

电力电缆 Power Cable

适用于额定电压35kV及以下，输配电系统。
Power cable is applicable to power transmission
and distribution systems at rated voltage
up to and including 35kV.

索引 Index

额定电压6-35kV交联聚乙烯绝缘电力电缆 XLPE Insulated Power Cable at Rated Voltage of 6-35kV	06
额定电压0.6/1kV聚氯乙烯/交联聚乙烯绝缘电力电缆 PVC/XLPE Insulated Power Cable at Rated Voltage of 0.6/1kV	08
额定电压0.6/1kV氟聚合物绝缘电力电缆 Fluorine Polymer Insulated Power Cable at Rated Voltage of 0.6/1kV	12
额定电压0.6/1kV硅橡胶绝缘电力电缆 Silicon Rubber Insulated Power Cable at Rated Voltage of 0.6/1kV	15
聚氯乙烯绝缘/交联聚乙烯绝缘耐火电力电缆 PVC/XLPE Insulated Fire-resistant Power Cable	18
额定电压1kV及以下架空绝缘电缆 Overhead Insulated Cable at Rated Voltage up to and Including 1kV	21
额定电压10kV架空绝缘电缆 Overhead Insulated Cable at Rated of 10kV	25



电力电缆 Power Cable

额定电压6~35kV交联聚乙烯绝缘电力电缆 XLPE Insulated Power Cable at Rated Voltage of 6~35kV

执行标准 Executive Standard

本产品按照GB/T12706-2008、GB/T 18380-2008(IEC60502、IEC60332)标准生产制造。
The product is manufactured as per GB/T12706-2008、GB/T 18380-2008 (IEC60502、IEC60332) standards.

适用范围 Application Scope

产品适用于额定电压35kV及以下电力输配电系统。
The product is applied to power distribution and transmission system at rated voltage up to and including 35kV.

使用特性 Operating Features

- 1、电缆额定电压Rated voltage： $U_0/U(U_m)$ ：3.6/6(7.2)kV，6/6(7.2)、6/10(12)kV，8.7/10(12)、8.7/15(17.5)kV，12/20(24)kV，18/30(36)kV，21/35(40.5)kV，26/35(40.5)kV
 U_0 —电缆设计用的导体对地或金属屏蔽之间的额定工频电压；
Rated power frequency voltage from conductor to ground or between metal shielding layers
 U —电缆设计用的导体间的额定工频电压；
Rated power frequency voltage between conductors
 U_m —设备可承受的“最高系统电压”的最大值。
Max bearable “system highest voltage”
- 2、电缆正常运行时导体最高工作温度：交联聚乙烯绝缘为90℃。
Max. operating temp of conductor at normal operation: 90℃ for XLPE insulation
- 3、电缆短路时导体最高温度：交联聚乙烯绝缘为250℃（短路最长持续时间为5秒）。
Max temp of conductor at short circuit: 250℃ for XLPE insulation (max duration at short circuit is 5s).
- 4、电缆安装时的最小弯曲半径：Min. bending radius of cable installation:
 - (1) 单芯电缆：无铠装为20D；有铠装为15D。
Single-core cable: 20D for non-armored cable, 15D for armored cable.
 - (2) 多芯电缆：无铠装为15D；有铠装为12D。
Multi-core cable: 15D non-armored cable, 12D for armored cable.

D—电缆试样的实际外径mm
D—Actual O.D of cable sample (mm)
- 5、电缆敷设 Cable Installation
电缆敷设时环境温度不低于0℃，低于0℃时，应对电缆进行预热。
The ambient temp of cable installation shall not be less than 0℃, the cable shall be preheated if the temp. is less than 0℃.

电缆的型号、名称和使用环境 Type, Designation and Service Environment

型号 Type	名称 Description	使用环境 Service environment
YJV YJLV YJY YJLY	铜芯或铝芯交联聚乙烯绝缘，聚氯乙烯（聚乙烯）护套电力电缆 Copper or Al conductor, XLPE insulated, PVC (PE) sheathed, power cable	适用于室内外敷设，可经受一定的敷设牵引，但不能承受机械外力作用的场合中，单芯电缆不允许敷设在磁性管道中。 For indoor or outdoor installation, cable could bear certain pulling force, but it could not bear mechanical forces, single-core cable is not allowed to be installed in magnetic tube.
YJV22 YJLV22 YJV23 YJLV23	铜芯或铝芯交联聚乙烯绝缘钢带铠装聚氯乙烯（聚乙烯）护套电力电缆 Copper or Al conductor, XLPE insulated, steel tape armored, PVC (PE) sheathed, power cable	适用于埋地敷设，能承受机械外力作用，但不能承受大的拉力。 For burying installation, cable could bear external mechanical forces, but could not bear large pulling force.
YJV32 YJLV32 YJV33 YJLV33	铜芯或铝芯交联聚乙烯绝缘细钢丝铠装聚氯乙烯（聚乙烯）护套电力电缆 Copper or Al conductor, XLPE insulated, fine steel wire armored, PVC (PE) sheathed, power cable	适用于高落差地区，能承受机械外力作用和相当的拉力。 For area with large drop height, cable could bear certain external mechanical forces and pulling force.

备注：阻燃型电缆在型号前加“Z (A、B、C)-”表示，低烟无卤阻燃型电缆在型号前加“WDZ (A、B、C)-”表示。
Note: “Z(A、B、C)-” is added in front of flame-retardant cable, and “WDZ (A、B、C)-” is added in front of LSOH flame-retardant cable.

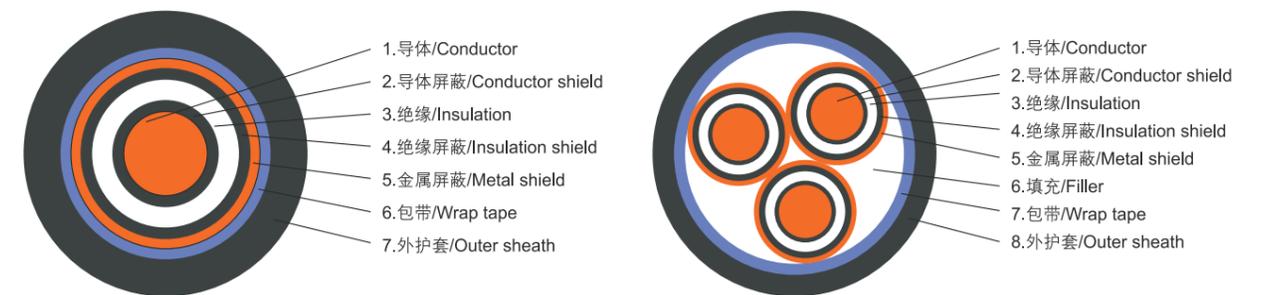
生产范围 Production Scope

型号 Type	芯数 No. of cores	额定电压 Rated Voltage kV						
		3.6/6	6/6、6/10	8.7/10、8.7/15	12/20	18/30	21/35	26/35
		导电线芯标称截面 Nom. cross section of conductor mm ²						
YJV	1	25-630	25-630	25-630	35-630	50-630	50-630	50-630
	3	25-500	25-500	25-500	35-500	50-500	50-500	50-500
YJV22	3	25-500	25-500	25-500	35-500	50-500	50-500	50-500
YJV32	3	25-500	25-500	25-500	35-500	50-500	50-500	50-500
YJY	1	25-630	25-630	25-630	35-630	50-630	50-630	50-630
	3	25-500	25-500	25-500	35-500	50-500	50-500	50-500
YJV23	3	25-500	25-500	25-500	35-500	50-500	50-500	50-500
YJV33	3	25-500	25-500	25-500	35-500	50-500	50-500	50-500

表中未列入的产品标准、规格和截面，亦可按用户要求生产

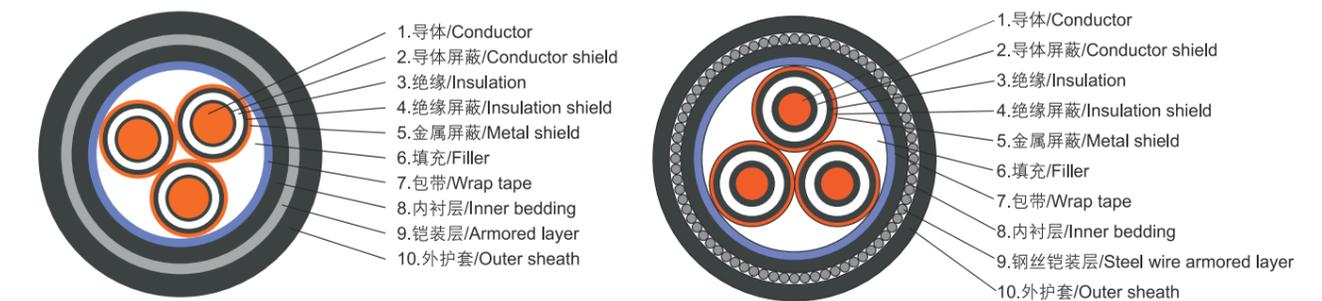
Specifications, sizes and cross sections not listed in above mentioned tables can be produced according to the requirements of customers.

电缆结构图 Cable Drawings



单芯电缆 Single-core cable

三芯电缆 Three-core cable



三芯钢带铠装电缆 Three-core steel tape armored cable

三芯钢丝铠装电缆 Three-core steel wire armored cable

电力电缆 Power Cable

额定电压0.6/1kV聚氯乙烯/交联聚乙烯绝缘电力电缆 PVC/XLPE Insulated Power Cable at Rated Voltage of 0.6/1kV

执行标准 Executive Standard

本产品按照GB/T12706-2008、GB/T 18380-2008(IEC60502、IEC60332)标准生产制造。

The product is manufactured as per GB/T12706-2008、GB/T 18380-2008 (IEC60502、IEC60332) standards.

适用范围 Application Scope

产品适用于额定电压 $U_0/U(U_m)$ 为0.6/1(1.2)kV的固定敷设的输配电线路。

The product is applied to power distribution and transmission line for fixed installation at rated voltage of $U_0/U(U_m)$: 0.6/1(1.2)kV.

使用特性 Operating Features

1、电缆额定电压Rated voltage : $U_0/U(U_m)$: 0.6/1(1.2)kV

U_0 —电缆设计用的导体对地或金属屏蔽之间的额定工频电压;

Rated power frequency voltage from conductor to ground or between metal shielding layers

U —电缆设计用的导体间的额定工频电压;

Rated power frequency voltage between conductors

U_m —设备可承受的“最高系统电压”的最大值。

Max bearable “ system highest voltage”

2、电缆正常运行时导体最高工作温度: 交联聚乙烯绝缘为90℃; 聚氯乙烯绝缘电缆为70℃。

Max. operating temp of conductor at normal operation: 90℃ for XLPE insulation, 70℃ for PVC insulation.

3、电缆短路时导体最高温度: 交联聚乙烯绝缘为250℃; 聚氯乙烯绝缘为160℃。(短路最长持续时间为5秒)。

Max temp of conductor at short circuit: 250℃ for XLPE insulation, 160℃ for PVC insulation, (max duration at short circuit is 5s).

4、电缆安装时的最小弯曲半径: Min. bending radius of cable installation:

(1) 单芯电缆: 无铠装为20D; 有铠装为15D。

Single-core cable: 20D for non-armored cable, 15D for armored cable.

(2) 多芯电缆: 无铠装为15D; 有铠装为12D。

Multi-core cable: 15D non-armored cable, 12D for armored cable.

D—电缆试样的实际外径mm

D—Actual O.D of cable sample (mm)

5、电缆敷设 Cable Installation

电缆敷设时环境温度不低于0℃, 低于0℃时, 应对电缆进行预热。

The ambient temp of cable installation shall not be less than 0℃, the cable shall be preheated if the temp. is less than 0℃.

电缆的型号、名称和使用环境 Type, Designation and Service Environment

型号Type	名称Description	使用环境Service environment
VV VLV VY VLY	铜芯或铝芯聚氯乙烯绝缘聚氯乙烯(聚乙烯)护套电力电缆 Copper or Al conductor, PVC insulated, PVC (PE) sheathed, power cable	敷设在室内、隧道及管道中, 电缆不能承受压力和机械外力作用。 For indoor, tube and conduit, cable could not bear pressure and external mechanical forces
VV22 VLV22 VV23 VLV23	铜芯或铝芯聚氯乙烯绝缘钢带铠装聚氯乙烯(聚乙烯)护套电力电缆 Copper or Al conductor, PVC insulated, steel tape armored, PVC (PE) sheathed, power cable	敷设在室内、隧道及直埋土中, 电缆能承受压力和其它外力作用。 For indoor, tube and oil, cable could bear pressure and external mechanical forces
VV32 VLV32 VV33 VLV33	铜芯或铝芯聚氯乙烯绝缘细钢丝铠装聚氯乙烯(聚乙烯)护套电力电缆 Copper or Al conductor, PVC insulated, fine steel wire armored, PVC (PE) sheathed, power cable	敷设在室内、矿井中, 电缆能承受相当的拉力。 For indoor and mine, cable could bear certain pulling force
YJV YJLV YJY YJLY	铜芯或铝芯交联聚乙烯绝缘, 聚氯乙烯(聚乙烯)护套电力电缆 Copper or Al conductor, XLPE insulated, PVC (PE) sheathed, power cable	适用于室内外敷设, 可经受一定的敷设牵引, 但不能承受机械外力作用的场合中, 单芯电缆不允许敷设在磁性管道中。 For indoor or outdoor installation, cable could bear certain pulling force, but it could not bear mechanical forces, single-core cable is not allowed to be installed in magnetic tube.
YJV22 YJLV22 YJV23 YJLV23	铜芯或铝芯交联聚乙烯绝缘, 聚氯乙烯(聚乙烯)护套钢带铠装电力电缆 Copper or Al conductor, XLPE insulated, steel tape armored, PVC (PE) sheathed, power cable	适用于埋地敷设, 能承受机械外力作用, 但不能承受大的拉力。 For burying installation, cable could bear external mechanical forces, but could not bear large pulling force.
YJV32 YJLV32 YJV33 YJLV33	铜芯或铝芯交联聚乙烯绝缘, 聚氯乙烯(聚乙烯)护套细钢丝铠装电力电缆 Copper or Al conductor, XLPE insulated, fine steel wire armored, PVC (PE) sheathed, power cable	适用于高落差地区, 能承受机械外力作用和相当的拉力。 For area with large drop height, cable could bear certain external mechanical forces and pulling force.

备注: 阻燃型电缆在型号前加“Z (A、B、C)-”表示; 电缆低烟无卤阻燃型电缆在型号前加“WDZ (A、B、C)-”表示(针对交联聚乙烯绝缘的电缆)。

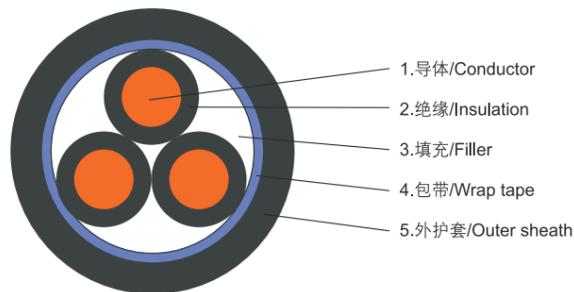
Note: “Z (A、B、C)-” is added in front of flame-retardant cable, and “WDZ (A、B、C)-” is added in front of LSOH flame-retardant cable (only for XLPE insulated cable).

电力电缆 Power Cable

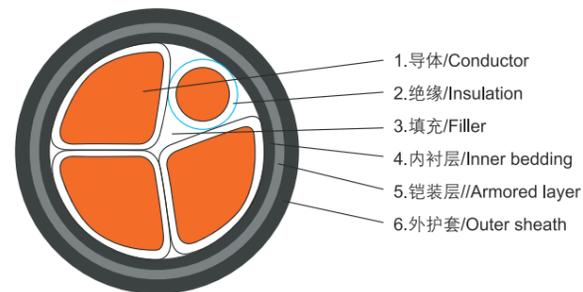
生产范围 Production Scope

芯数 No. of cores	导体标称截面积 Nom. cross section of conductor		
	V(L)V、VY YJ(L)V、YJ(L)Y	V(L)V22、V(L)V23、 YJ(L)V22、YJ(L)V23	V(L)V32、V(L)V33、 YJ(L)V32、YJ(L)V33
1	1.5~800	10~800	10~800
2	1.5~400	4~500	4~500
3	1.5~400	1.5~500	1.5~500
4	1.5~400	1.5~400	1.5~400
5	1.5~400	1.5~400	1.5~400
3+1	2.5~400	2.5~400	2.5~400
3+2	2.5~400	2.5~400	2.5~400
4+1	2.5~400	2.5~400	2.5~400

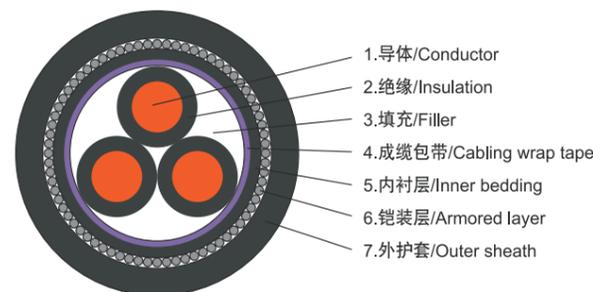
电缆结构图 Cable Drawings



无铠装型 Non-armored cable



钢带铠装型 Steel tape armored cable



钢丝铠装型 Steel wire armored cable

主要试验项目及指标 Main Test Items and Index

1、20℃时导电线芯最大直流电阻

Max. D.C Resistance of Conductor at 20℃

规格 Specification	20℃时导体最大直流电阻 Max. D.C resistance of conductor at 20℃	
	铜Copper	铝Al
mm ²	Ω/km	Ω/km
1.5	12.1	—
2.5	7.41	—
4	4.61	7.41
6	3.08	4.61
10	1.83	3.08
16	1.15	1.91
25	0.727	1.20
35	0.524	0.868
50	0.387	0.641
70	0.268	0.443
95	0.193	0.320
120	0.153	0.253
150	0.124	0.206
185	0.0991	0.164
240	0.0754	0.125
300	0.0601	0.100
400	0.0470	0.0778
500	0.0366	0.0605
630	0.0283	0.0469
800	0.0221	0.0367

2、交流电压试验：施加工频试验电压3.5kV，5min，绝缘不击穿。

A.C voltage test: 3.5kV power frequency test voltage is applied in 5 min, without breakdown on insulation.

3、绝缘电阻常数Insulation resistance constant :

环境温度为20℃时：聚氯乙烯绝缘为36.7 MΩ·km，交联聚乙烯绝缘为3670 MΩ·km。

When ambient temp is 20℃: 36.7 MΩ·km for PVC insulation, 3670 MΩ·km for XLPE insulation

正常运行时导体最高温度时：聚氯乙烯绝缘为0.037 MΩ·km，交联聚乙烯绝缘为3.67 MΩ·km。

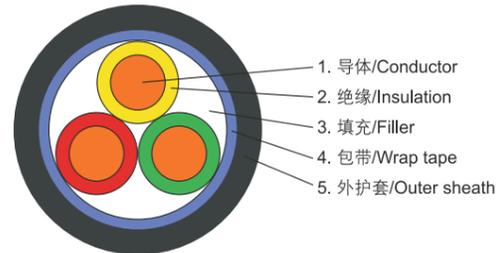
Max. temp of conductor at normal operation: 0.037 MΩ·km for PVC insulation, 3.67 MΩ·km for XLPE insulation

电力电缆 Power Cable

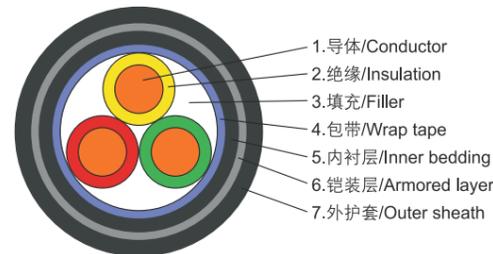
电缆结构图 Cable Drawings



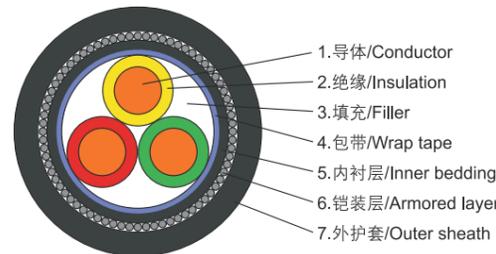
单芯非铠装型 Single-core non-armored cable



三芯非铠装型 Three-core non-armored cable



三芯钢带铠装型 Three-core steel tape armored cable



三芯钢丝铠装型 Three-core steel wire armored cable

主要试验项目及指标 Main Test Items and Index

1、20℃时导电线芯最大直流电阻

Max. D.C Resistance of Conductor at 20℃

规格 Specification	20℃时导体最大直流电阻 Max. D.C resistance of conductor at 20℃	
	铜Copper	铝Al
mm ²	Ω/km	Ω/km
1.5	12.1	—
2.5	7.41	—
4	4.61	7.41
6	3.08	4.61
10	1.83	3.08
16	1.15	1.91
25	0.727	1.20
35	0.524	0.868
50	0.387	0.641
70	0.268	0.443
95	0.193	0.320
120	0.153	0.253
150	0.124	0.206
185	0.0991	0.164
240	0.0754	0.125
300	0.0601	0.100
400	0.0470	0.0778
500	0.0366	0.0605
630	0.0283	0.0469
800	0.0221	0.0367

额定电压0.6/1kV硅橡胶绝缘电力电缆 Silicon Rubber Insulated Power Cable at Rated Voltage of 0.6/1kV

执行标准 Executive Standard

硅橡胶绝缘电力电缆执行标准: Q/75230256-2.3

Silicon rubber insulated power cable is manufactured as per Q/75230256-2.3 standard.

阻燃特性符合GB/T19666-2005标准规定

Flame-retardant feature is in accordance with GB/T19666-2005 standard.

适用范围 Application Scopes

本产品选用硅橡胶材料, 采用专用的挤出生产线及硫化工艺生产, 产品具有耐高温、耐低温、结构柔软、耐酸碱、防腐、耐老化等优异性能。广泛应用于电力、冶金、石油、化工等领域及高低温环境中长期使用。

Silicon rubber material and special extruding production line and vulcanization technology is used to manufacture the product. The product has superior performances as high-temp resistant, low-temp resistant, flexible structure, acid and alkali-resistant, and ageing resistant etc and they are expansively applied to some industries as electricity, metallurgy, petroleum and chemistry and high-temp environment.

使用特性 Operating Features

1、电缆额定电压Rated voltage: $U_0/U (U_m)$: 0.6/1(1.2)kV

U_0 —电缆设计用的导体对地或金属屏蔽之间的额定工频电压;

Rated power frequency voltage from conductor to ground or between metal shielding layers

U —电缆设计用的导体间的额定工频电压;

Rated power frequency voltage between conductors

U_m —设备可承受的“最高系统电压”的最大值。

Max bearable “system highest voltage”

2、电缆导体长期允许工作温度为: 180℃

Long-term permissible operating temp of conductor is 180℃.

3、硅橡胶绝缘及护套电缆最低环境温度: -80℃

Min. ambient temp of silicon rubber insulated and sheathed cable is -80℃.

4、硅橡胶绝缘及护套电缆敷设时环境温度应不低于-20℃

Ambient temp during installation for silicon rubber insulated and sheathed cable shall not be less than -20℃.

5、电缆敷设时允许的弯曲半径

Permissible bending radius of cable installation:

(1) 无铠装层的电缆, 弯曲半径不小于电缆外径的6倍

For non-armored cable, bending radius is not 6 times less than cable O.D

(2) 有铠装或屏蔽结构的电缆, 弯曲半径不小于电缆外径的12倍

For armored or shielded cable, bending radius is not 12 times less than cable O.D

电力电缆 Power Cable

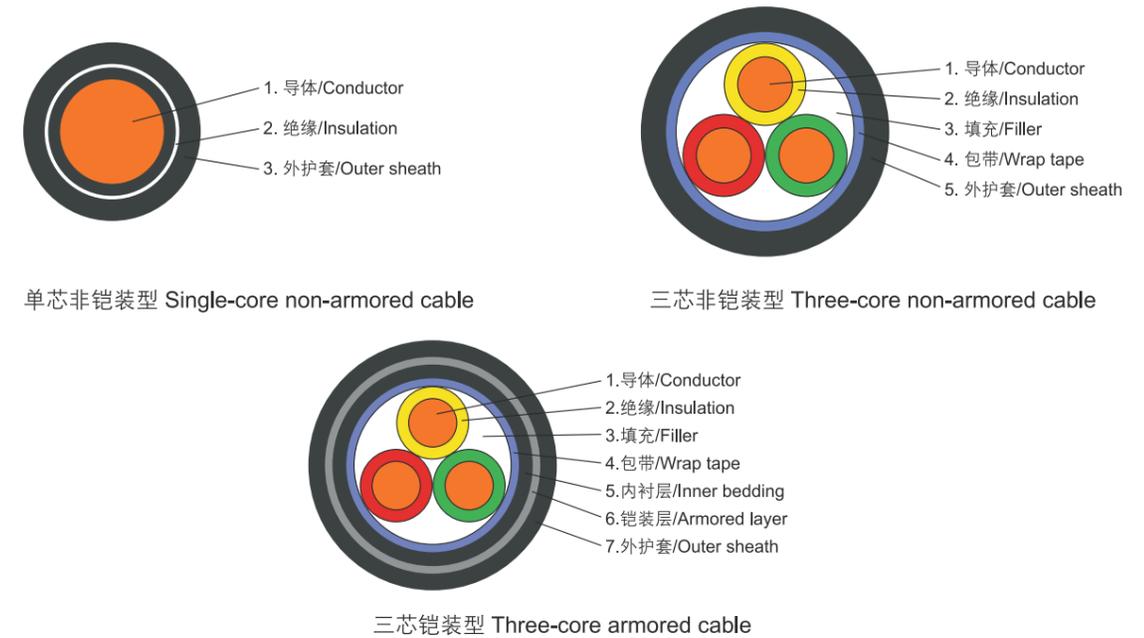
电缆的型号、名称 Type, Description	
型号 Type	产品名称 Description
GG	铜芯硅橡胶绝缘及护套电力电缆 Copper conductor, silicon rubber insulated and sheathed, power cable
GG22	铜芯硅橡胶绝缘及聚氯乙烯护套双钢带铠装电力电缆 Copper conductor, silicon rubber insulated, double steel tape armored, PVC sheathed, power cable
YGC	铜芯硅橡胶绝缘及护套移动软电缆 Copper conductor, silicon rubber insulated and sheathed, portable and flexible cable
YGC22	铜芯硅橡胶绝缘双钢带铠装聚氯乙烯外护套移动软电缆 Copper conductor, silicon rubber insulated, double steel tape armored, PVC sheathed, portable and flexible cable
YGE	铜芯硅橡胶绝缘聚烯烃护套移动软电缆 Copper conductor, silicon rubber insulated, PO sheathed, portable and flexible cable

备注：阻燃型电缆在型号前加“Z (A、B、C) -”表示。

Note: "Z (A、B、C) -" is added in front of flame-retardant cable.

生产范围 Production Scope		
芯数 No. of cores	导体标称截面积 Nom. cross section of conductor	
	GG、YGC、YGE	GG22、YGC22
1	1.5~300	1.5~300
2	1.5~300	1.5~300
3	1.5~300	1.5~300
4	1.5~300	1.5~300
5	1.5~300	1.5~300
3+1	2.5~300	2.5~300
3+2	2.5~300	2.5~300
4+1	2.5~300	2.5~300

电缆结构图 Cable Drawings



主要试验项目及指标 Main Test Items and Index

1、20℃时导电线芯最大直流电阻

Max. D.C Resistance of Conductor at 20℃

规格 Specification	20℃时导体最大直流电阻 Max. D.C resistance of conductor at 20℃	
	铜Copper	铝Al
mm ²	Ω/km	Ω/km
1.5	12.1	—
2.5	7.41	—
4	4.61	7.41
6	3.08	4.61
10	1.83	3.08
16	1.15	1.91
25	0.727	1.20
35	0.524	0.868
50	0.387	0.641
70	0.268	0.443
95	0.193	0.320
120	0.153	0.253
150	0.124	0.206
185	0.0991	0.164
240	0.0754	0.125
300	0.0601	0.100
400	0.0470	0.0778
500	0.0366	0.0605
630	0.0283	0.0469
800	0.0221	0.0367

电力电缆 Power Cable

聚氯乙烯绝缘/交联聚乙烯绝缘耐火电力电缆 PVC/XLPE Insulated Fire-resistant Power Cable

执行标准 Executive Standard

本产品按照GB/T12706-2008 (IEC60502)、GB/T 19666-2005标准生产制造。

The product is manufactured as per GB/T12706-2008 (IEC60502)、GB/T 19666-2005 standards.

耐火试验要求符合GB/T19216 (IEC60331)的规定。

Fire-resistant test requirement is in accordance with GB/T19216 (IEC60331) standard.

适用范围 Application Scope

产品适用于在火灾中要求电缆在着火情况下仍能保持一定时间继续运行的固定敷设、额定电压0.6/1kV的电力传输和电力分配线路。

The product is applied to fixed installation and power transmission and distribution lines at rated voltage of 0.6/1kV with requirements of keeping operation in certain time during fire condition.

使用特性 Operating Features

电缆的耐火特性符合GB/T 19666-2005规定的耐火性能，要求见下表：

Fire-resistant feature is in accordance with fire-resistant performance specified in GB/T 19666-2005 standard and it is detailed in the following table.

代号 Code	供火时间+冷却时间 Fire-supply time + cooling time / min	供火温度/℃ Fire-supply temp.	试验电压/V Test voltage	合格指标 Qualification index	试验方法 Test standard
N	90+15	750~800	1000	1)2A熔断器不断 No breaking of 2A fuse 2)指示灯不熄 Indicator is not distinguished	GB/T 19216.21

电缆的型号、名称 Type, Description

型号 Type	名称 Description
NH-VV	聚氯乙烯绝缘和护套耐火电力电缆 PVC insulated and sheathed, fire-resistant, power cable
NH-VV22	聚氯乙烯绝缘和护套钢带铠装耐火电力电缆 PVC insulated and sheathed, steel tape armored, fire-resistant, power cable
NH-VV32	聚氯乙烯绝缘和护套钢丝铠装耐火电力电缆 PVC insulated and sheathed, steel wire armored, fire-resistant, power cable
NH-YJV	交联聚乙烯绝缘聚氯乙烯护套耐火电力电缆 XLPE insulated, PVC sheathed, fire-resistant, power cable
NH-YJV22	交联聚乙烯绝缘聚氯乙烯护套双钢带铠装耐火电力电缆 XLPE insulated, double steel tape armored, PVC sheathed, fire-resistant, power cable
NH-YJV32	交联聚乙烯绝缘聚氯乙烯护套钢丝铠装耐火电力电缆 XLPE insulated, steel wire armored, PVC sheathed, fire-resistant, power cable

注：1) 单芯铠装电缆用于交流系统，应采用非磁性材料铠装或隔磁措施

Note: Single core armored cable is applied to A.C system, non-magnetic material armoring or magnetic isolation measure is taken.

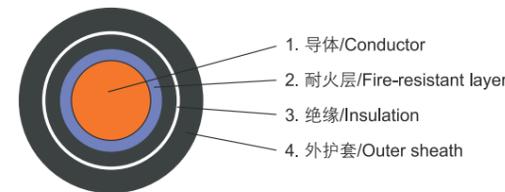
2) 若无特殊说明，NH等同于N

NH is equivalent to N if there is without any special statement.

生产范围 Production scope

芯数 No. of cores	导体标称截面积 Nom. cross section of conductor		
	NH-VV、NH-YJV	NH-VV22、NH-YJV22	NH-VV32、NH-YJV32
1	1.5~800	10~800	10~800
2	1.5~400	1.5~400	1.5~400
3	1.5~400	1.5~400	1.5~400
4	1.5~400	1.5~400	1.5~400
5	1.5~400	1.5~400	1.5~400
3+1	2.5~400	2.5~400	2.5~400
3+2	2.5~400	2.5~400	2.5~400
4+1	2.5~400	2.5~400	2.5~400

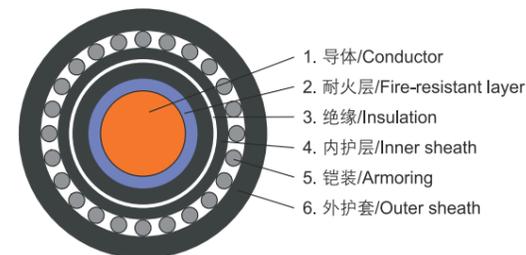
电缆结构图 Cable Drawings



单芯无铠装型 Single-core non-armored cable



单芯钢带铠装型 Single-core steel tape armored cable



单芯钢丝铠装型 Single-core steel wire armored cable



三芯非铠装型 Three-core non-armored cable



三芯钢带铠装型 Three-core steel tape armored cable



三芯钢丝铠装型 Three-core steel wire armored cable

电力电缆 Power Cable

主要试验项目及指标 Main Test Items and Index

1、20℃时导电线芯最大直流电阻 Max. D.C Resistance of Conductor at 20℃

规格 Specification	20℃时导体最大直流电阻 Max. D.C resistance of conductor at 20℃	
	铜Copper	铝Al
mm ²	Ω/km	Ω/km
1.5	12.1	—
2.5	7.41	—
4	4.61	7.41
6	3.08	4.61
10	1.83	3.08
16	1.15	1.91
25	0.727	1.20
35	0.524	0.868
50	0.387	0.641
70	0.268	0.443
95	0.193	0.320
120	0.153	0.253
150	0.124	0.206
185	0.0991	0.164
240	0.0754	0.125
300	0.0601	0.100
400	0.0470	0.0778
500	0.0366	0.0605
630	0.0283	0.0469
800	0.0221	0.0367

2、交流电压试验：施加工频试验电压3.5kV，5min，绝缘不击穿。

A.C voltage test: 3.5kV power frequency test voltage is applied, 5min, without breakdown on insulation.

3、绝缘电阻常数Insulation resistance constant :

环境温度为20℃时：聚氯乙烯绝缘为36.7 MΩ·km，交联聚乙烯绝缘为3670 MΩ·km。

When ambient temp is 20℃, 36.7 MΩ·km for PVC insulation, 3670 MΩ·km for XLPE insulation

正常运行时导体最高温度时：聚氯乙烯绝缘为0.037 MΩ·km，交联聚乙烯绝缘为3.67 MΩ·km。

Max. temp of conductor at normal operation, 0.037 MΩ·km for PVC insulation, 3.67 MΩ·km for XLPE insulation

额定电压1kV及以下架空绝缘电缆

Overhead Insulated Cable at Rated Voltage up to and Including 1kV

执行标准 Executive Standard

本产品按照GB/T12527-2008标准生产制造。

The product is manufactured as per GB/T12527-2008 standard.

适用范围 Application Scope

本产品主要用于交流额定电压1kV架空电力线路。

The product is applied to overhead power line at A.C rated voltage of 1kV.

使用特性 Operating Features

1、额定电压 (U₀/U) Rated voltage : 0.6/1kV。

2、电缆的最高长期允许工作温度:

Max. long-term permissible operating temp of cable

聚氯乙烯、聚乙烯绝缘电缆应不大于70℃；交联聚乙烯绝缘电缆应不大于90℃。

Not be more than 70℃ for PVC, PE insulation, and not be more than 90℃ for XLPE insulation.

3、电缆的敷设温度不低于-20℃。

Min. installation temp is -20℃

4、电缆的允许弯曲半径: Permissible bending radius

电缆外径小于25mm者，应不小于4倍电缆外径；电缆外径不小于25mm者，应不小于6倍电缆外径。

It shall not be 4 times less than cable O.D for cable dia. less than 25mm, and it shall not be 6 times less than cable O.D for cable dia. more than 25mm.

5、电缆的结构尺寸、拉断力、导体电阻、绝缘电阻见表4。

Structural dimension, broken strength, conductor resistance and insulation resistance are detailed in table 4.

6、电缆能经受3.5kV/1min的耐压试验。

Cable shall withstand 3.5kV/1min voltage test.

7、电缆的耐磨次数应不小于20000次。

Times of abrasion-resistant shall not be less than 20000.

电力电缆 Power Cable

电缆的型号、名称和使用环境 Type, Designation and Service Environment

型号 Type	名称 Description	使用环境 Service environment
JKV-0.6/1	额定电压0.6/1kV铜芯、聚氯乙烯绝缘架空绝缘电缆 Copper conductor, PVC insulated, overhead cable at rated voltage of 0.6/1kV.	架空固定敷设, 引户线 For overhead fixed installation, lead wire
JKLV-0.6/1	额定电压0.6/1kV铝芯、聚氯乙烯绝缘架空绝缘电缆 Al conductor, PVC insulated, overhead cable at rated voltage of 0.6/1kV.	架空固定敷设, 引户线 For overhead fixed installation, lead wire
JKLHV-0.6/1	额定电压0.6/1kV铝合金芯、聚氯乙烯绝缘架空绝缘电缆 Al-alloy conductor, PVC insulated, overhead cable at rated voltage of 0.6/1kV.	架空固定敷设, 引户线 For overhead fixed installation, lead wire
JKY-0.6/1	额定电压0.6/1kV铜芯、聚乙烯绝缘架空绝缘电缆 Copper conductor, PE insulated, overhead cable at rated voltage of 0.6/1kV.	架空固定敷设, 引户线 For overhead fixed installation, lead wire
JKLY-0.6/1	额定电压0.6/1kV铝芯、聚乙烯绝缘架空绝缘电缆 Al conductor, PE insulated, overhead cable at rated voltage of 0.6/1kV.	架空固定敷设, 引户线 For overhead fixed installation, lead wire
JKLHY-0.6/1	额定电压0.6/1kV铝合金芯、聚乙烯绝缘架空绝缘电缆 Al-alloy conductor, PE insulated, overhead cable at rated voltage of 0.6/1kV.	架空固定敷设, 引户线 For overhead fixed installation, lead wire
JKYJ-0.6/1	额定电压0.6/1kV铜芯、交联聚乙烯绝缘架空绝缘电缆 Copper conductor, XLPE insulated, overhead cable at rated voltage of 0.6/1kV.	架空固定敷设, 引户线 For overhead fixed installation, lead wire
JKLYJ-0.6/1	额定电压0.6/1kV铝芯、交联聚乙烯绝缘架空绝缘电缆 Al conductor, XLPE insulated, overhead cable at rated voltage of 0.6/1kV.	架空固定敷设, 引户线 For overhead fixed installation, lead wire
JKLHYJ-0.6/1	额定电压0.6/1kV铝合金芯、交联聚乙烯绝缘架空绝缘电缆 Al-alloy conductor, XLPE insulated, overhead cable at rated voltage of 0.6/1kV.	架空固定敷设, 引户线 For overhead fixed installation, lead wire

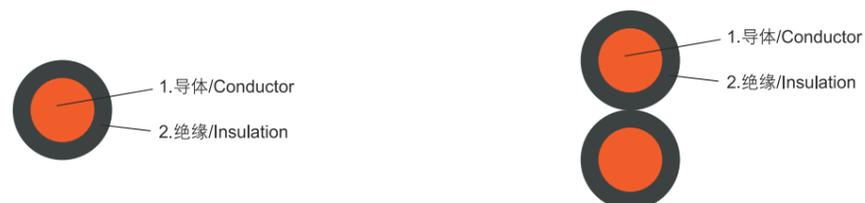
生产范围 Production Scope

芯数 No. of cores	导体标称截面积 Nom. cross section of conductor		
	JKV-0.6/1、JKLV-0.6/1、JKLHV-0.6/1 JKY-0.6/1、JKLY-0.6/1	JKLHY-0.6/1 JKYJ-0.6/1 JKLYJ-0.6/1 JKLHYJ-0.6/1	JKLV-0.6/1 JKLY-0.6/1 JKLYJ-0.6/1
1	10~400	10~120	/
2、4	10~400	10~120	/
3+K	/	/	10~120

注: K为带承载的中型导体, 根据配电工程要求, 任选其中截面积与主线芯搭配。

Note: K is a bearing neutral conductor, any cross section could be selected to match with main core as per requirements of electricians.

电缆结构图 Cable Drawings

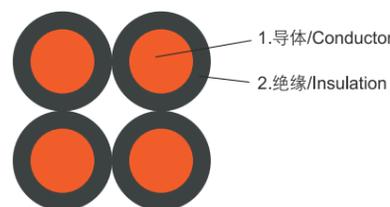


单芯架空绝缘线

Single-core overhead insulated wire

两芯架空绝缘线

Two-core overhead insulated wire



4芯架空绝缘线

Four-core overhead insulated wire

主要试验项目及指标 Main Test Items and Index

1、铜芯架空绝缘电缆20℃时导电线芯最大直流电阻、额定工作温度时绝缘电阻和额定抗拉力

Max. D.C resistance of conductor for copper conductor overhead insulated cable at 20℃ and insulation and rated pulling force at rated operating temp.

导体 标称截面 Nom. cross section of conductor mm ²	20℃时导体直流电阻 Ω/km D.C resistance of conductor at 20℃		额定工作温度时绝缘电阻 ≥MQ·km Insulation resistant at rated operating temp.		单芯电缆抗拉力 ≥N Broken strength of single-core cable
	硬铜 Hard copper	软铜 Soft copper	70℃	90℃	硬铜 Hard copper
10	1.906	1.83	0.0067	0.67	3471
16	1.198	1.15	0.0065	0.65	5487
25	0.749	0.727	0.0054	0.54	8465
35	0.540	0.524	0.0054	0.54	11731
50	0.399	0.387	0.0046	0.46	16502
70	0.276	0.268	0.0040	0.40	23461
95	0.199	0.193	0.0039	0.39	31759
120	0.158	0.153	0.0035	0.35	39911
150	0.128	0.124	0.0035	0.35	49505
185	0.1021	0.0991	0.0035	0.35	61846
240	0.0777	0.0754	0.0034	0.34	79823

电力电缆 Power Cable

2 铝芯、铝合金芯架空绝缘电缆20℃时导电线芯最大直流电阻、额定工作温度时绝缘电阻和额定抗拉力

Max. D.C resistance of conductor for Al and Al-alloy conductor overhead insulated cable at 20℃ and insulation and rated pulling force at rated operating temp.

导体 标称截面 Nom. cross section of conductor mm ²	20℃时导体直流电阻 Ω/km D.C resistance of conductor at 20℃		额定工作温度时绝缘电阻 ≥MΩ·km Insulation resistant at rated operating temp.		单芯电缆拉断力 ≥N Broken strength of single-core cable	
	铝芯 Al core	铝合金芯 Al alloyed core	70℃	90℃	铝芯 Al core	铝合金芯 Al alloyed core
10	3.08	3.574	0.0067	0.67	1650	2514
16	1.91	2.217	0.0065	0.65	2517	4022
25	1.20	1.393	0.0054	0.54	3762	6284
35	0.868	1.007	0.0054	0.54	5177	8800
50	0.641	0.744	0.0046	0.46	7011	12569
70	0.443	0.514	0.0040	0.40	10354	17596
95	0.320	0.371	0.0039	0.39	13727	23880
120	0.253	0.294	0.0035	0.35	17339	30164
150	0.206	0.293	0.0035	0.35	21033	37706
185	0.164	0.190	0.0035	0.35	26732	46503
240	0.125	0.145	0.0034	0.34	34679	60329
300	0.100	0.116	0.0033	0.33	43349	75411
400	0.0778	0.0904	0.0032	0.32	55707	100548

额定电压10kV架空绝缘电缆 Overhead Insulated Cable at Rated of 10kV

执行标准 Executive Standard

本产品按照GB/T14049-2008标准制造。

The product is manufactured as per GB/T14049-2008 standard.

适用范围 Application Scope

本产品主要用于交流额定电压10kV架空电力线路。

The product is applied to overhead power line at A.C rated voltage of 10kV.

使用特性 Operating Features

- 1、额定电压 Rated voltage
- 2、电缆的敷设温度不低于 - 20℃。
Installation temp is not less than - 20℃.
- 3、电缆导体的最高长期允许工作温度。
Max. long-term permissible operating temp of cable conductor
交联聚乙烯绝缘: 90℃
90℃ for XLPE insulation
高密度聚乙烯绝缘: 75℃
75℃ for HDPE insulation
- 4、短路时（最长持续时间应不超过5S）电缆的最高温度：
Max. temp at short circuit (max duration is not more than 5s):
交联聚乙烯绝缘: 250℃
250℃ for XLPE insulation
高密度聚乙烯绝缘: 150℃
150℃ for HDPE insulation
- 5、电缆的允许弯曲半径: Permissible bending radius:
单芯电缆不小于20倍电缆外径;
For single-core cable: it is not be 20 times less than cable O.D
多芯电缆不小于15倍电缆外径。
For multi-core cable: it is not be 15 times less than cable O.D

电力电缆 Power Cable

电缆的型号、名称和使用环境 Type, Designation and Service Environment

型号 Type	产品名称 Description	主要用途 Main application
JKYJ-10	铜芯、交联聚乙烯绝缘架空绝缘电缆 Copper conductor, XLPE insulated, overhead insulated cable	架空固定敷设，软铜芯产品用于变压器引下线。电缆架设时，应考虑电缆和树木保持一定距离，电缆运行时，允许电缆和树木频繁接触。 For overhead fixed installation, flexible copper conductor is applied to lead wire of transformer. When cable is installed, certain distance between cable and tree shall be kept. When the cable is at operation, contact with tree is permissible.
JKTRYJ-10	软铜芯、交联聚乙烯绝缘架空绝缘电缆 Flexible copper conductor, XLPE insulated, overhead insulated cable	
JKLYJ-10	铝芯、交联聚乙烯绝缘架空绝缘电缆 Al conductor, XLPE insulated, overhead insulated cable	
JKLHYJ-10	铝合金芯、交联聚乙烯绝缘架空绝缘电缆 Al-alloy conductor, XLPE insulated, overhead insulated cable	
JKY-10	铜芯、聚乙烯绝缘架空绝缘电缆 Copper conductor, PE insulated, overhead insulated cable	
JKTRY-10	软铜芯、聚乙烯绝缘架空绝缘电缆 Flexible copper conductor, XLPE insulated, overhead insulated cable	
JKLY-10	铝芯、聚乙烯绝缘架空绝缘电缆 Al conductor, PE insulated, overhead insulated cable	
JKLHY-10	铝合金芯、聚乙烯绝缘架空绝缘电缆 Al-alloy conductor, PE insulated, overhead insulated cable	
JKLYJ/B-10	铝芯、本色交联聚乙烯绝缘架空绝缘电缆 Al conductor, natural color XLPE insulated, overhead insulated cable	
JKLHYJ/B-10	铝合金芯、本色交联聚乙烯绝缘架空绝缘电缆 Al-alloy conductor, natural color XLPE insulated, overhead insulated cable	
JKLYJ/Q-10	铝芯、轻型交联聚乙烯薄绝缘架空绝缘电缆 Al conductor, light-type XLPE insulated, overhead insulated cable	架空固定敷设电缆时，应考虑电缆和树木保持一定距离，电缆运行时，只允许电缆和树木作短时接触。 For overhead fixed installation, certain distance between cable and tree shall be kept. When the cable is at operation, only temporary contact with tree is permissible.
JKLHYJ/Q-10	铝合金芯、轻型交联聚乙烯薄绝缘架空绝缘电缆 Al-alloy conductor, light-type XLPE insulated, overhead insulated cable	
JKLY/Q-10	铝芯、轻型聚乙烯薄绝缘架空绝缘电缆 Al conductor, light-type PE insulated, overhead insulated cable	
JKLHY/Q-10	铝合金芯、轻型聚乙烯薄绝缘架空绝缘电缆 Al-alloy conductor, light-type PE insulated, overhead insulated cable	

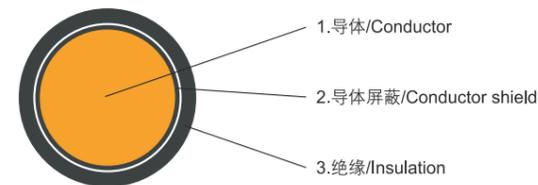
生产范围 Production Scope

型号/Type	芯数 No. of cores	标称截面积 Nom. cross section
JKYJ-10 JKTRYJ-10 JKLYJ-10 JKLHYJ-10	1 3 3+K (A) 3+K (B)	10 ~ 400 25 ~ 400 25 ~ 400 其中where, K: 25 ~ 120
JKY-10 JKTRY-10 JKLY-10 JKLHY-10 JKLYJ/Q-10 JKLHYJ/Q-10 JKLY/Q-10 JKLJY/Q-10	1	10 ~ 400
JKLYJ/B-10 JKLHYJ/B-10	3	25 ~ 400
	3+K (A) 3+K (B)	25 ~ 400 其中where, K: 25 ~ 120

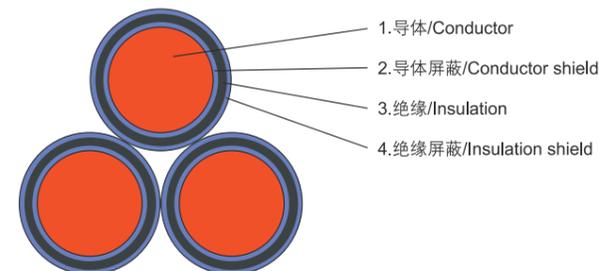
注：K为承载绞线，按工程设计要求，可任选上表中规定截面与相应导体截面相匹配，如杆塔跨距更大采用外加承载索时，该承载索不包括在电缆结构内。其中（A）表示钢承载索，（B）表示铝合金承载索。

Note: K is a bearing stranding wire, any cross section could be selected to match with main core as per requirements of engineering design, if span of the tower line is greater, bearing wire is needed, the bearing wire is not included in the cable structure. Where, A refers to steel bearing wire, B refers to Al-alloy bearing wire.

电缆结构图 Cable Drawings



普通单芯绝缘结构电缆 Common single-core structure



三芯架空绝缘线 Three-core overhead insulated wire

电力电缆 Power Cable

主要试验项目及指标 Main Test Items and Index

1、铜芯架空绝缘电缆20℃时导线芯最大直流电阻和额定抗拉力

Max. D.C resistance of conductor for copper conductor overhead insulated cable at 20℃ and insulation and rated pulling force at rated operating temp.

导体标称截面 Nom. cross section mm ²	20℃时导体直流电阻 ≤Ω/km D.C resistance of conductor at 20℃		单芯电缆拉断力 ≥N Broken strength of single-core cable
	硬铜 Hard copper	软铜 Soft copper	硬铜 Hard copper
10	—	1.830	—
16	—	1.150	—
25	0.749	0.727	8465
35	0.540	0.524	11731
50	0.399	0.387	16502
70	0.276	0.268	23461
95	0.199	0.193	31759
120	0.158	0.153	39911
150	0.128	—	49505
185	0.1021	—	61846
240	0.0777	—	79823
300	0.0619	—	99788
400	0.0484	—	133040

2、铝芯、铝合金芯架空绝缘电缆20℃时导线芯最大直流电阻和额定抗拉力

Max. D.C resistance of conductor for Al and Al-alloy conductor overhead insulated cable at 20℃ and insulation and rated pulling force at rated operating temp.

导体标称截面 Nom. cross section mm ²	20℃时导体直流电阻 ≤Ω/km D.C resistance of conductor at 20℃		单芯电缆拉断力 ≥N Broken strength of single-core cable	
	铝芯 Al core	铝合金芯 Al alloy core	铝芯 Al core	铝合金芯 Al alloy core
10	3.080	3.574	—	—
16	1.910	2.217	—	—
25	1.200	1.393	3762	6284
35	0.868	1.007	5177	8800
50	0.641	0.744	7011	12569
70	0.443	0.514	10354	17596
95	0.320	0.371	13727	23880
120	0.253	0.294	17339	30164
150	0.206	0.239	21033	37706
185	0.164	0.190	26732	46503
240	0.125	0.145	34679	60329
300	0.100	0.116	43349	75411
400	0.0778	0.0904	55707	100548

3、电缆能通过下表规定的交流电压试验，不击穿。

The cable shall pass the A.C voltage test specified in the following tables, no breakdown:

额定电压U Rated voltage KV	试验电压 Test voltage kV	
	普通绝缘结构电缆 Common insulation structure	轻型薄绝缘结构电缆 Light-type thin insulation structure
10	18	12

试验条件：室温下，电缆浸水不小于1小时，试验时间1分钟。

Test conditions: at room temp, cable is immersed into water more than 1 hour, test time is 1min.

4、电缆绝缘电阻：普通型绝缘结构电缆≥1500MΩ·km；轻型薄绝缘结构电缆≥1000MΩ·km。

Insulation resistance: ≥1500MΩ·km for common insulation structure, ≥1000MΩ·km for light-type thin insulation structure

5、局部放电实验：在10kV电缆试样上施加9kV交流电压，电缆放电量不大于20pC

Partial discharge test: 9kV A.C voltage is applied to cable at rated voltage of 10kV, partial discharge is not more than 20pC.