

额定电压 0.6/1kV 及以下聚氯乙烯绝缘电力电缆 PVC Insulated Power Cable with Rated Voltage up to 0.6/1kV

用途 Application

本产品适用于额定电压 1kV 及以下的电力系统中的输配电线路。It is suitable to use for transmission and distribution electric circuit in power system with rated voltage up to 1 kV.

产品型号及名称 Type and designation

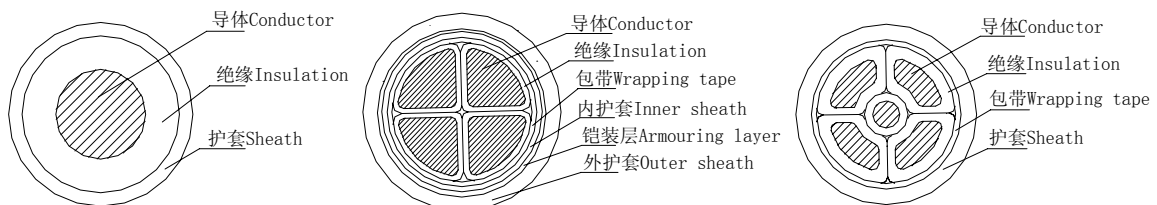
型号 Type		名称 Designation	产品标准 Standard
铜芯 copper core	铝芯 Aluminum core		
VV	VLV	铜芯（铝芯）聚氯乙烯绝缘聚氯乙烯护套电力电缆 Copper (aluminum) PVC insulation PVC jacketing power cable	IEC60502-1 GB/T12706.1 Q/321023KLA3.2 Q/321023KLA6.2
VV22	VLV22	铜芯（铝芯）聚氯乙烯绝缘钢带铠装聚氯乙烯护套电力电缆 Copper (aluminum) steel strip armoring PVC insulating and jacketing power cable	
VV32	VLV32	铜芯（铝芯）聚氯乙烯绝缘细钢丝铠装聚氯乙烯护套电力电缆 Copper (aluminum) thin steel wire armoring PVC insulating and jacketing power cable	
VV42	VLV42	铜芯（铝芯）聚氯乙烯绝缘粗钢丝铠装聚氯乙烯护套电力电缆 Copper (aluminum) thick steel wire armoring PVC insulating and jacketing power cable	

注：产品还包含阻燃型和耐火型（不含铝芯），性能分别满足 GB/T18380 和 GB/T19216 规定的阻燃和耐火试验要求。
Note: the products also contain flame-retardant type and fire-resistant type (except for aluminum), and their properties are in accordance with the flame-retardant and fire-resistant requirements in GB/T18380 and GB/T19216 respectively.

规格 Specification

产品型号 Type		额定电压 Rated voltage kv	芯数 Number of core	标称截面 Nominal cross-section mm ²
铜芯 Copper core	铝芯 Aluminum core			
VV VV22、VV32 VV42	VLV VLV22、VLV32 VLV42	0.6/1	1	1.5~1000 2.5~300 10~300
VV VV22、VV32 VV42	VLV VLV22、VLV32 VLV42		2	1.5~185 2.5~185 4~185
VV VV22、VV32 VV42	VLV VLV22、VLV32 VLV42		3	1.5~300 2.5~300 4~300
VV、VV22、VV32、 VV42	VLV、VLV22、VLV32、 VLV42		4、3+1、5、4+1、 3+2	4~300

产品结构示意图 Structural representation



性能参数 Property parameter

1、导体直流电阻符合GB/T3956的规定。Conductor DC resistance shall meet the stipulation in GB/T3956.

2、成品电缆经受交流 50Hz、5min、3500V 的电压试验不击穿，对于单芯非铠装电缆则进行浸水耐压试验。Finished cable shall pass the AC voltage (50Hz、5min、3500V) test without breakdown. Water-immersion voltage resistant test is for the single core cable with no armor.

3、绝缘电阻 Insulation resistance

序号 No.	性能 Property	聚氯乙烯绝缘 PVC insulation
1	体积电阻率 ρ $\Omega \cdot \text{cm}$ volume resistivity 在 20°C 在电缆额定工作温度 rating operating temperature 20°C of the cable	10^{13} 10^{10}
2	绝缘电阻常数 K_i $M\Omega \cdot \text{km}$ insulation resistance constant K_i 在 20°C 在电缆额定工作温度 rating operating temperature 20°C of the cable	36.7 0.037

4、阻燃试验 Flame-retardant test

成品电缆应符合 IEC60332-3 及 GB/T18380.3 中规定的阻燃性能试验要求。Finished cable shall meet the flame-retardant property test requirement stipulated in IEC60332-3 and GB/T18380.3.

5、耐火试验 Fire-resistance test

成品电缆应符合 IEC60332-21 及 GB/T19216.21 中规定耐火试验要求。Finished cable shall meet the fire resistant test requirements stipulated in IEC60332-21 and GB/T19216.21.

产品特点 Characteristics

五芯电力电缆适用于三相五线制输配电系统，由于中性线与地线分开使得系统运行更加稳定，操作人员更为安全。且五芯电力电缆采用独特的瓦形设计，使电缆具有结构稳定、重量轻、外径小的特点。Five-core power cable is suitable to use in three-phase five-wire transmission and distribution power system. Separating the neutral wire from the ground wire thus is available for the stable operation of the system and safety of the operator. Moreover, since the five-core power cable is designed in a special tile form, the cable has many features such as a stable structure, lightweight, small outer diameter and so on.

额定电压 0.6/1kV 及以下交联聚乙烯绝缘电力电缆

XLPE Insulated Power Cable with Rated Voltage up to 0.6/1kV

用途 Application

本产品适用于额定电压 1kV 及以下的电力系统中的输配电线路。It is suitable to use for transmission and distribution electric circuit in power system with rated voltage up to 1kV.

产品型号及名称 Type and designation

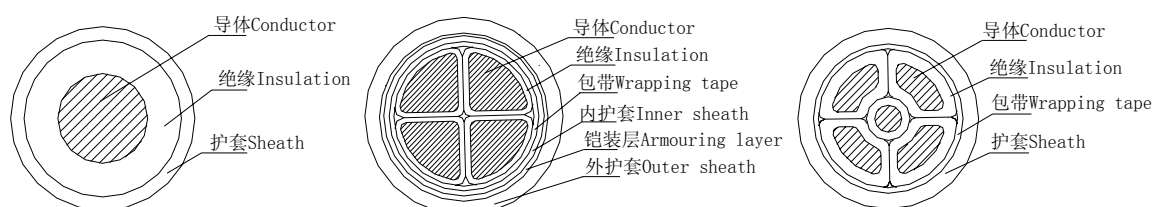
型号 Type		名称 Designation	执行标准 Standard
铜芯 Copper core	铝芯 Aluminum core		
YJV	YJLV	铜（铝）芯交联聚乙烯绝缘聚氯乙烯护套电力电缆 Copper (aluminum) XLPE insulation PVC jacketing power cable	IEC 60502-1 GB/T12706.1 Q/321023KLA3.3 Q/321023KLA6.3
YJV22	YJLV22	铜（铝）芯交联聚乙烯绝缘钢带铠装聚氯乙烯护套电力电缆 Copper (aluminum) XLPE insulation steel strip armoring PVC jacketing power cable	
YJV32	YJLV32	铜（铝）芯交联聚乙烯绝缘细钢丝铠装聚氯乙烯护套电力电缆 Copper (aluminum) XLPE insulation thin steel wire armoring PVC jacketing power cable	
YJV42	YJLV42	铜（铝）芯交联聚乙烯绝缘粗钢丝铠装聚氯乙烯护套电力电缆 Copper (aluminum) XLPE insulation thick steel wire armoring PVC jacketing power cable	

注：产品还包含阻燃型和耐火型（不含铝芯），性能分别满足 GB/T18380 和 GB/T19216 规定的阻燃和耐火试验要求。Note: the products also contain flame-retardant type and fire-resistant type (except for aluminum), and their properties are in accordance with the flame-retardant and fire-resistant requirements in GB/T18380 and GB/T19216 respectively.

规格 Specification

产品型号 Type		额定电压 Rated voltage kV	芯数 Number of core	标称截面 Nominal cross-section mm ²
铜芯 Copper core	铝芯 Aluminum core			
YJV YJV22、YJV32 YJV42	YJLV YJLV22、YJLV32 YJLV42	0.6/1	1	1.5~1000 2.5~300 10~300
YJV YJV22、YJV32 YJV42	YJLV YJLV22、YJLV32 YJLV42		2	1.5~185 2.5~185 4~185
YJV YJV22、YJV32 YJV42	YJLV YJLV22、YJLV32 YJLV42		3	1.5~300 2.5~300 4~300
YJV、YJV22、YJV32、 YJV42	YJLV、YJLV22、YJLV32、 YJLV42		4、3+1、5、4+1、 3+2	4~300

产品结构示意图 structural representation



技术参数 Technical parameters

1、导体直流电阻符合 GB/T3956 的规定。Conductor DC resistance shall meet the stipulation in GB/T3956.

2、绝缘电阻 insulation resistance

序号 No.	性能 Properties	绝缘电阻 Insulation resistance
1	在电缆工作温度 90℃ 时体积电阻率 $\rho \quad \Omega \cdot \text{cm}$ at the operating temperature 90℃ of the cable, volume resistivity $\rho \quad \Omega \cdot \text{cm}$	10^{12}
2	在电缆工作温度 90℃ 时绝缘电阻常数 $K_i \quad \text{M}\Omega \cdot \text{km}$ at the operating temperature 90℃ of the cable, insulation resistance constant $K_i \quad \text{M}\Omega \cdot \text{km}$	3.67

3、交流电压试验 AC voltage test

成品电缆经受交流 50Hz、5min、3500V 的电压试验不击穿，对于单芯非铠装电缆，则进行浸水耐压试验。Finished cable shall pass the AC voltage (50Hz、5min、3500V) test without breakdown. Water-immersion voltage resistant test is for the single core cable with no armor.

4、阻燃试验 Flame-retardant test

成品电缆应符合 IEC60332-3 及 GB/T18380.3 中规定的阻燃性能试验要求。Finished cable shall meet the flame-retardant property test requirement stipulated in IEC60332-3 and GB/T18380.3.

5、耐火试验 Fire-resistance test

成品电缆应符合 IEC60332-21 及 GB/T19216.21 中规定耐火试验要求。Finished cable shall meet the fire resistant test requirements stipulated in IEC60332-21 and GB/T19216.21.

产品特点 Characteristics

1、优良的电性能和良好的耐热性能。It has excellent electricity property and thermal resistant property.

2、绝缘线芯采用色皮识别时，绝缘电阻不平衡现象大大减少。For adopting color identification for the insulation cores, its unbalance phenomenon of the insulation resistance decrease dramatically.

3、敷设不受落差限制。There is no limited at height drop for installation.

4、五芯电力电缆适用于三相五线制输配电系统，由于中性线与地线分开使得系统运行更加稳定，操作人员更为安全。且五芯电力电缆采用独特的瓦形设计，使电缆具有结构稳定、重量轻、外径小的特点。Five-core power cable is suitable to use in three-phase five-wire transmission and distribution power system. Separating the neutral wire from the ground wire thus is available for the stable operation of the system and safety of the operator. Moreover, since the five-core power cable is designed in a special tile form, the cable has many features such as a stable structure, lightweight, small outer diameter and so on.

额定电压 35kV 及以下交联聚乙烯绝缘电力电缆

XLPE Insulated Power Cable with Rated Voltage up to 35 kV

用途 Application

本产品适用于额定电压 35kV 及以下电力输配电。This product is fit for power transmission with rated voltage up to 35 kV.

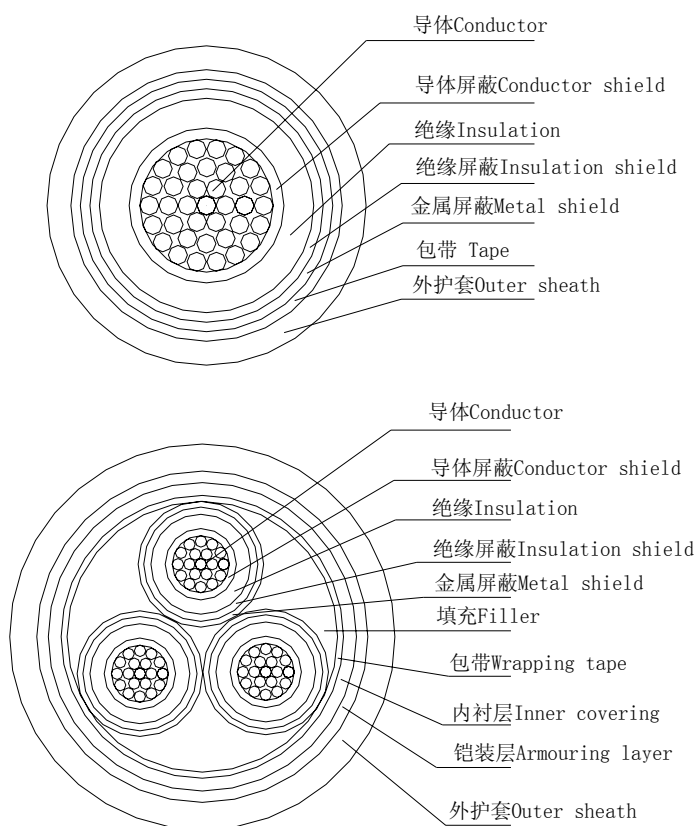
产品型号及名称 Type and Designation

基本型号 Basic type		名称 Designation	执行标准 Standard
铜芯 copper core	铝芯 Al core		
YJV	YJLV	交联聚乙烯绝缘聚氯乙烯护套电力电缆 XLPE insulated PVC sheathed power cable	IEC60502-2 GB/T12706.2~.3
YJY	YJLY	交联聚乙烯绝缘聚乙烯护套电力电缆 XLPE insulated PE sheathed power cable	
YJV22	YJLV22	交联聚乙烯绝缘钢带铠装聚氯乙烯护套电力电缆 XLPE insulated steel tape armoured PVC sheathed power cable	
YJV32	YJLV32	交联聚乙烯绝缘细钢丝铠装聚氯乙烯护套电力电缆 XLPE insulated fin steel wire armoured PVC sheathed power cable	
YJV42	YJLV42	交联聚乙烯绝缘粗钢丝铠装聚氯乙烯护套电力电缆 XLPE insulated fine steel wire armoured PVC sheathed power cable	
YJV62	YJLV62	交联聚乙烯绝缘双非磁性金属带铠装聚氯乙烯护套电力电缆 XLPE insulated dual non-magnetic metal tape armoured PVC sheathed power cable	
YJV72	YJLV72	交联聚乙烯绝缘非磁性金属丝铠装聚氯乙烯护套电力电缆 XLPE insulated non-magnetic metal tape armoured PVC sheathed power cable	

规格 Specification

型号 Type		芯数 Number of core	额定电压 Rated voltage U ₀ /U kV			
			3.6/6、6/6	6/10、8.7/10、8.7/15	12/20	18/30、21/35、26/35
			标称截面 Nominal cross-section mm ²			
YJV YJY YJV62 YJV72	YJLV YJLY YJLV62 YJLV72	1	25~630	25~630	35~630	50~630
YJV YJY YJV22 YJV32 YJV42 YJV62 YJV72	YJLV YJLY YJLV22 YJLV32 YJLV42 YJLV62 YJLV72	3	25~500	25~500	35~500	50~500

结构示意图 Structure Figure



绝缘厚度 Insulation thickness

导体标称截面 Nominal cross-section mm ²	在额定电压 U ₀ /U (U _m) 下的绝缘标称厚度 Nominal insulation thickness at rated voltage mm						
	3.6/6(7.2) kV	6/6(7.2) kV 6/10(12) kV	8.7/10(12) kV 8.7/15(17.5) kV	12/20(24) kV	18/30(36) kV	21/35(40.5) kV	26/35(40.5) kV
25	2.5	3.4	4.5	—	—	—	—
35	2.5	3.4	4.5	5.5	—	—	—
50~185	2.5	3.4	4.5	5.5	8.0	9.3	10.5
240	2.6	3.4	4.5	5.5	8.0	9.3	10.5
300	2.8	3.4	4.5	5.5	8.0	9.3	10.5
400	3.0	3.4	4.5	5.5	8.0	9.3	10.5
500~1000	3.2	3.4	4.5	5.5	8.0	9.3	10.5
		3.4	4.5	5.5	8.0	9.3	10.5

技术参数 Technical parameter

● 导体直流电阻符合 IEC60228、GB/T3956 规定。D.C resistance of the conductor can comply with regulation in IEC60228、GB/T3956.

● 电缆电感 (mH/km) 和对地电容 (mF/km) Inductance and earthing capacitance.

① 单芯电缆的电感、电容 Inductance and capacitance of single cable

标称 截面 Nominal cross-section mm ²	电 压 等 级 Voltage rating kV													
	3.6/6		6/6、6/10		8.7/10、8.5/15		12/20		18/30		21/35		26/35	
	电感 induc tance	电容 capac itance	电感 induc tance	电容 capac itance	电感 induc tance	电容 capac itance	电感 induc tance	电容 capac itance	电感 induc tance	电容 capac itance	电感 induc tance	电容 capac itance	电感 induc tance	电容 capac itance
25	0.240	0.24	0.433	0.19	0.449	0.15	—	—	—	—	—	—	—	—
35	0.408	0.26	0.411	0.21	0.427	0.18	0.459	0.16	—	—	—	—	—	—
50	0.385	0.30	0.398	0.24	0.414	0.19	0.436	0.17	0.448	0.13	0.467	0.12	0.513	0.11
70	0.366	0.34	0.379	0.27	0.392	0.22	0.414	0.19	0.432	0.15	0.455	0.14	0.487	0.12
95	0.344	0.38	0.354	0.30	0.369	0.24	0.392	0.21	0.413	0.16	0.436	0.15	0.465	0.13
120	0.331	0.42	0.344	0.32	0.360	0.26	0.379	0.23	0.394	0.17	0.417	0.16	0.446	0.14
150	0.315	0.46	0.334	0.35	0.350	0.28	0.366	0.25	0.398	0.19	0.404	0.17	0.430	0.15
185	0.308	0.50	0.322	0.38	0.341	0.30	0.350	0.27	0.375	0.20	0.392	0.18	0.417	0.16
240	0.301	0.54	0.313	0.42	0.325	0.34	0.341	0.29	0.361	0.22	0.376	0.20	0.394	0.18
300	0.296	0.56	0.302	0.47	0.314	0.37	0.328	0.32	0.341	0.24	0.360	0.22	0.373	0.19
400	0.295	0.61	0.299	0.55	0.309	0.41	0.318	0.36	0.332	0.26	0.347	0.23	0.361	0.21
500	0.288	0.68	0.291	0.63	0.298	0.45	0.307	0.41	0.328	0.32	0.355	0.25	0.354	0.23
630	0.281	0.76	0.283	0.71	0.289	0.51	0.298	0.45	0.312	0.34	0.339	0.30	0.342	0.26

②三芯电缆电感、电容 Inductance and capacitance of 3-core cable

标称 截面 Nominal cross-section mm ²	电 压 等 级 Voltage rating kV													
	3.6/6		6/6、6/10		8.7/10、8.5/15		12/20		18/30		21/35		26/35	
	电感 induc tance	电容 capac itance	电感 induc tance	电容 capac itance	电感 induc tance	电容 capac itance	电感 induc tance	电容 capac itance	电感 induc tance	电容 capac itance	电感 induc tance	电容 capac itance	电感 induc tance	电容 capac itance
25	0.363	0.70	0.395	0.51	0.424	0.45	—	—	—	—	—	—	—	—
35	0.351	0.78	0.376	0.63	0.401	0.54	0.424	0.48	—	—	—	—	—	—
50	0.331	0.90	0.357	0.72	0.379	0.57	0.398	0.51	0.413	0.47	0.486	0.41	0.528	0.38
70	0.314	1.02	0.336	0.81	0.360	0.66	0.379	0.57	0.397	0.54	0.450	0.48	0.503	0.42
95	0.301	1.14	0.322	0.90	0.341	0.72	0.363	0.63	0.382	0.60	0.417	0.52	0.427	0.48
120	0.289	1.26	0.309	0.96	0.325	0.78	0.344	0.69	0.367	0.65	0.402	0.58	0.412	0.52
150	0.280	1.38	0.299	1.05	0.316	0.84	0.334	0.75	0.353	0.71	0.382	0.63	0.398	0.57
185	0.273	1.50	0.291	1.14	0.305	0.90	0.322	0.81	0.346	0.75	0.367	0.69	0.382	0.62
240	0.266	1.62	0.281	1.26	0.296	1.02	0.301	0.87	0.331	0.81	0.352	0.76	0.366	0.70
300	0.263	1.68	0.273	1.41	0.286	1.11	0.300	0.96	0.325	0.92	0.337	0.85	0.352	0.79
400	0.259	1.83	0.265	1.65	0.277	1.41	0.290	1.08	0.317	1.01	0.326	0.97	0.339	0.92
500	0.254	1.91	0.260	1.82	0.270	1.68	0.283	1.21	0.308	1.12	0.317	1.05	0.326	0.97

③其它电气性能 Other electrical performance

电缆额定电压 Rated voltage U ₀ /U	kV	3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/30	21/35	26/35
例行试验 Route test								
局部放电试验 Partial discharge 电压 放电量 voltage discharge ≤	kV PC	6.3 10	10.5 10	15.2 10	20.9 10	31.2 10	36.4 10	45.0 10
交流电压试验 A.C voltage test 电压 时间 time	kV min	12.5 5	21 5	30.5 5	42 5	63 5	73.5 5	91 5
型式试验 Type test								
局部放电试验 Partial discharge 电压	kV	6.3	10.5	15.2	20.9	31.2	36.4	45.0

放电量 voltage discharge≤	PC	5	5	5	5	5	5	5
冲击电压试验 Impact voltage test 电压	kV	60	75	95	125	170	250	250
4h 交流电压试验 4 hours A.C voltage test 电压	kV	14.4	24	34.8	48	72	84	104

产品特点 Feature

- 交联聚乙烯电力电缆具有优良的电性能，良好的耐热性能。XLPE insulated cable has good electrical and heat resistant performance.
- 与充油电缆相比无漏油隐患，敷设不受落差限制，可重点敷设。Compared with oil filled cable, it has no risk of oil leakage, and cable laying will not effected by the fall.
- 能长期承受电网的工作电压，和运行中经常遇到的各种过电压，如操作过电压、大气过电压和故障过电压。It can bear long-term operating network voltage, and various over voltage encountered in the normal operating, such as over voltage by operation, by the atmosphere, by the fault.
- 能可靠地传送需要传输的功率。It can transmit the power reliable.
- 具有较好的机械强度、弯曲性能和防腐蚀、抗破坏、阻燃性能。It has good mechanical strength, bending, and corrosion, destroy flame-retardant performance.
- 无污染，有较长的使用寿命。It has no pollution, and has a long usage life.

使用条件 Working condition

- 导体最高工作温度 90℃。Max.operating temperature of the conductor: 90℃.
- 短路时（最长持续时间不超过 5s），电缆导体最高温度不超过 250℃。In short circuit condition (Max.continual period shall not exceed 5 S), Max. temperature of the conductor shall not exceed 250℃.
- 敷设环境温度 0℃。laying surrounding temperature 0℃.
- 电缆允许弯曲半径：对于单芯电缆，应不小于外径的 15 倍。对于三芯电缆，应不小于电缆外径的 20 倍。Permitted bend radius of the cable: shall not less than 15 times of outer diameter of the cable for the single cable, and shall not less than 20 times of outer diameter of the cable for three core cable.

额定电压 35kV 及以下交联聚乙烯绝缘无卤低烟阻燃电力电缆 XLPE Insulated Halogen-free Low Smoke Flame-retardant Power Cable with Rated Voltage up to 35kV

用途 Application

适用于核电站、地下设施、隧道、高层建筑以及广播电视台等场所，作固定敷设在额定电压 35kV 及以下的电力线路中作输配电能之用。It is suitable to use for transmission and distribution electric circuit with rated voltage up to 35kV in various fields such as nuclear power station, tunnel, broadcasting station, television station and so on.

产品型号及名称 Type and Designation

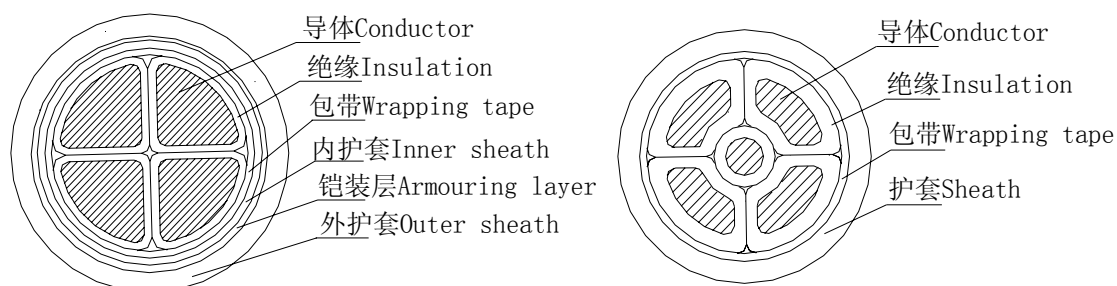
型号 Type				名称 Designation	执行标准 Standard
A	B	C	D		
WDZ—YJY、WDZ—YJLY				铜芯（铝芯）交联聚乙烯绝缘无卤低烟阻燃电力电缆 Copper (aluminum) core XLPE insulation halogen-free low smoke flame-retardant power cable	Q/321023KLA41.6
WDZ—YJY23、WDZ—YJLY23				铜芯（铝芯）交联聚乙烯绝缘钢带铠装无卤低烟阻燃电力电缆 Copper (aluminum) core XLPE insulation steel strip armoring halogen-free low smoke flame-retardant power cable	
WDZ—YJY33、WDZ—YJLY33				铜芯（铝芯）交联聚乙烯绝缘细钢丝铠装无卤低烟阻燃电力电缆 Copper (aluminum) core XLPE insulation thin steel wire halogen-free low smoke flame-retardant power cable	
WDZ—YJY43、WDZ—YJLY43				铜芯（铝芯）交联聚乙烯绝缘粗钢丝铠装无卤低烟阻燃电力电缆 Copper (aluminum) core XLPE insulation thick steel wire halogen-free low smoke flame-retardant power cable	

规格 Specification

型号 Type				芯数 Number of core	额定电压 kV Rated voltage					
A	B	C	D		0.6/1	1.8/3	3.6/6、6/6	6/10、8/10	8.7/15	18/20~26/35
					标称截面 Nominal cross-section mm ²					
WDZ—YJY、WDZ—YJLY				1	2.5~1000	10~1000	25~1200	25~1200	35~1200	50~1200
WDZ—YJY33、WDZ—YJLY33					10~1000	10~1000	25~1200	25~1200	3.5~1200	50~1200
WDZ—YJY43、WDZ—YJLY43					10~1000	10~1000	25~1200	25~1200	3.5~1200	50~1200
WDZ—YJY、WDZ—YJLY				3	2.5~300	10~300	25~300	25~300	—	—
WDZ—YJY23、WDZ—YJLY23				2	2.5~300	—	—	—	—	—
WDZ—YJY33、WDZ—YJLY33				3+1、4	4~300	—	—	—	—	—
WDZ—YJY43、WDZ—YJLY43				5、3+2	4~300	—	—	—	—	—
				4+1	4~300	—	—	—	—	—

注：单芯电缆铠装应采用非磁性材料结构。Note: material for armoring single core cable should be nonmagnetic

产品结构示意图 Structural representation



技术参数 Technical parameters

- 1、导体直流电阻符合GB/T3956的规定。Conductor DC resistance shall meet the stipulation in GB/T3956.
- 2、90℃绝缘电阻常数不小于 $3.67\text{M}\Omega \cdot \text{km}$ ，体积电阻率不小于 $10^{12}\Omega \cdot \text{cm}$ 。at the temperature of 90℃, its insulation resistance constant shall not be less than $3.67\text{M}\Omega \cdot \text{km}$, and its volume resistivity shall not be less than $10^{12}\Omega \cdot \text{cm}$.
- 3、烟密度试验应通过 GB/T17651.2 的规定，其透光率应不小于 60%。Smoke density shall meet the requirements stipulated in GB/T17651.2, and its light transmittance shall not be less than 60%.
- 4、卤酸气体含量的测定应符合 GB/T17650.2 的规定，pH 值不小于 4.3；电导率不大于 $10\mu\text{S}/\text{mm}$ 。Test for the halogen acid gas content shall be in accordance with the stipulation in GB/T17650.2; pH value shall not be less than 4.3; electric conductivity shall not be more than $10\mu\text{S}/\text{mm}$.
- 5、阻燃性能应符合 GB/T18380.3 规定的成束燃烧试验要求。Flame-retardant property shall be in accordance with the requirements of bunched flame test stipulated in GB/T18380.3.

产品特点 Characteristics

- 1、本产品产品在着火后不延燃，具有无卤、低烟、无毒无腐蚀等特性，为绿色环保产品。
This kind of product will be non-fire propagating after firing. It has characteristics such as halogen free, low smoke, no toxicity, no corrosion and so on; it is a product of pollution free type.
- 2、五芯电力电缆适用于三相五线制输电系统，由于中性线与地线分开使得系统运行更加稳定，操作人员更为安全。且五芯电力电缆采用独特的瓦形设计，使电缆具有结构稳定、重量轻、外径小的特点。Five-core power cable is suitable to use in three-phase five-wire transmission and distribution power system. Separating the neutral wire from the ground wire thus is available for the stable operation of the system and safety of the operator. Moreover, since the five-core power cable is designed in a special tile form, the cable has many features such as a stable structure, lightweight, small outer diameter and so on.

无毒无害防白蚁电力电缆

Toxicity Free Harmless Termite-proof Power Cable

用途 Application

本产品适用于在白蚁危害比较严重，且有绿色环保要求的场所，特别是埋地和管道敷设的电力系统输配电线路。It is suitable to use in the fields where suffer great damage from the termites and require environment protection, especially for the power transmission and distribution in the electric circuits of power system buried under the earth and installation with pipe.

型号及名称 Type and designation

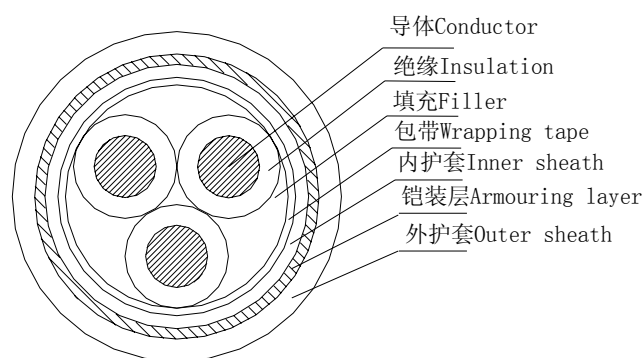
型号 Type		名称 Designation	执行标准 Standard
铜芯 Copper	铝芯 Aluminum		
WFY-YJY	WFY-YJLY	铜芯（铝芯）交联聚乙烯绝缘无毒无害防白蚁聚烯烃护套电力电缆 Copper (aluminum) XLPE insulation toxicity free harmless termite-proof polyolefine jacketing power cable	Q/321023KLA46
WFY-YJY23	WFY-YJLY23	铜芯（铝芯）交联聚乙烯绝缘钢带铠装无毒无害防白蚁聚烯烃护套电力电缆 Copper (aluminum) XLPE insulation steel strip armoring toxicity free harmless termite-proof polyolefine jacketing power cable	
WFY-YJY33	WFY-YJLY33	铜芯（铝芯）交联聚乙烯绝缘细钢丝铠装无毒无害防白蚁聚烯烃护套电力电缆 Copper (aluminum) XLPE insulation thin steel wire armoring toxicity free harmless termite-proof polyolefine jacketing power cable	
WFY-YJY43	WFY-YJLY43	铜芯（铝芯）交联聚乙烯绝缘粗钢丝铠装无毒无害防白蚁聚烯烃护套电力电缆 Copper (aluminum) XLPE insulation thick steel wire armoring toxicity free harmless termite-proof polyolefine jacketing power cable	
WFY-YJY53	WFY-YJLY53	铜芯（铝芯）交联聚乙烯绝缘轧纹钢带铠装无毒无害防白蚁聚烯烃护套电力电缆 Copper (aluminum) XLPE insulation corrugating steel strip armoring toxicity free harmless termite-proof polyolefine jacketing power cable	

规格 Specification

产品型号 Type		额定电压 Voltage rating kV	芯数 Core number	标称截面 Nominal cross-section mm ²
铜芯 Copper	铝芯 Aluminum			
WFY-YJY	WFY-YJLY	0.6/1	1	2.5~300
			2	1.5~185
			3	1.5~300
			3+1、4	4~300
			5、3+2、4+1	4~300
WFY-YJY23	WFY-YJLY23		1	10~300
WFY-YJY33	WFY-YJLY33		2	4~185
WFY-YJY43	WFY-YJLY43		3、3+1、4	4~300
WFY-YJY53	WFY-YJLY53		5、3+2、4+1	4~300

注：单芯电缆铠装应采用非磁性材料。
Note: material for armoring single core cable should be nonmagnetic.

产品结构示意图 Structural representation



技术参数 Technical parameter

1、导体直流电阻符合GB/T3956的规定。Conductor DC resistance shall meet the stipulation in GB/T3956.

2、成品电缆经受交流 50Hz、5min、3500V 的电压试验不击穿，对于单芯非铠装电缆，则进行浸水耐压试验。Finished cable shall pass the AC voltage (50Hz、5min、3500V) test without breakdown. Water-immersion voltage resistant test is for the single core cable with no armor.

3、90℃绝缘电阻常数不小于 $3.67M\Omega \cdot km$ 。At the temperature of 90℃, its insulation resistance constant shall not be less than $3.67M\Omega \cdot km$.

4、电缆防白蚁性能符合 GB/T2951.38《电线电缆白蚁试验方法》中 2.2“实验群体法”的规定。Termite-proof property of the cable shall be meet the stipulation of 2.2“test group method” of the termite test methods for wire and cables in GB/T2951.38.

产品特点 Characteristics

1、产品能有效预防白蚁对电缆的危害,性能可靠长久,无需其它辅助防治方法。This kind of cable can efficiently prevent the termites from damaging the cable; its properties are stable and available; there is no need for other assistant methods to prevent the termites.

2、电缆产品内无对空气、土壤、人身造成污染和危害的材料,属绿色环保型产品。There is no material in the cable that will be harmful or polluted to air, soil or human beings; it is an environment protection pollution-free product.

3、五芯电力电缆适用于三相五线制输配电系统，由于中性线与地线分开使得系统运行更加稳定，操作人员更为安全。且五芯电力电缆采用独特的瓦形设计，使电缆具有结构稳定、重量轻、外径小的特点。Five-core power cable is suitable to use in three-phase five-wire transmission and distribution power system. Separating the neutral wire from the ground wire thus is available for the stable operation of the system and safety of the operator. Moreover, since the five-core power cable is designed in a special tile form, the cable has many features such as a stable structure, lightweight, small outer diameter and so on.

金属屏蔽电力电缆

Metal Screened Power Cable

用途 Application

本产品适用于额定电压 0.6/1kV 及以下的电力线路中作输送电能用。特别适用具有精密电子装备的场所。It is suitable to use for transmission and distribution electric circuit in power system with rated voltage up to 1kV, especially for the fields possessing precise electronic equipments.

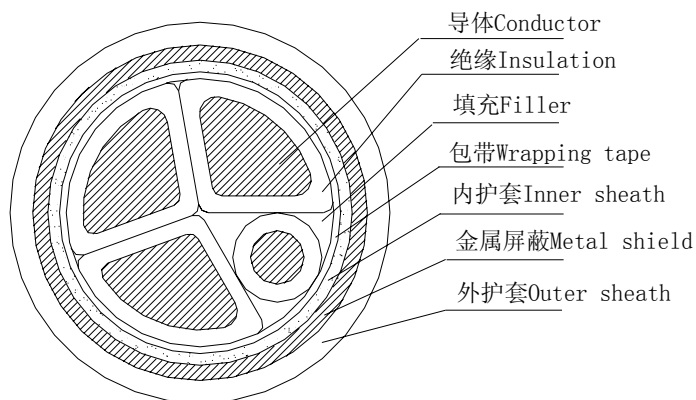
产品型号及名称 Type and designation

型号 Type		名称 Designation	执行标准 Standard
铜芯 Copper core	铝芯 aluminum core		
VV-P YJV-P	VLV-P YJLV-P	铜芯（铝芯）聚氯乙烯绝缘金属屏蔽聚氯乙烯护套电力电缆 Copper (aluminum) PVC insulation metal screening PVC jacketing power cable 铜芯（铝芯）交联聚乙烯绝缘金属屏蔽聚氯乙烯护套电力电缆 Copper (aluminum) XLPE insulation metal screening PVC jacketing power cable	Q/321023KLA28
VV22-P YJV22-P	VLV22-P YJLV22-P	铜芯（铝芯）聚氯乙烯绝缘金属屏蔽钢带铠装聚氯乙烯护套电力电缆 Copper (aluminum) PVC insulation metal screening steel strip armoring PVC jacketing power cable 铜芯（铝芯）交联聚乙烯绝缘金属屏蔽钢带铠装聚氯乙烯护套电力电缆 Copper (aluminum) XLPE insulation metal screening steel strip armoring PVC jacketing power cable	
VV32-P YJV32-P	VLV32-P YJLV32-P	铜芯（铝芯）聚氯乙烯绝缘金属屏蔽细钢丝铠装聚氯乙烯护套电力电缆 Copper (aluminum) PVC insulation metal screening thin steel wire armoring PVC jacketing power cable 铜芯（铝芯）交联聚乙烯绝缘金属屏蔽细钢丝铠装聚氯乙烯护套电力电缆 Copper (aluminum) XLPE insulation metal screening thin steel wire armoring PVC jacketing power cable	
VV42-P YJV42-P	VLV42-P YJLV42-P	铜芯（铝芯）聚氯乙烯绝缘金属屏蔽粗钢丝铠装聚氯乙烯护套电力电缆 Copper (aluminum) PVC insulation metal screening thick steel wire armoring PVC jacketing power cable 铜芯（铝芯）交联聚乙烯绝缘金属屏蔽粗钢丝铠装聚氯乙烯护套电力电缆 Copper (aluminum) XLPE insulation metal screening thick steel wire armoring PVC jacketing power cable	

规格 Specification

产品型号 Type		额定电压 Rated voltage kV	芯数 Number of core	标称截面 Nominal cross-section mm ²
铜芯 Copper core	铝芯 Aluminum core			
VV-P、YJV-P	VLV-P、YJLV-P	0.6/1	1	4~300
VV22-P、YJV22-P	VLV22-P、YJLV22-P		2	4~185
V32-P、YJV32-P	VLV32-P、YJLV32-P		3	4~300
VV42-P、YJV42-P	VLV42-P、YJLV42-P		4、3+1	4~300

产品结构示意图 Structural representation



技术参数 Technical parameters

- 1、导体直流电阻符合GB/T3956的规定。Conductor DC resistance shall meet the stipulation in GB/T3956.
- 2、成品电缆经受交流 50Hz、5min、3500V 的电压试验不击穿。Finished cable shall pass the AC voltage (50Hz、5min、3500V) test without breakdown.
- 3、绝缘电阻 insulation resistance

序号 No.	性能 Property	聚氯乙烯绝缘 PVC insulation	交联聚乙烯绝缘 XLPE insulation
1	体积电阻率 ρ volume resistivity $\Omega \cdot \text{cm}$ 20℃ 在电缆工作温度时 rating operating temperature 20℃ of the cable	10^{13} 10^{10}	- 10^{12}
2	绝缘电阻常数 insulation resistance constant $\text{M}\Omega \cdot \text{km}$ 20℃ 在电缆工作温度时 rating operating temperature 20℃ of the cable	36.7 0.037	- 3.67

产品特点 Characteristics

- 1、具有较强的抗电磁干扰、抗雷击性能。It has excellent properties for anti-electromagnetic interfere and anti-thunder damage.
- 2、能均衡电位，改善供电品质。It can balance the potential, and so improve the electricity quality.

同心导体电力电缆 Concentric Conductor Power Cable

用途 Application

本产品适用于额定电压 0.6/1kV 及以下的电力线路中作输送电能用。It is suitable to use for transmission electric circuit in power system with rated voltage up to 1kV.

型号及名称 Type and cable

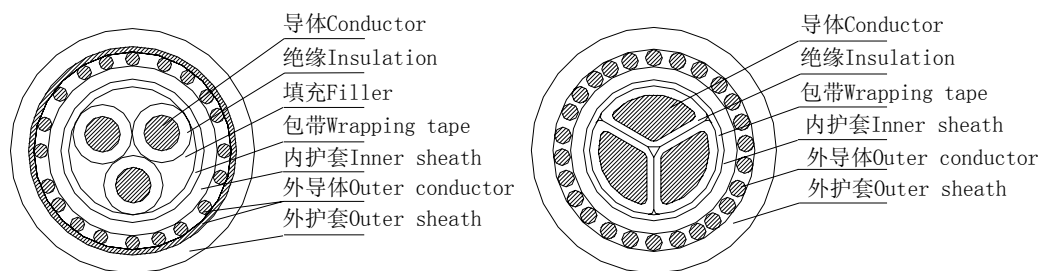
型号 type		名称 designation	执行标准 standard
铜芯 copper	铝芯 aluminum		
VV-T	VLV-T	聚氯乙烯绝缘同心导体聚氯乙烯护套电力电缆 Concentric conductor PVC insulating and jacketing power cable	Q/321023KLA8
YJV-T	YJLV-T	交联聚乙烯绝缘同心导体聚氯乙烯护套电力电缆 XLPE insulation concentric conductor PVC jacketing power cable	
VV22-T	VLV22-T	聚氯乙烯绝缘同心导体钢带铠装聚氯乙烯护套电力电缆 Concentric conductor steel strip armoring PVC insulating and jacketing power cable	
YJV22-T	YJLV22-T	交联聚乙烯绝缘同心导体钢带铠装聚氯乙烯护套电力电缆 XLPE insulation concentric conductor steel strip armoring PVC jacketing power cable	
VV32-T	VLV32-T	聚氯乙烯绝缘同心导体细钢丝铠装聚氯乙烯护套电力电缆 Concentric conductor thin steel wire armoring PVC insulating and jacketing power cable	
YJV32-T	YJLV32-T	交联聚乙烯绝缘同心导体细钢丝铠装聚氯乙烯护套电力电缆 XLPE insulation concentric conductor thin steel wire armoring PVC jacketing power cable	
VV42-T	VLV42-T	聚氯乙烯绝缘同心导体粗钢丝铠装聚氯乙烯护套电力电缆 Concentric conductor thick steel wire armoring PVC insulating and jacketing power cable	
YJV42-T	YJLV42-T	交联聚乙烯绝缘同心导体粗钢丝铠装聚氯乙烯护套电力电缆 XLPE insulation concentric conductor thick steel wire armoring PVC jacketing power cable	

规格 Specification

产品型号 Type		额定电压 Voltage rating kV	芯数 Core number	标称截面 Nominal cross-section mm ²
铜芯 Copper	铝芯 Aluminum			
VV-T、YJV-T	VLV-T、YJLV-T	0.6/1	3+1 (T) 4+1 (T)	4~300
VV22-T、YJV22-T	VLV22-T、YJLV22-T			
VV32-T、YJV32-T	VLV32-T、YJLV32-T			
VV42-T、YJV42-T	VLV42-T、YJLV42-T			

注：同心导体分截面和不等截面。 Note: concentric conductors are divided into cross-section and unequal cross-section

产品结构示意图 Structural representation



技术参数 Technical parameter

- 1、导体直流电阻符合GB/T3956的规定。Conductor DC resistance shall meet the stipulation in GB/T3956.
- 2、成品电缆经受交流 50Hz、5min、3500V 的电压试验不击穿。Finished cable shall pass the AC voltage (50Hz、5min、3500V) test without breakdown.
- 3、绝缘电阻 insulation resistance

序号 No.	性能 property	聚氯乙烯绝缘 PVC insulation	交联聚乙烯绝缘 XLPE insulation
1	体积电阻率 volume resistivity $\rho \quad \Omega \cdot \text{cm}$ 20°C at the operating temperature of the cable 在电缆工作温度时	10^{13} 10^{10}	- 10^{12}
2	绝缘电阻常数 insulation resistance constant $M\Omega \cdot \text{km}$ 20°C at the operating temperature of the cable 在电缆工作温度时	36.7 0.037	- 3.67

产品特点 Characteristics

- 1、具有较低且均匀的正（逆）序和零序阻抗，有利于改善供电品质。It has a low, regular, right (reverse) and zero impedance and it is good for improving the power supply quality.
- 2、同心层导体比普通四芯电缆的第四芯在零序工作状态下的电抗值低得多，有利于短路自动保护装置的灵敏动作，从而保证电缆相关设备的安全运行。The impedance of the concentric conductor is much lower than that of the fourth core under zero order operation in the ordinary four-core cable, therefore, it is better for the sensitive short-circuit automatic protection and thus ensures the running of the equipments safely in relation to the cable.
- 3、具有较强的抗电磁干扰性能和抗雷击性能。It has excellent properties for anti-electromagnetic interfere and anti-thunder damage.
- 4、五芯同心导体电力电缆适用于三相五线制的配电系统。Five-core concentric conductor power cable is suitable to use in the distribution power system of three-phase five-wire system.

具有屏蔽和耐化学药品功能的电力电缆

Power Cable with Function of Screen and Chemical Leechdom Resistant

用途 Application

本产品适用于炼油厂、石油化工厂及一般化工厂中经常会接触到芳香族溶剂的输电线路，电缆具有较好的耐化学药品、油类、溶剂腐蚀能力，同时也具有防磁场、抗静电干扰的能力。It is suitable to use for transmission and distribution electric circuit in oil-refined plant, petroleum-chemical plant and those plant often using aromatic solvent. This kind of cable has performances of chemical resistance, oil resistance, solvent corrosion resistance, as well as anti-electromagnetic interfere and anti-electrostatic interfere.

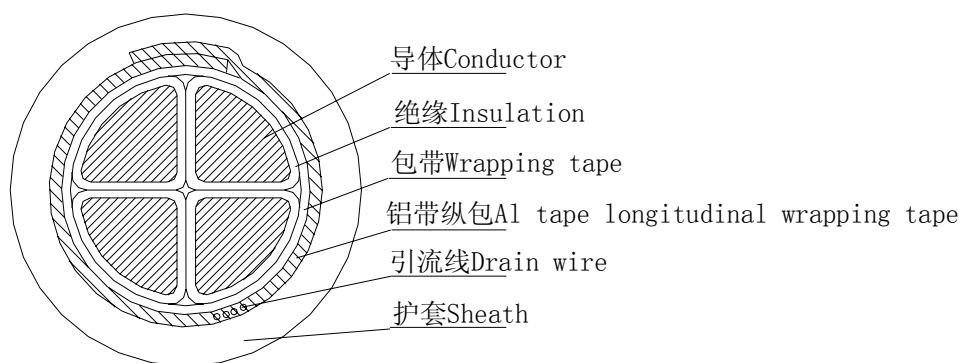
产品型号及名称 Type and designation

型号 Type		名称 Designation	执行标准 Standard
铜芯 Copper core	铝芯 Aluminum core		
LH-YJA	LH-YJLA	铜芯（铝芯）交联聚乙烯绝缘铝—交联聚乙烯粘结护套具有屏蔽和耐化学药品功能的电力电缆 Copper (aluminum) XLPE insulation aluminum-XLPE laminated jacketing power cable with function of screen and leechdom chemical resistant	Q/321023KLA45
LH-YJA23	LH-YJLA23	铜芯（铝芯）交联聚乙烯绝缘铝—交联聚乙烯粘结护套钢带铠装聚乙烯外护套具有屏蔽和耐化学药品功能的电力电缆 Copper (aluminum) XLPE insulation aluminum-XLPE laminated jacketing steel strip armoring PE outer jacketing power cable with function of screen and leechdom resistant	
LH-YJA53	LH-YJLA53	铜芯（铝芯）交联聚乙烯绝缘铝—交联聚乙烯粘结护套单层钢带轧纹纵包铠装聚乙烯外护套具有屏蔽和耐化学药品功能的电力电缆 Copper (aluminum) XLPE insulation aluminum-XLPE laminated jacketing single steel corrugating armoring PE outer jacketing power cable with function of screen and leechdom resistant	

规格 Specification

产品型号 Type		额定电压 Voltage rating kV	芯数 Core number	标称截面 Nominal cross-section mm ²
铜芯 Copper	铝芯 Aluminum			
LH-YJA	LH-YJLA	0.6/1	1、2、3	2.5~300
LH-YJA23	LH-YJLA23		4	4~185
			3+1	4~300
LH-YJA53	LH-YJLA53		5、3+2	4~185
		4+1	4~240	

产品结构示意图 Structural representation



技术参数 Technical parameters

- 1、导体直流电阻符合GB/T3956的规定。Conductor DC resistance shall meet the stipulation in GB/T3956.
- 2、成品电缆经受交流 50Hz、5min、3500V 的电压试验不击穿。Finished cable shall pass the AC voltage (50Hz、5min、3500V) test without breakdown.
- 3、90℃绝缘电阻常数不小于 $3.67\text{M}\Omega \cdot \text{km}$ ，体积电阻率不小于 $10^{12}\Omega \cdot \text{cm}$ 。At the temperature of 90℃, its insulation resistance constant shall not be less than $3.67\text{M}\Omega \cdot \text{km}$, and its volume resistivity shall not be less than $10^{12}\Omega \cdot \text{cm}$.

产品特点 Characteristics

- 1、本产品耐药品性和抑制药品透过性较好，仅次于全封闭金属护套。Its performances of chemical resistance and preventing chemical penetration are only inferior to the whole sealing metal jacket.
- 2、由于屏蔽层采用纵包结构，因此电缆的屏蔽效果优于绕包结构的电缆。Its longitudinal applying structure of shielding layer has a better screening than those cables with lapped structure.
- 3、金属屏蔽层和铠装层内侧均配有引流线，形成了全屏蔽结构。引流线不仅有利于电缆接地处理，而且可确保屏蔽层的连续性。There are leading wires both inside the metal shielding layer and armoring layer, thus constitute a whole screening structure. The leading wire is not only good for the cable grounding, but also be available for the continuity of the shielding layer.
- 4、五芯电力电缆适用于三相五线制输配电系统，由于中性线与地线分开使得系统运行更加稳定，操作人员更为安全。且五芯电力电缆采用独特的瓦形设计，使电缆具有结构稳定、重量轻、外径小的特点。Five-core power cable is suitable to use in three-phase five-wire transmission and distribution power system. Separating the neutral wire from the ground wire thus is available for the stable operation of the system and safety of the operator. Moreover, since the five-core power cable is designed in a special tile form, the cable has many features such as a stable structure, lightweight, small outer diameter and so on.

额定电压 0.6/1kV 防水型交联聚乙烯绝缘电力电缆

Waterproofed XLPE Insulated Power Cable with Rated Voltage of 0.6/1kV

用途 Application

适用于港口、水电站、船闸、隧道、化工、冶金、水库、水厂、园林灯饰等供电防水工程可靠性要求高的重要设施及基地，以及高降雨量地带和低洼地区的低压电力传输。

It is suitable to provide low voltage power supply to the fields where require high availability for waterproofed power supply, such as ports, water electricity-generating station, tunnel, chemic, metallurgy, water reservoir, water plant and the garden lighting decoration, and to the fields where bear large quantity of rain and topographic low.

产品型号及名称 type and designation

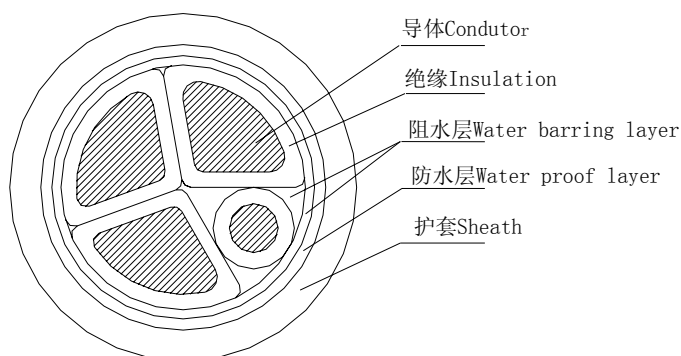
型 号 Type		名 称 Designation	执行标准 Standard
铜 芯 Copper core	铝 芯 Aluminum core		
FS-YJA	FS-YJLA	铜（铝）芯防水型交联聚乙烯绝缘铝塑粘接综合护套电力电缆 Copper (aluminum) core waterproofed XLPE insulation aluminum-plastic laminated jacketing power cable	IEC60502-1 GB/T12706.1 Q/321023KLA67
FS-YJA23	FS-YJLA23	铜（铝）芯防水型交联聚乙烯绝缘铝塑粘接综合护套钢带铠装聚乙烯外护电力电缆 Copper (aluminum) core waterproofed XLPE insulation aluminum-plastic laminated jacketing steel strip armoring power cable	

规格 Specification

型 号 Type		额定电压 Rated voltage kV	芯 数 Number of core	标称截面 Nominal cross-section mm ²
铜 芯 Copper core	铝 芯 Aluminum core			
FS-YJA	FS-YJLA	0.6/1	1	2.5~800
FS-YJA23	FS-YJLA23		2	1.5~185
			3	1.5~300
			3+1、4	4~300

注：单芯电缆铠装应采用非磁性材料。Note: material for armoring single core cable should be nonmagnetic.

产品结构示意图 Structural representation for the product



技术参数 Technical parameters

- 1、导体直流电阻符合GB/T3956的规定。DC resistance of the conductor shall be in accordance with the stipulations in GB/T3956.
- 2、成品电缆经受交流50Hz、5min、3500V的电压试验不击穿。Finished cable shall pass the AC voltage test of 50Hz、5min、3500V without breakdown.
- 3、90℃绝缘电阻常数不小于3.67MΩ·km。Insulation resistance constant at 90℃ shall not be less than 3.67MΩ·km.
- 4、阻水层纵向阻水试验。在(95~100)℃循环10次，水份向两端渗透长度不大于1500mm。Longitudinal water proof test for water-resisting layer. After 10 times cycle of the water (95~100)℃, the length water penetrated on two sides shall not be more than 1500mm.

产品特点 Product characteristics

- 1、采用纵向阻水技术，阻止水份纵向迁移，降低“水树”发生机率。Adopting Longitudinal water proofed technology, it can prevent water from moving along the cable's length, and then it reduces the possibility of occurring "water tree".
- 2、采用径向防水技术，彻底防止水分子的渗透。Adopting radial waterproofed technology, it can thoroughly prevent the penetration of the water molecule.
- 3、防水层同时具有屏蔽性能，能有效防止电缆内外电磁场的干扰。The waterproofed layer also has shielding property to efficiently prevent the electromagnetic field interfere in or out the cable.
- 4、阻水层具有缓冲作用，降低电缆热膨胀引起的机械损伤。Waterproofed layer possesses a buffer function to reduce the mechanical damage due to the thermal inflation of the cable.
- 5、电缆护层便于电缆接头的密封防水。Cable jacketing layer is available to seal waterproof for the cable connector.
- 6、电缆使用寿命可提高10~15年。The service life of the cable could be 10~15 longer.

额定电压 35kV 及以下防水型交联聚乙烯绝缘电力电缆

Waterproofed XLPE Insulated Power Cable with Rated Voltage up to 35kV

用途

适用于额定电压 35kV 及以下的港口、水电站、船闸、隧道、化工、冶金、水库、水厂、园林灯饰等供电防水工程可靠性要求高的重要设施及基地，以及高降雨量地带和低洼地区中低压电力传输。It is suitable to provide low and medium voltage power supply to the fields where require high availability for waterproofed power supply, such as ports, water electricity-generating station, tunnel, chemic, metallurgy, water reservoir, water plant and the garden lighting decoration, and to the fields where bear large quantity of rain and topographic low.

产品型号及名称 Type and designation

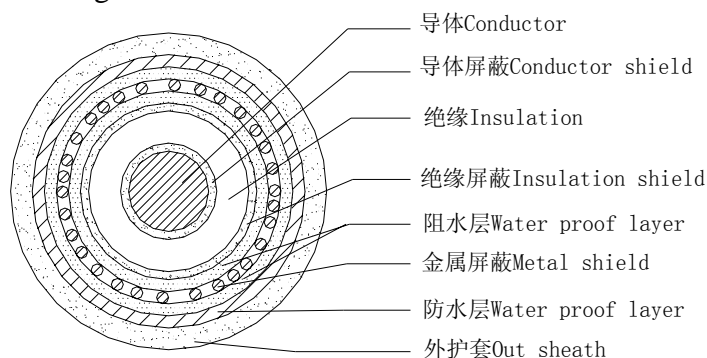
型号 Type		名称 Designation	执行标准 Standard
铜芯 Copper core	铝芯 Al core		
FS-YJY	FS-YJLY	防水型铜（铝）芯交联聚乙烯绝缘聚乙烯护套电力电缆 Water proof Cu/Al core XLPE insulated PE sheathed power cable	IEC60502-2 GB/T12706.2~.3 Q/321023KLA31
FS-YJV22	FS-YJLV22	防水型铜（铝）芯交联聚乙烯绝缘钢带铠装聚氯乙烯护套电力电缆 Water proof Cu/Al core XLPE insulated steel tape armoured PVC sheathed power cable	
FS-YJV32	FS-YJLV32	防水型铜（铝）芯交联聚乙烯绝缘细钢丝铠装聚氯乙烯护套电力电缆 Water proof Cu/Al core XLPE insulated fine steel wire armoured PVC sheathed power cable	
FS-YJV42	FS-YJLV42	防水型铜（铝）芯交联聚乙烯绝缘粗钢丝铠装聚氯乙烯护套电力电缆 Water proof Cu/Al core XLPE insulated thick steel wire armoured PVC sheathed power cable	

规格 Specification

型号 Type	额定电压 Rated voltage kV	芯数 Number of core	标称截面 Nominal cross-section mm ²
FS-YJY、FS-YJLY	3.6/6~8.7/10	1	25~500 (630)
FS-YJV22、FS-YJLV22 FS-YJV32、FS-YJLV32 FS-YJV42、FS-YJLV42 FS-YJY、FS-YJLY		3	25~500 (630)
FS-YJY、FS-YJLY	8.7/15~12/20	1	35~500 (630)
	18/30~26/35		50~400 (500)

注：标称截面括号内截面为铝导体的截面范围。Note: value in the bracket means cross-section scope of the Al conductor.

产品结构示意图 Structural figure



技术参数 Technical parameters

1、导体直流电阻符合GB/T3956的规定。D.C resistance of the conductor shall be in accordance with the stipulations in GB/T3956.

2、成品电缆交流电压试验 A.C voltage test of the finished cable

电缆额定电压 rated voltage U_0 kV	3.6	6	8.7	12	18	21	26
试验电压 testing voltage kV	12.5	21	30.5	42	63	73.5	91

3、绝缘电阻常数 Insulation resistance constant

序号 No.	试验项目 item	单位 unit	性能要求 requirement	
			3.6/6kV~6/6kV	6/10kV~26/35kV
1	体积电阻率 ρ volume resistivity at the Max. rated temperature 在最高额定温度	$\Omega \cdot \text{cm}$	10^{12}	10^{12}
2	绝缘电阻常数 K_i insulation resistance content at the Max. rated temperature 在最高额定温度	$\text{M}\Omega \cdot \text{km}$	3.67	3.67

4、局部放电试验 partial discharge test

交联聚乙烯绝缘电缆应在 $1.73U_0$ 电压下测量局部放电量，其数值应不高于5pC。Partial discharge of the XLPE insulated cable shall not exceed 5pC when measured at $1.73U_0$ voltage;

5、成品电缆应进行充气恒压试验，即将电缆两端密封后充入50kPa~100kPa干燥空气或氮气后均衡3h，任一端气压应不降低。Gas-filled constant voltage test for finished cable. With both ends sealed, filling dry air or nitrogen gas of (50~100) kPa into the cable and balancing it for 3h, there shall be no voltage decrease on either end of the cable.

6、透水试验 water penetration test

成品电缆的纵向阻水性能符合 GB/T12706.2 中附录 D 的有关阻水性能试验方法的规定。Longitudinal water proof performance of the finished cable shall be compliance with stipulation in appendix D of GB/T12706.2.

产品特点 Feature

1、采用纵向阻水技术，阻止水份纵向迁移，降低“水树”发生机率。Adopting longitudinal waterproofed technology, it can prevent water from moving along the cable's length, and then it reduces the possibility of occurring "water tree".

2、采用径向防水技术，彻底防止水分子的渗透。Adopting radial waterproofed technology, it can thoroughly prevent the penetration of the water molecule.

3、防水层同时具有屏蔽性能，能有效防止电缆内外电磁场的干扰。The waterproofed layer also has shielding property to efficiently prevent the electromagnetic field interfere in or out the cable.

4、阻水层具有缓冲作用，降低电缆热膨胀引起的机械损伤。Waterproofed layer possesses a buffer function to reduce the mechanical damage due to the thermal inflation of the cable.

5、电缆护层便于电缆接头的密封防水。Cable jacketing layer is available to seal waterproof for the cable connector.

6、电缆使用寿命可提高10~15年。The service life of the cable could be 10~15 longer.

额定电压 35kV 及以下乙丙橡胶绝缘电力电缆

EPR Insulated Power Cable with Rated Voltage up to 35kV

用途 Application

本产品适用于额定电压35kV及以下的电力线路中作中低压电力输配电。This product is suitable for low and medium voltage power transmission and distribution in the electric line with rated voltage up to 35kV.

产品型号及名称 Type and Designation

型 号 Type		名 称 Designation	执行标准 Standard
铜芯 Copper core	铝芯 Al core		
EF、EV、EY	ELF、ELV、ELY	铜（铝）芯乙丙橡胶绝缘电力电缆 Copper(Al) core EPR insulated power cable	IEC60502-1~2 GB/T12706.1~3
EF32、EV32、EY33	ELF32、ELV32、ELY33	铜（铝）芯乙丙橡胶绝缘钢带铠装电力电缆 Copper(Al) core EPR insulated steel tape armoured power cable	
EF32、EV32、EY33	ELF32、ELV32、ELY33	铜（铝）芯乙丙橡胶绝缘细钢丝铠装电力电缆 Copper(Al) core EPR insulated fine steel wire armoured power cable	

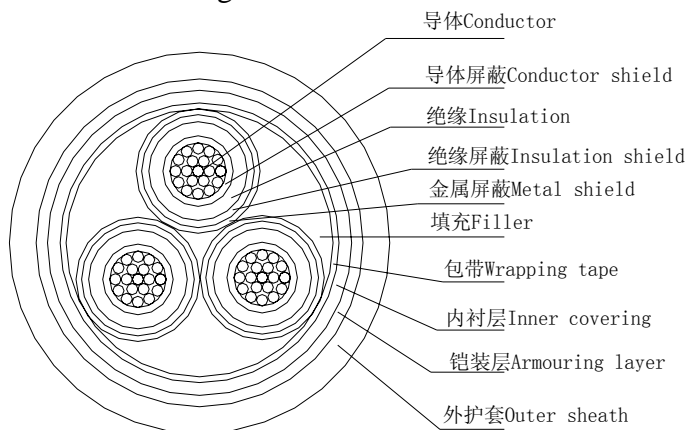
规格 Specification

型 号 Type	芯 数 Number of core	额 定 电 压 kV Rated voltage					
		0.6/1	1.8/3	3.6/6 6/6	6/10 8.7/10	8.7/15	18/20~ 26/35
		标 称 截 面 mm ² Nominal cross-section					
EF、EV、EY ELF、ELV、ELY	1	2.5~1000	10~1000	25~1000	25~1000	25~1000	25~1000
EF32、EV32、EY33 ELF32、ELV32、ELY33		10~1000	10~1000	25~1000	25~1000	25~1000	25~1000
EF、EV、EY ELF、ELV、ELY	2、4 3+1、 3+2 4+1	2.5~400	-	-	-	-	-
EF22、EV22、EY23 ELF22、ELV22、ELY23		4~400	-	-	-	-	-
EF32、EV32、EY33 ELF32、ELV32、ELY33		4~400	-	-	-	-	-
EF、EV、EY ELF、ELV、ELY	3	2.5~400	10~300	25~300	25~300	25~300	25~300
EF22、EV22、EY23 ELF22、ELV22、ELY23		4~400	10~300	25~300	25~300	25~300	25~300
EF32、EV32、EY33 ELF32、ELV32、ELY33		4~400	10~300	25~300	25~300	25~300	25~300

注：单芯电缆铠装应采用非磁性材料

Note: It should use the non-magnetic armouring material for the single cable.

产品结构示意图 Structural figure



技术参数 Technical parameter

额定电压 U_0 Rated voltage kV	0.6	1.8	3.6	6	8.7	12	18	21	26
试验电压 Tested voltage kV	3.5	6.5	12.5	21	30.5	42	63	73.5	91

产品特点 Feature

乙丙橡皮绝缘电力电缆具有优良的电性能、良好的耐热性能，防水性能特别突出。抗电晕、防水树等性能优越。

This product has excellent electrical, heat resistant, waterproof, water tree resistant and corona resistant performance.

额定电压 0.6/1kV 铜芯塑料绝缘分支电缆

Copper Cores Plastic Insulated Branch Cable with Rated Voltage of 0.6/1kV

用途 Application

分支电缆广泛应用于各类建筑、工厂、城网改造的低压配电系统及道路、桥梁、隧道、机场、地铁等场所的照明配电系统。

It is applied widely in low-voltage electricity distribution system of all kinds of buildings, factories, internal electricity network and the lighting system of roadway, bridge, tunnel, airdrome, underway, etc.

产品型号及名称 Tape and name

型号 Type	名称 Designation	执行标准 Standard
(BS)FZ-VV	铜芯聚氯乙烯绝缘聚氯乙烯护套分支电缆 Copper conductor PVC insulated and sheathed branch cable	JCS 427 JG/T147 Q/321023KLA59
(BS)FZ-YJV	铜芯交联聚乙烯绝缘聚氯乙烯护套分支电缆 Copper conductor XLPE insulated PVC sheathed branch cable	
(BS)FZ-ZRYJV	铜芯交联聚乙烯绝缘聚氯乙烯护套阻燃分支电缆 Copper conductor XLPE insulated PVC sheathed flame-retardant branch cable	
(BS)FZ-NHYJV	铜芯交联聚乙烯绝缘聚氯乙烯护套耐火分支电缆 Copper conductor XLPE insulated PVC sheathed fire-resistant branch cable	
(BS)FZ-WDZYJY	铜芯交联聚乙烯绝缘低烟无卤阻燃聚烯烃护套分支电缆 Copper conductor XLPE insulated LSOH flame-retardant sheathed branch cable	
(BS)FZ-WDZNYJY	铜芯交联聚乙烯绝缘低烟无卤阻燃聚烯烃护套耐火分支电缆 Copper conductor XLPE insulated LSOH flame-retardant sheathed fire-resistant branch cable	
(BS)FZ-CLYJY	铜芯交联聚乙烯绝缘无卤聚烯烃护套绿色清洁型分支电缆 Copper conductor XLPE insulated non-halogen flame-retardant polyolefin sheathed cleansing branch cable	
(BS)FZ-CLSYJY	铜芯交联聚乙烯绝缘无卤聚烯烃护套绿色安全型分支电缆 Copper conductor XLPE insulated non-halogen flame-retardant polyolefin sheathed safety branch cable	

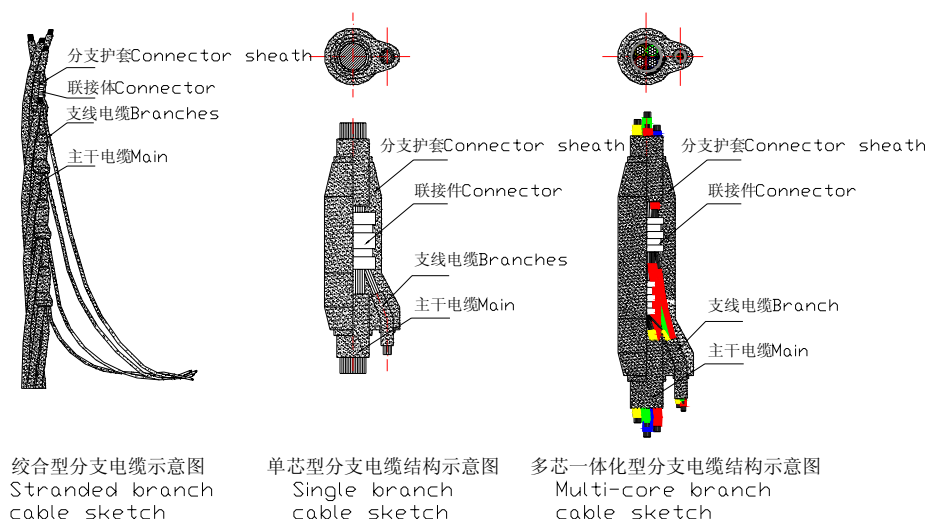
根据用户的具体要求，可以生产动力配电型、铠装型、防水型、支线保护各种专用品种的分支电缆。

According to require of consumers, we can make all kinds of special branch cables, such as power distribution, armored, waterproof, protected branches, etc.

规格 Specification

标称截面 mm ² Nominal cross-section	主干线 Main	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000
	分支线 Branch	~	~	~	~	~	~	~	~	~	~	~	~	~300				
额定电压 kV Rated voltage	0.6/1																	
芯数 Cores	1、2、3、4、5												1					

产品结构示意图 Configuration sketch



技术参数 Performance parameter

1、导体直流电阻符合 GB/T3956 的规定；

The DC resistant of the conductor conforms to the stipulation of GB/T3956;

2、电缆及分支接头经受工频电压 3500V，5min 不击穿；

The cable and the connector can withstand power frequency test with voltage 3500V for 5min, not broken down;

3、阻燃型电缆通过 GB/T18380.3 规定的阻燃试验；

The flame-retardant cable can pass flame-retardant test by GB/T18380.3;

4、耐火电缆和安全型电缆通过 GB/T19216.21 规定的耐火试验；

The fire-resistant and safety cable can pass fire resistant test by GB/T19216.21;

5、无卤清洁型电缆同时符合：①卤化氢含量 $\leq 5\%$ ；②PH 值 ≥ 4.3 ；③透光率 60%；

The halogen-free low smoke type cable has the following properties:①Capacity of haloid is no more 5%;②PH value is more than 4.3;③Clarity is no less than 60 percent;

6、分支接头绝缘电阻不小于 200M Ω ；

The insulation impedance of the connector should not be less than 200M Ω ；

7、分支接头 125 次热循环试验后温升较标准导体不大于 8 $^{\circ}\text{C}$ 。

After 125 times of thermal recycle test for the connector, the temperature rising should be not more 8 $^{\circ}\text{C}$ comparing to the standard conductor.

产品特点 Characteristic

1、节约工程造价，可替代中小容量母线，价格更低；

Economy project cost, it can replace of middle and small capacity bus, but its price is cheaper.

2、安装方便，可大幅度减轻现场施工的劳动强度，缩短施工时间，降低施工成本；

It is fixed expediently and need lesser labour, lesser work time, and lesser work cost.

3、密封性好，防水防潮，长期免维护、免保养；

It has better hermetical, waterproof and dampproof performance, and it need not maintain for long time.

4、柔性结构，具备优良的抗振动性能，适应高层建筑的摆动；

It has soft construction and better aseismatic performance, so it adapt sway of high buildings.

5、紧凑型，安装占用空间较小；

It is compact and need litter fixing space.

6、工厂预制，简化工程管理。

It is made in factory and predigest project management.

额定电压 0.6/1kV 及以下核电站用 1E 级 K3 类电力电缆

1E Class K3 Category Nuclear Power Station Used Power Cable with Rated Voltage up to 0.6/1kV

产品用途 Application

本产品适用于核电站安全壳外地震荷载下的能确保紧急停堆、安全壳隔离、堆芯应急冷却、反应堆热导出、防止放射性物质向周围环境排放等功能的额定电压 0.6/1kV 级核电站用 1E 级 K3 类电力传输系统。This product is used in the 1E class K3 category nuclear power station power transmission system outside the secure covering with voltage of 0.6/1kV. In which system it can insure stop of the reactor under the earthquake load, separation of the secure cover, cooling of the center of reactor emergently, heat vent in the reactor, and can prevent the radioactive particle to enter the surrounding environment.

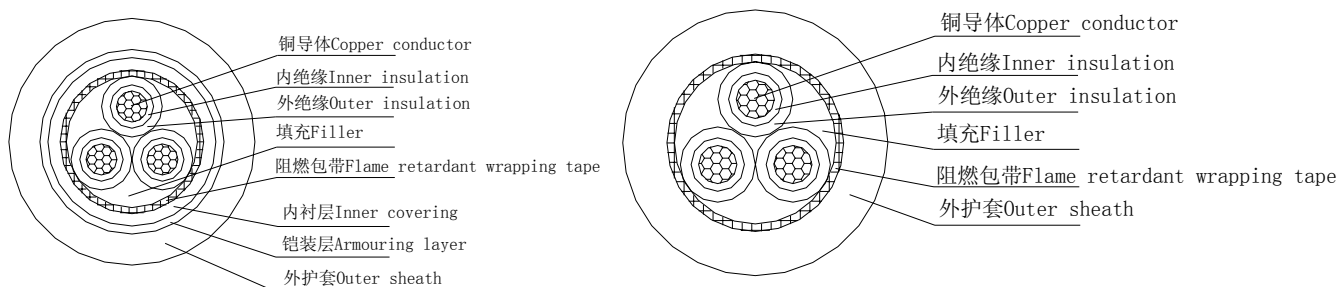
产品型号及名称 Type and Designation

型 号 Type	名 称 Designation	执行标准 Standard
YJY K3	铜芯交联聚乙烯绝缘无卤低烟聚烯烃护套核电站用 1E 级 K3 类电力电缆 Copper core XLPE insulated LS0H PO sheathed nuclear power station used 1E class K3 category power cable	Q/321023KLA60.2
YJY23 K3	铜芯交联聚乙烯绝缘钢带铠装无卤低烟聚烯烃护套核电站用 1E 级 K3 类电力电缆 Copper core XLPE insulated steel tape armoured LS0H PO sheathed nuclear power station used 1E class K3 category power cable	

规格 Specification

型 号 Type	芯 数 Number of core	额定电压 Rated voltage kV	标称截面 Nominal cross-section mm ²
YJY K3	1	0.6/1	1.5~300
YJY K3	3		1.5~185
YJY23 K3			4~300
YJY K3	2、4、3+1		1.5~300
YJY23 K3			4~300

产品结构示音图 Structural figure



主要技术参数 Main technical parameter

1、燃烧性能 Burning performance

(1) 卤素气体释放量试验, pH 值 ≥ 4.3 , 电导率 $\leq 10 \mu\text{S}/\text{mm}$; Halogen gas emission test: pH value ≥ 4.3 , conductivity $\leq 10 \mu\text{S}/\text{mm}$;

(2) 烟密度试验, 透光率 $\geq 60\%$ 。smoke density test, light transparent rate $\geq 60\%$;

(3) 电缆阻燃试验, 通过 IEC60332-3 或 GB/T18380.3 规定的成束燃烧试验。Flame retardant test, cable can pass the bundle burning test regulated in IEC60332-3 or GB/T18380.3.

(4) 绝缘线芯通过 GB/T18380.1 规定的单根垂直燃烧试验。Insulated core can pass the single vertical burning test regulated in GB/T18380.1.

(5) 按英国军用标准 NES713 规定的毒性指数: 小于 2.5。As per NEX713, the toxicity index shall less than 2.5.

(6) 热寿命评定试验 通过 IEC60216 和 IEEE383 规定的 40 年热寿命评定试验 Thermal life assess test, cable can pass the 40 years thermal life assess test as per IEC60216 and IEEE383.

2、电气性能 Electrical performance

(1) 导体直流电阻符合 GB/T3956 的规定 D.C resistance of the conductor can comply with stipulation in GB/T3956.

(2) 工频耐压试验 3500V/5min 不击穿; Cable will not breakdown in the power frequency voltage test 3500V/5min.

(3) 绝缘电阻常数 Ki: 20℃时不小于 $3000\Omega \cdot \text{km}$; 60℃时不小于 $30\Omega \cdot \text{km}$; 90℃时不小于 $3\Omega \cdot \text{km}$ 。Insulating resistance constant Ki: will not exceed $3000\Omega \cdot \text{km}$ at 20℃, will not exceed $30\Omega \cdot \text{km}$ at 60℃, will not exceed $3\Omega \cdot \text{km}$ at 90℃.

产品特点 Feature

1、具有无卤低烟环保卫生等特性。Cable is halogen free and low smoke, and so has environment protection and sanitary characteristic.

2、采用复合双层绝缘的结构。It adopts the dual layer insulation structure.

3、电缆燃烧透光率大。Cable has a large light transparent rate.

4、具有优异的阻燃性能。Cable has excellent flame retardant performance.

5、使用寿命长, 设计及实际工作寿命不低于 40 年。Cable has a long usage life, its design and actual working life will not less than 40 years.

6、优良的耐热老化和耐气候老化性能。Cable has excellent heat aging resistant and weather aging performance.

7、优良的高低温绝缘性能。Cable has excellent high and low temperature insulation performance.

8、优良的组分相容性和抗撕裂性。Cable has good content compatibility and rip resistant.

直流牵引电缆 Direct Current Haul Cable

用途 Application

主要适用于额定电压 750V 或 1500V 的城市轨道交通、电气化铁路及地铁线路的直流电力传输。
It is mainly used for rated voltage 750V or 1500V power transmission of city rail transportation, electrization railway and underground line.

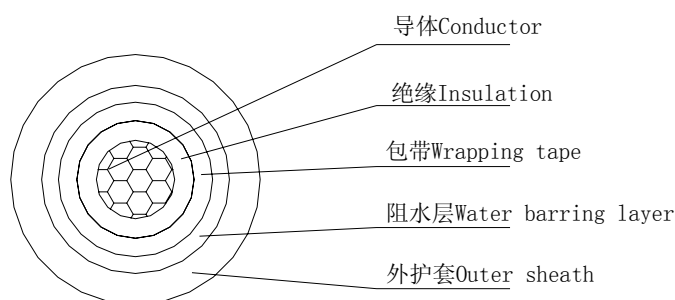
产品型号及名称 Type and name

型 号 type	名 称 name	执行标准 standard
DCYJV	交联聚乙烯绝缘聚氯乙烯护套直流牵引电缆 XLPE insulated PVC jacketed D.C haul cable	Q/321023KLA70
DCYJVR	交联聚乙烯绝缘聚氯乙烯护套直流牵引软电缆 XLPE insulated PVC jacketed D.C haul flexible cable	
DCEFR	乙丙橡胶绝缘弹性体护套直流牵引软电缆 Polyethylene-propylene rubber insulated elastomer jacketed D.C haul flexible cable	
WDZ-DCYJY	交联聚乙烯绝缘聚烯烃护套无卤低烟阻燃直流牵引电缆 XLPE insulated polyolefin jacketed halogen free low smoke flame retardant D.C haul cable	
WDZ-DCYJYR	交联聚乙烯绝缘聚烯烃护套无卤低烟阻燃直流牵引软电缆 XLPE insulated polyolefin jacketed halogen free low smoke flame retardant D.C haul flexible cable	
WDZ-DCEFR	乙丙橡胶绝缘弹性体护套无卤低烟阻燃直流牵引软电缆 Polyethylene-propylene rubber insulated elastomer jacketed halogen free low smoke flame retardant D.C haul flexible cable	
FSZ-WDZ-DCYJYR	防紫外线交联聚乙烯绝缘聚烯烃护套无卤低烟阻燃直流牵引软电缆 anti-ultraviolet XLPE insulated polyolefin jacketed halogen free low smoke flame retardant D.C haul flexible cable	

规格 Specification

型 号 Type	芯 数 Number of core	额定电压 Rated voltage V	标称截面 Nominal cross-section mm ²
DCYJV、DCYJVR、DCEFR、 WDZ-DCYJY、WDZ-DCYJYR、 WDZ-DCEFR、FSZ-WDZ-DCYJYR	1	750 1500	10~400

产品结构示意图 Structural representation



技术参数 Technical parameters

1、20℃时导体直流电阻值应符合 GB/T3956 规定的第 2 类或第 5 类导体的要求。At 20℃ D.C resistance of the conductor shall meet the requirements for category 2 and 5 conductor stipulated in GB/T3956.

2、燃烧性能 Burning property

(1) 电缆阻燃试验，通过 IEC60332-3 或 GB/T18380.3 规定的成束类燃烧试验。The cable shall pass the bunched burning test stipulated in IEC60332-3 or GB/T18380.3.

(2) 对于无卤低烟型直流牵引电缆：For cables of halogen free low smoke D.C haultype:

① 卤素气体释放量试验 Halogen gas emission test , pH \geq 4.3, 电导率 Electricity conductivity \leq 10 μ S/mm。

② 电缆燃烧烟密度试验 Smoke density test for cable burning, 透光率 Light penetration \geq 60%。

3、电缆通过耐紫外光性能试验。The products pass the test for ultra-violet resistant property.

4、耐湿性试验 Moisture resistant test

电缆浸水 72h, 绝缘线芯表面无水份。After immersing in water for 72h, insulated cores of the cable shall have no water on their surfaces.

产品特点 Product characteristics

1、稳定的电气、绝缘性能；Stable electrical and insulated property.

2、介质损耗较小、电压降低、过载保护能力强；Small dielectric loss, lower voltage and ability for overloading protection.

3、具有无卤低烟环保卫生等特性；Environmental protection for its halogen free and low smoke.

4、电缆燃烧透光率大；Big light penetration percentage when burned.

5、优异的阻燃性能；Excellent flame-retardant property.

6、具有耐紫外线老化性能；Anti-ultraviolet aging property.

7、优良的防水耐湿性能；Good waterproofed and moisture resistant properties.

8、具有较好的可挠曲性能。Good yielding resistant property.

轨道交通用无卤低烟防鼠蚁直流牵引电缆

Halogen-free Low Smoke Mouse and Termite proofed D.C Haul Cable for Rail Transportation

用途 Application

主要适用于额定电压 750V 或 1500V 的城市轨道交通、电气化铁路及地铁线路的直流电力传输。
It is mainly used for rated voltage 750V or 1500V power transmission of city rail transportation, electrization railway and underground line.

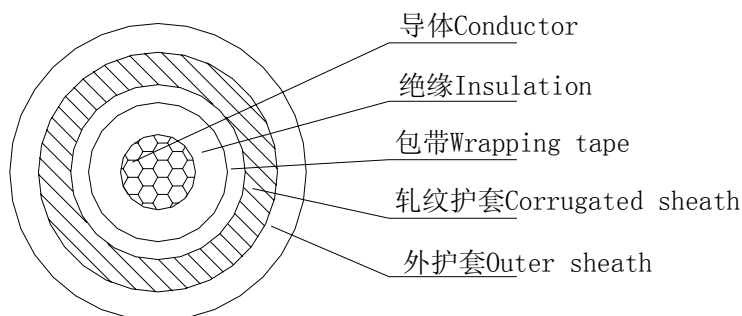
产品型号及名称 Type and name

型 号 type	名 称 name	执行标准 standard
WDZA-DCYJTY	轨道交通用无卤低烟 A 类阻燃防鼠蚁直流牵引电缆 Halogen free low smoke class A flame-retardant mouse and termite proofed D.C haul cable for orbit traffic	Q/321023KLA103
WDZA-DCYJTYR	轨道交通用无卤低烟 A 类阻燃防鼠蚁直流牵引软电缆 Halogen free low smoke category A flame-retardant mouse and termite proofed D.C haul flexible cable for orbit traffic	

规格 Specification

型 号 Type	芯 数 core	额定电压 Rated voltage V	标称截面 Nominal cross-section mm ²
WDZA-DCYJTY、 WDZA-DCYJTYR	1	750 1500	10~400

产品结构示意图 Structural representation



主要技术性能 Technical parameters

1、铜导体 20℃ 直流电阻值符合 GB/T3956 规定的要求。At 20℃ D.C resistance of the copper conductor shall meet the requirements stipulated in GB/T3956.

2、燃烧性能 Burning property

(1) 卤素气体释放量试验 Halogen gas release quantity test, $pH \geq 4.3$, 电导率 Electricity conductivity $\leq 10 \mu S/mm$ 。

(2) 电缆燃烧烟密度试验 Smoke density test for cable burning, 透光率 Light penetration percentage $\geq 60\%$ 。

(3) 电缆阻燃试验, 通过 IEC60332-3 或 GB/T18380.3 规定的成束类燃烧试验。The cable shall

pass the bunched burning test stipulated in IEC60332-3 or GB/T18380.3.

3、防鼠性能 Mouse proofed property

电缆样品经 14 天的防鼠试验，波纹金属管防护层没被咬破。After 14 days of mouse proofed test, corrugated metal-pipe protections of the cable sample haven't been bit by the mice.

4、电缆通过耐紫外光性能试验。The products pass the test for ultra-violet resistant property.

5、耐湿性试验 Moisture resistant test

电缆浸水 72h，绝缘线芯表面无水份。After immersing in water for 72h, insulated cores of the cable shall have no water on their surfaces.

产品特点 Characteristics

1、稳定的电气绝缘性能；Stable electrical insulated property

2、介质损耗较小、电压降低、载流能力强；Small dielectric loss, lower voltage and ability for overloading protection

3、具有无卤低烟环保卫生等特性；Environmental protection for its halogen free and low smoke.

4、电缆燃烧透光率大；Big light penetration percentage.

5、优异的阻燃性能；Excellent flame-retardant property.

6、具有耐紫外线老化性能；Anti-ultraviolet aging property.

7、优良的防水耐湿性能；Good waterproofed and moisture resistant properties.

8、具有较好的可挠曲性能。Good flexible property.

9、具有防鼠蚁啃咬性能。Mouse and termite bite resistant property.

变频器用主电电缆

Frequency Converter used Main Circuit Cable

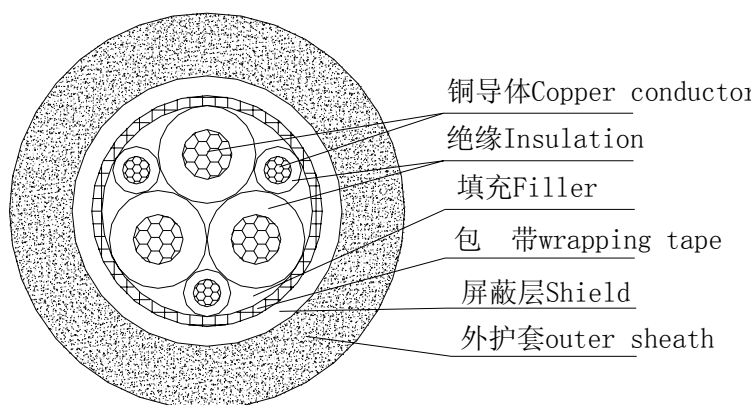
产品用途 Application

主要适用于变频器与电机之间的额定电压 0.6/1kV 的电力系统传输。It is fit for power supply between frequency converter and the motor with rated voltage of 0.6/1kV.

产品型号、名称及规格 Type, Designation and Specification

型 号 Type	名 称 Designation	芯数 Number of core	标称截面 Nominal cross-section mm ²	执行标准 Standard
BPYJVP1-2	交联聚乙烯绝缘聚氯乙烯护套铜丝缠绕铜带绕包屏蔽变频器用主电电缆 XLPE insulated PVC sheathed copper wire and tape wrapped and shielded frequency converter used main circuit cable	3+3	4~300	Q/321023KLA69
BPYJVA	交联聚乙烯绝缘聚氯乙烯护套铝(铝塑)带(轧纹)纵包屏蔽变频器用主电电缆 XLPE insulated PVC sheathed AL(AL-plastic) tape (corrugated) longitudinal wrapping shielded frequency converter used main circuit cable			
WDZ—BPYJVP1-2	交联聚乙烯绝缘无卤低烟阻燃聚烯烃护套铜丝缠绕铜带绕包屏蔽变频器用主电电缆 XLPE insulated LSOH PO sheathed copper wire and tape wrapped and shielded frequency converter used main circuit cable			
WDZ—BPYJVA	交联聚乙烯绝缘无卤低烟阻燃聚烯烃护套铝(铝塑)带(轧纹)纵包屏蔽变频器用主电电缆 XLPE insulated LSOH PO sheathed AL(AL-plastic) tape (corrugated) longitudinal wrapping shielded frequency converter used main circuit cable			

结构示意图 Structural figure



主要技术参数 Technical parameter

其屏蔽传输阻抗在 100MHz 范围以内不大于 $1 \Omega/m$ 。Its shield transmission independence will not more than $1 \Omega/m$ within 100MHz.

产品特点 Product feature

- 1、具有较小的绝缘介质损耗； It has a small insulation medium loss;
- 2、具有较强的耐电压冲击性，能经受高速、频繁变频时的脉冲电压； It has strong voltage impact resistance, and it can endure high speed and frequent frequency-converting pulse voltage;
- 3、具有优良的热老化性能； It has excellent thermal aging performance;
- 4、电缆结构紧凑、圆整，用电安全性高； It has a round and high compressing structural, so the cable has a high electrical security;
- 5、可实现电机输入电源功率因数的改善，减轻其容量； It can obtain the improve of power factor of the input motor power, and can lighten its capacity;
- 6、减少了变频器输入电流中包含的高次谐波成份的输出； It reduces the high hypo syntony wave output part included in the converted input current;
- 7、抑制了由于电源电压瞬间提升造成电容两端电压的升高，而使变频器产生过电压保护； It restrain the rise of voltage between two end of the capacitor under the emergent power rise, so it gives the overload protection to the converter.
- 8、具有良好的屏蔽性能。 It has excellent shield performance.

变频器用主回路电缆

Frequency Converter used Main Loop Cable

产品用途

主要适用于电源与变频器之间的额定电压 0.6/1kV 的电力系统传输。It is fit for power supply between frequency converter and the power supply with rated voltage of 0.6/1kV

产品型号、名称及规格 Type, Designation and Specification

型号 Type	名称 Designation	芯数 Number of core	标称截面 Nominal cross-section mm ²	执行标准 Standard
BPYJVP	交联聚乙烯绝缘聚氯乙烯护套铜丝编织屏蔽变频器用主回路电缆 XLPE insulated PVC sheathed copper wire braided and shielded frequency converter used main loop cable	3+3	4~300	Q/321023KLA69
BPYJVP1	交联聚乙烯绝缘聚氯乙烯护套铜丝缠绕屏蔽变频器用主回路电缆 XLPE insulated PVC sheathed copper wire wrapped and shielded frequency converter used main loop cable			
BPYJVP2	交联聚乙烯绝缘聚氯乙烯护套铜带绕包屏蔽变频器用主回路电缆 XLPE insulated PVC sheathed copper tape wrapped and shielded frequency converter used main loop cable			
WDZ—BPYJYP	交联聚乙烯绝缘无卤低烟阻燃聚烯烃护套铜丝编织屏蔽变频器用主回路电缆 XLPE insulated LSOH PO sheathed copper wire braided and shielded frequency converter used main loop cable			
WDZ—BPYJYP1	交联聚乙烯绝缘无卤低烟阻燃聚烯烃护套铜丝缠绕屏蔽变频器用主回路电缆 XLPE insulated LSOH PO sheathed copper wire wrapped and shielded frequency converter used main loop cable			
WDZ—BPYJYP2	交联聚乙烯绝缘无卤低烟阻燃聚烯烃护套铜带绕包屏蔽变频器用主回路电缆 XLPE insulated LSOH PO sheathed copper tape wrapped and shielded frequency converter used main loop cable			

产品特点 Product feature

- 1、具有较小的绝缘介质损耗。It has a small insulation medium loss;
- 2、具有较强的耐电压冲击性，能经受高速、频繁变频时的脉冲电压。It has strong voltage impact resistance, and it can endure high speed and frequent frequency-converting pulse voltage;
- 3、具有良好的屏蔽性能，其屏蔽传输阻抗在 100MHz 范围以内不大于 100MΩ/m。It has good shielding performance, and its shield transmission independence will not more than 100Ω/m within 100MHz.
- 4、具有优良的热老化性能。It has excellent thermal aging performance;
- 5、电缆结构紧凑、圆整，用电安全性高。It has a round and high compressing structural, so the cable has

a high electrical security;

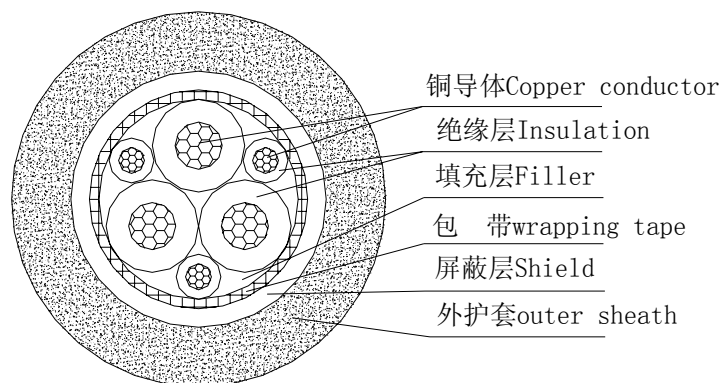
6、可降低变频器输出中存在的高次谐波的不良影响。It reduces ill effect caused by the occurred high hypo syntony wave output in the converted output;

7、降低电机噪声。It can lower noise of the motor;

8、提供过电流误动作保护。It can provide overload current and mis-operate protection;

9、提高电机的转矩效率。It can increase the rotate moment of the motor.

结构示意图 Structural figure



大功率变频驱动系统用电力电缆

Heavy Duty Frequency-converted Drive System used Power Cable

产品用途 Application

本标准适用于额定电压 6kV (Um=7.2kV) 到 35kV (Um=40.5kV) 大功率变频驱动系统的电力传输。It is fit for power transmission in the Heavy Duty Frequency-converted Drive System with rated voltage from 6kV to 35 kV.

产品型号及名称 Type and Designation

型 号 Type		名 称 Designation	执行标准 Standard
铜 芯 Copper core	铝 芯 Al core		
BPYJVT	BPYJLVT	铜（铝）芯大功率变频驱动系统用电力电缆 copper(Aluminum) core heavy duty frequency-converted drive System used cable	Q/321023KLA101
ZB-BPYJVT	ZB-BPYJLVT	铜（铝）芯 B 类阻燃大功率变频驱动系统用电力电缆 copper(Aluminum) core Category B heavy duty frequency-converted drive System used cable	
ZC-BPYJVT	ZC-BPYJLVT	铜（铝）芯 C 类阻燃大功率变频驱动系统用电力电缆 copper(Aluminum) core Category C heavy duty frequency-converted drive System used cable	

产品规格 Specification

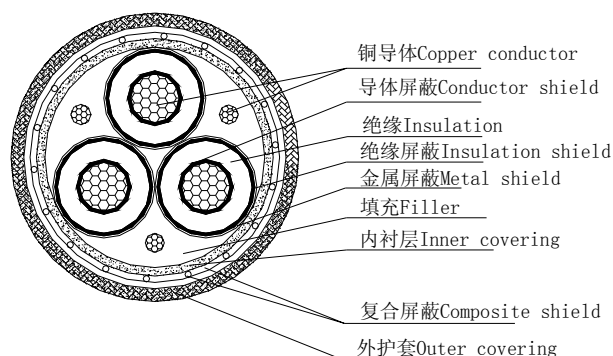
产品型号 Type	额定电压(U ₀ /U) Rated voltage kV	芯数 Number of core 相线+地线+屏蔽层 phase+earth+shield	相线标称截面 Nominal cross-section of the phase wire mm ²
BPYJVT BPYJLVT ZB-BPYJVT ZB-BPYJLVT ZC-BPYJVT ZC-BPYJLVT	3.6/6	3+3+1 (T)	25~300 (400)
	6/6		25~300 (400)
	6/10		25~300 (400)
	8.7/10		25~300 (400)
	8.7/15		25~300 (400)
	12/20		35~300 (400)
	18/30		50~240 (300)
	21/35		50~240 (300)
	26/35		50~240 (300)

注：标称截面栏括号内截面为铝导体的截面范围。Note: value in the bracket means cross-section scope of the Al conductor.

接地线、总屏蔽层截面 cross-section of the earthing wire and the overall shielding layer

相线标称截面 Nominal cross-section of the phase wire mm ²	接地线标称截面 Nominal cross-section of the earthing wire mm ²	总屏蔽层截面 Nominal cross-section of the overall shielding layer mm ²
25	4	16
35	6	25
50	10	25
70	16	35
95	16	50
120	25	70
150	25	95
185	35	95
240	50	120
300	50	150
400	70	240

结构示意图 Structural figure



主要技术参数 Main technical parameter

总屏蔽的截面积不小于相线截面的 50%，屏蔽层传输阻抗在 100MHz 范围以内，小于等于 $1 \Omega / \text{m}$ 。Cross-section of the overall shield shall not less than that of phase wire by 50%, transmission impedance of the shield layer shall be within 100MHz.

产品特点 Feature

- 1、具有较小的绝缘介质损耗； It has a small insulation medium loss.
- 2、具有较强的耐电压冲击性，能经受高速、频繁变频时的脉冲电压； It has strong voltage impact resistance, and it can endure high speed and frequent frequency-converting pulse voltage.
- 3、具有良好的屏蔽性能； It has good shielding performance.
- 4、电缆结构紧凑，用电安全性高； It has a round and high compressing structural, so the cable has a high electrical security.
- 5、可降低变频器输出中存在的高次谐波的不良影响，降低电机噪声； It reduces ill effect caused by the occurred high hypo syntony wave output in the converted output, and can lower noise of the motor;
- 6、提供过电流误动作保护，提高电机的转矩效率。

It can provide overload current and mis-operate protection;and can increase the rotate moment of the motor.

额定电压 0.6/1kV 耐热硅橡胶绝缘及护套变频器用动力电缆 Heat Resistant Si-Rubber Insulated and Sheathed Frequency Converter Used Drive Cable With Voltage of 0.6/1kV

产品用途 Application

本产品适用于耐温等级较高的变频器电力传输系统。This product is fit for frequency converter power transmission system with high temperature resistant.

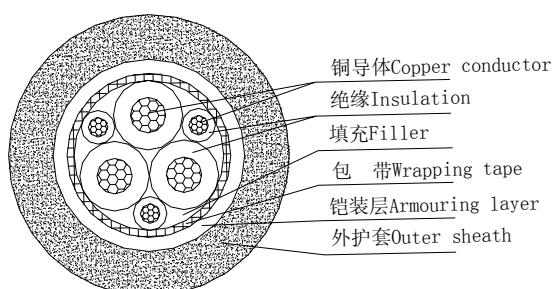
产品型号及名称 Type and Designation

型号 Type	名称 designation	执行标准 standard
BPGGRP	铜芯硅橡胶绝缘及护套铜丝编织屏蔽变频器用动力电缆 Copper core Si-rubber insulated and sheathed copper wire braiding shielded frequency converter used drive cable	Q/321023KLA97
BPGGRPP	铜芯硅橡胶绝缘及护套双层铜丝编织屏蔽变频器用动力电缆 Copper core Si-rubber insulated and sheathed dual copper wire braiding shielded frequency converter used drive cable	
BPGXGRP11	镀锡铜芯硅橡胶绝缘及护套镀锡铜丝编织屏蔽变频器用动力电缆 Copper core Si-rubber insulated and sheathed tinning copper wire braiding shielded frequency converter used drive cable	
BPGXGRPP11	镀锡铜芯硅橡胶绝缘及护套双层镀锡铜丝编织屏蔽变频器用动力电缆 Copper core Si-rubber insulated and sheathed dual tinning copper wire braiding shielded frequency converter used drive cable	
BPGGRP1-2	铜芯硅橡胶绝缘及护套铜丝缠绕铜带绕包复合屏蔽变频器用动力电缆 Copper core Si-rubber insulated and sheathed copper wire and copper tape wrapped composite shielded frequency converter used drive cable	

型号规格 Type and Specification

产品型号 Type	额定电压 Rated voltage kV	芯数 Number of core	主线芯标称截面 Nominal cross-section of the main core mm ²
BPGGRP BPGGRPP BPGXGRP11 BPGXGRPP11 BPGGRP1-2	0.6/1	3+3	4~300

结构示意图 Structural figure



主要技术参数 Main technical parameter

1、其屏蔽层传输阻抗测量 30MHz、60MHz 二个点的数值,分别不大于 25 Ω /m、50 Ω /m。Transmission impedance of the shield layer shall not exceed 25 Ω /m and 50 Ω /m when measure at 30Mhz and 60MHz respectively;

2、电缆的理想屏蔽系数:铜丝编织屏蔽不大于 0.9,铜丝缠绕铜带绕包复合屏蔽不大于 0.6。The ideal shield factor of cable shall: not exceed 0.9 for cable with copper wire shield, and not exceed 0.6 for cable with copper wire and copper tape composite shield.

产品特点 Feature

1、可改善系统的功率因数,减小高次谐波对电缆及设备的不良影响,降低电机噪音。It can improve power loss factor of the system, reduce effect to cable and other equipment caused by the high hypo syntony wave, and can reduce noise of the motor.

2、具有良好的屏蔽性能 It has excellent shielding performance;

3、具有极好的柔软性和弹性。It has good flexibility and elasticity;

4、可提高电缆及系统的用电安全性能。It can improve electrical security performance of cable and the total system.

硅橡胶绝缘电力电缆 Si-Rubber Insulated Power Cable

用途 Application

本产品适用于交流额定电压 0.6/1kV 及以下的要求耐高温和柔软的输配电线路，适用于冶金，矿山等输配电线路。

This product is suitable for used in power transmission and distribution line with rated A.C voltage up to 0.6/1kV which require high temperature resistant and flexible. It also can be used for transmission and distribution wires in the metallurgy and mine industry.

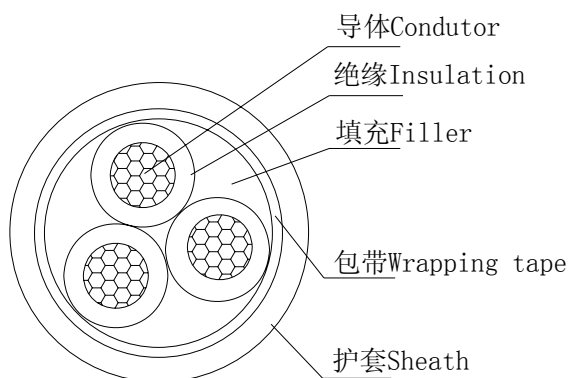
产品型号及名称 Type and Designation

型号 Type	产品名称 Designation	执行标准 Standard
GG	铜芯硅橡胶绝缘及护套电力电缆 Copper core Si-rubber insulated and sheathed power cable	Q/321023KLA88
GXG	镀锡铜芯硅橡胶绝缘及护套电力电缆 Tinning copper core Si-rubber insulated and sheathed power cable	

规格 Specification

产品型号 Type	额定电压 Rated voltage kV	芯数 Number of core	标称截面 Nominal cross-section mm ²
GG GXG	0.6/1	1	1.5~120
		2	1.5~120
		3	1.5~120
		3+1	1.5~120
		4	1.5~120

产品结构示意图 Schematic Figuration of Structure



产品特点 Product Feature

1、耐紫外线辐射、耐老化和耐臭氧性能优良。

It has a good resistance of ultraviolet radiation, aging and ozone.

2、材料透气性能好，使同等截面的载流量大大的提高。

The performance of air penetration of the material is so good that the current-carrying capacity increases smartly although with same cross-section.

3、产品柔软性能优异，可频繁移动使用。

The product is very soft so that it can be moved frequency.

橡皮绝缘船用电力电缆 Rubber Insulated Ship Power Cable

用途 Application

本产品用于各种河海船舶及海上石油平台等水上建筑物的电力传输。

It is suitable for power transmission in the water architecture such as all kinds of river or sea ship and sea petroleum platform.

产品型号及名称 Type and Designation

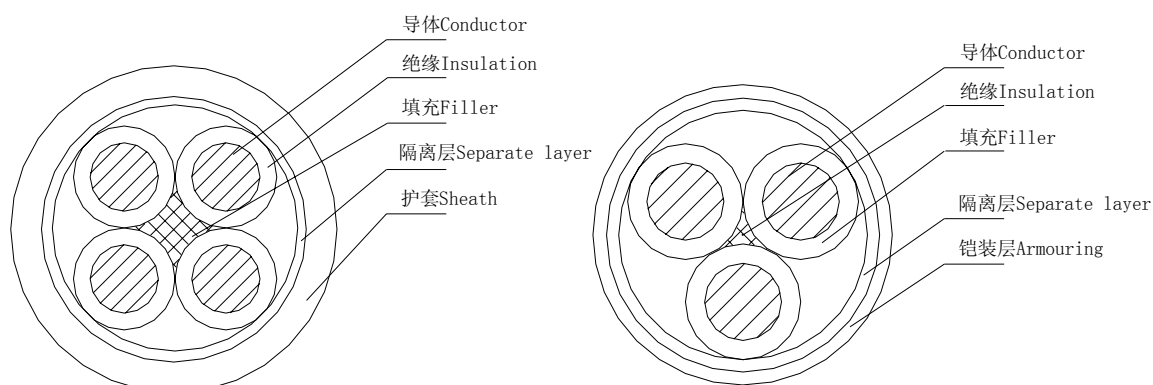
型 号 type	名 称 designation	执行标准 standard
CEF/DA	乙丙绝缘氯丁护套船用电力电缆, DA 型 EP-rubber insulated polychloroprene jacketed ship power cable, DA type	
CEF80/DA	乙丙绝缘氯丁内套裸铜丝编织铠装船用电力电缆, DA 型 EP-rubber insulated polychloroprene under-jacketed copper braiding armored ship power cable, DA type	
CEF90/DA	乙丙绝缘氯丁内套裸钢丝编织铠装船用电力电缆, DA 型 EP-rubber insulated polychloroprene under-jacketed bare steel wire braiding armored ship power cable, DA type	
CEF82/DA	乙丙绝缘氯丁内套铜丝编织铠装聚氯乙烯外套船用电力电缆, DA 型 EP-rubber insulated polychloroprene under-jacketed copper braiding armored PVC outer jacketed ship power cable, DA type	
CEF92/DA	乙丙绝缘氯丁内套钢丝编织铠装聚氯乙烯外套船用电力电缆, DA 型 EP-rubber insulated polychloroprene under-jacketed steel wire braiding armored PVC outer jacketed ship power cable, DA type	
CEH/DA	乙丙绝缘氯磺化聚乙烯护套船用电力电缆, DA 型 EP-rubber insulated chlorosulphonated PE jacketed ship power cable, DA type	
CEH80/DA	乙丙绝缘氯磺化聚乙烯内套裸铜丝编织铠装船用电力电缆, DA 型 EP-rubber insulated chlorosulphonated PE under-jacketed bare copper braiding armored ship power cable, DA type	
CEH90/DA	乙丙绝缘氯磺化聚乙烯内套裸钢丝编织铠装船用电力电缆, DA 型 EP-rubber insulated chlorosulphonated PE under-jacketed bare steel braiding armored ship power cable, DA type	GB9331 JB/T8140
CEH82/DA	乙丙绝缘氯磺化聚乙烯内套铜丝编织铠装聚氯乙烯外套船用电力电缆, DA 型 EP-rubber insulated chlorosulphonated PE under-jacketed copper wire braiding armored PVC outer jacketed ship power cable, DA type	
CEH92/DA	乙丙绝缘氯磺化聚乙烯内套钢丝编织铠装聚氯乙烯外套船用电力电缆, DA 型 EP-rubber insulated chlorosulphonated PE under-jacketed bare steel braiding armored PVC outer jacketed ship power cable, DA type	
CEFR/DA	乙丙绝缘氯丁护套船用电力软电缆, DA 型 EP-rubber insulated polychloroprene jacketed ship power flexible cable, DA type	
CEHR/DA	乙丙绝缘氯磺化聚乙烯护套船用电力软电缆, DA 型 EP-rubber insulated chlorosulphonated PE jacketed ship power flexible cable, DA type	
CEV/DA	乙丙绝缘聚氯乙烯护套船用电力电缆, DA 型 EP-rubber insulated PVC jacketed ship power cable, DA type.	
CEV80/DA	乙丙绝缘聚氯乙烯内套裸铜丝编织铠装船用电力电缆, DA 型 EP-rubber insulated PVC under-jacketed bare copper wire braiding armored ship power cable, DA type.	
CEV90/DA	乙丙绝缘聚氯乙烯内套裸钢丝编织铠装船用电力电缆, DA 型 EP-rubber insulated PVC under-jacketed bare steel wire braiding armored ship power cable, DA type.	

CEV82/DA	乙丙绝缘聚氯乙烯内套裸铜丝编织铠装聚氯乙烯外套船用电力电缆, DA 型 EP-rubber insulated PVC under-jacketed bare copper wire braiding armored PVC outer jacketed ship power cable, DA type
CEV92/DA	乙丙绝缘聚氯乙烯内套裸钢丝编织铠装聚氯乙烯外套船用电力电缆, DA 型 EP-rubber insulated PVC under-jacketed bare steel wire braiding armored PVC outer jacketed ship power cable, DA type
CXF	天然丁苯绝缘氯丁护套船用电力电缆 Natural butadiene-styrene insulated polychloroprene jacketed ship power cable
CXF80	天然丁苯绝缘氯丁内套裸铜丝编织铠装船用电力电缆 Natural butadiene-styrene insulated polychloroprene under-jacketed bare copper wire braiding armored ship power cable
CXF90	天然丁苯绝缘氯丁内套裸钢丝编织铠装船用电力电缆 Natural butadiene-styrene insulated polychloroprene under-jacketed bare steel wire braiding armored ship power cable
CXF92	天然丁苯绝缘氯丁内套钢丝编织铠装聚氯乙烯外套船用电力电缆 Natural butadiene-styrene insulated polychloroprene under-jacketed steel wire braiding armored PVC outer jacketed ship power cable
CXV	天然丁苯绝缘聚氯乙烯护套船用电力电缆 Natural butadiene-styrene insulated PVC jacketed ship power cable
CXV80	天然丁苯绝缘聚氯乙烯内套裸铜丝编织铠装船用电力电缆 Natural butadiene-styrene insulated PVC under-jacketed bare copper braiding armored ship power cable
CXV90	天然丁苯绝缘聚氯乙烯内套裸钢丝编织铠装船用电力电缆 Natural butadiene-styrene insulated PVC under-jacketed bare steel wire braiding armored ship power cable
CXV92	天然丁苯绝缘聚氯乙烯内套钢丝编织铠装聚氯乙烯外套船用电力电缆 Natural butadiene-styrene insulated PVC under-jacketed steel wire braiding armored ship power cable
CXFR	天然丁苯绝缘氯丁护套船用电力软电缆 Natural butadiene-styrene insulated polychloroprene jacketed ship power flexible cable

规格 Specification

型 号 Type	额定电压 Rated voltage kV	芯数 Number of core	标称截面 Nominal cross-section mm ²
CEF/DA, CEF80/DA, CEF90/DA, CEF82/DA, CEF92/DA CEH/DA, CEH80/DA, CEH90/DA, CEH82/DA, CEH92/DA CEV/DA, CEV80/DA, CEV90/DA, CEV82/DA, CEV92/DA CXF, CXF80, CXF90, CXF92, CXV, CXV80, CXV90, CXV92 CXFR, CEFR/DA, CEHR/D	0.6/1	1	1~300
		2	1~120
		3	1~185
		4	1~2.5

产品结构示意图 Structural representation



技术参数 Technical parameters

1、5 类镀锡软线导体时直流电阻应符合 GB/T 3956 规定的要求。The DC resistance of the fifth-class tinned flexible cord conductor shall be in accordance with the requirements stipulated in GB/T 3956.

2、燃烧试验：应符合 JB/T18380.1 规定单根垂直燃烧试验，其未碳化部分的最小长度为 50mm。Burning test: it shall meet the single vertical burning test stipulated in JB/T18380.1; the uncarbonized part shall not be less than 50mm in length.

3、浸油试验：在 100℃ 得油液中浸泡 24h 后，抗张强度变化率不大于 40%，断裂伸长率变化率不超过 40%。Oil-immersed test: after being immersed in the oil solution at 100℃ for 24h, its tensile strength variation shall not be more than 40%, and the variation of its elongation at break shall not be more than 40%.

4、浸水电容试验：试验后电容第 14 天的电容比第一电容的增率不大于 15%，第 14 天的电容比第七天的电容增率不大于 5%。Water-immersed capacity test: after the test, compared to the capacity on the first day, the increase percentage of the capacity on the fourteenth day shall not be more than 15%; compared to the capacity on the seventh day, the increase percentage of the capacity on the fourteenth day shall not be more than 5%.

产品特点 Characteristics

乙丙橡皮绝缘电力电缆具有优良的电性能、良好的耐热性能，防水性能特别突出。具有一定的阻燃性能、良好的耐弯曲性能，尤其有耐油、耐盐，防水的性能。在防电磁抗干扰和抗拉方面有优越的性能。EP-rubber insulated power cable has excellent property of electricity, heat-resistance and waterproof; flame-retardant, good buckling-resistance; its main characteristics are its performances of oil resistance, salt resistance and water proof as well as excellent anti-electromagnetic interfere and tensile resistance.

矿用电缆

Mine used Cable

用途 Application

本产品适用于煤矿用的交流额定电压 6kV 及以下各种类型橡胶套绝缘软电缆。This product is suitable for using as all different kinds of rubber insulated flexible mine used cable with A.C voltage of 6 kV and below.

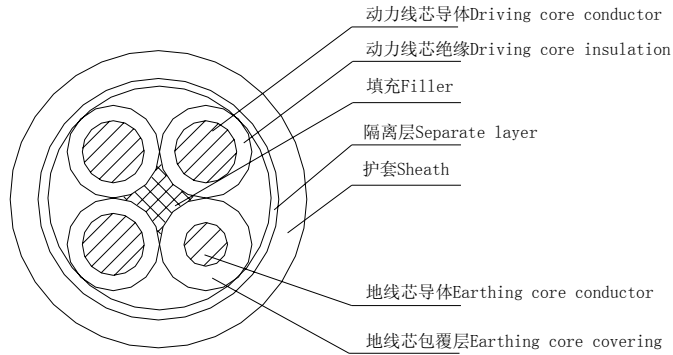
产品型号及名称 Type and Designation

产品名称 Designation	执行标准 Standard	
	GB/T12972.1~10-1991	MT818.1~10-1999
	型号 Type	
采煤机橡胶套软电缆 Coal excavator used rubber covered flexible cable	UC-0.38/0.66	MC-0.38/0.66
采煤机屏蔽橡胶套软电缆 Coal excavator shielded rubber covered flexible cable	UCP-0.38/0.66 UCP-0.66/1.14	MCP-0.38/0.66 MCP-0.66/1.14 MCP-1.9/3.3
采煤机金属屏蔽橡胶套软电缆 Coal excavator metal shielded rubber covered flexible cable	UCPT-0.66/1.14	MCPT-1.9/3.3
采煤机金属屏蔽监视型橡胶套软电缆 Coal excavator metal shielded supervising rubber covered flexible cable	—	MCPTJ-1.9/3.3 MCPTJ-0.66/1.14
采煤机屏蔽监视编织加强型橡胶套软电缆 Coal excavator shielded supervising braided enhanced rubber covered flexible cable	UCPJB-0.66/1.14	MCPJB-0.66/1.14
采煤机屏蔽监视绕包加强型橡胶套软电缆 Coal excavator shielded supervising wrapping enhanced rubber covered flexible cable	UCPJR-0.66/1.14	MCPJR-0.66/1.14
矿用电钻橡胶套电缆 Mine electric driller used rubber covered cable	UZ-0.3/0.5	MZ-0.3/0.5
矿用屏蔽电钻橡胶套电缆 Mine shielding electric driller rubber covered cable	UZP-0.3/0.5	MZP-0.3/0.5
矿用移动橡胶套软电缆 Mine moving rubber covered flexible cable	UY-0.38/0.66	MY-0.38/0.66
矿用移动屏蔽橡胶套软电缆 Mine moving shielding rubber covered flexible cable	UYP-0.38/0.66 UYP-0.66/1.14	MYP-0.38/0.66 MYP-0.66/1.14
矿用移动金属屏蔽橡胶套软电缆 Mine moving metal shielding rubber covered flexible cable	UYPT-3.6/6	MYPT-1.9/3.3 MYPT-3.6/6
矿用移动金属屏蔽监视型橡胶套软电缆 Mine moving metal shielding supervising rubber covered flexible cable	UYPJ-3.6/6	MYPTJ-3.6/6
矿用移动轻型橡胶套软电缆 Mine moving light duty rubber covered flexible cable	UYQ-0.3/0.5	MYQ-0.3/0.5
矿工帽用电缆 Mine worker cap used cable	UM UM-1	MM

产品规格 Specification

型号 Type	额定电压 Rated voltage kV	规格 (芯数×截面) Specification(number of core × cross-section) mm ²	
UC-0.38/0.66、UCP-0.38/0.66 MC-0.38/0.66、MCP-0.38/0.66	0.38/0.66	3×16+1×4+3×2.5 3×35+1×6+4×4	3×25+1×6+4×2.5 3×50+1×10+7×4
UCP-0.66/1.14 MCP-0.66/1.14	0.66/1.14	3×35+1×6+3×6 3×70+1×16+3×6	3×50+1×10+3×6 3×95+1×25+3×6
UCPT-0.66/1.14 MCPTJ-0.66/1.14	0.66/1.14	3×16+1×16+1×16 3×35+1×16+1×16 3×50+1×25+1×25	3×25+1×16+1×16 3×95+1×50+1×50 3×70+1×35+1×35
MCP-1.9/3.3	1.9/3.3	3×35+1×16+4×2.5 3×50+1×25+4×2.5	3×70+1×35+4×2.5 3×95+1×50+4×2.5
MCPT-1.9/3.3	1.9/3.3	3×35+1×16 3×50+1×25	3×70+1×35 3×95+1×50
MCPTJ-1.9/3.3	1.9/3.3	3×35+1×16+1×16 3×70+1×35+1×35	3×50+1×25+1×25 3×95+1×50+1×50
UZ-0.3/0.5、UZP-0.3/0.5 MZ-0.3/0.5、MZP-0.3/0.5	0.3/0.5	3×2.5+1×2.5 3×2.5+1×2.5+1×2.5	3×4+1×4 3×4+1×4+1×4
UYP-0.38/0.66、UYPE-0.38/0.66 MYP-0.38/0.66、MYPE-0.38/0.66 UY-0.38/0.66、UYE-0.38/0.66 MY-0.38/0.66、MYE-0.38/0.66	0.38/0.66	3×4+1×4 3×10+1×10 3×25+1×16 3×50+1×16	3×6+1×6 3×16+1×10 3×35+1×16 3×70+1×25
UYP-0.66/1.14、UYPE-0.66/1.14 MYP-0.66/1.14、MYPE-0.66/1.14	0.66/1.14	3×10+1×10 3×25+1×16 3×50+1×16 3×95+1×25	3×16+1×10 3×35+1×16 3×70+1×25
MYPT-1.9/3.3	1.9/3.3	3×35+3×16/3 3×70+1×35/3	3×50+3×25/3 3×95+1×50/3
UYPJ-3.6/6	3.6/6	3×25+3×16/3+3×2.5 3×50+3×25/3+3×2.5	3×35+3×16/3+3×2.5
MYPTJ-3.6/6、MYPTJE-3.6/6	3.6/6	3×25+3×16/3+3×2.5 3×50+3×25/3+3×2.5	3×35+3×16/3+3×2.5
UYP-3.6/6 MYP-3.6/6	3.6/6	3×16+1×16 3×35+1×16	3×25+1×16 3×50+1×25
UYPT-3.6/6 MYPT-3.6/6	3.6/6	3×16+3×16/3 3×35+3×16/3	3×25+3×16/3 3×50+3×25/3
UYQ-0.3/0.5 MYQ-0.3/0.5	0.3/0.5	2×1.0 2×1.5 2×2.5 3×1.5 3×2.5 4×1.0 4×2.5 7×1.0 7×1.5	3×1.0 12×1.0 4×1.5 12×1.5 7×2.5 12×2.5
UM、UM-1 MM	0.005	2×0.75 2×1.2	

产品结构示意图 Structure figure



技术参数 Technical parameter

- 1、5类镀锡软线导体 20℃时直流电阻应符合 GB/T3956 规定的要求。At 20℃ D.C resistance of the category 5 tining flexible conductor should comply with requirement of GB/T3956.
- 2、电气绝缘性能: Electrical insulating performance
 - 绝缘电阻常数 Insulating resistance constant Ki: 20℃时不小于 180MΩ·km shall not exceed 180MΩ·km at 20℃;
 - 工频交流电压试验: Power frequency A.C voltage test:

绝缘线芯类型 Type of the insulation core	额定电压 U ₀ /U Rated voltage kV	试验电压 (有效值) Testing voltage (virtual value) kV	施加电压时间 Time of operating voltage min
动力线芯 Driving core	3.6/6	11.0	5
	1.9/3.3	6.8	
	0.66/1.14	3.7	
	0.38/0.66	3.0	
	0.3/0.5	2.0	
控制线芯 Control core	—	1.5	

- 3、电压 1.9/3.3kV 及以下的采煤机橡套软电缆和矿用移动软电缆应该具有: Coal excavator used rubber flexible cable and mine used moving flexible cable with voltage of 1.9/3.3kV and below shall have the following performance:
 - 抗机械冲击次数规定如下 Times of mechanical resistant impact shall be:
 - 标称截面 Nominal cross-section 16mm²~35mm² 2次 2 times
 - 标称截面 Nominal cross-section 50mm²~95mm² 3次 3 times
 - 抗挤压压力如下 Pressure of press resistant:
 - U₀/U 为 0.38/0.66kV 20kN
 - 0.66/1.14kV 30kN
 - 1.9/3.3 kV 40kN

- 4、额定电压 1.9/3.3 kV 及以下的采煤机橡套软电缆应该具有抗弯曲性能, 弯曲 9000 次后不发生短路、断路。Coal excavator used rubber flexible cable with voltage of 1.9/3.3 kV and below shall have the bending resistant performance, it shall not cause circuit breakdown and short circuit after 9000 times bend.

产品特点 Feature

煤矿用电缆具有良好的抗冲击、抗弯曲和抗挤压性能, 特别是防火阻燃性能。它具有安全操作性, 有良好的接地性。Coal mine used cable has good impact, bending and press resistant performance, especially the fire resistant and flame-retardant characteristic. It also has operating secure and good earthing performance.

额定电压 450/750V 及以下聚氯乙烯绝缘电缆

PVC Insulated Cable with Rated Voltage up to 450/750V

用途 Application

本产品适用于额定电压 450/750V 及以下动力装置、日用电器、仪器仪表等。It is suitable to used in power equipments, daily used electrical appliance, instruments and so on rated voltage up to 450/750V.

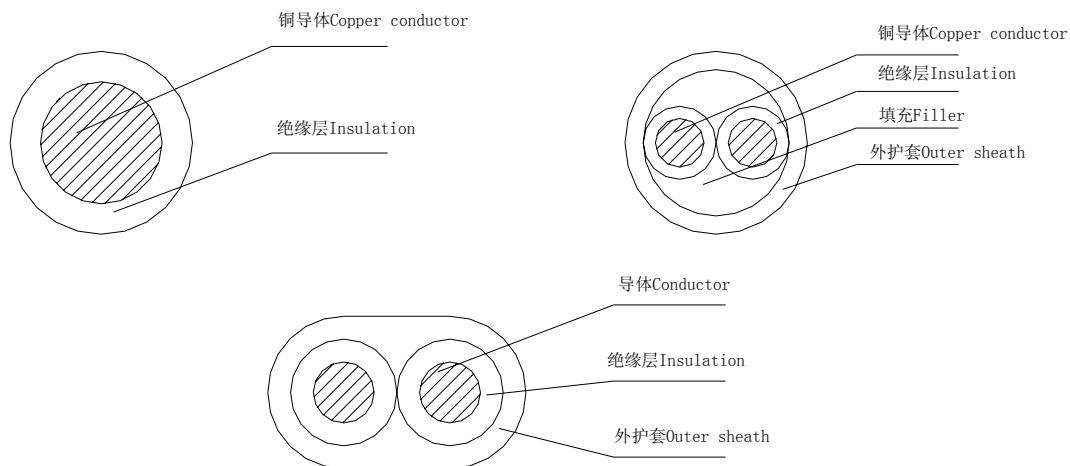
产品型号及名称 Type and designation

名 称 Designation	执行标准 Standard	
	GB5023.1~7(IEC 60227-1~7)	JB8734.2~5
	产品型号 Type	
一般用途单芯硬导体无护套电缆 Single hard conductor cable with no jacket for ordinary use	227 IEC 01	BV
一般用途单芯软导体无护套电缆 Single soft conductor cable with no jacket for ordinary use	227 IEC 02	RV
内部布线用导体温度为 70℃ 的单芯实心导体无护套电缆 Single solid conductor non jacket cable for internal wiring with the conductor temperature of 70℃	227 IEC 05	BV
内部布线用导体温度为 70℃ 的单芯软导体无护套电缆 Single soft conductor non jacket cable for internal wiring with the conductor temperature of 70℃	227 IEC 06	RV
内部布线用导体温度为 90℃ 的单芯实心导体无护套电缆 Single solid conductor non jacket cable for internal wiring with the conductor temperature of 90℃	227 IEC 07	BV-90
内部布线用导体温度为 90℃ 的单芯软导体无护套电缆 single soft conductor non jacket cable for internal wiring with the conductor temperature of 90℃	227 IEC 08	RV-90
轻型聚氯乙烯护套电缆 Light PVC jacketing cable	227 IEC 10	BVV
扁形无护套软线 Flat soft wire with no jacket	227 IEC 42	RVB
户内装饰照明回路用软线 Soft wire for internal decorating lightening circuit	227 IEC 43	SVR
轻型聚氯乙烯护套软线 Light PVC jacketing soft wire	227 IEC 52	RVV
普通聚氯乙烯护套软线 Average PVC jacketing soft wire	227 IEC 53	RVV
铜芯聚氯乙烯绝缘绞型连接用软电线 Copper conductor PVC-insulated twisted connecting flexible wire	-	RVS
注：本产品还包括阻燃型和耐火型，性能分别符合 GB/T18380 和 GB/T19216 规定的阻燃和耐火试验要求。Note: this kind of products also contain flame-retardant type and fire-resistant type; its properties are in accordance with the requirements of flame-retardant and fire-resistant test stipulated in GB/T18380 and GB/T19216 respectively.		

规格 Specification

型 号 Type	额定电压 Rated voltage V	芯 数 Core number	标称截面 Nominal cross-section mm ²
227 IEC 01	450/750	1	1.5~400
227 IEC 02	450/750	1	1.5~240
227 IEC 05	300/500	1	0.5~1
227 IEC 06	300/500	1	0.5~1
227 IEC 07	300/500	1	0.5~2.5
227 IEC 08	300/500	1	0.5~2.5
227 IEC 10	300/500	2、3、4、5	1.5~35
227 IEC 42	300/300	2	0.5~0.75
227 IEC 43	300/300	1	0.5~0.75
227 IEC 52	300/300	2、3	0.75~2.5
227 IEC 53	300/500	2、3、4、5	0.75~2.5
BV	300/500	1	0.75~1
BLV	450/750	1	2.5~400
BVR	450/750	1	2.5~70
BVV	300/500	1	0.75~10
BLVV	300/500	1	2.5~10
BVVB	300/500	2、3	0.75~10
BLVVB	300/500	2、3	2.5~10
RVS	300/300	2	0.5~0.75

结构示意图 Structural representation



聚氯乙烯绝缘尼龙护套电线 PVC Insulated Nylon Jacketed Wire

用途 Application

本产品主要用于建筑、电器、开关等固定用布线。It is suitable for fixing wiring in architecture, electrical appliance, switch and so on.

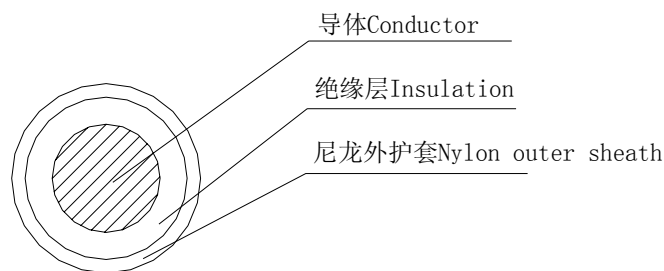
产品型号及名称 Type and designation

型号 Type	名称 Designation	执行标准 Standard
BVN	铜芯导体温度 70℃ 聚氯乙烯绝缘尼龙护套电线 PVC insulated nylon jacketed wire with conductor operating at 70℃	JB/T10261-2001
BVN-90	铜芯导体温度 90℃ 聚氯乙烯绝缘尼龙护套电线 PVC insulated nylon jacketed wire with conductor operating at 90℃	
BVNVB	铜芯导体温度 70℃ 聚氯乙烯绝缘尼龙护套、聚氯乙烯外护套扁型电缆 PVC insulated nylon jacketed PVC outer sheathed cable with conductor operating at 70℃	

规格 Specification

型号 Type	额定电压 Rated voltage V	芯数 Core number	标称截面 Nominal cross-section mm ²
BVN BVN-90	300/500	1	0.5~1.0
BVN BVN-90	450/750	1	1.5~400
BVNVB	300/500	2、3	0.75~10

产品结构示意图 Structural representation



产品特点 Characteristics

- 热变形小。Tiny thermal deformation.
- 摩擦系数低，穿管方便，工作效率高，且相应可减少电线穿管时绝缘受损伤，提高安全性。

Small coefficient, convenience for passing through the pipe, high working efficient, and it can reduce the damage on the insulation accordingly when passing through the pipe and improve its safety.

- 热收缩率低，可减少电线与其它电器连接处的导体裸露部分，提高安全性能。

Its low thermal shrinkage can reduce its bare part of the conductor connected with other electrical appliance and thus improve its property of safety.

- 电缆外径小、具有较高的机械强度、冲击强度和耐磨性。The cable has small outer diameter, high mechanical strength, impact strength and excellent abrasion resistant property.

塑料绝缘控制电缆

Plastic Insulated Control Cable

用 途 Application

聚氯乙烯绝缘和护套控制电缆使用交流额定电压 450/750V 及以下控制、监控回路及保护线路等场合。The PVC insulated and sheathed control cable is suitable for used in occasion of control, monitoring loop and protection line with A.C rated voltage up to 450/750V.

产品型号及名称 Type and Designation

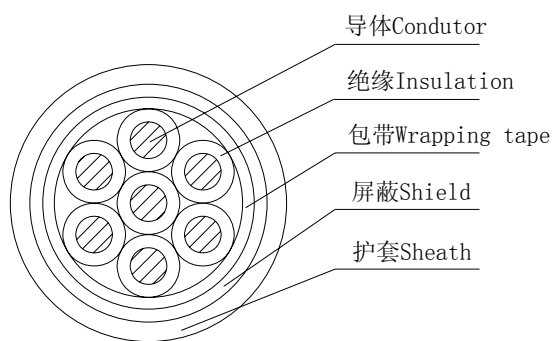
型 号 Type	名 称 Designation	执行标准 Standard
KVV	铜芯聚氯乙烯绝缘聚氯乙烯护套控制电缆 Copper core PVC insulated PVC sheathed control cable	GB9330
KVVP	铜芯聚氯乙烯绝缘聚氯乙烯编织屏蔽护套控制电缆 Copper core PVC insulated PVC braiding screen sheathed control cable	
KVVP2	铜芯聚氯乙烯绝缘聚氯乙烯铜带屏蔽护套控制电缆 Copper core PVC insulated PVC copper strip screened sheathed control cable	
KVV22	铜芯聚氯乙烯绝缘聚氯乙烯钢带铠装护套控制电缆 Copper core PVC insulated steel tape armoured PVC sheathed control cable	
KVV32	铜芯聚氯乙烯绝缘聚氯乙烯细钢丝铠装护套控制电缆 Copper core PVC insulated fine steel tape armoured PVC sheathed control cable	
KVVR	铜芯聚氯乙烯绝缘聚氯乙烯护套控制软电缆 Copper core PVC insulated PVC sheathed flexible control cable	
KVVRP	铜芯聚氯乙烯绝缘聚氯乙烯编织屏蔽护套控制软电缆 Copper core PVC insulated braiding shielded PVC sheathed flexible control cable	

规 格 Specification

型 号 Type	额定电压 Rated voltage V	导体标称截面 Nominal cross-section of conductor mm ²							
		0.5	0.75	1.0	1.5	2.5	4	6	10
		芯数 Number of core							
KVV KVVP	450/750	—	2~61				2~14		2~10
KVVP2		—	4~61				4~14		4~10
KVV22		—	7~61			4~61	4~14		4~10
KVV32		—	19~61		7~61		4~14		4~10
KVVR		4~61				—		—	
KVVRP		4~61		4~48		—		—	

注.: 推荐的芯数系列为: 2、3、4、5、7、8、10、12、14、16、19、24、27、30、37、44、48、52 和 61 芯。
Note: The core count series recommended are: 2,3,4,5,7,8,10,12,14,16,19,24,27,30,44,48,52 and 61 cores.

产品结构示意图 Schematic Figuration of Structure



产品特点 Product Feature

1、产品具有良好的防霉性、防水性

This product has a good resistance of mildew and water.

2、产品外护套机械性能较高，耐磨性能好。

The outer sheath of this product has a good performance of mechanism and abrading.

3、“R”类产品柔软度好，可用于频繁移动的场所。

The type of “R” product is very soft so that it can be moved frequency.

交联聚乙烯绝缘聚氯乙烯护套控制电缆 XLPE Insulated PVC Sheathed Control Cable

用 途 Application

交联聚乙烯绝缘控制电缆适用于交流 50Hz，额定电压 0.6/1kV 及以下的发电厂、变电站、工厂、石化等企业远距离操作的控制回路，作为各类电器仪表及自动化装置之间的连接线，起着传输各种电能的作用，使整个电气系统得到安全、可靠的运行。

XLPE insulated control cable is suitable for A.C 50Hz control loop rated voltage up to 0.6/1kV in power plants、transformer substations、factories and petrochemical factories, using as the connecting wires between automatic applications and meters. It transfers electricity and make the whole electric system run safely and steadily.

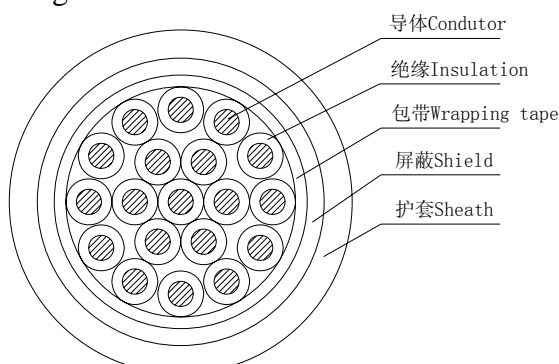
产品型号及名称 Type and designation

型号 Types	产品名称 Designation	执行标准 Standards
KYJV	铜芯交联聚乙烯绝缘聚氯乙烯护套控制电缆 Copper conductor XLPE insulated PVC sheathed control cable	Q/321023KLA18
KYJVR	铜芯交联聚乙烯绝缘聚氯乙烯护套控制软电缆 Copper conductor XLPE insulated PVC sheathed soft control cable	
KYJVP	铜芯交联聚乙烯绝缘聚氯乙烯护套编织屏蔽控制电缆 Copper conductor XLPE insulated PVC sheathed braid shielded control cable	
KYJVRP	铜芯交联聚乙烯绝缘聚氯乙烯护套编织屏蔽控制软电缆 Copper conductor XLPE insulated PVC sheathed braid shielded soft control cable	
KYJVP2	铜芯交联聚乙烯绝缘聚氯乙烯护套铜带屏蔽控制电缆 Copper conductor XLPE insulated PVC sheathed copper tape shielded control cable	
KYJV22	铜芯交联聚乙烯绝缘聚氯乙烯护套钢带铠装控制电缆 Copper conductor XLPE insulated PVC sheathed steel tape armored control cable	

产品规格 Specifications

型号 Type	额定电压 Rated voltage kV	导体标称截面 Nominal core cross section mm ²								
		0.75	1.0	1.5	2.5	4	6	10		
		芯数 Number of core								
KYJV KYJVP	0.6/1	2~61			2~14		2~10			
KYJVP2		4~61			4~14		4~10			
KYJVR		4~61			—		—			
KYJVRP		4~61		4~48		—		—		
KYJV22		7~61			4~61		4~14		4~10	

产品结构示意图 Structural figure



产品特点: Characteristics

1、产品具有优良的耐寒性、耐酸、耐碱和有机溶剂性能。

It has good cold resistance、acid resistance、alkali resistance and could be used as organic solvent.

2、产品具有良好的弯曲性能，结构紧凑

It has good performance in bending and has compact structure.

3、绝缘材料透气性能好，大大的提高了电流过载能力。

The insulation has good ventilation ability, so the overloading capacity for current is improved.

耐热硅橡胶绝缘控制电缆

Control Cables with Heat Resistant Silicon Rubber Insulation

用途 Application

本产品适用于长期工作温度在 180℃以下,额定电压 0.6/1kV 及以下的控制回路及信号保护和测量线路中,产品可广泛用于原子能工业、自动控制器、日用电器、煤矿电站和高温加热设备等一些特殊性场合。This product is suitable for control loop、signal protection and measuring circuitry with rated voltage up to 0.6/1kV which works below 180℃.It is widely used in A-energy industry、automatic control units、home appliances、coal mine、power plant and heating units etc.

产品型号及名称 Type and designation

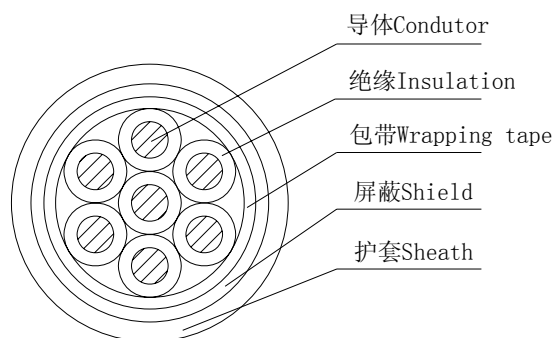
型号 Types	名称 Designation	执行标准 Standards
KGG	耐热硅橡胶绝缘与护套控制软电缆 Heat resistant silicon rubber insulated and sheathed flexible control cable	Q/321023KLA34
KGGP	耐热硅橡胶绝缘与护套屏蔽控制软电缆 Heat resistant silicon rubber insulated and sheathed shielded flexible control cable	
KGG-P	耐热硅橡胶绝缘与镀锡铜线编织加强护套控制软电缆 Heat resistant silicon rubber insulated and tining copper wire braid enhanced sheathed flexible control cable	

规格 Specifications

型号 Types	额定电压 Rated voltage V	芯数 Number of cores	标准截面 Nominal cross section mm ²
KGG	450/750	2~48	0.5、0.75、1.0、1.5
KGGP		2~37	2.5
KGG-P		2~10	4、6、10

注:推荐芯数系列为:2,3,4,5,6,7,8,10,12,14,16,19,24,27,30,37,44,48。
Note: recommended number of conductor.

产品结构示意图 Structural figure



产品特点 Characteristics

- 1、产品具有极好的柔软性,可用于弯曲半径较小的场合。It has excellent plasticity and could be used small bend radius locations.
- 2、产品具有较高的耐热性和耐寒性,其工作温度范围为-60℃~180℃。
Good performance in heatproof and cold resistant abilities with Working temperature between -60℃ and 180℃.

3、产品具有优异的耐臭氧老化、紫外线老化和大气老化性能。

Excellent capacities of ozone aging resistance 、ultraviolet radiation aging resistance and atmosphere aging resistance.

4、产品具有良好的防霉性,其吸水性不超过 0.015%。

Good performance of mildew resistance, percentage of water that sop up below 0.015%.

5、产品具有优良的电绝缘性能,在温度和频率变化时或受潮时,电绝缘性能仍比较稳定。

It could also maintain good insulation capacity even when the temperature and frequency change or when the cable gets wet.

6、屏蔽型电缆具有抗雷击、抗电磁干扰和均衡电能的作用。

Cable with shield is lightning-proof 、electromagnetism resistant and can poise the power.

7、屏蔽型电缆敷设时,应将屏蔽层两端可靠接地,并不使屏蔽层断裂和松散,否则会降低屏蔽效果。

You should connect the ends of the shield to the earth when you are installing the cable with shield. Make sure that do not break and loosen the shield, otherwise the capacity of the shield will reduce very heavily.

核电站用 1E 级 K3 类补偿电缆

Nuclear Power Plant used Class 1E, Category K3 Compensatory Cable

用 途 Application

主要用于核电站安全壳外地震荷载下的能确保反应堆紧急停堆、安全壳隔离、堆芯应急冷却、反应堆余热导出、反应堆厂房的热导出、防止放射性物质向周围环境大量排放等功能的 KC、KX 型热电偶补偿系统。

It is normally used in the class KC、KX thermocouple compensatory system outside the shield of the nuclear power plant which controls emergency stop of the reactor, isolating the security shield, emergency cooling of the reactor core, removing the afterheat of the reactor and the workshop, preventing from letting the radioactive substance into the environment when the earthquake does not exceed the load for that.

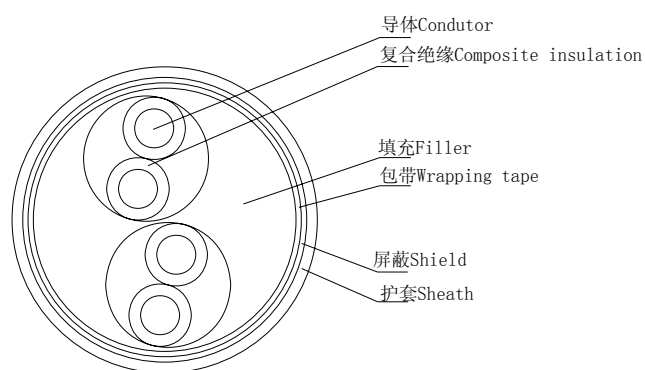
产品型号及名称 Type and designation

型 号 Types	名 称 Designation	执行标准 Standards
KCBGYJYP3 K3	交联聚乙烯绝缘铝塑复合带屏蔽无卤低烟阻燃护套核电站用 1E 级 K3 类 KCBG 型补偿电缆 Class 1E category K3 KCBG XLPE insulated AL/plastic composite tape shielded LSF flame-retardant sheathed compensatory cable for nuclear power plant	Q/321023KLA60.5
KCBGYJYP K3	交联聚乙烯绝缘铜丝编织屏蔽无卤低烟阻燃护套核电站用 1E 级 K3 类 KCBG 型补偿电缆 Class 1E,category K3,KCGB XLPE insulated copper wire braid shielded LSF flame-retardant sheathed compensatory cable for nuclear power plant	
KCBGYJYP2 K3	交联聚乙烯绝缘铜带屏蔽无卤低烟阻燃护套核电站用 1E 级 K3 类 KCBG 型补偿电缆 Class 1E,category K3,KCGB XLPE insulated copper tape shielded LSF flame-retardant sheathed compensatory cable for nuclear power plant	
KXGYJYP3 K3	交联聚乙烯绝缘铝塑复合带屏蔽无卤低烟阻燃护套核电站用 1E 级 K3 类 KXG 型补偿电缆 Class 1E,category K3,KXG XLPE insulated AL/plastic composite tape shielded LSF flame-retardant sheathed compensatory cable for nuclear power plant	
KXGYJYP K3	交联聚乙烯绝缘铜丝编织屏蔽无卤低烟阻燃护套核电站用 1E 级 K3 类 KXG 型补偿电缆 Class 1E,category K3,KXG XLPE insulated copper wire braid shielded LSF flame-retardant sheathed compensatory cable for nuclear power plant	
KXBGYJYP2 K3	交联聚乙烯绝缘铜带屏蔽无卤低烟阻燃护套核电站用 1E 级 K3 类 KXG 型补偿电缆 Class 1E,category K3,KXG XLPE insulated copper tape shielded LSF flame-retardant sheathed compensatory cable for nuclear power plant	
KCBGYJYP3/23 K3	交联聚乙烯绝缘铝塑复合带屏蔽钢带铠装无卤低烟阻燃护套核电站用 1E 级 K3 类 KCBG 型补偿电缆 Class 1E,category K3,KCBG XLPE insulated AL/plastic composite tape shielded steel tape armored LSF flame-retardant sheathed compensatory cable for nuclear power plant	

规格 Specifications

型 号 Types	对 数 Number of pairs	标称截面 Nominal cross section mm ²
KCBGYJYP3 K3	1~30	0.5、1.0、1.5
KCBGYJYP K3		
KCBGYJYP2 K3		
KXGYJYP3 K3		
KXGYJYP K3		
KXGYJYP2 K3		
KCBGYJYP3/23 K3	4~30	0.5、1.0、1.5

产品结构示意图 Structural figure



产品特点 Characteristics

- 1、产品具有优良的高低温绝缘性能 Good insulation capacity in various of temperature.
- 2、使用寿命长，设计及实际工作寿命不低于 40 年
Longevity, which is designed to be used for over 40 years.
- 3、优良的耐热老化和气候老化性能
Good performance in heatproof aging and atmosphere aging resistance.
- 4、优良的组分相容性和电缆的抗震性。
Good performance of component compatibility and shake resistance

1E 级 K3 类核电站用控制电缆

Nuclear Power Plant used Class 1E, Category K3 Control Cable

用途 Purpose

本产品主要用于交流额定电压 0.6/1kV 及以下的核电站安全壳外地震荷载下确保紧急停堆，安全壳隔离，堆芯应急冷却，反应堆余热导出，反应堆安全壳的热导出，防止放射性物质向周围环境排放等功能的电气控制、监控回路及保护系统。

It is mostly used in the electric control、monitoring loop and protection system with rated voltage up to 0.6/1kV outside the shield of the nuclear power plant which controls emergency stop of the reactor, isolating the security shield, emergency cooling of the reactor core, removing the afterheat of the reactor and the shield, preventing from letting the radioactive substance into the environment when the earthquake does not exceed the load for that.

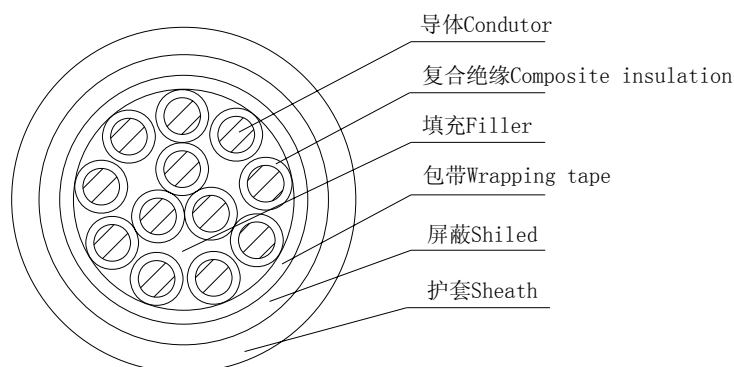
型号、名称 Type and designation

型 号 Types	名 称 Designation	执行标准 Standards
KYJY K3	铜芯交联聚乙烯复合绝缘无卤低烟阻燃热塑性聚烯烃护套 1E 级 K3 类核电站用控制电缆 Copper core XLPE composite insulated LOSH thermal PO sheathed class 1E category K3 nuclear power station used control cable	Q/321023KLA60.3
KYJYP3 K3	铜芯交联聚乙烯复合绝缘铝塑复合带屏蔽无卤低烟阻燃热塑性聚烯烃护套 1E 级 K3 类核电站用控制电缆 Copper core XLPE composite insulated Al-plastic overall shielded LOSH thermal PO sheathed class 1E category K3 nuclear power station used control cable	
KYJYP2 K3	铜芯交联聚乙烯复合绝缘铜带屏蔽无卤低烟阻燃热塑性聚烯烃护套 1E 级 K3 类核电站用控制电缆 Copper core XLPE composite insulated copper tape shielded LOSH thermal PO sheathed class 1E category K3 nuclear power station used control cable	
KYJY23 K3	铜芯交联聚乙烯复合绝缘钢带铠装无卤低烟阻燃热塑性聚烯烃护套 1E 级 K3 类核电站用控制电缆 Copper core XLPE composite insulated steel tape armouring LOSH thermal PO sheathed class 1E category K3 nuclear power station used control cable	
KYJYP3/23 K3	铜芯交联聚乙烯复合绝缘铝塑复合带屏蔽钢带铠装无卤低烟阻燃热塑性聚烯烃护套 1E 级 K3 类核电站用控制电缆 Copper core XLPE composite insulated Al-plastic tape shielded steel tape armouring LOSH thermal PO sheathed class 1E category K3 nuclear power station used control cable	
KYJYP2/23 K3	铜芯交联聚乙烯复合绝缘铜带屏蔽钢带铠装无卤低烟阻燃热塑性聚烯烃护套 1E 级 K3 类核电站用控制电缆 Copper core XLPE composite insulated copper tape shielded steel tape armouring LOSH thermal PO sheathed class 1E category K3 nuclear power station used control cable	

产品规格 Specifications

型 号 Types	额定电压 Rated voltage kV	标称截面 Nominal cross section mm ²	芯 数 Number of cores
KYJY K3 KYJYP3 K3 KYJYP2 K3	0.6/1	1.0	2~61
KYJY23 K3 KYJYP3/23 K3 KYJYP2/23 K3		1.5 2.5	

产品结构示意图 Structural figure



产品特点 Characteristics

1、使用寿命长，设计及实际工作寿命不低于 40 年

Longevity, which is designed to be used for over 40 years.

2、优良的耐热老化和气候老化性能

Good performance in heatproof aging and atmosphere aging resistance.

3、优良的组分相容性和抗撕裂性

Good performance of component compatibility and tear resistance.

4、具有优异的阻燃性能

Good flame-retardant capacity.

5、双层绝缘：通过绝缘结构的改进，实现了绝缘电性能与阻燃性能的平衡。

Double layer of insulation: It gets good performance both in electric insulation and flame-retardant from improving the structure of the insulation.

6、隔离层+单层绝缘：通过增加辅助结构隔离层，确保了电缆的阻燃性能，同时也提高了其电性能。

Isolation +single electric insulation: It's certain that the capacity of flame-retardant is good and the electrical capacity is improved by adding extra structure of isolation.

交联聚乙烯绝缘聚烯烃护套无毒无害防白蚁控制电缆

XLPE Insulated and Polyolefin Sheathed Non-toxicity Harmless and Termite Resistant Control Cable

用途 Application

本产品适用于额定电压 0.6/1kV 的控制、信号、保护、电器、仪表线路系统的电缆防白蚁，特别是在绿色环保要求高的埋地和管道敷设的控制线路防白蚁。

This product is suitable for the control, signal, protection, electric device and meter circuit system with rated voltage of 0.6/1kV to defence termite. It is especially suitable for the burial in earth and duct installation under the high requirement of environment for termite resist termite.

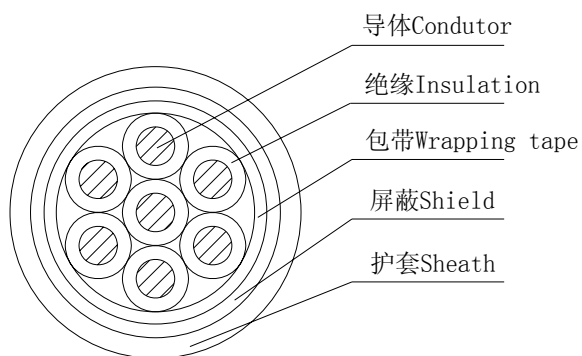
产品型号名称及规格 Type, Designation and Specification

型号 Type	名称 Designation	执行标准 Standard
WFY-KYJY	铜芯交联聚乙烯绝缘无毒无害防白蚁控制电缆 Copper core XLPE insulated non-toxicity harmless and termite resistant control cable	Q/321023KLA62
WFY-KYJYP	铜芯交联聚乙烯绝缘铜丝编织屏蔽无毒无害防白蚁控制电缆 Copper core XLPE insulated copper wire braiding shielded non-toxicity harmless and termite resistant control cable	
WFY-KYJYP2	铜芯交联聚乙烯绝缘铜带屏蔽无毒无害防白蚁控制电缆 Copper core XLPE insulated copper tape shielded non-toxicity harmless and termite resistant control cable	
WFY-KYJYP3	铜芯交联聚乙烯绝缘铝塑复合带屏蔽无毒无害防白蚁控制电缆 Copper core XLPE insulated Al-plastic composite tape shielded non-toxicity harmless and termite resistant control cable	
WFY-KYJY23	铜芯交联聚乙烯绝缘钢带铠装无毒无害防白蚁控制电缆 Copper core XLPE insulated steel tape armoured non-toxicity harmless and termite resistant control cable	
WFY-KYJYP2/23	铜芯交联聚乙烯绝缘铜带屏蔽钢带铠装无毒无害防白蚁控制电缆 Copper core XLPE insulated copper shielded steel tape armoured non-toxicity harmless and termite resistant control cable	

规格 Specification

型号 Type	额定电压 kV Rated voltage	导体标称截面 Nominal cross-section of conductor mm ²						
		0.75	1.0	1.5	2.5	4	6	10
		芯数 Core count						
WFY-KYJY WFY-KYJYP	0.6/1	2~61			2~14		2~10	
WFY-KYJYP2 WFY-KYJYP3		4~61			2~14		4~10	
WFY-KYJY23		7~61	4~61		2~14		4~10	
WFY-KYJYP2/23								

产品结构示意图 Schematic Figuration of Structure



产品特点 Product Feature

1、产品能有效地防白蚁对电缆的危害，无需其它辅助防治方法。

It can prevent cables from termite efficiently. There is no need to use other methods.

2、电缆产品内无对空气、土壤、人身造成的污染和危害的有毒助剂，属绿色环保型电缆。

There is no poisonous content in this cable to pollute air, earth and human. It is a kind of environmental protection cables.

3、电缆外护套机械强度高、耐磨性好，并且具有高光洁度。

The outer sheath of cables has high mechanical strength, good abrasion resistant and high polish degree.

具有屏蔽和耐化学药品功能的控制电缆

Control Cables with Function of Screen and Chemical leechdom Resistant

用 途 Application

本产品适用于炼油厂、石油化工厂及一般化工厂中经常会接触到芳香族溶剂的电气控制、监控线路，电缆具有较好的耐化学药品、油类、溶剂腐蚀能力，同时也具有防磁场、抗静电干扰的能力。电缆可用于直埋和穿管敷设。

This product is suitable for using in the electric control and monitoring circuit in the factories, such as oil refining factories, oil chemical industry factories and other ecumenical chemical industry factories, which often contacts with aromatic substance solvent. This cable has good resistance of chemical, oil and solvent. Besides, it can also defend the magnetic field and resist static. This cable can be buried directly or laid through the pipe.

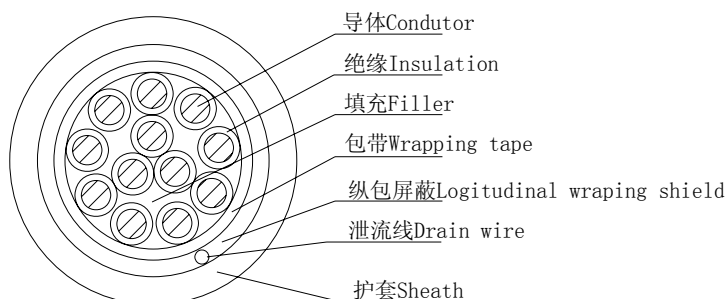
产品型号及名称 Type and Designation

型号 Type	名称 Designation	执行标准 Standard
LH-KYJA	铜芯交联聚乙烯绝缘铝-交联聚乙烯粘接护套具有屏蔽和耐化学药品功能的控制电缆 Copper core XLPE insulated Al-XLPE bonded sheath control cable with function of screen and chemical leechdom resistance	Q/321023KLA44
LH-KYJA23	铜芯交联聚乙烯绝缘铝-交联聚乙烯粘接护套钢带铠装聚乙烯外护套具有屏蔽和耐化学药品功能的控制电缆 Copper core XLPE insulated Al-XLPE bonded sheath steel tape armoured PE outer covering control cable with function of screen and chemical leechdom resistance	
LH-KYJA53	铜芯交联聚乙烯绝缘铝-交联聚乙烯粘接护套单层钢带轧纹纵包铠装聚乙烯外护套具有屏蔽和耐化学药品功能的控制电缆 Copper core XLPE insulated Al-XLPE bonded sheath single layer steel tape corrugated longitudinal wrapping PE outer covering control cable with function of screen and chemical leechdom resistance	

产品规格 Specification

型号 Type	标称截面 Nominal cross-section mm ²				
	0.75、1.0	1.5	2.5	4	6、10
芯数 Core count					
LH-KYJA	2~61	2~61	2~37	2~14	2~10
LH-KYJA23 LH-KYJA53	7~61	4~61	4~37	4~14	4~10

产品结构示意图 Schematic Figuration of Structure



产品特点 Product Feature

1、本产品耐药品性和抑制药品透过性较好，仅次于全封闭金属护套。

This product has a good resistance of chemical leechdom and can restrain its penetration. Here, it is only inferior to the completely covered metal sheath.

2、产品具有较好的耐芳香族溶剂性、耐油、耐药品性，耐水性、防蚊性

This product has good resistance of aromatic substance solvent, oil, chemical leechdom, water and mosquito.

3、金属屏蔽层和铠装层内侧均配有引流线，形成了全屏蔽结构。引流线不仅有利于电缆接地处理，而且可确保屏蔽层的连续性。

The metal screen and armoring screen with lead wires form the structure of full screen. The lead wire is not only good for cable earthing but also can ensure the continuity of the screen.

4、与全封闭金属护套比，电缆外径小、重量轻、可弯曲性能好。

Compared with the full screen sheath, this product has a small outer diameter, light weight and good bending performance.

5.电缆在 60°C 矿物油中浸泡 10 天，其护套不发生溶胀或开裂现象。

Its sheath will not be dissolved and expended or ruptured when this cable dipping in the 60°C mineral oil for as long as 10 days.

聚全氟乙丙烯绝缘及护套控制电缆 F46 Insulated and Sheathed Control Cable

用 途 Application

本产品适用于长期工作温度在 200 °C 及以下，要求柔软、防水、防酸、阻燃、耐腐蚀和耐臭氧老化的场合。

This product is suitable for the situation which works usually under 200°C and required pliancy, waterproof, anti-acid, flame retardant, corrosion and ozone aging resistant performance.

产品型号及名称 Type and Designation

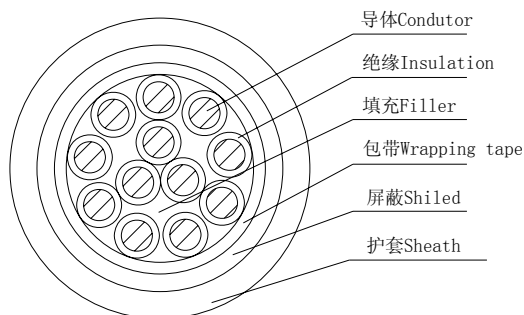
型 号 Type	名 称 Designation	执行标准 standard
KF46H3-1 (2)	镀锡(银)铜芯氟塑料绝缘及护套控制电缆 Tin/silver plating copper core fluorine plastic insulated and sheathed control cable	Q/321023KLA19
KF46H3R-1 (2)	镀锡(银)铜芯氟塑料绝缘及护套控制软电缆 Tin/silver plating copper core fluorine plastic insulated and sheathed flexible control cable	
KF46H3P-1 (2)	镀锡(银)铜芯氟塑料绝缘及护套编织屏蔽控制电缆 Tin/silver plating copper core fluorine plastic insulated and sheathed braid screened control cable	
KF46H3RP-1 (2)	镀锡(银)铜芯氟塑料绝缘及护套铜丝编织屏蔽控制软电缆 Tin/silver plating copper core fluorine plastic insulated and sheathed copper wire braid screened flexible control cable	

规格 Specification

型号 Type	导体标称截面 Nominal cross-section of conductor	芯数 Number of core
KF46H3-1 (2)	0.5、0.75、1.0、1.5	2~61
KF46H3R-1 (2)	2.5	2~48
	4.0、6.0	2~37
KF46H3P-1 (2)	0.5、0.75、1.0、1.5	2~61
KF46H3RP-1 (2)	2.5	2~44

注：推荐的芯数系列为 2、3、4、5、7、8、10、12、14、16、19、24、27、30、37、44、48、52 和 61 芯。
Note: The recommended number of core series are 2、3、4、5、7、8、10、12、14、16、19、24、27、30、37、44、48、52 and 61 cores.

产品结构示意图 Schematic Figuration of Structure



产品特点 Product Feature

1、产品长期工作温度-65℃~200℃。

Long-term operating temperature of this cable shall be -65℃~200℃.

2、产品具有良好的耐臭氧老化、耐紫外线和大气老化性能。

This product has a good resistance of ozone aging, ultraviolet radiation and atmosphere aging.

3、产品具有防霉性、防水性和阻燃性。

This product has the resistance of mildew, water and fire.

4、产品绝缘具有耐酸碱、耐化学腐蚀性。

Its insulation has the resistance of acid, alkali and chemical corrosion.

5、产品外径小、结构紧凑，可用于穿管或对外径要求较小的场合。

This product has a small outer diameter and tighten structure. It can be used to pull on the pipe or in the occasion which requires small outer diameter cables.

橡皮绝缘船用控制电缆 Rubber Insulated Ship Control Cable

用途 Application

本产品用于交流额定电压 250V 及以下各种河海船舶及海上石油平台及对干扰不敏感的控制和类似电路。It is suitable for various ships and sea petroleum platform; as well as control electric circuit that is not sensitive to interfere with rated voltage up to 250V.

型号名称 Type and Designation

型 号 Type	名 称 Designation	执行标准 Standard
CKEF/DA	乙丙绝缘氯丁护套船用控制电缆, DA 型 EP-rubber insulated polychloroprene jacketed ship control cable, DA type	GB9332 JB/T8141
CKEF80/DA	乙丙绝缘氯丁内套裸铜丝编织铠装船用控制电缆, DA 型 EP-rubber insulated polychloroprene under-jacketed copper braiding armored ship control cable, DA type	
CKEF90/DA	乙丙绝缘氯丁内套裸铜丝编织铠装船用控制电缆, DA 型 EP-rubber insulated polychloroprene under-jacketed bare steel wire braiding armored ship control cable, DA type	
CKEF82/DA	乙丙绝缘氯丁内套铜丝编织铠装聚氯乙烯外套船用控制电缆, DA 型 EP-rubber insulated polychloroprene under-jacketed copper braiding armored PVC outer jacketed ship control cable, DA type	
CKEH/DA	乙丙绝缘氯磺化聚乙烯护套船用控制电缆, DA 型 EP-rubber insulated chlorosulphonated PE jacketed ship control cable, DA type	
CKEH80/DA	乙丙绝缘氯磺化聚乙烯内套裸铜丝编织铠装船用控制电缆, DA 型 EP-rubber insulated chlorosulphonated PE under-jacketed bare copper wire braiding armored ship control cable, DA type	
CKEH90/DA	乙丙绝缘氯磺化聚乙烯内套裸铜丝编织铠装船用控制电缆, DA 型 EP-rubber insulated chlorosulphonated PE under-jacketed bare steel wire braiding armored ship control cable, DA type	
CKEH92/DA	乙丙绝缘氯磺化聚乙烯内套铜丝编织铠装聚氯乙烯外套船用控制电缆, DA 型 EP-rubber insulated chlorosulphonated PE under-jacketed steel wire braiding armored PVC outer jacketed ship control cable, DA type	
CKEV/DA	乙丙绝缘聚氯乙烯护套船用控制电缆, DA 型 EP-rubber insulated PVC jacketed ship control cable, DA type	
CKEV80/DA	乙丙绝缘聚氯乙烯内套裸铜丝编织铠装船用控制电缆, DA 型 EP-rubber insulated PVC under-jacketed bare copper wire braiding armored ship control cable, DA type.	
CKEV90/DA	乙丙绝缘聚氯乙烯内套裸铜丝编织铠装船用控制电缆, DA 型 EP-rubber insulated PVC under-jacketed bare steel wire braiding armored ship control cable, DA type.	
CKEV92/DA	乙丙绝缘聚氯乙烯内套裸铜丝编织铠装聚氯乙烯外套船用控制电缆, DA 型 EP-rubber insulated PVC under-jacketed bare steel wire braiding armored PVC outer jacketed ship control cable, DA type	
CKXF	天然丁苯绝缘氯丁护套船用控制电缆 Natural butadiene-styrene insulated polychloroprene jacketed ship control cable	
	天然丁苯绝缘氯丁内套裸铜丝编织铠装船用控制电缆	

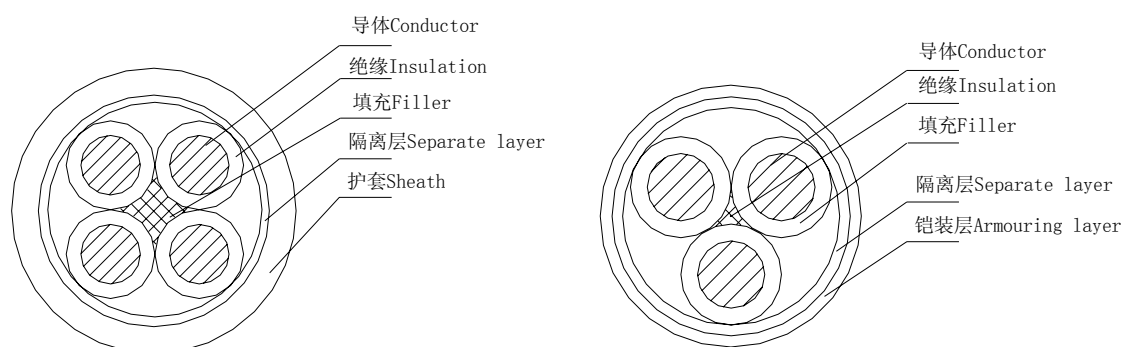
CKXF80	Natural butadiene-styrene insulated polychloroprene under-jacketed bare copper wire braiding armored ship control cable 天然丁苯绝缘氯丁内套铜丝编织铠装聚氯乙烯外套船用控制电缆
CKXF82	Natural butadiene-styrene insulated polychloroprene under-jacketed copper wire braiding armored PVC outer jacketed ship control cable 天然丁苯绝缘氯丁内套裸钢丝编织铠装船用控制电缆
CKXF90	Natural butadiene-styrene insulated polychloroprene under-jacketed bare steel wire braiding armored ship control cable 天然丁苯绝缘氯丁内套钢丝编织铠装聚氯乙烯外套船用控制电缆
CKXF92	Natural butadiene-styrene insulated polychloroprene under-jacketed steel wire braiding armored PVC outer jacketed ship control cable 天然丁苯绝缘聚氯乙烯护套船用控制电缆
CKXV	Natural butadiene-styrene insulated PVC jacketed ship control cable 天然丁苯绝缘聚氯乙烯内套裸铜丝编织铠装船用控制电缆
CKXV80	Natural butadiene-styrene insulated PVC under-jacketed bare copper braiding armored ship control cable 天然丁苯绝缘聚氯乙烯内套裸铜丝编织铠装船用控制电缆
CKXV90	Natural butadiene-styrene insulated PVC under-jacketed bare steel wire braiding armored ship control cable 天然丁苯绝缘氯丁护套船用控制电缆
CKXV92	Natural butadiene-styrene insulated polychloroprene jacketed ship control cable

规格 Specification

型 号 Type	额定电压 Rated voltage V	芯数 Number of core	标称截面 Nominal cross-section mm ²
CKEF/DA,CKEF80/DA,CKEF90/DA,CKEF82/DA CKEH/DA,CKEH80/DA,CKEH90/DA,CKEH92/DA CKEV/DA,CKEV80/DA,CKEV90/DA,CKEV92/DA	250	2~37	0.75、1
CKXF,CKXF80,CKXF82,CKXF90, CKXF92, CKXV,CKXV80,CKXV90,CKXV92		2~37	0.75、1、1.5、2.5

注：推荐芯数为(recommending core numbers)2、4、7、10、14、19、24、30 和 37 芯

产品结构示意图 Structural representation



技术参数 Technical parameter

1、5 类镀锡软线导体时直流电阻应符合 GB/T 3956 规定的要求。The DC resistance of the fifth-class tinned flexible cord conductor shall be in accordance with the requirements stipulated in GB/T 3956.

2、燃烧试验: 应符合 JB/T18380.1 规定单根垂直燃烧试验, 其未碳化部分的最小长度为 50mm。
Burning test: it shall meet the single vertical burning test stipulated in JB/T18380.1; the uncarbonized part shall not be less than 50mm in length.

3、浸油试验: 在 100℃ 得油液中浸泡 24h 后, 抗张强度变化率不大于 40%, 断裂伸长率变化率不超过 40%。
Oil-immersed test: after being immersed in the oil solution at 100℃ for 24h, its tensile strength variation shall not be more than 40%, and the variation of its elongation at break shall not be more than 40%.

4、浸水电容试验: 试验后电容第 14 天的电容比第一电容的增率不大于 15%, 第 14 天的电容比第七天的电容增率不大于 5%。
Oil-immersed test: after being immersed in the oil solution at 100℃ for 24h, its tensile strength variation shall not be more than 40%, and the variation of its elongation at break shall not be more than 40%.

5、热延伸试验: 在 200℃ 的空气温度、15min 的载荷时间和 20N/cm² 的机械应力下, 绝缘材料的伸长率应不大于 175%, 冷却的永久变形不大于 25%。

Hot set test: under the conditions of the air temperature 200℃, loading time 15min and mechanical stress 20N/cm², elongation of the insulated material shall not be more than 175%; after cooled, the permanent deformation shall not be more than 25%.

产品特点 Characteristics

橡皮绝缘船用控制电缆具有一定的阻燃性能、良好的耐弯曲性能, 尤其有耐油、耐盐, 防水的性能。在防电磁抗干扰和抗拉方面有优越的性能。

Rubber insulated ship control cables have flame-retardant property, good buckling resistant property; its main characteristics are its performances of oil resistance, salt resistance and water proof as well as excellent anti-electromagnetic interfere and tensile resistance.

测量和计算机输入用电缆

Measuring And Computer Inputting Cable

用途 Application

本产品适用于额定电压 300/500V 及以下防干扰性能要求较高的电子计算机，检测仪器、仪表的连接，在高频场合下更能显示出其优越的性能。It is suitable for the computers、inspection appliance and instruments with rated voltage up to 300/500V. This product presents an excellent performance in high frequency locations.

产品型号及名称 Type and designation

型号 types				测量和计算机电缆结构特征 cable structure	执行标准 standard
聚氯乙烯绝缘 PVC insulation	聚乙烯绝缘 PE insulation	交联聚乙烯绝缘 XLPE insulation	聚全氟乙丙烯绝 缘 F46 insulation		
DJVPV	DJYPV	DJYJPV	DJF46PV	铜芯铜丝编织对绞屏蔽聚氯乙烯护套 copper core copper wire braid twisted shield PVC sheath	Q/321023KL A11
DJVPVR	DJYVVR	DJYJVR	—	铜芯铜丝编织对绞屏蔽聚乙烯护套软 copper core copper wire braid twisted shield PVC sheath flexible	
DJVP2V	DJYP2V	DJYJP2V	DJF46P2V	铜芯铜带对绞屏蔽聚氯乙烯护套 copper core copper tape twisted shield PVC sheath	
DJVP3V	DJYP3V	DJYJP3V	DJF46P3V	铜芯铝塑复合带对绞屏蔽聚氯乙烯护套 copper core Al-plastic tape twisted shield PVC sheath	
DJVVP	DJYVP	DJYJVP	DJF46VP	铜芯铜丝编织总屏蔽聚氯乙烯护套 copper core copper wire braid overall shield PVC sheath	
DJVVRP	DJYVRP	DJYJVRP	—	铜芯铜丝编织总屏蔽聚乙烯护套软 copper core copper wire braid overall shield PVC sheath flexible	
DJVVP2	DJYVP2	DJYJVP2	DJF46VP2	铜芯铜带总屏蔽聚氯乙烯护套 copper core copper tape overall shield PVC sheath	
DJVVP3	DJYVP3	DJYJVP3	DJF46VP3	铜芯铝塑复合带总屏蔽聚氯乙烯护套 copper core Al-plastic tape overall shield PVC sheath	
DJVPVP	DJYPVP	DJYJPVP	DJF46PVP	铜芯铜丝编织对绞屏蔽铜丝编织总屏蔽聚氯乙烯护套 copper core copper wire braid twisted and overall shield PVC sheath	
DJVPVRP	DJYVVRP	DJYJVRP	—	铜芯铜丝编织对绞屏蔽铜丝编织总屏蔽聚乙烯护套软 copper core copper wire braid twisted and overall shield PVC sheath flexible	
DJVP2VP2	DJYP2VP2	DJYJP2VP2	DJF46P2VP2	铜芯铜带对绞屏蔽铜带总屏蔽聚氯乙烯护套 copper core copper tape twisted shield copper tape overall shield PVC sheath	
DJVP3VP3	DJYP3VP3	DJYJP3VP3	DJF46P3VP3	铜芯铝塑复合带对绞屏蔽铝塑复合带总屏蔽聚氯乙烯护套 copper core Al-plastic tape twisted and overall shield PVC sheath	
DJVP2V22	DJYP2V22	DJYJP2V22	DJF46P2V22	铜芯铜带对绞屏蔽钢带铠装聚氯乙烯护套 copper core copper tape twisted shield steel tape armouring PVC sheath	
DJVP3V22	DJYP3V22	DJYJP3V22	DJF46P3V22	铜芯铝塑复合带对绞屏蔽钢带铠装聚氯乙烯护套 copper core Al-plastic tape twisted shield steel tape armouring PVC sheath	
DJVVP2/22	DJYVP2/22	DJYJVP2/22	DJF46VP2/22	铜芯铜带总屏蔽钢带铠装聚氯乙烯护套	

DJVVP3/22	DJYVP3/22	DJYJVP3/22	DJF46VP3/22	copper core copper tape overall shield steel tape armouring PVC sheath 铜芯铝塑复合带总屏蔽钢带铠装聚氯乙烯护套
DJVP2VP2/22	DJYP2VP2/22	DJYJP2VP2/22	DJF46P2VP2/22	copper core Al-plastic tape overall shield steel tape armouring PVC sheath 铜芯铜带对绞屏蔽铜带总屏蔽钢带铠装聚氯乙烯护套
DJVP3VP3/22	DJYP3VP3/22	DJYJP3VP3/22	DJF46P3VP3/22	copper core copper tape twisted and overall shielded steel tape armouring PVC sheath 铜芯铝塑复合带对绞屏蔽铝塑复合带总屏蔽钢带铠装聚氯乙烯护套

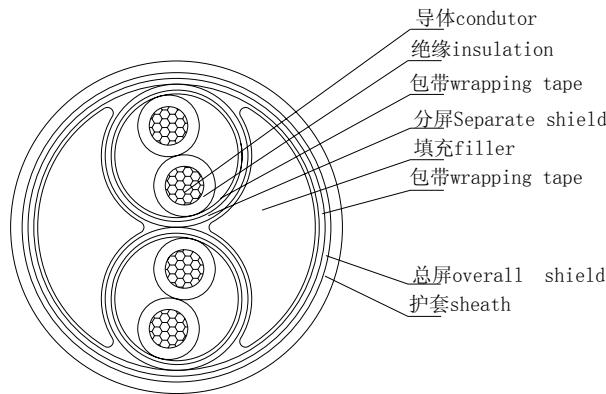
注：本产品含阻燃型，其性能应符合 GB/T18380 规定的阻燃性能试验要求。Note: this product include the flame retardant type, its performance shall comply requirements of the flame retardant performance in GB/T18380.

产品规格 Specifications

产品特征 Characteristics	对数 Number of pairs	标称截面 Nominal cross section mm ²
无铠装电缆 Non-armored	2~48	0.75 1.0
有铠装电缆 Armored	4~48	1.5

注:推荐的对数系列为:2、3、4、5、7、8、10、12、14、16、19、24、27、30、44、48]
Note: recommended number of pair

产品结构示意图 Structural figure



产品特点 Characteristics

- 1、具有良好的信号传输性能。Good transfer ability of signals.
- 2、屏蔽型电缆具有抗雷击、抗电磁干扰性能。并具有良好的防芯与芯之间的干扰性能。Cable with shield is lightning-proof and electromagnetism resistant. It is also has the anti-jamming capacity between the conductors.
- 3、屏蔽型电缆敷设时，应将屏蔽层两端可靠接地，并不使屏蔽层断裂和松散，否则会大大的降低屏蔽层效果。You should connect the ends of the shield to the earth when you are installing the cable with shield. Make sure that do not break and loosen the shield, otherwise the capacity of the shield will reduce very heavily.
- 4、在低频、高频、超高频及变频等场合下，仍具有精确的抗干扰性能。It can maintain its anti-jamming capacity in various of frequency locations, even when the frequency is changing.

特种热电偶用补偿导线与补偿电缆

Special Thermocouple Used Compensation Lead Wire and Cable

用途 Application

适用于测量设备与仪表之间的连接。以补偿它们与热电偶连接处的温度变化所产生的误差。广泛用与矿山、冶金、热电厂等一些场合的测量装置中。

It is suitable for connecting the measured equipment and the instruments. It is used to compensate the error occurs at the connecting between these devices and the thermocouples because of the change of temperature. It is widely used in the measuring devices in the mine, metallurgy and thermoelectricity factories.

产品型号及导体成分 Type and the Component of the conductor

组合使用热电偶 品种型号 type of composite use of thermocouple	补偿导线品种型 号 type of Compensation lead wire	按使用及容许 误差的分类 classification according to the use and allowance error	组成材料 compositive materials		执行标准 standard
			正极 anode	负极 cathode	
B	BX-G	一般用普通级 common using and common degree	铜 copper	铜 copper	Q/321023K LA24
R	RX-G RX-H	一般用普通级 common using and common degree 耐热用普通级 heat resistant using and common degree	铜 copper	以铜及镍为主 的合金 alloy mainly with copper and nickel	
S	SX-G SX-H	一般用普通级 common using and common degree 耐热用普通级 heat resistant using and common degree			
K	KX-G KX-GS KX-H KX-HS	一般用普通级 common using and common degree 一般用精密级 common using and precise degree 耐热用普通级 heat resistant using and common degree 耐热用精密 级 heat resistant using and precise degree	以镍及铬为主 的合金 alloy mainly with nickel and chrome	以镍为主的合 金 alloy mainly with nickel	
E	EX-G EX-H	一般用普通级 common using and common degree 耐热用普通 级 heat resistant using and common degree	以镍及铬为主 的合金 alloy mainly with nickel and chrome	以铜及镍为主 的合金 alloy mainly with copper and nickel	
J	JX-G JX-H	一般用普通级 common using and common degree 耐热用普通级 heat resistant using and common degree	铁 Fe	以铜及镍为主 的合金 alloy mainly with copper and nickel	

T	TX-G	一般用普通级 common using and common degree	铜 Cu	以铜及镍为主的合金 alloy mainly with copper and nickel
	TX-GS	一般用精密级 common using precise degree		
	TX-H	耐热用普通级 heat resistant using and common degree		
	TX-HS	耐热用精密级 heat resistant using and precise degree		

注：1) 一般用代号 G 使用温度为-20℃~90℃，耐热用代号为 H 使用范围为 0℃~150℃。

Note: 1) usually we use G refers to the using temperature between -20℃ and 90℃, use H refers to the using scope of heat resistance between 0℃ and 150℃.

2) 精密级代号为 S，其补偿导线容许是普通级的 1/2 左右，适用于特别精密度的温度测量。

2) the code name of exact degree is S. its allowance of compensation conductor is a half of the current degree's. It is suitable for measuring special exact temperature.

规格 Specification

标称截面 Nominal cross-section mm ²	线芯结构 单线根数/单线直径 mm Structure of core The number of single wire / The diameter of single wire	对数 Number of pairs
0.5	20/0.18	1~30
0.75	30/0.18 or 7/0.37	1~30
1.25	7/0.45	1~30
1.3	4/0.65 or 1/1.3	1~30
2.0	7/0.6 or 1/1.6	1~30
2.3	7/0.65	1~30

注：对数系数为：1、2、4、5、7、10、12、15、20、24、25、30

Note: The logarithm series recommended are 1,2,4,5,7,10,12,15,20,24,25,30.

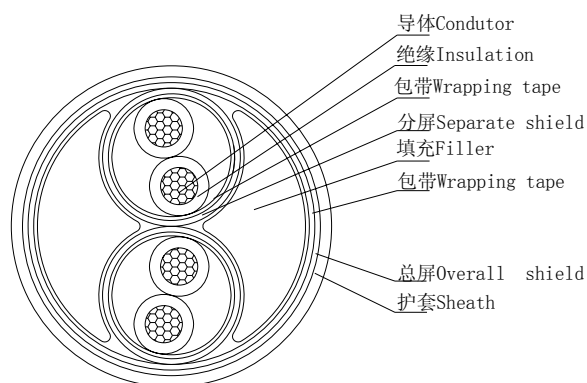
补偿导线与补偿电缆规格分类和等级标志 Classify of the specification and label of degree of the compensation lead wire and cable

类别 Type	标志 Label	允差等级及标志 Allowance error degree and label	
		普通级 Common degree	精密级 Precise degree
一般用 Common use	G	B (or be omitted)	A or S
耐热用 Heat resistant use	H		

补偿导线与补偿电缆色别标志 Color label of the compensation lead wire and cable

绝缘颜色 Color of insulation								护套颜色 Color of sheath			
型号 Type	RC SC	KC	KX	EX	JX	TX	NC NX	一般用 Common use		耐热用 Heat resistant use	
正级 Anode	红 red	红	红	红	红	红	红	普通级 Common	精密级 Precision	普通级 Common	精密级 Precision
负级 Cathode	绿 green	蓝 blue	黑 black	棕 palm	紫 purple	白 white	灰 ash	黑 black	灰 ash	黑 black	黄 yellow

产品结构示意图 Schematic Figuration of Structure



产品特点 Product Feature

1、产品具有结构紧凑，外径小等特点

The product has a well-knit structure and a small outer diameter.

2、屏蔽型具有防电磁干扰、防雷击性能

The screen type cable has the performance of resistance of electromagnetism interference and lightning strike.

3、用于测量装置的产品测温值准确、误差小

It is used for measuring device and the measured temperature is exact and the error is small.

变频器用控制电缆

Frequency Converter Used Control Cable

用途 Application

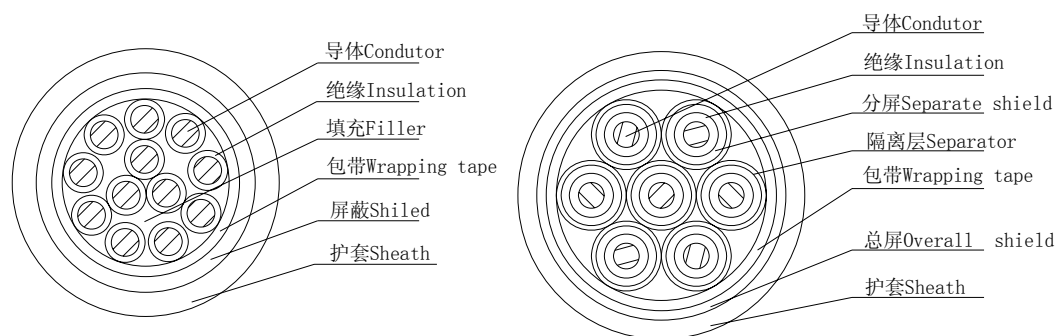
主要用于变频器控制回路中微弱电压、电流信号的控制。

It is suitable for control weak voltage current signal in the frequency converter control loop.

产品型号、规格及名称 Type, Specification and Designation

型号 Type	名称 Designation	芯数 Number of core	标称截面 Nominal cross-section mm	执行标准 Standard
BPKXGGP2	硅橡胶绝缘铜带屏蔽硅橡胶护套变频器用控制电缆 Si-rubber insulation and sheath flexible copper tape screen control cable for frequency converter	1~20	0.75~2.5	Q/321023KLA120
BPKXGGP1P2	硅橡胶绝缘铜丝编织铜带绕包双屏蔽硅橡胶护套变频器用控制电缆 Si-rubber insulation and copper wires braid and copper strip wrapping double screen Si-rubber sheath control cable for frequency converter			
BPKXGP2GP2	硅橡胶绝缘铜带分屏蔽铜带总屏蔽硅橡胶护套变频器用控制电缆 Si-rubber insulation and copper strip separate and overall screen Si-rubber sheath control cable for frequency converter			
BPKXGPGP1P2	硅橡胶绝缘铜丝编织铜带绕包双分屏蔽铜丝编织铜带绕包双总屏蔽硅橡胶护套变频器用控制电缆 Si-rubber insulation and copper wires braid copper strip wrapping double separate and overall shielding Si-rubber sheath control cable for frequency converter			

产品结构示意图 Schematic Figuration of Structure



产品特点 Product Feature

1、具有良好的耐高温性能，长期允许最高工作温度达 180℃。

It has good high temperature resisttermite performance, max long term allowable working temperature is 180℃.

2、具有优异的耐低温性能，最低允许工作温度为-60℃。

It has good low temperature resisttermite performance, min allowable working temperature is -60℃.

3、具有良好的双屏蔽效果，可防止强电压对弱电压电流信号的干扰。

It has good screen effect, preventing from strong current disturbing weak current.

4、合理的敷设间距与有效的屏蔽接地，可以减少静电耦合干扰。

Reasonable laying space and effective screen earthing, which can reduce the static electricity coupling interference.

5、具有优良的耐老化性和耐候性。

It has good old resisttermite and climate resisttermite.

6、具有极好的柔软性和弹性。

It has good flexibility and elasticity.

聚乙烯绝缘导引电缆

Polyethylene-Insulated Guiding Cable

用 途 Application

聚乙烯绝缘导引电缆适用于纵差保护和配电装置中的各种仪器的信号传输，以及电话通讯、载波通信、高频通信保护等用途。

PE insulated guiding cable is suitable for the signal transmission in the longitudinal distance protection and distribution equipments, and the telephone communication, wave-carrier communication and high frequency communication protection.

产品型号及名称 Type and Designation

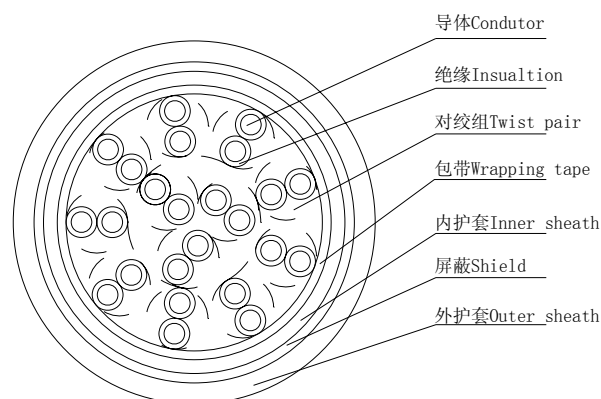
型号 Type	产 品 名 称 Designation	执行标准 Standard
DYVP	铜芯聚乙烯绝缘铜丝编织屏蔽聚氯乙烯护套导引电缆 Copper core PE insulated copper wires braiding screened PVC sheathed guiding cable	Q/321023KLA14
DYYP	铜芯聚乙烯绝缘铜丝编织屏蔽聚乙烯护套导引电缆 Copper core PE insulated copper wires braiding screened PE sheathed guiding cable	
DYVP3	铜芯聚乙烯绝缘铝塑复合带屏蔽聚氯乙烯护套导引电缆 Copper core PE insulated Al-plastic composite tape screened PVC sheathed guiding cable	
DYYP3	铜芯聚乙烯绝缘铝塑复合带屏蔽聚乙烯护套导引电缆 Copper core PE insulated Al-plastic composite tape screened PE guiding cable	
DYVP4	铜芯聚乙烯绝缘铝线屏蔽聚氯乙烯护套导引电缆 Copper core PE insulated Al wire screened PVC sheathed guiding cable	
DYYP4	铜芯聚乙烯绝缘铝线屏蔽聚乙烯护套导引电缆 Copper core PE insulated Al wire screened PE sheathed guiding cable	
DY32	铜芯聚乙烯绝缘细钢丝铠装聚氯乙烯护套导引电缆 Copper core PE insulated fine steel wire armoured PVC sheathed guiding cable	
DY33	铜芯聚乙烯绝缘细钢丝铠装聚乙烯护套导引电缆 Copper core PE insulated fine steel wire armoured PE sheathed guiding cable	

规格 Specification

型号 Type	对数 Number of pairs	标称截面 Nominal cross-section mm ²
DYVP、DYYP DYVP4、DYYP4 DYVP3、DYYP3	4~30	0.9 1.38
DY32、DY33	7~30	

注：推荐的对数系列为：4、7、10、12、14、16、19、24、27、30。
Note: The logarithm series recommended are 4,7,10,12,14,16,19,24,27,30.

产品结构示意图 Schematic Figuration of Structure



产品特点 Product Feature

1、先进的工艺,保证产品具有稳定的信号传输,减少设备误动作的发生。

Advanced techniques ensure that the product has steady signal transmission and reduce the rate of occurrence of doing wrong operation on the equipment.

2、可与电力电缆同沟敷设,主要采用直埋方式。

It can be laid together with the power cable in the same channel. We usually adopt the manner of burying directly.

3、采用屏蔽结构,使产品具有抗雷击功能。

The structure of screen makes the product have the resistance of lightning strike.

4、产品可用于大容量、短距离高压输电线的纵差保护和信号传输。

This product is suitable for the longitudinal distance protection and signal transmission which has a large capacity and short distance high voltage transmit electricity wires.

通用橡套软电缆

General Rubber Covering Flexible Cable

用途 Application

本产品适用于额定电压 U_0/U 为 450/750V 及以下动力装置，各种家用电器、电动工具和各种移动式电气设备。It is suitable for use in the drive device with rated voltage up to 450/750V, different kinds of home appliance, electrical tools and other moving electrical equipment.

产品型号及名称 Type and designation

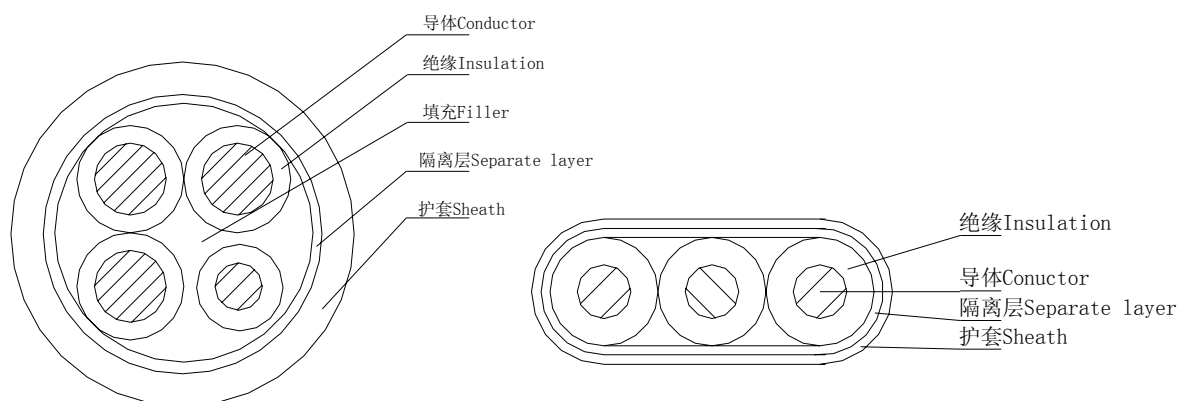
型号 Type	名称 Designation	执行标准 Standard
245IEC51 (RX)	编织软线 Braided flexible wire	IEC 60245 GB5013 JB/T8735
245IEC53 (YZ)	普通强度橡套软线 General strength rubber flexible wire	
245IEC57 (YZW)	普通氯丁或其它相当的合成弹性体橡套软线 General chloroprene or other similar synthetic elastomer rubber flexible wire	
245IEC66 (YCW)	重型氯丁或其它相当的合成弹性体橡套软线 Heavy duty chloroprene or other similar synthetic elastomer rubber flexible wire	
245IEC58 (YSF) 245IEC58f (YSFB)	装饰回路用氯丁或其它相当的合成弹性体橡套软线 Decoration loop used chloroprene or other similar synthetic elastomer rubber flexible wire	
245IEC81 (YH)	高强度橡套电焊机电缆 High strength rubber welding machine used cable	
245IEC82 (YHF)	氯丁或其它相当的合成弹性体橡套电焊机电缆 Chloroprene or other similar synthetic elastomer rubber welding machine used cable	
YQ、YQW	轻型橡套软电缆 Light duty rubber flexible cable	
YZ、YZW	中型橡套软电缆 Medium duty rubber flexible cable	
YZB、YZWB	中型橡套扁型软电缆 Medium duty rubber flat flexible cable	
YC、YCW	重型橡套软电缆 Heavy duty rubber flexible cable	
RX	橡皮绝缘编织软线 Rubber insulated braiding flexible wire	
RXS	橡皮绝缘编织双绞软线 Rubber insulated braiding twin twisted flexible wire	
RXH	橡皮绝缘橡皮保护层总编织圆形软电缆 Rubber insulated covering layer overall braiding round flexible cable	

规格 Specification

型号 Type	额定电压 Rated voltage V	芯数 Number of core	标称截面 Nominal cross-section mm^2
245IEC51 (RX)	300/300	2、3	0.75~1.5
245IEC53 (YZ)	300/500	2、3、4、5	0.75~2.5
245IEC57 (YZW)	300/500	2、3、4、5	0.75~2.5
245IEC66 (YCW)	450/750	1、2、3、4、5	1.5~2.5
245IEC58 (YSF)	300/500	1、2	0.75~1.5
245IEC58f (YSFB)	300/500	1、2	0.75~1.5
245IEC81 (YH)	—	1	16~95
245IEC82 (YHF)	—	1	16~95
YQ、YQW	300/300	2、3	0.3~0.5
YZ、YZW	300/500	2、3、4、5	4~6
		4 (三大一小)	1.5~6
		6	0.75~6

YZB、YZWB	300/500	2、3、4、5、6	0.75~6
YC	450/750	1	1.5~400
		2	1.5~95
		3、4	1.5~150
		5	1.5~25
		4 (三大一小)	2.5~150
YCW	450/750	2	35~95
		3	120~150
		4 (三大一小)	2.5~150
RX	300/300	2、3	0.3~4
RXS	300/300	1	0.3~4
RXH	300/300	2、3	0.3~4

产品结构示意图 Structural figure



主要技术性能 Main technical performance

1、导体应符合 GB/T 3956 第 5 种导体的规定。Conductor shall comply with regulation for the category 5 conductor in GB/T 3956;

2、机械强度：能经受正常使用时所引起的弯曲和其他机械应力。Mechanical strength: cable should bear the bend and other strain caused when normal use;

3、曲挠试验：在试验期间经 15000 次往复运动，即 30000 次单程运动后不发生电流断路，也不发生导体之间的短路。Yielding strength test: Cable shall not cause circuit breakdown, and cause short circuit between the conductor after tested by 15000 times return movement i.e. 30000 times of single route movement.

产品特点 Feature

有良好的接地性能和优越的弯曲性能，高的电绝缘性能。Cable has good earthing and bending performance and high electric insulating performance.

铜芯铜护套矿物绝缘电缆

Copper Conductor and Sheath Mineral Insulated Cable

用途 Application

适用于防爆系统、高温环境、公共建筑、地下设施、运输和交通枢纽等重要场所。It is fit for use in the important occasion, such as explosion resistant, high temperature surrounding, public building, underground facility, transportation and traffic network.

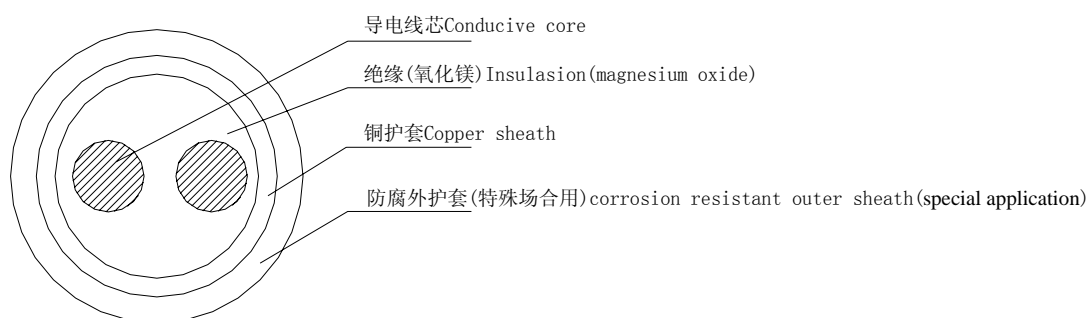
型号及名称 Type and Designation

型号 Type	名称 Designation	执行标准 Standard
BTTQ	轻载铜芯铜护套氧化镁绝缘防火电缆 Light duty copper conductor and sheath MgO insulated fire proof cable	IEC60702-1 GB13033.2 Q/321023KLA36
BTTVQ	轻载铜芯铜护套聚氯乙烯外套氧化镁绝缘防火电缆 Light duty copper conductor and sheath PVC covering MgO insulated fire proof cable	
BTTZ	重载铜芯铜护套氧化镁绝缘防火电缆 Heavy duty copper conductor and sheath MgO insulated fire proof cable	
BTTVZ	重载铜芯铜护套聚氯乙烯外套氧化镁绝缘防火电缆 Heavy duty copper conductor and sheath PVC covering MgO insulated fire proof cable	

规格 Specification

型号 Type	额定电压 Rated voltage V	芯数 Number of core	标称截面 Nominal cross-section mm ²
BTTQ BTTVQ	500	1、2	1~4
		3、4、7	1~2.5
BTTZ BTTVZ	750	1	1.5~400
		2、3、4	1.5~25
		7	1.5~2.5
		5、10、12、19	1.5

产品结构示意图 Structure figure



产品特点 Main characteristics of the cable

- 1、防火、防爆、防水性能优越 It has good fire proof, anti-explosion and water proof performance;
- 2、具有无烟、无卤、无毒性能 It has LSOH and non-toxicity characteristic;
- 3、耐高温、耐腐蚀性强 It has strong high temperature and corrosion resistant capability;
- 4、耐辐射、防电磁干扰 It is radiation resistant, and electro-magnetic resistant;
- 5、载流量大、过载能力强 It has a big current-carrying capacity and strong over-loading capability;

6、具有良好的接地性能 It has good earthing performance.

技术参数 Technical parameter:

型号 Type	导体芯数和 标称截面 number of core and nominal cross-section	电缆外径 outer diameter		额定载流量 rated current-carrying capacity		近似重量 approximate weight	
		裸电缆 Bare cable	防腐外套电缆 Cable with anti-corrosion covering	裸电缆 bare cable	防腐外套电缆 Cable with anti-corrosion covering	裸电缆 bare cable	防腐外套电缆 Cable with anti-corrosion covering
	mm ²	mm	mm	A	A	kg/km	kg/km
轻载 电缆 light duty	2×1.0	5.1	6.7	17	20	104	125
	2×1.5	5.7	7.3	22	24	130	153
	2×2.5	6.6	8.2	30	33	179	205
	2×4.0	7.7	9.7	38	44	248	282
	3×1.0	5.8	7.4	15	17	135	159
	3×1.5	6.4	8.0	19	21	168	193
	3×2.5	7.3	10.1	25	28	224	258
	4×1.0	6.3	7.9	15	16	161	187
	4×1.5	7.0	9.0	19	21	203	230
	4×2.5	8.1	10.1	25	28	278	314
	7×1.0	7.6	9.6	10	11	172	207
	7×1.5	8.4	10.4	13	14	294	331
	7×2.5	9.7	11.7	17	19	413	455
	重载 电缆 heavy duty	1×1.5	4.9	6.5	30	33	88
1×2.5		5.3	6.9	39	43	114	135
1×4.0		5.9	7.5	51	56	140	162
1×6.0		6.4	8.0	63	69	172	198
1×10.0		7.3	9.3	81	90	235	258
1×16.0		8.3	10.3	107	119	319	356
1×25.0		9.6	11.6	139	154	451	439
1×35.0		10.7	12.7	168	187	573	619
1×50.0		12.1	14.1	207	230	764	816
1×70.0		13.7	15.7	251	279	1018	1076
1×95.0		15.4	17.8	300	333	1298	1386
1×120.0		16.8	19.2	344	382	1576	1674
1×150.0		18.4	20.8	388	431	1890	1997
1×185.0		20.4	23.2	434	482	2323	2468
1×240.0		23.3	26.1	483	537	3031	3197
1×300.0		26.2	—	795	883	3832	—
1×400.0		30.6	—	948	1053	5228	—
2×1.5		7.9	9.9	24	26	212	243
2×2.5		8.7	10.7	32	36	260	298
2×4.0		9.8	11.8	42	47	342	385
2×6.0		10.9	12.9	54	60	427	474
2×10.0		12.7	14.7	74	82	582	636
2×16.0		14.7	16.7	98	109	845	907
2×25.0		17.1	19.5	128	142	1138	1238
3×1.5		8.3	10.3	20	22	242	274
3×2.5		9.3	11.3	27	30	311	352
3×4.0		10.4	12.4	36	40	399	444
3×6.0		11.5	13.5	46	51	507	556
3×10.0		13.6	15.6	62	69	728	786
3×16.0		15.6	18.0	83	92	980	1069
3×25.0		18.2	20.6	108	120	1370	1476
4×1.5		9.1	11.1	21	23	298	333
4×2.5		10.1	12.1	27	30	367	411
4×4.0		11.4	13.4	36	40	472	521
4×6.0		12.7	14.7	46	51	623	677
4×10.0		14.8	16.8	61	68	861	923
4×16.0		17.3	19.7	80	89	1275	1376
4×25.0		20.1	22.9	104	116	1766	1909
7×1.5		10.8	12.8	14	16	409	455
7×2.5		12.1	14.1	19	21	562	614

辐照交联聚烯烃绝缘固定敷设用电线 (电缆)

Radiated cross-linking Polyolefin Insulated Fixed Lay Wire (Cable)

用途 Application

主要适用于额定电压 450/750V 及以下, 用于固定敷设场所, 长期工作温度为 90°C、105°C、125°C 或 150°C 的阻燃或非阻燃电线电缆。

It is mainly suitable to use in the permanent installation fields where require long-term operating temperature of 90°C、105°C、125°C or 150°C and require flame-retardant or no flame-retardant. Its rated voltage is up to 450/750V.

产品型号名称 Type and name

型 号 Type		名 称 Name	执行标准 Standard
铜 芯 Copper	铝 芯 Aluminum		
BYJ (F) -××	BLYJ (F) -××	铜(铝)芯辐照交联聚烯烃绝缘固定敷设用电线 Copper (aluminum) core radiation cross-linked polyolefin insulated permanent-installation wire	JB/T10491 Q/321023KLA55.4
ZR-BYJ (F) -××	ZR-BLYJ (F) -××	铜(铝)芯阻燃辐照交联聚烯烃绝缘固定敷设用电线 Copper (aluminum) core flame-retardant radiation cross-linked polyolefin insulated permanent-installation wire	
ZN-BYJ (F) -××	—	铜芯阻燃辐照交联聚烯烃绝缘固定敷设用耐火电线 Copper core flame-retardant radiation cross-linked polyolefin insulated permanent-installation fire resistant wire	
WDZ-BYJ (F) -××	WDZ-BLYJ (F) -××	铜(铝)芯无卤低烟阻燃辐照交联聚烯烃绝缘固定敷设用电线 Copper (aluminum) core halogen free low smoke flame-retardant radiation cross-linked polyolefin insulated permanent-installation wire	
WDZN-BYJ (F) -××	—	铜芯无卤低烟阻燃辐照交联聚烯烃绝缘固定敷设用耐火电线 Copper core halogen free low smoke flame-retardant radiation cross-linked polyolefin insulated permanent-installation fire resistant wire	
BYJ (F) V-××	BLYJ (F) V-××	铜(铝)芯辐照交联聚烯烃绝缘聚氯乙烯护套固定敷设用电线(电缆) Copper (aluminum) core radiation cross-linked polyolefin insulated PVC jacketed permanent-installation wire(cable)	
ZR-BYJ (F) V-××	ZR-BLYJ (F) V-××	铜(铝)芯辐照交联聚烯烃绝缘阻燃聚氯乙烯护套固定敷设用电线(电缆) Copper (aluminum) core radiation cross-linked polyolefin insulated flame retardant PVC jacketed permanent-installation wire(cable)	
ZN-BYJ (F) V-××	—	铜芯辐照交联聚烯烃绝缘阻燃聚氯乙烯护套固定敷设用耐火电缆(电线) Copper core radiation cross-linked polyolefin insulated flame retardant PVC jacketed permanent-installation fire resistant wire(cable)	

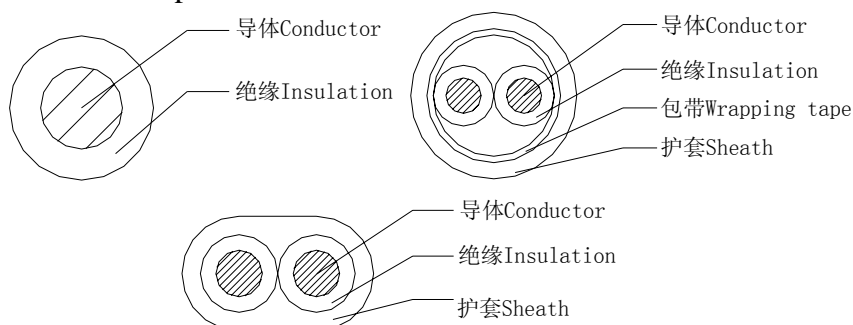
WDZ-BYJ (F) Y-××	WDZ-BYJL (F) Y-××	铜(铝)芯辐照交联聚烯烃绝缘无卤低烟阻燃聚烯烃护套固定敷设用电缆(电线) Copper (aluminum) core radiation cross-linked polyolefin insulated and jacketed halogen free low smoke flame-retardant permanent-installation wire(cable)
WDZN-BYJ (F) Y-××	—	铜芯辐照交联聚烯烃绝缘无卤低烟阻燃聚烯烃护套固定敷设用耐火电缆(电线) Copper core radiation cross-linked polyolefin insulated and jacketed halogen free low smoke flame-retardant permanent-installation fire resistant wire(cable)
BYJ (F) VB-××	BLYJ (F) VB-××	铜(铝)芯辐照交联聚烯烃绝缘聚氯乙烯护套固定敷设用扁型电缆(电线) Copper (aluminum) core radiation cross-linked polyolefin insulated PVC jacketed permanent-installation flat wire(cable)
ZR-BYJ (F) VB-××	ZR-BLYJ (F) VB-××	铜(铝)芯辐照交联聚烯烃绝缘阻燃聚氯乙烯护套固定敷设用扁型电缆(电线) Copper (aluminum) core radiation cross-linked polyolefin insulated flame-retardant PVC jacketed permanent-installation flat wire(cable)
ZN-BYJ (F) VB-××	—	铜芯辐照交联聚烯烃绝缘阻燃聚氯乙烯护套固定敷设用扁型耐火电缆(电线) copper core radiation cross-linked polyolefin insulated flame-retardant fire resistant PVC jacketed permanent-installation flat wire(cable)
WDZ-BYJ (F) YB-××	WDZ-BLYJ (F) YB-××	铜(铝)芯辐照交联聚烯烃绝缘无卤低烟阻燃聚烯烃护套固定敷设用扁型电缆(电线) Copper (aluminum) core radiation cross-linked polyolefin insulated and jacketed halogen free low smoke flame-retardant permanent-installation flat wire(cable)
WDZN-BYJ (F) YB-××	—	铜(铝)芯辐照交联聚烯烃绝缘无卤低烟阻燃聚烯烃护套固定敷设用扁型耐火电缆(电线) Copper (aluminum) core radiation cross-linked polyolefin insulated and jacketed halogen free low smoke flame-retardant fire resistant permanent-installation flat wire(cable)
WDZN-BYJ (F) Y-××	—	铜芯辐照交联聚烯烃绝缘无卤低烟阻燃聚烯烃护套固定敷设用耐火电缆(电线) Copper core radiation cross-linked polyolefin insulated and jacketed halogen free low smoke flame-retardant fire resistant permanent-installation wire(cable)

注 Note: 1) -××表示电缆工作温度为90℃、105℃、125℃、150℃, 工作温度为90℃可以省略。-×× represents that the operating temperatures are 90℃、105℃、125℃、150℃, when the operating temperature is 90℃, it could be omitted.
2) 对于阻燃类电缆, 可根据不同要求, 达到各级别阻燃性能。In relation to the flame-retardant type cables, they can meet various classes of the flame-retardant properties according to the different requirements.

产品规格 Specification

产品型号 Type	额定电压 Rated voltage V	芯数 Core	标称截面 Nominal cross-section mm ²
BYJ (F) -×××, ZR-BYJ (F) -×××, ZN-BYJ (F) -×××, WDZ-BYJ (F) -×××, WDZN-BYJ (F) -×××	300/500 450/750	1	0.5~1.0 1.5~240
BLYJ (F) -×××, ZR-BLYJ-×××, WDZ- BLYJ (F) -×××	450/750	1	2.5~240
BYJ (F) V-×××, ZR-BYJV-×××, ZN-BYJV-×××, WDZ-BYJ (F) Y-×××, WDZN-BYJ (F) Y-×××	300/500	1 2、3、4、5	0.75~10 1.5~35
BLYJ (F) V-×××, ZR-BLYJV-×××, WDZ-BLYJ (F) Y-×××	300/500	1	2.5~10
BYJ (F) VB-×××, ZR-BYJ (F) VB-×××, ZN-BYJ (F) VB-×××, WDZ-BYJ (F) YB-×××, WDZN-BYJ (F) YB-×××	300/500	2、3	0.75~10
BLYJ (F) VB-×××, ZR-BLYJ (F) VB-×××, WDZ-BLYJ (F) YB-×××	300/500	2、3	2.5~10

产品结构示意图 Structural representation



技术参数 Technical requirements

- 1、阻燃型成品电线或电缆通过 GB/T18380.3 中规定成束燃烧试验。Finished wire or cable of the flame-retardant type shall pass the bunched burning test stipulated in GB/T18380.3.
- 2、耐火型成品电线或电缆通过符合 GB/T19216.21 中规定的耐火性能试验。Finished wire or cable of the fire resistant type shall pass the fire-resistant property test stipulated in GB/T19216.21.
- 3、低烟无卤型电线或电缆通过 GB/T17651.2 规定的烟密度试验，其透光率应不小于 60%。Wire or cable of the halogen free low smoke type shall pass the smoke density test stipulated in GB/T17651.2 while its light penetration percentage shall not be less than 60%.
- 4、低烟无卤型电线或电缆通过 GB/T17650.2 规定的卤酸气体含量的测定，其 pH 值应不小于 4.3，电导率不大于 10 μ s/mm。Wire or cable of low-smoke halogen-free type shall pass the measurement for its halogen acid gas content stipulated in GB/T17650.2; its pH value shall not be less than 4.3 while its electricity conductivity shall not be more than 10 μ s/mm.
- 5、非阻燃型聚氯乙烯护套电缆通过 GB/T18380.1 中单根垂直燃烧试验。Non flame-retardant PVC jacketed cable shall pass the single vertical burning test stipulated in GB/T18380.1.

产品特点 Characteristics

- 1、电气、绝缘性能稳定；The products have stable electrical property and insulated property.
- 2、耐高温等级高，可生产 90℃、105℃、125℃ 和 150℃，载流量大，过载保护性能强；they have high levels of temperature resistance for 90℃、105℃、125℃ or 150℃; for its large quantity of loading current, it has a strong performance of over-loading protection.
- 3、具有无卤、低烟、低毒环保等特性；They also have characteristics of halogen free, low smoke and low toxicity for environment protection.
- 4、电缆燃烧烟密度小；When burning the cable, it has low smoke density.
- 5、具有优异的阻燃性能，可通过单根垂直燃烧试验和成束燃烧试验。They have excellent flame-retardant property; they can pass single vertical burning test and bunched burning test.

市内通信电缆 City Communication Cable

用途 Application

本产品主要用于传输音频、150kHz 及以下的模拟信号和 2048kbit/s 及以下的数字信号。在一定条件下可用于传输 2048kbit/s 以上的数字信号。适用于城市、近郊及厂矿局部区域的电信线路中。
It is mainly used to transmit audio frequency signals, analog signals up to 150kHz and the digital signals up to 2048kbit/s; and under certain conditions, it also can be used to transmit the digital signals above 2048kbit/s. it is suitable to use in the telecom circuit of city, near suburb and local areas.

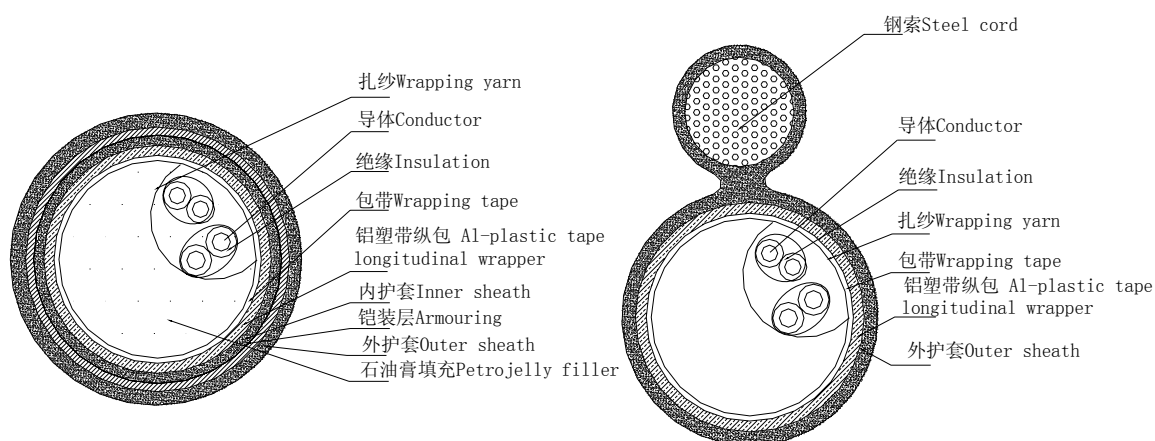
产品型号及名称 Type and designation

型号 Type	名称 Designation	执行标准 Standard
HYA	铜芯实心聚烯烃绝缘涂塑铝带粘接屏蔽聚烯烃护套市内通信电缆 Copper core solid polyolefin insulated plastic coating aluminum tape adhibit shielding polyolefin jacketed city communication cable	YD/T 322
HYP A	铜芯泡沫皮聚烯烃绝缘涂塑铝带粘接屏蔽聚烯烃护套市内通信电缆 Copper foam skin polyolefin insulated plastic coating aluminum tape adhibit shielding polyolefin jacketed city communication cable	
HYAT	铜芯实心聚烯烃绝缘油膏填充涂塑铝带粘接屏蔽聚烯烃护套市内通信电缆 Copper core solid polyolefin insulated grease filled plastic coating aluminum tape adhibit shielding polyolefin jacketed city communication cable	
HYPAT	铜芯泡沫皮聚烯烃绝缘油膏填充涂塑铝带粘接屏蔽聚烯烃护套市内通信电缆 Copper foam skin polyolefin insulated grease plastic coating aluminum tape adhibit shielding polyolefin jacketed city communication cable	
HYAC	铜芯实心聚烯烃绝缘油膏填充涂塑铝带粘接屏蔽聚烯烃护套自承式市内通信电缆 Copper core solid polyolefin insulated grease filled plastic coating aluminum tape adhibit shielding polyolefin jacketed self-supporting city communication cable	
HYA23	铜芯实心聚烯烃绝缘涂塑铝带粘接屏蔽聚烯烃护套双层钢带绕包铠装聚烯烃外被层市内通信电缆 Copper core solid polyolefin insulated plastic coating aluminum tape adhibit shielding polyolefin jacketed and serving double-tape armored city communication cable	
HYAT23	铜芯实心聚烯烃绝缘油膏填充涂塑铝带粘接屏蔽聚烯烃护套双层钢带绕包铠装聚烯烃外被层市内通信电缆 Copper core solid polyolefin insulated grease filled plastic coating aluminum tape adhibit shielding polyolefin jacketed and serving double-tape armored city communication cable	
HYA53	铜芯实心聚烯烃绝缘涂塑铝带粘接屏蔽聚烯烃护套皱纹钢带纵包铠装聚烯烃外被层市内通信电缆 Copper core solid polyolefin insulated plastic coating aluminum tape adhibit shielding polyolefin jacketed and serving corrugated steel-tape longitudinal covered armored city communication cable	
HYAT53	铜芯实心聚烯烃绝缘油膏填充涂塑铝带粘接屏蔽聚烯烃护套皱纹钢带纵包铠装聚烯烃外被层市内通信电缆 Copper core solid polyolefin insulated grease filled plastic coating aluminum tape adhibit shielding polyolefin jacketed and serving corrugated steel-tape longitudinal covered armored city communication cable	

规格 Specification

型号 Type	导体直径 Conductor diameter mm	对数 Pair
HYA、HYPA、HYAC HYA23、HYA53	0.40	10~2400
	0.50	10~1600
	0.60	10~1000
	0.80	10~600
HYAT、HYAT23 HYPAT、HYAT53	0.40	10~2000
	0.50	10~1000
	0.60	10~800
	0.80	10~400

产品结构示意图 Structural representation



技术参数 Technical parameter

序号 No.	项目 content	单位 unit	指标 index	长度换算关系 conversion for length
1	单根导体直流电阻 20℃ DC resistance single conductor	Ω/km	导线标称直径 nominal diameter for the conductor (mm) 0.40 0.50 0.60 0.80 148.0 95.0 65.8 36.6	实测值/L Actual test value/L
2	线对直流电阻不平衡 20℃ DC resistance unbalance for pair	%	导线标称直径 mm 0.40 0.50 0.60 0.80 平均值不大于 1.5 1.5 1.5 1.5 average value ≤ 最大值 max. value 5.0 5.0 5.0 4.0	—
3	每根绝缘导线与其余接地及屏蔽的绝缘导线间的绝缘电阻 20℃ insulation resistance between each insulated conductor and the other grounding and shielding conductor DC 100V~500V	MΩ·km	非填充式 non filled 填充式 filled 最小值 min. value 10×10 ³ 3×10 ³	Actual test value 实测值×L Actual test value×L
4	绝缘电气强度 insulated electrical strength DC 施加电压的时间 time for voltage force 导线间 conductor to conductor 导线与屏蔽间 conductor to shield	kV	实心绝缘电缆 solid insulated cable 泡沫皮绝缘电缆 foam skin insulated cable 3s 1min 3s 1min 2.0 1.0 1.5 0.75 6.0 3.0 6.0 3.0	—
5	工作电容 operating	nF/km	电缆标称对数 10 >10	实测值/L

	capacitance 0.8kHz 或 1 kHz		nominal pair no. 最大值 max. Value 58.0 57.0 平均值 average value 52.0±4.0 52.0±2.0	Actual test value/L
6	电容不平衡 capacitance unbalance 0.8kHz 或 1 kHz 线对与线对间电容不平衡 capacitance unbalance between pair and pair 线对与地间电容不平衡 capacitance unbalance between pair and ground	pF/km	电缆标称对数 10 >10 nominal pair 最大值 max. 250 (200) ¹⁾ 250 (200) ¹⁾ 最大值 min. 2630 2630 平均值不大于 average value ≤ — 570 (490) ¹⁾	实测值/[0.5(L+√L)] Actual test value/[0.5(L+√L)] 实测值/L Actual test value/L
7	固有衰减 natural attenuation 20℃ 10 对以上电缆 cable with more than 10 pairs: 150 kHz 1024 kHz 150 kHz 1024 kHz 150 kHz 1024 kHz 150 kHz 1024 kHz 10 对电缆 10 pairs	dB/km	导线标称直径 nominal diameter mm 0.40 0.50 0.60 0.80 实心聚烯烃绝缘电缆 solid polyolefin insulated cable 平均值不大于 average value ≤ 12.1 9.0 7.2 5.7 平均值不大于 average value ≤ 27.3 22.5 18.5 13.7 实心聚烯烃绝缘填充式电缆 solid polyolefin insulated filled cable 平均值不大于 average value ≤ 11.7 8.2 6.7 4.7 平均值不大于 average value ≤ 23.6 18.6 15.8 12.3 泡沫皮聚烯烃绝缘电缆 foam skin polyolefin insulated cable 平均值不大于 average value ≤ 12.6 9.3 7.4 5.8 平均值不大于 average value ≤ 29.3 24.1 19.8 14.6 泡沫皮聚烯烃绝缘填充式电缆 foam skin polyolefin insulated filled cable 平均值不大于 average value ≤ 12.1 9.0 7.2 5.7 平均值不大于 average value ≤ 26.5 21.8 18.0 13.3 平均值不大于 10 对以上同一型式电缆最大平均值的 110%。Average value shall not 110% of Max. average value of same type cable above 10 pairs.	实测值/L Actual test value/L
9	远端串音防卫度 far-end cross-talk defence 150 kHz 任意线对组合 random combination pair to pair 基本单位内或 30 对电缆内线对间的全部组合 all pair combination between basic unit or 30 pairs 12 对、13 对子单位内或 10 对及 20 对电缆内线对间的全部组合 all pair-combination within 12 or 13 sub-unit or 10 pairs and 20 pairs	dB/km	最小值 min. 58 功率平均值不小于 power average value ≥ 69 功率平均值不小于 power average value ≥ 68	实测值+10lgL Actual test value+10lgL
1): 括号中的指标适用于导体直径 0.60mm 及 0.80mm 电缆。 Indexes in the bracket are suitable for the cables with conductor diameter of 0.60mm and 0.80mm				

数字通信用水平对绞电缆

Horizontal Pair Twisted Cable for Digital Communication

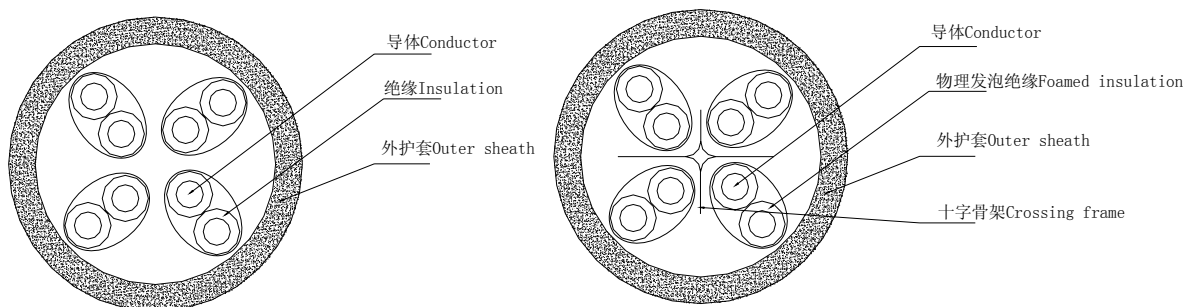
用途 Application

主要用于大楼通信综合布线系统的工作区通信引出端与交接间的配线架之间的布线，以及住宅综合布线系统的用户通信引出端与交接间的配线架之间的布线。It is mainly used for wiring between telecommunication output of operating area in communication generic cabling system of big building and distribution frame of cross-connecting area; as well as for wiring between user telecommunication output in generic cabling system of residential building.

产品型号、名称及规格 Type, designation and specification

型号 Type	名称 Designation	规格 Specification	执行标准 Standard
HSYV5	非屏蔽 5 类实心聚烯烃绝缘聚氯乙烯护套水平对绞电缆 unshielded category 5 solid polyolefin insulated PVC jacketed horizontal pair twisted cable	4×2×0.5 25×2×0.5	YD/T 1019
HSYY5	非屏蔽 5 类实心聚烯烃绝缘聚乙烯护套水平对绞电缆 unshielded category 5 solid polyolefin insulated PE jacketed horizontal pair twisted cable	4×2×0.5 25×2×0.5	
HSYVP5	屏蔽 5 类实心聚烯烃绝缘聚氯乙烯护套水平对绞电缆 shielded category 5E solid polyolefin insulated PVC jacketed horizontal pair twisted cable	4×2×0.5	
HSYV5e	非屏蔽 5 E 类实心聚烯烃绝缘聚氯乙烯护套水平对绞电缆 unshielded category 5E solid polyolefin insulated PVC jacketed horizontal pair twisted cable	4×2×0.5	
HSYV6	非屏蔽 6 类实心聚烯烃绝缘聚氯乙烯护套水平对绞电缆 unshielded category 6 solid polyolefin insulated PE jacketed horizontal pair twisted cable	4×2×0.5	

产品结构示意图 Structural representation



技术参数 Technical parameters

序号 No.	电气特性名称 Electrical property	单位 Unit	5	5e	6
1	单根导体直流电阻 最大值 D.C resistance of single conductor max. value	Ω/100m	9.50		
2	直流电阻不平衡 最大值 D.C resistance unbalance max. value	%	2.5		
3	工作电容 最大值 operating capacitance max. value	nF/100m	5.6		
4	线对对地电容不平衡 最大值 capacitance unbalance between pair and ground max. value	pF/100m	330		
5	特性阻抗 characteristic impedance	Ω	100 ± 15		
6	结构回波损耗 structural return loss	dB			
	10 MHz		23	28	30
	20 MHz		23	28	30
	100 MHz		16	21	23
250 MHz	—	—	23		
7	衰减 attenuation	dB /100m			
	10 MHz		6.5	6.5	5.9
	20 MHz		9.2	9.2	8.4
	100 MHz		22	22	19.8
250 MHz	—	—	32.8		
8	近端串音衰减 near-end cross-talk attenuation	dB /100m			
	10 MHz		47	50	59
	20 MHz		43	46	55
	100 MHz		32	35	44
250 MHz	—	—	38		

铁路信号电缆

Signal Cable

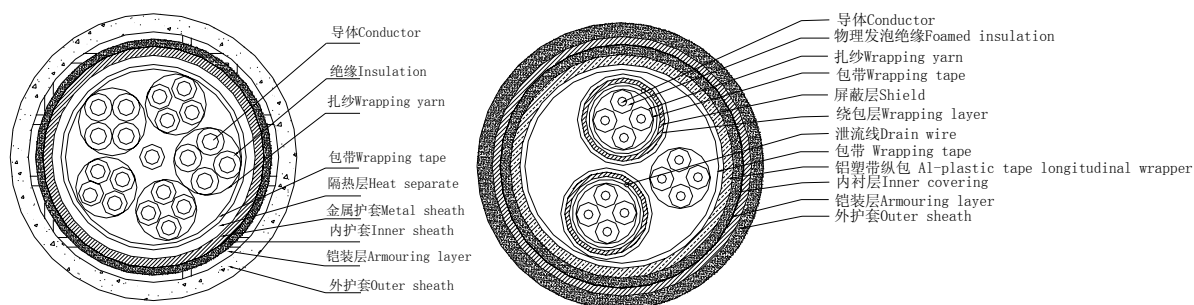
用途 Application

适用于额定电压交流 750V 或直流 1100V 及以下的高速重载电气化铁路区域或非电气化区域铁路信号、数字信号的传输及某些自动控制装置专用的固定敷设系列电缆。It is fit for railway signal and digital signal transmission in area of high speed heavy loading electrization or non-electrization railway with rated voltage of A.C 750V and D.C 1100V, and for special fixed laying serial cable of some automatic control device.

产品型号、规格及名称 Type, specification and Designation

型号 Type	名称 Designation	芯数 Number of core	执行标准 Standard
PTYA23	铜芯聚乙烯绝缘综合护套钢带铠装聚乙烯护套铁路信号电缆 Copper core PE insulated integrated sheath steel tape armoured PE sheath railway signal cable	4、6、8、9、12、14、16、19、21、24、28、30、33、37、42、44、48、52、56、61	TB/T2476
PTYL23	铜芯聚乙烯绝缘铝护套钢带铠装聚乙烯外护套铁路信号电缆 Copper core PE insulated Al sheath steel tape armoured PE outer sheath railway signal cable		
SPTYWA23	铜芯物理发泡聚烯烃绝缘综合护套钢带铠装聚乙烯护套铁路数字信号电缆 Copper core foamed PO insulated integrated sheath steel tape armoured PE sheath railway digital signal cable	8B、12A、12B、14A、14B、16A、16B、19A、19B、21A、21B、24A、24B、28A、28B、30A、30B、33A、37A、42A、44A、48A	TB/T3100
SPTYWL23	铜芯物理发泡聚烯烃绝缘铝护套钢带铠装聚乙烯外护套铁路数字信号电缆 Copper core foamed PO insulated Al sheath steel tape armoured PE outer sheath railway digital signal cable		
SPTYWPA23	铜芯物理发泡聚烯烃绝缘综合护套钢带铠装聚乙烯外护套内屏蔽铁路数字信号电缆 Copper core foamed PO insulated integrated sheath steel tape armoured PE outer sheath inner shielding railway digital signal cable		
SPTYWPL23	铜芯物理发泡聚烯烃绝缘铝护套钢带铠装聚乙烯外护套内屏蔽铁路数字信号电缆 Copper core foamed PO insulated Al sheath steel tape armoured PE outer sheath inner shielding railway digital signal cable		

产品结构示意图 Structural figure



技术参数 Technical parameter

1、PTYA23 与 PTYL23 电气参数 Electrical parameter

序号 No	项目 Item	单位 Unit	指标 Value	换算公式 Conversion formula
1	20℃时直流电阻 Ω/km D.C Resistance at 20℃ 每根导体直流电阻 D.C Resistance of each conductor 四线组工作对导体电阻平衡 conductor balance of quad pairs	Ω/km %	≤23.5 ≤1.5	L/1000 —
2	绝缘电阻 Resistance	MΩ · km	≥3000	1000/L
3	工作电容 nF/km Working capacitance 星形四线组工作电容 Star quad pairs working capacitance 对线组工作电容 twin pair working capacitance 任一绝缘线芯对连接到地的其它绝缘线芯间电容 Capacitance between each insulated core and others connected to earth	nF/km	≤50 ≤70 ≤100	L/1000
4	电容耦合 Capacitance coupling K ₁ 平均值 Average value 最大值 Maxium value	pF/500m	≤100 ≤330	$\sqrt{L/500}$ L/500
5	对外来地电容不平衡 Capacitance imbalance to the earth ea ₁ 、ea ₂ 平均值 Average value ea ₁ 、ea ₂ 最大值 Maxium value 四芯电缆 ea ₁ 、ea ₂ 指标为最大值 ea ₁ 、ea ₂ means the maxium value for the for core cable	pF/500m	≤300 ≤1294	L/500
6	绝缘耐压 Insulation voltage test 50Hz 2min 线芯间 Between the core 线芯与其余接地 Between core and other earth	V	1000 1800	—

2、SPTYWA23 SPTYWPA23 SPTYWL23 与 SPTYWPL23 电气参数 Electrical parameter

序号 No	项目 Item	单位 Unit	指标 Value	换算公式 Conversion formula
1	20℃时直流电阻 Ω/km D.C Resistance at 20℃ 每根导体直流电阻 D.C Resistance of each conductor 四线组工作对导体电阻平衡 conductor balance of quad pairs	Ω/km %	23.5±1.0 ≤1.0	L/1000 —
2	绝缘电阻 Resistance	MΩ · km	≥10000	1000/L
3	工作电容 nF/km Working capacitance 星形四线组工作电容 Star quad pairs working capacitance 屏蔽星形四线组 Shield Star quad pairs 对线组工作电容 twin pair working capacitance 任一绝缘线芯对连接到地的其它绝缘线芯间电容 Capacitance between each insulated core and others connected to earth	nF/km	28±3 28±2 ≤50 ≤70	L/1000

4	电容耦合 Capacitance coupling K ₁ 平均值 Average value 最大值 Maxium value	pF/km	≤81 ≤330	$\sqrt{L/1000}$ L/1000
5	对外来地电容不平衡 Capacitance imbalance to the earth ea ₁ 、ea ₂ 平均值 Average value ea ₁ 、ea ₂ 最大值 Maxium value 四芯电缆 ea ₁ 、ea ₂ 指标为最大值 ea ₁ 、ea ₂ means the maxium value for the for core cable	pF/500m	≤300 ≤800	L/1000
6	绝缘耐压 Insulation voltage test 50Hz 2min 线芯间 Between the core 线芯与其余接地 Between core and other earth	V	1000 2000	—
7	回路间近端串音衰减 NEXT between loop 150kHz 组内 Inside the pair 组间 Between the pair 1000 kHz 组内 Inside the pair 组间 Between the pair	dB/km	≥51 ≥55 ≥37 ≥42	-10lg (L/1000) -10lg (L/1000) — —
8	回路间远端串音衰减防卫度 FEXT defence between loop 150kHz 组内 Inside the pair 组间 Between the pair 1000 kHz 组内 Inside the pair 组间 Between the pair	dB/km	≥52 ≥62 ≥39 ≥49	-10lg (L/1000)

额定电压 300/500V 及以下核电站用 1E 级 K3 类信号电缆 1E Class K3 Category Nuclear Power Station Used Signal Cable with Voltage up to 0.6/1kV

用途 Application

本产品适用于核电站安全壳外地震荷载下的能确保紧急停堆、安全壳隔离、堆芯应急冷却、反应堆热导出、防止放射性物质向周围环境排放等功能信号控制系统。This product is used in the 1E class K3 category nuclear power station signal control system outside the secure covering with voltage up to 0.6/1kV. In which system it can insure stop of the reactor under the earthquake load, separation of the secure cover, cooling of the center of reactor emergently, heat vent in the reactor, and can prevent the radioactive particle to enter the surrounding environment.

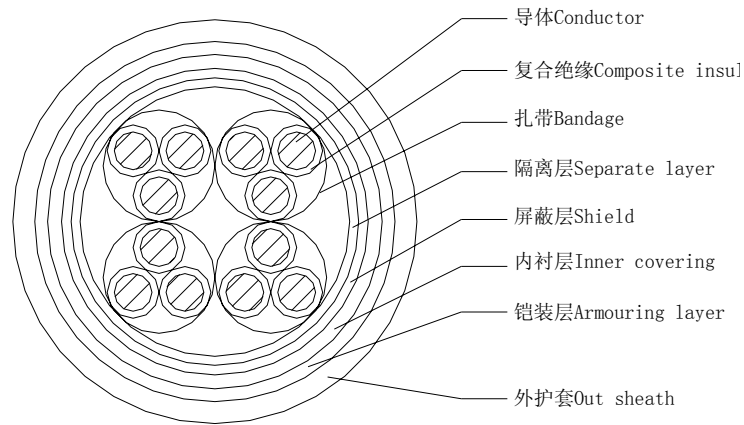
产品型号及名称 Type and Designation

型 号 Type	名 称 Designation	执行标准 Standard
PYJYP K3	铜芯交联聚乙烯绝缘铜丝编织屏蔽无卤低烟阻燃护套核电站用 1E 级 K3 类信号电缆 Copper core XLPE insulated copper wire braided shield LSOH P0 sheathed nuclear power station used 1E class K3 category signal cable	Q/321023KLA60.4
PYJYP2 K3	铜芯交联聚乙烯绝缘铜带屏蔽无卤低烟阻燃护套核电站用 1E 级 K3 类信号电缆 Copper core XLPE insulated copper tape braided shield LSOH P0 sheathed nuclear power station used 1E class K3 category signal cable	
PYJYP3 K3	铜芯交联聚乙烯绝缘铝塑带屏蔽无卤低烟阻燃护套核电站用 1E 级 K3 类信号电缆 Copper core XLPE insulated Al-plastic tape braided shield LSOH P0 sheathed nuclear power station used 1E class K3 category signal cable	
PYJYP2/23 K3	铜芯交联聚乙烯绝缘铜带屏蔽钢带铠装无卤低烟阻燃护套核电站用 1E 级 K3 类信号电缆 Copper core XLPE insulated copper tape shield steel tape armoured LSOH P0 sheathed nuclear power station used 1E class K3 category signal cable	
PYJYP3/23 K3	铜芯交联聚乙烯绝缘铝塑带屏蔽钢带铠装无卤低烟阻燃护套核电站用 1E 级 K3 类信号电缆 Copper core XLPE insulated Al-plastic tape shield steel tape armoured LSOH P0 sheathed nuclear power station used 1E class K3 category signal cable	

规格 Specification

型 号 Type	额定电压 Rated voltage V	芯 数 Number of core	导体标称截面 Nominal cross-section of the conductor mm ²
PYJYP K3、PYJYP2 K3	300/500	(1~30) × 2	0.50
PYJYP3 K3、PYJYP2/23 K3		(1~19) × 3	0.75
PYJYP3/23 K3			1.0

产品结构示意图 Structural figure



主要技术参数 Main technical parameter

1、燃烧性能 Burning performance

(1) 卤素气体释放量试验, pH 值 ≥ 4.3 , 电导率 $\leq 10 \mu S/mm$; Halogen gas emission test: pH value ≥ 4.3 , conductivity $\leq 10 \mu S/mm$;

(2) 烟密度试验 smoke density test, 透光率 light transparent rate $\geq 60\%$;

(3) 电缆阻燃试验, 通过 IEC60332-3 和 GB/T18380.3 规定的成束燃烧试验。Flame retardant test, cable can pass the bundle burning test regulated in IEC60332-3 和 GB/T18380.3.

(4) 绝缘线芯通过 GB/T18380.1 规定的单根垂直燃烧试验。Insulated core can pass the single vertical burning test regulated in GB/T18380.1.

(5) 按英国军用标准 NES713 规定的毒性指数: 小于 2.5。As per NES713, the toxicity index shall less than 2.5.

(6) 热寿命评定试验 通过 IEC60216 和 IEEE383 规定的 40 年热寿命评定试验 Thermal life assess test, cable can pass the 40 years thermal life assess test as per IEC60216 and IEEE383.

2、电气性能 Electrical performance

(1) 导体直流电阻符合 GB/T3956 的规定 D.C resistance of the conductor can comply with stipulation in GB/T3956.

(2) 电压试验 Voltage test

试验类别 Category of test	交流电压值 A.C voltage V	时间 Test time min
线芯之间 core to core	2500	5
线芯对地 core to the earth	1500	

(3) 绝缘电阻常数 Ki: 20 $^{\circ}C$ 时不小于 3000 $\Omega \cdot km$; 60 $^{\circ}C$ 时不小于 30 $\Omega \cdot km$; 90 $^{\circ}C$ 时不小于 3 $\Omega \cdot km$ 。Insulating resistance constant Ki: will not exceed 3000 $\Omega \cdot km$ at 20 $^{\circ}C$, will not exceed 30 $\Omega \cdot km$ at 60 $^{\circ}C$, will not exceed 3 $\Omega \cdot km$ at 90 $^{\circ}C$.

产品特点 Feature

1、具有无卤低烟环保卫生等特性。Cable is halogen free and low smoke, and so has environment protection and sanitary characteristic;

2、采用复合双层绝缘的结构。It adopts the dual layer insulation structure;

3、电缆燃烧透光率大。Cable has a large light transparent rate;

4、具有优异的阻燃性能。Cable has excellent flame retardant performance;

5、使用寿命长，设计及实际工作寿命不低于40年。Cable has a long usage life, its design and actual working life will not less than 40 years;

6、优良的耐热老化和耐气候老化性能。Cable has excellent heat aging resistant and weather aging performance;

7、优良的高低温绝缘性能。Cable has excellent high and low temperature insulation performance;

8、优良的组分相容性和抗撕裂性。Cable has good content compatibility and rip resistant.

关于辐照交联电缆的说明

Description for the Radiated Cross-linking Cable

一、辐照交联电缆的优势 Advantage of the radiation cross-linking cable

(1) 电缆载流量大幅提高 Dramatic increase of the current-carrying capacity of the cable

辐照交联电缆耐温等级可由普通交联电缆的 90°C 提高到 150°C，短时短路温度由 250°C 提高到 350°C，同等规格的电缆截流量可提高 15%~45%。After radiation cross-linking, the temperature resistance of the cable be improved from 90°C of the ordinary cross-linked cable to 150°C. When the short-circuit is occurred, temperature can be improved from 250°C to 350°C in a short time, while the current-loading quantity of the same specification can be improved by 15%~45%.

(2) 可实现交联聚乙烯本体的低烟、无卤、阻燃等绿色环保功能.Environmental protecting functions such as low smoke, halogen free and flame retardant of XLPE base can be realized

辐照交联电缆避免了聚烯烃材料为实现低烟、无卤、阻燃功能而渗入大量 $Mg(OH)_2$ 、 $Al(OH)_3$ 阻燃剂使普通交联工艺发生预交联和因绝缘层吸湿绝缘电阻大幅下降等不良现象。辐照交联是在常温、空气中对聚烯烃材料进行交联处理的高新技术产业，是交联聚乙烯本体实现低烟、无卤、阻燃的最优途径。There is no need to add large quantity of the flame-retardant agents such as $Mg(OH)_2$ 、 $Al(OH)_3$ into the radiation cross-linked cable for its functions of low smoke, halogen free and flame retardant as do in the ordinary cross-linked process; There is no phenomenon for the radiation cross-linked cables of big drop in the electricity resistance of the insulation layer due to the moisture absorption of the insulation in the ordinary cross-linked cables. Radiation cross-linking is a hi-tech industry for cross-linking treatment of the polyolefin material under the normal temperature and it is the best way for XLPE material achieving its functions such as halogen free, low smoke and flame retardant.

(3) 优良的老化性能 Nice aging performance

电缆绝缘层经受老化的温度由普通交联电缆的 135°C 提高到 180°C，延长的电缆在使用过程中循环发热的使用寿命，确保电缆正常使用 50 年。The aging temperature for the insulation of the radiation cross-linked cable is improved from 135°C of the ordinary cross-linked cable to 180°C, thus extends the service life of the cable operated in the cycle thermal and ensures its normal operation time of 50 years.

(4) 稳定的产品质量 Stable quality of the products

聚合物交联后的机械物理性能取决于聚合物分子链的交联度，辐照交联加工的交联度取决于电子束的辐照剂量，而电子束的辐照剂量由计算机系统直接设定，避免了普通交联材料交联过程存在的化学反应的随机性。

Mechanical physical property of the polymer after cross-linking is dependent on the cross-linking degree of its molecular chain, while the cross-linking degree of radiation cross-linking process is dependent on the radiation dose of the electronic bunch; since the radiation dose is directly set on the computer, it has a high stability comparing to the random possibility due to the chemical reaction in the ordinary cross-linking process.

二、一流的生产装备 Advanced production equipments

一套引进俄罗斯新西伯利亚核物理研究所及韩国 EB-TECH 公司 2.5MeV、50mA 电子加速器、束下装置系统（大、小线系统各一台套），及韩国三星公司的联动控制系统，另外还有一台套由中国原子核研究所研制的 1.5MeV/30mA 电子加速器及束下装置系统。可辐照 $0.5mm^2 \sim 300mm^2$ 电线电缆。年生产能力达 10 万 km 以上。Accelerator of 2.5MeV、50mA and EPS system imported from Russia and Korea, and a set of linking control system from Korean Anycall Company as well as

accelerator of 1.5MeV/30mA and its EPS system bought from China atomic nuclear research institution. They can radiate the cable with cross-section of $0.5\text{mm}^2 \sim 300\text{mm}^2$, and its annual output is 100,000 km.

三、适合生产的产品类型 Product type available for manufacturing

(一) 动力传输电缆: Drive transmission cable

- 1、额定电压10kV及以下辐照交联绝缘架空电缆 Radiation cross-linked insulation aerial cable with rated voltage up to 10kV
- 2、额定电压10kV及以下辐照交联绝缘电力电缆 Radiation cross-linked insulation power cable with rated voltage 10kV and below.
- 3、机场照明用电电缆 Air port illumination cable
- 4、变频器用电电缆 Frequency converter cable
- 5、高载荷分支电缆 Heavy loaded branch cable

(二) 核电站用1E级K3、K1类电缆 Class 1E and category K3、K1 cable for nuclear power station

(三) 航空航天用交联F40绝缘电线电缆 Cross-linked F40 insulation wire and cable for used in aviation and space industry

(四) 电气装备用电线电缆 Wire and cable for electrical appliance

- 1、辐照交联聚烯烃绝缘控制电缆 Radiation cross-linked po insulation control cable
- 2、辐照交联聚烯烃绝缘计算机电缆 Radiation cross-linked po insulation computer cable
- 3、汽车车辆用辐照交联聚烯烃绝缘低压电缆(电线) Radiation cross-linked polyolefin insulation low voltage cable (wire) for automobile use
- 4、新型自控温加热电缆 New type temperature regulating heat tracing cable
- 5、125℃辐照交联聚烯烃绝缘机车车辆用电线。125℃ radiation cross-linked polyolefin insulation low voltage cable (wire) for rolling stock use
- 6、辐照交联聚烯烃绝缘F级电机引接线 Radiation cross-linked polyolefin insulation class F motor leading wire
- 7、电视机用高压线 High voltage wire for television
- 8、辐照交联聚烯烃绝缘耐热灯头线 Radiation cross-linked polyolefin insulation heat resistant lamp wire
- 9、辐照交联聚烯烃绝缘固定敷设用电线 Radiation cross-linked polyolefin insulation fixed laying wire

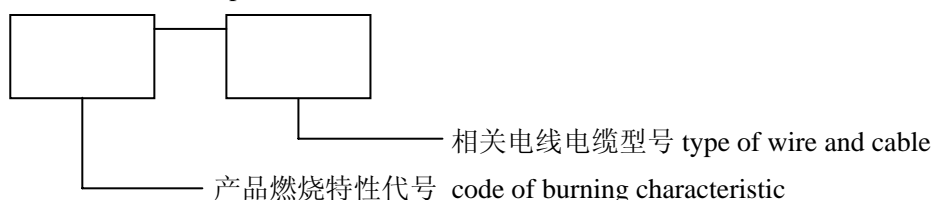
阻燃和耐火电线电缆说明

Description to Flame-retardant and Fire Resistant Wires & Cables

阻燃和耐火电线电缆，包括有卤、无卤、低烟等产品，产品应用于对防火安全具有重要的场合。
Flame-retardant and fire resistant wires and cables include product with halogen, without halogen, low smoke etc. These are suitable for the places that have a high requirement for the fireproofing.

型号组成说明 Description of the type composition

阻燃、耐火和无卤低烟电线电缆的型号由产品燃烧特性代号和相关电线电缆型号两部分组成。
The name of the flame-retardant and fireproof wire and cable is consisted of the code of the burning characteristic and the code of the specification.



产品燃烧特性代号说明 Description of the code of the burning characteristic

产品燃烧特性代号见表 1。Please Refer to the table 1

表 1 产品燃烧特性代号 Table 1 code of the burning characteristic

系列名称 Name of series	代号 Code	名称 Name	执行标准 Standard	
阻燃系列 flame retardant series	有卤 with halogen	ZA	阻燃 A 类 flame-retardant category A	GB/T19666
		ZB	阻燃 B 类 flame-retardant category B	
		ZC	阻燃 C 类 flame-retardant category C	
		ZD ^b	阻燃 D 类 flame-retardant category D	
	无卤低烟 halogen free and with low smoke	WDZ ^a	无卤低烟阻燃 halogen free and with low smoke and flame retardant	
		WDZA	阻燃 A 类 flame-retardant category A	
		WDZB	阻燃 B 类 flame-retardant category B	
		WDZC	阻燃 C 类 flame-retardant category C	
		WDZD ^b	阻燃 D 类 flame-retardant category D	
		耐火系列 fire resistant series	有卤 with halogen	
ZAN	阻燃 A 类耐火 flame-retardant category A fire resistant			
ZBN	阻燃 B 类耐火 flame-retardant category B fire resistant			
ZCN	阻燃 C 类耐火 flame-retardant category C fire resistant			
ZD ^b N	阻燃 D 类耐火 flame-retardant category D fire resistant			
无卤低烟 halogen free and with low smoke	WDZN		无卤低烟阻燃耐火 halogen free and with low smoke flame retardant and fire resistant	
	WDZAN		无卤低烟阻燃 A 类耐火 halogen free and with low smoke flame retardant and category A fire resistant	
	WDZBN		无卤低烟阻燃 B 类耐火 halogen free and with low smoke flame retardant and category B fire resistant	
	WDZCN		无卤低烟阻燃 C 类耐火 halogen free and with low smoke flame retardant and category C fire resistant	
	WDZDbN		无卤低烟阻燃 D 类耐火 halogen free and with low smoke flame retardant and category D fire resistant	
<p>a Z 为单根阻燃，仅用于基材不含卤素的产品。基材含卤素的，Z 省略。 Z means single flame-retardant, it is limited for product base with no halogen. If it has halogen in it, Z will not be included.</p> <p>b ZD 为成束阻燃 D 类，适用于外径不大于 12mm 即较细的产品。 ZD means category D, bundle flame-retardant. It is fit for cable with diameter not exceed 12mm.</p>				

举例说明 Sample of the description

示例 1: 额定电压 300/500V 铜芯聚乙烯绝缘, 铜丝编织对绞屏蔽, 聚氯乙烯护套 C 类阻燃计算机电缆, 4 对, 标称截面 1.0 mm² 表示为: ZC-DJYPV 4×2×1.0

Sample 1: cable with copper core PE insulation, copper wire braid twisted shielding, PVC sheath category C flame retardant computer cable, 4 pairs, with cross-section of 1.0 mm² with voltage of 300/500V shall be expressed as ZC-DJYPV 4×2×1.0;

示例 2: 额定电压 450/750V 聚氯乙烯绝缘聚氯乙烯护套耐火控制电缆, 7 芯, 标称截面 1.0 mm² 表示为: N-KVV 450/750V 7×1.0

Sample 2: control cable with PVC and insulation and sheath fire resistant, 7 core and with cross-section of 1.0 mm² shall be expressed as N-KVV 450/750V 7×1.0;

示例 3: 额定电压 0.6/1kV 交联聚乙烯绝缘无卤低烟 B 类阻燃聚烯烃护套电力电缆, 3+1 芯, 主线芯标称截面 95 mm², 地线芯标称截面为 50 mm² 表示为: WDZB-YJY 0.6/1kV 3×95+1×50

Sample 3: power cable with XLPE insulation LOSH category B flame retardant PO sheath with voltage of 0.6/1kV, 3+1 core, with cross-section of the main core of 95 mm² and with cross-section of the earthing core of 50 mm² shall be expressed as WDZB-YJY 0.6/1kV 3×95+1×50;

示例 4: 额定电压 6/10kV 交联聚乙烯绝缘无卤低烟 B 类阻燃聚烯烃护套耐火电力电缆, 3 芯, 标称截面 150 mm², 表示为: WDZBN-YJY 6/10kV 3×150

Sample 4: fire resistant power cable with XLPE insulation LOSH category B flame retardant PO sheath with voltage of 6/10kV, 3 core, with nominal cross-section of 150 mm² shall be expressed as WDZBN-YJY 6/10kV 3×150.

阻燃电缆特性 Flame-retardant characteristics

1、产品应用特性: 产品在着火后不延燃, 适用于核电站、地下设施、隧道、高层建筑以及广播电视台等场所。Application characteristics: The fire will not spread when the product gets fire. It is suitable for nuclear power plants, underground establishments, tunnels, tall buildings and broadcast & television stations etc.

2、单根阻燃性能符合表 2 的规定。The single flame-retardant performance should comply with the table 2 below.

表 2 单根阻燃性能要求 Table 2: flame-retardant characteristics requirement for the single core cable

代号 code	试样外径 D mm	供火时间 time of giving fire s	合格指标 qualified requirement	试验方法 test method
Z	D≤25	60	试样烧焦应不超过距上夹具下缘 50mm~540mm 的范围之外 the burnt range shall not be out of 50mm to 540mm to the soffit of the upper nip	IEC60332-1 GB/T18380.1 GB/T18380.2
	25<D≤50	120		
	50<D≤75	240		
	D>75	480		

3、成束阻燃性能符合表 3 的规定。The bundle flame-retardant characteristic should comply with regulation of table 3 below.

表 3 成束阻燃性能要求 Table 3: Requirements for the bundle flame-retardant characteristic

代号 code	试样非金属材料体积 non-metal material volume of the sample L/m	供火时间 time of giving fire s	合格指标 qualified requirements	试验方法 test method
ZA	7	40	①试样上炭化的长度最大不应超过距喷嘴底边向上 2.5m; carbonized part can not be out of 2.5 m up to the down side of the muzzle ②停止供火后试样上的有焰燃烧时间不应超过 1h. time of burning with flame in the sample shall not exceed 1 hour after stopping giving fire.	IEC60332-3 GB/T18380.3
ZB	3.5	40		
ZC	1.5	20		
ZD	0.5	20		

耐火电缆特性 Fire resistant characteristics

1、产品应用特性：产品在着火情况下仍能保持一定时间内继续运行，特别适用于火灾报警和紧急照明线路。Applications characteristics: It could continue work for a certain length of time even it gets fire and. It is suitable for the fire alarm and the emergent lighting circuitry.

2、耐火性能符合表 4 的规定。The fire resistant characteristics should comply with the requirements in table 4 below.

表 4 耐火性能要求 Table 4: requirements for the fire resistant characteristic

代号 code	适用范围 applications	供火时间+冷却时间 time of giving fire and cooling min	试验电压 test voltage V	合格指标 qualified requirements	试验方法 test method
N	0.6/1kV 及以下 电缆 cable with a voltage up to 0.6/1kV	90+15	额定值 rated value	①2A 熔断器不断; 2A fused does not break ②指示灯不熄。 The indicator light does not extinguish	IEC60331-21 GB/T19216.21
	数据电缆 data cable	90+15	相对地: correspond ingly 110±10	①2A 熔断器不断;2A fused does not break ②指示灯不熄。The indicator light does not extinguish	IEC60331-23 GB/T19216.23

注：供火温度为 750℃~800℃ giving fire temperature: 750℃~800℃

阻燃耐火电缆特性

1、应用特性：适用于火灾报警和消防设备、通讯排烟设备及紧急通道运输、照明等应急设施的供电线路中要求阻燃耐火的场合。Applications characteristic: It is suitable for the circuitry in fire alarm system, fire protection appliances, communication smoke exhausting equipments and the emergency establishments such as emergent lighting for channels.

2、阻燃耐火性能要求：必须同时符合阻燃特性和耐火特性的要求。The requirements for the flame-retardant fire resistant characteristics: It should comply with both the requirements for fire resistant characteristic, and flame retardant characteristics.

无卤低烟阻燃电缆特性

1、应用特性：具有无卤、低烟、低毒、能见度高优良特性，特别适用于地铁、地下商场、高层建筑、智能通讯大楼、电站等安全要求高的重要场所。Application characteristics: It has advantages such as no halogen, low smoke, low toxin, high visibility and so on. It is especially suitable for the places that have a high requirement for safety such as subways, underground stores, tall buildings, aptitude communication mansions and power plants etc.

2、产品无卤性能应符合 IEC 60754-2 或 GB/T17650.2 规定的试验要求，pH 值应不小于 4.3，电导率不大于 10 μ S/mm。The halogen free performance shall comply with test requirement of IEC 60754-2 或 GB/T17650.2, the PH value shall not less than 4.3, the conductivity shall not exceed 10 μ S/mm。

3、产品低烟性能应符合 IEC 61034-2 或 GB/T17651.2 规定的试验要求，其透光率不小于 60%。The low smoke performance shall comply with test requirement of IEC 60754-2 或 GB/T17650.2, the light penetration shall not less than 60%;

4、产品阻燃性能应符合 IEC60332-3 或 GB/T18380.3 规定的成束燃烧试验要求。The flame retardant performance shall comply with the bundling burning test requirement of IEC60332-3 或 GB/T18380.3.

电缆适用性选择 cable applicability selection

使用场合 using occasion			电 缆 名 称 name of cable					
			阻燃 电缆 flame retardant cable	低卤低烟 阻燃电缆 low halogen low smoke flame retardant cable	无卤低烟 阻燃电缆 LOSH flame retardant cable	耐火 电缆 fire resistant cable	无卤低烟 耐火电缆 LOSH fire resistant cable	矿物绝缘电 缆 MI cable
高密度 人口区 area with high density populati on	公共交通 public transporta tion	地铁车辆	不适用	尚可用、不推荐	适用	不适用	适用	适用
		隧 道	不适用	尚可用、不推荐	适用	不适用	适用	适用
		机车车辆 rolling stock	不适用 not applicable	尚可用、不推荐 applicable not recommend	适用 applicable	不适用 not applicable	适用 applicable	适用 applicable
	建筑物 building	高楼、会场、影剧院、 购物中心 tower, meeting place, cinema, shopping center	不适用 not applicable	尚可用、不推荐 applicable not recommend	适用 applicable	不适用	适用 applicable	适用 applicable
	石油化工 petro-che mical	近海石油平台 off-shore petroleum plate	不适用 not applicable	尚可用、不推荐 applicable not recommend	适用 applicable	不适用	适用 applicable	适用 applicable
	其它工业 other industry		不适用 not applicable	尚可用、不推荐 applicable not recommend	适用 applicable	不适用	适用 applicable	适用 applicable
低密度 人口区 area with low density populati on	电力 power	发电和配电 power generator and distribution	尚可用 applicable	可用 applicable	适用 applicable	不适用 not applicable	适用 applicable	适用 applicable
	石油化 工	炼 油 厂 oil refine factory	尚可用 applicable	可用 applicable	适用 applicable	尚可用 applicable	适用 applicable	适用 applicable
		化学工业中心 central chemical industry	尚可用 applicable	可用 applicable	适用 applicable	尚可用 applicable	适用 applicable	适用 applicable
	其它工业 other industry		尚可用 applicable	可用 applicable	适用 applicable	尚可用 applicable	适用 applicable	适用 applicable
	各种区 域 all the area	报警、照明、通风、 动力、泵等 alarming, illumination, ventilation, driving and pump etc	不适用 not applicable	不适用 not applicable	不适用 not applicable	尚可用 applicable	适用 applicable	适用 applicable