good thermal stability and thermodynamic performance, good sealing performance, can work under water.

## ■ Product Model



Item Code
HYYJM-15/200 (15kV)
HY TGZ-25/200 (25kV)



## 15kV Rotatable Feedthru Connector

HY SST-15/200



## Overview

Rotatable feedthru connector is used to provide dual bushings from a single apparatus bushing well. One of the way has similar functions with single joint, the other one to connect the elbow arrester (improve over-voltage protection), or to change the connection mode of box. It is mainly used for connecting underground cable to distribution power system of pad-mound transformer. surrounding power supply box. Using together with this is elbow connector, elbow surge arrester and apparatus bushing.

## ■ Product Features

- Good internal structure design of double-way bushing ensures normal arc extinguishing when disconnecting form time-type joint;
- The unique anti-reversal design ensures that the double-way bushing joint rotates to the correct installation position without compromising connectivity.

## ■ Item Code



## ■ Product Model

Item Code
HY SST-15/200 (12kV)
HY JYM-25/200 (25kV)



## Overview

17/50kV elbow surge arrester is widely used on medium voltage network, such as transformer switch gears and others. Product design is suitable for installation in 200A load plug interface, to protect equipment from damage by over-voltage and effectively prolong the service life of equipment.

## Product Features

- The bottom of the surge arrester is with grounding wire, it can effectively connect the lighting impulse voltage to the ground position;
- Good internal structure design of double-way bushing ensures normal arc extinguishing when disconnecting form time-type joint;
- The unique anti-reversal design ensures that the double-way bushing joint rotates to the correct installation position without compromising connectivity.

## ■ Product Model



## ■ Technical Specification

Test Item	Parameters
Rated Voltage	17kV
Lightning Shock Withstand Voltage	≪45kV
Reference Voltage at 1mA DC (kV)	25≤ μ1m.DC≤27.2
0.75u=µ1mA Dc Leakage Current	≤50 μ A
2ms Square Wave Impact Capacity(A)	150/18times
Power Frequency Voltage of Insulating Coat	54kV
Sealing Experiment	Qualified
Continuous Running Voltage	13.6kV



# 17kV Surge Arrester Insert

**HY DTBLQ-17/50** 



## Overview

17/50kV surge arrester insert is widely used on medium voltage network, such as transformer switchgears and others. It used together with load break cable accessories such as bushing elbow connector and insulated protective cap.

## ■ Product Model



## 25kV Elbow Cable Connector

HY ZT-25/200



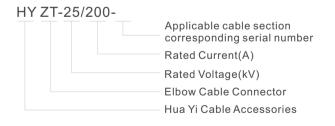
#### Overview

25kV 200 elbow connector is fully-shield and shield and insulated plug-in termination for connecting underground cable to distribution power system of pad-mound transformer, surrounding power supply branch, cable branch box equipped with load bushings. Installed in T-II type cable head the 200A outlet side, 200A bus-bar and American box single-pass (or double pass) bushing joints and load transfer joint, etc.

## ■ Product Features

- Test point can install live display to check the live status of the equipment and meet the requirements of the nuclear phase of the line;
- It can be operated with live, but cannot cut off short circuit current;
- It's suitable for XLPE cable with sectional area 25mm²~150mm²;
- It can be used as load switch to switch off 200A current.

#### ■ Product Model



Item Code	Cable Sectional Area(mm²)	Outer diameter of cable insulation layer(mm)
LIV/ 7T 05/000 4	35	19.6
HY ZT-25/200-1	70	21
HY ZT-25/200-2	95	22.6
HY ZT-25/200-3	120	24.2
HY Z1-25/200-3	150	25.6

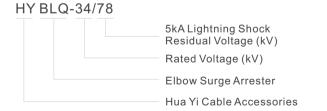




#### Overview

25kV elbow surge arrester is widely used on medium voltage network, such as transformers, switch gears and other equipments.

## ■ Product Model



## ■ Product Features

- Test point can install live display to check the live status of the equipment and meet the requirements of the nuclear phase of the line;
- It can be operated with live, but cannot cut off short circuit current;
- It's suitable for XLPE cable with sectional area 25mm<sup>2</sup>~150mm<sup>2</sup>;
- It can be used as load switch to switch off 200A current.



## **American 250A Cable Accessory Series**

## Standard

- ANSI IEEE std386-2006 more than 600V separable insulated connector systems for power distribution systems;
- ANSI IEEE592-1990 Exposed semiconducting shields on high-voltage cable joints and separable insulated connectors;
- IEC60502 Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um = 1,2 kV) up to 30 kV (Um = 35 kV);
- IEC61442 Test methods for accessories for power cables with rated voltages from 6 kV (Um = 7,2 kV) up to 30 kV (Um = 35 kV);
- GB12706-2002 Power cables with extruded insulation and their accessories or rated voltages from 1 kV (Um = 1,2 kV) up to 35 kV (Um = 40.5 kV);
- GB311.1-1999 Insulation co-ordination for high voltage transmission and distribution equipment;
- GB/T41.9-1999 High pressure casing technology conditions;
- GB11032-2010 Metal-oxide surge arresters without gaps for a.c. systems;
- DIN47636-7-1990 Bushing for separable accessories for power cable with protruding cone; Um up to 35kV, dimensions of the arrangement for bushings and separable connectors.

## Voltage Feature

Test Item	15kV Parameters	25kV Parameters	35kV Parameters
Rated Voltage	8.7kV/14.4kV	15.2kV/26.3kV	26kV/35kV
Power Frequency Voltage Withstand	42kV/1min	55kV/5min	117kV/5min
DC Voltage Withstand	53kV/15min	78kV/15min	104kV
Lightning Impulse Voltage Withstand	95kV	125kV	215kV
Partial Discharge Voltage < 10PC	13kV	22kV	45kV

## Current Performance

Test Item	200AMP	600AMP
Load Operating Current	It can perform 10 times of breaking and closing operation at 14.4kV and 200A	
Fault Closing Current	It can pass one fail-close operation at 14.4kV and 10000A/0.175	
Thermal Stable Current	16kA 1s	30kA 2S
Dynamic Stable Current	40kA	105kA



## 10/24kV Elbow Cable Connector

HY ZT-10/250 HY ZT-24/250



#### Overview

Elbow cable connector is used for connecting cable and transformer, switch gear, cable connection box, etc. It is suitable for indoor and outdoor installation. Products meet the GB/T 12706.4-2002 IEC60502.4-2005.

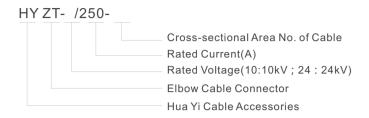
## ■ Product Features

- Provides a fully screened and fully submersible separable connection when mated with the proper bushing or plug. It can run under water and other harsh conditions for a long time;
- Built-in capacity test point to determine the circuit status or install a fault indicator;
- No minimum phase clearance requirements;
- Mounting can be vertical, horizontal, or any angle in between.



## 10/24kV Elbow Cable Connector

## ■ Product Model



## ■ Technical Specification

Test Item	Parameters	
Maximum System Voltage(Um)	25kV	
Impulse Withstand Voltage	125kV	
Ac Withstand Voltage	54kV/5min	
Continuous Rated Voltage	250A	
Overload Current	300A/8H	
Short-time Withstand Current	12.5kA/1s	

## ■ Type Table

## 10kV Type Table

Item Code	Cable Sectional Area(mm²)	Outer diameter of cable insulation layer(mm)
HY ZT-10/250-1	25	16.6
HT Z1-10/250-1	35	17.6
HY ZT-10/250-2	50	19
	70	20.6
HY ZT-10/250-3	95	22.6
	120	23.6

## 24kVType Table

Item Code	Cable Sectional Area(mm²)	Outer diameter of cable insulation layer(mm)
HY ZT-24/250-1	35	18.6
111 21-24/250-1	50	19.6
HY ZT-24/250-2	70	21
	95	22.6
HY ZT-24/250-3	120	24.2
HY ZT-24/400	/	1



# 10/24kV Straight-through Cable Connector

HY ZTS-10-250 HY ZTS-24-250



#### Overview

Straight-through type Cable connector is used for connecting cable and transformer, switch gear, cable connection box, etc. Products meet the GB/T 12706.4-2002 IEC60502.4-2005.

## ■ Product Features

- Provides a fully screened and fully submersible separable connection when mated with the proper bushing or plug;
- Built-in capacity test point to determine the circuit status or install a fault indicator;
- No minimum phase clearance requirements;
- Mounting can be vertical, horizontal, or any angle in between.

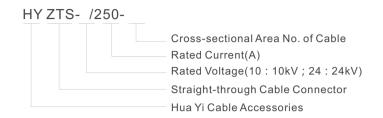
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# **HYR5** 10/24kV Straight-through Cable Connector

## ■ Product Model



## ■ Technical Specification

Test Item	Parameters
Rated Voltage	24kV
Impulse Withstand Voltage	125kV
Ac Withstand Voltage	54kV/5min
Continuous Rated Current	250A
Overload Current	300A/8H
Short-circuit Current	12.5kA/1S

## ■ Type Table

#### 10kV Type Table

Item Code	Cable Sectional Area(mm²)	Outer diameter of cable insulation layer(mm)
HY ZTS-10/250-1	25	16.6
H1 213-10/250-1	35	17.6
HY ZTS-10/250-2	50	19
	70	20.6
HY ZTS-10/250-3	95	22.2
HY 215-10/250-3	120	23.6

#### 24kV Type Table

Item Code	Cable Sectional Area(mm²)	Outer diameter of cable insulation layer(mm)
HY ZTS-24/250-1	35	18.6
H1 Z13-24/250-1	50	19.6
HY ZTS-24/250-2	70	21
111 213-24/230-2	95	22.6
HY ZTS-24/250-3	120	24.2



## 24kV Insulated Cap

HY JYM-24/250



## Overview

24kV 250A insulated cap is as an attachment to the charged casing accessories, to provide insulation for charged casing insulating sleeve, to provide dust-proof and moisture-proof envelope for uncharged joint. 250A insulation cap can be installed in 250A bush, bus-bar and hanging device. When the bus-bar and cable joint reserve have a spare line, must be sealed it with the 250A insulated cap.

## ■ Product Model





# 24kV Bushing Holder

**HYTGZ-24/250** 



## Overview

24kV 250A bushing holder provides the interface for the 250A cable connector and mostly used on the oil-insulated (R-temp, hydrocarbon, or silicon)apparatus, including switch gear, transformer and capacitors. The Apparatus Bushing is molded using high quality epoxy rubber, which meet the requirement of standard EN50180/EN50181 DIN47636/HN52-S-61.

## ■ Product Model



Item Code	Product Size	
	А	В
HY TGZ-24/250	224	108
HY TGZ-24/250-S	189	73
HY TGZ-24/250-L	284	168
HY TGZ-24/400	1	1



# 24kV Bushing Holder

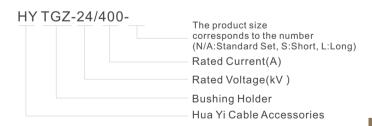
**HYTGZ-24/400** 



## Overview

24kV 250A bushing holder provides the interface for the 250A cable connector and mostly used on the oil-insulated (R-temp, hydrocarbon, or silicon)apparatus, including switch gear, transformer and capacitors. The Apparatus Bushing is molded using high quality epoxy rubber, which meet the requirement of standard EN50180/EN50181 DIN47636/HN52-S-61.

## ■ Product Model



## ■ Type Table

Item Code	Product Size	
	А	В
HY TGZ-24/250	224	108
HY TGZ-24/250-S	189	73
HY TGZ-24/250-L	284	168
HY TGZ-24/400	1	1

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# 24kV Extension Bushing Holder

**HY JCTGZ-24/250** 



#### Overview

24kV 250A bushing holder provides the interface for the 250A cable connector and mostly used on the oil-insulated (R-temp, hydrocarbon, or silicon) apparatus, including switch gear, transformer and capacitors. The bushing holder is molded using high quality epoxy rubber, which meet the requirement of standard EN50180/EN50181 DIN47636/HN52-S-61.

#### ■ Product Model

HY JCTGZ-24/250





# 24kV Extension Bushing Holder

**HY JCTGZ-24/400** 



#### Overview

24kV 400A bushing holder provides the interface for the 400A cable connector and mostly used on the oil-insulated (R-temp, hydrocarbon, or silicon) apparatus, including switch gear, transformer and capacitors. The bushing holder is molded using high quality epoxy rubber, which meet the requirement of standard EN50180/EN50181 DIN47636/HN52-S-61.

#### ■ Product Model

HY JCTGZ-24/400

Rated Current(A)

Rated Voltage(kV)

Extension Bushing Holder

Hua Yi Cable Accessories



## **American 600A Cable Accessory Series**

#### Standard

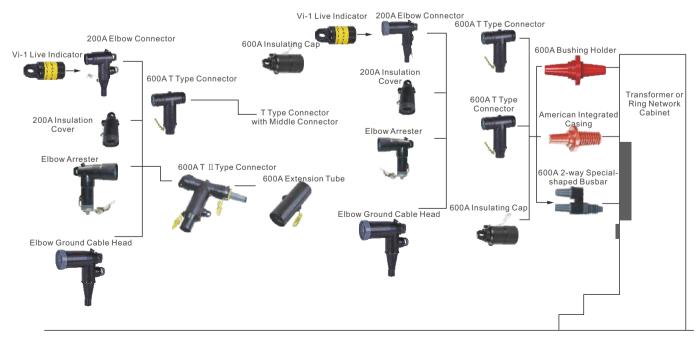
- ANSI IEEE std386-2006 more than 600V separable insulated connector systems for power distribution systems;
- ANSI IEEE592-1990 Exposed semiconducting shields on high-voltage cable joints and separable insulated connectors;
- IEC60502 Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um = 1,2 kV) up to 30 kV (Um = 35 kV);
- IEC61442 Test methods for accessories for power cables with rated voltages from 6 kV (Um = 7,2 kV) up to 30 kV (Um = 35 kV);
- GB12706-2002 Power cables with extruded insulation and their accessories or rated voltages from 1 kV (Um = 1,2 kV) up to 35 kV (Um = 40.5 kV);
- GB311.1-1999 Insulation co-ordination for high voltage transmission and distribution equipment;
- GB/T41.9-1999 High pressure casing technology conditions;
- GB11032-2010 Metal-oxide surge arresters without gaps for a.c. systems;
- DIN47636-7-1990 Bushing for separable accessories for power cable with protruding cone; Um up to 35kV, dimensions of the
  arrangement for bushings and separable connectors.

#### ■ Voltage Feature

Test Item	15kV Parameters	25kV Parameters	35kV Parameters
Rated Voltage	8.7kV/14.4kV	15.2kV/26.3kV	26kV/35kV
Power Frequency Voltage Withstand	42kV/1min	55kV/5min	117kV/5min
DC Voltage Withstand	53kV/15min	78kV/15min	104kV
Lightning Impulse Voltage Withstand	95kV	125kV	215kV
Partial Discharge Voltage < 10PC	13kV	22kV	45kV

#### Current Performance

Test Item	200AMP	600AMP
Load Operating Current	It can perform 10 times of breaking and closing operation at 14.4kV and 200A	
Fault Closing Current	It can pass one fail-close operation at 14.4kV and 10000A/0.175	
Thermal Stable Current	16kA 1s	30kA 2S
Dynamic Stable Current	40kA	105kA





## 15kV T Cable Connector

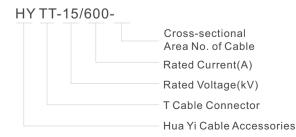
**HYTT-15/600** 



#### Overview

T cable connector is used for cable connection equipment, American box transformer, ring network cabinet and cable distribution box, as the incoming and outgoing cable connection. It can be used for 600A bus-bar, T-T multi-combination connection through the middle connector, or 200A elbow cable connector or elbow surge arrester through 600/200A conversion head. The live indicator can be installed on the live test point, which can also meet the requirements of the nuclear phase of the line.

#### ■ Product Model



## ■ Type Table

Item Code	Cable Sectional Area(mm²)	Outer diameter of cable insulation layer(mm)
	25	16.6
HY TT-15/600-1	35	17.6
	50	19
HY TT-15/600-2	70	20.6
ПТ 11-15/600-2	95	22.2
HY TT-15/600-3	120	23.6
	150	25.2
	185	26.7
LIN/TT 45/000 4	240	29
HY TT-15/600-4	300	31.2
HY TT-15/600-5	400	34.4
HYTT-15/600-6	500	37.2



## 15kV T II T Cable Connector

HY T || T-15/600



#### Overview

T II T cable connector is s used for cable connection equipment, American box transformer, ring network cabinet and cable distribution box. It can connect 600/200A conversion head through 200A elbow cable connector or elbow surge arrester. The live indicator can be installed on the live test point.

#### ■ Product Model





## 15kV T Connector

HY-TTL-15/600



#### Overview

600A T connector provides a transition for the 600A T cable connector, which is mainly used for the direct combination of cable ends (without bus-bar connection). Common cable accessories connected to it include t connector and T-II connector.

#### ■ Product Model



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# 15 kV Integral Dead Break Bushing

HY ZHT 15-600/200



#### Overview

600A/200A Integral Dead Break Bushing is used to convert a standard 600A dead break interface to a standard 200A load break integral. Used with a 200A insulated protective cap M.O.V Elbow Arrester, Grounding Elbow or Load Breaker Elbow Connector. A integral dead break bushing provides a fully shielded. It will be T-II connect if connects with T connect.

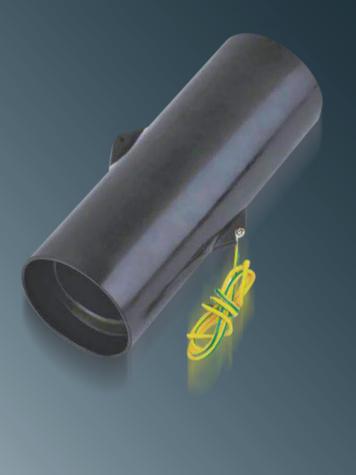
#### ■ Product Model

# Rated Current of the 200A Port Rated Current of the 600A Port Rated Voltage(kV) Integral Dead Break Bushing Hua Yi Cable Accessories



# 15kV Bushing Extender

HY YCG-15/600



#### Overview

The 600A bushing extender is mated with the conversion head to form a 600A/200A conversion head with extension bush, which can be installed directly on the 600A bus-bar or 600A bushings. The 200A jack can be installed with elbow surge arrester or elbow cable connector.

#### Product Model



J



# 15kV Insulated Cap

HY JYM-15/600



#### Overview

15kV 600A insulated cap is as an attachment to the charged casing accessories, to provide insulation for charged casing insulating sleeve, to provide dust-proof and moisture-proof envelope for uncharged joint. 600A insulation cap can be installed in 600A bush, bus-bar and hanging device. When the bus-bar and cable joint reserve have a spare line, must be sealed it with the 600A insulated cap.

#### Product Model





# 15 kV American Integrated Bush

**HY JCTG-15/600** 



#### Overview

600A integral bush or vacuum switch bush are designed for Cable Branch Cabinet with SF6 Switch. Separable connectors, such as 600A and T-II connector can be used with these bushing. These bushing are made by export resin. With the skirt make the Rotatable Feedthru Bushing can be used better.

#### Product Model



44

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# 15kV Bus-bar

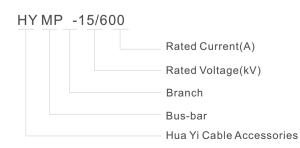
**HY MP-15/600** 



#### Overview

600A bus-bar acts as bus-bar in the cable branch line. It can combine T cable joint, T-II cable joint, 600A extension tube and 600A insulation cap as a cable branch lines.

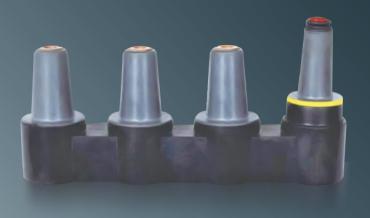
#### ■ Product Model



### ■ Type Table

Item Code	Branch
HY MP2-15/600	2
HY MP3-15/600	3
HY MP4-15/600	4

111





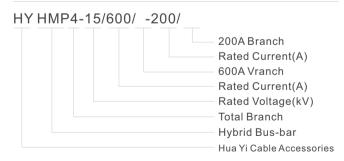
#### Overview

600A/ 200A hybrid bus-bar gathers 200A and 600A bolt type of bus-bar interface. hybrid bus-bar is made of high quality EPDM. It has the characteristics of the insulation, fully sealed. With T type cable joint, T - type cable joint or elbow cable joint connection, configuration is varied.

#### ■ Product Features

- Test point can install live display to check the live status of the equipment and meet the requirements of the nuclear phase of the line.
- IT can be operated with live, but cannot cut off short circuit current.
- It's suitable for XLPE cable with sectional area 25mm²~150mm².
- It can be used as load switch to switch off 200A current.

#### ■ Product Model



#### ■ Type Table

Product Name	Item Code
15kV Hybrid Bus-bar	HY HMP4-15/600/1-200/3
	HY HMP4-15/600/2-200/2
	HY HMP4-15/600/3-200/1



# in recent years. Product Features

Overview

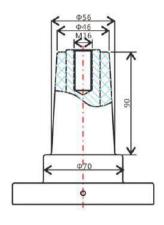
- Two-way door, simple installation, maintenance-free;
- It uses butt bushing as connection bus and has the advantages of small length, clear cable arrangement, etc.
- Multi-loop power supply in the small box can achieve branch and docking.
- Full sealing, full installation, full protection structure design, outdoor maintenance free, shell protection grade lp33.

Europe type cable branch box is special electrical equipment in distribution system for collecting and taping. The main spare

parts consists of the box body, insulation sleeve, shielding separable connector, charged display. The cable can finish the electrical connection through the separable connector and insulation sleeve and realize collected and tapping function. The box body is made of stainless steel plate with the feature heat insulation, ventilation and corrosion resistant, compact structure, convenient installation. Its surface plastic spraying which is modelling beautiful and generous. So it can urban green belts, belt and other natural scenery. It is widely used for cable engineering equipment in electric power distribution network system

• Box layout is reasonable, small size, compact structure, beautiful appearance.





#### Overview

Europe type cable branch box is special electrical equipment in distribution system for collecting and taping. The main spare parts consists of the box body, insulation sleeve, shielding separable connector, charged display. The cable can finish the electrical connection through the separable connector and insulation sleeve and realize collected and tapping function. The box body is made of stainless steel plate with the feature heat insulation, ventilation and corrosion resistant, compact structure, convenient installation. Its surface plastic spraying which is modelling beautiful and generous. So it can urban green belts, belt and other natural scenery. It is widely used for cable engineering equipment in electric power distribution network system in recent years.

#### ■ Technical Specification

Test Item	Parameters
Rated Voltage	12kV
Rated Current	630A
Main Circuit Contact Resistance	50 μ Ω
Insulation Resistance	20ΜΩ
Power Frequency Withstand Voltage	42kV
Lightning Shock Withstand Voltage	95kV
Partial Discharge	Under 15kV, 10pC
Cross-sectional Area No. of Cable	25mm²~500mm²
Box Protection Class	IP33

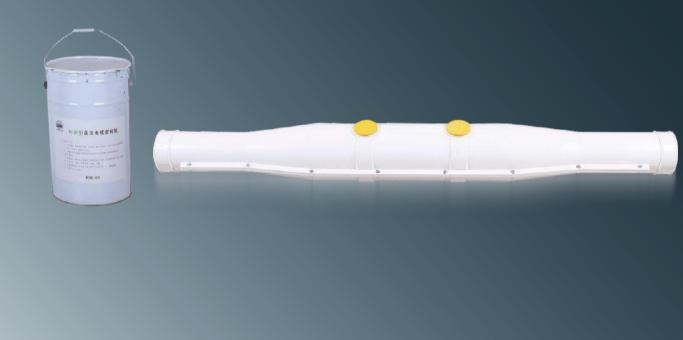
#### ■ Type Table

Item Code	Wiring Scheme	Reference Size
DF-12-2	<b>V</b>	N/A
DF-12-3	<b>*</b>	550*700*950
DF-12-4	<b>* * * * *</b>	550*820*950
DF-12-5	<b>* * * * * * *</b>	550*940*950
DF-12-6	<b>***</b>	550*1060*950
DF-12-7	<b>***</b>	550*1180*950
DF-12-8	<b>*************************************</b>	550*1300*950

Duradica (Maria	Item Code		
Product Name	Stainless Steel Case	Ordinary Iron Case	
Cable 2-Branch Box	DF-12-2	DF-12-2-P	
Cable 3-Branch Box	DF-12-3	DF-12-3-P	
Cable 4-Branch Box	DF-12-4	DF-12-4-P	
Cable 5-Branch Box	DF-12-5	DF-12-5-P	
Cable 6-Branch Box	DF-12-6	DF-12-6-P	
Cable 7-Branch Box	DF-12-7	DF-12-7-P	
Cable 8-Branch Box	DF-12-8	DF-12-8-P	



## **Cable Joint Protection Box**



#### Overview

As the cable intermediate joint is completed by manual installation at the scene, it is influenced by the construction environment and running environment, cable breakdown and explosion accident would inevitably exist because of the installation error, external force damage, water in into cable. It will release a lot of energy which causes a harm to surrounding other electric power facilities or personnel, and even causes secondary explosion accidents.

Cable joint box is to limit the high-pressure air flow, flame, and debris which may caused by explosion in explosion box, to prevent accident expanding.

Product material: glass fiber reinforced plastic
Processing mode: glass fiber reinforced plastic sheet mixing moulding
Product use: Mainly used for cable connection. Add a layer of
protection joint in the middle after the joint is made completely.
Application: Cable joint explosion-proof box is widely used in
power plants, power transmission and transformation, metallurgical,
petrochemical, and other fields' the installation of the channel tunnel
and the underground buried.

#### Recommended Use Method

Indoor with good environment conditions: Use shell, choose two head seal sealing material.

Indoor with bad environmental conditions (such as in the cable well or in the cable trench) or outdoor: Apply shell internal filling material, use two head seal sealing material.

#### Product Features

- The joint explosion-proof box has good corrosion resistance, which
  can effectively resist water, alcohol, electrolytic salt, acetic acid,
  hydrochloric acid, potassium sodium compounds, urine, asphalt
  and various kinds of acid and alkali soil and the corrosion of acid rain.
- Explosion-proof box outside surface coated with uv coating, adapt to all kinds of bad weather:
- Apply to high stress levels. After the overall filling materials, products
  of good seal performance, good thermal performance. It can better
  protect the joint running in all kinds of bad environment;
- If the joint failure, it can protect the surrounding personnel and objects from harm or loss;
- The product can drain holes. When the e joint failure, it can through the drainage hole drainage can first, and then protect box body from the impact.

#### Type Table

Product Name	Item Code	Specification
Cable Joint	ZJB-10kV	10kV
Protection Box	ZJB-35kV	35kV

Notes: 2pcs or 4pcs for 10kV box, 4pcs only for 35kV box.



## The Quality and After-sales Service Commitment

- 1. Our company guarantees for the shipment is in conformity with the national standard requirement, technology advanced, the quality is reliable. We ensure the delivery of the technical documentation is clear, correct, complete and unified. It can satisfy the demand of goods design, installation, commissioning, operation and maintenance requirements.
- 2. During the warranty period, if there is product quality problem and determines that it belongs to our responsibility, we will be carried out in accordance with the "three guarantees", namely: bag miserably, replacement or return. If it is outside the warranty period, we will provide best price and service for product accessories material and spare parts. If it belongs to quality problem or needs help to solve the problem, we will reply immediately after received the notice.
- **3.**When the project stops or installation delay caused by the need to replace or repair the quality problem product, the warranty period delays accordingly by real time.
- **4.**Our company guarantees the product quality under the condition of normal storage period, cold products storage period for one year and thermal shrinkage, precast products shelf life for two years.
- **5.**Our company guarantees to meet customer's demand for spare parts at any time.
- **6.**Customer satisfaction is our eternal pursuit! We will do our best to provide customers with fast and efficient, excellent service. Service will not stop until customers satisfied.

Service hotline: 4008-262-131

HUAYI CABLE ACCESSORIES Co.,Ltd.