



电线电缆选型样本

Wires&Cables Catalogue



安徽天康(集团)股份有限公司
ANHUI TIANKANG(GROUP)SHARES CO.,LTD.

Brief Introduction to Anhui Tiankang (Group) Shares Co.,Ltd.

企业简介

安徽天康（集团）股份有限公司位于长江之滨的皖东明珠——天长市，南接古城南京，东与扬州相邻，地处中国最具活力的上海经济协作区，具有良好的经济发展环境。

安徽天康（集团）股份有限公司由原天长市仪表厂、中外合资安徽省天康光电有限公司、安徽省天康药业有限公司、安徽省天康医疗用品有限公司等企业经整体改制成立，属国家大型工业企业、安徽省重点骨干企业、省级高新技术企业。

1986年我集团引进了具有国际先进水平的电缆生产线，开始生产电线电缆产品，多年的发展过程为企业积累了丰富的开发和生产电缆经验技术。我集团作为安徽省光电缆产业基地，目前电缆产品的年生产能力已达50万公里，主要产品有：电力电缆、控制电缆、核电站用电缆、煤矿用电缆、计算机电缆、硅橡胶电缆、高温电缆、阻燃耐火电缆、船用电缆、本安电缆、低烟低卤及低烟无卤电缆、补偿电缆、铝绞线及钢芯铝绞线、架空电缆和其它各种安装布电线等几十个品种。产品广泛应用于石化、电力、建筑、建材、冶金及造纸等行业。

1996年我集团通过了ISO9001国际质量体系认证，集团以一流的产品质量和一流的售后服务赢得了良好的信誉，良好的信誉为企业赢得了广阔的市场。我集团先后与八十多家电力企业、一百多家石化企业及其它行业的许多知名企业建立了长期的合作关系，并且先后为秦山核电站、邹县电厂、宝鸡二电厂、石嘴山电厂、扬子石化、燕山石化、齐鲁石化、茂名石化、大边西太平洋石化、上海石化、胜利油田和黄河万家寨水利工程等一批国内重点工程，以及越南协福电厂、伊朗阿拉克电厂、苏丹喀士穆炼油厂、南斯拉夫潘切沃化肥厂和科特迪瓦国际大剧院等三十多项国外重点工程项目提供了大批优质电缆。

用户的支持就是我们的成功，安徽天康（集团）股份有限公司董事长赵宽携集团全体员工感谢社会各界及广大用户的关心和支持，我集团将倍加努力为用户提供更为满意的产品和服务。





Anhui Tiankang(Group)Shares Co.,Ltd.lies in Tianchang city--eastern pearl of Anhui province on bank of Yangtz River,near Nanjing in the south,and Yangzhou in the east,within the most active shanghai Economic Cooperation Area in China,good environment for economic development.

Anhui Tiankang(Group)Shares Co.,Ltd.,was established after corporate reorganization of Tianchang Instrument Plant,Sino-foreign funded Anhui Tiankang Light-electric Co.,Ltd.,Anhui Tiankang Pharmaceutical Co.,Ltd.,Anhui Tiankang Medical Products Co.,Ltd.,and so on.It is ranked as National Large-sized Industrial Enterprose,Key Enterprise of Anhui Province,Anhui Hi-tech Enterprise.

In 1986,we imported internationally advanced cable production lines and began producing wires & cables.We accumulated rich developing & manufacturing experiences through development process of many years.As cable industry base in Anhui province,our yearly production capacity on cables reaches 500,000km including power cable,control cable,computer cable,silica rubber insulated cable,heat-resistant cable,fire-resistant cable,ship cable,intrinsic safety cable,low smoke & halogen cable,low smoke & halogen-free cable,compensational cable,A.A.C.,A.C.S.R.,aerial cable,other installation wires & cables,and so on.The products are widely used in petrochemical industry,porer,building,co nstruction material,metallurgy and paper-making industries,etc.

In 1996,we got ISO9001 Quality System Certificate.With first-class quality and aftersales service,Tiankang Group has won good prestige,which results in considerable market share.We have established long-term cooperation relationship with more than 80 power enterprises,more than 100 petrochemical enterprises,and many famous enterprises in other fields. Our cables of high quality have been adopted in domestic key projects including Qinshan Nuclera Power Station,Zhouxian Power Plant,Baoji No.2 Power Plant,Shizuishan Power Plant,Yangtze Petrochem,Yanshan Petrochem,Qilu Petrochem,Maoming Petrochem,Dalian West Pacific Petrochem,Shanghai Petrochem,Shengli Oilfield,and Wanjiashai Water Conservancy Project on Yellow River,and overseas projects including Vietnam Xiefu Power Plant,Iran Arak Power Plant,Sudan Capital Refinery,Yugoslavia Panchev Chemical Fertilzer Plant,Cotedevair International Theatre,etc.

Customer support is our success.Mr.zhao kuan,President of Anhui Tiankang(Group)Shares Co.,Ltd.,on behalf of all employees,thanks for concern and support of various social classes and customers.We'll work harder to provide customers with more satisfied products and services.



目 录 CONTENTS

电力电缆

power cable

35kV及以下交联聚乙烯绝缘电力电缆

XLPE Insulation Power Cable of 35kv or Lower 1

0.6/1kV及以下聚氯乙烯绝缘及护套电力电缆

PVC Insulation & Sheath Power Cable of 0.6/1kv or Lower 19

通信电源用电力软电缆

Power Flexible Cable for Telecommunication Power supply Application 25

金属屏蔽电力电缆

Metal shielding Power Cable 27

控制电缆

Control Cable

交联聚乙烯聚氯乙烯绝缘控制电缆

XLPE PVC Insulation Control Cable 30

聚氯乙烯绝缘及护套控制电缆

PVC Insulation & Sheath Control Cable 34

聚氯乙烯绝缘电缆电线

PVC Insulation Cable & Wire 40

计算机电缆

Computer Cable

计算机用屏蔽电缆（或称DCS系统用电缆）

Shielding Cable for Computer Application(Cable for DCS System Application) 45

本安计算机用屏蔽电缆（或称本安DCS系统用电缆）

Shielding Cable for Intrinsic Safety Computer Application(Cable for Intrinsic Safety DCS System) 55

射频电缆

RF Cable

电缆分配系统用物理发泡聚乙烯绝缘同轴电缆

Physical Foam PE Insulation Coaxial Cable for Cable Distribution System 60

实芯聚乙烯绝缘射频电缆

RF Cable with Solid Core and PE Insulation 62

补偿电缆

Compensational Cable

..... 66

变频电缆

Frequency Conversion Cable

..... 73

通用橡套软电缆

General Rubber Jacketed Flexible Cable

..... 78

铝绞线及钢芯铝绞线

Aluminum Stranded Conductor & Aluminum-Steel Conductor

..... 81

核电站用1E级电缆

1E Degree Cable for Nuclear Power Station Application

..... 85

船用电缆

Ship Cable

聚氯乙烯绝缘和护套船用电力电缆

Ship Power Cable with PVC Insulation & Sheath 91

聚氯乙烯绝缘和护套船用控制电缆

Ship Control Cable with PVC Insulation & Sheath 93

船用射频电缆

Ship RF Cable 95

煤矿用电缆

Cable for Coal Mine Application

煤矿用额定电压8.7/10kV及以下交联绝缘阻燃电力电缆

Flame Retardant Power Cable with Cross linked Insulation, Rated Voltage of 8.7/10kv or Lower for Coal Mine Application 98

煤矿用额定电压3.6/6kV及以下聚氯乙烯绝缘阻燃电力电缆

Flame Retardant Power Cable with PVC Insulation, Rated Voltage of 3.6/6kV or Lower for Coal Mine Application 108

煤矿用额定电压0.66/1.14kV及以下移动类阻燃电缆

Mobile Flame Retardant Flexible Cable with rated voltage of 0.66/1.14kV or lower for Coal Mine Application 111

特种电缆

Special Cable

耐高温(阻燃)电力电缆

High temperature resistant(flame retardant)power cable 116

硅橡胶绝缘(阻燃)电力电缆

Silicon rubber insulation(flame retardant)flexible power cable 118

硅橡胶(阻燃)扁电力电缆

Silicon rubber (flame retardant)flat power cable 120

硅橡胶(阻燃)控制电缆

Silicon rubber (flame retardant)control flexible cable 122

低烟低卤阻燃控制电缆

Low smoke low halogen flame retardant control cable 124

无卤低烟阻燃、耐火电缆

Low smoke zero halogen flame retardant fire resistant cable 126

耐火电缆

Fire resistant cable 129

氟塑料绝缘耐高温控制电缆

High temperature resistant control cable with Fluoroplastic insulation 131

丁腈聚氯乙烯复合物电缆

Butadiene PVC compound Flexible Cable 139

自控温伴热电缆

Self-thermal control heating cable 141

恒功率电

Constant power electrically-heated tape 144

AF-200、AF-260型氟塑料安装线

AF-200 & AF-260 Fluoroplastics installation wire 146

AF-125型氟塑料安装线

AF-125 type Fluoroplastics installation wire 147

180℃电机绕组引接电缆

180℃ flexible cable for motor winding connection 148

具有屏蔽和耐化学药品功能的电力电缆

Power cable with shielding and chemical medicine resistance 149

电力电缆 power cable



35kV及以下交联聚乙烯绝缘电力电缆

XLPE Insulation Power Cable of 35kv or Lower

0.6/1kV及以下聚氯乙烯绝缘及护套电力电缆

PVC Insulation & Sheath Power Cable of 0.6/1kv or Lower

通信电源用电力 电缆

Power Flexible Cable for Telecommunication Power supply Application

金属屏蔽电力电缆

Metal shielding Power Cable

35kV及以下交联聚乙烯绝缘电力电缆

35 kV or Lower Power Cable with XLPE Insulation

本产品适用于固定敷设在交流50Hz，额定电压35kV及以下的电力输配电线路上作输送电能用。与聚氯乙烯绝缘电力电缆相比，交联电力电缆产品不仅具有优异的电性能、机械性能、耐老化性能、耐环境应力和耐化学腐蚀性能的能力，而结构简单，重量，不受敷设落差限制，长期工作温度高（90℃）等特点。

一、生产执行标准

GB/T12706.1-2002~ GB/T12706.3-2002《额定电压1kV（Um=1.2 kV）到35kV（Um=40.5 kV）挤包绝缘电力电缆》，也可按用户需要，采用国际电工委员会IEC60502-1997标准生产。

二、使用特点

- 1、电缆导体的允许长期最高工作温度为90℃。
- 2、短路时（最长持续时间不超过5秒）电缆导体的最高温度不超过250℃。
- 3、电缆敷设时的环境温度不得低于0℃。
- 4、电缆的最小弯曲半径： 电缆不小于电缆外径的15倍；单芯电缆不小于电缆外径的20倍。
- 5、电缆的工频额定电压U0/U为0.6/1kV~26/35kV。
U0： 电缆设计用的导体对地或金属屏蔽之间的额定工频电压，称相电压；
U： 电缆设计用的导体间的额定工频电压，称线电压；
Um： 设备可承受的“最高系统电压”的最大值。

、电缆型号名称及适用场合

型号 Type		名称 Description	适用场合 Application occasion
铜Cu	铝Al		
YJV	YJLV	交联聚乙烯绝缘聚氯乙烯护套电力电缆 Power cable with XLPE insulation, PVC sheath	敷设在室内、隧道、电缆沟及管道中，也可埋在土壤中，电缆不能承受机械外力作用。单芯电缆不允许敷设在磁性管道中。To be laid indoors, in the tunnel, cable furrow, pipe or under soft soil. The cable can not bear mechanical force from outside. Single core cable isn't permitted to be laid in the magnetic pipe.
YJY	YJLY	交联聚乙烯绝缘聚乙烯护套电力电缆 Power cable with XLPE insulation, PE sheath	
YJV22	YJLV22	交联聚乙烯绝缘钢带铠装聚氯乙烯护套电力电缆 .Power cable with XLPE insulation, steel tape armor, PVC sheath	直埋敷设在地下（埋设深度：距地面≥0.7m），电缆能承受一定机械外力作用，但不能承受大的拉力。 To be laid underground(depth of burying: at least 0.7m above earth), the cable can bear certain mechanical force, but it can not bear great pulling force.
YJV23	YJLV23	交联聚乙烯绝缘钢带铠装聚乙烯护套电力电缆 .Power cable with XLPE insulation steel tape armored PE sheath	

The cable is used to transmit power on the power transmission and distribution line of A.C. 50Hz, rated voltage 35 kV or lower. By comparison with power cable with PVC insulation, it has not only excellent electric performance, mechanical performance, heat & aging resistant performance, weather resistant performance, chemical corrosion resistant performance, but also simple structure, light weight, no restriction by laying drop, and high temperature allowance for long term working(90℃) as well.

Executive standard

As section “extruded insulation power cable with rated voltage from 1kV (Um=1.2 kV) to 35kV (Um=40.5 kV)” stipulated in GB/T12706.1-2002~ GB/T12706.3-2002 or IEC60502-1997 according to the requirement of the customer.

Working Condition

- 1、Long-term working temperature by cable conductor is 90℃.
- 2、Max. temperature of cable conductor shall be no more than 250℃ during short circuit (the longest lasting time shall be no more than 5 seconds).
- 3、Environment temperature for installation is no less than 0℃.
- 4、Min bending radius of cable:
It is no less than 15 times that of cable outer diameter for cable with three cores.
It is no less than 20 times that of cable outer diameter for cable with single core.
- 5、A.C. rated voltage U0/U of cable is 0.6/1kV~26/35kV.
U0: rated A.C. voltage of conductor to earth OR between metallic shielding for cable designing, which is called phase voltage.
U: rated A.C. voltage between conductors for cable designing, which is called wire voltage.
Um: Max endurable value of “Max system voltage” for cable

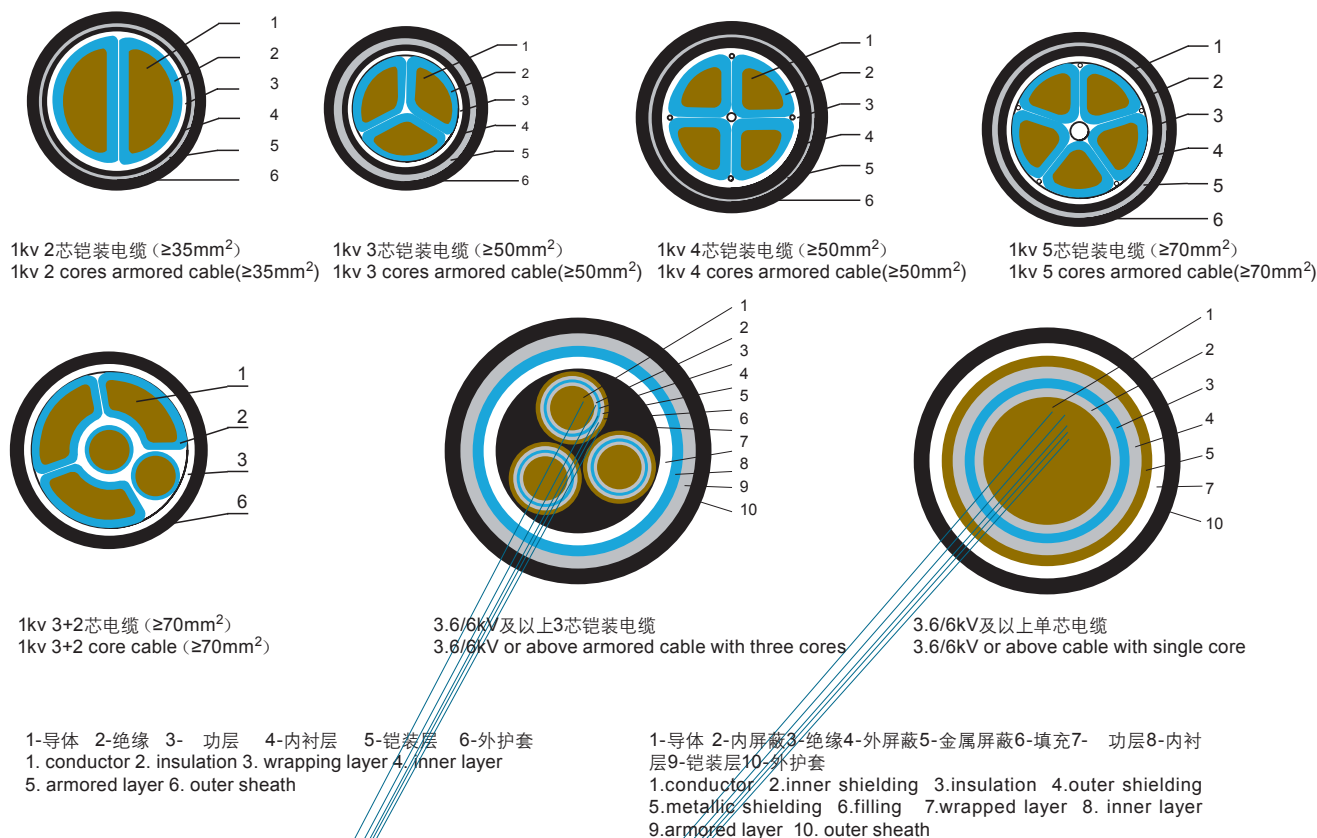
Type, Description and Application Occasion

备注: 1、可根据 用户需求, 提供钢丝铠装型交联力缆, : YJV32、YJLV32、YJV33、YJLV33。
2、需要阻 型电缆, 应在原型号 加 “ZR-” 表示。

Note:1: We also produce steel wire armored cross-linked power cable such as YJV32、YJLV32、YJV33、YJLV33 according to the requirement of the customer.
2: Prefix “ZR” (flame retardant type) shall be added to the original type when flame retardant type cable is needed.

四、电缆结构示意图

The Figure of Cable Structure



五、生产范围

Production Scope

型号 Type		芯数 Core No.	额定电压 (kV) Rated voltage								
铜Cu	铝Al		0.6/1	1.8/3	3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/20 18/30	21/35	26/35
YJV YJY	YJLV YJLY	1	1.5~500	10~400	25~500	25~500	25~500	35~500	50~500	50~500	50~500
		3	1.5~300	10~300	25~300	25~300	25~300	35~300	50~300	50~300	50~300
		2	1.5~240	10~150	/	/	/	/	/	/	/
		3+1	4~300	10~300	/	/	/	/	/	/	/
		3+2	50~240	/	/	/	/	/	/	/	/
		4+1	50~240	/	/	/	/	/	/	/	/
		5	1.5~150	/	/	/	/	/	/	/	/
YJV22 YJV23	YJLV22 YJLV23	1	10~500	10~400	25~500	25~500	25~500	35~500	50~500	50~500	50~500
		3	2.5~300	10~240	25~300	25~300	25~300	35~300	50~300	50~300	50~300
		2	4~150	10~150	/	/	/	/	/	/	/
		3+1	4~300	10~240	/	/	/	/	/	/	/
		3+2	50~240	/	/	/	/	/	/	/	/
		4+1	50~240	/	/	/	/	/	/	/	/
		5	2.5~150	/	/	/	/	/	/	/	/



六、电缆外径尺寸

OD Size of Cable(OD: outer diameter)

YJV-0.6/1kV、YJLV-0.6/1kV table 1

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度mm insulated thickness	护套厚度mm sheath thickness	电缆近似外径 mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
1*1.5	0.7	1.4	5.6		/
1*2.5	0.7	1.4	6.0	68	/
1*4	0.7	1.4	6.5	87	/
1*6	0.7	1.4	7.0	110	/
1*10	0.7	1.4	8.2	115	95
1*16	0.7	1.4	9.3	220	120
1*25	0.9	1.4	11.0	345	190
1*35	0.9	1.4	12.0	424	207
1*50	1.0	1.4	13.8	554	245
1*70	1.1	1.4	16.2	770	336
1*95	1.1	1.5	17.2	1040	455
1*120	1.2	1.5	19.1	1290	550
1*150	1.4	1.6	21.2	1575	642
1*185	1.6	1.7	23.1	1929	798
1*240	1.7	1.8	26.0	2500	1016
1*300	1.8	1.9	28.4	3056	1230
1*400	2.0	2.0	33.1	3622	1446
1*500	2.2	2.2	37.8	4950	1845

YJV-0.6/1kV、YJLV-0.6/1kV Table 2

芯数*导体标称截面mm ² core no. * nominal cross section area of conductor	绝缘厚度mm insulated thickness	护套厚度mm sheath thickness	电缆近似外径mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
2*1.5	0.7	1.8	9.7	103	/
2*2.5	0.7	1.8	10.6	131	/
2*4	0.7	1.8	11.5	168	118
2*6	0.7	1.8	12.6	216	142
2*10	0.7	1.8	15.2	328	189
2*16	0.7	1.8	17.3	461	245
2*25	0.9	1.8	20.0	659	329
2*35	0.9	1.8	22.0	868	413
2*50	1.0	1.8	19.8	1116	489
2*70	1.1	1.8	22.2	1514	644
2*95	1.1	1.9	25.2	2017	830
2*120	1.2	2.0	28.0	2526	1026
2*150	1.4	2.1	31.2	3139	1286
2*185	1.6	2.3	34.2	3967	1773
2*240	1.7	2.4	38.0	5053	2207

YJV-0.6/1kV、YJLV-0.6/1kV Table 3

芯数*导体标称截面mm ² core no. * nominal cross section area of conductor	绝缘厚度mm Insulated thickness	护套厚度mm sheath thickness	电缆近似外径mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
3*1.5	0.7	1.8	10.0	145	/
3*2.5	0.7	1.8	10.8	185	/
3*4	0.7	1.8	11.8	250	175
3*6	0.7	1.8	12.9	320	210
3*10	0.7	1.8	15.7	450	260
3*16	0.7	1.8	18.0	640	340
3*25	0.9	1.8	20.8	940	470
3*35	0.9	1.8	22.9	1260	600
3*50	1.0	1.8	22.6	1670	730
3*70	1.1	1.8	26.5	2280	970
3*95	1.1	2.0	29.8	3020	1240
3*120	1.2	2.1	33.0	3795	1540
3*150	1.4	2.2	36.6	4750	1940
3*185	1.6	2.4	41.6	5654	2248
3*240	1.7	2.6	46.4	7243	2723
3*300	1.8	2.7	50.6	8832	3218

YJV-0.6/1kV、YJLV-0.6/1kV Table 4

芯数*导体标称截面mm ² core no. * nominal cross section area of conductor	绝缘厚度mm Insulated thickness	护套厚度mm sheath thickness	电缆近似外径mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
4*1.5	0.7	1.8	10.6	139	84
4*2.5	0.7	1.8	11.5	150	107
4*4	0.7	1.8	12.8	253	151
4*6	0.7	1.8	14.0	337	198
4*10	0.7	1.8	17.0	501	291
4*16	0.7	1.8	19.6	778	455
4*25	0.9	1.8	22.8	1160	696
4*35	0.9	1.8	25.2	1554	905
4*50	1.0	1.8	27.0	2148	1235
4*70	1.1	1.9	31.0	2928	1640
4*95	1.1	2.1	34.6	3954	2294
4*120	1.2	2.3	39.0	4925	2865
4*150	1.4	2.4	42.4	6238	3618
4*185	1.6	2.5	48.0	7562	4395
4*240	1.7	2.8	51.2	9660	5603
4*300	1.8	3.0	59.8	11758	6585

YJV-0.6/1kV、YJLV-0.6/1kV Table 5

芯数*导体标称截面mm ² core no. * nominal cross section area of conductor	绝缘厚度mm Insulated thickness	护套厚度 Mm sheath thickness	电缆近似外径mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
3*4+1*2.5	0.7	1.8	12.3	236	180
3*6+1*4	0.7	1.8	13.5	316	210
3*10+1*6	0.7	1.8	16.6	460	380
3*16+1*10	0.7	1.8	19.2	679	375
3*25+1*16	0.9	1.8	22.4	1065	586
3*35+1*16	0.9	1.8	24.6	1368	821
3*50+1*25	1.0	1.8	27.0	1901	1141
3*70+1*35	1.1	1.9	31.0	2585	1463
3*95+1*50	1.1	2.0	35.2	3718	2231
3*120+1*70	1.2	2.1	39.0	4443	2665
3*150+1*70	1.4	2.3	41.8	5326	3190
3*185+1*95	1.6	2.4	47.0	6628	3842
3*240+1*120	1.7	2.6	52.6	8501	5001
3*300+1*150	1.8	2.8	57.9	10320	5679

YJV-0.6/1kV、YJLV-0.6/1kV Table 6

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度mm 相/副 Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
3*50+2*25	1.0/0.9	1.8	27.7	2155	953
3*70+2*35	1.1/0.9	2.0	32.2	2960	1278
3*95+2*50	1.1/1.0	2.1	36.3	3967	1654
3*120+2*70	1.2/1.1	2.3	40.7	5106	2102
3*150+2*70	1.4/1.1	2.4	43.5	5990	2445
3*185+2*95	1.6/1.1	2.5	48.0	7495	3019
3*240+2*120	1.7/1.2	2.7	53.4	9548	3781

YJV-0.6/1kV、YJLV-0.6/1kV Table 7

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度mm 相/副 Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
4*50+1*25	1.0/0.9	1.9	29.0	2406	1055
4*70+1*35	1.1/0.9	2.1	33.9	3312	1419
4*95+1*50	1.1/1.0	2.2	38.0	4410	1826
4*120+1*70	1.2/1.1	2.3	41.9	5569	2265
4*150+1*70	1.4/1.1	2.4	45.4	6755	2729
4*185+1*95	1.6/1.1	2.6	50.3	8379	3363
4*240+1*120	1.7/1.2	2.8	56.0	10726	4237

YJV-0.6/1kV、YJLV-0.6/1kV Table 8

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
5*1.5	0.7	1.8	11.4	182	/
5*2.5	0.7	1.8	12.5	239	/
5*4	0.7	1.8	13.8	341	200
5*6	0.7	1.8	15.0	448	252
5*10	0.7	1.8	18.5	677	372
5*16	0.7	1.8	21.3	1000	512
5*25	0.9	1.8	26.0	1504	742
5*35	0.9	1.9	29.5	2027	958
5*50	1.0	1.9	31.4	2815	1233
5*70	1.1	2.1	36.8	3881	1667
5*95	1.1	2.3	41.4	5155	2149
5*120	1.2	2.4	44.8	6400	2606
5*150	1.4	2.5	49.6	7967	3222

YJV22-0.6/1kV、YJLV22-0.6/1kV Table 9

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm Sheath thickness	电缆近似外径 mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22*	YJLV22*
1*10	0.7	1.8	12.0	290	230
1*16	0.7	1.8	13.1	366	270
1*25	0.9	1.8	14.8	487	335
1*35	0.9	1.8	15.9	600	388
1*50	1.0	1.8	18.3	768	465
1*70	1.1	1.8	20.0	993	566
1*95	1.1	1.8	21.5	1255	676
1*120	1.2	1.8	24.2	4003	788
1*150	1.4	1.8	25.6	1840	924
1*185	1.6	1.9	27.8	2223	1092
1*240	1.7	2.0	30.6	2790	1326
1*300	1.8	2.1	33.4	3400	1570
1*400	2.0	2.2	37.8	4445	1977
1*500	2.2	2.4	42.6	5605	2457

YJV22-0.6/1kV、YJLV22-0.6/1kV Table 10

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22	YJLV22
2*4	0.7	1.8	14.5	366	/
2*6	0.7	1.8	15.6	432	/
2*10	0.7	1.8	18.2	590	472
2*16	0.7	1.8	20.3	763	574
2*25	0.9	1.8	23.0	1001	721
2*35	0.9	1.8	25.0	1250	854
2*50	1.0	1.8	21.8	1535	1002
2*70	1.1	1.9	25.7	1985	1282
2*95	1.1	2.0	28.7	2838	1872
2*120	1.2	2.1	31.5	3445	2203
2*150	1.4	2.3	34.7	4165	2637
2*185	1.6	2.4	38.2	5202	3187
2*240	1.7	2.6	42.0	6445	3932

YJV22-0.6/1kV、YJLV22-0.6/1kV Table 11

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22	YJLV22
3*2.5	0.7	1.8	13.8	408	/
3*4	0.7	1.8	14.8	505	420
3*6	0.7	1.8	15.9	597	473
3*10	0.7	1.8	18.7	756	571
3*16	0.7	1.8	21.0	983	691
3*25	0.9	1.8	23.8	1343	895
3*35	0.9	1.8	25.9	1721	1086
3*50	1.0	1.9	26.1	2173	1262
3*70	1.1	2.0	30.0	3143	1869
3*95	1.1	2.1	33.3	3979	2237
3*120	1.2	2.2	36.5	4844	2622
3*150	1.4	2.4	40.6	5972	3172
3*185	1.6	2.5	45.6	6941	3595
3*240	1.7	2.7	50.4	8699	4362
3*300	1.8	2.9	55.1	10422	5210

YJV22-0.6/1kV、YJLV22-0.6/1kV Table 12

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22	YJLV22
4*1.5	0.7	1.8	13.6	298	/
4*2.5	0.7	1.8	14.5	311	/
4*4	0.7	1.8	15.8	479	383
4*6	0.7	1.8	17.0	586	444
4*10	0.7	1.8	20.0	800	579
4*16	0.7	1.8	22.6	1138	764
4*25	0.9	1.8	25.8	1598	1015
4*35	0.9	1.9	28.7	2049	1232
4*50	1.0	2.0	30.5	2583	1443
4*70	1.1	2.1	34.5	3717	2136
4*95	1.1	2.3	38.6	4768	2592
4*120	1.2	2.4	43.0	5759	3029
4*150	1.4	2.5	46.4	7173	3694
4*185	1.6	2.7	52.5	8513	4292
4*240	1.7	2.9	55.7	10641	5208
4*300	1.8	3.1	64.8	12699	6047

YJV22-0.6/1kV、YJLV22-0.6/1kV Table 13

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22	YJLV22
3*4+1*2.5	0.7	1.8	15.3	472	/
3*6+1*4	0.7	1.8	16.5	579	/
3*10+1*6	0.7	1.8	19.6	762	548
3*16+1*10	0.7	1.8	22.2	1034	705
3*25+1*16	0.9	1.8	25.4	1510	970
3*35+1*16	0.9	1.8	27.6	1865	1139
3*50+1*25	1.0	1.9	30.5	2431	1377
3*70+1*35	1.1	2.0	34.5	3502	2037
3*95+1*50	1.1	2.2	39.2	4823	2656
3*120+1*70	1.2	2.3	43.0	5625	3009
3*150+1*70	1.4	2.4	45.8	6592	3441
3*185+1*95	1.6	2.6	51.5	8045	4087
3*240+1*120	1.7	2.8	57.1	10120	4991
3*300+1*150	1.8	3.0	62.9	11971	5700

YJV22-0.6/1kV、YJLV22-0.6/1kV Table 14

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度mm 相/副 Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22	YJLV22
3*50+2*25	1.0/0.9	2.0	31.2	2758	1558
3*70+2*35	1.1/0.9	2.1	35.7	3996	2323
3*95+2*50	1.1/1.0	2.3	40.3	5157	2834
3*120+2*70	1.2/1.1	2.4	44.7	6485	3468
3*150+2*70	1.4/1.1	2.5	47.5	7428	3869
3*185+2*95	1.6/1.1	2.7	52.5	9069	4604
3*240+2*120	1.7/1.2	2.9	57.9	11362	5597

YJV22-0.6/1kV、YJLV22-0.6/1kV Table 15

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度mm 相/副Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22	YJLV22
4*50+1*25	1.0/0.9	2.0	32.5	3080	1721
4*70+1*35	1.1/0.9	2.2	37.9	4471	2570
4*95+1*50	1.1/1.0	2.4	42.0	5733	3116
4*120+1*70	1.2/1.1	2.4	45.9	7073	3723
4*150+1*70	1.4/1.1	2.5	49.9	8376	4318
4*185+1*95	1.6/1.1	2.8	54.8	10139	5121
4*240+1*120	1.7/1.2	3.0	61.0	12764	6257

YJV22-0.6/1kV、YJLV22-0.6/1kV Table 16

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximated outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22	YJLV22
5*2.5	0.7	1.8	15.5	485	/
5*4	0.7	1.8	16.8	610	469
5*6	0.7	1.8	18.0	744	550
5*10	0.7	1.8	21.5	1036	731
5*16	0.7	1.8	24.3	1410	922
5*25	0.9	1.9	29.5	2015	1252
5*35	0.9	2.0	33.0	2596	1527
5*50	1.0	2.1	34.9	3322	1815
5*70	1.1	2.2	40.8	4791	2686
5*95	1.1	2.4	45.4	6149	3293
5*120	1.2	2.5	49.3	7396	3820
5*150	1.4	2.6	54.1	9024	4560

YJV-3.6/6kV、YJLV-3.6/6kV Table 17

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
1*25	2.5	1.6	18.1	565	392
1*35	2.5	1.6	19.0	687	483
1*50	2.5	1.6	20.3	869	555
1*70	2.5	1.7	22.1	1090	656
1*95	2.5	1.7	23.7	1364	767
1*120	2.5	1.8	25.3	1625	879
1*150	2.5	1.8	27.1	1940	1000
1*185	2.5	1.9	28.8	2313	1151
1*240	2.6	2.0	31.3	2885	1382
1*300	2.8	2.1	34.1	3528	1654
1*400	3.0	2.2	37.8	4640	2155
1*500	3.2	2.3	41.3	5735	2634

YJV-3.6/6kV、YJLV-3.6/6kV Table 18

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
3*25	2.5	2.1	36.0	1763	1284
3*35	2.5	2.2	38.0	2150	1526
3*50	2.5	2.3	41.2	2720	1754
3*70	2.5	2.4	44.7	3423	2112
3*95	2.5	2.5	48.7	4297	2490
3*120	2.5	2.6	51.7	5135	2883
3*150	2.5	2.8	55.5	6165	3300
3*185	2.5	2.9	58.9	7332	3867
3*240	2.6	3.0	64.7	9146	4628
3*300	2.8	3.2	70.6	11184	5540

YJV22-3.6/6kV、YJLV22-3.6/6kV Table 19

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22*	YJLV22*
1*25	2.5	1.8	21.9	706	553
1*35	2.5	1.8	22.7	831	613
1*50	2.5	1.8	24.0	999	694
1*70	2.5	1.8	25.8	1232	800
1*95	2.5	1.8	27.4	1500	928
1*120	2.5	1.9	29.0	1788	1055
1*150	2.5	2.0	31.6	2270	1340
1*185	2.5	2.0	33.4	2637	1496
1*240	2.6	2.1	36.0	3202	1741
1*300	2.8	2.2	38.7	3846	2001
1*400	3.0	2.3	42.7	4872	2435
1*500	3.2	2.4	46.2	5907	2845

YJV22-3.6/6kV、YJLV22-3.6/6kV Table 20

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22	YJLV22
3*25	2.5	2.3	40.5	2767	2273
3*35	2.5	2.3	42.7	3226	2638
3*50	2.5	2.4	46.0	4690	2912
3*70	2.5	2.6	49.7	4518	3358
3*95	2.5	2.7	53.7	5500	3860
3*120	2.5	2.8	56.8	6419	4353
3*150	2.5	2.9	60.6	7521	4818
3*185	2.5	3.0	64.4	8725	5490
3*240	2.6	3.2	70.2	10883	6387
3*300	2.8	3.3	76.2	13197	7645

YJV-6/6kV, 6/10kV, YJLV-6/6kV, 6/10kV Table 21

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
1*25	3.4	1.8	20.3	644	482
1*35	3.4	1.8	21.4	769	541
1*50	3.4	1.8	22.7	926	614
1*70	3.4	1.8	24.3	1158	717
1*95	3.4	1.8	25.9	1456	839
1*120	3.4	1.8	27.4	1684	940
1*150	3.4	1.8	29.0	2020	1082
1*185	3.4	1.9	30.8	2391	1228
1*240	3.4	2.0	33.2	2940	1450
1*300	3.4	2.0	36.2	3678	1769
1*400	3.4	2.2	37.9	4565	2119
1*500	3.4	2.3	41.9	5680	2537

YJV-6/6kV, 6/10kV, YJLV-6/6kV, 6/10kV Table 22

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
3*25	3.4	2.2	39.4	1967	1479
3*35	3.4	2.3	42.0	2381	1693
3*50	3.4	2.4	45.0	2892	1951
3*70	3.4	2.5	48.7	3632	2303
3*95	3.4	2.6	52.3	4615	2755
3*120	3.4	2.7	55.7	5361	3118
3*150	3.4	2.8	59.4	6395	3567
3*185	3.4	2.9	63.0	7634	4128
3*240	3.4	3.1	68.2	9342	4850
3*300	3.4	3.3	75.0	11600	5844

YJV22-6/6kV, 6/10kV, YJLV22-6/6kV, 6/10kV Table 23

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22*	YJLV22*
1*25	3.4	1.8	23.3	966	805
1*35	3.4	1.8	24.5	1107	882
1*50	3.4	1.8	25.8	1287	970
1*70	3.4	1.8	28.4	1540	1097
1*95	3.4	1.9	29.4	1863	1242
1*120	3.4	1.9	30.9	2355	1617
1*150	3.4	2.0	33.2	2727	1807
1*185	3.4	2.1	35.0	3156	2002
1*240	3.4	2.2	38.7	3733	2277
1*300	3.4	2.3	41.9	4524	2654
1*400	3.4	2.4	45.3	5432	3030
1*500	3.4	2.5	48.7	6588	3500

YJV22-6/6kV、6/10kV、YJLV22-6/6kV、6/10kV Table 24

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22	YJLV22
3*25	3.4	2.4	44.7	3097	2609
3*35	3.4	2.5	47.5	3576	2888
3*50	3.4	2.5	50.6	4191	3250
3*70	3.4	2.7	54.3	5056	3727
3*95	3.4	2.8	58.2	6112	4252
3*120	3.4	2.9	61.3	6979	4736
3*150	3.4	3.0	65.5	8175	5347
3*185	3.4	3.1	69.0	9513	6007
3*240	3.4	3.3	74.3	11368	6876
3*300	3.4	3.5	81.0	13888	8132

YJV-8.7/10kV、8.7/15kV、YJLV-8.7/10kV、8.7/15kV Table 25

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
1*25	4.5	1.8	22.7	730	568
1*35	4.5	1.8	23.8	858	630
1*50	4.5	1.8	25.0	1020	708
1*70	4.5	1.8	26.6	1256	815
1*95	4.5	1.8	28.5	1561	944
1*120	4.5	1.8	30.0	1805	1061
1*150	4.5	1.8	31.4	2136	1198
1*185	4.5	1.9	33.4	2526	1363
1*240	4.5	2.0	35.8	3084	1594
1*300	4.5	2.1	38.6	3817	1908
1*400	4.5	2.2	42.0	4735	2289
1*500	4.5	2.3	44.6	5850	2720

YJV-8.7/10kV、8.7/15kV、YJLV-8.7/10kV、8.7/15kV Table 26

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
3*25	4.5	2.4	45.4	2276	1788
3*35	4.5	2.5	47.8	2703	2015
3*50	4.5	2.6	50.7	3239	2298
3*70	4.5	2.7	54.3	4008	2679
3*95	4.5	2.8	57.6	4989	3129
3*120	4.5	2.9	61.3	5744	3501
3*150	4.5	3.0	64.6	6868	4040
3*185	4.5	3.1	68.3	8094	4588
3*240	4.5	3.3	73.5	9877	5269
3*300	4.5	3.4	80.2	12184	6428

YJV22-8.7/10kV, 8.7/15kV, YJLV22-8.7/10kV, 8.7/15kV Table 27

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22*	YJLV22*
1*25	4.5	1.8	25.9	964	795
1*35	4.5	1.8	27.0	1098	875
1*50	4.5	1.8	28.2	1275	962
1*70	4.5	1.8	29.8	1532	1092
1*95	4.5	1.9	31.7	1857	1236
1*120	4.5	1.9	33.6	2364	1623
1*150	4.5	2.0	35.2	2734	1797
1*185	4.5	2.1	38.4	3157	2004
1*240	4.5	2.2	40.8	3731	2263
1*300	4.5	2.2	44.0	4504	2613
1*400	4.5	2.4	47.6	5445	3044
1*500	4.5	2.4	50.7	6610	3508

YJV22-8.7/10kV, 8.7/15kV, YJLV22-8.7/10kV, 8.7/15kV Table 28

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22	YJLV22
3*25	4.5	2.5	50.2	3575	3087
3*35	4.5	2.6	52.6	4096	3408
3*50	4.5	2.7	55.4	4713	3772
3*70	4.5	2.8	59.3	5608	4279
3*95	4.5	2.9	63.0	6692	4832
3*120	4.5	3.1	67.0	7572	5329
3*150	4.5	3.2	70.7	8834	6006
3*185	4.5	3.3	74.3	10166	6660
3*240	4.5	3.4	79.5	12064	7572
3*300	4.5	3.6	86.8	15628	9872

YJV-12/20kV, YJLV-12/20kV Table 29

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
1*25	5.5	1.8	24.5	820	658
1*35	5.5	1.8	25.6	951	723
1*50	5.5	1.8	26.9	1118	806
1*70	5.5	1.8	28.5	1372	931
1*95	5.5	1.9	30.3	1683	1066
1*120	5.5	1.9	31.8	1934	1190
1*150	5.5	2.0	33.6	2269	1331
1*185	5.5	2.0	35.2	2667	1504
1*240	5.5	2.1	37.6	3216	1726
1*300	5.5	2.2	40.8	3977	2068
1*400	5.5	2.3	44.0	4888	2442
1*500	5.5	2.4	47.2	5914	2880

YJV-12/20kV、YJLV-12/20kV Table 30

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
3*25	5.5	2.5	49.2	2615	2127
3*35	5.5	2.6	51.8	3029	2341
3*50	5.5	2.7	54.9	3592	2651
3*70	5.5	2.8	58.4	4378	3049
3*95	5.5	2.9	62.2	5376	3516
3*120	5.5	3.0	65.6	6243	4000
3*150	5.5	3.1	69.3	7324	4496
3*185	5.5	3.3	73.2	8586	5080
3*240	5.5	3.4	78.0	10368	5876

YJV22-12/20kV、YJLV22-12/20kV Table 31

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22*	YJLV22*
1*25	5.5	1.8	27.3	1279	1132
1*35	5.5	1.9	28.7	1436	1200
1*50	5.5	1.9	30.0	1565	1249
1*70	5.5	2.0	32.0	1838	1387
1*95	5.5	2.1	34.2	2188	1567
1*120	5.5	2.1	35.5	2436	1702
1*150	5.5	2.2	38.6	2813	1876
1*185	5.5	2.2	40.2	3227	2076
1*240	5.5	2.2	42.4	3795	2330
1*300	5.5	2.3	46.0	4653	2792
1*400	5.5	2.4	49.3	5475	3101
1*500	5.5	2.5	52.4	6505	3542

YJV22-12/20kV、YJLV22-12/20kV Table 32

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22	YJLV22
3*25	5.5	2.7	54.1	4035	3547
3*35	5.5	2.8	57.2	4524	3836
3*50	5.5	2.9	60.2	5196	4255
3*70	5.5	3.0	63.7	6082	4753
3*95	5.5	3.1	67.5	7242	5382
3*120	5.5	3.2	70.9	8208	5965
3*150	5.5	3.3	74.8	9392	6564
3*185	5.5	3.4	78.5	10760	7254
3*240	5.5	3.6	85.0	13713	9221

YJV-18/30kV、YJLV-18/30kV Table 33

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
1*50	8.0	2.0	33.0	1498	1185
1*70	8.0	2.1	34.9	1784	1322
1*95	8.0	2.1	36.5	2121	1482
1*120	8.0	2.2	38.1	2379	1630
1*150	8.0	2.2	40.1	2723	1784
1*185	8.0	2.3	41.5	3147	1985
1*240	8.0	2.3	43.7	3698	2209
1*300	8.0	2.4	46.1	4534	2606
1*400	8.0	2.5	49.4	5377	2930
1*500	8.0	2.6	52.6	6328	3370

YJV22-18/30kV、YJLV22-18/30kV Table 34

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22*	YJLV22*
1*50	8.0	2.2	38.3	1972	1661
1*70	8.0	2.2	40.0	2261	1803
1*95	8.0	2.3	41.8	2647	2006
1*120	8.0	2.3	43.2	2923	2179
1*150	8.0	2.4	45.0	3319	2364
1*185	8.0	2.5	47.2	3743	2595
1*240	8.0	2.5	49.4	4364	2889
1*300	8.0	2.6	51.8	5211	3322
1*400	8.0	2.7	55.1	6077	3690
1*500	8.0	2.8	58.7	7156	4144

YJV-21/35kV、YJLV-21/35kV Table 35

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
1*50	9.3	2.1	36.4	1625	1313
1*70	9.3	2.1	38.0	1888	1447
1*95	9.3	2.2	39.8	2236	1619
1*120	9.3	2.2	41.3	2494	1750
1*150	9.3	2.3	43.1	2870	1932
1*185	9.3	2.3	44.7	3274	2111
1*240	9.3	2.4	47.1	3876	2386
1*300	9.3	2.5	49.5	4611	2702
1*400	9.3	2.6	52.8	5563	3117
1*500	9.3	2.7	56.0	6700	3580

YJV22-21/35kV、YJLV22-21/35kV Table 36

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22*	YJLV22*
1*50	9.3	2.3	41.1	2421	2101
1*70	9.3	2.3	42.8	2737	2286
1*95	9.3	2.4	44.6	3130	2509
1*120	9.3	2.4	46.4	3392	2660
1*150	9.3	2.5	48.2	3817	2898
1*185	9.3	2.5	49.8	4289	3103
1*240	9.3	2.6	52.2	4923	3436
1*300	9.3	2.7	54.6	5764	3837
1*400	9.3	2.8	58.3	6731	4333
1*500	9.3	2.9	61.5	7973	4869

YJV-26/35kV、YJLV-26/35kV Table 37

芯数*导体标称截面 mm ² core no. * nominal cross section area of conductor	绝缘厚度 mm Insulated thickness	护套厚度 mm sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV	YJLV
1*50	10.5	2.2	38.4	1803	1491
1*70	10.5	2.2	40.1	2071	1630
1*95	10.5	2.3	41.9	2419	1802
1*120	10.5	2.3	43.3	2692	1948
1*150	10.5	2.4	45.1	3077	2139
1*185	10.5	2.4	46.7	3487	2324
1*240	10.5	2.5	49.1	4100	2610
1*300	10.5	2.6	51.5	4843	2934
1*400	10.5	2.7	54.8	5810	3364
1*500	10.5	2.8	59.4	7138	4009

YJV22-26/35kV、YJLV22-26/35kV Table 38

芯数*导体标称截面 mm ² Core no.* nominal cross section area of cable	绝缘厚度 mm Insulated thickness	护套厚度 mm Sheath thickness	电缆近似外径 mm approximate outer diameter of cable	电缆近似重量kg/km approximated weight of cable	
				YJV22*	YJLV22*
1*50	10.5	2.3	43.5	2705	2400
1*70	10.5	2.4	45.4	3023	2575
1*95	10.5	2.5	47.6	3387	2757
1*120	10.5	2.5	49.0	3661	2902
1*150	10.5	2.6	50.8	4092	3144
1*185	10.5	2.6	52.4	4533	3369
1*240	10.5	2.7	54.8	5248	3732
1*300	10.5	2.8	57.6	6005	4107
1*400	10.5	2.9	60.9	6449	4575
1*500	10.5	3.0	65.2	8423	5332

*用于交流系统的单芯铠装电缆的铠装层应采用非磁性金属带 包；单芯钢丝铠装电缆应采用隔磁措施。

Non-magnetic metallic tape wrapping should be adopted as armored layer of single core armored cable for A.C. system. Magnetism-separated measure shall be adopted by single core steel wire armored cable.

七、电缆主要技术参数

Main Technical Parameter of Cable

1、20℃时导体最大直流电阻值应满足GB/T3956标准中的2类导体的规定：

Max value of conductor DC resistance at 20℃ shall meet the requirement of category 2 conductor stipulated in GB/T3956 standard.

导体标称 截面mm ² nominal cross section area of conductor	20℃时导体最大直流电阻Ω/km conductor max DC resistance at 20℃		导体标称 截面mm ² nominal cross section area of conductor	20℃时导体最大直流电阻Ω/km conductor max DC resistance at 20℃	
	铜芯导体 Cu conductor	铝芯导体 Al conductor		铜芯导体 Cu conductor	铝芯导体 Al conductor
1.5	12.1	/	70	0.268	0.443
2.5	7.41	/	95	0.193	0.320
4	4.61	7.41	120	0.153	0.253
6	3.08	4.61	150	0.124	0.206
10	1.83	3.02	185	0.0991	0.164
16	1.15	1.91	240	0.0754	0.125
25	0.727	1.20	300	0.0601	0.100
35	0.524	0.868	400	0.0470	0.078
50	0.387	0.641	500	0.0366	0.0605

2、工频交流耐压试验

A.C. Voltage Test under Power Frequency

额定电压kV Rated voltage kv	0.6/1	1.8/3	3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/30	21/35	26/35
试验电压kV Tested voltage kv	3.5	6.5	12.5	21	30.5	42	63	73.5	91
试验条件：环境温度下，5min。 Testing condition: under environment temperature for 5min 试验要求：绝缘应无 穿。 Testing requirement: insulation without puncture									

3、局部放电量 Partial Discharging Capacity

应在1.73U₀电压下测量局部放电量，值应不高于以下规定：

Partial discharging capacity shall be tested at the voltage of 1.73U₀, and its value shall be no more than that stipulated in the following table:

额定电压 kV Rated voltage	3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/30	21/35	26/35
放电量 pc Partial discharging capacity	10						

4、电缆载流量

Current-loading Capacity of Cable

不同土 数下的载流量修正系数

Current-loading capacity correcting coefficient under different heat-resistant coefficient of soil

电压KV Voltage	导体标称截面mm ² Nominal cross section area of conductor	土 系数 °C.m/w Heat-resistant coefficient of soil				
		0.8	1.0	1.2	1.5	2.0
0.6/1~6/6	≤35	1.06	1.00	0.95	0.88	0.80
	50~150	1.08	1.00	0.94	0.87	0.77
	≥185	1.09	1.00	0.93	0.85	0.76
6/10~12/15	≤35	1.05	1.00	0.95	0.89	0.80
	50~150	1.06	1.00	0.94	0.88	0.79
	≥185	1.07	1.00	0.93	0.86	0.77
12/20~26/35	≤95	1.05	1.00	0.95	0.90	0.82
	≥120	1.06	1.02	0.94	0.83	0.80

不同土 温度下的载流量修正系数

Current-loading capacity correcting coefficient under different soil temperature

工作温度°C Working temperature	土 温度°C Soil temperature					
90	10	15	20	25	30	35
修正系数 Correcting coefficient	1.11	1.07	1.04	1.00	0.96	0.92

4.1 低压交联电力电缆 (0.6/1kV)

Low voltage XLPE Power Cable (0.6/1kV)

不同空 温度下的载流量修正系数

Current-loading capacity correcting coefficient under different air temperature

工作温度°C Working temperature	空 温度 °C Air temperature							
90	10	15	20	25	30	35	40	45
修正系数Correcting coefficient	1.18	1.13	1.09	1.04	1.00	0.95	0.90	0.84

导体 材质 Conductor material	导体截面mm ² cross section area of conductor	非铠装型电缆 inarmored cable				铠装型电缆armored cable			
		单芯 single core		3cores		单芯 single core		3cores	
		空 air	土 soil	空 air	土 soil	空 air	土 soil	空 air	土 soil
铜 导体 Cu conductor	1.5	30	43	21	25	—	—	—	—
	2.5	40	57	28	33	—	—	28	33
	4	53	74	37	44	—	—	37	43
	6	67	94	46	54	—	—	47	54
	10	93	127	63	73	105	125	63	71
	16	124	165	84	94	136	162	84	92
	25	168	213	109	120	180	210	110	118
	35	207	256	132	144	220	253	134	141
	50	252	304	159	169	265	299	161	167
	70	308	372	195	205	322	366	197	203
	95	384	449	237	245	398	442	239	242
	120	439	512	273	278	465	505	275	274
	150	507	575	310	309	521	567	314	305
	185	591	650	355	347	604	639	354	341
	240	694	757	416	399	706	744	414	392
	300	810	855	473	446	819	842	—	—
	400	937	976	—	—	949	962	—	—
	500	1078	1110	—	—	1094	1094	—	—
铝 导体 Al conductor	10	71	97	48	56	81	96	49	55
	16	121	162	82	92	133	159	82	90
	25	130	165	85	93	140	163	85	92
	35	160	199	102	111	170	196	104	110
	50	195	235	123	131	205	272	124	129
	70	239	289	152	159	250	284	153	158
	95	298	348	184	190	308	343	185	188
	120	340	398	213	216	361	392	214	213
	150	392	445	241	240	404	439	242	237
	185	459	505	277	271	469	497	277	267
	240	539	589	326	312	549	578	325	308
	300	629	664	372	351	636	654	—	—
	400	731	762	—	—	741	751	—	—
	500	845	870	—	—	858	858	—	—

*直埋深度100cm。

Depth of direct burying is 100cm.

4.2 中压交联电力电缆 (3.6kV~35kV)

Middle voltage cross-linked Power Cable
(3.6kV~35kV)

不同空气温度下的载流量修正系数 Current-loading capacity correcting coefficient under different air temperature

工作温度℃ Working temperature	空气温度℃ Air temperature							
90	10	15	20	25	30	35	40	45
修正系数Correcting coefficient	1.26	1.22	1.18	1.13	1.09	1.04	1.00	0.94

空 中 In the air

导体截面mm ² cross section area of conductor	YJV、YJY					YJLV、YJLY				
	3.6/6kV ~12/20kV			18/20kV ~26/35kV		3.6/6kV ~12/20kV			18/20kV ~26/35kV	
	单芯 single core		3cores	单芯 Single core		单芯 single core		3cores	单芯 single core	
	○○○	⊗		○○○	⊗	○○○	⊗		○○○	⊗
25	165	140	133	—	—	130	110	101	—	—
35	205	170	161	—	—	155	135	120	—	—
50	245	205	190	245	220	190	160	147	190	170
70	305	260	240	305	270	235	200	180	235	210
95	370	315	285	370	330	290	245	221	285	255
120	430	360	322	425	375	335	280	253	330	290
150	490	410	367	485	425	380	320	285	3756	330
185	560	470	418	555	485	435	365	326	430	380
240	665	555	490	650	560	515	435	382	505	435
300	765	640	555	745	650	595	500	440	580	510
400	890	745	—	870	760	695	585	—	680	595
500	1030	855	—	1000	875	810	680	—	790	690

注: 1、空 温度为40℃;

2、单芯电缆平型排列时, 相邻电缆间的距离等于电缆外径。

Note: 1. Air temperature is 40℃.

2.Distance between two close cables amount to outer diameter of cable when being arrayed in parallel for cable with single core.

土 中 In the soil

导体截面mm ² cross section area of conductor	YJV、YJY					YJLV、YJLY				
	3.6/6kV ~12/20kV			18/20kV ~26/35kV		3.6/6kV ~12/20kV			18/20kV ~26/35kV	
	单芯 single core		3cores	单芯 single core		单芯 single core		3cores	单芯 single core	
	○○○	⊗		○○○	⊗	○○○	⊗		○○○	⊗
25	160	150	147	—	—	120	115	114	—	—
35	190	180	180	—	—	145	135	132	—	—
50	225	215	212	225	215	175	160	158	175	165
70	275	265	262	275	265	215	200	198	215	200
95	330	315	312	330	315	255	240	237	255	240
120	375	360	358	375	360	290	270	267	290	270
150	425	405	400	420	400	330	305	300	325	305
185	480	455	451	475	455	370	345	341	370	345
240	555	530	528	555	525	435	400	396	430	400
300	630	595	590	630	595	490	455	450	490	455
400	725	680	—	720	680	565	520	—	565	525
500	825	765	—	825	775	650	595	—	645	600

注: 1、土 温度为25℃, 土 系数为1.0℃.m/w。

2、单芯电缆平型排列时, 相邻电缆间的距离等于电缆外径。

3、铠装型电缆的载流量值可参照非铠装电缆, 比非铠装电缆略小。

Note: 1. Soil temperature is 25℃. Heat-resistant coefficient of soil is 1.0℃.m/w.

2.Distance between two close cables amount to outer diameter of cable when being arrayed in parallel for cable with single core.

3. You can refer to that of inarmored cable about current-loading capacity of armored cable, which is relevantly smaller compared with that of inarmored cable.

0.6/1kV及以下聚氯乙烯绝缘及护套电力电缆

PVC Insulation & Sheath Power Cable of 0.6/1kv or Lower

本产品适用于交流额定电压0.6/1KV的线路中，供输配电能用。

It is used to transmit and distribute power on the power line of A.C. rated voltage 0.6/1kv.

一、生产执行标准

GB/T12706.1等同采用国际电工委员会IEC60502。

Executive standard:

Executive standard:GB/T12706.1 (equal to the standard of IEC60502)

二、使用特点

- 1、电缆导体长期允许工作温度不超过70℃；
- 2、短路时（最长持续时间不超过5秒），电缆导体的最高温度不超过160℃；
- 3、敷设电缆时的环境温度应不低于0℃。

Working Condition

Long-term working temperature allowed by cable conductor shall be no more than 70℃.
Max. temperature of cable conductor shall be no more than 160℃ during short circuit (the longest lasting time shall be no more than 5 seconds).
Environment temperature for installation shall be no less than 0℃.

、电缆基本型号名称

Type, Description and Application occasion

型号Type		名称 Description	适用场合 Application occasion
铜Cu	铝Al		
VV	VLV	聚氯乙烯绝缘聚氯乙烯护套电力电缆 Power cable with PVC insulation and sheath	敷设在室内、隧道、电缆沟及管道中，电缆不能承受机械外力作用。 To be laid indoors, in the tunnel, cable furrow or pipe. The cable can not bear mechanical force from outside.
VV22	VLV22	聚氯乙烯绝缘聚氯乙烯护套钢带铠装电力电缆 Power cable with PVC insulation, PVC sheath and steel tape armored	敷设在地下，电缆能承受一定机械外力作用，但不能承受大的拉力。 To be laid underground, the cable can bear certain mechanical force, but it can not bear great pulling force.

注：1、本公司可根据用户的需要提供阻 型、耐火型电力电缆产品，订货时在原型号 “ZR-” 表示阻 ，加 “NH-” 表示耐火型。
2、本公司也可根据用户的需要，提供VV32型、VLV32型钢丝铠装电力电缆，单芯钢丝铠装电缆应采用隔离措施。

Note:
1: We also produce flame-retardant fire resistant type power cable according to the requirement of the customer. Prefix “ZR” should be added to the original type of cable in ordering flame retardant cable; prefix “NH-” for fire resistant cable.
2: We also produce VV32, VLV32 type steel wire armored power cable according to the requirement of the customer. Magnetism-separated measure shall be adopted by single core steel wire armored cable.

四、生产范围

Production Scope

型号 Type		芯数 Core number	标称截面mm ² Nominal cross section area
铜Cu	铝Al		
VV	—	1	1.5~500
—	VLV		2.5~500
VV22	VLV22		10~500
VV	—	2	1.5~185
—	VLV		2.5~185
VV22	VLV22		4~185
VV	—	3	1.5~300
—	VLV		2.5~300
VV22	VLV22		4~300
VV	—	4	2.5~300
—	VLV		2.5~300
VV22	VLV22		4~300
VV	—	3+1	4~300
VV22	VLV22		4~300

注：①本公司可根据用户需要，提供五芯结构电缆产品。
②用于交流系统的单芯铠装电缆的铠装层应采用非磁性金属带 包。

Note:
1: We also produce cable with five cores according to the requirement of the customer.
2: Non-magnetic metal tape wrapping should be adopted as armored layer for single core armored cable for A.C. system.

五、电缆主要技术参数

1、20℃时导体最大直流电阻值应满足GB/T3956标准中的2类导体的规定。

2、工频交流耐压试验 A.C. Voltage Test

单芯无屏蔽电缆应将 浸 水中1h, 在导体和水之间施加试验电压3.5kV/5 min; 多芯电缆应依次在每一根绝缘导体对 余导体之间施加试验电压3.5kV/5 min, 绝缘均应无穿。

Main Technical parameter of cable

Max value of conductor DC resistance shall meet the requirement of conductor of category 2 stipulated in GB/T3956 standard at 20℃.

For single core cable without shielding, voltage test of 3.5kV under power frequency is put on for 5 minutes between conductor and water when be immersed in the water for one hour. For multi-core cable, between each insulated conductor and other conductor, voltage test of 3.5kV under power frequency is put on for 5 minutes without puncture of insulation.

六、电缆近似外径及近似重量(表1~表5) Table 1

Approximate outer diameter and weight of cable (from table 1 to table 5) table 1

芯数×标称截面mm ² core number x nominal cross section area	电缆近似外径mm approximate outer diameter of cable	电缆近似重量kg/km approximate weight of cable		电缆近似外径mm approximate outer diameter of cable	电缆近似重量kg/km approximate weight of cable	
		VV	VLV		VV22*	VLV22*
1×1.5	5.8	50	/	/	/	/
1×2.5	6.2	62	47	/	/	/
1×4	7.1	87	63	/	/	/
1×6	7.6	110	75	/	/	/
1×10	8.9	166	96	12.4	346	270
1×16	9.9	234	133	13.4	432	331
1×25	11.7	345	186	15.2	574	414
1×35	12.6	450	229	16.2	692	475
1×50	14.6	585	276	18.1	863	553
1×70	16.3	800	366	19.8	1133	700
1×95	18.5	1065	475	22.0	1432	844
1×120	20.2	1328	586	23.7	1705	962
1×150	22.5	1600	702	26.0	2044	1120
1×185	24.8	1990	850	28.3	2438	1296
1×240	27.8	2546	1060	31.5	3057	1570
1×300	30.7	3140	1292	34.2	3926	2070
1×400	34.7	4127	1651	38.0	5084	2608
1×500	39.0	5259	2016	43.0	6295	2936

*用于交流系统的单芯铠装电缆的铠装层应采用非磁性金属带 包; 单芯钢丝铠装电缆应采用隔磁措施。

*Non-magnetic metal tape wrapping should be adopted as armored layer for single core armored cable for A.C. system. Magnetic separation measure should be adopted for cable with single conductor and steel wire armor.

Table 2

芯数×标称截面mm ² core number x nominal cross section area	电缆近似外径mm approximate outer diameter of cable	电缆近似重量kg/km approximate weight of cable		电缆近似外径mm approximate outer diameter of cable	电缆近似重量kg/km approximate weight of cable	
		VV	VLV		VV22	VLV22
2×1.5	10.4	118	/	/	/	/
2×2.5	11.3	151	118	/	/	/
2×4	13.0	210	159	16.0	424	374
2×6	13.9	263	192	17.1	494	425
2×10	16.5	394	242	19.8	665	497
2×16	18.6	541	334	21.8	845	638
2×25	22.0	794	468	25.3	1154	827
2×35	24.2	1037	585	27.5	1436	982
2×50	20.3	1236	592	23.6	1580	940
2×70	22.7	1647	745	26.0	2210	1302
2×95	26.2	2189	966	29.1	2800	1530
2×120	28.8	2640	1144	32.6	3400	1850
2×150	32.2	3280	1410	36.2	4150	2198
2×185	35.8	4006	1703	39.5	5025	2592

Table 3

芯数×标称截面mm ² core number x nominal cross section area	电缆近似外径mm approximate outer diameter of cable	电缆近似重量kg/km approximate weight of cable		电缆近似外径mm approximate outer diameter of cable	电缆近似重量kg/km approximate weight of cable	
		VV	VLV		VV22	VLV22
3×1.5	10.6	142	/	/	/	/
3×2.5	11.7	187	139	/	/	/
3×4	13.6	264	189	16.6	489	413
3×6	14.7	335	226	17.7	578	472
3×10	17.4	514	290	20.4	801	560
3×16	19.7	729	418	22.7	1058	743
3×25	23.4	1085	596	26.4	1470	979
3×35	25.8	1430	748	28.8	2148	1370
3×50	25.5	1820	839	28.5	2457	1489
3×70	28.4	2400	1080	31.7	3122	1768
3×95	32.8	3155	1418	36.7	4055	2218
3×120	35.7	3982	1747	39.6	4925	2606
3×150	40.0	4950	2135	44.0	6050	3154
3×185	44.4	6156	2610	48.6	7299	3721
3×240	49.7	7886	3308	53.9	9223	4584
3×300	54.3	9647	4059	58.7	11022	5423

Table 4

芯数×标称截面mm ² core number x nominal cross section area	电缆近似外径mm approximate outer diameter of cable	电缆近似重量kg/km approximate weight of cable		电缆近似外径mm approximate outer diameter of cable	电缆近似重量kg/km approximate weight of cable	
		VV	VLV		VV22	VLV22
4×2.5	12.2	225	166	/	/	/
4×4	15.0	332	231	18.0	581	480
4×6	16.2	430	270	19.2	703	551
4×10	19.7	641	393	22.7	891	637
4×16	22.0	902	499	25.0	1175	771
4×25	26.0	1438	766	29.0	1998	1347
4×35	28.7	1815	919	31.7	2585	1660
4×50	30.4	2380	1091	33.4	3100	1819
4×70	33.8	3202	1398	37.0	4039	2228
4×95	38.2	4300	1860	41.5	5200	2800
4×120	42.0	5269	2186	45.5	6400	3320
4×150	46.4	6554	2748	49.9	7806	3958
4×185	51.2	8090	3325	54.9	9442	4700
4×240	55.3	10355	4056	59.0	11887	5734
4×300	64.5	12776	4950	68.2	14356	6995

Table 5

芯数×标称截面 mm ² core number x nominal cross section area	电缆近似外径mm approximate outer diameter of cable	电缆近似重量kg/km approximate weight of cable		电缆近似外径mm approximate outer diameter of cable	电缆近似重量kg/km approximate weight of cable	
		VV	VLV		VV22	VLV22
3×4+1×2.5	14.5	310	215	17.5	543	447
3×6+1×4	16.1	403	268	19.1	661	526
3×10+1×6	18.9	600	363	21.9	894	625
3×16+1×10	21.6	858	505	24.6	1195	807
3×25+1×16	25.0	1315	693	28.0	1679	1082
3×35+1×16	27.6	1645	834	30.6	2243	1458
3×50+1×25	29.6	2124	996	32.6	2867	1736
3×70+1×50	33.2	2867	1285	36.2	3698	2099
3×95+1×50	38.0	3824	1664	42.1	4796	2636
3×120+1×70	41.5	4784	2060	45.5	5900	3129
3×150+1×70	44.6	5790	2473	48.4	6921	3623
3×185+1×95	49.7	7164	3050	54.2	8437	4369
3×240+1×120	55.9	9414	3842	60.3	11163	5586
3×300+1×150	61.6	11749	4920	66.0	13465	6445

七、电缆载流量 (0.6/1kV)

Current-loading capacity of cable

在空 中敷设

To be laid in the air

1、单芯电缆平行敷设时中心距离: 185mm²及以下为电缆直径的2倍; 240mm²及以上为90mm。

Center distance for laying single core cable in parallel:

185mm² or lower: 2 times that of cable diameter;

240mm² or higher: 90mm

2、导电线芯最高允许工作温度: 70℃, 周围环境温度: 30℃。

Max working temperature of conductive core is 70℃;
Environment temperature is 30℃.

不同空 温度下的载流量修正系数 Current-loading capacity correcting coefficient under different air temperature

空 温度℃ Air temperature	20	25	30	35	40	45
修正系数 Correcting coefficient	1.12	1.06	1.00	0.94	0.87	0.79

0.6/1KV铜导体PVC绝缘PVC护套阻 或非阻 电力电
缆在空 中敷设长期连续负荷允许载流量

Long-term and continual current-loading capacity in the air for 0.6/1kv flame retardant OR non-flame retardant power cable with Cu conductor, PVC insulation and PVC sheath

在空 中敷设长期连续负荷允许载流量 Long-term and continual current-loading capacity in the air

标称截面 mm ² nominal cross section area	长期连续负荷载流量 (A) Long-term and continual current-loading capacity											
	无铠装inarmored						铠装armored					
	单芯single core			2 cores	3cores 4cores (3+1)core	5cores (4+1)core (3+2)core	单芯single core			2cores	3cores 4cores (3+1)core	5cores (4+1)core (3+2)core
	2pieces oo	3 pieces					2pieces oo	3pieces				
		ooo	oo					ooo	oo			
1.5	28	26	23	20	—	—	28	26	23	—	—	—
2.5	36	33	30	26	—	—	36	33	30	—	—	—
4	47	44	39	37	30	—	46	44	39	38	31	32
6	60	56	49	44	37	31	60	56	49	45	38	39
10	83	77	68	61	53	38	83	77	68	62	54	55
16	109	101	89	82	69	54	109	101	89	84	70	71
25	138	128	113	104	89	70	138	128	113	106	91	91
35	173	161	142	127	109	91	173	161	142	130	111	112
50	207	193	170	155	132	111	207	193	170	158	135	137
70	264	246	216	190	167	135	264	246	216	194	170	173
95	322	299	264	242	213	170	322	299	264	247	217	221
120	374	348	307	282	242	217	374	348	307	288	247	250
150	431	401	353	322	282	247	431	401	353	328	287	290
185	495	460	406	368	322	288	495	460	406	375	327	330
240	587	546	481	—	385	328	587	546	481	—	392	398
300	673	626	552	—	431	393	673	626	552	—	439	445
400	794	738	652	—	—	440	794	738	652	—	—	—
500	920	854	754	—	—	—	920	854	754	—	—	—

0.6/1KV铝导体PVC绝缘PVC护套阻 或非阻 电力电
缆在空 中敷设长期连续负荷允许流量

Long-term and continual current-loading capacity in the air for 0.6/1kv flame retardant OR non-flame retardant power cable with Al conductor, PVC insulation and PVC sheath

在空 中敷设长期连续负荷允许载流量
Long-term and continual current-loading capacity in the air

标称截面 mm ² nominal cross section area	长期连续负荷载流量 (A) Long-term and continual current-loading capacity											
	无铠装inarmored						铠装armored					
	单芯single core			2cores	3cores 4cores (3+1)core	5cores (4+1)core (3+2)core	单芯single core			2cores	3cores 4cores (3+1)core	5cores (4+1)core (3+2)core
	2pieces oo	3pieces ooo	3pieces ooo				2pieces oo	3pieces ooo	3pieces ooo			
2.5	28	26	23	21	17	17	28	26	23	—	—	—
4	37	34	30	28	23	23	37	34	30	28	23	23
6	48	45	40	37	30	31	48	45	40	37	30	31
10	63	59	52	48	40	41	63	59	52	48	40	41
16	84	78	69	63	54	55	84	78	69	63	54	55
25	110	102	90	81	69	70	110	102	90	81	69	70
35	132	123	108	99	85	87	132	123	108	99	85	87
50	161	150	132	121	104	106	161	150	132	121	104	106
70	201	187	165	150	132	135	201	187	165	150	132	135
95	247	230	203	190	161	164	247	230	203	190	161	164
120	288	268	236	219	190	194	288	268	236	219	190	194
150	334	311	274	247	219	223	334	311	274	247	219	223
185	385	358	316	288	247	252	385	358	316	288	247	252
240	454	422	372	—	299	305	454	422	372	—	299	305
300	523	486	429	—	339	346	523	486	429	—	339	346
400	621	578	509	—	—	—	621	578	509	—	—	—
500	725	674	595	—	—	—	725	674	595	—	—	—

直埋敷设

- 1、单芯电缆非接触敷设时，中心距离为电缆直径的2倍。
- 2、导电线芯最高允许工作温度：70℃，土 温度：25℃。
- 3、土 系数：1.0℃.m/w，直埋深度：0.8m。

To be laid underground

Center distance shall be 2 times that of cable diameter for contactless installation of single core cable.
Max working temperature of conductive core is 70℃;
Soil temperature is 25℃.
Heat-resistant coefficient of soil is 1.0℃.m/w; Depth of direct burying is 0.8m.

不同土 温度下的载流量修正系数
Current-loading capacity correcting coefficient under different soil temperature

土 温度℃ Soil temperature	15	20	25	30	35
修正系数 Correcting coefficient	1.11	1.05	1.00	0.94	0.88

0.6/1KV铜导体PVC绝缘PVC护套阻 或非阻 电力电
缆在土 中直埋敷设长期连续负荷许载流量

Long-term and continual current-loading capacity for
laying underground for 0.6/1kv flame retardant OR non-
flame retardant power cable with Cu conductor, PVC
insulation and PVC sheath

在土 直埋敷设长期连续负荷允许载流量

Long-term and continual current-loading capacity for laying underground directly

标称截面 mm ² nominal cross section area	长期连续负荷载流量 (A) Long-term and continual current-loading capacity											
	无铠装inarmored						铠装armored					
	单芯single core			2 cores	3 cores 4 cores (3+1)core	5cores (4+1)core (3+2)core	单芯single core			2cores	3cores 4cores (3+1)core	5cores (4+1)core (3+2)core
	2pieces oo	3pieces ooo					2pieces oo	3pieces ooo				
1.5	29	27	24	26	22	22	29	27	24	26	22	22
2.5	38	35	31	34	29	30	38	35	31	34	29	30
4	49	46	40	44	38	39	49	46	40	44	38	39
6	61	57	50	56	47	48	61	57	50	56	47	48
10	83	77	68	76	65	66	83	77	68	76	65	66
16	105	98	86	100	84	86	105	98	86	100	84	86
25	135	126	111	125	110	112	135	126	111	125	110	112
35	160	149	131	155	130	133	160	149	131	155	130	133
50	195	181	160	185	155	158	195	181	160	185	155	158
70	240	223	197	230	195	199	240	223	197	230	195	199
95	285	265	234	275	230	235	285	265	234	275	230	235
120	325	302	267	310	260	265	325	302	267	310	260	265
150	365	339	299	350	300	306	365	339	299	350	300	306
185	415	386	340	395	335	341	415	386	340	395	335	341
240	480	446	394	—	390	398	480	446	394	—	390	398
300	545	507	447	—	435	444	545	507	447	—	435	444
400	625	581	513	—	—	—	625	581	513	—	—	—
500	710	660	582	—	—	—	710	660	582	—	—	—

0.6/1KV铝导体PVC绝缘PVC护套阻 或非阻 电力电
 缆在土 中直埋敷设长期连续负荷允许载流量

Long-term and continual current-loading capacity
 for laying underground for 0.6/1kv flame retardant OR
 non-flame retardant power cable with Al conductor, PVC
 insulation and PVC sheath

在土 直埋敷设长期连续负荷允许载流量

Long-term and continual current-loading capacity for laying underground directly

标称截面 mm ² nominal cross section area	长期连续负荷载流量 (A) Long-term and continual current-loading capacity											
	无铠装inarmored						铠装armored					
	单芯single core			双芯 2 cores	3 cores 四芯 4cores (3+1)core	五芯5cores (4+1)core (3+2)core	单芯			双芯 2 cores	3 cores 4cores (3+1)core	5cores (4+1)core (3+2)core
	2 pieces ○○	3 pieces ○○○ ⊘					2 pieces ○○	3 pieces ○○○ ⊘				
2.5	30	28	25	26	23	23	30	28	25	26	23	23
4	39	36	32	35	30	31	39	36	32	35	30	31
6	50	47	41	45	39	40	50	47	41	45	39	40
10	64	60	52	59	50	51	64	60	52	59	50	51
16	83	77	68	77	65	66	83	77	68	77	65	66
25	105	98	86	100	84	85	105	98	86	100	84	85
35	125	116	103	120	100	102	125	116	103	120	100	102
50	150	140	123	145	120	122	150	140	123	145	120	122
70	185	172	152	175	150	153	185	172	152	175	150	153
95	220	205	180	210	185	189	220	205	180	210	185	189
120	250	233	205	245	205	209	250	233	205	245	205	209
150	285	265	234	275	230	235	285	265	234	275	230	235
185	320	298	262	310	260	265	320	298	262	310	260	265
240	375	349	308	--	300	306	375	349	308	--	300	306
300	425	395	349	--	340	347	425	395	349	--	340	347
400	490	456	402	--	--	--	490	456	402	--	--	--
500	560	521	459	--	--	--	560	521	459	--	--	--

八、交货长度

Delivery Length

按合同要 长度交货，长度计量误差为±0.5%。

The goods will be delivered according to the contract
 with length error of ±0.5%.

通信电源用电力 电缆

Power Flexible Cable for telecommunication Power Sply Application

本产品适用于交流额定电压0.6/1KV及以下的电力系统中, 作输配电能用。产品除具有聚氯乙烯绝缘电缆已有的优良性能外, 还具有 、易弯 等特点。

It is used to transmit and distribute power of A.C rated voltage 0.6/1KV or lower for power system. It has not only better performance of PVC insulation power cable, but also advantages of softness and flexibility as well.

一、生产执行标准 YD/T1173-2001

Executive standard: YD/T1173-2001

二、型号及名称

Type and Description

型号Type	名称Description
RV	铜芯聚氯乙烯绝缘电力 电缆 Soft power cable with Cu core, PVC insulation
RVZ	铜芯聚氯乙烯绝缘阻 型电力 缆 Soft power cable with Cu core, PVC insulation, flame retardance
RVV	铜芯聚氯乙烯绝缘聚氯乙烯护套电力 缆 Soft power cable with Cu core, PVC insulation and sheath
RVVZ	铜芯聚氯乙烯绝缘聚氯乙烯护套阻 型电力 缆 Soft power cable with Cu core, PVC insulation & sheath, flame retardance
RVV22	铜芯聚氯乙烯绝缘钢带铠装聚氯乙烯护套电力 缆 Soft power cable with Cu core, PVC insulation & sheath, steel tape armor
RVVZ22	铜芯聚氯乙烯绝缘钢带铠装聚氯乙烯护套阻 型 电缆 Soft power cable with Cu core, PVC insulation & sheath, steel tape armor, flame retardance

、生产范围

Production Scope

型号 Type	芯数 Core number	标称截面mm ² Nominal cross section area
RV RVV RVVZ RVVZ22	1	1.5~400
RVV RVVZ RVVZ22	2	1.5~185
RVV RVVZ RVVZ22	3	1.5~300 4~300
RVV RVVZ RVVZ22	4	4~185
RVV RVVZ RVVZ22	3+1	4~300 4~240
RVV RVVZ RVVZ22	3+2	4~240 10~240

四、使用条件

- 1、电缆的导体长期允许最高工作温度为70℃;
- 2、电缆敷设时最低环境温度为0℃;
- 3、电缆允许弯 半径: 非铠装电缆不小于电缆外径的8倍; 铠装型电缆不小于电缆外径的20倍;
- 4、短路时(最长持续时间不超过5S), 电缆导体的最高工作温度为160℃;

Working Condition

- 1: Max temperature of cable conductor for Long-term working is 70℃.
- 2: Min. environment temperature for installing cable is 0℃.
- 3: Bending radium allowed by cable:
It will be no less than 8 times that of cable O.D for inarmored cable and 20 times that of cable O.D for armored cable.
- 4: Max. working temperature of cable conductor is 160℃ during short circuit(the longest lasting time shall be no more than 5 seconds).

五、主要技术参数

- 1、20℃时导体最大直流电阻值应满足下面的规定:

Main Technical Parameter

Max DC resistance value of conductor at 20℃ shall meet the requirements of the following table:

标称截面mm ² Nominal cross section area	1.5	2.5	4	6	10	16	25	35	50
20℃时导体最大直流电阻Ω/km Max. DC resistance of conductor at 20℃	13.3	7.98	4.91	3.30	1.91	1.21	0.780	0.554	0.389
标称截面mm ² Nominal cross section area	70	95	120	150	185	240	300	400	
20℃时导体最大直流电阻Ω/km Max. DC resistance of conductor at 20℃	0.272	0.206	0.161	0.129	0.106	0.0801	0.0641	0.0495	

2、70℃时最小绝缘电阻

Min insulation resistance at 70℃

标称截面mm ² Nominal cross section area	70℃时最小绝缘电阻MΩ.km Min insulation resistance at 70℃	标称截面mm ² Nominal cross section area	70℃时最小绝缘电阻MΩ.km Min insulation resistance at 70℃
1.5	0.010	70	0.0032
2.5	0.009	95	0.0032
4	0.007	120	0.0029
6	0.006	150	0.0029
10	0.0056	185	0.0029
16	0.0046	240	0.0028
25	0.0044	300	0.0028
35	0.0038	400	0.0026
50	0.0037	/	/
试验条件: Testing condition ① 验长度: 5m。 ② 浸水时间: 1h。 ③ 水温: 70℃。 1: Testing length: 5m. 2: Time for immersion in the water is one hour. 3: Temperature of water is 70℃			

3、工频交流耐压试验 成品电缆应经受下表规定的交流50Hz耐电压试验而不应击穿。

A.C. voltage test under power frequency
The finished cable shall bear A.C. voltage test of 50Hz listed in the following table without puncture.

电缆芯数 Core No.	试验方法 Testing method	试样长度m Sample length	电压V Voltage		持续时间 Lasting time
			额定电压 Rated voltage	试验电压 Testing voltage	
单芯* Single core	浸水1h Immersing in the water for 1h	制造长度 Manufacturing length	450/750	2500	5min
多芯及铠装 Multi-core and armoring	相间 interphase		600/1000	3500	

* 适用于RV型及RVZ型。

*Suitable for RV type and RVZ type

六、电缆近似外径及载流量

与同规格的普通聚氯乙烯绝缘聚乙烯护套电力电缆相比, 电缆的外径一般增加: 导体截面为95mm²及以下, 外径增加2~10mm; 导体截面为120mm²及以上, 外径增加12~20mm; 电缆的重量一般增加4%~10%。软电力电缆允许的载流量可参照同规格VV系列电力电缆的载流量值, 下降6%~10%。

七、交货长度

根据双方协议, 允许任何长度的电缆交货。长度计量误差不得超过±0.5%。

Approximate outer diameter and current-loading capacity of cable

By comparing with common power cable of the same specification with PVC insulation and sheath, cable outer diameter is bigger by 2~10mm for cable with cross section of 95 mm² or lower and by 12~20mm for cable with cross section of 120 mm² or higher. And cable weight generally remains heavier by 4%~10%. About current-loading capacity allowed by soft power cable, you can refer to that of VV series power cable of the same specification with a drop of 6%~10%.

Delivery Length

Delivery length of cable depends on both agreements with length error allowance of ±0.5%.

金属屏蔽电力电缆

Metallic Shielding Power Cable

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。产品具有较强的电磁干扰、抗雷击及均衡电位，改善供电品质的特性，特别适宜计算机中心、航空航天监控中心，智能大楼等精密电子装置场所。

一、生产执行标准 GB/T12706.1-2002

二、型号名称

型号 Type		名称 Description
铜 Cu	铝 Al	
VVP	VLVP	铜、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 Power cable with Cu/Al core, PVC insulation, metallic shielding(steel tape armor), PVC sheath
VVP22	VLVP22	
YJVP	YJLVP	铜、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 Power cable with Cu/Al core, XLPE insulation, metallic shielding(steel tape armor), PVC sheath
YJVP22	YJLVP22	

注：1、该产品可按用户的使用要求，设计成具有阻燃性能或耐火性能的产品。
订货时只需在原型号前加“ZR-”表示阻燃型，加“NH-”表示耐火型；
2、电缆的金属屏蔽可按用户要求有两种形式：金属丝编织或金属带绕包。
3、如需软芯导体的电缆，应在原型号后加字母“R”。

It is used for power transmission on power lines of rated voltage 0.6/1KV or lower. It has strong resistant characters against electromagnetic interference, thunder strike and even electric potential, improving power supply quality. It is especially suitable to place with precision electronic devices such as computer center, space & aviation supervision center and intellectual buildings etc.

Executive standard: GB/T12706.1-2002

Type and Description

Note: 1: We also produce cable with flame resistant performance or fire resistant performance according to the requirement of customer. Prefix “ZR-” should be added to the original type for flame retardant cable and “NH-” added for fire-resistant cable.
2: There are two kinds of metallic shielding. One is metallic wire braiding shielding. The other is metallic tape wrapped shielding.
3: Prefix “R” should be added to the original type for ordering cable with soft conductor.

三、规格

型号Type		芯数 Core number	标称截面 Nominal cross section area
铜Cu	铝Al		
VVP	VLVP	1	4~300
YJVP	YJLVP		
VVP	VLVP	2	4~185
VV22P	VLV22P	3	
YJVP	YJLVP	3+1	4~300
YJV22P	YJLV22P	4	4~185

Specification

四、使用条件

1、导体最高长期允许工作温度：聚氯乙烯绝缘为70℃；交联聚乙烯绝缘为90℃。
2、电缆短路时（最长持续时间不超过5S），导体的最高温度不超过：聚氯乙烯绝缘为160℃；交联聚乙烯绝缘为250℃。
3、敷设时环境温度应不低于0℃。
4、电缆允许弯曲半径为：铠装电缆不小于电缆外径的20倍；非铠装电缆不小于电缆外径的15倍；软芯导体电缆不小于电缆外径的10倍。

Working Condition

1: Max long-term working temperature allowed by conductor is 70℃ for cable with PVC insulation, 90℃ for cable with XLPE insulation.
2: Max temperature of conductor is no higher than 160℃ for cable with PVC insulation, 250℃ for cable with XLPE insulation during short circuit (The longest lasting time is no more than 5s).
3: Environment temperature for installation is not lower than 0℃.
4: Bending radius allowed by cable is no less than 20 times that of cable outer diameter for armored cable, 15 times that for inarmored cable, 10times that for cable with soft conductor.

五、电缆近似外径

Approximate Outer Diameter of Cable

VVP型、VLVP型电缆外径分别在VV型、VLV型电缆外径的基础上增加1~1.5mm。

YJVP型、YJLVP型电缆外径分别在YJV型、YJLV型电缆外径的基础上增加1~1.5mm。

VV22P型、VLV22P型电缆外径分别在VV22型、VLV22型电缆外径的基础上增加1~1.5mm。

YJV22P型、YJLV22P型电缆外径分别在YJV22型、YJLV22型电缆外径的基础上增加1~1.5mm。

Outer diameter value of VVP type and VLVP type cable should be added by 1~1.5mm on the basis of that of VV type and VLV type cable.

Outer diameter value of YJVP type and YJLVP type cable should be added by 1~1.5mm on the basis of that of YJV type and YJLV type cable.

Outer diameter value of VV22P type and VLV22P type cable should be added by 1~1.5mm on the basis of that of VV22 type and VLV22 type cable.

Outer diameter value of YJV22P type and YJLV22P type cable should be added by 1~1.5mm on the basis of that of YJV22 type and YJLV22 type cable.

六、主要技术参数

1、20℃时导体直流电阻

参见0.6/1KV聚氯乙烯绝缘及护套电力电缆。

2、绝缘电阻

1: DC resistance of conductor at 20℃

2: Insulated resistance

序号 No.	性能 Performance	聚氯乙烯绝缘 PVC insulation	交联聚乙烯绝缘 XLPE insulation
1	体积电阻率(20℃) 电缆工作温度时 Volume resistance ratio(20℃) under cable working temperature	10 ¹³ 10 ¹⁰	-- 10 ¹⁰
2	绝缘电阻常数(20℃) 电缆工作温度时 Insulation resistance constant (20℃) under cable working temperature	36.7 0.037	-- 3.67

3、交流电压试验成品电缆经受交流50Hz、5min、3.5kV的电压试验绝缘应无击穿。

4、耐火型电缆的耐火特性应符合IEC60331或GB12666.6中的A类或B类耐火试验要求。

5、阻燃型电缆的阻燃性能应符合IEC60332或GB/T18380.3标准中规定的A、B或C三类中任一类别阻燃性能要求。

3: Finished cable should endure A.C voltage test of 3.5kV, AC 50Hz for 5min without puncture.

4: Fire resistant performance of fire resistance cable should meet testing requirement of category A or B stipulated in IEC60331 or GB12666.6 standard.

5: Flame retardant performance of Flame retardant cable should meet testing requirement of category A or B or C stipulated in IEC60332 or GB/T18380.3 standard.

七、交货长度

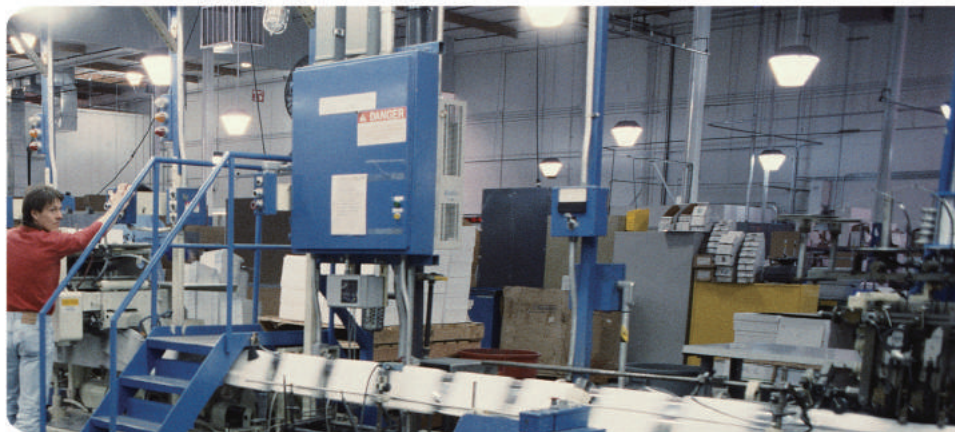
1、根据双方协议，允许任何长度的电缆交货。

2、长度计量误差不超过±0.5%。

Delivery Length

Delivery length of cable depends on both agreements with length error allowance of ±0.5%.

控制电缆 Control Cable



交联聚乙烯聚氯乙烯绝缘控制电缆
XLPE PVC Insulation Control Cable
聚氯乙烯绝缘及护套控制电缆
PVC Insulation & Sheath Control Cable
聚氯乙烯绝缘电缆电线
PVC Insulation Cable & Wire

交联聚乙烯绝缘聚氯乙烯护套控制电缆

Control Cable with XLPE Insulation and PVC Sheath

本产品适用于额定电压600/1000V及以下的配电装置，作电器仪表的连接线。

一、生产执行标准

企业标准（参照GB9330-88）

二、使用条件 Working Condition

1、敷设温度、最小弯曲半径：电缆的敷设温度在不低于0℃条件下敷设时，无需预先加温；电缆敷设不受落差限制，敷设时的最小弯曲半径规定如下：

a.无铠装层的电缆，应不小于电缆外径的6倍；

b.有铠装层或铜带屏蔽结构的电缆，应不小于电缆外径的12倍；

c.有屏蔽结构的软电缆，应不小于电缆外径的10倍。

2、电缆导体的长期允许工作温度为90℃。

3、短路时，电缆导体的最高温度不超过250℃，持续时间不超过5s。

三、产品型号中各字母代表意义

1、系列代号	K
2、材料代号	
铜导体	省略
交联聚乙烯绝缘	YJ
聚氯乙烯护套	V
聚乙烯护套	Y
3.按结构特性分	
编织屏蔽	P
铜带屏蔽	P2
软结构	R
圆型	省略
平型（扁型）	B

四、型号、名称（见表1）

It is used as connection cable of electric appliances and instruments for power distribution devices of rated voltage 600/1000V.

Executive standard:

enterprise standard (GB9330-88 for reference)

1: Temperature for installation & min. bending radius: Preheating is unnecessary when ambient temperature remains no lower than 0℃. Installation is free from restriction by drop. And min. bending radius of cable is stipulated as follows:

a: It will be no less than 6 times that of cable OD for cable without armor.

b: It will be no less than 12 times that of cable OD for cable with armor or that with copper tape shielding.

c: It will be no less than 10 times that of cable OD for soft cable with shielding structure.

2: Long-term working temperature of conductor is 90℃.

3:Max temperature of cable conductor is no more than 250℃ during short circuit within 5s.

Codes Meaning

Series code	K
Material Code	
Copper conductor	omitted
XLPE insulation	YJ
PVC sheath	V
PE sheath	Y
Classified by Structure and Performance	
Braided shielding	P
Copper tape shielding	P2
Soft structure	R
Round type	omitted
Flat type	B

Type and Description

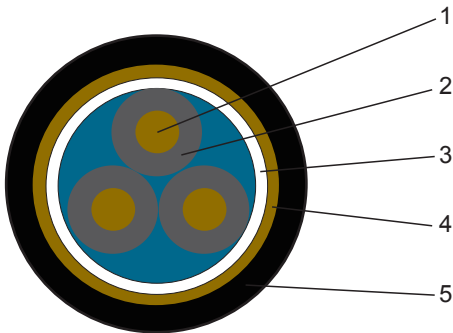
Table 1

型号 Type	产品名称 Description
KYJV	铜芯交联聚乙烯绝缘聚氯乙烯护套控制电缆 Control cable with Cu core, XLPE insulation, PVC sheath
KYJVR	铜芯交联聚乙烯绝缘聚氯乙烯护套控制软电缆 Control soft cable with Cu core, XLPE insulation, PVC sheath
KYJVP	铜芯交联聚乙烯绝缘聚氯乙烯护套铜丝编织屏蔽控制电缆 Control cable with Cu core, XLPE insulation, PVC sheath, copper wire braided shielding
KYJVRP	铜芯交联聚乙烯绝缘聚氯乙烯护套铜丝编织屏蔽控制软电缆 Control soft cable with Cu core, XLPE insulation, PVC sheath, copper wire braided shielding
KYJVP2	铜芯交联聚乙烯绝缘聚氯乙烯护套铜带屏蔽控制电缆 Control cable with Cu core, XLPE insulation, PVC sheath, copper tape shielding
KYJVRP2	铜芯交联聚乙烯绝缘聚氯乙烯护套铜带屏蔽控制软电缆 Control soft cable with Cu core, XLPE insulation, PVC sheath, copper tape shielding
KYJV22	铜芯交联聚乙烯绝缘聚氯乙烯护套钢带铠装控制电缆 Control cable with Cu core, XLPE insulation, PVC sheath, steel tape armor
KYJVP22	铜芯交联聚乙烯绝缘聚氯乙烯护套铜丝编织屏蔽钢带铠装控制电缆 Control cable with Cu core, XLPE insulation, PVC sheath, copper wire braided shielding, steel tape armor
KYJVP2-22	铜芯交联聚乙烯绝缘聚氯乙烯护套铜带屏蔽钢带铠装控制电缆 Control cable with Cu core, XLPE insulation, PVC sheath, copper tape shielding, steel tape armor

注: ①需要阻燃型产品, 订货时应在原型号前加“ZR”表示, 如: ZR-KYJV。
②需要聚乙烯外护套时, 用字母“Y”代替原型号中的字母“V”即可。

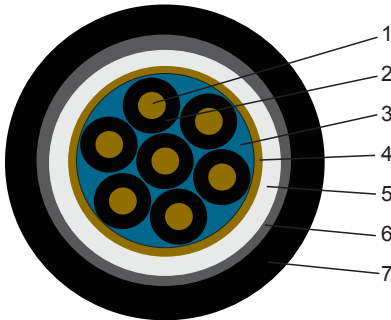
Note: 1: prefix “ZR” should be added to the original type in ordering flame retardant cable. Eg. ZR-KYJV
2: Letter “Y” substitutes for “V” of the original type in ordering cable with PE outer sheath.

产品结构示意图
The figure of cable structure



KYJVP type

1 导体 2 交联聚乙烯绝缘 3 聚酯带 4 铜丝编织屏蔽 5 聚氯乙烯护套
1.conductor 2.polyester tape 3.XLPE insulation 4.copper wire braided shielding 5.PVC sheath



KYJVP2-22 type

1 导体 2 交联聚乙烯绝缘 3 聚酯带 4 铝带或铜带绕包屏蔽 5 内衬层 6 铠装层 7 聚氯乙烯护套
1. conductor 2.XLPE insulation 3.polyester tape 4.aluminum tape shielding (copper tape wrapping shielding) 5.inner layer 6.armor layer 7.PVC sheath

五、技术参数

1、成品电缆导体20℃时直流电阻, 见表2:

Technical Parameter

DC resistance of finished cable conductor at 20℃ in table 2

Table 2

项目 Item	单位 Unit	技术指标 Technical indices							
		截面mm ² cross section area	0.75	1.0	1.5	2.5	4	6	10
20℃时导体直流电阻 DC resistance of conductor at 20℃	Ω/km	Category A, B	24.5	18.1	12.2	7.41	4.61	3.08	1.83
		category R	26.0	19.5	13.3	7.98	/	/	/

2、成品电缆应经受3.5kV/5min工频交流电压试验, 绝缘不击穿。
3、电缆绝缘电阻: 最高额定工作温度时, 绝缘电阻不小于1.0MΩ.km。
4、交联聚乙烯绝缘控制电缆的耐热性、耐寒性、耐化学性、绝缘电阻和使用寿命远优于聚氯乙烯绝缘控制电缆。

2: Finished cable should bear A.C. voltage of 3.5KV under power frequency for 5min without puncture of insulation.
3: Insulated resistance of cable:
It is no less than 1.0MΩ.km at Max. rated working temperature.
4: Control cable with XLPE insulation has good features of heat resistance, freezing resistance, chemistry resistance, insulated resistance and long lifetime compared with control cable with PVC insulation.

六、常用型号外形尺寸（供参考）

External Dimension of Common Type

芯数×标称截面 mm ² core number * nominal cross section area	KYJV		KYJVP		KYJV22		KYJVP2	
	外径 mm outer diameter	重量 kg/km weight	外径 mm outer diameter	重量 kg/km weight	外径 mm outer diameter	重量 kg/km weight	外径 mm outer diameter	重量 kg/km weight
2×0.75	6.5	52.1	7.4	78.4	--	--	--	--
2×1.0	6.8	59.8	7.7	87.5	--	--	--	--
2×1.5	7.7	78.3	8.6	110.3	--	--	--	--
2×2.5	8.9	109.5	9.8	147.1	--	--	--	--
2×4.0	9.9	147.0	11.6	217.2	--	--	--	--
2×6.0	10.9	196.8	12.6	274.6	--	--	--	--
3×0.75	6.8	64.9	7.7	92.5	--	--	--	--
3×1.0	7.1	76.2	8.0	105.6	--	--	--	--
3×1.5	8.1	100.2	9.0	134.0	--	--	--	--
3×2.5	9.5	144.8	10.3	184.7	--	--	--	--
3×4.0	10.4	198.0	12.1	272.4	--	--	--	--
3×6.0	12.1	286.2	13.2	352.8	--	--	--	--
4×0.75	7.3	79.5	8.2	108.6	--	--	8.0	105.3
4×1.0	7.7	90.0	8.6	124.9	--	--	8.4	121.5
4×1.5	8.9	115.0	9.7	160.8	--	--	9.6	157.2
4×2.5	10.2	181.4	11.9	254.5	13.8	343.2	11.5	236.9
4×4	12.0	267.4	13.1	332.6	15.0	429.0	12.7	313.3
4×6.0	13.2	374.8	14.3	486.4	16.2	541.1	13.9	415.1
5×0.75	7.9	86.9	8.8	119.9	--	--	8.6	116.6
5×1.0	8.3	106.1	9.2	140.5	--	--	9.0	137.3
5×1.5	9.5	143.3	10.4	183.8	--	--	10.8	194.7
5×2.5	11.7	227.2	12.8	291.1	14.7	386.0	12.4	272.1
5×4	13.0	315.6	14.1	387.1	16.0	490.6	13.7	366.1
5×6	14.4	431.4	15.5	511.2	17.8	640.4	15.1	488.0
7×0.75	8.3	110.0	9.4	145.5	12.1	246.7	9.2	142.0
7×1.0	8.7	132.9	9.4	170.7	12.5	276.4	9.6	167.0
7×1.5	10.3	183.3	9.8	243.4	13.9	346.0	11.6	239.2
7×2.5	12.7	291.6	11.8	361.9	15.7	463.2	13.4	341.4
7×4	15.6	412.8	13.8	490.9	17.1	601.8	14.8	468.1
7×6	15.6	570.7	16.7	658.0	19.0	796.9	16.3	632.7
8×0.75	9.1	123.2	10.0	161.5	12.7	268.2	10.4	171.8
8×1.0	11.7	149.2	11.1	205.0	13.2	301.8	10.9	201.0
8×1.5	13.5	221.9	12.8	285.7	14.7	380.1	12.4	266.9
8×2.5	15.9	329.4	14.7	407.8	16.6	512.5	14.4	382.7
8×4	18.2	466.7	16.7	632.9	18.6	687.4	16.3	542.0
8×6	20.2	662.7	18.4	758.6	20.3	890.1	18.0	731.0
10×0.75	10.5	152.5	12.1	227.1	14.1	317.2	11.7	209.4
10×1.0	11.7	181.2	12.8	264.2	14.7	358.7	12.4	245.2
10×1.5	13.5	275.7	14.6	349.9	16.5	456.6	14.3	328.7
10×2.5	15.9	409.8	17.0	498.8	19.3	639.3	17.0	488.6
10×4	18.2	598.0	19.3	696.3	21.2	836.6	18.9	670.2
10×6	20.2	825.9	21.5	965.4	23.2	1090.7	20.9	907.2
12×0.75	11.3	189.9	12.4	257.8	14.3	344.0	12.0	233.5
12×1.0	12.0	230.4	13.1	295.8	15.0	392.5	12.7	276.4
12×1.5	13.9	316.9	15.0	393.6	16.9	602.9	14.8	372.1
12×2.5	16.4	476.0	17.9	584.5	19.8	712.5	17.5	577.7
12×4	18.7	696.7	19.8	801.3	21.7	942.6	19.4	771.4
12×6	20.9	978.5	22.1	1122.7	23.9	1251.5	21.5	1062.5
14×0.75	11.9	214.1	13.8	278.6	14.9	374.3	12.6	259.4
14×1.0	12.6	260.5	14.7	329.2	15.6	429.6	13.3	308.9
14×1.5	14.5	369.9	15.6	440.7	17.9	571.1	15.2	417.2
14×2.5	17.2	544.1	18.7	658.2	20.6	791.8	19.3	630.0
14×4	19.7	798.2	20.8	908.2	22.7	1055.8	20.4	876.7
14×6	21.9	1113.3	23.2	1265.5	24.9	1400.0	22.6	1202.2
16×0.75	12.4	234.7	13.5	302.6	15.4	402.0	13.1	282.5
16×1.0	13.2	443.0	14.3	358.9	16.2	463.5	13.9	337.6
16×1.5	15.3	399.1	16.4	484.3	18.7	620.5	16.0	459.6
16×2.5	18.5	622.4	19.6	725.7	21.5	865.5	19.2	696.1
19×0.75	13.0	266.9	14.1	338.3	16.0	441.8	13.7	317.3
19×1.0	13.8	327.0	14.9	403.4	17.2	528.1	14.5	381.1

19×1.5	16.1	458.7	17.6	564.8	19.5	690.7	17.2	538.5
19×2.5	19.5	718.4	20.6	827.5	22.5	973.7	20.2	796.4
24×0.75	15.0	331.4	16.1	414.8	18.4	548.6	15.7	390.6
24×1.0	15.9	407.1	17.4	512.3	19.3	637.4	17.0	486.2
24×1.5	19.0	591.0	20.1	697.5	22.0	841.4	19.7	667.1
24×2.5	22.6	899.1	23.9	1056.5	25.5	1195.2	23.3	991.2
27×0.75	15.3	363.9	16.4	449.1	18.7	585.2	16.4	439.5
27×1.0	16.3	449.1	17.8	556.6	19.7	684.0	17.4	530.0
27×1.5	19.4	651.1	20.5	729.9	22.4	906.8	20.1	728.8
27×2.5	23.1	995.9	24.4	1157.1	26.1	1298.3	23.8	1090.2
30×0.75	15.8	398.2	17.3	501.8	19.2	625.9	16.9	475.9
30×1.0	17.2	509.7	18.3	603.0	20.2	734.1	17.9	575.5
30×1.5	20.1	713.2	21.4	951.9	23.1	976.8	20.8	794.0
30×2.5	24.0	1094.6	25.3	1261.9	27.0	1407.6	24.7	1192.6
37×0.75	17.3	485.2	18.4	581.5	20.3	713.4	18.0	553.8
37×1.0	18.5	600.2	19.6	703.3	21.5	842.8	19.2	673.8
37×1.5	21.6	850.4	22.9	1000.3	24.6	1133.4	22.3	937.9
37×2.5	25.8	202.8	27.7	1532.2	30.6	2001.9	27.1	1456.5
44×0.75	19.3	570.8	20.6	704.0	22.3	824.3	20.0	648.6
44×1.0	20.6	707.2	21.9	849.6	23.6	977.1	21.3	790.3
44×1.5	24.2	1004.4	25.4	1173.5	27.8	1359.0	24.9	1103.3
44×2.5	29.6	1594.4	31.1	1839.3	34.2	2356.2	30.3	1715.7
48×0.75	19.6	613.2	20.9	748.3	22.6	870.5	20.3	691.9
48×1.0	20.9	772.9	22.2	906.7	23.9	1047.0	21.6	846.4
48×1.5	24.6	899.4	25.9	1245.5	29.4	1740.1	25.9	1183.2
48×2.5	30.1	1721.9	31.6	1971.1	34.5	2496.1	30.8	1845.2
52×0.75	20.1	656.8	21.4	795.8	23.3	920.8	20.8	737.3
52×1.0	21.5	817.4	22.8	966.3	24.8	1097.9	22.2	908.8
52×1.5	25.3	1163.6	27.2	1378.2	30.1	1838.5	26.6	1309.4
52×2.5	30.9	1851.8	32.8	2138.7	35.5	2647.0	32.0	2075.0
61×0.75	21.3	758.1	22.6	905.6	24.3	1036.9	22.0	876.5
61×1.0	22.7	935.0	24.0	1093.2	25.7	1232.2	23.4	1017.9
61×1.5	27.3	1375.7	28.7	1565.7	31.6	2051.6	28.7	1497.5
61×2.5	33.2	2163.3	34.7	2437.5	37.4	2974.8	33.9	2387.3

聚氯乙烯绝缘和护套控制电缆

Control Cable with PVC Insulation and Sheath

本产品适用于交流额定电压450/750V及以下控制，监控回路及保护线路等场合使用。

一、产品执行标准 GB9330-88

二、使用特性

- 1、电缆导体的长期允许工作温度为70℃。
- 2、电缆的敷设温度应不低于0℃，推荐的允许弯曲半径：
无铠装层的电缆，应不小于电缆外径的6倍。
有铠装或铜带屏蔽结构的电缆，应不小于电缆外径的12倍。
有屏蔽层结构的软电缆，应不小于电缆外径的6倍。

三、电缆型号及主要使用范围

型号 Type	名称 Description	主要使用范围 Application occasion
KVV	铜芯聚氯乙烯绝缘聚氯乙烯护套控制电缆 Control cable with Cu core, PVC insulation and sheath	敷设在室内、电缆沟、管道固定场合 To be fixedly laid indoor, in cable furrow, pipe
KVVP	铜芯聚氯乙烯绝缘聚氯乙烯护套编织屏蔽控制电缆 Control cable with Cu core, PVC insulation and sheath, braided shielding	敷设在室内、电缆沟、管道等要求屏蔽的固定场合 To be fixedly laid indoor, in cable furrow, pipe with demand on shielding
KVVP2	铜芯聚氯乙烯绝缘聚氯乙烯护套铜带屏蔽控制电缆 Control cable with Cu core, PVC insulation and sheath, copper tape shielding	敷设在室内、电缆沟、管道等要求屏蔽的固定场合 To be fixedly laid indoor, in cable furrow, pipe with demand on shielding
KVV22	铜芯聚氯乙烯绝缘聚氯乙烯护套钢带铠装控制电缆 Control cable with Cu core, PVC insulation and sheath, steel tape armoring	敷设在室内、电缆沟、管道直埋等能承受较大机械外力的固定场合 To be fixedly laid indoor, in cable furrow, pipe, underground with demand on enduring strong mechanical force
KVV32	铜芯聚氯乙烯绝缘聚氯乙烯护套细钢丝铠装控制电缆 Control cable with Cu core, PVC insulation and sheath, steel wire armoring	敷设在室内、电缆沟、管道竖井等能承受较大机械拉力等固定场合 To be fixedly laid indoor, in cable furrow, pipe, shaft with demand on enduring strong mechanical force
KVVR	铜芯聚氯乙烯绝缘聚氯乙烯护套控制软电缆 Control soft cable with Cu core, PVC insulation and sheath	敷设在室内移动要求柔软等场合 To be laid indoor with demand on mobility and softness
KVVRP	铜芯聚氯乙烯绝缘聚氯乙烯护套编织屏蔽控制软电缆 Control soft cable with Cu core, PVC insulation and sheath, braiding shielding	敷设在室内移动要求柔软、屏蔽等场合 To be laid indoor with demand on shielding and softness

注：①用户需要阻燃型产品，上述型号均可生产供货，只要在型号前加“ZR-”，如：ZR-KVV型等。
②根据用户需要，还可提供生产非标准型号的产品，如：KVVP2-22、KVVP32等。

It is used for supervising and controlling return circuit and protective circuit of A.C rated voltage of 450/750V or lower.

Executive standard: GB9332-88

Working Condition

- 1: Long term working temperature of conductor allowed by cable is 70℃.
- 2: Environment temperature for installation is no less than 0℃.
Min. bending radius of cable is no less than 6 times that of cable OD for cable without armoring, 12 times for cable with armoring or metallic tape shielding and 6 times for soft cable with shielding structure.

Type, Description and Application Occasion

Note: 1: We also produce flame retardant cable according to the requirements of customer. Prefix "ZR-" should be added. Eg: ZR-KVV type
2: We also produce cable which does not belong to standard type according to the requirement of customer. Eg. KVVP2-22, KVVP32.

各型号规格范围 Various Specification Range

型号 Type	额定 电压V Rated voltage	导体标称截面mm² Nominal cross section of conductor area							
		0.5	0.75	1.0	1.5	2.5	4	6	10
		芯数 core number							
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: Cores recommended: 2,3,4,5,7,8,10,12,14,16,19,24,27,30,37,44,48, 52 or 61.

四、典型电缆结构及外形尺寸

Typical Cable Structure and External Dimension

KVV型铜芯聚氯乙烯绝缘及护套控制电缆
KVV type control cable with Cu core, PVC insulation and sheath

芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘 电阻MΩ.km Min insulated resistance at 70℃	芯数×标称截面 mm ² No.*nominal cross section area	导体种类 Conductor category	外径 Mm Outer diameter	70℃最小绝缘电 阻MΩ.km insulated resistance at 70 ℃
2×0.75	1	7.0	0.012	3×0.75	1	7.3	0.012
2×0.75	2	7.4	0.014	3×0.75	2	7.7	0.014
2×1.0	1	7.4	0.011	3×1.0	1	7.7	0.011
2×1.0	2	7.8	0.013	3×1.0	2	8.4	0.013
2×1.5	1	8.2	0.011	3×1.5	1	8.6	0.011
2×1.5	2	9.0	0.010	3×1.5	2	9.5	0.010
2×2.5	1	9.4	0.010	3×2.5	1	9.9	0.010
2×2.5	2	10.4	0.009	3×2.5	2	10.9	0.009
2×4	1	10.4	0.0085	3×4	1	10.9	0.0085
2×4	2	11.4	0.0070	3×4	2	12.4	0.0077
2×6	1	11.4	0.0070	3×6	1	12.8	0.0070
2×6	2	13.0	0.0065	3×6	2	13.8	0.0065
2×10	2	15.7	0.0065	3×10	2	16.6	0.0065
4×0.75	1	7.9	0.012	5×0.75	1	8.6	0.012
4×0.75	2	8.5	0.014	5×0.75	2	9.5	0.014
4×1.0	1	8.4	0.011	5×1.0	1	9.1	0.011
4×1.0	2	9.0	0.013	5×1.0	2	10.1	0.013
4×1.5	1	9.3	0.011	5×1.5	1	10.2	0.011
4×1.5	2	10.3	0.010	5×1.5	2	11.2	0.010
4×2.5	1	10.8	0.010	5×2.5	1	12.6	0.010
4×2.5	2	11.8	0.009	5×2.5	2	13.2	0.009

芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘 电阻MΩ.km Min. insulated resistance at 70℃	芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘电 阻MΩ.km Min. insulated resistance at 70 ℃
4×4	1	12.8	0.0085	5×4	1	14.0	0.0085
4×4	2	13.8	0.0077	5×4	2	15.5	0.0077
4×6	1	14.0	0.0070	5×6	1	15.5	0.0070
4×6	2	15.5	0.0065	5×6	2	17.0	0.0065
4×10	2	18.1	0.0065	5×10	2	20.5	0.0065
7×0.75	1	9.2	0.012	8×0.75	1	10.0	0.012
7×0.75	2	9.7	0.014	8×0.75	2	10.5	0.014
7×1.0	1	9.8	0.011	8×1.0	1	10.7	0.011
7×1.0	2	10.3	0.013	8×1.0	2	11.7	0.013
7×1.5	1	11.0	0.011	8×1.5	1	12.8	0.011
7×1.5	2	12.0	0.010	8×1.5	2	13.8	0.010
7×2.5	1	13.6	0.010	8×2.5	1	14.8	0.010
7×2.5	2	14.6	0.009	8×2.5	2	15.8	0.009
7×4	1	15.1	0.0085	8×4	1	16.5	0.0085
7×4	2	16.1	0.0077	8×4	2	18.0	0.0077
7×6	1	16.6	0.0070	8×6	1	18.6	0.0070
7×6	2	18.0	0.0065	8×6	2	20.8	0.0065
7×10	2	22.3	0.0065	8×10	2	24.4	0.0065
10×0.75	1	11.2	0.012	12×0.75	1	12.3	0.012
10×0.75	2	12.2	0.014	12×0.75	2	13.3	0.014
10×1.0	1	12.8	0.011	12×1.0	1	13.1	0.011
10×1.0	2	13.8	0.013	12×1.0	2	14.1	0.013
10×1.5	1	14.4	0.011	12×1.5	1	14.7	0.011
10×1.5	2	15.4	0.010	12×1.5	2	15.7	0.010
10×2.5	1	16.7	0.010	12×2.5	1	17.1	0.010
10×2.5	2	17.7	0.009	12×2.5	2	18.5	0.009
10×4	1	19.1	0.0085	12×4	1	19.5	0.0085
10×4	2	21.0	0.0077	12×4	2	21.0	0.0077

10×6	1	21.0	0.0070	12×6	1	21.5	0.0070
10×6	2	23.5	0.0065	12×6	2	24.0	0.0065
10×10	2	28.0	0.0065	/	/	/	/
14×0.75	1	12.9	0.012	16×0.75	1	13.5	0.012
14×0.75	2	13.1	0.014	16×0.75	2	14.5	0.014
14×1.0	1	13.7	0.011	16×1.0	1	14.4	0.011
14×1.0	2	14.7	0.013	16×1.0	2	16.0	0.013
14×1.5	1	15.4	0.011	16×1.5	1	16.3	0.011
14×1.5	2	17.0	0.010	16×1.5	2	17.8	0.010
14×2.5	1	18.0	0.010	16×2.5	1	19.3	0.010
14×2.5	2	20.0	0.009	16×2.5	2	21.3	0.009
14×4	1	20.4	0.0085	/	/	/	/
14×4	2	22.4	0.0077	/	/	/	/
14×6	1	22.6	0.0070	/	/	/	/

芯数×标称 截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘 电阻MΩ.km Min. insulated resistance at 70℃	芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘电 阻MΩ.km Min insulated resistance at 70 ℃
14×6	2	25.0	0.0065	/	/	/	/
19×0.75	1	14.1	0.012	24×0.75	1	16.2	0.012
19×0.75	2	15.1	0.014	24×0.75	2	17.2	0.014
19×1.0	1	15.1	0.011	24×1.0	1	17.4	0.011
19×1.0	2	16.1	0.013	24×1.0	2	19.0	0.013
19×1.5	1	17.1	0.011	24×1.5	1	20.2	0.011
19×1.5	2	18.6	0.010	24×1.5	2	22.2	0.010
19×2.5	1	20.3	0.010	24×2.5	1	23.7	0.010
19×2.5	2	22.3	0.009	24×2.5	2	26.2	0.009
27×0.75	1	16.5	0.012	30×0.75	1	17.1	0.012
27×0.75	2	18.0	0.014	30×0.75	2	18.1	0.014
27×1.0	1	17.8	0.011	30×1.0	1	18.7	0.011
27×1.0	2	19.3	0.013	30×1.0	2	20.2	0.013
27×1.5	1	20.5	0.011	30×1.5	1	21.3	0.011
27×1.5	2	22.5	0.010	30×1.5	2	23.3	0.010
27×2.5	1	24.1	0.010	30×2.5	1	24.9	0.010
27×2.5	2	26.5	0.009	30×2.5	2	27.5	0.009
37×0.75	1	18.9	0.012	44×0.75	1	21.1	0.012
37×0.75	2	19.5	0.014	44×0.75	2	22.5	0.014
37×1.0	1	20.3	0.011	44×1.0	1	22.7	0.011
37×1.0	2	22.3	0.013	44×1.0	2	24.7	0.013
37×1.5	1	23.0	0.011	44×1.5	1	25.8	0.011
37×1.5	2	25.0	0.010	44×1.5	2	28.3	0.010
37×2.5	1	27.1	0.010	44×2.5	1	31.1	0.010
37×2.5	2	29.5	0.009	44×2.5	2	33.5	0.009
48×0.75	1	21.3	0.012	52×0.75	1	22.0	0.012
48×0.75	2	23.3	0.014	52×0.75	2	24.0	0.014
48×1.0	1	22.9	0.011	52×1.0	1	23.7	0.011
48×1.0	2	24.9	0.013	52×1.0	2	25.7	0.013
48×1.5	1	26.1	0.011	52×1.5	1	27.0	0.011
48×1.5	2	28.5	0.010	52×1.5	2	29.0	0.010
48×2.5	1	31.5	0.010	52×2.5	1	32.5	0.010
48×2.5	2	34.0	0.009	52×2.5	2	35.5	0.009
61×0.75	1	23.3	0.012	61×1.5	1	29.2	0.011
61×0.75	2	25.3	0.014	61×1.5	2	31.8	0.010
61×1.0	1	25.1	0.011	61×2.5	1	34.9	0.010
61×1.0	2	27.1	0.013	61×2.5	2	37.0	0.009

KVVP型铜芯聚氯乙烯绝缘及护套编织屏蔽控制电缆
KVVP type control cable with Cu core, PVC insulation and sheath, braided shielding

芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘电 阻MΩ.km Min insulated resistance at 70℃	芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘电 阻MΩ.km Min insulated resistance at 70 ℃
2×0.75	2	8.2	0.014	3×0.75	2	8.5	0.014
2×1.0	2	8.6	0.013	3×1.0	2	8.9	0.013
2×1.5	2	9.4	0.010	3×1.5	2	9.8	0.010
2×2.5	2	10.8	0.009	3×2.5	2	11.3	0.009
2×4	2	13.0	0.0077	3×4	2	13.5	0.0077
2×6	2	14.0	0.0065	3×6	2	14.6	0.0065
2×10	2	16.7	0.0065	3×10	2	17.6	0.0065
4×0.75	2	9.1	0.014	5×0.75	2	9.8	0.014
4×1.0	2	9.6	0.013	5×1.0	2	10.3	0.013
4×1.5	2	10.9	0.010	5×1.5	2	11.8	0.010
4×2.5	2	13.4	0.009	5×2.5	2	14.4	0.009
4×4	2	14.6	0.0077	5×4	2	15.8	0.0077
4×6	2	15.8	0.0065	5×6	2	17.1	0.0065
4×10	2	19.5	0.0065	5×10	2	21.5	0.0065
7×0.75	2	10.4	0.014	8×0.75	2	11.2	0.014
7×1.0	2	11.0	0.013	8×1.0	2	13.1	0.013
7×1.5	2	13.4	0.010	8×1.5	2	14.6	0.010
7×2.5	2	15.4	0.009	8×2.5	2	16.6	0.009
7×4	2	16.9	0.0077	8×4	2	18.7	0.0077
7×6	2	18.4	0.0065	8×6	2	20.4	0.0065
7×10	2	23.3	0.0065	8×10	2	25.6	0.0065
10×0.75	2	13.8	0.014	10×4	2	21.1	0.0077
10×1.0	2	14.6	0.013	10×6	2	23.2	0.0065
10×1.5	2	16.2	0.010	10×10	2	29.2	0.0065
10×2.5	2	18.5	0.009	/	/	/	/
12×0.75	2	14.1	0.014	14×0.75	2	14.9	0.014
12×1.0	2	14.9	0.013	14×1.0	2	15.7	0.013
12×1.5	2	16.5	0.010	14×1.5	2	17.4	0.010
12×2.5	2	19.3	0.009	14×2.5	2	20.4	0.009
12×4	2	21.5	0.0077	14×4	2	23.2	0.0077
12×6	2	23.7	0.0065	14×6	2	25.4	0.0065
16×0.75	2	15.5	0.014	19×0.75	2	16.1	0.014
16×1.0	2	16.4	0.013	19×1.0	2	17.1	0.013
16×1.5	2	18.3	0.010	19×1.5	2	19.4	0.010
16×2.5	2	21.9	0.009	19×2.5	2	22.9	0.009
24×0.75	2	18.2	0.014	27×0.75	2	18.5	0.014
24×1.0	2	19.8	0.013	27×1.0	2	20.2	0.013
24×1.5	2	23.2	0.010	27×1.5	2	23.1	0.010
24×2.5	2	26.9	0.009	27×2.5	2	27.3	0.009

芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘电 阻MΩ.km Min insulated resistance at 70℃	芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘电 阻MΩ.km Min insulated resistance at 70 ℃
30×0.75	2	19.5	0.014	37×0.75	2	21.3	0.014
30×1.0	2	20.9	0.013	37×1.0	2	22.3	0.013
30×1.5	2	24.5	0.010	37×1.5	2	26.0	0.010
30×2.5	2	28.2	0.009	37×2.5	2	30.7	0.009
44×0.75	2	23.9	0.014	48×0.75	2	24.2	0.014
44×1.0	2	25.1	0.013	48×1.0	2	25.4	0.013
44×1.5	2	29.0	0.010	48×1.5	2	29.4	0.010
44×2.5	2	33.7	0.009	48×2.5	2	34.9	0.009
52×0.75	2	24.8	0.014	61×0.75	2	26.1	0.014
52×1.0	2	26.0	0.013	61×1.0	2	27.5	0.013
52×1.5	2	30.8	0.010	61×1.5	2	32.5	0.010
52×2.5	2	36.3	0.009	61×2.5	2	38.4	0.009

KVVP2型铜芯聚氯乙烯绝缘及护套铜带屏蔽控制电缆
KVVP2 type control cable with Cu core, PVC insulation and sheath, copper tape shielding

芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘电阻 MΩ.km Min insulated resistance at 70℃	芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘电阻 MΩ.km Min insulated resistance at 70 ℃
4×0.75	1	8.4	0.012	5×0.75	1	9.1	0.012
4×1.0	1	8.9	0.011	5×1.0	1	9.6	0.011
4×1.5	1	9.8	0.011	5×1.5	1	11.5	0.011
4×2.5	1	12.1	0.010	5×2.5	1	13.1	0.010
4×4	1	13.3	0.0085	5×4	1	14.5	0.0085
4×6	1	14.5	0.0070	5×6	1	15.8	0.0070
4×10	2	19.0	0.0065	5×10	2	21.0	0.0065
7×0.75	1	9.7	0.012	8×0.75	1	11.3	0.012
7×1.0	1	10.3	0.011	8×1.0	1	12.0	0.011
7×1.5	1	12.3	0.011	8×1.5	1	13.3	0.011
7×2.5	1	14.1	0.010	8×2.5	1	15.3	0.010
7×4	1	15.6	0.0085	8×4	1	17.4	0.0085
7×6	1	17.1	0.0070	8×6	1	19.1	0.0070
7×10	2	22.8	0.0065	8×10	2	24.9	0.0065
10×0.75	1	12.5	0.012	10×4	1	19.6	0.0085
10×1.0	1	13.3	0.011	10×6	1	21.5	0.0070
10×1.5	1	14.9	0.011	10×10	2	28.5	0.0065
10×2.5	1	17.6	0.010	/	/	/	/
12×0.75	1	12.8	0.012	14×0.75	1	13.4	0.012
12×1.0	1	13.6	0.011	14×1.0	1	14.3	0.011
12×1.5	1	15.2	0.011	14×1.5	1	15.9	0.011
12×2.5	1	18.0	0.010	14×2.5	1	18.9	0.010
12×4	1	20.0	0.0085	14×4	1	20.9	0.0085

芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘电阻 MΩ.km Min insulated resistance at 70℃	芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘电阻 MΩ.km Min insulated resistance at 70 ℃
12×6	1	22.0	0.0070	14×6	1	23.1	0.0070
16×0.75	1	14.0	0.012	19×0.75	1	14.6	0.012
16×1.0	1	14.9	0.011	19×1.0	1	15.6	0.011
16×1.5	1	16.8	0.011	19×1.5	1	18.0	0.011
16×2.5	1	19.8	0.010	19×2.5	1	20.8	0.010
24×0.75	1	16.7	0.012	27×0.75	1	17.4	0.012
24×1.0	1	18.3	0.011	27×1.0	1	18.7	0.011
24×1.5	1	20.7	0.011	27×1.5	1	21.0	0.011
24×2.5	1	24.2	0.010	27×2.5	1	24.6	0.010
30×0.75	1	18.0	0.012	37×0.75	1	19.4	0.012
30×1.0	1	19.2	0.011	37×1.0	1	20.8	0.011
30×1.5	1	21.8	0.011	37×1.5	1	23.5	0.011
30×2.5	1	25.4	0.010	37×2.5	1	28.2	0.010
44×0.75	1	21.6	0.012	48×0.75	1	21.8	0.012
44×1.0	1	23.2	0.011	48×1.0	1	23.4	0.011
44×1.5	1	26.3	0.011	48×1.5	1	26.6	0.011
44×2.5	1	31.6	0.010	48×2.5	1	32.0	0.010
52×0.75	1	22.5	0.012	61×0.75	1	23.8	0.012
52×1.0	1	24.2	0.011	61×1.0	1	25.6	0.011
52×1.5	1	28.1	0.011	61×1.5	1	29.7	0.011
52×2.5	1	33.4	0.010	61×2.5	1	35.4	0.010

KVV22型铜芯聚氯乙烯绝缘及护套钢带铠装控制电缆
KVV22 type control cable with Cu core, PVC insulation and sheath, steel tape armoring

芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘电阻 MΩ.km Min insulated resistance at 70℃	芯数×标称截面 mm ² core No.*nominal cross section area	导体种类 Conductor category	外径mm Outer diameter	70℃最小绝缘电阻 MΩ.km Min insulated resistance at 70 ℃
4×2.5	1	15.4	0.010	5×2.5	1	16.1	0.010
4×4	1	16.6	0.0085	5×4	1	17.5	0.0085
4×6	1	17.8	0.0070	5×6	1	19.2	0.0070
4×10	2	22.3	0.0065	5×10	2	24.0	0.0065
7×0.75	1	13.5	0.012	8×0.75	1	14.3	0.012
7×1.0	1	14.1	0.011	8×1.0	1	15.0	0.011
7×1.5	1	15.3	0.011	8×1.5	1	16.3	0.011
7×2.5	1	17.1	0.010	8×2.5	1	18.3	0.010
7×4	1	18.6	0.0085	8×4	1	20.4	0.0085
7×6	1	20.5	0.0070	8×6	1	22.1	0.0070
7×10	2	25.8	0.0065	8×10	2	27.9	0.0065
10×0.75	1	15.3	0.012	14×0.75	1	16.2	0.012
10×1.0	1	16.3	0.011	14×1.0	1	17.0	0.011
10×1.5	1	17.7	0.011	14×1.5	1	19.1	0.011
10×2.5	1	20.4	0.010	14×2.5	1	21.7	0.010
10×4	1	22.6	0.0085	14×4	1	23.8	0.0085
10×6	1	24.5	0.0070	14×6	1	25.9	0.0070
10×10	2	32.1	0.0065	16×0.75	1	17.0	0.012
12×0.75	1	15.6	0.012	16×1.0	1	17.9	0.011
12×1.0	1	16.4	0.011	16×1.5	1	20.2	0.011
12×1.5	1	18.0	0.011	16×2.5	1	22.8	0.010
12×2.5	1	20.8	0.010	19×0.75	1	17.6	0.012
12×4	1	22.8	0.0085	19×1.0	1	19.0	0.011
12×6	1	24.8	0.0070	19×1.5	1	21.0	0.011
/	/	/	/	19×2.5	1	23.8	0.010
24×0.75	1	20.1	0.012	27×0.75	1	20.4	0.012
24×1.0	1	21.3	0.011	27×1.0	1	21.7	0.011
24×1.5	1	23.7	0.011	27×1.5	1	24.0	0.011
24×2.5	1	27.2	0.010	27×2.5	1	27.6	0.010
30×0.75	1	21.0	0.012	37×0.75	1	22.4	0.012
30×1.0	1	22.2	0.011	37×1.0	1	23.8	0.011
30×1.5	1	24.8	0.011	37×1.5	1	26.5	0.011
30×2.5	1	28.4	0.010	37×2.5	1	31.2	0.010
44×0.75	1	24.6	0.012	48×0.75	1	24.8	0.012
44×1.0	1	26.2	0.011	48×1.0	1	26.4	0.011
44×1.5	1	29.9	0.011	48×1.5	1	30.2	0.011
44×2.5	1	35.0	0.010	48×2.5	1	35.4	0.010
52×0.75	1	25.5	0.012	61×0.75	1	26.8	0.012
52×1.0	1	27.2	0.011	61×1.0	1	28.6	0.011
52×1.5	1	31.1	0.011	61×1.5	1	32.7	0.011
52×2.5	1	36.4	0.010	61×2.5	1	38.4	0.010

聚氯乙烯绝缘电缆 (电线)

Cable (wire) with PVC Insulation

该类产品中B系列产品适用于交流额定电压450/750V及以下的动力装置固定敷设用; R系列产品适用于交流额定电压300/500V及以下的家用电器, 小型电动工具、仪器、仪表及电力照明用铜芯聚氯乙烯绝缘连接软电缆 (电线)。

一、生产执行标准

GB5023.1~7-1997

JB8734.1~5-1998等同采用IEC227

二、分类和型号如下

- 0-固定布线用无护套电缆
- 01-一般用途单芯硬导体无护套电缆 (227IEC01)
- 02-一般用途单芯软导体无护套电缆 (227IEC02)
- 05-内部布线用导体温度为70℃的单芯实心导体无护套电缆 (227IEC05)
- 06-内部布线用导体温度为70℃的单芯软导体无护套电缆 (227IEC06)
- 07-内部布线用导体温度为90℃的单芯实心导体无护套电缆 (227IEC07)
- 08-内部布线用导体温度为90℃的单芯软导体无护套电缆 (227IEC08)
- 1-固定布线用护套电缆
- 10-轻型聚氯乙烯护套电缆 (227IEC10)
- 5-一般用途护套软电缆
- 52-轻型聚氯乙烯护套软线 (227IEC52)
- 53-普通聚氯乙烯护套软线 (227IEC53)

三、产品型号中各字母代表意义

- 1、按用途分
 - 固定敷设用电线 (电线)B
 - 连接用软电线 (电线)R
 - 装饰照明用软线S
- 2、按材料特性分
 - 铜导体省略
 - 聚氯乙烯绝缘V
 - 聚氯乙烯护套V
 - 耐油聚氯乙烯护套VY
- 3、按结构特性分
 - 圆形省略
 - 扁形 (平型)B
 - 双绞型S
 - 屏蔽型P
 - 软结构R
- 4、按耐热特性分
 - 70℃省略
 - 90℃90

B series of the product are used for fixed laying in engine devices of A.C rated voltage 450/750V or lower; R series of soft connection cable (wire) with cu core, PVC insulation are used for household electrical appliance, small electrical tools, instruments and engine lighting of A.C rated voltage 300/500V or lower.

Executive standard:

GB5023.1~7-1997

JB8734.1~5-1998 (equal to IEC227)

Classification and Type as follows:

- 0: Cable without sheath for permanent wiring
- 01: Cable with single core hard conductor, without sheath for general purpose (227IEC01)
- 02: Cable with single core soft conductor, without sheath for general purpose (227IEC02)
- 05: Cable with solid single conductor, without sheath at 70℃ of conductor temperature for interior wiring (227IEC05)
- 06: Cable with soft single conductor, without sheath at 70℃ of conductor temperature for interior wiring (227IEC06)
- 07: Cable with solid single conductor, without sheath at 90℃ of conductor temperature for interior wiring (227IEC07)
- 08: cable with soft single conductor, without sheath at 90℃ of conductor temperature for interior wiring (227IEC08)
- 1: Cable with sheath for permanent wiring
- 10: Light type cable with PVC sheath (227IEC10)
- 5: Soft cable with sheath for general purpose
- 52: Light type soft wire with PVC sheath (227IEC52)
- 53: Common soft wire with PVC sheath (227IEC53)

Code Meaning

- Classified by usage
 - Cable (wire) for fixed installation.....B
 - Soft cable (wire) for connectionR
 - Soft wire for decorated lightingS
- Classified by material performance
 - Cu conductor.....omitted
 - PVC insulation.....V
 - PVC sheath.....V
 - Oil resistant PVC sheath.....VY
- Classified by structure character
 - Round typeomitted
 - Flat typeB
 - Twin transposition type.....S
 - Shielding type.....P
 - Soft structureR
- Classified by heat resistant performance
 - 70℃.....omitted
 - 90℃.....90

四、型号名称及相应执行标准

Type, Description and Relevant Executive Standard

型号 Type	名称 Description	芯数 Core number	生产范围 mm ² production scope	额定电压 (V) Rated voltage	执行标准 Executive standard
227IEC01 (BV)	一般用途单芯硬导体无护套电缆 Cable with hard single conductor, without sheath for general purpose	1	1.5~400	450/750	GB5023.3
227IEC02 (RV)	一般用途单芯软导体无护套电缆 Cable with soft single conductor, without sheath for general purpose	1	1.5~240	450/750	
227IEC05 (BV)	内部布线用导体温度为70℃的单芯实心导体无护套电缆 Cable with solid single conductor, without sheath at 70℃ of conductor temperature for interior wiring	1	0.5~1.0	300/500	
227IEC06 (RV)	内部布线用导体温度为70℃的单芯软导体无护套电缆 Cable with soft single conductor, without sheath at 70℃ of conductor temperature for interior wiring	1	0.5~1.0	300/500	
227IEC07 (BV-90)	内部布线用导体温度为90℃的单芯实心导体无护套电缆 Cable with solid single conductor, without sheath at 90℃ of conductor temperature for interior wiring	1	0.5~2.5	300/500	
227IEC08 (RV-90)	内部布线用导体温度为90℃的单芯软导体无护套电缆 Cable with solid single conductor, without sheath at 90℃ of conductor temperature for interior wiring	1	0.5~2.5	300/500	
227IEC10 (BVV)	轻型聚氯乙烯护套电缆 Light type cable with PVC sheath	2~5	1.5~35	300/500	GB5023.4
227IEC52 (RVV)	轻型聚氯乙烯护套软线 Light type soft wire with PVC sheath	2, 3	0.5, 0.75	300/300	GB5023.5
227IEC53 (RVV)	普通聚氯乙烯护套软线 Common soft wire with PVC sheath	2~5	0.75~2.5	300/500	
BV	铜芯聚氯乙烯绝缘电线 Wire with cu core, PVC insulation	1	0.75, 1.0	300/500	JB8734.2
BLV	铝芯聚氯乙烯绝缘电线 Wire with aluminum core, PVC insulation	1	2.5~400	450/750	
BVR	铜芯聚氯乙烯绝缘软电线 Soft wire with cu core, PVC insulation	1	2.5~70	450/750	
BVV	铜芯聚氯乙烯绝缘护套圆形电缆 Round type cable with Cu core, PVC insulation	1	0.75~10	300/500	
BLVV	铝芯聚氯乙烯绝缘护套圆形电缆 Round type cable with aluminum core, PVC insulation	1	2.5~10	300/500	
BVVB	铜芯聚氯乙烯绝缘护套扁形电缆 Flat type cable with Cu core, PVC insulation	2, 3	0.75~10	300/500	
BLVVB	铝芯聚氯乙烯绝缘护套扁形电缆 Flat type cable with aluminum core, PVC insulation	2, 3	2.5~10	300/500	
RVVP	铜芯聚氯乙烯绝缘屏蔽聚氯乙烯护套软电缆(线) Soft cable (wire) with Cu core, PVC insulation and shielding, PVC sheath	1 2, 3 4~24	0.3~2.5 0.3~1.5 0.2~0.4	300/300	JB8734.5

五、使用条件

1、长期允许工作温度应不超过：BV-90、RV-90型导体最高温度为90℃，其他型号为70℃。

2、电缆（线）敷设时温度应不低于0℃。

3、推荐的允许弯曲半径：

电缆外径<25mm，应不小于4倍的电缆外径。

电缆外径≥25mm，应不小于6倍的电缆外径。

Working Condition

1: Max conductor temperature for long-term working is no higher than 90℃ for BV-90、RV-90 type cable and 70℃ for other types.

2: Temperature for installing is no lower than 0℃ (wire).

3: Recommended bending radius:

It is no less than 4 times of cable OD when cable OD is less than 25mm.

It is no less than 6 times of cable OD when cable OD is at least more than 25mm

六、规格尺寸（部分）

Specification and Size (part)

227IEC01 (BV)

导体标称截面 mm ² nominal cross section area	导体 种类 conductor category	绝缘厚度标称值 mm nominal insulated thickness	外径上限 mm max. outer diameter	70℃时最小绝缘电阻 MΩ.km min insulated resistance at 70 ℃
1.5	1	0.7	3.0	0.011
1.5	2	0.7	3.2	0.010
2.5	1	0.8	3.6	0.010
2.5	2	0.8	3.9	0.009
4	1	0.8	4.1	0.0085
4	2	0.8	4.4	0.0077
6	1	0.8	4.6	0.0070
6	2	0.8	5.1	0.0065
10	1	1.0	5.9	0.0070
10	2	1.0	6.4	0.0065
16	2	1.0	7.4	0.0050
25	2	1.2	9.2	0.0050
35	2	1.2	10.3	0.0040
50	2	1.4	11.5	0.0045
70	2	1.4	13.1	0.0035
95	2	1.6	15.3	0.0035
120	2	1.6	17.0	0.0032
150	2	1.8	18.7	0.0032
185	2	2.0	20.8	0.0032
240	2	2.2	23.4	0.0032
300	2	2.4	27.0	0.0030
400	2	2.6	30.0	0.0028

227IEC02 (RV)

导体标称截面mm ² nominal cross section area	绝缘厚度标称值 mm nominal insulated thickness	外径上限 mm max. outer diameter	70℃时最小绝缘电阻MΩ.km min insulated resistance at 70℃
1.5	0.7	3.2	0.010
2.5	0.8	3.8	0.009
4	0.8	4.8	0.007
6	0.8	5.3	0.006
10	1.0	7.0	0.0056
16	1.0	7.9	0.0046
25	1.2	9.9	0.0044
35	1.2	11.2	0.0038
50	1.4	13.3	0.0037
70	1.4	14.9	0.0032
95	1.6	17.7	0.0032
120	1.6	19.5	0.0029
150	1.8	21.9	0.0029
185	2.0	24.9	0.0029
240	2.2	28.0	0.0028

227IEC05 (BV)

导体标称截面 mm ² nominal cross section area	绝缘厚度标称值 mm nominal insulated thickness	外径上限mm max. outer diameter	70℃时最小绝缘电阻MΩ.km min insulated resistance at 70℃
0.5	0.6	2.2	0.015
0.75	0.6	2.4	0.012
1.0	0.6	2.6	0.011

227IEC06 (RV)

导体标称截面mm ² nominal cross section area	绝缘厚度标称值mm nominal insulated thickness	外径上限mm max. outer diameter	70℃时最小绝缘电阻MΩ.km min insulated resistance at 70℃
0.5	0.6	2.4	0.013
0.75	0.6	2.6	0.011
1.0	0.6	2.8	0.010

227IEC07 (BV-90)

导体标称截面 mm ² nominal cross section area	绝缘厚度标称值 mm nominal insulated thickness	外径上限mm max. outer diameter	70℃时最小绝缘电阻MΩ.km min insulated resistance at 70℃
0.5	0.6	2.2	0.015
0.75	0.6	2.4	0.013
1.0	0.6	2.6	0.012
1.5	0.7	3.1	0.011
2.5	0.8	3.7	0.009

227IEC08 (RV-90)

导体标称截面 mm ² nominal cross section area	绝缘厚度标称值 mm nominal insulated thickness	外径上限mm max. outer diameter	70℃时最小绝缘电阻MΩ.km min insulated resistance at 70℃
0.5	0.6	2.4	0.013
0.75	0.6	2.6	0.012
1.0	0.6	2.8	0.010
1.5	0.7	3.3	0.009
2.5	0.8	4.0	0.009

注：其它规格结构及技术参数请参见GB5023-1997或JB8734-1998标准。

Note: please refer to GB5023-1997or JB8734-1998standard for other specification and technical parameter.

七、交货长度

根据双方协议允许任何长度交货、长度计量误差为±0.5%。

Deliver Length

Delivery length of cable depends on both agreements with length error allowance of ±0.5%

计算机电缆 Computer Cable



计算机用屏蔽电缆（或称DCS系统用电缆）

Shielding Cable for Computer Application(Cable for DCS System Application)

本安计算机用屏蔽电缆（或称本安DCS系统用电缆）

Shielding Cable for Intrinsic Safety Computer Application(Cable for Intrinsic Safety DCS System)

计算机用屏蔽电缆(或称DCS系统用电缆)

Computer Shielded Cable (Cable for DSC system)

本产品适用于电子计算机网络及控制系统，或抗干扰性能要求较高的检测装置和仪器仪表的连接。

一、生产执行标准:
Q/TK.J.04.030-2004参照采用英国BS5308标准。

二、使用特性

- 1、交流额定电压U0/U: 300/500V; 电缆导体长期允许最高工作温度: 聚氯乙烯绝缘分70℃、105℃两种; 聚乙烯绝缘为70℃; 交联聚乙烯绝缘为90℃(绝缘交联类型可分为硅烷交联和辐照交联)。
- 2、最低环境温度: 固定敷设-40℃; 非固定敷设-15℃。安装敷设时环境温度: 不低于0℃。
- 3、电缆允许最小弯曲半径: 金属带绕包屏蔽或钢丝、钢带铠装电缆不小于电缆外径的12倍; 非铠装软电缆或编织屏蔽电缆不小于电缆外径的6倍。

三、基本型号及名称

序号No.	型号Type	电缆名称Description
1	DJYVP	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织总屏蔽计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper wire braided general shielding
2	DJYVPR	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织总屏蔽计算机软电缆 Computer soft cable with Cu core, PE insulation, PVC sheath, copper wire braided general shielding
3	DJYPV	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织分屏蔽计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper wire braided individual shielding
4	DJYPVR	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织分屏蔽计算机软电缆 Computer soft cable with Cu core, PE insulation, PVC sheath, copper wire braided individual shielding
5	DJYPVP	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织分屏总屏计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper wire braided general & individual shielding
6	DJYPVPR	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织分屏总屏计算机软电缆 Computer soft cable with Cu core, PE insulation, PVC sheath, copper wire braided general & individual shielding
7	DJYVP2	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包总屏蔽计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper-plastic compound tape wrapping general shielding
8	DJYVP2R	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包总屏蔽计算机软电缆 Computer soft cable with Cu core, PE insulation, PVC sheath, copper-plastic compound tape wrapping general shielding
9	DJYP2V	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包分屏蔽计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper-plastic compound tape wrapping individual shielding
10	DJYP2VR	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包分屏蔽计算机软电缆 Computer soft cable with Cu core, PE insulation, PVC sheath, copper-plastic compound tape wrapping individual shielding

It is used as connection cable of inspection devices and instruments with high demand on interference resistant performance in computer network and control system.

Executive standard:
Q/TK.J.04.030-2004 or BS5308 standard for reference

Performance for Usage

- 1: AC rated voltageU0/U: 300/500V. Long term working temperature of cable conductor is 70℃ & 105℃ for cable with PVC insulation, 70℃ for cable with PE insulation and 90℃ for cable with XLPE insulation.(XLPE insulation includes silane XLPE & irradiation XLPE insulation.)
- 2: Min. environment temperature is -40℃ for fixed laying and -15℃ for non-fixed laying. Environment temperature shall be no less than 0℃ for installing.
- 3: Min.bending radius allowed by cable is no less than 6 times that of cable OD for non-armored soft cable or braided shielding cable and 12 times that of cable OD for cable with metallic tape wrapped shielding or steel wire/steel tape armor.

Basic Type and Description

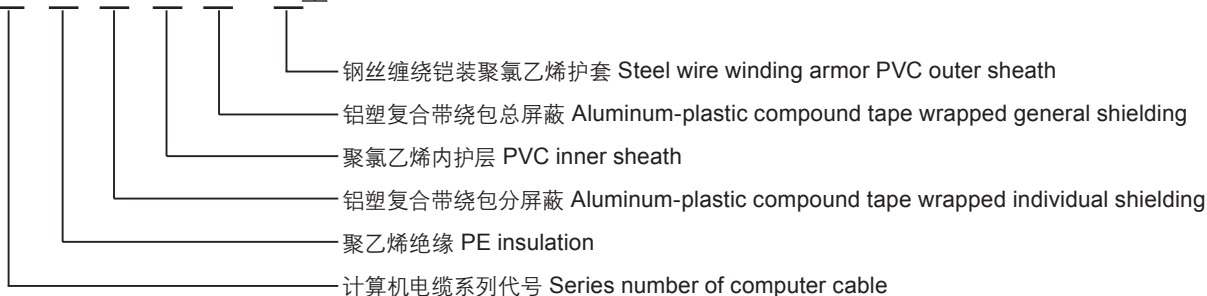
11	DJYP2VP2	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包分屏总屏计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper-plastic compound tape wrapping individual & general shielding
12	DJYP2VP2R	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包分屏总屏计算机软电缆 Computer soft cable with Cu core, PE insulation, PVC sheath, copper-plastic compound tape wrapping individual & general shielding
13	DJYVP3	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包总屏蔽计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapping general shielding
14	DJYVP3R	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包总屏蔽计算机软电缆 Computer soft cable with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapping general shielding
15	DJYP3V	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包分屏蔽计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapping individual shielding
16	DJYP3VR	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包分屏蔽计算机软电缆 Computer soft cable with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapping individual shielding
17	DJYP3VP3	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包分屏总屏计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapping individual & general shielding
18	DJYP3VP3R	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包分屏总屏计算机软电缆 Computer soft cable with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapping individual & general shielding
19	DJYVP22	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织总屏蔽钢带铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper wire braided general shielding, steel tape armor
20	DJYPV22	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织分屏蔽钢带铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper wire braided individual shielding, steel tape armor
21	DJYVPV22	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织分屏总屏钢带铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper wire braided individual & general shielding, steel tape armor
22	DJYVP2-22	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包总屏蔽钢带铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper-plastic compound tape wrapping, general shielding, steel tape armor
23	DJYP2V22	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包分屏蔽钢带铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper-plastic compound tape wrapping, individual shielding, steel tape armor
24	DJYP2VP2-22	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包分屏总屏钢带铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper-plastic compound tape wrapping, individual & general shielding, steel tape armor
25	DJYVP3-22	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包总屏蔽钢带铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapping, general shielding, steel tape armor
26	DJYP3V22	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包分屏蔽钢带铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapping, individual shielding, steel tape armor

27	DJYP3VP3-22	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包分屏总屏钢带铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapping, individual & general shielding, steel tape armor
28	DJYVP32	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织总屏蔽钢丝铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper wire braided general shielding, steel wire armor
29	DJYPV32	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织分屏蔽钢丝铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper wire braided individual shielding, steel wire armor
30	DJYVPV32	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织分屏总屏钢丝铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper wire braided individual & general shielding, steel wire armor
31	DJYVP2-32	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包总屏蔽钢丝铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper-plastic compound tape wrapping, general shielding, steel wire armor
32	DJYP2V32	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包分屏蔽钢丝铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper-plastic compound tape wrapping, individual shielding, steel wire armor
33	DJYP2VP2-32	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包分屏总屏钢丝铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, copper-plastic compound tape wrapping, general & individual shielding, steel wire armor
34	DJYVP3-32	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包总屏蔽钢丝铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapping, general shielding, steel wire armor
35	DJYP3V32	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包分屏蔽钢丝铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapping, individual shielding, steel wire armor
36	DJYP3VP3-32	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包分屏总屏钢丝铠装计算机电缆 Computer cable with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapping, general & individual shielding, steel wire armor

四、型号名称及含义

Type, Description and Definition

举例: DJ Y P3 V P3 - 32型



绝缘或护套材料: Y—聚乙烯挤包绝缘或护套

V—聚氯乙烯挤包绝缘或护套

YJ—交联聚乙烯挤包绝缘

阻燃性能分: ZRA—A类阻燃 (A类阻燃性能最佳)

ZRB—B类阻燃

ZRC、ZR—C类阻燃。

阻燃型电缆在基本型号前分别加“ZRA-”、“ZRB-”、“ZRC或ZR”表示即可。

Insulation or sheath material:

Y means PE extruded insulation or sheath

V means PVC extruded insulation or sheath

YJ means XLPE extruded insulation

Flame retardant performance category:

ZRA: category A (the best)

ZRB: category B

ZRC & ZR: category C

Prefix “ZRA-”、“ZRB-”、“ZRC or ZR” is added to the original type of flame retardant cable.

铠装结构: 22—钢带铠装聚氯乙烯外护套
 23—钢带铠装聚乙烯外护套
 32—圆形镀锌低碳钢丝缠绕铠装聚氯乙烯外护套
 33—圆形镀锌低碳钢丝缠绕铠装聚乙烯外护套
 屏蔽材料: P—铜线编织
 P1—镀锡铜线编织
 P2—铜塑复合带绕包
 P3—铝塑复合带绕包
 导体种类: A—单根导体 (型号中省略)
 B—七根绞合导体 (在规格后面加“B”表示)
 R—多根绞合导体

Armor structure:
 22 means steel tape armor, PVC outer sheath
 23 means steel tape armor, PE outer sheath
 32 means round galvanized low carbon steel wire wrapping, armor, PVC outer sheath
 33 means round galvanized low carbon steel wire wrapping, armor, PE outer sheath
 Shielding material:
 P means copper wire braiding
 P1 means tinned copper wire braiding
 P2 means copper-plastic compound tape wrapping
 P3 means aluminum- plastic compound tape wrapping
 structure of conductor:
 A means single conductor (omitted in type)
 B means 7 stranded conductor (“B” shall be added after specification)
 C means multi-stranded conductor

五、规格范围

对数: 1~24对。
 每对芯数: 二芯(称二线组)或三芯(称三线组)。
 导体截面: 0.5mm²、0.75mm²、1.0mm²、1.5mm²、2.5mm²。

Specification Scope

Pair No.: 1~24 pairs
 Core No. per pair: 2 cores (equal to 2 wire group) or 3 cores (equal to 3 wire group)
 Cross section of conductor: 0.5mm²、0.75mm²、1.0mm²、1.5mm²、2.5mm²

六、主要技术参数

1、20℃导体直流电阻

DC Resistance of Conductor at 20℃

导体标称 截面mm ² Nominal cross section area	导体根数/单丝直径mm Pieces of conductor/diameter of single piece			20℃时导体直流电阻Ω/km DC resistance of conductor at 20℃	
	A	B	R	A、B	R
0.5	1/0.80	7/0.30	16/0.20	≤36.0	≤39.0
0.75	1/0.97	7/0.37	24/0.20	≤24.5	≤26.0
1.0	1/1.13	7/0.43	32/0.20	≤18.1	≤19.5
1.5	1/1.38	7/0.52	30/0.25	≤12.1	≤13.3
2.5	1/1.78	7/0.68	49/0.25	≤7.41	≤7.98

2、20℃绝缘电阻

Insulation Resistance at 20℃

性能项目 Performance item	PVC绝缘 PVC insulation	PE、XLPE绝缘 PE、XLPE insulation
20℃时绝缘电阻MΩ.km insulation resistance at 20℃	≥25	≥500

3、电缆应经受工频交流电压试验: 2000V/1min绝缘不发生击穿, 试验温度为环境温度。

Cable shall endure A.C. voltage test of 2000V under power frequency for 1min without puncture of insulation. And testing temperature is environment temperature.

七、电缆计算外径（供参考）

Calculated Outer Diameter of Cable (for reference)

对数×芯数×导体 标称截面 mm ² pair number* core number* nominal cross section	导体种类 Conductor category	电缆计算外径mm calculated outer diameter of cable			对数×芯数×导体 标称截面 mm ² pair number* core number* nominal cross section	导体 种类 Conductor category	电缆计算外径mm calculated outer diameter of cable		
		DJYPV DJVPV DJYJPV	DJYVP DJVVP DJYJVP	DJYPVP DJVPVP DJYJPVP			DJYPV DJVPV DJYJPV	DJYVP DJVVP DJYJVP	DJYPVP DJVPVP DJYJPVP
1×2×0.5	A	6.5	6.5	—	8×2×1.5	A	20.0	19.0	20.4
1×2×0.75		7.2	7.2	—	8×2×2.5		23.4	22.4	23.9
1×2×1.0		7.8	7.8	—	10×2×0.5		15.6	15.0	16.2
1×2×1.5		8.5	8.5	—	10×2×0.75		19.6	18.5	20.1
1×2×2.5		9.7	9.7	—	10×2×1.0		20.9	19.8	21.4
2×2×0.5		9.2	9.0	9.8	10×2×1.5		22.2	21.1	22.7
2×2×0.75		11.0	10.5	11.5	10×2×2.5		26.2	25.1	26.7
2×2×1.0		11.7	11.4	12.2	12×2×0.5		16.5	15.8	17.1
2×2×1.5		12.8	12.1	13.3	12×2×0.75		20.6	19.4	21.1
2×2×2.5		15.0	14.7	15.5	12×2×1.0		22.0	20.8	22.5
3×2×0.5		10.0	9.8	10.6	12×2×1.5		23.4	22.2	23.9
3×2×0.75		12.1	11.6	13.0	12×2×2.5		27.6	26.4	28.1
3×2×1.0		13.3	12.8	13.8	14×2×0.5		17.2	16.4	18.4
3×2×1.5		14.1	13.6	14.6	14×2×0.75		21.5	20.3	22.0
3×2×2.5		16.5	16.0	17.0	14×2×1.0		23.0	21.8	23.5
4×2×0.5		10.9	10.6	11.5	14×2×1.5		24.5	23.3	25.0
4×2×0.75		13.5	13.0	14.0	14×2×2.5		29.5	27.7	30.0
4×2×1.0		14.4	13.9	14.9	16×2×0.5		18.9	18.0	19.5
4×2×1.5		15.3	14.7	15.8	16×2×0.75		23.1	21.6	23.6
4×2×2.5		18.5	17.4	19.0	16×2×1.0		24.7	23.2	25.2
5×2×0.5		11.5	11.1	12.1	16×2×1.5		26.3	24.8	26.8
5×2×0.75		14.4	13.6	14.9	16×2×2.5		31.7	30.2	32.2
5×2×1.0		15.4	14.6	15.9	(18)19×2×0.5		20.5	19.5	21.1
5×2×1.5		16.3	15.6	16.8	(18)19×2×0.75		25.1	23.4	25.6
5×2×2.5		19.8	19.1	20.3	(18)19×2×1.0		26.9	25.2	27.4
(6) 7×2×0.5		12.3	12.0	13.3	(18)19×2×1.5		29.2	26.9	29.7
(6) 7×2×0.75		15.0	14.2	15.5	(18)19×2×2.5		34.9	32.8	35.4
(6) 7×2×1.0		18.2	15.2	16.5	24×2×0.5		22.8	21.7	23.4
(6) 7×2×1.5		19.6	16.2	17.5	24×2×0.75		28.1	26.1	29.2
(6) 7×2×2.5		20.6	19.8	21.1	24×2×1.0		30.7	28.1	31.2
8×2×0.5		14.0	13.5	14.6	24×2×1.5		32.7	30.7	33.2
8×2×0.75		17.0	16.0	17.5	24×2×2.5		39.1	37.1	40.0
8×2×1.0		18.7	17.2	19.2	/		/	/	/

备注：①铜塑复合带屏蔽型及铝塑复合带屏蔽型的电缆外径略小于铜丝编织屏蔽型电缆外径约0.5mm范围。
②铜塑复合带屏蔽型电缆及铝塑复合带屏蔽型电缆的外径可以按相同设计考虑。

Note: 1: Outer diameter of cable with copper(aluminum)-plastic compound tape shielding is smaller by 0.5mm than that with copper wire braided shielding.

2: Cable with copper-plastic compound tape shielding and cable with aluminum-plastic compound tape shielding can be designed with similar consideration.

对数×芯数×导体标称截面 mm ² pair number* core number* nominal cross section	导体种类 Conductor category	电缆计算外径mm calculated outer diameter of cable			对数×芯数×导体标称截面 mm ² pair number* core number* nominal cross section	导体种类 Conductor category	电缆计算外径mm calculated outer diameter of cable		
		DJYPVR DJVPVR DJYJPVR	DJYVPR DJVVPR DJYJVPR	DJYVPVR DJVPVPR DJYJPVPR			DJYPVR DJVPVR DJYJPVR	DJYVPR DJVVPR DJYJVPR	DJYVPVR DJVPVPR DJYJPVPR
1×2×0.5	R	7.0	7.0	—	8×2×1.5	R	21.9	21.0	22.4
1×2×0.75		7.7	7.7	—	8×2×2.5		25.4	24.5	25.9
1×2×1.0		8.2	8.2	—	10×2×0.5		17.9	17.3	19.1
1×2×1.5		9.0	9.0	—	10×2×0.75		21.3	20.1	21.8
1×2×2.5		10.2	10.2	—	10×2×1.0		22.6	21.4	23.1
2×2×0.5		10.3	10.2	10.9	10×2×1.5		24.6	23.4	25.1
2×2×0.75		11.9	11.6	12.8	10×2×2.5		29.2	27.4	29.7
2×2×1.0		13.0	12.2	13.5	12×2×0.5		19.5	18.8	20.1
2×2×1.5		14.1	13.7	14.6	12×2×0.75		22.4	21.1	22.9
2×2×2.5		16.3	15.9	16.2	12×2×1.0		23.8	22.5	24.3
3×2×0.5		11.2	11.0	11.8	12×2×1.5		25.9	24.6	26.4
3×2×0.75		13.4	12.9	13.9	12×2×2.5		30.7	29.4	31.2
3×2×1.0		14.2	13.7	14.7	14×2×0.5		20.5	19.7	21.1
3×2×1.5		15.4	14.9	15.9	14×2×0.75		23.5	22.1	24.0
3×2×2.5		18.4	17.4	18.9	14×2×1.0		25.0	23.6	25.5
4×2×0.5		12.2	11.9	13.2	14×2×1.5		27.2	25.8	27.7
4×2×0.75		14.6	14.0	15.1	14×2×2.5		32.3	30.8	32.8
4×2×1.0		15.5	14.9	16.0	16×2×0.5		21.9	21.1	22.5
4×2×1.5		16.8	16.2	17.3	16×2×0.75		25.1	23.6	25.6
4×2×2.5		20.1	19.5	20.6	16×2×1.0		26.7	25.2	27.2
5×2×0.5		13.5	13.1	14.1	16×2×1.5		29.7	27.6	30.2
5×2×0.75		15.5	14.9	16.0	16×2×2.5		34.9	33.0	35.4
5×2×1.0		16.5	15.9	17.0	(18)19×2×0.5		23.8	22.9	24.4
5×2×1.5		18.5	17.3	19.0	(18)19×2×0.75		27.3	26.2	27.8
5×2×2.5		21.4	20.7	21.9	(18)19×2×1.0		29.7	27.9	30.2
(6) 7×2×0.5		14.5	14.1	15.1	(18)19×2×1.5		32.3	30.6	32.8
(6) 7×2×0.75		16.1	15.5	16.6	(18)19×2×2.5		38.0	36.2	38.5
(6) 7×2×1.0		17.1	16.5	17.6	24×2×0.5		26.6	25.5	27.2
(6) 7×2×1.5		19.2	18.5	19.7	24×2×0.75		31.2	29.2	31.7
(6) 7×2×2.5		22.2	21.5	22.7	24×2×1.0		33.2	31.2	33.7
8×2×0.5		15.9	15.5	16.5	24×2×1.5		36.6	34.6	37.1
8×2×0.75		19.0	18.1	19.5	24×2×2.5		43.0	41.0	43.5
8×2×1.0		20.2	19.3	20.7	/		/	/	/

备注：①铜塑复合带屏蔽型及铝塑复合带屏蔽型的电缆外径略小于铜丝编织屏蔽型电缆外径约0.5mm范围。
 ②铜塑复合带屏蔽型电缆及铝塑复合带屏蔽型电缆的外径可以按相同设计考虑。
 ③B类导体的电缆外径略小于R类导体的电缆外径,约0.5~1mm范围内。

Note:
 1: Outer diameter of cable with copper (aluminum)-plastic compound tape shielding is smaller by 0.5mm than that with copper wire braided shielding.
 2: Cable with copper-plastic compound tape shielding and cable with aluminum-plastic compound tape shielding can be designed with similar consideration.
 3: Outer diameter of cable with conductor of category B is smaller by 0.5~1mm than that of category R.

对数×芯数× 导体标称截面 mm ² pair number* core number* nominal cross section	导体种类 Conductor category	电缆计算外径mm calculated outer diameter of cable			对数×芯数×导 体标称截面 mm ² pair number* core number* nominal cross section	导体种类 Conductor category	电缆计算外径mm calculated outer diameter of cable		
		DJYPV22 DJVPV22 DJYJPV22	DJYVP22 DJVVP22 DJYJVP22	DJYVP22 DJVPV22 DJYJPV22			DJYPV22 DJVPV22 DJYJPV22	DJYVP22 DJVVP22 DJYJVP22	DJYVP22 DJVPV22 DJYJPV22
1×2×0.5	A	10.4	10.4	—	8×2×1.5	A	22.5	22.0	23.4
1×2×0.75		10.8	10.8	—	8×2×2.5		26.8	25.4	27.3
1×2×1.0		11.3	11.3	—	10×2×0.5		21.1	19.9	21.6
1×2×1.5		11.8	11.8	—	10×2×0.75		22.6	21.5	23.1
1×2×2.5		13.1	13.1	—	10×2×1.0		23.9	22.8	24.4
2×2×0.5		13.7	12.8	14.2	10×2×1.5		25.2	24.1	25.7
2×2×0.75		14.4	14.0	14.9	10×2×2.5		30.2	29.1	30.7
2×2×1.0		15.1	14.8	15.6	12×2×0.5		22.0	20.7	22.5
2×2×1.5		15.8	15.5	16.3	12×2×0.75		23.6	22.4	24.1
2×2×2.5		18.6	18.3	19.1	12×2×1.0		25.0	23.8	25.5
3×2×0.5		14.6	13.6	15.1	12×2×1.5		26.8	25.2	27.3
3×2×0.75		15.5	15.0	16.0	12×2×2.5		31.6	30.4	32.6
3×2×1.0		16.3	15.8	16.8	14×2×0.5		22.9	21.5	23.4
3×2×1.5		17.1	16.6	17.6	14×2×0.75		24.5	23.3	25.0
3×2×2.5		20.1	19.6	20.6	14×2×1.0		26.0	24.8	26.9
4×2×0.5		15.5	14.4	16.0	14×2×1.5		27.9	26.7	28.4
4×2×0.75		16.5	16.0	17.0	14×2×2.5		33.4	31.7	33.9
4×2×1.0		17.4	16.9	18.5	16×2×0.5		24.2	22.7	24.7
4×2×1.5		18.9	18.3	19.4	16×2×0.75		26.1	24.6	27.0
4×2×2.5		21.5	21.0	22.0	16×2×1.0		28.1	26.2	29.2
5×2×0.5		16.4	15.2	16.9	16×2×1.5		30.3	28.2	30.8
5×2×0.75		17.4	16.6	18.5	16×2×2.5		36.0	34.5	36.5
5×2×1.0		19.0	17.6	19.5	(18)19×2×0.5		26.4	24.3	26.9
5×2×1.5		19.9	19.2	20.4	(18)19×2×0.75		29.1	26.8	29.6
5×2×2.5		22.8	22.1	23.3	(18)19×2×1.0		30.9	29.2	31.4
(6) 7×2×0.5		17.9	17.1	18.4	(18)19×2×1.5		33.1	30.9	33.6
(6) 7×2×0.75		18.6	17.2	19.1	(18)19×2×2.5		38.8	37.1	39.7
(6) 7×2×1.0		19.6	18.8	20.1	24×2×0.5		29.7	27.1	30.2
(6) 7×2×1.5		20.6	19.8	21.1	24×2×0.75		32.1	30.1	33.1
(6) 7×2×2.5		23.6	22.8	24.1	24×2×1.0		35.0	32.1	35.5
8×2×0.5		19.3	18.3	19.8	24×2×1.5		37.0	35.0	37.5
8×2×0.75		20.6	19.6	21.1	24×2×2.5		43.6	41.6	44.1
8×2×1.0		21.7	20.8	22.2	/		/	/	/

备注：①铜塑复合带屏蔽型及铝塑复合带屏蔽型的电缆外径略小于铜丝编织屏蔽型电缆外径约0.5mm范围。
②铜塑复合带屏蔽型电缆及铝塑复合带屏蔽型电缆的外径可以按相同设计考虑。
③钢丝铠装型电缆外径在钢带铠装型电缆外径基础上增加1~1.5mm。

Note: 1: Outer diameter of cable with copper(aluminum)-plastic compound tape shielding is smaller by 0.5mm than that with copper wire braided shielding.
2: Cable with copper-plastic compound tape shielding and cable with aluminum-plastic compound tape shielding can be designed with similar consideration.
3: Outer diameter of cable with steel wire armor is added by 1~1.5mm on the basis of that with steel tape armor.

对数×芯数×导体标称截面 mm ² pair number* core number* nominal cross section	导体种类 Conductor category	电缆计算外径mm calculated outer diameter of cable			对数×芯数×导体 标称截面 mm ² pair number* core number* nominal cross section	导体种类 Conductor category	电缆计算外径mm calculated outer diameter of cable		
		DJYPV DJVPV DJYJPV	DJYVP DJVVP DJYJVP	DJYPVP DJVPVP DJYJPVP			DJYPV DJVPV DJYJPV	DJYVP DJVVP DJYJVP	DJYPVP DJVPVP DJYJPVP
1×3×0.5	A	6.8	6.8	—	8×3×1.5	A	22.0	21.0	22.5
1×3×0.75		7.56	7.5	—	8×3×2.5		25.7	24.7	26.2
1×3×1.0		8.1	8.1	—	10×3×0.5		19.9	18.6	20.4
1×3×1.5		8.8	8.8	—	10×3×0.75		21.8	20.6	22.5
1×3×2.5		10.0	10.0	—	10×3×1.0		23.3	22.0	23.8
2×3×0.5		10.9	10.5	11.4	10×3×1.5		25.1	23.8	25.6
2×3×0.75		11.9	11.5	12.8	10×3×2.5		30.0	28.1	30.5
2×3×1.0		13.1	12.7	13.6	12×3×0.5		20.9	19.5	21.4
2×3×1.5		14.0	13.6	14.5	12×3×0.75		22.8	21.5	23.3
2×3×2.5		16.3	15.9	16.8	12×3×1.0		24.4	23.0	24.9
3×3×0.5		12.3	11.3	12.8	12×3×1.5		26.3	24.9	26.8
3×3×0.75		13.4	12.8	13.9	12×3×2.5		31.4	30.1	31.9
3×3×1.0		14.3	13.6	14.8	14×3×0.5		21.8	20.3	22.3
3×3×1.5		15.3	14.7	15.8	14×3×0.75		23.9	22.4	24.4
3×3×2.5		18.4	17.2	18.9	14×3×1.0		25.5	24.0	26.0
4×3×0.5		13.2	12.6	13.7	14×3×1.5		27.5	26.0	28.0
4×3×0.75		14.5	13.8	15.0	14×3×2.5		32.9	31.4	33.4
4×3×1.0		15.5	14.7	16.0	16×3×0.5		23.2	21.6	23.7
4×3×1.5		16.6	15.9	17.1	16×3×0.75		25.4	23.8	25.9
4×3×2.5		20.0	19.3	20.5	16×3×1.0		27.2	25.5	27.7
5×3×0.5		14.2	13.4	14.7	16×3×1.5		29.9	27.6	30.4
5×3×0.75		15.4	14.6	15.9	16×3×2.5		35.5	33.4	36.0
5×3×1.0		16.4	15.6	16.9	(18)19×3×0.5		25.1	23.2	25.6
5×3×1.5		17.6	16.8	18.7	(18)19×3×0.75		27.5	25.7	28.0
5×3×2.5		21.2	20.4	21.7	(18)19×3×1.0		30.0	27.6	30.5
(6) 7×3×0.5		15.1	14.2	15.6	(18)19×3×1.5		32.3	30.5	32.8
(6) 7×3×0.75		17.0	16.1	17.5	(18)19×3×2.5		38.4	36.6	38.9
(6) 7×3×1.0		18.8	17.2	19.3	24×3×0.5		28.5	25.8	29.0
(6) 7×3×1.5		20.2	19.2	20.7	24×3×0.75		31.2	29.1	31.7
(6) 7×3×2.5		23.5	22.6	24.0	24×3×1.0		33.4	31.2	34.3
8×3×0.5		17.6	15.9	18.1	24×3×1.5		36.4	34.3	36.9
8×3×0.75		19.2	17.6	19.7	24×3×2.5		43.2	41.0	43.7
8×3×1.0		20.5	19.4	21.0	/		/	/	/

备注：①铜塑复合带屏蔽型及铝塑复合带屏蔽型的电缆外径略小于铜丝编织屏蔽型电缆外径约0.5mm范围。
②铜塑复合带屏蔽型电缆及铝塑复合带屏蔽型电缆的外径可以按相同设计考虑。

Note: 1: Outer diameter of cable with copper(aluminum)-plastic compound tape shielding is smaller by 0.5mm than that with copper wire braided shielding.
2: Cable with copper-plastic compound tape shielding and cable with aluminum-plastic compound tape shielding can be designed with similar consideration.

对数×芯数×导体标称截面 mm ² pair number* core number* nominal cross section	导体种类 Conductor category	电缆计算外径mm calculated outer diameter of cable			对数×芯数×导体标称截面 mm ² pair number* core number* nominal cross section	导体种类 Conductor category	电缆计算外径mm calculated outer diameter of cable		
		DJYPVR DJVPVR DJYJPVR	DJYVPR DJVVPR DJYJVPR	DJYVPVR DJVPVPR DJYJPVPR			DJYPVR DJVPVR DJYJPVR	DJYVPR DJVVPR DJYJVPR	DJYVPVR DJVPVPR DJYJPVPR
1×3×0.5	R	7.3	7.3	—	8×3×1.5	R	24.2	23.2	24.7
1×3×0.75		8.0	8.0	—	8×3×2.5		27.9	26.9	29.0
1×3×1.0		8.6	8.6	—	10×3×0.5		20.6	19.3	21.1
1×3×1.5		9.3	9.3	—	10×3×0.75		23.6	22.3	24.1
1×3×2.5		10.5	10.5	—	10×3×1.0		25.0	23.8	25.5
2×3×0.5		11.3	10.9	11.8	10×3×1.5		27.5	26.3	28.0
2×3×0.75		13.2	12.8	13.7	10×3×2.5		32.5	31.2	33.0
2×3×1.0		14.0	13.5	14.5	12×3×0.5		21.6	20.2	22.1
2×3×1.5		15.3	14.9	15.8	12×3×0.75		24.8	23.3	25.3
2×3×2.5		17.6	17.2	18.7	12×3×1.0		26.3	24.9	26.8
3×3×0.5		12.7	11.7	13.2	12×3×1.5		29.6	27.5	30.1
3×3×0.75		14.4	13.9	14.9	12×3×2.5		34.5	32.7	35.0
3×3×1.0		15.2	14.7	15.7	14×3×0.5		22.6	21.1	23.1
3×3×1.5		16.7	16.2	17.2	14×3×0.75		25.9	24.4	26.4
3×3×2.5		19.8	19.3	20.3	14×3×1.0		27.5	26.0	28.0
4×3×0.5		13.7	13.0	14.2	14×3×1.5		30.9	29.4	31.4
4×3×0.75		15.6	15.0	16.1	14×3×2.5		36.1	34.6	36.0
4×3×1.0		16.5	15.9	17.0	16×3×0.5		24.1	22.4	24.6
4×3×1.5		18.7	17.5	19.2	16×3×0.75		27.6	26.0	28.1
4×3×2.5		21.5	20.9	22.0	16×3×1.0		29.9	27.7	30.4
5×3×0.5		14.7	13.9	15.2	16×3×1.5		32.9	31.3	33.4
5×3×0.75		16.6	15.9	17.1	16×3×2.5		38.5	36.9	39.0
5×3×1.0		17.6	16.9	18.7	(18)19×3×0.5		26.0	24.2	26.5
5×3×1.5		19.7	19.2	20.4	(18)19×3×0.75		30.5	28.0	31.0
5×3×2.5		22.9	22.2	23.4	(18)19×3×1.0		32.3	30.5	32.8
(6) 7×3×0.5		15.6	14.8	16.1	(18)19×3×1.5		36.0	33.8	36.5
(6) 7×3×0.75		19.1	17.5	19.6	(18)19×3×2.5		42.1	40.2	42.6
(6) 7×3×1.0		20.2	19.3	20.7	24×3×0.5		29.6	26.8	30.1
(6) 7×3×1.5		22.2	21.2	22.7	24×3×0.75		34.3	31.8	34.8
(6) 7×3×2.5		25.5	24.6	26.0	24×3×1.0		36.4	34.3	36.9
8×3×0.5		18.2	16.5	18.7	24×3×1.5		40.5	38.0	41.0
8×3×0.75		20.8	19.7	21.3	24×3×2.5		47.5	45.4	48.0
8×3×1.0		22.0	21.0	22.5	/		//	/	/

备注：①铜塑复合带屏蔽型及铝塑复合带屏蔽型的电缆外径略小于铜丝编织屏蔽型电缆外径约0.5mm范围。
②铜塑复合带屏蔽型电缆及铝塑复合带屏蔽型电缆的外径可以按相同设计考虑。
③B类导体的电缆外径略小于R类导体的电缆外径,约0.5~1mm范围内。

Note:
1: Outer diameter of cable with copper(aluminum)-plastic compound tape shielding is smaller by 0.5mm than that with copper wire braided shielding.
2: Cable with copper-plastic compound tape shielding and cable with aluminum-plastic compound tape shielding can be designed with similar consideration.
3: Outer diameter of cable with conductor of class B is smaller by 0.5~1mm than that of category R.

对数×芯数× 导体标称截面 mm ² pair number* core number* nominal cross section	导体种类 Conductor category	电缆计算外径mm calculated outer diameter of cable			对数×芯数×导 体标称截面 mm ² pair number* core number* nominal cross section	导体种类 conductor category	电缆计算外径mm calculated outer diameter of cable		
		DJYPV22 DJVPV22 DJYJPV22	DJYVP22 DJVVP22 DJYJVP22	DJYVPV22 DJVPVP22 DJYJPVP22			DJYPV22 DJVPV22 DJYJPV22	DJYVP22 DJVVP22 DJYJVP22	DJYVPV22 DJVPVP22 DJYJPVP22
1×3×0.5	A	10.8	10.8	—	8×3×1.5	A	25.0	24.0	25.5
1×3×0.75		11.1	11.1	—	8×3×2.5		29.7	28.1	30.2
1×3×1.0		11.6	11.6	—	10×3×0.5		23.8	22.5	24.3
1×3×1.5		12.3	12.3	—	10×3×0.75		24.8	23.6	25.3
1×3×2.5		13.5	13.5	—	10×3×1.0		26.7	25.0	27.2
2×3×0.5		14.9	14.5	15.4	10×3×1.5		29.1	27.2	29.6
2×3×0.75		15.3	14.9	15.8	10×3×2.5		33.4	32.1	34.3
2×3×1.0		16.1	15.7	16.6	12×3×0.5		24.8	23.4	25.3
2×3×1.5		17.0	16.6	17.5	12×3×0.75		25.8	24.5	26.3
2×3×2.5		19.9	19.5	20.4	12×3×1.0		27.8	26.0	28.9
3×3×0.5		15.9	15.3	16.4	12×3×1.5		30.3	28.3	30.8
3×3×0.75		16.4	15.8	16.9	12×3×2.5		35.2	33.5	36.2
3×3×1.0		17.3	16.6	18.4	14×3×0.5		26.2	24.3	26.7
3×3×1.5		18.9	18.3	19.4	14×3×0.75		27.3	25.4	27.8
3×3×2.5		21.4	20.8	21.9	14×3×1.0		29.5	27.4	30.0
4×3×0.5		16.9	16.2	17.4	14×3×1.5		31.5	30.0	32.0
4×3×0.75		17.5	16.8	18.6	14×3×2.5		37.2	35.2	37.7
4×3×1.0		19.1	18.3	19.6	16×3×0.5		27.7	25.6	28.2
4×3×1.5		20.2	19.5	20.7	16×3×0.75		29.4	27.2	29.9
4×3×2.5		23.0	22.3	23.5	16×3×1.0		31.2	29.5	31.7
5×3×0.5		18.5	17.1	19.0	16×3×1.5		33.3	31.6	33.8
5×3×0.75		19.0	17.6	19.5	16×3×2.5		39.8	37.7	40.3
5×3×1.0		20.0	19.2	20.5	(18)19×3×0.5		30.2	27.8	30.7
5×3×1.5		21.2	20.4	21.7	(18)19×3×0.75		31.5	29.7	32.0
5×3×2.5		24.2	23.4	24.7	(18)19×3×1.0		33.4	31.6	34.3
(6) 7×3×0.5		19.4	18.6	19.9	(18)19×3×1.5		36.6	34.3	37.1
(6) 7×3×0.75		20.6	19.7	21.1	(18)19×3×2.5		42.9	41.1	43.4
(6) 7×3×1.0		21.8	20.8	22.3	24×3×0.5		33.6	31.0	34.1
(6) 7×3×1.5		23.2	22.2	23.7	24×3×0.75		35.0	32.5	36.0
(6) 7×3×2.5		26.9	25.6	27.4	24×3×1.0		37.7	35.0	38.2
8×3×0.5		21.4	20.3	21.9	24×3×1.5		40.9	38.2	41.4
8×3×0.75		22.2	21.2	22.7	24×3×2.5		48.1	45.7	48.6
8×3×1.0		23.5	22.4	24.0	/		/	/	/

备注：①铜塑复合带屏蔽型及铝塑复合带屏蔽型的电缆外径略小于铜丝编织屏蔽型电缆外径约0.5mm范围。
②铜塑复合带屏蔽型电缆及铝塑复合带屏蔽型电缆的外径可以按相同设计考虑。
③铜丝铠装型电缆外径在钢带铠装型电缆外径基础上增加1~1.5mm。

Note: 1: Outer diameter of cable with copper(aluminum)-plastic compound tape shielding is smaller by 0.5mm than that with copper wire braided shielding.
2: Cable with copper-plastic compound tape shielding and cable with aluminum-plastic compound tape shielding can be designed with similar consideration.
3: Outer diameter of cable with steel wire armor is added by 1~1.5mm on the basis of that with steel tape armor.

本安计算机用屏蔽电缆（或称本安DCS系统用电缆）

Intrinsic Safety Type Computer Shielding Cable(Intrinsic Safety Type Cable for DCS System)

本产品适用于石油、化工、电力、煤气工程、矿山等存在爆炸危险的场合以及其它防爆安全要求较高的场合，传输自动控制信号。该电缆具有低电容、低电感集散型仪表信号电缆，简称本安型DCS电缆，具有优异的屏蔽性能和抗干扰性能，因此防爆安全性能明显高于一般DCS电缆和计算机控制电缆。

一、生产执行标准 企业标准。

二、使用特性

- 1、交流额定电压U0/U: 300/500V。
- 2、电缆导体长期允许最高工作温度：聚乙烯绝缘为70℃；交联聚乙烯绝缘为90℃；无卤低烟阻燃聚烯烃绝缘为70℃。
- 3、最低环境温度：固定敷设-40℃；非固定敷设-15℃。安装敷设时环境温度：不低于0℃。
- 4、电缆允许弯曲半径：非铠装、编织屏蔽电缆不小于电缆外径的6倍；铜带屏蔽、铠装电缆不小于电缆外径的12倍。

三、基本型号及名称

It is used to transmit automatic control signal in the environment not only with exploding danger such as petroleum, chemical plant, power, gas project and mine but also with high demand on explosion proof performance. It is decentralized type instrument signal cable with the feature of low capacitance & low inductance & good shielding performance and interference proof performance, which is also named as Intrinsic safety type cable for DCS system. So, its performance of explosion-proof & safety is apparently higher compared with common computer control cable and cable for DSC.

Executive standard: enterprise standard

Performance for Usage

- 1: AC rated voltageU0/U: 300/500V.
- 2: Max temperature of cable conductor for long term working is 70℃ for cable with PE insulation, 90℃ for cable with XLPE insulation and 70℃for cable with free halogen, low smoke, flame retardant, polyolefin insulation.
- 3: Min. environment temperature is -40℃ for fixed laying and -15℃ for non-fixed laying. Environment temperature for installing is no less than 0℃.
- 4: Bending radius allowed by cable is no less than 6 times that of cable OD for inarmored braided shielding cable and 12 times that of cable OD for copper tape shielding, armored cable.

Basic Type and Description

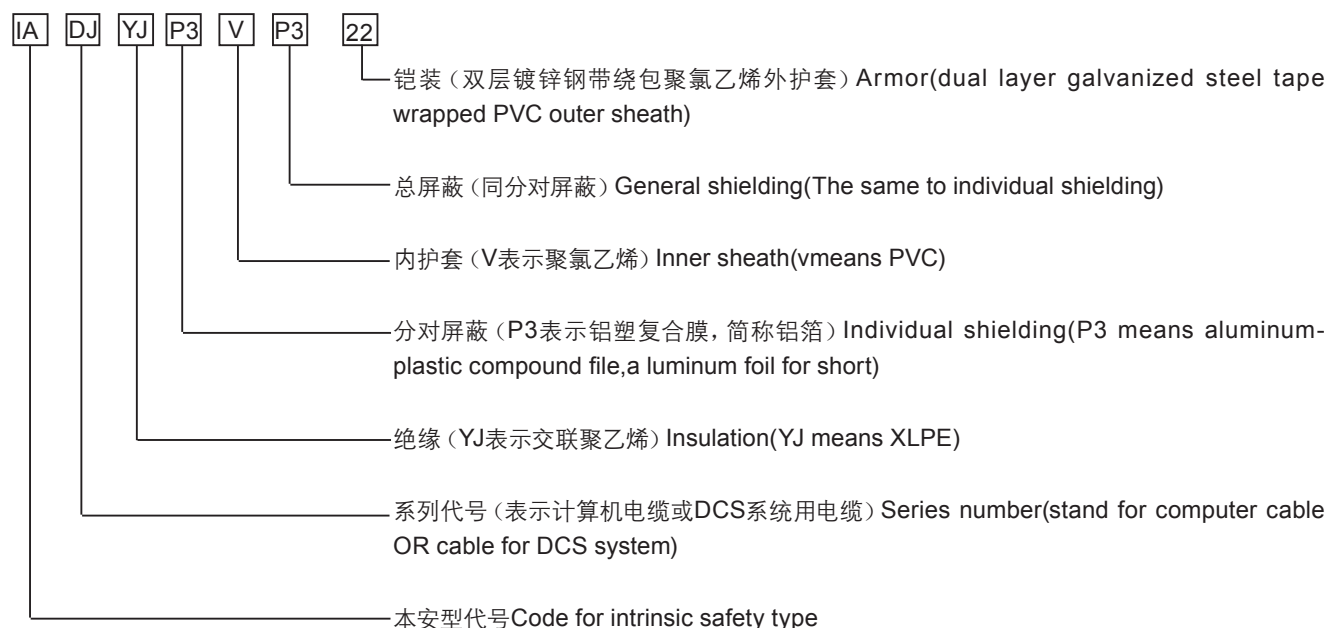
型 号Type	名 称Description
IA-DJYPVP	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织分屏总屏本安型DCS电缆 Intrinsic safety type cable for DCS system with Cu core, PE insulation, PVC sheath, copper wire braided general & individual shielding
IA-DJYPVPR	铜芯聚乙烯绝缘聚氯乙烯护套铜线编织分屏总屏本安型DCS软电缆 Intrinsic safety type soft cable for DCS system with Cu core, PE insulation, PVC sheath, copper wire braided general & individual shielding
IA-DJYP3VP3	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包分屏总屏本安型DCS电缆 Intrinsic safety type cable for DCS system with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapped general & individual shielding
IA-DJYP3VP3R	铜芯聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包分屏总屏本安型DCS软电缆 Intrinsic safety type soft cable for DCS system with Cu core, PE insulation, PVC sheath, aluminum-plastic compound tape wrapped general & individual shielding
IA-DJYP2VP2	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包分屏总屏本安型DCS电缆 Intrinsic safety type cable for DCS system with Cu core, PE insulation, PVC sheath, copper-plastics compound tape wrapped general & individual shielding
IA-DJYP2VP2R	铜芯聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包分屏总屏本安型DCS软电缆 Intrinsic safety type soft cable for DCS system with Cu core, PE insulation, PVC sheath, copper-plastic compound tape wrapped general & individual shielding
IA-DJYJPVP	铜芯交联聚乙烯绝缘聚氯乙烯护套铜线编织分屏总屏本安型DCS电缆 Intrinsic safety type cable for DCS system with Cu core, XLPE insulation, PVC sheath, copper wire braided general & individual shielding
IA-DJYJPVPR	铜芯交联聚乙烯绝缘聚氯乙烯护套铜线编织分屏总屏本安型DCS软电缆 Intrinsic safety type soft cable for DCS system with Cu core, XLPE insulation, PVC sheath, copper wire braided general & individual shielding

IA-DJYJP3VP3	铜芯交联聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包分屏总屏本安型DCS电缆 Intrinsic safety type cable for DCS system with Cu core, XLPE insulation, PVC sheath, aluminum-plastic compound tape wrapped general & individual shielding
IA-DJYJP3VP3R	铜芯交联聚乙烯绝缘聚氯乙烯护套铝塑复合带绕包分屏总屏本安型DCS软电缆 Intrinsic safety type soft cable for DCS system with Cu core, XLPE insulation, PVC sheath, aluminum-plastic compound tape wrapped general & individual shielding
IA-DJYJP2VP2	铜芯交联聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包分屏总屏本安型DCS电缆 Intrinsic safety type cable for DCS system with Cu core, XLPE insulation, PVC sheath, copper-plastic compound tape wrapped general & individual shielding
IA-DJYJP2VP2R	铜芯交联聚乙烯绝缘聚氯乙烯护套铜塑复合带绕包分屏总屏本安型DCS软电缆 Intrinsic safety type soft cable for DCS system with Cu core, XLPE insulation, PVC sheath, copper-plastic compound tape wrapped general & individual shielding
WDZ-IA-DJYPYP	铜芯无卤低烟阻燃聚烯烃绝缘及护套铜线编织分屏总屏本安型DCS电缆 Intrinsic safety type cable for DCS system with Cu core, free halogen, low smoke, flame retardant, polyolefin insulation & sheath, copper wire braided general & individual shielding
WDZ-IA-DJYPYPR	铜芯无卤低烟阻燃聚烯烃绝缘及护套铜线编织分屏总屏本安型DCS软电缆 Intrinsic safety type soft cable for DCS system with Cu core, free halogen, low smoke, flame retardant, polyolefin insulation & sheath, copper wire braided general & individual shielding
WDZ-IA-DJYP3YP3	铜芯无卤低烟阻燃聚烯烃绝缘及护套铝塑复合带绕包分屏总屏本安型DCS电缆 Intrinsic safety type cable for DCS system with Cu core, free halogen, low smoke, flame retardant, polyolefin insulation & sheath, aluminum-plastic compound tape wrapped general & individual shielding
WDZ-IA-DJYP3YP3R	铜芯无卤低烟阻燃聚烯烃绝缘及护套铝塑复合带绕包分屏总屏本安型DCS软电缆 Intrinsic safety type soft cable for DCS system with Cu core, free halogen, low smoke, flame retardant, polyolefin insulation & sheath, aluminum-plastic compound tape wrapped general & individual shielding
WDZ-IA-DJYP2YP2	铜芯无卤低烟阻燃聚烯烃绝缘及护套铜塑复合带绕包分屏总屏本安型DCS电缆 Intrinsic safety type cable for DCS system with Cu core, free halogen, low smoke, flame retardant, polyolefin insulation & sheath, copper-plastic compound tape wrapped general & individual shielding
WDZ-IA-DJYP2YP2R	铜芯无卤低烟阻燃聚烯烃绝缘及护套铜塑复合带绕包分屏总屏本安型DCS软电缆 Intrinsic safety type soft cable for DCS system with Cu core, free halogen, low smoke, flame retardant, polyolefin insulation & sheath, copper-plastic compound tape wrapped general & individual shielding

四、型号名称及含义

Type, Description and Definition

举例eg:



绝缘或护套材料: Y—聚乙烯或无卤低烟阻燃聚烯烃挤包绝缘、护套;

YJ—交联聚乙烯挤包绝缘

阻燃性能分: ZRA—A类阻燃 (A类阻燃性能最佳)
ZRB—B类阻燃
ZRC—C类阻燃
本安阻燃型电缆在基本型号前分别加“ZRA-”、“ZRB-”、“ZRC-”表示即可。

铠装结构: 22—钢带铠装聚氯乙烯外护套
23—钢带铠装聚乙烯外护套
32—圆形镀锌低碳钢丝缠绕铠装聚氯乙烯外护套
33—圆形镀锌低碳钢丝缠绕铠装聚乙烯外护套
屏蔽材料: P—铜线编织
P1—镀锡铜线编织
P2—铜塑复合带绕包
P3—铝塑复合带绕包
导体种类: A—单根导体 (型号中省略)
B—七根绞合导体 (在规格后面加“B”表示)
R—多根绞合导体

五、规格范围

对数: 1~24对。
每对芯数: 二芯(称二线组)或三芯(称三线组)。
导体截面: 0.5mm²、0.75mm²、1.0mm²、1.5mm²、2.5mm²。

六、其他常见型号与本公司型号对照

其他型号 Other type	本厂型号 Type of our company
ia-K ₂ YVR、ia-K ₃ YVR、IJYP _L VP _L R、IJYP ₃ VR-2	IA-DJYP3VP3R
ia-K ₂ YV、ia-K ₃ YV、IJYP _L VP _L 、IJYP ₃ V-2 ia-K ₂ YV(EX)、ia-K ₃ YV(EX)	IA-DJYP3VP3
KJYYVP _L 、IA-KJVVVP _L	IA-DJYP3VP3

Insulation or sheath material:
Y: PE insulation and sheath OR free halogen, low smoke, flame retardant, polyolefin extruded insulation & sheath
YJ: XLPE extruded insulation

Flame retardant performance category:
ZRA: category A (the best)
ZRB: category B
ZRC: category C
Prefix “ZRA-”、“ZRB-”、“ZRC-” should be added to the original type for cable with intrinsic safety type cable

Armor structure:
22 means steel tape armor, PVC outer sheath
23 means steel tape armor, PE outer sheath
32 means round galvanized low carbon steel wire wrapping, armor, PVC outer sheath
33 means round galvanized low carbon steel wire wrapping, armor, PE outer sheath
Shielding material:
P means copper wire braiding
P1 means tinned copper wire braiding
P2 means copper-plastic compound tape wrapping
P3 means aluminum- plastic compound tape wrapping
Conductor category:
A means single conductor (omitted in type)
B means 7 stranded conductor(“B” shall be added after specification)
C means multi-stranded conductor

Specification Scope

Pair No.: 1~24 pairs
Core No. per pair: 2 cores(equal to 2 wire group) or 3 cores(equal to 3 wire group)
Cross section area of conductor: 0.5mm²、0.75mm²、1.0mm²、1.5mm²、2.5mm²

Comparison between other common type and type of our company

七、主要技术参数

Main Technical Parameter

1、20℃导体直流电阻

DC resistance of conductor at 20℃

导体标称 截面mm ² nominal cross area section	导体根数/单丝直径mm Pieces of conductor/diameter of single piece			20℃时导体直流电阻Ω/km DC resistance of conductor at 20℃	
	A	B	R	A、B	R
0.5	1/0.80	7/0.30	16/0.20	≤36.0	≤39.0
0.75	1/0.97	7/0.37	24/0.20	≤24.5	≤26.0
1.0	1/1.13	7/0.43	32/0.20	≤18.1	≤19.5
1.5	1/1.38	7/0.52	30/0.25	≤12.1	≤13.3
2.5	1/1.78	7/0.68	49/0.25	≤7.41	≤7.98

2、20℃绝缘电阻

Insulation resistance at 20℃

性能项目 Performance item	PE类、XLPE绝缘 PE category, XLPE insulation
20℃时绝缘电阻MΩ.km Insulation resistance at 20℃	≥500

3、电缆应经受工频交流电压试验：2000V/1min绝缘不发生击穿，试验温度为环境温度。

Cable shall endure A.C. voltage test of 2000V under power frequency for 1min without puncture of insulation. And testing temperature is environment temperature.

4、工作电容（1KHZ）：线芯与线芯≤90PF/m。

Working capacitance (1KHZ) : core to core ≤90PF/m

5、分布电感（1KHZ）≤0.6μH/m。

Distributing inductance (1KHZ) ≤0.6μH/m

6、电磁干扰感应电压(干扰磁场400A/m) ≤5mV。

Inductive voltage of electromagnetic interference(interference magnetic field): ≤5mV

7、静电感应电压(静电电压20kV) <1V。

Inductive voltage of electrostatic(static voltage) <1V

8、辐射场透入强度(干扰场强120dBμV, 干扰场频率200MHZ) ≤66dBμV。

Penetration stress of radiant field(stress of interference field is 120dBμV; frequency of interference field is 200MHZ) ≤66dBμV

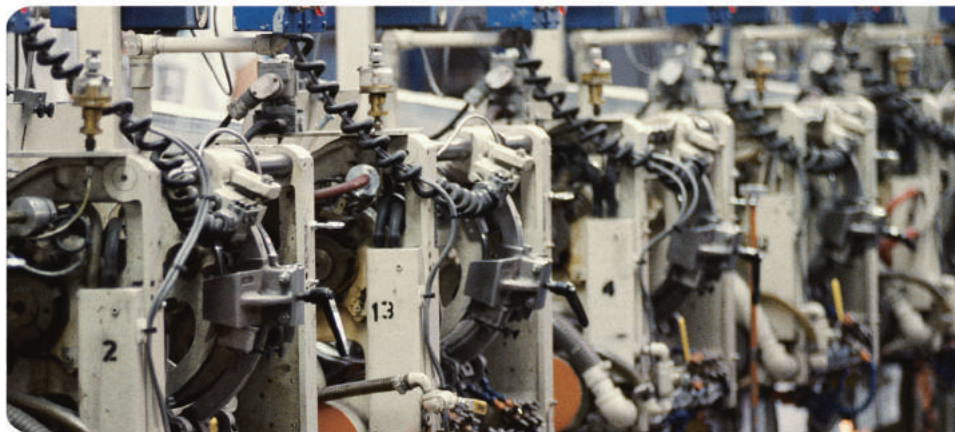
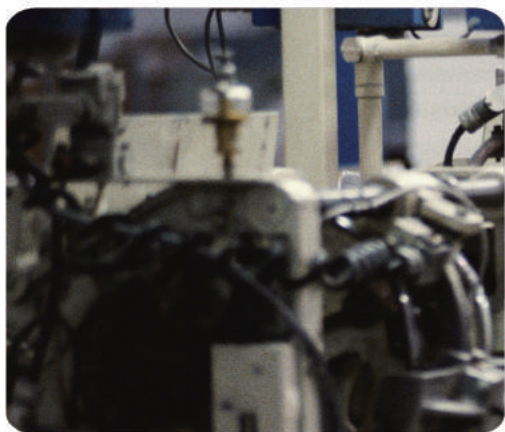
八、电缆外径参数

Parameter of cable OD

请参照计算机用屏蔽电缆的相关内容。

Please refer to relevant contents of computer shielding cable

射频电缆 RF Cable



电缆分配系统用物理发泡聚乙烯绝缘同轴电缆

Physical Foam PE Insulation Coaxial Cable for Cable Distribution System

实芯聚乙烯绝缘射频电缆

RF Cable with Solid Core and PE Insulation

电缆分配系统用物理发泡聚乙烯绝缘同轴电缆

Coaxial Cable with Physically Foamed PE Insulation for Cable Distribution System

本产品适用于1GHZ以下闭路电视系统、共用天线电视系统作分支线和用户线以及其它电子装置。电缆分配系统用物理发泡聚乙烯绝缘同轴电缆比实芯聚乙烯、化学发泡聚乙烯和纵孔聚乙烯绝缘电视电缆具有更优良的高频性能，它有衰减低、一致性好、不易受潮等突出优点，为此在国际、国内市场已获得广泛使用。

It is used as branch cable and user cable for signal distribution system of closed circuit TV and common antenna TV of 1GHZ or lower, or for other electronic devices. Coaxial cable with physically foamed PE insulation for cable distribution system has good features of high frequency performance, low attenuation, good consistency and humidity resistance etc compared with TV cable with solid core PE, chemically foamed PE and cell PE insulation. Now, it is widely used in domestic and international market.

环境条件: -25℃~+70℃ (PVC护套)
-40℃~+70℃ (PE护套)

Environment temperature: -25℃~+70℃ (PVC sheath)
-40℃~+70℃ (PE sheath)

相对湿度: 当温度为40±2℃, 为90%~95%。

Relative humidity is 90%~95% under the temperature of 40±2℃.

一、常用型号及名称

Common Type and Description

型号Type	名称Name
SYWV-75-5 SYWV-75-7 SYWV-75-9	电缆分配系统用物理发泡聚乙烯绝缘聚氯乙烯护套同轴电缆 Coaxial cable with physically foamed PE insulation, PVC sheath for cable distribution system
SYWY-75-7 SYWY-75-9	电缆分配系统用物理发泡聚乙烯绝缘聚乙烯护套同轴电缆 Coaxial cable with physically foamed PE insulation and sheath for cable distribution system

二、电缆的结构尺寸

Structure Dimension of Cable

型号 Type	内导体mm Inner conductor	绝缘外径mm Insulation OD	外导体mm Outer conductor	护套mm Sheath	单位重量kg/km Unit weight
SYWV-75-5	1.0±0.02	4.8±0.2	≤5.8	≤7.5	46
SYWV-75-7 SYWY-75-7	1.66±0.02	7.25±0.25	≤8.3	≤10.6	85 (PVC) 75 (PE)
SYWV-75-9 SYWY-75-9	2.15±0.03	9.00±0.25	≤10.3	≤12.6	120 (PVC) 110 (PE)

备注: 1、内导体为单根圆铜线或铜包铝线;

2、绝缘为物理发泡聚乙烯;

3、外导体为铝塑复合膜和镀锡圆铜线(或铝合金线)编织双层屏蔽形式;

4、护套为聚氯乙烯或聚乙烯。

Note: 1: Inner conductor consists of single round copper wire OR copper-clad aluminum wire

2: Insulation material is physically foamed PE.

3: Outer conductor consists of aluminum-plastic compound film and tinned round copper wire(aluminum-alloy wire) braid dual shielding.

4: Sheath material is PVC or PE.

三、电气性能

Electric Performance

试验项目 Testing item	试验条件 Testing condition	单位 Unit	技术要求Technical requirements		
			SYWV-75-5	SYWV-75-7 SYWY-75-7	SYWV-75-9 SYWY-75-9
绝缘电阻Insulated resistance	500V Dc(20℃)	MΩ.km	≥5000	≥5000	≥5000
护套介电强度Sheath dielectric strength 浸水试验 Immersion test in water 火花试验 Spark test	40Hz~60Hz	kV	2.0 3.0	3.0 5.0	5.0 8.0
特性阻抗 Characteristic impedance	200MHz	Ω	72.0~78.0	72.5~77.5	72.5~77.5
衰减常数 (20℃) Attenuation coefficient	50MHz 200MHz 550MHz 800MHz	dB/100m	≤4.8 ≤9.7 ≤16.8 ≤20.3	≤3.2 ≤6.4 ≤10.7 ≤13.3	≤2.4 ≤5.0 ≤8.5 ≤10.4
回波损耗 Return-loss	VHF UHF	dB dB	≥20.0 ≥18.0	≥20.0 ≥18.0	≥20.0 ≥18.0
屏蔽衰减 Shielding attenuation	50MHz 200MHz 800MHz	dB dB dB	60 70 70	60 70 70	60 70 70

实芯聚乙烯绝缘射频电缆

RF Cable with Solid Core & PE Insulation

适用于无线电通讯广播设备和有关无线电电子设备中传输射频信号。

It is used to transmit radio frequency signal for radio communication broadcasting equipments and concerned electric devices.

一、生产执行标准 GB/T14864-93

Executive standard: GB/T14864-93

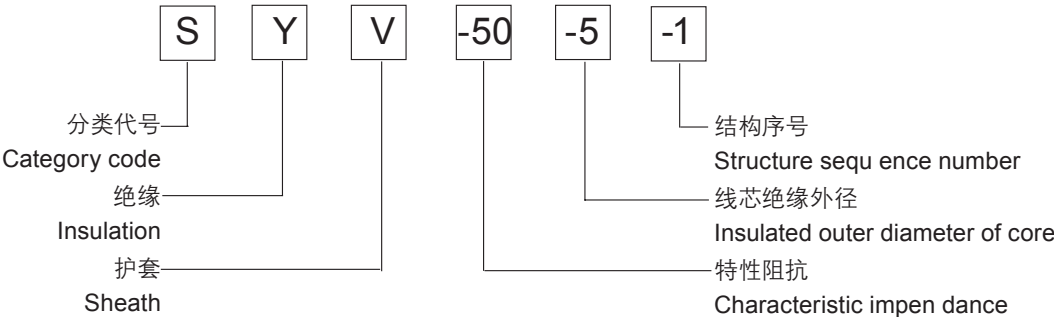
二、型号编制及字母代号含义

Type Compiling and Code Meaning

射频同轴电缆.....S
铜导体.....T (可省略)
聚乙烯实芯.....Y
聚氯乙烯护套.....V

RF coaxial cable.....S
Copper conductorT (omitted)
PE solid core.....Y
PVC sheathV

型号组成表示方法 Type-forming Method



三、使用条件

Working Condition

使用温度: -30℃~70℃。
相对湿度: 当温度为40±2℃时, 达98%, 安装敷设温度不低于-15℃。
允许最小弯曲半径: 室内使用时不少于5倍电缆外径, 室外使用不小于10倍电缆外径。

Working temperature: -30℃~70℃
Relevant humidity: 98% at 40±2℃. Temperature for installation is no lower than -15℃.
Min. bending radius: it will be no less than 5 times that of cable outer diameter for indoor usage, and no less than 10 times for outdoor usage.

四、型号及名称

Type and Description

型号Type	名称Description
SYV	实芯聚乙烯绝缘、聚氯乙烯护套同轴射频电缆 Coaxial RF cable with solid core, PE insulation and PVC sheath

五、结构尺寸

Specification and Size

型号规格 Type	内导体mm Inner conductor	绝缘 外径mm Insulated outer diameter	外导体直径mm Diameter of outer conductor			护套外 径mm Sheath OD	绝缘电阻 M Ω .km Insulated resistance	200MHz下 衰减dB/m Attenuation under 200MHz
	根数/直径* Pieces/ diameter*		内层 Inner layer	外层 Outer layer	单线直径 Diameter of single piece			
SYV-50-2-1	7/0.16	1.50 $\pm$ 0.10	软 铜 线 Soft copper wire	/	0.10 $\pm$ 0.01	2.8 $\pm$ 0.2	$\geq$ 5000	$\leq$ 0.45
SYV-50-2-7	7/0.16	1.50 $\pm$ 0.10		/	0.10 $\pm$ 0.01	2.8 $\pm$ 0.2		$\leq$ 0.45
SYV-50-2-8	7/0.16	1.50 $\pm$ 0.10		/	0.10 $\pm$ 0.01	2.8 $\pm$ 0.2		$\leq$ 0.45
SYV-50-2-41	1/0.68	2.20 $\pm$ 0.10		/	0.14 $\pm$ 0.01	4.0 $\pm$ 0.2		$\leq$ 0.31
SYV-50-3-1	7/0.32	2.95 $\pm$ 0.13		/	0.14 $\pm$ 0.01	5.0 $\pm$ 0.2		$\leq$ 0.24
SYV-50-3-3	1/0.90	2.95 $\pm$ 0.13		/	0.14 $\pm$ 0.01	5.0 $\pm$ 0.2		$\leq$ 0.22
SYV-50-3-4	1/0.90	2.95 $\pm$ 0.13		/	0.14 $\pm$ 0.01	5.0 $\pm$ 0.2		$\leq$ 0.22
SYV-50-3-5	1/0.90	2.95 $\pm$ 0.13		软铜线 Soft copper wire	0.14 $\pm$ 0.01	5.8 $\pm$ 0.2		$\leq$ 0.22
SYV-50-3-41	1/0.90	2.95 $\pm$ 0.13		软铜线 Soft copper wire	0.14 $\pm$ 0.01	5.8 $\pm$ 0.2		$\leq$ 0.22
SYV-50-5-1	1/1.40	4.80 $\pm$ 0.20		/	0.14 $\pm$ 0.01	7.2 $\pm$ 0.3		$\leq$ 0.15
SYV-50-5-3	1/1.40	4.80 $\pm$ 0.20		/	0.14 $\pm$ 0.01	7.2 $\pm$ 0.3		$\leq$ 0.15
SYV-50-5-4	1/1.40	4.80 $\pm$ 0.20		软铜线 Soft copper wire	0.14 $\pm$ 0.01	7.9 $\pm$ 0.3		$\leq$ 0.15
SYV-50-5-41	1/1.40	4.80 $\pm$ 0.20		软铜线 Soft copper wire	0.14 $\pm$ 0.01	7.9 $\pm$ 0.3		$\leq$ 0.15
SYV-50-7-1	7/0.75	7.25 $\pm$ 0.25		/	0.19 $\pm$ 0.01	10.3 $\pm$ 0.3		$\leq$ 0.11
SYV-50-7-2	7/0.75	7.25 $\pm$ 0.25		/	0.19 $\pm$ 0.01	10.3 $\pm$ 0.3		$\leq$ 0.11
SYV-50-7-3	7/0.75	7.25 $\pm$ 0.25		软铜线 Soft copper wire	0.17 $\pm$ 0.01	11.0 $\pm$ 0.3		$\leq$ 0.11
SYV-50-7-4	7/0.75	7.25 $\pm$ 0.15	软 铜 线 Soft copper wire	/	0.19 $\pm$ 0.01	10.3 $\pm$ 0.3	$\geq$ 5000	$\leq$ 0.62**
SYV-50-7-6	7/0.75	7.25 $\pm$ 0.15		软铜线 Soft copper wire	0.17 $\pm$ 0.01	11.0 $\pm$ 0.3		$\leq$ 0.62**
SYV-50-7-41	7/0.75	7.25 $\pm$ 0.25		软铜线 Soft copper wire	0.17 $\pm$ 0.01	11.0 $\pm$ 0.3		$\leq$ 0.11
SYV-50-9-41	7/0.95	9.0 $\pm$ 0.30		/	0.19 $\pm$ 0.01	12.2 $\pm$ 0.4		$\leq$ 0.095

注: SYV-50- 的特性阻抗为 $50\pm 2.5\Omega$, 电容不大于 115 pF/m 。

Note: characteristic impedance of SYV-50- is $50\pm 2.5\Omega$. Capacitance is no more than 115 pF/m

型号规格 Type	内导体mm Inner conductor	绝缘 外径mm Insulated OD	外导体直径mm Diameter of outer conductor			护套外 径mm Sheath OD	绝缘电阻 M Ω .km Insulated resistance	200MHz下 衰减dB/m Attenuation under 200MHz
	根数/直径* Pieces/diameter		内层 inner layer	外层 outer layer	单线直径 Diameter of single piece			
SYV-75-3-41	7/0.17	3.00 $\pm$ 0.13	软 铜 线 Soft copper wire	/	0.14 $\pm$ 0.01	5.0 $\pm$ 0.25	$\geq$ 5000	0.28
SYV-75-4-1	7/0.21	3.70 $\pm$ 0.13		/	0.14 $\pm$ 0.01	6.0 $\pm$ 0.2		0.22
SYV-75-4-2	7/0.21	3.70 $\pm$ 0.10		软铜线 Soft copper wire	0.14 $\pm$ 0.01	6.7 $\pm$ 0.2		0.95**
SYV-75-4-3	1/0.59	3.70 $\pm$ 0.13		/	0.14 $\pm$ 0.01	6.0 $\pm$ 0.2		0.19
SYV-75-4-4	1/0.59	3.70 $\pm$ 0.13		/	0.14 $\pm$ 0.01	6.0 $\pm$ 0.2		0.19
SYV-75-5-4	1/0.75	4.80 $\pm$ 0.20		/	0.14 $\pm$ 0.01	7.2 $\pm$ 0.3		0.15
SYV-75-5-5	1/0.75	4.80 $\pm$ 0.20		软铜线 Soft copper wire	0.14 $\pm$ 0.01	7.9 $\pm$ 0.3		0.15
SYV-75-5-41	1/0.75	4.80 $\pm$ 0.20		/	0.14 $\pm$ 0.01	7.2 $\pm$ 0.3		0.15
SYV-75-5-42	1/0.75	4.80 $\pm$ 0.20		软铜线 Soft copper wire	0.14 $\pm$ 0.01	7.9 $\pm$ 0.3		0.15
SYV-75-7-1	7/0.40	7.25 $\pm$ 0.25		/	0.19 $\pm$ 0.01	10.3 $\pm$ 0.3		0.12
SYV-75-7-2	7/0.40	7.25 $\pm$ 0.25		/	0.19 $\pm$ 0.01	10.3 $\pm$ 0.3		0.12
SYV-75-7-3	7/0.40	7.25 $\pm$ 0.15		软铜线 Soft copper wire	0.17 $\pm$ 0.01	11.0 $\pm$ 0.3		0.60
SYV-75-7-4	1/1.15	7.25 $\pm$ 0.15		/	0.19 $\pm$ 0.01	10.3 $\pm$ 0.3		0.52
SYV-75-7-8	1/1.15	7.25 $\pm$ 0.25		/	0.19 $\pm$ 0.01	10.3 $\pm$ 0.3		0.10
SYV-75-7-41	7/0.40	7.25 $\pm$ 0.25		软铜线 Soft copper wire	0.17 $\pm$ 0.01	11.0 $\pm$ 0.3		0.12

注: SYV-75- 的特性阻抗为75 $\pm$ 3 Ω , 电容不大于76pF/m。

*表示单线直径为近似值。

**表示频率为3000 MHz下的衰减值。

Note: Characteristic impedance of SYV-75- is 75 $\pm$ 3 Ω . Capacitance is no more than 76pF/m.

* : approximate value of diameter of single wire

** : attenuation value under 3000 MHz

六、交货要求

1、 允许成圈长度为100米交货, 成盘长度应不小于100米, 长度误差为 $\pm$ 0.5%。

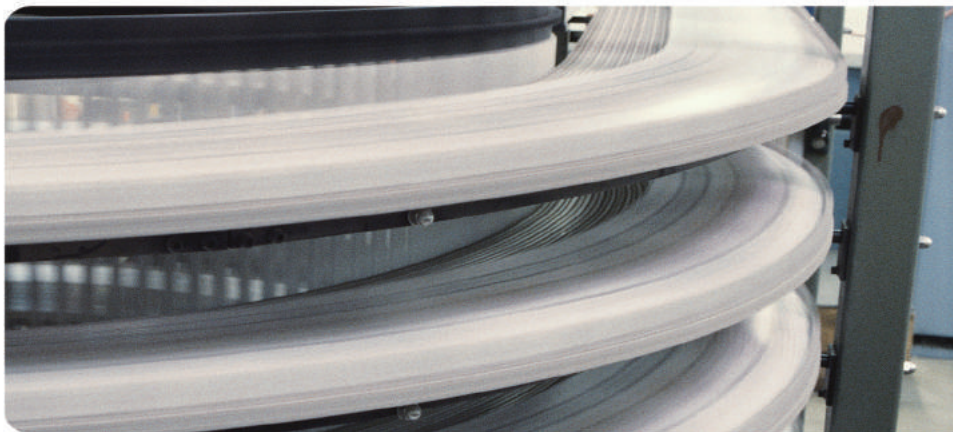
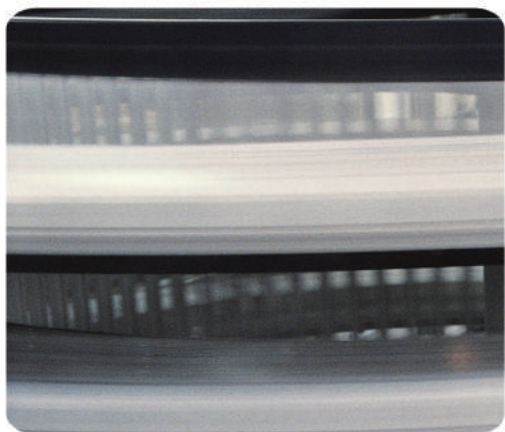
2、 根据双方协议允许任何长度交货。

Delivery Requirement

1: Cable length in coil is 100 meters. Cable length on drum is no less than 100 meters with length error of $\pm$ 0.5%.

2: It depends on both agreements.

补偿电缆
Compensational Cable



热电偶用补偿导线、补偿电缆

Compensational Wire & Cable for Thermocouple

补偿导线与补偿电缆是在一定温度范围内(包括常温)具有与所匹配的热电偶的热电动势值相同的一对或多对带有绝缘层的导线或电缆,用它们连接热电偶与测量装置,以补偿它们与热电偶连接处的温度变化所产生的误差,补偿导线与补偿电缆分为延长型和补偿型两种。

一、生产执行标准

GB/T4989-94及JB/T7495-94

二、使用条件

1、工作温度: Working Temperature

耐热用: 最高200℃和260℃两种。

一般用: 最高70℃和105℃两种。

Max. 200℃&260℃ for heat resistant cable

Max. 70℃&105℃ for common cable

2、最低环境温度: Min Environment Temperature

氟塑料绝缘和护套线缆: 固定敷设-60℃, 非固定敷设-20℃。

聚氯乙烯绝缘和护套线缆: 固定敷设-40℃, 非固定敷设-15℃。

三、型号、名称

Compensational wire & cable are cables & wires with one pair or multi-pair and insulated layer with the same Pyro-EMF value of matched thermocouple within certain temperature. They are used to connect thermocouple and measuring devices to compensate the error resulting from temperature change on connection part. They are divided into two type including extension type and compensational type.

Executive standard:

GB/T4989-94 & JB/T7495-94

Working Condition

Wire & cable with fluoroplastic insulation and sheath: -60℃ for fixed installation, -20℃ for non-fixed installation

Wire & cable with PVC insulation and sheath: -40℃ for fixed installation, -15℃ for non-fixed installation

3、允许弯曲半径:

a)有铜带屏蔽的补偿电缆, 应不小于电缆外径的16倍;

b)其它结构的补偿电缆, 应不小于电缆外径的10倍。

Bending radius:

It should be no less than 16 times that of cable outer diameter for compensational cable with copper tape shielding.

It should be no less than 10 times that of cable outer diameter for compensational cable with other structure.

Type and Description

一) 补偿导线Compensational Wire

型号Type	名称Description
KX-GS-VV	聚氯乙烯绝缘和护套一般用精密级K分度热电偶用补偿导线 Precise grade compensational wire for thermocouple of K graduation with PVC insulation and sheath for general purpose
KX-GS-VPV	聚氯乙烯绝缘和护套铜丝编织屏蔽一般用精密级K分度热电偶用屏蔽补偿导线 Precise grade compensational wire for thermocouple of K graduation with PVC insulation and sheath, copper wire braided shielding for general purpose
KX-HS-FF	氟塑料绝缘和护套耐热用精密级K分度热电偶用高温补偿导线 Precise grade high temperature compensational wire for thermocouple of K graduation with Fluoroplastic insulation and sheath for heat resistant purpose
KX-HS-FP ₁ F	氟塑料绝缘和护套镀锡铜丝编织屏蔽耐热用精密级K分度热电偶用高温补偿导线 Precise grade high temperature compensational wire for thermocouple of K graduation with Fluoroplastic insulation and sheath, tinned copper wire braided shielding for heat resistant purpose
KX-HS-FB	聚四氟乙烯绝缘、玻璃丝编织护套耐热用精密级K分度热电偶用高温补偿导线 Precise grade high temperature compensational wire for thermocouple of K graduation with F4 insulation and glass wire braided sheath for heat resistant purpose
KX-HS-FBP ₁	聚四氟乙烯带绕包绝缘玻璃丝编织, 镀锡铜丝编织屏蔽, 玻璃丝编织外护套耐热用精密级K分度热电偶用高温补偿导线 Precise grade high temperature compensational wire for thermocouple of K graduation with F46 wrapped insulation glass wire braiding, tinned copper wire braided shielding and glass wire braided outer sheath for heat resistant purpose
KX-HS-FP ₁ V ₁₀₅	氟塑料绝缘镀锡铜丝编织屏蔽耐热105℃聚氯乙烯护套耐热用精密级K分度热电偶用高温补偿导线 Precise grade high temperature compensational wire for thermocouple of K graduation with Fluoroplastic insulation, tinned copper wire braided shielding, 105℃ heat resistant and PVC sheath for heat resistant purpose

注: 普通级补偿导线型号表示方法: 在精密级补偿导线型号基础上去掉字母“S”即可(下同)。

Note: type-naming method of common grade compensational wire: “S” should be omitted on the basis of precise grade compensational wire type.

二) 补偿电缆 Compensational Cable

型号Type	名称Description
KX-GS-VV	聚氯乙烯绝缘对绞聚氯乙烯护套一般用精密级K分度热电偶用补偿电缆 Precise grade compensational cable for thermocouple of K graduation with PVC insulation and twinning PVC sheath for general purpose
KX-GS-VPV	聚氯乙烯绝缘对绞铜丝编织分屏蔽聚氯乙烯护套一般用精密级K分度热电偶用补偿电缆 Precise grade compensational cable for thermocouple of K graduation with PVC insulation, twinning copper wire braided individual shielding, PVC sheath for general purpose
KX-GS-VPVP	聚氯乙烯绝缘对绞铜丝编织分屏蔽和总屏蔽聚氯乙烯护套一般用精密级K分度热电偶用补偿电缆 Precise grade compensational cable for thermocouple of K graduation with PVC insulation, twinning copper wire braided individual & general shielding, PVC sheath for general purpose
KX-GS-VVP	聚氯乙烯绝缘对绞铜丝编织总屏蔽聚氯乙烯护套一般用精密级K分度热电偶用补偿电缆 Precise grade compensational cable for thermocouple of K graduation with PVC insulation, twinning copper wire braided general shielding, PVC sheath for general purpose
KX-HS-FF	氟塑料绝缘对绞氟塑料护套精密级K分度热电偶用高温补偿电缆 Precise grade high temperature compensational cable for thermocouple of K graduation with Fluoroplastic insulation and twinning Fluoroplastic sheath
KX-HS-FP ₁ F	氟塑料绝缘对绞镀锡铜丝编织分屏蔽氟塑料护套精密级K分度热电偶用高温补偿电缆 Precise grade high temperature compensational cable for thermocouple of K graduation with Fluoroplastic insulation, twinning tinned copper wire braided individual shielding and Fluoroplastic sheath
KX-HS-FP ₁ FP ₁	氟塑料绝缘对绞镀锡铜丝编织分屏蔽和总屏蔽氟塑料护套精密级K分度热电偶用高温补偿电缆 Precise grade high temperature compensational cable for thermocouple of K graduation with Fluoroplastic insulation, twinning tinned copper wire braided individual & general shielding and Fluoroplastic sheath
KX-HS-FFP ₁	氟塑料绝缘对绞镀锡铜丝编织总屏蔽氟塑料护套精密级K分度热电偶用高温补偿电缆 Precise grade high temperature compensational cable for thermocouple of K graduation with Fluoroplastic insulation, twinning tinned copper wire braided general shielding and Fluoroplastic sheath
KX-HS-FV ₁₀₅	氟塑料绝缘对绞耐热105℃聚氯乙烯护套精密级K分度热电偶用高温补偿电缆 Precise grade high temperature compensational cable for thermocouple of K graduation with Fluoroplastic insulation, twinning 105℃ heat resistant PVC sheath
KX-HS-FP ₁ V ₁₀₅	氟塑料绝缘对绞镀锡铜丝编织分屏蔽耐热105℃聚氯乙烯护套精密级K分度热电偶用高温补偿电缆 Precise grade high temperature compensational cable for thermocouple of K graduation with Fluoroplastic insulation, twinning tinned copper wire braided individual shielding 105℃ heat resistant PVC sheath
KX-HS-FP ₁ V ₁₀₅ P ₁	氟塑料绝缘对绞镀锡铜丝编织分屏蔽总屏蔽耐热105℃聚氯乙烯护套精密级K分度热电偶用高温补偿电缆 Precise grade high temperature compensational cable for thermocouple of K graduation with Fluoroplastic insulation, twinning tinned copper wire braided individual and general shielding 105℃ heat resistant PVC sheath
KX-HS-FV ₁₀₅ P ₁	氟塑料绝缘对绞镀锡铜丝编织总屏蔽耐热105℃聚氯乙烯护套精密级K分度热电偶用高温补偿电缆 Precise grade high temperature compensational cable for thermocouple of K graduation with Fluoroplastic insulation, twinning tinned copper wire braided general shielding 105℃ heat resistant PVC sheath

注: 1、其它型号补偿导线如: KC、JX、SC、EX、NC、TX等, 只需改写型号的第一项, 如: EX-G-VV、TX-H-FVP等;
2、需导体为多股软芯时, 应在原型号后加“R”表示, 如: TX-G-VVPR;
3、还可根据需要提供聚乙烯(Y)绝缘、交联聚乙烯(YJ)绝缘补偿电缆。
4、补偿电缆屏蔽层也可采用金属带绕包形式, 如: 复合铝带(P3)、复合铜带(P2);
5、需阻燃型补偿电缆, 应在原型号前加“ZR-”。
6、需铠装型补偿电缆, 应在原型号后加“-22”表示钢带铠装; 加“-32”表示钢丝铠装。
7、需本安型补偿电缆, 应在原型号前加“ia-”表示。

Note: 1: The first part of type is changed for indication of compensational wires of other types such as KC,JX,SC,EX,NC,TX etc. eg. EX-G-VV、TX-H-FVP
2: Suffix “R” is added to the original type for indication of cable with soft multi-strand core. eg. TX-G-VVPR
3: We also produce compensational cable with PE (Y) insulation or XLPE (YJ) insulation if needed.
4: Shielding layer material of compensational cable includes metallic tape wrapping such as compound aluminum tape (P3) and compound copper tape (P2).
5: Prefix “ZR-” is added to the original type for indication of flame retardant type compensational cable.
6: Suffix “-22” is added to the original type for indication of compensational cable with steel tape armor, “-32” for that with steel wire armor.
7: Prefix “ia-” is added to the original type for indication of intrinsic safety type compensational cable.

四、规格范围

Specification Range

名称 Name	线芯对数 Pair No. of core	标称截面 mm ² Nominal cross section area	线芯结构 Core structure	
			A	R
补偿导线 compensational wire	1	0.5	1/0.80	7/0.30
		1.0	1/1.13	7/0.43
补偿电缆 compensational cable	1~19	1.5	1/1.37	7/0.52
		2.0	1/1.76	19/0.41

五、主要技术要求

Main Technical Requirement

产品型号 Type	补偿导线及电缆线芯 Compensational wire & cable core		补偿导线绝缘层着色 Insulation color of compensational wire		配用热电偶分度号 Thermocouple graduation
	正极plus	负极minus	正极plus	负极minus	
SC or RC	铜Cu	铜镍0.6 Cu-Ni	红red	绿green	S (铂铑10-铂) 或 R (铂铑13-铂) S (PtRh10-PT) or R (PtRh13-PT)
KCA	铁Fe	铜镍22 Cu-Ni	红red	蓝blue	K (镍铬-镍硅) K (NiCr-NiSi)
KCB	铜Cu	铜镍40 Cu-Ni	红red	蓝blue	
KX	镍铬10 Ni-Cr 10	镍硅3 Ni-Si	红red	黑black	
EX	镍铬10 Ni-Cr 10	铜镍45 Cu-Ni	红red	棕brown	E (镍铬-铜镍) E (NiCr-NiSi)
JX	铁Fe	铜镍45 Cu-Ni	红red	紫violet	J (铁-铜镍) J (Fe-CuNi)
TX	铜Cu	铜镍45 Cu-Ni	红red	白white	T (铜-铜镍) T (Cu-CuNi)
NC	铁Fe	铜镍18 Cu-Ni	红red	灰grey	N (镍铬硅-镍硅) N (NiCrSi-NiSi)
NX	镍铬14硅 Ni-Cr 14 Si	镍硅4 Ni-Si	红red	灰grey	

六、补偿导线与补偿电缆使用分类、等级及护套着色

Category, Class mark and Sheath Color of Compensational Cable and Wire

使用 分类 Category	标志 代号 Mark code	允差等级及标志 Error allowance grade & mark		护套着色 Sheath color		
		普通级 Common grade	精密级 Precise grade	普通级 Common grade	精密级 Precise grade	本安型 Intrinsic safety
一般用general	G	省略omitted	S	黑色black	灰色grey	蓝色blue
耐热用 Heat resistance	H			黑色black	黄色yellow	蓝色blue

注：在旧标准GB4989-85中，普通级用B表示，精密级用A表示。

Note: In early version of GB4989-85 standard, B stands for common grade; A stands for precise grade.

七、补偿导线及补偿电缆热电特性及允差表

Pyro-electric Character and Error Allowance of Compensational Cable and Wire

型号 Type	使用分类 Category	导线温度范围 ℃ Tem range of cable&wire	热电势及允差 μV Pyro EMF			热电偶测量端 温度℃ Measuring end tem. of thermocouple	20℃时往复电阻值 $\leq \Omega/m$ Reciprocating resistance at 20℃			
			热电势 Pyro EMF	精密级 Precise grade	普通级 Common grade		0.5 mm ²	1.0mm ²	1.5mm ²	1.5mm ²
SC&RC	G	0~100	646	$\pm 30(\pm 2.5^\circ C)$	$\pm 60(\pm 5.0^\circ C)$	1000	0.10	0.05	0.03	0.02
	H	0~200	1440	/	$\pm 60(\pm 5.0^\circ C)$					
KCA	G	0~100	4095	$\pm 60(\pm 1.5^\circ C)$	$\pm 100(\pm 2.5^\circ C)$	1000	1.40	0.70	0.47	0.28
	H	0~200	8137			900				
KCB	G	0~100	4095			900	1.04	0.52	0.35	0.21
KX	G	-20~100	4095			900	2.20	1.10	0.73	0.44
	H	-25~200	8137			900				
EX	G	-20~100	6317	$\pm 120(\pm 1.5^\circ C)$	$\pm 200(\pm 2.5^\circ C)$	500	2.50	1.25	0.83	0.50
	H	-25~200	13419			500				
JX	G	-20~100	5268	$\pm 85(\pm 1.5^\circ C)$	$\pm 140(\pm 2.5^\circ C)$	500	1.30	0.65	0.43	0.26
	H	-25~200	10777			500				
TX	G	-20~100	4277	$\pm 30(\pm 0.5^\circ C)$	$\pm 60(\pm 1.0^\circ C)$	300	1.04	0.52	0.35	0.21
	H	25~200	9285	$\pm 48(\pm 0.8^\circ C)$	$\pm 90(\pm 1.5^\circ C)$	300				
NC	G	0~100	2774	$\pm 60(\pm 1.5^\circ C)$	$\pm 100(\pm 2.5^\circ C)$	900	1.50	0.75	0.50	0.30
	H	0~200	5912			900				
NX	G	-20~100	2774			900	2.86	1.43	0.95	0.57
	H	-25~200	5912			900				

八、其它参数指标

Other Parameter Indices

项目 Item	单位 Unit	参数指标Parameter Indices	
		PVC绝缘 PVC insulation	PE、XLPE、F46&F绝缘 PE、XLPE、F46&F insulation
绝缘电阻Insulated resistance	MΩ.km	25	100
电压试验 Voltage test	V/1min	1000	
阻燃性能Flame resistant performance	符合GB/T18380-2001阻燃标准中A、B、C类规定。 Meet the requirement of flame retardance of category A, B.C stipulated in GB/T18380-2001 standard.		

九、规格尺寸

Specification and Size

一) 补偿导线Compensational Wire

芯数×标称 截面mm ² core No. * nominal cross section area	导体 种类 Conductor category	最大外径mm Max OD				计算重量kg/km Calculated weight			
		VV	VPV	FF	FP1F	VV	VPV	FF	FP1F
2×0.5	A	3.7×6.4	4.7×7.4	2.6×4.6	3.2×5.2	30	50	27	45
	R	3.9×6.6	4.9×7.6	2.8×4.8	3.4×5.4	35	55	30	50
2×1.0	A	5.0×7.7	6.0×8.7	3.0×5.3	3.6×5.9	56	82	39	64
	R	5.1×8.0	6.1×9.0	3.1×5.6	3.7×6.2	60	87	45	69
2×1.5	A	5.2×8.3	6.2×9.3	3.2×5.8	3.8×6.4	68	93	54	77
	R	5.5×8.7	6.5×9.7	3.4×6.2	4.0×6.8	75	102	60	87
2×2.5	A	5.7×9.3	6.7×10.3	3.6×6.7	4.2×7.3	94	121	77	103
	R	5.9×9.8	6.9×10.8	4.0×7.3	4.6×7.9	101	133	84	114

二) 补偿电缆 Compensational Cable

芯数×标 称截面 mm ² core No. * nominal cross section area	导体 种类 Conductor category	最大外径mm Max OD						计算重量kg/km Calculated weight					
		VV	VPV	FV	FP1V	FF	FP1F	VV	VPV	FV	FP1V	FF	FP1F
1×2×0.5	A	6.9	7.4	6.7	7.2	5.0	5.6	58	70	49	68	36	53
	R	7.3	7.7	7.0	7.4	5.2	5.8	59	73	52	73	38	56
1×2×1.0	A	8.7	9.1	7.4	7.8	5.8	6.3	87	107	64	86	50	70
	R	8.9	9.4	7.6	8.3	6.1	6.8	94	113	70	95	54	80
1×2×1.5	A	9.1	9.8	7.9	8.4	6.4	6.9	104	125	78	103	62	89
	R	9.6	10.5	8.1	8.8	6.6	7.4	109	131	83	110	72	95
1×2×2.5	A	10.0	10.7	8.8	9.2	7.4	7.8	129	153	106	133	92	117
	R	10.7	11.3	9.2	10.1	7.8	8.7	143	179	113	144	99	126

2×2×0.5	A	10.3	11.4	9.4	11.1	7.9	9.7	107	177	93	175	79	156
	R	10.6	12.0	9.5	11.4	8.1	10.0	115	186	98	183	84	164
2×2×1.0	A	13.0	15.0	10.5	12.2	9.0	11.0	175	282	128	220	112	207
	R	13.3	15.4	10.9	12.9	9.5	11.7	177	293	135	236	120	221
2×2×1.5	A	13.6	16.1	11.3	13.1	9.9	11.9	197	314	153	257	137	240
	R	15.1	16.8	11.9	14.4	10.7	13.0	226	338	174	294	158	277
2×2×2.5	A	15.8	17.5	12.8	15.2	11.6	13.6	277	388	211	346	198	325
	R	16.8	18.6	13.6	16.6	12.4	15.1	302	449	239	383	238	360
3×2×0.5	A	10.6	12.1	9.8	11.7	8.4	10.5	122	212	105	206	91	193
	R	11.2	12.7	10.0	12.1	8.6	10.9	134	220	110	210	96	204
3×2×1.0	A	14.4	15.8	11.0	13.0	9.6	11.8	217	336	156	272	139	254
	R	14.7	16.3	11.6	13.6	10.3	12.4	232	356	170	291	155	273
3×2×1.5	A	15.2	17.1	12.0	14.5	10.8	13.0	264	387	195	337	181	317
	R	16.0	17.8	12.5	15.3	11.3	13.8	278	411	214	362	198	344
3×2×2.5	A	16.7	18.6	13.5	16.1	12.3	14.5	338	485	273	434	256	412
	R	17.9	19.8	15.2	17.6	13.6	16.1	369	553	314	466	295	446
4×2×0.5	A	11.3	12.9	10.5	13.5	9.0	12.3	151	252	133	254	113	236
	R	12.0	14.5	10.7	14.7	9.2	13.2	160	283	139	265	172	248
4×2×1.0	A	15.4	16.9	11.8	15.6	10.6	14.1	262	410	187	342	185	322
	R	16.2	17.4	12.4	16.6	11.2	15.1	271	418	201	368	218	346
4×2×1.5	A	16.3	18.3	12.9	16.8	11.7	15.3	309	462	235	405	250	383
	R	18.3	19.1	13.5	17.8	12.3	16.3	330	487	270	431	327	408
4×2×2.5	A	18.0	20.6	14.5	18.8	13.6	17.3	404	612	348	521	355	497
	R	19.3	21.9	16.3	21.5	14.7	19.7	440	691	377	566	146	540
5×2×0.5	A	12.7	15.0	11.7	14.4	10.5	12.5	183	321	158	322	214	302
	R	13.4	15.8	11.9	14.9	10.7	13.6	196	343	172	337	251	319
5×2×1.0	A	17.3	18.9	13.1	16.1	11.9	14.5	318	485	230	410	288	392
	R	18.0	19.4	14.5	16.9	13.0	15.4	334	504	269	448	311	423
5×2×1.5	A	18.3	21.0	15.1	17.2	13.5	15.6	383	591	300	492	411	468
	R	19.3	22.0	15.8	18.2	14.3	16.6	405	624	332	524	453	499
5×2×2.5	A	20.9	23.0	17.1	19.1	15.5	17.6	531	750	434	640	411	612
	R	22.3	24.5	18.3	21.8	16.7	20.0	574	848	473	726	453	696
6×2×0.5	A	15.0	16.8	13.2	16.3	12.0	14.7	234	384	195	385	178	361
	R	15.8	17.7	13.5	16.8	12.3	15.3	250	410	209	406	192	383
6×2×1.0	A	19.7	22.1	15.5	18.0	14.0	16.5	382	609	304	503	283	473
	R	20.9	22.8	16.5	19.1	15.0	17.6	433	643	326	539	303	507
6×2×1.5	A	21.5	23.9	17.1	19.5	15.5	17.9	492	703	363	592	352	562
	R	22.7	25.1	18.0	21.2	16.5	19.5	521	756	405	659	381	634
6×2×2.5	A	23.9	26.6	19.4	22.4	17.8	20.7	641	870	527	798	502	767
	R	25.5	28.4	21.6	24.8	19.8	23.0	697	1048	603	870	573	836
7×2×0.5	A	15.2	17.1	13.4	16.5	12.2	15.0	248	413	207	411	187	388
	R	16.1	17.9	14.4	17.0	12.9	15.5	260	435	235	436	215	408
7×2×1.0	A	20.7	22.4	15.8	18.2	14.3	16.7	429	650	318	531	296	505
	R	21.2	23.1	16.8	19.4	15.3	17.9	445	675	341	572	318	545
7×2×1.5	A	21.9	24.3	17.3	19.7	15.7	18.2	514	750	398	631	375	606
	R	23.0	25.4	18.3	21.5	16.7	19.8	537	796	426	704	402	672
7×2×2.5	A	24.2	27.1	19.7	22.7	18.2	21.0	676	971	562	857	535	825
	R	26.0	28.8	21.9	25.2	20.1	23.4	727	1113	637	932	607	897
8×2×0.5	A	16.5	18.5	15.2	17.8	13.6	16.3	279	464	245	400	228	435
	R	17.5	19.5	15.6	18.5	14.1	16.9	294	485	263	483	242	457
8×2×1.0	A	22.4	24.4	17.2	19.8	15.6	18.3	480	730	357	595	333	568
	R	23.1	25.1	18.3	21.8	16.7	20.0	490	759	380	671	360	640
8×2×1.5	A	23.8	26.8	18.8	22.1	17.3	20.4	574	840	450	741	426	710
	R	25.1	28.2	20.6	23.4	18.8	21.7	604	922	508	792	480	760
8×2×2.5	A	26.8	29.5	22.1	24.8	20.4	23.0	786	1089	663	968	634	934
	R	28.8	31.5	23.9	27.8	22.4	25.4	844	1250	718	1074	686	1046
9×2×0.5	A	17.3	19.5	16.0	18.7	14.4	17.2	300	509	273	503	252	478
	R	18.4	21.1	16.4	19.5	14.9	17.9	321	559	288	530	266	505
9×2×1.0	A	23.7	25.7	18.0	21.5	16.5	19.7	527	802	391	680	369	651
	R	24.3	26.8	19.3	22.9	17.7	21.1	542	859	423	735	398	703
9×2×1.5	A	25.1	28.3	19.8	23.2	18.2	21.5	633	955	497	816	472	783
	R	27.0	29.7	21.7	24.6	19.9	22.9	686	1010	560	866	530	837
9×2×2.5	A	28.3	31.1	23.3	26.5	21.6	24.3	866	1201	734	1091	703	1064
	R	30.5	33.2	25.2	29.4	23.4	26.8	932	1423	795	1186	761	1157
10×2×0.5	A	17.5	19.5	16.1	18.8	14.5	17.3	324	541	293	540	271	514
	R	18.5	21.2	16.5	19.6	15.0	17.9	346	599	310	570	287	543
10×2×1.0	A	23.8	25.8	18.1	21.6	16.6	19.8	566	862	423	735	400	701
	R	24.5	26.9	19.4	23.0	17.8	21.1	584	922	458	791	433	758

芯数×标称截面 mm ² core No. * nominal cross section area	导体 种类 Conductor category	最大外径mm Max OD						计算重量kg/km Calculated weight					
		VV	VPV	FV	FP1V	FF	FP1F	VV	VPV	FV	FP1V	FF	FP1F
10×2×1.5	A	25.2	28.4	19.8	23.3	18.2	21.6	684	1027	538	878	514	844
	R	27.1	29.8	21.8	24.7	20.0	22.9	742	1085	606	934	575	903
10×2×2.5	A	28.5	31.2	23.4	26.6	21.7	24.4	941	1296	797	1180	767	1152
	R	30.6	33.3	25.3	29.5	23.5	26.8	1009	1536	863	1279	827	1250
12×2×0.5	A	18.5	21.5	17.1	20.7	15.5	18.9	372	641	336	636	313	617
	R	19.7	22.6	17.6	21.5	16.1	19.7	396	680	354	681	332	650
12×2×1.0	A	25.2	27.5	19.4	23.0	17.8	21.2	647	1014	490	843	465	811
	R	26.5	28.7	21.3	24.4	19.6	22.7	697	1054	557	908	526	874
12×2×1.5	A	27.3	30.1	21.9	24.9	20.1	23.1	812	1191	655	1014	625	980
	R	28.8	31.8	23.2	26.8	21.5	25.1	856	1254	700	1119	668	1091
12×2×2.5	A	30.4	33.3	25.0	28.4	23.2	26.2	1086	1541	929	1367	896	1339
	R	32.7	35.6	26.5	31.5	25.9	28.9	1167	1767	1030	1404	1011	1455
14×2×0.5	A	20.6	22.9	18.3	22.1	-	-	420	736	380	732	-	-
	R	21.9	24.2	18.9	22.9	-	-	473	770	401	769	-	-
14×2×1.0	A	27.7	30.1	21.5	24.6	-	-	763	1161	588	960	-	-
	R	28.6	30.9	22.9	26.7	-	-	792	1199	634	1061	-	-
14×2×1.5	A	29.4	32.6	23.5	27.2	-	-	925	1379	749	1183	-	-
	R	31.0	34.2	25.0	28.8	-	-	975	1459	801	1266	-	-
14×2×2.5	A	32.8	35.9	27.2	30.5	-	-	1241	1762	1090	1564	-	-
	R	35.2	38.8	28.7	33.8	-	-	1335	2063	1180	1734	-	-
16×2×0.5	A	21.5	23.9	19.0	23.0	-	-	501	820	427	815	-	-
	R	22.8	25.2	19.7	23.9	-	-	528	860	453	861	-	-
16×2×1.0	A	28.9	31.4	22.3	25.6	-	-	855	1300	663	1075	-	-
	R	29.8	32.2	23.9	27.8	-	-	893	1380	715	1186	-	-
16×2×1.5	A	30.7	34.0	24.5	28.3	-	-	1050	1546	845	1328	-	-
	R	32.5	35.8	26.5	30.0	-	-	1100	1648	927	1418	-	-
16×2×2.5	A	34.2	38.0	28.5	31.8	-	-	1408	1982	1237	1796	-	-
	R	36.7	40.6	30.9	35.3	-	-	1516	2326	1341	1956	-	-
19×2×0.5	A	23.2	25.7	21.2	24.9	-	-	571	936	517	934	-	-
	R	24.6	27.6	22.0	25.7	-	-	598	1005	546	985	-	-
19×2×1.0	A	31.4	34.0	24.2	28.0	-	-	978	1528	758	1263	-	-
	R	32.9	34.9	25.9	30.0	-	-	1008	1577	818	1361	-	-
19×2×1.5	A	33.3	36.9	27.0	30.6	-	-	1193	1773	998	1528	-	-
	R	35.8	39.3	28.7	32.5	-	-	1254	1920	1065	1665	-	-
19×2×2.5	A	37.2	41.2	30.9	34.4	-	-	1615	2317	1420	2072	-	-
	R	40.5	44.1	33.6	38.7	-	-	1763	2677	1543	2284	-	-

订货须知：1、订货时务必注明产品型号、规格、导体种类、数量等；

2、根据双方协议允许任何长度交货；长度计量误差不超过±0.5%。

Note for ordering:

1: Cable type, specification, conductor category and quantity etc should be indicated clearly when ordering.

2: Delivery length of cable depends on both agreements with length error allowance of ±0.5%.

变频电缆
Frequency Converter Cable



变频电缆

Frequency Converter Cable

变频电缆主要用于变频电源和变频电机之间连接用的电缆，以及额定电压1kV及以下的输配电线路中，作输送电能用。尤其适用于造纸、冶金、纺织、金属加工、矿山、铁路和食品加工等行业。

一、使用条件

- 1、额定电压U0/U: 0.6/1kV。
- 2、电缆导体长期允许最高温度为90℃，短路时最高温度为250℃（最长持续时间为5秒）。
- 3、安装敷设环境温度不低于0℃，固定敷设时环境温度不低于-10℃。
- 4、电缆允许最小弯曲半径不小于15D（D-电缆外径，mm）。

二、产品性能

- 1、BPYJVP12R、ZR-BPYJVP12R、BPYJVPX13R、ZR-BPYJVPX13R型设计采用符合GB/T3956-1997规定的第5类软绞合铜导体。
- 2、交联聚乙烯绝缘，耐温耐候性好。
- 3、低传输阻抗，电磁兼容性好。
- 4、低工作电容。
- 5、良好的抗干扰和低辐射性能。
- 6、对称的三芯电缆结构设计，具有比四芯电缆更好的传输性能。

三、主要技术参数

1、20℃时导体最大直流电阻

导体标称截面mm ² nominal cross section area of conductor	20℃时导体最大直流电阻Ω/km Max DC resistance of conductor at 20℃	导体标称截面 mm ² nominal cross section area of conductor	20℃时导体最大直流电阻Ω/km Max DC resistance of conductor at 20℃
0.5	36.0	25	0.727
0.75	24.5	35	0.524
1.0	18.1	50	0.387
1.5	12.1	70	0.268
2.5	7.41	95	0.193
4	4.61	120	0.153
6	3.08	150	0.124
10	1.83	185	0.0991
16	1.15	240	0.0754

Frequency Converter cable is mainly used as the connection cable between frequency converter power supply and frequency converter motor. And it is also used to transmit power on distribution line of rated voltage 1kv or lower. It is specially used in the field of paper-making, metallurgy, textile mill, metalworking, mine, railway and packinghouse etc.

Working Condition

- 1: Rated voltage U0/U: 0.6/1kV
- 2: Max temperature of cable conductor for Long-term working is 90℃. Max. working temperature of cable conductor is 250℃ during short circuit (the longest lasting time shall be no more than 5 seconds).
- 3: Environment temperature for installing is no less than 0℃and -10℃ for fixed installing.
- 4: Min bending radium allowed by cable is no less than 15D. (D means outer diameter of cable with unit “mm”)

Product Performance

- 1: Design for type BPYJVP12R、ZR-BPYJVP12R、BPYJVPX13R、ZR-BPYJVPX13R meets the requirements of soft stranded copper conductor of category 5 stipulated in GB/T3956-1997 standard.
- 2: XLPE insulation, good performance of weather resistance and humidity resistance.
- 3: Low transmission impedance; good performance of electromagnetic compatibility
- 4: Low working capacitance
- 5: Good performance of interference resistance and low radiation
- 6: Symmetrical structure design for cable with 3 cores, which has better transmission performance compared with cable with 4 cores.

Main Technical Parameter

Max DC resistance of conductor at 20℃

2、交流电压试验

电压应依次施加在每一绝缘导体对其余导体和绕包金属层之间施加试验电压3500V/5min, 绝缘应无击穿。试验应在环境温度下进行。

A.C. Voltage Test

Between each insulated conductor to other conductor and wrapped metallic layer, voltage test of 3500V under power frequency is put on for 5 minutes without puncture of insulation. And test will be done at the environment temperature.

四、型号名称

Type and Description

型号Type	名称Description
BPYJVTP2	铜芯交联聚乙烯绝缘聚氯乙烯护套铜丝缠绕+铜带绕包屏蔽变频电缆 Frequency converter cable with Cu core, XLPE insulation, PVC sheath, copper wire winding plus copper tape wrapping shielding
ZR-BPYJVTP2	铜芯交联聚乙烯绝缘阻燃聚氯乙烯护套铜丝缠绕+铜带绕包屏蔽阻燃型变频电缆 Flame retardant type frequency converter cable with Cu core, XLPE insulation, flame retardant PVC sheath, copper wire winding plus copper tape wrapping shielding
BPYJVP12R	铜芯交联聚乙烯绝缘聚氯乙烯护套铜带绕包+铜丝编织双屏蔽变频软电缆 Frequency Converter soft cable with Cu core, XLPE insulation, PVC sheath, copper tape wrapping plus copper wire braided dual shielding
ZR-BPYJVP12 R	铜芯交联聚乙烯绝缘阻燃聚氯乙烯护套铜带绕包+铜丝编织双屏蔽阻燃型变频软电缆 Flame retardant type frequency converter soft cable with Cu core, XLPE insulation, flame retardant PVC sheath, copper tape wrapping plus copper wire braided dual shielding
BPYJVPX13R	铜芯交联聚乙烯绝缘聚氯乙烯护套铝带绕包+镀锡铜丝编织双屏蔽变频软电缆 Frequency converter soft cable with Cu core, XLPE insulation, PVC sheath, aluminum tape wrapping plus tinned copper wire braided dual shielding
ZR-BPYJVPX13R	铜芯交联聚乙烯绝缘阻燃聚氯乙烯护套铝带绕包+镀锡铜丝编织双屏蔽阻燃型变频软电缆 Flame retardant type frequency converter soft cable with Cu core, XLPE insulation, flame retardant PVC sheath, aluminum tape wrapping plus tinned copper wire braided dual shielding

五、生产范围

Production Scope

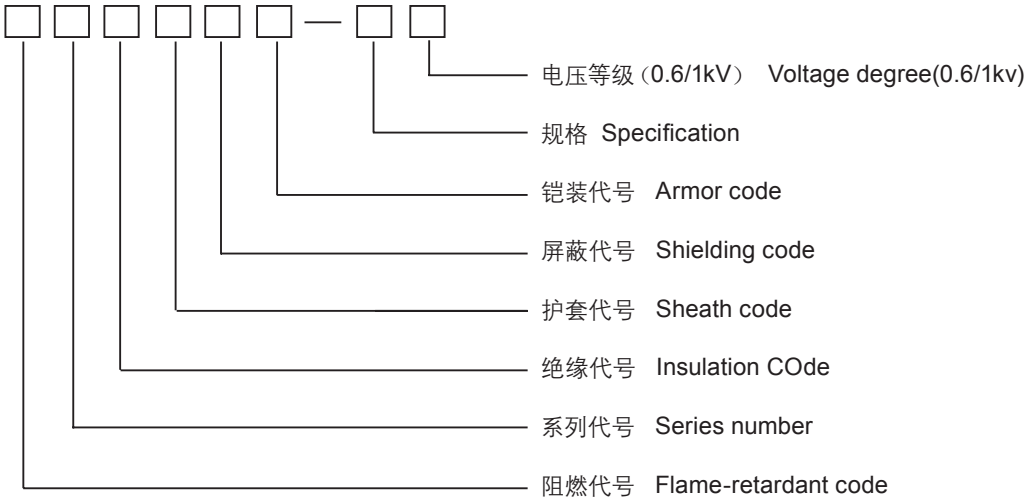
型号 Type	芯数 Core No.	导体标称截面mm ² Nominal cross section area of conductor
BPYJVTP2 ZR-BPYJVTP2	3+1	4~240
BPYJVP12R、ZR-BPYJVP12 R BPYJVPX13R、ZR-BPYJVPX13R	3+3	主线芯截面: 2.5~240 cross section area of main core: 2.5~240 副线芯截面: 0.5~35 cross section area of auxiliary core: 0.5~35

注: 另可根据用户需要提供铠装结构变频电缆。

Note: We also produce frequency converter cable with armored structure according to the requirement of customer.

型号说明

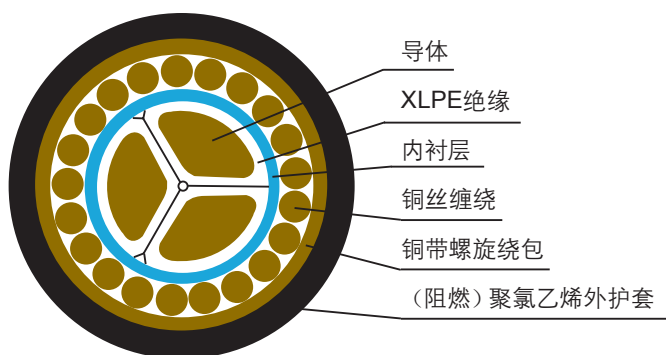
Type Introduction



项目 Item	代号 Code	说明 Description
系列代号series No.	BP	变频电缆frequency converter cable
绝缘代号insulation code	YJ	交联聚乙烯绝缘 XLPE insulation
护套代号sheath code	V E	聚氯乙烯护套PVC sheath 无卤低烟聚烯烃护套 low smoke & free halogen polyolefin sheath
屏蔽代号shielding code	TP2 P12 PX13	同心导体+铜带绕包屏蔽 concentric conductor plus copper tape wrapped shielding 铜带绕包+铜丝编织屏蔽 copper tape wrapping plus copper wire braided shielding 铝带绕包+镀锡铜丝编织屏蔽 Aluminum tape wrapping plus tinned copper wire braided shielding
铠装代号armoring code	22 23	钢带铠装聚氯乙烯护套 steel tape armor PVC sheath 钢带铠装聚烯烃护套 steel tape armor polyolefin sheath
阻燃代号flame-retardant code	ZR	阻燃型 (C类) flame-retardant type (category C)

六、产品结构示意图

The Figure of Cable Structure



3+1芯
BPYJVTP2、ZR-BPYJVTP2

conductor/XLPE insulation/inner layer/copper wire winding/copper tape helical wrapping/flame retardant PVC outer sheath/ 3+1 core



3+3芯
BPYJVP12R、ZR-BPYJVP12R
BPYJVPX13R、ZR-BPYJVPX13R

七、外径尺寸

Dimension of Outer Diameter

1、BPYJVTP2、ZR-BPYJVTP2 3+1 core

规格 Specification	近似外径mm Approximate OD	重量kg/km Weight	电缆载流量A Current-loading capacity of cable
3×4+1×2.5	16.0	334	34
3×6+1×4	17.3	430	45
3×10+1×6	20.2	627	53
3×16+1×10	22.7	833	84
3×25+1×16	27.4	1308	109
3×35+1×16	28.9	1718	132
3×50+1×25	30.2	3059	159
3×70+1×35	32.8	3445	195
3×95+1×50	34.9	4172	237
3×120+1×70	39.6	5055	274
3×150+1×70	44.2	5410	310
3×185+1×95	48.5	7062	355
3×240+1×120	54.6	9811	416

2、BPYJVP12R、ZR-BPYJVP12 R

BPYJVPX13R、ZR-BPYJVPX13R 3+3 core

规格 Specification	近似外径mm Approximate OD	重量kg/km Weight	电缆载流量A Current-loading capacity of cable
3×2.5+3×0.5	12.5	232	26
3×4+3×0.75	14.0	330	34
3×6+3×1.0	15.4	422	45
3×10+3×1.5	19.6	621	53
3×16+3×2.5	22.7	820	84
3×25+3×4	28.0	1310	109
3×35+3×6	29.4	1723	132
3×50+3×10	36.3	3075	159
3×70+3×10	40.0	3454	195
3×95+3×16	45.5	4180	237
3×120+3×16	50.4	5100	274
3×150+3×25	55.5	5432	310
3×185+3×25	60.6	7098	355
3×240+3×35	69.0	10221	416

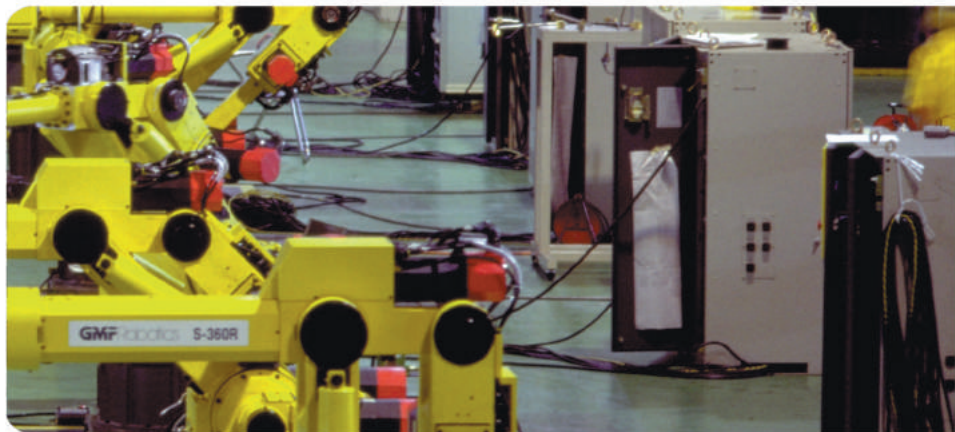
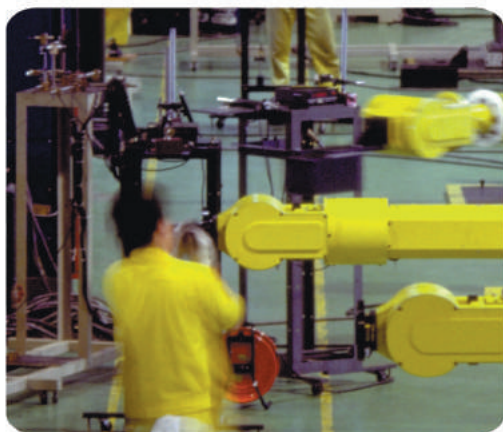
八、交货长度

Delivery Length

根据双方协议长度供货。

According to the agreement between both parties.

通用橡套软电缆
General Rubber Jacketed Flexible Cable



通用橡套软电缆

Soft Rubber Sheath Cable for General Purpose

本产品适用于交流额定电压450/750V及以下的家用电器、电动工具和各种移动电气设备。

It is used for household electrical appliance, electrical tools and various mobile electrical equipments of AC rated voltage 450/750V or lower.

一、生产执行标准 JB8735.2-1998。

Executive standard: JB8735.2-1998

二、使用特性

Working Condition

- 1、额定电压:YZ型为300/500V, YC型为450/750V。
- 2、电缆允许工作温度应不超过65℃。

- 1: Rated voltage 300/500V for YZ type and 450/750V for YC type
- 2: Working temperature allowed by cable is no higher than 65℃.

三、型号及名称及主要用途如表1

Type, Description and Main Application in Table 1

Table 1

型 号 Type	名 称 Description	主要用途 Main application
YZ、YZW	中型橡套软电缆 General type rubber sheath soft cable	用于各种移动电器设备和工具 For various mobile electric devices and tools
YC、YCW	重型橡套软电缆 Heavy type rubber sheath soft cable	用于各种移动电器设备, 能承受较大的机械外力作用 For various mobile electric devices and tools. It could bear strong mechanical force from outside
YH	天然胶电焊机电缆 Crude rubber electric welding machine cable	主要用作电焊机焊接线用 It is used as jointing line of electric welding machine
YHF	氯丁胶电焊机电缆 neoprene electric welding machine cable	

四、规格范围如表2

Specification Range in Table 2

Table 2

型 号 Type	额定电压V Rated voltage	芯 数 Core number	标称截面mm ² Nominal cross section area
YZ、YZW	300/500	2, 3, 4, 5	0.75~6
YC、YCW	450/750	1	1.5~240
		2	1~95
		3, 4	1~150
YH、YHF	--	5	1.5~25
		1	16~95

五、规格尺寸及技术参数如下表

Specification, Size and Technical Parameter in Table 3

Table 3 YZ、YZW 300/500V

标称截面mm ² Nominal cross section area	导体结构 Conductor structure	20℃导体电阻≤Ω/km Conductor resistance at 20℃	电缆外径参考 Cable OD for reference				
	根/单线直径 Pieces/diameter of single piece		2芯 cores	3芯 cores	4芯 cores	5芯 cores	6芯 cores

0.75	24/0.20	26.0	8.2	8.8	9.6	11.0	-
1.0	32/0.20	19.5	8.8	9.2	10.0	11.5	-
1.5	30/0.25	13.3	10.5	11.0	12.5	13.5	12.0
2.5	49/0.25	7.98	12.5	13.0	14.0	15.5	14.0
4	81/0.25	4.95	14.0	14.5	16.5	18.0	16.0
6	122/0.25	3.30	17.0	18.0	20.0	22.5	19.5

Table 4 YC、YCW 450/750V

标称截面 mm ² Nominal cross section area	导体结构Conductor structure 根/单线 直径mm Pieces/ diameter of single piece	20℃导体电 阻≤Ω/km Conductor resistance at 20℃	电缆外径参考值 (mm) Cable OD for reference					
			1芯 core	2芯 cores	3芯 cores	4芯 cores	5芯 cores	3+1芯 core
1.5	30/0.25	13.3	7.2	11.5	12.5	15.5	15.0	-
2.5	49/0.25	7.98	8.0	13.5	14.5	16.5	17.0	15.5
4	81/0.25	4.95	9.0	15.0	16.0	18.0	19.5	17.5
6	122/0.25	3.30	11.0	18.5	20.0	22.0	24.5	21.0
10	77/0.41	1.91	13.0	24.0	25.5	28.0	31.0	26.5
16	119/0.41	1.21	14.5	27.5	29.5	32.0	35.5	30.5
25	189/0.41	0.780	16.5	31.5	34.0	37.5	41.5	35.5
35	265/0.41	0.554	18.5	35.5	38.0	42.0	-	38.5
50	379/0.41	0.368	21.0	41.0	43.5	48.5	-	46.0
70	530/0.41	0.272	24.0	46.0	49.5	55.0	-	51.0
95	437/0.52	0.206	26.0	50.5	54.0	60.5	-	55.0
120	551/0.52	0.161	28.5	-	59.0	65.5	-	59.0
150	696/0.52	0.129	32.0	-	66.5	74.0	-	66.0
185	851/0.52	0.106	34.5	-	-	-	-	-
240	1073/0.52	0.0801	38.0	-	-	-	-	-

Table 5 YH、YHF

标称截面mm ² Nominal cross section area	导体结构Conductor structure 根/单线直径Pieces/ diameter of single piece	20℃导体电阻≤Ω/km Conductor resistance at 20℃		电缆外径参考 mm Cable OD for reference
		不镀锡 non tinned	镀锡 tinned	
16	509/0.20	1.16	1.19	11.5
25	796/0.20	0.758	0.780	13.0
35	1115/0.20	0.536	0.552	14.5
50	1592/0.20	0.379	0.390	17.0
70	2229/0.20	0.268	0.276	19.5
95	3025/0.20	0.198	0.204	22.0

六、交货要求

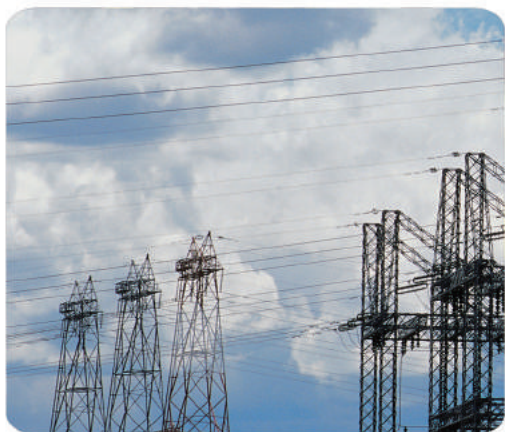
- 1、根据双方协议允许任何长度的电缆交货，长度误差为±0.5%。
- 2、用户对产品有阻燃特性要求,在合同中需另补充协议。

Delivery Length

- 1: Delivery length of cable depends on both agreements with length error allowance of ±0.5%
- 2: The additional agreement should be added according to customer's requirements on flame retardant performance.

铝绞线及钢芯铝绞线

Aluminum Stranded Conductor & Aluminum-Steel Conductor



铝绞线、钢芯铝绞线

Aluminum Stranded Conductor & Aluminum-Steel Conductor

一、适用范围

本产品适用于架空电力线路。

二、执行标准

GB/T1179-1999圆线同心绞架空导线
GB/T17048-1997架空绞线用硬铝线
GB/T3428-2002架空绞线用镀锌钢线

三、型号名称

型号type	名称name	型号说明 type description
JL	铝绞线aluminum stranded wire	J-同心绞合 concentric stranding F-防腐 corrosive proof L-硬圆铝线（LY9型）hard round aluminum wire(LY9 type) G-绞线用镀锌钢线（G1A型、G1B型、G2A型、G2B型，其中：1-普通强度，2-高强度，A-普通镀层厚度，B-加厚镀层厚度） Letter G standards for Galvanized steel wire for stranding wire purpose（G1A type, G1B type, G2A type, G2B type. Among these types, number 1 stands for common tension; number 2 stands for high tension; letter A stands for common coated layer thickness; letter B stands for higher coated layer thickness.）
JL/G1A	A型普通强度钢芯铝绞线 A type common intension aluminum-steel conductor	
JL/G1B	B型普通强度钢芯铝绞线 B type common intension aluminum-steel conductor	
JL/G2A	A型高强度钢芯铝绞线 A type high intension aluminum-steel conductor	
JL/G2B	B型高强度钢芯铝绞线 B type high intension aluminum-steel conductor	
JL/G1AF	普通强度防腐钢芯铝绞线 Common intension corrosive proof aluminum-steel conductor	
JL/G2AF	高强度防腐钢芯铝绞线 High intension corrosive proof aluminum-steel conductor	

四、规格

JL型铝绞线

Specification

JL type aluminum stranded wire

面积area (mm ²)	根数/单丝直径 (Φmm) Pieces/ single silk diameter	外径 (mm) Outer diameter	重量 (kg/km) weight	额定抗拉力 (kN) rated pull resist	20℃直流电阻值 (Ω/km) DC resistance at 20℃
10	7/1.35	4.05	27.4	1.95	2.8633
16	7/1.71	5.12	43.8	3.04	1.7896
25	7/2.13	6.40	68.4	4.50	1.1453
40	7/2.70	8.09	109.4	6.80	0.7158
63	7/3.39	10.2	172.3	10.39	0.4545
100	19/2.59	12.9	274.8	17.00	0.2877
125	19/2.89	14.5	343.6	21.25	0.2302
160	19/3.27	16.4	439.8	26.40	0.1798
200	19/3.66	18.3	549.7	32.00	0.1439
250	19/4.09	20.5	687.1	40.00	0.1151
315	37/3.29	23.0	867.9	51.97	0.0916
400	37/3.71	26.0	1102.0	64.00	0.0721
450	37/3.94	27.5	1239.8	72.00	0.0641
500	37/4.15	29.0	1377.6	80.00	0.0577
560	37/4.39	30.7	1542.9	89.60	0.0515
630	61/3.63	32.6	1738.3	100.80	0.0458

JL/G1A、JL/G1B、JL/G2A、JL/G2B型钢芯铝绞线

JL/G1A type, JL/G1B type, JL/G2A type, JL/G2B type
aluminum-steel conductor

面积 铝/钢 (mm ²) area aluminum/steel	根数/单丝直径 Φ mm Pieces/ single silk diameter		外径 (mm) OD	重量 (kg/km) weight	额定抗拉力(kN) rated pull resist				20℃直流电 阻值 (Ω/km) DC resistance at 20℃
	铝	钢			JL/G1A	JL/G1B	JL/G2A	JL/G2B	
16/2.67	6/1.84	1/1.84	5.53	64.6	6.08	5.89	6.45	6.27	1.7934
25/4.17	6/2.30	1/2.30	6.91	100.9	9.13	8.83	9.71	9.42	1.1478
40/6.67	6/2.91	1/2.91	8.74	161.5	14.4	13.93	15.33	14.87	0.7174
63/10.5	6/3.66	1/3.36	11.0	254.4	21.63	20.58	22.37	21.63	0.4555
100/16.7	6/4.61	1/4.61	13.8	403.8	34.33	32.67	35.50	34.33	0.2869
125/6.94	18/2.97	1/2.97	14.9	397.9	29.17	28.68	30.14	29.65	0.2304
125/20.4	26/2.47	7/1.92	15.7	503.9	45.69	44.27	48.54	47.12	0.2310
160/8.89	18/3.36	1/3.36	16.8	509.3	36.18	35.29	37.42	36.80	0.1800
160/26.1	26/2.80	7/2.18	17.7	644.9	57.69	55.86	61.34	59.51	0.1805
200/11.1	18/3.76	1/3.76	18.8	636.7	44.22	43.11	45.00	44.22	0.1440
200/32.6	26/3.13	7/2.43	19.8	806.2	70.13	67.85	74.69	72.41	0.1444
250/24.6	22/3.80	7/2.11	21.6	880.6	68.72	67.01	72.16	70.44	0.1154
250/40.7	26/3.50	7/2.72	22.2	1007.7	87.67	84.82	93.37	90.52	0.1155
315/21.8	45/2.99	7/1.99	23.9	1039.6	79.03	77.51	82.08	80.55	0.0917
315/51.3	26/3.93	7/3.05	24.9	1269.7	106.83	101.70	114.02	110.43	0.0917
400/27.7	45/3.36	7/2.24	26.9	1320.1	98.36	96.42	102.23	100.29	0.0722
400/51.9	54/3.07	7/3.07	27.6	1510.3	123.04	117.85	130.30	126.67	0.0723
450/31.1	45/3.57	7/2.38	28.5	1485.2	107.47	105.29	111.82	109.64	0.0642
450/58.3	54/3.26	7/3.26	29.3	1699.1	138.42	132.58	146.58	142.50	0.0643
500/34.6	45/3.76	7/2.51	30.1	1650.2	119.41	116.99	124.25	121.83	0.0578
500/64.8	54/3.43	7/3.43	30.9	1887.9	153.80	147.31	162.87	158.33	0.0578
560/38.7	45/3.98	7/2.65	31.8	1848.2	133.74	131.03	139.16	136.45	0.0516
560/70.9	54/3.63	19/2.18	32.7	2103.4	172.59	167.63	182.52	177.56	0.0516
630/43.6	45/4.22	7/2.81	33.8	2079.2	150.45	147.40	156.55	153.50	0.0459
630/79.8	54/3.85	19/2.31	34.7	2366.3	191.77	186.19	202.94	197.36	0.0459

注：表中性能同样适用于JL/G1AF、JL/G2AF防腐型钢芯铝绞线，但单位长度重量应按GB/T1179-1999标准中附录C的计算方法计算，如有用户需要可单独提供。
Note: the parameter listed in the table is also suitable for JL/G1AF type & JL/G2AF type corrosive proof aluminum-steel conductor. But unit length and weight shall be calculated in accordance with attachment C stipulated in GB/T1179-1999 standard. We can offer separately if customer requires.

五、导线绞合节径比

lay ration of lead stranding

结构元件 structure element	绞层 Stranding layer	节径比 Lay ratio
钢芯 steel core	6根层 6 pieces layer	16~26
	12根层 12 pieces layer	14~22
铝绞层 aluminum stranding layer	内层 inner layer	10~17
	邻外层 near outer layer	10~16
	外层 outer layer	10~14

六、铝绞线、钢芯铝绞线的弹性系数和线膨胀系数（数据来源：GB1179-83，供参考。）

Elasticity coefficient and wire expansion
coefficient of aluminum stranding
conductor & aluminum-steel conductor
(data origin: GB1179-83, only for
reference)

产品名称 product name	单线根数piece of single silk	最终弹性系数（实际值） Final elasticity coefficient (actual value)		线膨胀系数（计算值） wire expansion Coefficient(calculated value)
		N/mm2	kgf/mm2	1/℃
铝绞线aluminum stranding conductor	7	59000	6000	23.0×10-6
	19	56000	5700	
	37	56000	5700	
	61	54000	5500	

产品名称product name	结构 structure		铝 钢 截面比section ratio of aluminum and steel	最终弹性系数 （实际值） Final elasticity coefficient (actual value)		线膨胀系数(计算值) wire expansion Coefficient (calculated value)
	铝Aluminum	钢steel		N/mm2	kgf/mm2	
钢芯铝绞线 aluminum-steel conductor	6	1	6.00	79000	8100	19.1×10-6
	7	7	5.06	76000	7700	18.5×10-6
	12	7	1.71	105000	10700	15.3×10-6
	18	1	18.00	66000	6700	21.2×10-6
	24	7	7.71	73000	7400	19.6×10-6
	26	7	6.13	76000	7700	18.9×10-6
	30	7	4.29	80000	8200	17.8×10-6
	30	19	4.37	78000	8000	18.0×10-6
	42	7	19.44	61000	6200	21.4×10-6
	45	7	14.46	63000	6400	20.9×10-6
	48	7	11.34	65000	6600	20.5×10-6
	54	7	7.71	69000	7000	19.3×10-6
	54	19	7.90	67000	6800	19.4×10-6

七、订货及交货注意事项

1、询价或订货时应明确向生产厂至少提供：产品数量、产品的型号、面积（钢芯铝绞线应注明铝钢面积比）、绞制结构根数。

2、交货长度偏差±5%。

3、生产中不可避免地出现短段导线，短段导线的长度不小于合同规定制造长度的50%，其数量应不超过交货总量的5%。

4、根据双方协议，允许以任何长度的绞线交货。

Notes for order and delivery

Buyer shall at least provide manufacturer product quantity, type, section area(section ratio of steel and aluminum for aluminum-steel conductor) and pieces of stranding structure when enquiring or ordering.

Delivery length error is ±5%.

It is inevitable to have short leads during manufacturing. Length of short leads shall be no less than 50% of manufacturing length stipulated in the contract. And the quantity shall be no more than 5% of total delivery quantity.

Delivery length of cable depends on both agreements.

核电站用1E级电缆

IE Degree Cable for Nuclear Power Station Application



核电站用1E级电缆

1E Class Cable for Nuclear Power Station

该类电缆适用于核电站核反应堆(压水堆或沸水堆)安全壳外用1E级K3类电缆回路。

生产执行标准

企业标准（参照法国《RCC-E压水堆核电站核岛电气设备设计和建造规则》及核工业第二研究设计院编写的《0.6/1kV控制电缆技术规格书》的规定要求）

产品主要特点

- 1.该产品是用于核反应堆安全壳外，在正常情况及地震荷载下能执行其功能的电缆。质量鉴定程序为“K3”类。
- 2.产品具有无卤低烟阻燃特性，当火灾发生时蔓延速度慢，烟浓度低，有害气体释放量小，故对仪器设备的腐蚀性伤害小，能够适应核电站特殊环境要求。
- 3.该类产品共开发了以下几个品种：额定电压6/10kV及以下电力电缆、控制电缆、仪器仪表电缆、补偿电缆、通信用光缆等五个系列，以适应不同场合的使用要求。

产品型号规格

- 1、额定电压6/10kV及以下电力电缆
型号名称

It is used for return circuit of class 1E category K3 outside security housing of nuclear reactor in nuclear power station.

Executive Standard:

as the enterprise's enterprise (with reference to "Design & Manufacturing Regulations on Electric Devices of Nuclear Island of RCC-E Reactor in Nuclear Power Station" of France & "Technical Specifications of 0.6/1kV Control Cable" by No.2 Research & Design Institute of Nuclear Industry)

Main Features:

- 1.The cable, which is located outside security housing of nuclear reactor, keeps itself in normal operation under normal circumstance and earthquake loading. It belongs to category K3 by quality appraisal procedure .
- 2.It has flame-retardant performance free from halogen with low smoke and low spreading speed, smoke density and poisonous gas emission in fire disaster, which results in low corrosion on instruments and devices. It could meet special environmental demands of nuclear power station.
- 3.Cables for nuclear power station include 5 categories: powercable of rated voltage 6/10kV or lower, control cable, instrument cable, compensational cable, & optic fiber cable.

- Power Cable of Rated Voltage 6/10kV or Lower
Type & Description

核电站电力电缆 型号及名称
Type & Description of Power Cable for Nuclear Power Station

型 号Type		名 称Description
铜Cu	铝Al	
HDYJE-6	HDYJLE-6	额定电压6/10kV交联聚乙烯绝缘热塑性(热固性)护套无卤低烟阻燃核电站用电力电缆 Flame-retardant power cable for nuclear power station of rated voltage 6/10kV with XLPE insulation, low smoke and halogen-free thermoplasticity (thermosetting) sheath
HDYJE23-6	HDYJLE23-6	额定电压6/10kV交联聚乙烯绝缘钢带铠装热塑性(热固性)护套无卤低烟阻燃核电站用电力电缆 Flame-retardant power cable for nuclear power station of rated voltage 6/10kV with XLPE insulation, steel tape armor, low smoke and halogen-free thermoplasticity (thermosetting) sheath
HDYJE-1	HDYJLE-1	额定电压0.6/1kV交联聚乙烯绝缘热塑性(热固性)护套无卤低烟阻燃核电站用电力电缆 Flame-retardant power cable for nuclear power station of rated voltage 0.6/1kV with XLPE insulation, low smoke and halogen-free thermoplasticity (thermosetting) sheath
HDYJE23-1	HDYJLE23-1	额定电压0.6/1kV交联聚乙烯绝缘钢带铠装热塑性(热固性)护套无卤低烟阻燃核电站用电力电缆 Flame-retardant power cable for nuclear power station of rated voltage 0.6/1kV with XLPE insulation, steel tape armor, low smoke and halogen-free thermoplasticity (thermosetting) sheath

规格

Specification

核电站用电力电缆规格
Power Cable Specification for Nuclear Power Station

型 号 Type	芯数 Core Number	额定电压 Rated Voltage kV	
		0.6/1	6/10
		标称截面mm ²	Nominal Cross-section Area mm ²
HDYJE-6	1	1.5~400	50~400
HDYJLE-6	2	1.5~150	--
HDYJE23-6	3	1.5~300	25~400
HDYJLE23-6	4	1.5~300	--
HDYJE-1	4	1.5~300	--
HDYJLE-1	3+2, 4+1	1.5~300	--
HDYJE23-1	5	1.5~35	--
HDYJLE23-1			

注：钢带铠装结构电缆，导体截面应选择2.5mm²以上规格。

Remarks: The cross-section area of conductor for the cable with steel tape armor should be more than 2.5mm².

2、控制电缆

Control Cable

型号名称

Type & Description

核电站用控制电缆型号及名称
Type & Description of Control Cable for Nuclear Power Station

型 号Type	名 称Description
HKYJE	铜芯交联聚乙烯绝缘热塑性(热固性)无卤低烟阻燃聚烯烃护套核电站用控制电缆 Control cable for nuclear power station with Cu core, XLPE insulation, low smoke, halogen-free & flame-retardant thermoplasticity (thermosetting) polyolefin sheath
HKYJEP	铜芯交联聚乙烯绝缘镀锡铜线编织屏蔽热塑性(热固性)无卤低烟阻燃聚烯烃护套核电站用控制电缆 Control cable for nuclear power station with Cu core, XLPE insulation, shield of braided tinned Cu wire, low smoke, halogen-free & flame-retardant thermoplasticity (thermosetting) polyolefin sheath
HKYJE23	铜芯交联聚乙烯绝缘钢带铠装热塑性(热固性)无卤低烟阻燃聚烯烃护套核电站用控制电缆 Control cable for nuclear power station with Cu core, XLPE insulation, steel tape armor, low smoke, halogen-free & flame-retardant thermoplasticity (thermosetting) sheath

注：电缆屏蔽形式可以是编织屏蔽型，也可以是铜塑复合带(P2)或铝塑复合带(PL)绕包屏蔽型。

Remarks: The shieldings include braiding shield, Cu-plastics compound tape (P2) or Al-plastics compound tape (PL) wrapping shield.

规格

Specification

核电站用控制电缆规格
Specifications of Control Cable for Nuclear Power Station

型 号 Type	额定电压 Rated Voltage(kV)	标称截面 Nominal Cross-section Area (mm ²)		
		1.0	1.5	2.5
		芯 数 Core Number		
HKYJE	0.6/1	2~61		
HKYJEP				
HKYJE23		4~61		

3、仪器、仪表电缆

Instrument Cable

型号及名称

Type & Description

核电站用仪器仪表电缆型号及名称

Type & Description of Instrument Cable for Nuclear Power Station

型 号Type	名 称Description
HYYJEP	铜芯交联聚乙烯绝缘镀锡铜丝编织总屏蔽热塑性(热固性)无卤低烟阻燃聚烯烃护套核电站用仪器仪表电缆 Instrument cable for nuclear power station with Cu core, XLPE insulation, general shielding of braided tinned Cu wire, low smoke, halogen-free & flame-retardant thermoplasticity (thermosetting) polyolefin sheath
HYYJP ₂ EP ₂	铜芯交联聚乙烯绝缘铜塑复合带绕包分屏蔽及总屏蔽热塑性(热固性)无卤低烟阻燃聚烯烃护套核电站用仪器仪表电缆 Instrument cable for nuclear power station with Cu core, XLPE insulation, individual and general shields of wrapping Cu-plastics compound tape, low smoke, halogen-free & flame-retardant thermoplasticity (thermosetting) polyolefin sheath
HYYJP _L EP	铜芯交联聚乙烯绝缘铝塑复合带绕包分屏蔽镀锡铜丝编织总屏蔽热塑性(热固性)无卤低烟阻燃聚烯烃护套核电站用仪器仪表电缆 Instrument cable for nuclear power station with Cu core, XLPE insulation, individual shield of wrapping Al-plastics compound tape and general shield of braiding tinned Cu wire, low smoke, halogen-free & flame-retardant thermoplasticity (thermosetting) polyolefin sheath
HYYJEP ₂	铜芯交联聚乙烯绝缘铜带绕包总屏蔽热塑性(热固性)无卤低烟阻燃聚烯烃护套核电站用仪器仪表电缆 Instrument cable for nuclear power station with Cu core, XLPE insulation, general shielding of wrapped Cu tape, low smoke, halogen-free & flame-retardant thermoplasticity (thermosetting) polyolefin sheath
HYYJEP _L	铜芯交联聚乙烯绝缘铝带绕包总屏蔽热塑性(热固性)无卤低烟阻燃聚烯烃护套核电站用仪器仪表电缆 Instrument cable for nuclear power station with Cu core, XLPE insulation, general shielding of wrapped Al-plastics compound tape, low smoke & halogen-free thermoplasticity (thermosetting) polyolefin sheath

规格

Specification

核电站用仪器仪表电缆规格

Specifications of Instrument Cable for Nuclear Power Station

型 号 Type	额定电压V Rated Voltage V	导体直径 mm Conductor Diameter mm	线芯对数 (二线组或三线组) Core Pair(s) (2 wire or 3 wire group)
HYYJEP HYYJEP ₂ HYYJEP _L HYYJP ₂ EP ₂ HYYJP _L EP	300/500	1.0或(or) 0.8	1~37

4、补偿电缆
型号及名称

Compensational Cablee
Type & Description

核电站用补偿电缆型号及名称

Type & Description of Compensational Cable for Nuclear Power Station

型 号Type	名 称Description
HB-(KCB)YJEP	铜-铜镍40型合金丝导体交联聚乙烯绝缘镀锡铜丝编织屏蔽热塑性(热固性)护套无卤低烟阻燃聚烯烃护套核电站用补偿电缆 Compensational cable for nuclear power station with Cu-CuNi 40 type alloy conductor, XLPE insulation, shield of braided tinned Cu wire, thermoplasticity (thermosetting) polyolefin sheath, low smoke, halogen-free & flame-retardant sheath

注: ①补偿电缆的屏蔽型式有总屏蔽、分屏蔽、分屏蔽加总屏蔽三种可供选择, 屏蔽材料有: 镀锡铜丝(P)、铜带(P2)、铝带(PL);
②其它型号补偿电缆EX、TX、NC、JX等只需改写型号中括号内的部分, 如: HB-EXYJEP2、HB-KXYJPEP。

Remarks: ①The cable shieldings include 3 forms, i.e. general shield, individual shield, individual & general shields, and shielding materials include inned Cu wire (P), Cu tape (P2) & Al tape (PL).
②The indication of compensational cables of other types such as EX, TX, NC, JX could be made with the change of those in the brackets, for example, HB-EXYJEP2, HB-KXYJPEP.

规格

Specification

核电站用补偿电缆规格

Specifications of Compensational Cable for Nuclear Power Station

型 号 Type	额定电压V Rated Voltage V	线芯对数 Core Pair(s)	标称截面 Nominal Cross-section Area (mm ²)
HB-(KCB)YJEP	300/500	1~19	1.0、1.5、2.5

主要技术参数

Main Technical Parameters:

1、导体直流电阻 (20℃)

1. D.C. Conductor Resistance (20℃)

1.1额定电压6/10kV及以下核电站用电力电缆，其导体直流电阻值可参照普通塑力缆。

1.1PLS make reference to that of common power cable with plastic insulation for D.C. conductor resistance of power cable of rated voltage 6/10kV or lower for nuclear power station.

1.2控制电缆导体直流电阻

1.2D.C. Conductor Resistance of Control Cable

标称截面 Nominal Cross Section Area (mm ²)	根数/单丝直径 mm Pieces/ Diameter of Single Piece		20℃时导体直流电阻 D.C. Conductor Resistance (20℃) ≤W/km	
	1类 Category 1	2类 Category 2	不镀金属 Non-plated	镀金属 Plated
1.0	1/1.13	7/0.43	18.1	18.2
1.5	1/1.38	7/0.52	12.1	12.2
2.5	1/1.78	7/0.68	7.41	7.56

1.3仪表电缆导体直流电阻

1.3D.C. Conductor Resistance of Instrument Cable

导体直径 Conductor Diameter (mm)	20℃时导体直流电阻 D.C. Conductor Resistance (20℃) ≤W/km	
	不镀金属 Non-plated	镀金属 Plated
0.8	36.0	36.7
1.0	23.5	23.8

1.4补偿电缆导体结构

1.4Conductor Structure of Compensational Cable

标称截面 Nominal Cross Section Area (mm ²)	20℃时导体直流电阻 D.C. Conductor Resistance (20℃) ≤Ω/km	
	单股 Single Strand	多股 Multi Strand
1.0	1/1.13	7/0.43
1.5	1/1.37	7/0.52
2.5	1/1.76	19/0.41

2、绝缘电阻常数 (Ki)

2. Insulation Resistance Constant (Ki)

90℃时 3.67M W•km

3. Voltage Test of Finished Cable under Working Frequency:

90℃/min 3.67M W•km

3、成品工频耐压试验

(1). Power Cable, Control Cable: 3.5kV/5min

(1). 电力电缆、控制电缆: 3.5kV/5min

(2). Instrument Cable, Compensational Cable: between insulated cores: 2.5kV/5min between insulated core and shielding: 1.5kV/5min

(2). 仪表电缆、补偿电缆: 绝缘线芯间: 2.5kV/5min; 绝缘线芯与屏蔽间: 1.5kV/5min

4. Long-term Thermal Cycle Test:

4、长期热循环试验

(1). Test Time 5000h

(1). 试验时间5000h

(2). Test Voltage 2kV

(2). 试验电压2kV

5. Flame-retardant Performance:

5、阻燃性能

5.1 Vertical Firing Test of Single Insulated Core
Flame Supply Time: 15 S Flame-free Time: 15 S The damaged area should be less than 25% after 5 times of

5.1 单根绝缘线芯垂直燃烧试验供火时间: 供火15S, 停

火15S, 反复5次指示旗烧伤面积应小于25%

5.2成束电缆燃烧试验 (B类) 电缆损烧长度 $\leq 2.5\text{m}$

5.3 电缆烟浓度试验 (透光率) $\geq 60\%$

5.4 被覆材料燃烧气体的腐蚀性PH值 ≥ 4.3 ; 电导率 $\leq 10\text{ms/mm}$

使用条件

1. 电缆导体的最高额定温度为 90°C , 短路时(持续时间不超过5S)导体最高温度不超过 250°C ;

2. 电缆敷设时环境温度不低于 0°C ;

3. 敷设时电缆的允许弯曲半径: 非铠装电缆不小于电缆外径的8倍; 铠装电缆不小于电缆外径的16倍, 电力电缆还需加大一些;

4. 反应堆厂房正常工况 γ 射线辐照累积剂量为 250KGY ; LOCA工况 γ 射线辐照累积剂量为 600KGY ;

交货长度

1. 交货长度不低于200m;

2. 根据协议可以任何长度交货;

3. 长度计量误差不超过 $\pm 0.5\%$ 。

repetition.

5.2 Cable Firing Test in Bundle (Category B): damaged Cable Length $\leq 2.5\text{m}$

5.3 Smoke Density Test (Light Penetration Rate):

5.4 The emitted gas corrosion in firing of sheath material: PH value ≥ 4.3 ; Electric Conductivity $\leq 10\text{ms/mm}$

Working Conditions:

1. The highest rated temperature of cable conductor is 90°C . It should be no higher than 250°C in time of short circuit. (It lasts no longer than 5 minutes.)

2. Ambient temperature in installation should be no lower than 0°C .

3. Allowed bending radius in installation should be no less than 8 times that of cable outer diameter for cable without armor, and 16 times for armored cable. And it should be bigger for power cable.

4. γ ray radiation volume accumulated under normal operation status of reactor is 250KGY ; γ ray radiation volume accumulated under LOCA status is 600KGY .

Cable Length:

1. It should be no less than 200 meters.

2. It depends on final both agreements.

3. The length error allowance should be no more than $\pm 0.5\%$.

船用电缆 Ship Cable



聚氯乙烯绝缘和护套船用电力电缆

Ship Power Cable with PVC Insulation & Sheath

聚氯乙烯绝缘和护套船用控制电缆

Ship Control Cable with PVC Insulation & Sheath

船用射频电缆

Ship RF Cable

聚氯乙烯绝缘和护套船用电力电缆

Power Cable with PVC Insulation and Sheath for Ship

本产品适用于各种河海船舶及海上平台等水上建筑物输电能。

It is used to transmit power for ships, offshore platform and other building over water.

一、生产执行标准 GB9331.3-88

Executive standard: GB9331.3-88

二、使用条件

Working Condition

- 1、额定电压为0.6/1kV;
- 2、电缆长期允许工作温度为70℃。

- 1: Rated voltage is 0.6/1kV.
- 2: Long term working temperature allowed by cable is 70℃.

三、型号、名称

Type and Description

型 号 Type	名 称 Description
CVV/DA	聚氯乙烯绝缘及护套船用电力电缆, DA型 Power cable with PVC insulation and sheath for ship, DA type
CVV80/DA	聚氯乙烯绝缘聚氯乙烯内套裸铜丝编织船用电力电缆, DA型 Power cable with PVC insulation and inner sheath and bare copper wire braiding for ship, DA type
CVV90/DA	聚氯乙烯绝缘聚氯乙烯内套铜丝编织铠装船用电力电缆, DA型 Power cable with PVC insulation and inner sheath, steel wire braiding and armoring for ship, DA type
CVV82/DA	聚氯乙烯绝缘聚氯乙烯内套铜丝编织聚氯乙烯外护套船用电力电缆, DA型 Power cable with PVC insulation, PVC inner sheath, PVC outer sheath and copper wire braiding for ship, DA type
CVV92/DA	聚氯乙烯绝缘聚氯乙烯内套铜丝编织铠装聚氯乙烯外护套船用电力电缆, DA型 Power cable with PVC insulation, PVC inner sheath, PVC outer sheath, steel wire braiding and armoring for ship, DA type
CVV/SA	聚氯乙烯绝缘及护套阻燃船用电力电缆, SA型 Flame retardant power cable with PVC insulation and sheath for ship, SA type
CVV80/SA	聚氯乙烯绝缘聚氯乙烯内套裸铜丝编织船用电力电缆, SA型 Power cable with PVC insulation and inner sheath, bare copper wire braiding for ship, SA type
CVV90/SA	聚氯乙烯绝缘聚氯乙烯内套铜丝编织铠装船用电力电缆, SA型 Power cable with PVC insulation and inner sheath, steel wire braiding and armoring for ship, SA type
CVV82/SA	聚氯乙烯绝缘聚氯乙烯内套铜丝编织聚氯乙烯外护套船用电力电缆, SA型 Power cable with PVC insulation, PVC inner sheath, PVC outer sheath and copper wire braiding for ship, SA type
CVV92/SA	聚氯乙烯绝缘聚氯乙烯内套铜丝编织铠装聚氯乙烯外护套船用电力电缆, SA型 Power cable with PVC insulation, PVC inner sheath, PVC outer sheath, steel wire braiding and armoring for ship, SA type

注: DA型符合单根垂直燃烧试验要求; SA型符合成束垂直燃烧试验要求。

Note: DA type cable meets the requirements of vertical burning test for single piece. SA type cable meets the requirements of vertical burning test for bundle.

四、规格范围

Specification Range

型 号 Type	芯 数 Core number	截 面mm ² Nominal cross section area
CVV/DA, CVV80/DA	1	1~300
CVV90/DA, CVV82/DA	2	1~120
CVV92/DA	3	1~185
CVV/SA, CVV80/SA, CVV90/SA, CVV82/SA, CVV92/SA	4~37	1~2.5

芯数推荐: 1、2、3、4、5、7、10、12、14、16、19、24、27、30、33和37芯。

Cores recommended: 1,2,3,4,5,7,10,12,14,16,19,24,27,30,33or37

五、使用特性

Performance for Usage

电缆结构特性 Structure character of cable	电缆外径D Outer diameter of cable	最小弯曲半径 Min bending radius
金属编织型 metallic braiding type	任何值 any value	6D
非铠装型 Inarmored type	$D < 25$	4D
	$D \geq 25$	6D

六、技术要求及规格尺寸

Technical Requirement and Specification & Size

电缆应能经受交流电压3.5kV或直流电压8.4kV, 5min耐压试验;
电缆规格尺寸符合GB9331.3-88中相应数据规定。

Cable should bear voltage test of AC 3.5 KV or DC 8.4KV for 5min.

Specification of cable shall meet the requirement of relevant data stipulated in GB9331.3-88 standard.

七、交货长度

Delivery length

允许按双方协议长度交货。

According to the agreement between both parties.

聚氯乙烯绝缘和护套船用控制电缆

Control Cable with PVC Insulation and Sheath for Ship

本产品适用于交流额定电压250V及以下的各种船舶及海上石油平台等水上建筑物，用于对干扰不敏感的电路。

It is used for the circuit insensitive to interference of AC rated voltage 250V or lower for ships, offshore platform and other building over water.

一、生产执行标准 GB9332-88

Executive standard: GB9332-88

二、使用条件

Working Condition

- 1、电缆的长期允许工作温度为60℃；
- 2、敷设时电缆的最小弯曲半径；
金属屏蔽铠装型（电缆外径D为任何值）为6D；
非铠装型（电缆外径D≤25）为4D；
（电缆外径D>25）为6D。

- 1: Long term working temperature allowed by cable is 60℃.
 - 2: Min. bending radius of cable for installation is 6 times that of cable OD for cable with metallic shielding and armoring(D is for any value.)and 4 times that of cable OD for cable without armoring(D≤25); Min. bending radius of cable for installation is 6 times that of cable OD(D>25).
- Note: D means outer diameter of cable

三、型号、名称及敷设要求

Type, Description and Installation Requirements

型 号 Type	名 称 Description	敷 设 要 求 Installation requirements
CKVV/DA	聚氯乙烯绝缘聚氯乙烯护套船用控制电缆 Control cable with PVC insulation and sheath for ship	固定敷设特性代号： D-符合单根垂直燃烧 试验
CKVV80/DA	聚氯乙烯绝缘和护套裸铜丝编织铠装船用控制电缆 Control cable with PVC insulation and sheath, bare copper wire braiding and armoring for ship	
CKVV82/DA	聚氯乙烯绝缘铜丝编织铠装聚氯乙烯护套船用控制电缆 Control cable with PVC insulation and sheath, copper wire braiding and armoring for ship	
CKVV90/DA	聚氯乙烯绝缘聚氯乙烯内套裸铜丝编织铠装船用控制 电缆 Control cable with PVC insulation and inner sheath, bare steel wire braiding and armoring for ship	
CKVV92/DA	聚氯乙烯绝缘聚氯乙烯内套铜丝编织铠装聚氯乙烯 护套船用控制电缆 Control cable with PVC insulation and inner sheath, PVC outer sheath, steel wire braiding and armoring for ship	
CKJV/DA	交联聚乙烯绝缘聚氯乙烯护套船用控制电缆 Control cable with XLPE insulation and PVC sheath for ship	固定敷设特性代号： D-符合单根垂直燃烧 试验
CKJV80/DA	交联聚乙烯绝缘和护套裸铜丝编织铠装船用控制电缆 Control cable with XLPE insulation and sheath, bare copper wire braiding and armoring for ship	
CKJV82/DA	交联聚乙烯绝缘铜丝编织铠装聚氯乙烯护套船用控制电缆 Control cable with XLPE insulation and PVC sheath, copper wire braiding and armoring for ship	
CKJV90/DA	交联聚乙烯绝缘聚氯乙烯内套裸铜丝编织铠装船用 控制电缆 Control cable with XLPE insulation and PVC inner sheath, bare steel wire braiding and armoring for ship	
CKJV92/DA	交联聚乙烯绝缘聚氯乙烯内套铜丝编织铠装聚氯乙烯护套船用控制电缆 Control cable with XLPE insulation and PVC inner sheath, PVC outer sheath, steel wire braiding and armoring for ship	

四、规格范围

Specification Range

型号 Type	芯数 Core number	截面mm ² (根数/单丝直径) Cross section area (pieces/diameters of single piece)
所有型号 All types	2、4、7、10、14、19、24、30、37	0.75 (7/0.37) 、1.0 (7/0.43) 1.5 (7/0.52) 、2.5 (7/0.68)

五、技术要求

1、电缆应经受交流电压1500V或直流电压3600V, 5min的电压试验;

2、电缆具有符合GB2951.19单根垂直燃烧试验性能要求;

3、CKV系列电缆在20℃时绝缘电阻常数不小于36.7MΩ.km; CKJ系列电缆在20℃时绝缘电阻常数不小于3670MΩ.km。

Technical Requirements

1: Cable should bear voltage test of AV 1500V or DC 3600V for 5min.

2: Vertical burning test performance for single piece shall meet the requirement of GB2951.19 standard.

3: Insulated resistance constant is no less than 36.7MΩ.km at 20℃ for CKV series cable and 3670MΩ.km at 20℃ for CKJ series cable.

六、交货要求

按双方协议规定, 长度计量误差为±0.5%。

Delivery length

According to the agreement between both parties with length error of ±0.5%.

船用射频电缆

Radio-frequency Cable for Ship

本产品适用于各种河海船舶及海上石油平台等各种水上建筑物，连接高频信号和对地不对称的高频信号设备；如用作无线电和雷达设备的连接。

It is used for the connection between high frequency signal equipments and high frequency signal equipments to the ground on various ships, offshore platform and other buildings above water. eg. It is used for the connection with wireless and radar equipments.

一、生产执行标准 GB9334-88

Executive standard: GB9334-88

二、型号、名称

Type, Description

Table1

型号 Type	名称 Description
CSYV	铜导体实芯聚乙烯绝缘聚氯乙烯护套船用同轴射频电缆 Coaxial radio-frequency cable for ship with Cu conductor, solid core, PE insulation, PVC sheath
CSYV90	铜导体实芯聚乙烯绝缘聚氯乙烯内套裸钢丝编织铠装船用同轴射频电缆 Coaxial radio-frequency cable for ship with Cu conductor, solid core, PE insulation, PVC inner sheath, bare steel wire braided armoring
CSFF	镀银铜导体聚四氟乙烯绝缘聚四氟乙烯护套玻璃丝编织护层船用同轴射频电缆 Coaxial radio-frequency cable for ship with silver-plated Cu conductor, Teflon insulation, Teflon sheath, glass wire braided protecting layer

三、型号编制及字母代号含义

Type compiling and Letter meaning

船用射频电缆系列代号.....CS
铜导体.....T(省略)
聚乙烯绝缘.....Y
聚四氟乙烯绝缘或护套.....F
聚氯乙烯护套.....V

Serial number of RF cable for ship.....CS
Cu conductor.....T(omitted)
PE insulation.....Y
Teflon insulation or sheathF
PVC sheathV

注：聚四氟乙烯+玻璃丝编织浸渍外套也用F代号表示。

Note: “F” can also be used to stand for Teflon plus glass wire impregnated sheath.

四、使用特性

Performance for Usage

Table 2 CSYV、CSYV90

规格 Specification	电容 pF/m Capacitance	速比 Speed ration	最大交流电压 (kV) 峰值 Max. A.C. voltage	最大脉冲电压 (kV) 峰值 Max. pulse voltage	弯曲半径mm Bending radius		最低弯曲 温度 Min bending bending temperature
					室内 indoor	室外 outdoor	
50-7-2	100	0.66	6.5	13	5D	10D	-40℃
50-7-6	100	0.66	6.5	13			
50-12-1	100	0.66	9.5	19			

D-电缆外径(下同) D means outer diameter of cable(the following is the same)

Table 3 CSFF

规格specification	电容 pF/m capacitance	速比 Speed ration	最大交流电压 (kV) 峰值 Max. A.C. voltage	最大脉冲电压 (kV) 峰值 Max. pulse voltage	弯曲半径mm Bending radius		最低弯曲 温度 Min bending bending temperature
					室内 indoor	室外 outdoor	
50-7-8	94	0.70	6.5	13	50	100	-50℃

Table 4 CSYV、CSYV90

规格 specification	电容 pF/m capacitance	速比 Speed ration	最大交流电压 (kV) 峰值 Max. A.C. voltage	最大脉冲电压 (kV) 峰值 Max. pulse voltage	弯曲半径mm Bending radius		最低弯曲 温度Min bending bending temperature
					室内 indoor	室外 outdoor	
75-4-1	67	0.66	2.6	5.2	5D	10D	-40℃
75-4-2	67	0.66	2.6	5.2			
75-7-2	67	0.66	5.0	10			
75-7-3	67	0.66	5.0	10			

五、结构尺寸

Structure Dimension

Table 6 CSYV、CSYV90 type

规格 Specification	内导体 Inner conductor		绝缘外径 Mm Insulation OD	外导体材料 Material of outer conductor		护套外径 Mm Sheath OD	铠装外径(如有) 最大mm Max. OD of armoring
	材料 material	结构 structure		内层 Inner layer	外层 Outer layer		
50-7-2	铜线 Copper wire	7/0.75	7.25±0.25	--	铜线 Copper wire	10.3±0.3	12.5
50-7-6		7/0.75	7.25±0.15	镀银铜线 silver-plated copper wire		11.0±0.3	13.0
50-12-1		7/1.15	11.5±0.3	--		15.0±0.4	17.0

Table 7 CSFF type

规格 Specification	内导体 Inner conductor		绝缘外径 Mm Insulation OD	外导体材料 Material of outer conductor		护套外径 Mm Sheath OD
	材料material	结构structure		内层 inner layer	外层 Outer layer	
50-7-8	镀银铜线silver-plated copper wire	7/0.82	7.25±0.15	镀银铜线 silver-plated copper wire	镀银铜线 silver-plated copper wire	10.8±0.5

Table 8 CSYV、CSYV90 Type

规格 Specification	内导体 Inner conductor		绝缘外径 Mm Insulation OD	外导体材料 Material of outer conductor		护套外径mm Sheath OD	铠装外径(如有) 最大mm Max. OD of armoring
	材料 material	结构structure		内层 Inner layer	外层 Outer layer		
75-4-1	铜线 copper wire	7/0.21	3.70±0.13	--	铜线 Copper wire	6.0±0.2	8.0
75-4-2		7/0.21	3.70±0.10	铜线 Copper wire		6.7±0.2	9.0
75-7-2		7/0.40	7.25±0.25	--		10.3±0.3	12.5
75-7-3		7/0.40	7.25±0.15	铜线 Copper wire		11.0±0.3	13.0

六、交货要求

- 1、实芯聚乙烯绝缘电缆不小于100米，短段不小于10米长；
- 2、实芯聚四氟乙烯绝缘电缆不小于45米，短段不小于3米；
- 3、短段电缆交货数量不超过交货长度的15%；
- 4、根据双方协议，可以任何长度的电缆交货；长度计量误差应不超过±0.5%。

Delivery Requirements

- 1: Cable with solid conductor and PE insulation shall be no less than 100 m. And shorter cable shall be no less than 10 m.
- 2: Cable with solid conductor and Teflon insulation shall be no less than 45 m. And shorter cable shall be no less than 3 m.
- 3: Delivery quantity of shorter cables shall not exceed 15% of delivery length.
- 4: Delivery length of cable depends on both agreements with length error allowance of ±0.5%.

煤矿用电缆 Cable for Coal Mine Application



煤矿用额定电压8.7/10kV及以下交联绝缘阻燃电力电缆

Flame Retardant Power Cable with Cross linked Insulation, Rated Voltage of 8.7/10kv or Lower for Coal Mine Application

煤矿用额定电压3.6/6kV及以下聚氯乙烯绝缘阻燃电力电缆

Flame Retardant Power Cable with PVC Insulation, Rated Voltage of 3.6/6kV or Lower for Coal Mine Application

煤矿用额定电压0.66/1.14kV及以下移动类阻燃软电缆

Mobile Flame Retardant Flexible Cable with rated voltage of 0.66/1.14kV or lower for Coal Mine Application

煤矿用额定电压8.7/10kV及以下交联绝缘阻燃电力电缆 Cross Linked Insulation Flame Retardant Power Cable of Rated Voltage 8.7/10kV or Lower for Coal Mine Application

一、生产执行标准

MT818.13-1999《煤矿用额定电压10kV及以下铜芯固定敷设阻燃电力电缆第3部分，煤矿用交联聚乙烯绝缘电力电缆》

Executive standard:

MT818.13-1999 “Copper core fixed installation flame retardant power cable of rated voltage 10kv or lower for coal mine application---part 3 XLPE insulation power cable for coal mine application”

二、工作条件

- 1、电缆导体的允许最高工作温度为90℃。
- 2、短路时（最长持续时间不超过5秒）电缆导体的最高温度不超过250℃。
- 3、电缆敷设温度不低于0℃。

Working Condition

Max. working temperature of cable conductor is 90℃.
Max. temperature of cable conductor is no more than 250℃ during short circuit. (The longest lasting time is no more than 5 seconds.)
Cable installation temperature is no less than 0℃.

三、电缆型号名称

cable type & name

型号 type	名称name
MYJV	煤矿用铜芯交联聚乙烯绝缘聚氯乙烯护套电力电缆 Copper core XLPE insulation PVC sheath power cable for coal mine application
MYJV22	煤矿用铜芯交联聚乙烯绝缘钢带铠装聚氯乙烯护套电力电缆 Copper core XLPE insulation steel tape armoring PVC sheath power cable for coal mine application
MYJV32	煤矿用铜芯交联聚乙烯绝缘细钢丝铠装聚氯乙烯护套电力电缆 Copper core XLPE insulation thin steel wire armoring PVC sheath power cable for coal mine application
MYJV42	煤矿用铜芯交联聚乙烯绝缘粗钢丝铠装聚氯乙烯护套电力电缆 Copper core XLPE insulation thick steel wire armoring PVC sheath power cable for coal mine application

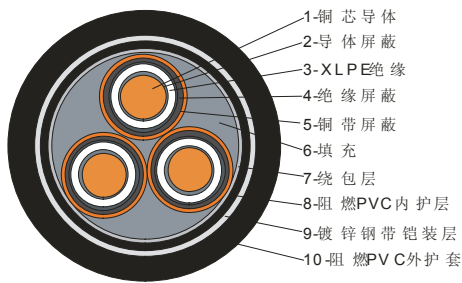
四、生产范围

manufacturing range

型号 type	芯数 Core number	额定电压(kV) rated voltage			
		0.6/1	1.8/3	3.6/6、6/6	6/10、8.7/10
		标称截面(mm ²) nominal cross section area			
MYJV	3	1.5~300	10~300	25~300	25~300
MYJV22	3	4~300	10~300	25~300	25~300
MYJV32	3	4~300	10~300	25~300	25~300
MYJV42	3	4~300	10~300	25~300	25~300

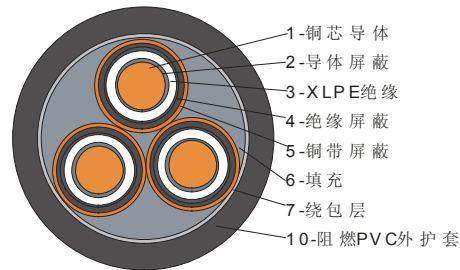
五、产品结构示意图

The figure of cable structure



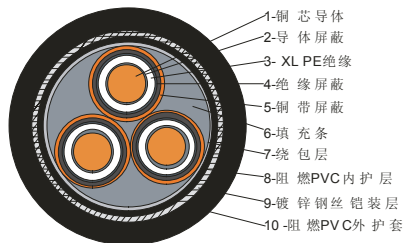
MYJV22-
3.6/6~8.7/10kV

1. copper conductor
3. XLPE insulation
5. copper tape shielding
7. wrapping layer
9. galvanized steel tape armoring layer



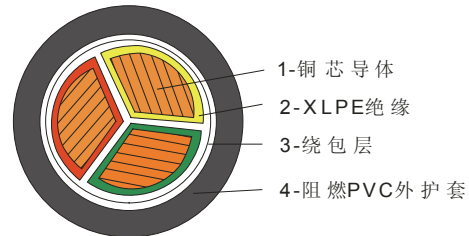
MYJV-
3.6/6~8.7/10kV

2. conductor shielding
4. insulated shielding
6. filling strip
8. flame retardant PVC inner sheath
10. flame retardant PVC outer sheath



MYJV42-
3.6/6~8.7/10kV

1. copper conductor
2. conductor shielding
3. XLPE insulation
4. insulated shielding
5. copper tape shielding
6. filling strip
7. wrapping layer
8. flame retardant PVC inner sheath
9. galvanized steel wire armoring layer
10. flame retardant PVC outer sheath



MYJV-
0.6/1~1.8/3 kV

1. copper conductor
2. XLPE insulation
3. wrapping layer
4. flame retardant PVC outer sheath

六、产品特色

- 1、具有优异的阻燃性能，满足煤矿用电缆特殊要求。
- 2、成品电缆的阻燃性能符合MT386各项试验要求。

product characteristic

The cable has good feature of flame resistance. It can meet special requirement of cable for coal mine application.

Flame retardant performance of finished cable shall meet all kinds of test requirement stipulated in MT386 standard.

七、电缆外径尺寸

outer diameter size of cable

MYJV-0.6/1kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度 (mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径 (mm) Approx. outer diameter of cable
3*1.5	0.7	1.8	10.0
3*2.5	0.7	1.8	10.8
3*4	0.7	1.8	11.8
3*6	0.7	1.8	12.8
3*10	0.7	1.8	15.6
3*16	0.7	1.8	18.0
3*25	0.9	1.8	20.6
3*35	0.9	1.8	20.2
3*50	1.0	1.8	23.4
3*70	1.1	1.8	26.4
3*95	1.1	1.9	30.0
3*120	1.2	2.0	33.2
3*150	1.4	2.1	37.5
3*185	1.6	2.3	42.0
3*240	1.7	2.4	46.4
3*300	1.8	2.6	51.0

MYJV22-0.6/1kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*4	0.7	1.8	14.5
3*6	0.7	1.8	15.6
3*10	0.7	1.8	18.5
3*16	0.7	1.8	20.8
3*25	0.9	1.8	23.5
3*35	0.9	1.8	23.0
3*50	1.0	1.8	26.2
3*70	1.1	1.9	30.5
3*95	1.1	2.0	34.5
3*120	1.2	2.2	38.0
3*150	1.4	2.3	42.2
3*185	1.6	2.5	47.0
3*240	1.7	2.6	51.6
3*300	1.8	2.8	56.4

MYJV32-0.6/1kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*4	0.7	1.8	15.5
3*6	0.7	1.8	17.5
3*10	0.7	1.8	20.4
3*16	0.7	1.8	23.2
3*25	0.9	1.8	26.0
3*35	0.9	1.8	25.5
3*50	1.0	1.8	28.5
3*70	1.1	2.0	32.0
3*95	1.1	2.1	36.8
3*120	1.2	2.2	40.0
3*150	1.4	2.4	45.5
3*185	1.6	2.6	50.5
3*240	1.7	2.7	55.0
3*300	1.8	2.9	60.0

MYJV42-0.6/1kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*4	0.7	1.8	24.0
3*6	0.7	1.8	25.0
3*10	0.7	1.8	28.0
3*16	0.7	1.9	30.2
3*25	0.9	2.0	33.2
3*35	0.9	2.0	32.5
3*50	1.0	2.1	36.0
3*70	1.1	2.2	39.5
3*95	1.1	2.3	42.5
3*120	1.2	2.4	46.0
3*150	1.4	2.6	50.5
3*185	1.6	2.7	54.5
3*240	1.7	2.9	59.5
3*300	1.8	3.0	63.5

MYJV-1.8/3kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*10	2.0	1.8	23.2
3*16	2.0	1.8	25.5
3*25	2.0	1.8	27.5
3*35	2.0	1.9	29.5
3*50	2.0	2.0	34.0
3*70	2.0	2.1	38.0
3*95	2.0	2.3	42.2
3*120	2.0	2.5	47.5
3*150	2.0	2.6	50.0
3*185	2.0	2.7	53.2
3*240	2.0	2.9	60.0
3*300	2.0	3.0	64.0

MYJV22-1.8/3kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*10	2.0	1.8	24.0
3*16	2.0	1.8	26.2
3*25	2.0	1.8	28.5
3*35	2.0	1.9	31.5
3*50	2.0	2.1	36.5
3*70	2.0	2.3	40.5
3*95	2.0	2.4	44.5
3*120	2.0	2.5	49.5
3*150	2.0	2.6	52.0
3*185	2.0	2.7	55.2
3*240	2.0	3.0	62.0
3*300	2.0	3.1	66.5

MYJV32 -1.8/3kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*10	2.0	1.8	26.5
3*16	2.0	1.8	28.8
3*25	2.0	1.9	31.0
3*35	2.0	2.0	34.0
3*50	2.0	2.1	38.5
3*70	2.0	2.3	42.8
3*95	2.0	2.4	46.8
3*120	2.0	2.6	52.8
3*150	2.0	2.7	54.8
3*185	2.0	2.8	58.8
3*240	2.0	3.1	66.8
3*300	2.0	3.2	71.0

MYJV42-1.8/3kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*10	2.0	1.9	31.5
3*16	2.0	2.0	34.0
3*25	2.0	2.1	36.2
3*35	2.0	2.1	38.0
3*50	2.0	2.3	42.8
3*70	2.0	2.4	46.8
3*95	2.0	2.5	50.8
3*120	2.0	2.7	56.2
3*150	2.0	2.8	58.5
3*185	2.0	2.9	62.0
3*240	2.0	3.1	68.0
3*300	2.0	3.3	73.0

MYJV-3.6/6kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	2.5	2.1	36.0
3*35	2.5	2.1	38.0
3*50	2.5	2.2	41.0
3*70	2.5	2.4	45.0
3*95	2.5	2.5	49.0
3*120	2.5	2.6	52.0
3*150	2.5	2.7	56.0
3*185	2.5	2.8	60.0
3*240	2.6	3.0	65.0
3*300	2.8	3.2	71.0

MYJV22-3.6/6kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	2.5	2.2	41.0
3*35	2.5	2.2	43.0
3*50	2.5	2.3	47.0
3*70	2.5	2.5	51.0
3*95	2.5	2.6	54.0
3*120	2.5	2.7	58.0
3*150	2.5	2.8	62.0
3*185	2.5	2.9	65.0
3*240	2.6	3.1	71.0
3*300	2.8	3.3	77.0

MYJV32 -3.6/6kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	2.5	2.2	43.0
3*35	2.5	2.3	46.0
3*50	2.5	2.4	50.0
3*70	2.5	2.6	54.0
3*95	2.5	2.7	58.0
3*120	2.5	2.8	62.0
3*150	2.5	2.9	66.5
3*185	2.5	3.1	71.0
3*240	2.6	3.2	76.0
3*300	2.8	3.4	82.0

MYJV42 -3.6/6kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	2.5	2.4	49.5
3*35	2.5	2.5	52.0
3*50	2.5	2.6	55.0
3*70	2.5	2.7	58.0
3*95	2.5	2.8	62.0
3*120	2.5	2.9	65.5
3*150	2.5	3.0	69.5
3*185	2.5	3.2	73.0
3*240	2.6	3.3	78.5
3*300	2.8	3.5	84.0

MYJV-6/6kV、6/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	3.4	2.2	40.5
3*35	3.4	2.3	43.0
3*50	3.4	2.4	46.0
3*70	3.4	2.5	50.0
3*95	3.4	2.6	53.0
3*120	3.4	2.7	56.5
3*150	3.4	2.8	60.5
3*185	3.4	2.9	64.0
3*240	3.4	3.1	69.5
3*300	3.4	3.3	74.5

MYJV22-6/6kV、6/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	3.4	2.3	45.0
3*35	3.4	2.4	48.0
3*50	3.4	2.5	51.0
3*70	3.4	2.6	55.0
3*95	3.4	2.7	59.0
3*120	3.4	2.8	62.0
3*150	3.4	2.9	66.0
3*185	3.4	3.0	70.0
3*240	3.4	3.2	75.0
3*300	3.4	3.4	80.0

MYJV32-6/6kV、6/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	3.4	2.4	48.5
3*35	3.4	2.5	51.5
3*50	3.4	2.6	54.5
3*70	3.4	2.7	58.0
3*95	3.4	2.9	63.5
3*120	3.4	3.0	67.0
3*150	3.4	3.1	71.0
3*185	3.4	3.2	74.0
3*240	3.4	3.4	80.0
3*300	3.4	3.5	85.0

MYJV42-6/6kV、6/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	3.4	2.5	53.0
3*35	3.4	2.6	56.0
3*50	3.4	2.7	58.0
3*70	3.4	2.8	62.5
3*95	3.4	3.0	66.5
3*120	3.4	3.1	70.0
3*150	3.4	3.2	73.5
3*185	3.4	3.3	77.0
3*240	3.4	3.5	82.0
3*300	3.4	3.6	87.0

MYJV-8.7/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	4.5	2.4	45.5
3*35	4.5	2.5	48.5
3*50	4.5	2.6	51.2
3*70	4.5	2.7	55.0
3*95	4.5	2.8	58.5
3*120	4.5	2.9	62.0
3*150	4.5	3.0	65.5
3*185	4.5	3.1	69.5
3*240	4.5	3.3	74.5
3*300	4.5	3.4	79.5

MYJV22-8.7/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	4.5	2.5	51.0
3*35	4.5	2.6	53.5
3*50	4.5	2.7	56.5
3*70	4.5	2.8	60.2
3*95	4.5	2.9	64.0
3*120	4.5	3.0	68.0
3*150	4.5	3.1	72.0
3*185	4.5	3.2	75.0
3*240	4.5	3.4	80.5
3*300	4.5	3.5	85.5

MYJV32-8.7/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	4.5	2.6	54.0
3*35	4.5	2.7	56.57.0
3*50	4.5	2.8	60.0
3*70	4.5	2.9	65.5
3*95	4.5	3.0	69.0
3*120	4.5	3.1	72.0
3*150	4.5	3.3	76.0
3*185	4.5	3.4	80.0
3*240	4.5	3.5	85.0
3*300	4.5	3.7	90.0

MYJV42-8.7/10 kV

芯数*导体标称截面(mm ²) Core number * nominal cross section area of conductor	绝缘厚度(mm) Insulated thickness	护套厚度(mm) Sheath thickness	电缆近似外径(mm) Approx. outer diameter of cable
3*25	4.5	2.7	58.0
3*35	4.5	2.8	61.0
3*50	4.5	2.9	64.0
3*70	4.5	3.0	68.0
3*95	4.5	3.1	71.5
3*120	4.5	3.2	75.0
3*150	4.5	3.4	79.0
3*185	4.5	3.5	82.5
3*240	4.5	3.6	88.0
3*300	4.5	3.8	92.0

八、电缆主要技术参数

main technical parameter of cable

1、20℃时导体最大直流电阻值应满足GB/T3956标准中的2类导体的规定：

Max. conductor DC resistance at 20℃ shall meet the requirement of class 2 conductor stipulated in GB/T3956 standard.

导体标称截面 (mm ²) Nominal cross section area of conductor	20℃时导体最大直流电阻 Ω/km Max. conductor DC resistance at 20℃	导体标称截面 (mm ²) Nominal cross section area of conductor	20℃时导体最大直流电阻 Ω/km Max. conductor DC resistance at 20℃
1.5	12.1	50	0.387
2.5	7.41	70	0.268
4	4.61	95	0.193
6	3.08	120	0.153
10	1.83	150	0.124
16	1.15	185	0.0991
25	0.727	240	0.0754
35	0.524	300	0.0601

2、工频交流耐压试验

A.C. proof-voltage test

额定电压kV Rated voltage	0.6/1	1.8/3	3.6/6	6/6、6/10	8.7/10
试验电压kV Test voltage	3.5	6.5	11	15	22
试验条件：环境温度下5分钟。 Test condition: 5 minutes under environment temperature 试验要求：绝缘应无击穿。 Test requirement: insulation without puncture					

3、局部放电量

Partial discharge

应在1.5 U₀电压下测量局部放电量，其数值应不高于以下规定：

Partial discharge shall be measured under voltage of 1.5 U₀. And the value shall be no more than that listed in the following table

额定电压kV Rated voltage	3.6/6	6/6、6/10	8.7/10
放电量pc Discharge value	10		

4、电缆载流量(A)

cable current loading capacity

参照普通YJV系列交联电力电缆的载流量值。

Please refer to current-loading capacity of common JYV series cross linked power cable.

煤矿用额定电压3.6/6kV及以下聚氯乙烯绝缘阻燃电力电缆 Flame Retardant Power Cable with PVC insulation, rated voltage of 3.6/6kV or lower for Coal Mine Application

一、生产执行标准

MT818.12-1999《煤矿用额定电压10kV及以下铜芯固定敷设阻燃电力电缆第2部分，煤矿用聚氯乙烯绝缘电力电缆》

Executive standard:

MT818.12-1999 “Copper core fixed installation flame retardant power cable of rated voltage 10kv or lower for coal mine application---part 2 PVC insulation power cable for coal mine application”

二、工作条件

- 1、电缆导体的允许最高工作温度为70℃。
- 2、短路时（最长持续时间不超过5秒）电缆导体的最高温度不超过160℃。
- 3、电缆敷设温度不低于0℃。

Working Condition

Max. working temperature of cable conductor is 70℃.
Max. temperature of cable conductor is no more than 160℃ during short circuit. (The longest lasting time is no more than 5 seconds.)
Cable installation temperature is no less than 0℃.

三、电缆型号名称

cable type & name

型号type	名称name
MVV	煤矿用聚氯乙烯绝缘聚氯乙烯护套电力电缆 PVC insulation PVC sheath power cable for coal mine application
MVV22	煤矿用聚氯乙烯绝缘钢带铠装聚氯乙烯护套电力电缆 PVC insulation steel tape armoring PVC sheath power cable for coal mine application
MVV32	煤矿用聚氯乙烯绝缘细钢丝铠装聚氯乙烯护套电力电缆 PVC insulation thin steel wire armoring PVC sheath power cable for coal mine application
MVV42	煤矿用聚氯乙烯绝缘粗钢丝铠装聚氯乙烯护套电力电缆 PVC insulation thick steel wire armoring PVC sheath power cable for coal mine application

四、生产范围

manufacturing range

型号 type	芯数 Core number	额定电压（kV） rated voltage		
		0.6/1	1.8/3	3.6/6
		标称截面(mm ²) nominal cross section area		
MVV	3	1.5~300	10~300	10~300
MVV22	3	2.5~300	10~300	10~300
MVV32	3	--	--	16~300
MVV42	3	--	--	16~300
MVV	3+1	4~300	10~300	--
MVV22	3+1	4~300	10~300	--
MVV	4	4~185	4~185	--
MVV22	4	4~185	4~185	--

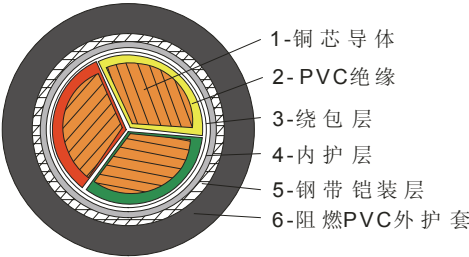
五、电缆绝缘标称厚度

Nominal thickness of cable insulation

导体标称 截面(mm2) nominal cross section area of conductor	额定电压（kV）rated voltage			导体标称截面 (mm2) nominal cross section area of conductor	额定电压（kV）rated voltage		
	0.6/1	1.8/3	3.6/6		0.6/1	1.8/3	3.6/6
	绝缘标称厚度（mm） insulation nominal thickness				绝缘标称厚度（mm） insulation nominal thickness		
1.5	0.8	--	--	50	1.4	2.2	3.4
2.5	0.8	--	--	70	1.4	2.2	3.4
4	1.0	--	--	95	1.6	2.2	3.4
6	1.0	--	--	120	1.6	2.2	3.4
10	1.0	2.2	3.4	150	1.8	2.2	3.4
16	1.0	2.2	3.4	185	2.0	2.2	3.4
25	1.2	2.2	3.4	240	2.2	2.2	3.4
35	1.2	2.2	3.4	300	2.4	2.4	3.4

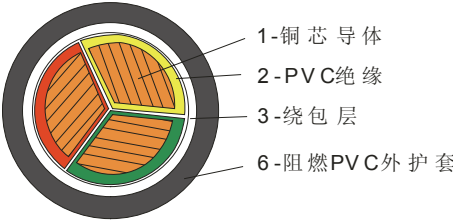
六、产品结构示意图

The figure of cable structure



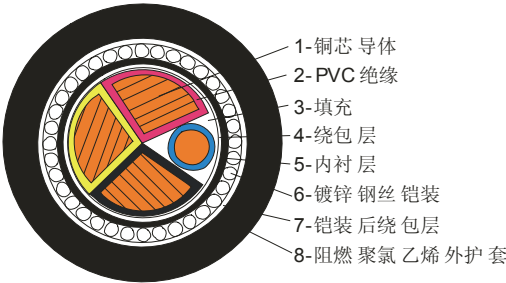
MVV22 3芯

- 1. copper conductor
- 2. PVC insulation
- 3. wrapping layer
- 5. steel tape armoring layer



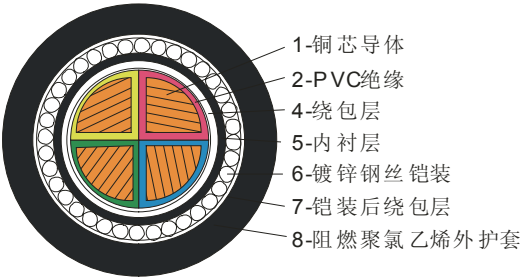
MVV 3芯

- 2. PVC insulation
- 4. inner sheath
- 6. flame retardant PVC outer sheath



MVV32 3+1芯

- 1. copper conductor
- 3. filling
- 5. inner layer
- 7. wrapping layer after armoring



MVV32 4芯

- 2. PVC insulation
- 4. wrapping layer
- 6. galvanized steel wire armoring
- 8. flame retardant PVC outer sheath

七、产品特点

- 1、具有优异的阻燃性能，满足煤矿用电缆特殊要求。
- 2、成品电缆的阻燃性能符合MT386各项试验要求。

product characteristic

The cable has good feature of flame resistance. It can meet special requirement of cable for coal mine application.

Flame retardant performance of finished cable shall meet all kinds of test requirement stipulated in MT386 standard.

煤矿用额定电压0.66/1.14kV及以下阻燃移动软电缆

Flame Retardant Mobile Flexible Cable with Rated Voltage of 0.66/1.14kV or Lower for Coal Mine Application

一、适用范围

本产品适用于交流额定电压0.66/1.14kV及以下煤矿移动设备用铜芯软电缆。

二、执行标准

- MT818.1-1999 煤矿用移动类阻燃软电缆 第1部分：一般规定
- MT818.5-1999 煤矿用移动类阻燃软电缆 第5部分：额定电压0.66/1.14kV及以下移动软电缆
- MT386-1995 煤矿用阻燃电缆阻燃性的试验方法和判定规则

三、工作条件

- 1、额定电压U0/U为0.38/0.66kV和0.66/1.14kV。
- 2、电缆导体的长期允许工作温度为65℃。
- 3、电缆的最小弯曲半径为电缆直径的6倍。

四、型号名称

Application

The product is copper core flexible cable with A.C. rated voltage of 0.66/1.14kV or lower for core mine moving equipment purpose.

Executive Standard

- Flame retardant mobile flexible cable for coal mine application Part 1 general regulation
- Flame retardant mobile soft cable for coal mine application Part 5 mobile flexible cable with rated voltage of 0.66/1.14kV or lower
- Test methods and judging rules of flam retardant performance of flam retardant cable for the coal mine application

Working condition

- Rated voltage U0/U is 0.38/0.66 and 0.66/1.14kV.
- Long-term working temperature of cable conductor is 65℃.
- Min. bending radius of cable is 6 times that of cable diameter.

Type & Description

型号Type	名称Description	用途Application
MY-0.38/0.66 kV	煤矿用移动橡胶套软电缆 Mobile rubber jacketed flexible cable for coal mine application	额定电压为0.38/0.66kV各种井下移动采煤设备的电源连接。 The cable is used to connect power supply of all kinds of mobile mining equipment under well with rated voltage of 0.38/0.66kV.
MYE-0.38/0.66 kV	煤矿用移动弹性体软电缆 Mobile elastomer flexible cable for coal mine application	
MYP-0.38/0.66 kV	煤矿用移动屏蔽橡胶套软电缆 Mobile shielding rubber jacketed flexible cable for coal mine application	
MYPE-0.38/0.66 kV	煤矿用移动屏蔽弹性体软电缆 Mobile shielding elastomer flexible cable for coal mine application	
MYP-0.66/1.14 kV	煤矿用移动屏蔽橡胶套软电缆 Mobile shielding rubber jacketed flexible cable for coal mine application	额定电压为0.66/1.14kV各种井下移动采煤设备的电源连接。The cable is used to connect power supply of all kinds of mobile mining equipment under well with rated voltage of 0.66/1.14kV.
MYPE-0.66/1.14 kV	煤矿用移动屏蔽弹性体软电缆 Mobile shielding elastomer flexible cable for coal mine application	

五、规格

Specification

1、该电缆的规格用：芯数×导体标称截面（mm²）表示。

Definition of cable specification: core no. × nominal cross section area of conductor (mm²)

2、该电缆的规格有：单芯和4芯（3+1）两种，具体见下表：

Two kinds of cable specification: single core and 4 cores(3+1). For details, please see the following table.

芯数×导体标称截面 (mm ²) Core No. × nominal cross section area of conductor (mm ²)	标称厚度 (mm) Nominal thickness		电缆外径 (mm) Outer diameter of cable
	绝缘 Insulation	护套 Sheath	MY-0.38/0.66 kV MYE-0.38/0.66 kV
1×50	1.6	2.4	18.7~20.5
1×70	1.6	2.6	20.9~23.0
1×95	1.8	2.8	24.2~26.6
1×120	1.8	3.0	26.4~29.0
1×150	2.0	3.2	30.1~33.1
1×185	2.2	3.4	32.7~35.9
1×240	2.4	3.5	35.3~38.8
1×300	2.6	3.6	40.0~43.3
1×400	2.8	3.8	43.4~47.7

芯数×导体标称截面 (mm ²) Core No. × nominal cross section area of conductor (mm ²)	标称厚度 (mm) Nominal thickness		电缆外径 (mm) Outer diameter of cable	
	动力线芯绝缘Power core insulation	护套 Sheath	MY-0.38/0.66 kV MYE-0.38/0.66 kV	MYP-0.38/0.66 kV MYPE-0.38/0.66 kV
3×4+4	1.4	3.5	20.9~23.0	22.9~25.2
3×6+6	1.4	3.5	22.9~25.1	24.7~27.2
3×10+10	1.6	4.0	27.8~30.6	29.7~32.7
3×16+10	1.6	4.0	30.3~33.3	32.2~35.4
3×25+16	1.8	4.5	36.4~40.1	38.3~41.0
3×35+16	1.8	4.5	40.5~44.6	42.4~46.6
3×50+16	2.0	5.0	45.5~50.1	47.4~51.0
3×70+25	2.0	5.0	51.5~55.1	52.4~57.1

芯数×导体标称截面 (mm ²) Core No. × nominal cross section area of conductor (mm ²)	标称厚度 (mm) Nominal thickness		电缆外径 (mm) Outer diameter of cable
	动力线芯绝缘 Power core insulation	护套 Sheath	MYP0.66/1.14 kV MYPE0.66/1.14 kV
3×10+10	1.8	4.5	31.7~34.9
3×16+10	1.8	4.5	34.2~37.6
3×25+16	2.0	5.0	40.3~44.3
3×35+16	2.0	5.0	44.4~48.8
3×50+16	2.2	5.5	51.5~54.6
3×70+25	2.2	5.5	53.9~59.3
3×95+25	2.4	6.0	62.1~68.1

六、主要技术参数

- 1、20℃导体直流电阻
在20℃时每芯导体电阻应符合GB/T3956中第5种导体（即多股软芯结构）的要求。
- 2、20℃绝缘电阻
弹性体绝缘动力线芯的绝缘体积电阻率 $\geq 1.0 \times 10^{13} \Omega \cdot \text{cm}$ ；橡皮绝缘动力线芯的绝缘电阻应符合下表规定：

动力线芯标称截面（mm2） Nominal cross section area of power core	20℃时绝缘电阻 （M Ω .km） Insulated resistance at 20℃	动力线芯标称截面（mm2） Nominal cross section area of power core	20℃时绝缘电阻 （M Ω .km） Insulated resistance at 20 ℃
4	≥200	95	≥80
6	≥180	120	≥50
10	≥160	150	
16	≥120	185	
25	≥120	240	
35	≥100	300	
50	≥100	400	
70	≥80	/	

- 3、工频电压试验
电缆的绝缘动力线芯应经受下表规定的工频电压试验而不被击穿：

额定电压U ₀ /U（kV） rated voltage	试验电压（有效值）（kV） Test voltage (effective value)	施加电压时间（min） Time for giving pressure
0.38/0.66	3.0	5
0.66/1.14	3.7	

- 4、成品电缆阻燃性能均应满足MT386标准中各项试验要求。

Main technical parameter

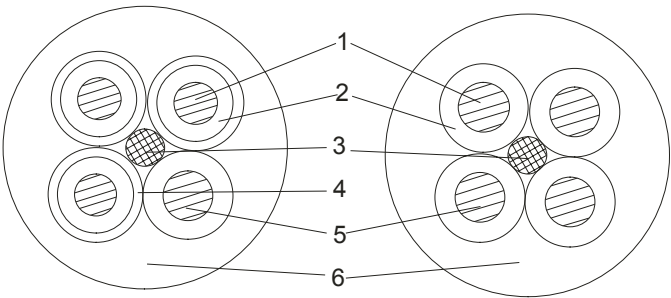
Conductor DC resistance at 20℃
Resistance of each core conductor shall meet the requirements of class 5 conductor (multi-strand flexible structure) stipulated in GB/T3956 standard at 20℃.
Insulated resistance at 20℃
Insulated volume resistance ratio of elastomer insulated power core is at least more than $1.0 \times 10^{13} \Omega \cdot \text{cm}$ ；Insulated resistance of rubber insulation power core shall meet the requirements stipulated in the following table.

A.C. voltage test
Insulated power core of cable shall endure following A.C. voltage test without puncture.

Flame retardant performance of finished cable can meet all kinds of test requirements stipulated in MT386 standard.

七、电缆结构图

The figure of cable structure



MYP-0.38/0.66 MYPE-0.38/0.66
MYP-0.66/1.14 MYPE-0.66/1.14

MY-0.38/0.66
MYE-0.38/0.66

1-动力线芯导体; 2-绝缘; 3-填充; 4-绝缘屏蔽; 5-地线芯导体; 6-外护套

1. Power core conductor 2. Insulation 3. Filler 4. Insulated shielding 5. earthing conductor 6. Outer sheath

八、电缆标志

1、绝缘线芯识别标志: 采用颜色或表面印阿拉伯数字, 当采用颜色时, 单芯电缆绝缘为红色或白色; 4芯电缆动力线芯为红色、白色、浅蓝色, 地线芯为黑色。当采用阿拉伯数字编码时, 4芯电缆动力线芯为1、2、3, 地线芯为0。

2、电缆识别标志: 井下用不同电压等级电缆的护套宜采用不同的识别颜色, 见下表:

Cable mark

Identified mark of insulated core: using color OR printing numbers on the surface of insulated core.

If you use color to identify, the insulated color of single core cable is red or white.

Power core color of cable with 4 cores is red, white, light blue and black for earthing conductor.

If you print numbers on the surface of insulated core, power core of cable with 4 cores is 1, 2, 3 and 0 for earthing conductor.

Identified mark of cable:

Different cable sheath color will be used to identify cable under well with different voltage degree. Please see the following table.

U0/U (kV)	3.6/6	1.9/3.3	0.66/1.14	0.38/0.66及以下 0.38/0.66 or lower
护套颜色 Sheath color	红 red	黑 black	黄 Yellow	黑 black

成品电缆护套表面至少应明显印有: 制造厂名、型号规格、电压、煤安标志的内容。

Manufacturer, type, voltage and coal mine safety mark etc. will be clearly printed on the surface of finished cable sheath

九、交货长度

- 1、电缆根据双方的协议长度交货。
- 2、无协议时, 按产品标准规定: 最小短段长度为40米, 短段长度应不超过总长度的10%。
- 3、长度计量误差不超过 $\pm 0.5\%$ 。

delivery length

Delivery length of cable depends on final both agreements.

If there is no final agreement, the cable no shorter than 40 meters is allowed for delivery, which accounts for no more than 10% of the total length.

Length error of cable is no more than $\pm 0.5\%$.

特种电缆 Special Cable



耐高温(阻燃)电力电缆

High temperature resistant(flame retardant)power cable

硅橡胶绝缘(阻燃)软电力电缆

Silicon rubber insulation(flame retardant)flexible power cable

硅橡胶(阻燃) 扁电力电缆

Silicon rubber (flame retardant)flat power cable

硅橡胶(阻燃) 控制软电缆

Silicon rubber (flame retardant)control flexible cable

低烟低卤阻燃控制电缆

Low smoke low halogen flame retardant control cable

无卤低烟阻燃、耐火电缆

Low smoke zero halogen flame retardant fire resistant cable

耐火电缆

Fire resistant cable

氟塑料绝缘耐高温控制电缆

High temperature resistant control cable with Fluoroplastic insulation

丁腈聚氯乙烯复合物软电缆

Butadiene PVC compound Flexible Cable

自控温伴热电缆

Self-thermal control heating cable

恒功率电热带

Constant power electrically-heated tape

AF-200、AF-260型氟塑料安装线

AF-200 & AF-260 Fluoroplastics installation wire

AF-125型氟塑料安装线

AF-125 type Fluoroplastics installation wire

180℃电机绕组引接软电缆

180℃ flexible cable for motor winding connection

具有屏蔽和耐化学药品功能的电力电缆

Power cable with shielding and chemical medicine resistance

耐高温(阻燃)电力电缆

High Temperature Resistant (Flame Retardant) Power Cable

本产品适用于额定电压0.6/1kV及以下的高温范围和恶劣环境内, 作电气设备电能传输线。

一、生产执行标准 采用企业标准

二、使用特性

- 1、额定电压U₀/U: 0.6/1kV。
- 2、电缆允许最高工作温度: 氟塑料绝缘及护套为200℃; 氟塑料绝缘耐热105聚氯乙烯护套为105℃; 氟塑料绝缘硅橡胶护套为180℃。
- 3、短路时(最长持续间不超过5S)电缆导体的最高温度不超过250℃。
- 4、电缆敷设温度应不低于-15℃。
- 5、电缆的弯曲半径如下: 单芯电缆: 其弯曲半径不小于电缆外径的20D。
三芯电缆:其弯曲半径不小于电缆外径的15D。
- 6、氟塑料绝缘及护套型电力电缆具有优异的耐化学腐蚀性、耐高温及阻燃性。

三、电缆的型号名称

1、电缆的型号名称如表1

It is used as power transmission cable for electric equipments of rated voltage 0.6/1kV or lower in bad environment or that with high temperature.

Executive standard: enterprise standard

Performance in Usage

- 1: Rated voltage U₀/U: 0.6/1kV
- 2: Max.working temperature allowed by cable is 200℃ for cable with fluoroplastic insulation and sheath, 105℃ for cable with fluoroplastic insulation, 105℃ heat resistant and PVC sheath, and 180℃ for cable with fluoroplastic insulation and silicon rubber sheath.
- 3: Max temperature of cable conductor is no more than 250℃ during short circuit (The longest lasting time is no more than 5s).
- 4: Temperature for installation is no less than -15℃.
- 5: Bending radius of cable as follows:
It is no less than 20 times that of cable outer diameter for cable with single core
It is no less than 15 times that of cable outer diameter for cable with 3 cores
- 6: Power cable with fluoroplastic insulation and sheath has good features of chemical corrosion resistance, high temperature resistance and flame retardance.

Type and Description

Type and Description in Table 1

Table 1

型 号 Type	名 称 Description
FF	聚全氟乙烯绝缘护套耐高温电力电缆 High temperature resistant power cable with F ₄₆ insulation and sheath
FF22	聚全氟乙烯绝缘护套钢带铠装耐高温电力电缆 High temperature resistant power cable with F ₄₆ insulation and sheath, steel tape armoring
(ZR)-FG	聚全氟乙烯绝缘(阻燃)硅橡胶护套耐高温电力电缆 High temperature resistant power cable with F ₄₆ insulation (flame retardant)and silicon rubber sheath
(ZR)-FG22	聚全氟乙烯绝缘(阻燃)硅橡胶护套钢带铠装耐高温电力电缆 High temperature resistant power cable with F ₄₆ insulation (flame retardant), silicon rubber sheath and steel tape armoring
(ZR)-FV	聚全氟乙烯绝缘(阻燃)耐热105聚氯乙烯护套耐高温电力电缆 High temperature resistant power cable with F ₄₆ insulation (flame retardant), 105℃ heat resistance and PVC sheath
(ZR)-FV22	聚全氟乙烯绝缘(阻燃)耐热105聚氯乙烯护套钢带铠装耐高温电力电缆 High temperature resistant power cable with F ₄₆ insulation (flame retardant), 105℃ heat resistance , PVC sheath and steel tape armoring

注: 型号中“22”表示钢带铠装, 如需钢丝铠装结构应将型号中的“22”改为“32”即可。

Note: 22 means steel tape armor “22” should be changed into “32” for cable with steel wire armor (if needed).

四、电缆规格

电缆规格表示为芯数×导体标称截面mm2,其芯数及导体标称截面如表2

Specification of Cable

“core number * nominal cross section” stands for cable specification. Please see the following table 2 for core number and nominal cross section

Table 2

型 号 Type	芯 数 Core number	标称截面 mm2 Nominal cross section area
FF	1、2、3、4、5、 3+2、3+1	1.5~95
FF22		2.5~70
(ZR)-FG、(ZR)-FV		1.5~240
(ZR)-FG22、(ZR)-FV22		2.5~240

五、技术参数

- 1、20℃导体直流电阻应符合GB/T3956标准规定。
- 2、电缆应经受3500V交流耐压试验5min绝缘不击穿。

Technical Parameter

- 1: DC resistance of conductor at 20℃ shall meet the requirement of GB/T3956 standard.
- 2: Cable shall bear AC voltage test of 3500V for 5min without puncture of insulation.

六、交货长度

允许根据双方协议长度交货；长度计量误差不超过±0.5%。

Delivery length

Delivery length of cable depends on both agreements with length error allowance of ±0.5%

硅橡胶绝缘(阻燃)软电力电缆

Soft Power Cable with Silicon Rubber Insulation(flame retardant)

本产品适用于额定电压0.6/1kV及以下的高温范围和恶劣环境内, 作电气设备电能传输线。它具有优良的耐高温、阻燃、耐辐射、耐老化、耐臭氧、防水等特性, 并具有很好的耐寒性、耐候性。

一、生产执行标准: 采用企业标准。

二、使用特性

- 1、额定电压UO/U:600/1000V。
- 2、电缆允许工作温度范围-60℃~+180℃。
- 3、短路时(最长持续间不超过5S)电缆导体的最高温度不超过250℃。
- 4、电缆敷设温度应不低于-20℃。
- 5、电缆的弯曲半径如下: 单芯电缆弯曲半径不小于电缆外径的15D; (D-电缆外径);
三芯电缆弯曲半径不小于电缆外径的12D。

三、电缆型号名称

- 1、电缆型号名称如表1

It is used as power transmission cable of electric equipments of rated voltage 0.6/1kv or lower in bad environment or that with high temperature. It has good features of high temperature resistance, flame resistance, radiation resistance, aging resistance, ozone resistance, water proof, freezing resistance, weather resistance etc.

Executive standard: enterprise standard

Performance for Usage

- 1: Rated voltage UO/U:600/1000V
- 2: Working temperature allowed by cable is -60℃~+180℃.
- 3: Max temperature of cable conductor is no more than 250℃ during short circuit(The longest lasting time is no more than 5s.)
- 4: Temperature for installing is no less than -20℃.
- 5: Bending radius of cable as follows:
It is no less than 15 times that of cable outer diameter for cable with single core
It is no less than 12 times that of cable outer diameter for cable with three cores

Type and Description

Type and Description Listed in the Following Table

Table 1

型 号 Type	名 称 Description
(ZR)-HGG	硅橡胶绝缘硅橡胶护套(阻燃)电力软电缆 (flame retardant)power soft cable with silicon rubber insulation and sheath
(ZR)-HG GP	硅橡胶绝缘硅橡胶护套铜丝编织屏蔽(阻燃)电力软电缆 (flame retardant)power soft cable with silicon rubber insulation and sheath, copper wire braided shielding
(ZR)-HG GP2	硅橡胶绝缘硅橡胶护套铜带屏蔽(阻燃)电力软电缆 (flame retardant)power soft cable with silicon rubber insulation and sheath, copper tape shielding
(ZR)-HGV _F	硅橡胶绝缘丁腈聚氯乙烯护套(阻燃)电力软电缆 (flame retardant)power soft cable with silicon rubber insulation and butadiene PVC sheath
(ZR)-HGV _F P	硅橡胶绝缘丁腈聚氯乙烯护套铜丝编织屏蔽(阻燃)电力软电缆 (flame retardant)power soft cable with silicon rubber insulation, butadiene PVC sheath, copper wire braided shielding
(ZR)-HGV _F 22	硅橡胶绝缘丁腈聚氯乙烯护套钢带铠装(阻燃)电力软电缆 (flame retardant)power soft cable with silicon rubber insulation, butadiene PVC sheath, steel tape armor
(ZR)-HGV _F P2	硅橡胶绝缘丁腈聚氯乙烯护套铜带绕包屏蔽(阻燃)电力软电缆 (flame retardant)power soft cable with silicon rubber insulation, butadiene PVC sheath, copper tape wrapped shielding

注: 型号中H-硅橡胶电力软电缆系列代号,
G-硅橡胶绝缘或护套,
VF-丁腈聚氯乙烯护套,
P-铜丝编织屏蔽,
22-钢带铠装, 如需钢丝铠装结构应将型号中的“22”改为“32”即可。

Note: type-naming code
H means series No. of silicon rubber power soft cable.
G means silicon rubber insulation or sheath
VF means butadiene PVC sheath
P means copper wire braided shielding
22 means steel tape armor “22” in the original type should be changed into “32” for cable with steel wire armor (if needed).

四、规格范围

电缆规格用导体芯数×导体标称截面mm2表示，如表2：

Specification

“core number * nominal cross section area” stands for cable specification. Please see the following table 2

Table 2

型 号 Type	芯 数 Core number	标称截面 mm ² Nominal cross section area
(ZR)-HGG	1、2、3、4、5、 3+2、3+1	单芯: 1.5~500 多芯: 1.5~240 1.5~500 for single core 1.5~240 for multi-core
(ZR)-HGGP		
(ZR)-HGGP2		
(ZR)-HGV _F		
(ZR)-HGV _F P		
(ZR)-HGV _F 22		
(ZR)-HGV _F P2		

五、技术参数

- 1、成品电缆导体20℃时直流电阻:应满足GB/T3956标准要求，成品电缆导电线芯的直流电阻，换算到电缆长度为1m，标称截面为1mm2和温度为20℃时，铜芯线芯应不大于0.0184Ω。
- 2、成品电缆绝缘线芯的绝缘电阻：成品电缆绝缘线芯的绝缘电阻，换算到电缆长度为1km和温度为20℃时，导电线芯截面在50mm2及以下的应不小于50MΩ,70~185mm2的应不小于35MΩ。
- 3、成品电缆应经受工频交流试验电压3000V、5min电压试验，绝缘无击穿。

Technical parameter

- 1: DC resistance of finished cable conductor at 20℃ shall meet the requirement of GB/T3956 standard. Conductive core DC resistance of finished cable is no more than 0.0184Ω for cable with cross section 1mm2 under the condition that cable length is 1m and temperature is 20℃.
- 2: Insulated resistance of finished cable insulated conductor will be no less than 50MΩ for cable with conductive core cross section 50mm2 or lower and 35 MΩ for cable with conductive core cross section 70~185mm2 under the condition that cable length is 1km and temperature is 20℃.
- 3: Finished cable shall bear A.C voltage test of 3500V under power frequency for 5 minutes without puncture of insulation.

六、交货长度

允许根据双方协议长度交货；长度计量误差不超过±0.5%。

Delivery Length

Delivery length of cable depends on both agreements with length error allowance of ±0.5%

硅橡胶(阻燃)扁电力电缆

Silicon Rubber (flame retardant) Flat Power Cable

该电缆广泛应用于起重、运输、机械、电气、钢铁、医药、冶金、港口、矿山、物流、仓储等行业的0.6/1kV及以下各种移动动力装置的电源连接及控制、信号、照明等。

一、生产执行标准： 采用企业标准

二、使用特性

- 1、额定电压:U₀/U为0.6/1kV。
- 2、电缆允许工作温度范围: 硅橡胶绝缘-60℃~+180℃; 氟塑料绝缘-60℃~+200℃。
- 3、短路时(最长持续间不超过5S)电缆导体的最高温度不超过250℃。
- 4、电缆敷设温度应不低于-20℃。
- 5、缆最小弯曲半径为电缆小边长度的10倍。

三、电缆的型号名称

- 1、电缆型号名称如表1

It is used as power connection & controlling & signal & lighting of various moving power equipment, in the field of lifting, transportation, machine, electronic, steel, medicine, metallurgy, port, mine and storage etc.

Executive standard: enterprise standard

Performance for Usage

- 1: Rated voltage U₀/U:0.6/1kV
- 2: Working temperature allowed by cable: -60℃~+180℃ for cable with silicon rubber insulation; -60℃~+200℃ for cable with fluoroplastics insulation
- 3: Max temperature of cable conductor is no more than 250℃ during short circuit(the longest lasting time is no more than 5s).
- 4: Temperature for installing is no lower than -20℃.
- 5: Min. bending radius of cable is 10 times that of small border length of cable.

Type and Description

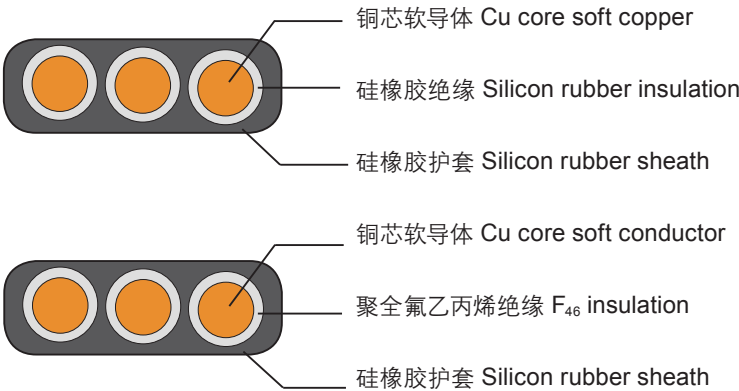
Type and description of cable listed in table 1

Table 1

型 号 Type	名 称 Description
(ZR)-YGCB	硅橡胶绝缘硅橡胶护套(阻燃)扁电力电缆 (flame retardant)Flat power cable with silicon rubber insulation and sheath
(ZR)-YF46GRB	聚全氟乙丙烯绝缘硅橡胶护套(阻燃)扁电力电缆 (flame retardant)Flat power cable with F ₄₆ insulation and silicon rubber sheath

- 2、电缆结构图如下:

The figure of cable structure



四、主要性能参数

Main Performance Parameter

- 1、在20℃时导体直流电阻应符合下表规定:

DC resistance of conductor at 20℃ shall meet the requirements of the following table:

截面mm ² Cross section area Romax	0.75	1	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185
(Ω/km)	26.0	19.5	13.3	7.98	4.95	3.30	1.91	1.21	0.780	0.551	0.386	0.272	0.206	0.161	0.129	0.106

2、规格及参考数据如下表规定:

Specification and data for reference stipulated in the following table:

标称截面mm ² Nominal cross section area	导体直径mm Conductor diameter	绝缘厚度mm Insulation thickness	护套厚度mm Sheath thickness	间距mm Space	电缆外径mm Cable OD	重量(kg) Weight
4×1	1.29	0.8	1.6	1	17.76×6.09	225
6×1	1.29	0.8	1.6	1	25.54×6.09	3.8
8×1	1.29	0.8	1.6	1	33.32×3.09	360
4×1.5	1.56	1	1.6	1	20.44×6.76	291
6×1.5	1.56	1	1.6	1	29.56×6.76	360
8×1.5	1.56	1	1.6	1	38.68×6.76	469
4×2.5	2.05	1.4	1.6	1.5	27.1×8.05	333
6×2.5	2.05	1.4	1.6	1.5	39.8×8.05	536
8×2.5	2.05	1.4	1.6	1.5	52.5×8.05	608
4×4	2.60	1.8	1.7	1.7	33.3×9.6	457
6×4	2.60	1.8	1.7	1.7	49.1×9.6	790
4×6	3.15	2	1.9	2.0	38.4×11.5	615
6×6	3.15	2	1.9	2.0	56.7×11.5	1098
3×10	4.4	2.5	2.4	2.4	37.8×14.2	702
6×10	4.4	2.5	2.4	2.4	73.2×14.2	1428
3×25	6.81	2.8	2.7	2.8	48.23×17.81	1645
6×25	6.81	2.8	2.7	2.8	93.86×17.81	3325
4×35	7.9	3	3	3	70.6×19.9	2181
3×50	9.2	3.2	3.1	3.4	59.8×21.8	2681
4×50	9.2	3.2	3.1	3.4	78.8×21.8	3158
3×70	12.6	3.4	3.3	3.8	72.4×26	2878
3×120	15.4	3.8	3.07	4.2	84.8×30.4	5157
3×150	16.4	4	4.1	4.4	90.2×32.6	6171

3、成品电缆线芯的绝缘电阻

成品电缆绝缘线芯的绝缘电阻, 换算到电缆长度为1km和温度为20℃时, 导电线芯截面在50mm²及以下的应不小于50MΩ, 70~185mm²的应不小于35 MΩ; 多芯电缆的成品电压试验应经受交流50HZ, 试验电压3500V、5min, 绝缘无击穿。

Insulated Resistance of Finished Cable Conductor

Insulated resistance of finished cable insulated conductor will be no less than 50MΩ for cable with conductive core cross section 50mm² or lower and 35 MΩ for cable with conductive core cross section 70~185mm² under the condition that cable length is 1km and temperature is 20℃. Finished cable with multi-core shall bear voltage test of 3500v, AC 50Hz for 5 minutes without puncture of insulation.

五、交货长度

允许根据双方协议长度交货; 长度计量误差不超过±0.5%。

Delivery Length

Delivery length of cable depends on both agreements with length error allowance of ±0.5%

硅橡胶（阻燃）控制软电缆

Silicon Rubber(flame retardant)Control soft Cable

本产品适用于钢铁、冶炼、电厂、焦化厂、航空、冶金机械、石油、化工等高温工业中，额定电压450/750V及以下的控制及监控回路中。它具有优良的耐高温、阻燃、耐辐射、耐老化、耐臭氧、防水等特性，同时具有很好的耐寒性、耐候性。

一、生产执行标准 采用企业标准。

二、使用条件

- 1、交流额定电压U₀/U: 450/750V ;
- 2、电缆的敷设温度应不低于-20℃;
- 3、电缆允许工作温度范围: -60℃~+180℃, 推荐弯曲半径不小于电缆外径的6倍, 有铜带屏蔽结构的电缆其弯曲半径不小于电缆外径的10倍;
- 4、有优良的耐臭氧老化、热老化、紫外光老化和大气老化性能;
- 5、电绝缘性能好, 耐电晕和抗电弧性很优越;

三、型号名称及主要使用范围如表1

It is widely used for supervising and controlling return circuit of rated voltage 450/750V or lower for production under high temperature in the field of steel & iron, refinery, power plant, coking plant, aviation, metallurgy, machinery, petrochemical industry etc. It has good feature of high temperature resistance, flame retardance, radiation resistance, aging resistance, ozone resistance, water proof, freezing resistance and weather resistance.

Executive standard: enterprise standard

Working Condition

- 1: A.C rated voltage U₀/U: 450/750V
- 2: Temperature for installing is no lower than -20℃.
- 3: Working temperature allowed by cable is -60℃~+180℃. Recommended bending radius is no less than 6 times that of cable OD and 10 times that of cable OD for cable with copper tape shielding.
- 4: It has good features of ozone aging resistance, thermal aging resistance, ultraviolet resistance and atmosphere aging resistance.
- 5: Good performance of electric insulation, corona resistance and arc resistance.

Type, description and main application occasion listed in the following table 1

Table 1

型号 Type	名称 Description	主要使用范围 Main application occasion
(ZR)-KGG	铜芯硅橡胶绝缘硅橡胶护套控制电缆 Control cable with Cu core, silicon rubber insulation and sheath	敷设在室内、电缆沟、管道固定场合 To be fixedly laid indoor, in cable furrow or pipe
(ZR)-KGGP	铜芯硅橡胶绝缘硅橡胶护套编织屏蔽控制电缆 Control cable with Cu core, silicon rubber insulation and sheath, braided shielding	敷设在室内、电缆沟、管道等要求屏蔽的固定场合 To be fixedly laid indoor, in cable furrow or pipe with demand on shielding
(ZR)-KGGP ₂	铜芯硅橡胶绝缘硅橡胶护套铜带屏蔽控制电缆 Control cable with Cu core, silicon rubber insulation and sheath, copper tape shielding	敷设在室内、电缆沟、管道等要求屏蔽的固定场合 To be fixed laid indoor, in cable furrow or pipe with demand on shielding
(ZR)-KGGR	铜芯硅橡胶绝缘硅橡胶护套控制软电缆 Control soft cable with Cu core, silicon rubber insulation and sheath	敷设在室内移动要求柔软等场合 to be laid indoor or in the environment with demand on softness and mobility
(ZR)-KGGRP	铜芯硅橡胶绝缘硅橡胶护套编织屏蔽控制软电缆 Control soft cable with Cu core, silicon rubber insulation and sheath, braided shielding	敷设在室内移动要求柔软、屏蔽等场合 to be laid indoor or in the environment with demand on softness and shielding

四、电缆规格如下表所示

Cable structure as follows

型 号 Type	额定 电压V Rated voltage	导体标称截面mm ² Nominal cross section area of conductor							
		0.5	0.75	1.0	1.5	2.5	4	6	10
		芯 数 core number							
KGG、KGGP、KGGP ₂	450/750	2~61					2~14	2~10	
KGGR、KGGRP		4~61		4~48		2~14			
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、61芯,如用户有特殊需要,也可生产61芯以下任意芯数的电缆。 Note: recommended series of core number: core of 2,3,4,5,7,8,10,12,14,16,19,24,27,30,37,44,48,52,61. We also produce cable with 61 cores or lower.									

五、技术参数

- 1、成品电缆绝缘线芯的绝缘电阻：换算到电缆长度为1km、温度为20℃时应不小于50MΩ。
- 2、成品电缆应经受工频交流3000V/5min电压试验，绝缘不击穿。

六、交货要求

允许根据双方协议长度交货；长度计量误差不超过±0.5%。

Technical Parameter

- 1: Insulated resistance of finished cable insulated conductor will be no less than 50M under the condition that cable length is 1km and temperature is 20℃.
- 2: Finished cable shall bear AC voltage test of 3000V under power frequency for 5 minutes without puncture of insulation.

Delivery Length

Delivery length of cable depends on the both agreement with length error allowance of ±0.5%

低烟低卤阻燃控制电缆

Control Cable with Low smoke, Low halogen and Flame retardant

本产品适用于额定电压450/750V及以下有低烟、低卤阻燃要求作为控制监控回路等场合使用。

一、生产执行标准:
采用企业标准及参照GB9330-88。

二、使用特性

- 1、额定电压:U₀/U为450/750V。
- 2、电缆长期允许工作温度70℃。
- 3、电缆敷设温度应不低于0℃，推荐弯曲半径：
有铠装和铜带屏蔽结构的电缆:其弯曲半径不小于电缆外径的12倍；其它结构的电缆:其弯曲半径不小于电缆外径的6倍。

三、电缆的型号名称

1、电缆型号名称如表1：

It is used for supervising and controlling return circuit of rated voltage 450/750V or lower with demand on low smoke, low halogen and flame retardance.

Executive standard:
enterprise standard and GB9330-88 standard for reference

Working Condition

- 1: Rated voltage: 450/750V
 - 2: Long-term working temperature allowed by cable is 70℃.
 - 3: Ambient temperature for installing cable shall be no lower than 0℃.
- Recommended bending radius:
It shall be no less than 12 times that of cable O.D for armored cable with copper tape shielding structure and 6 times that of cable O.D for cable with other structure.

Type and Description

Type and Description in table 1

Table 1

型 号 Type	名 称 Description
DDZ -KVV	铜芯低烟低卤阻燃型聚氯乙烯绝缘、护套控制电缆 Control cable with Cu core, low smoke & halogen, flame retardant, PVC insulation and sheath
DDZ -KVVP	铜芯低烟低卤阻燃型聚氯乙烯绝缘、护套铜丝编织屏蔽控制电缆 Control cable with Cu core, low smoke & halogen, flame retardant, PVC insulation and sheath, copper wire braided shielding
DDZ -KVVR	铜芯低烟低卤阻燃型聚氯乙烯绝缘、护套控制软电缆 Control soft cable with Cu core, low smoke & halogen, flame retardant, PVC insulation and sheath
DDZ -KVVRP	铜芯低烟低卤阻燃型聚氯乙烯绝缘、护套铜丝编织屏蔽控制软电缆 Control soft cable with Cu core, low smoke & halogen, flame retardant, PVC insulation and sheath, copper wire braided shielding
DDZ -KVVP2	铜芯低烟低卤阻燃型聚氯乙烯绝缘、护套铜带绕包屏蔽控制电缆 Control cable with Cu core, low smoke & halogen, flame retardant, PVC insulation and sheath, copper tape wrapped shielding
DDZ -KVVP22	铜芯低烟低卤阻燃型聚氯乙烯绝缘、护套钢带铠装控制电缆 Control cable with Cu core, low smoke & halogen, flame retardant, PVC insulation and sheath, steel tape armor
DDZ -KVVP32	铜芯低烟低卤阻燃型聚氯乙烯绝缘、护套钢丝铠装控制电缆 Control cable with Cu core, low smoke & halogen, flame retardant, PVC insulation and sheath, steel wire armor

注：型号中‘DDZ’表示低烟低卤阻燃型。

Remark: ‘DDZ’ means low smoke & halogen, flame retardant

2、主要名词术语解释 Explanation of Main Noun Term

低烟：在规定试验条件下，试样受热分解或燃烧释放出的烟比较少，符合规定的指标特性。

低卤：在规定试验条件下，试样燃烧时放出的卤化氢气体的含量比较少，符合规定指标的特性。

阻燃：在一定的试验条件下，试样被燃烧，在撤去火源后，火焰的蔓延仅在规定的范围内，残焰或残灼在规定的时间内能自行熄灭的特性。

Low smoke: under stipulated testing conditions, smoke out of decomposition with heat or emission in firing is less, which conforms to stipulated indices.

Low halogen: under stipulated testing conditions, HCl content of smoke emitted in firing is less which conforms to stipulated indices.

Flame retardant: under stipulated testing conditions, the tested sample is fired. After removing from source, flame spreads within stimulated range, remnant flame will go out on itself within stipulated time.

四、电缆规格范围如表2:

Specification Scope in Table 2

Table 2

型 号 Type	额定电压Rated voltage V	导体标称截面mm ² Nominal cross section area of conductor							
		0.5	0.75	1.0	1.5	2.5	4	6	10
		芯 数 core no.							
DDZ-KVV、DDZ-KVVP	450/750	2~61					2~37	2~14	
DDZ-KVVP2、DDZ-KVVP22 DDZ-KVVP32		4~61					2~37		
DDZ-KVVR、DDZ-KVVRP		2~61					2~37		

五、主要技术指标

Main Technical Indices

1、低烟低卤阻燃性能指标

(1) 烟密度试验: 最小透光率≥40%;

(2) Hcl气体释放量不大于100mg/g。

2、20℃时导体直流电阻值及耐电压强度

performance indices of low smoke & halogen and flame retardance

Smoke density test: min. light-penetration ratio is ≥ 40%.

Hcl emission value shall be no more than 100mg/g.

Conductor DC resistance value & voltage withstand stress at 20℃

标称截面 (mm ²) Nominal cross section area	导体结构 根数/直径(mm) Conductor structure Pieces/diameter	20℃导体直流电阻(Ω/km) Conductor DC resistance at 20℃		耐电压强度 Voltage withstand stress
		不镀锡 Non tinned	镀锡 tinned	
0.5	1/0.8	36.0	36.7	3kV/5min绝缘无击穿。 Insulation without puncture
	7/0.30	36.0	36.7	
	16/0.20	39.0	40.1	
0.75	1/0.97	24.5	24.8	
	7/0.37	24.5	24.8	
	24/0.20	26.0	26.7	
1.0	1/1.13	18.1	18.2	
	7/0.43	18.1	18.2	
	32/0.20	19.5	20.0	
1.5	1/1.38	12.1	12.2	
	7/0.52	12.1	12.2	
	30/0.25	13.3	13.7	
2.5	1/1.78	7.41	7.56	
	7/0.68	7.41	7.56	
	49/0.26	7.98	8.21	
4	1/2.25	4.61	4.70	
	7/0.85	4.61	4.70	
	56/0.30	4.95	5.09	
6	1/2.76	3.08	3.11	
	7/1.04	3.08	3.11	
	84/0.30	3.30	3.39	
10	7/1.35	1.83	1.84	

3、电缆的外形尺寸

参照聚氯乙烯绝缘和护套控制电缆。

External Dimension of Cable

Please refer to control cable with PVC insulation and sheath

六、交货长度

Delivery length

根据双方协议允许任何长度交货; 长度计量误差不超过±0.5%。

Delivery length of cable depends on both agreements with length error allowance of ±0.5%

无卤低烟阻燃、耐火电缆

Low Smoke No Halogen Flame Retardant Fire Resistant Cable

本产品适用于额定电压600/1000V及以下低烟无卤要求的电力系统或控制及监控回路中。

一、生产执行标准

采用企业标准及参照GB9330-88、GB/T12706-2002。

二、使用特性

- 1、 电缆长期允许工作温度90℃。
- 2、 电缆敷设温度应不低于0℃，推荐弯曲半径：
无卤阻燃控制电缆：①有铠装和铜带屏蔽结构的电缆：其弯曲半径不小于电缆外径的12倍；
②其它结构电缆：其弯曲半径不小于电缆外径的6倍。
无卤阻燃电力电缆：①单芯电缆：其弯曲半径不小于电缆外径的20倍；
②多芯电缆：其弯曲半径不小于电缆外径的15倍。

三、电缆的型号名称

- 1、 电缆的型号名称如下表

型号 type		名称name
铜芯 Copper core	铝芯 Aluminum core	
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 core (aluminum core) XLPE insulation low smoke no halogen flame retardant power cable
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 core (aluminum core) XLPE insulation steel tape armoring low smoke no halogen 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 core (aluminum core) XLPE insulation thin steel wire armoring low smoke no halogen flame retardant power cable
WDZN-YJY	/	铜芯交联聚乙烯绝缘无卤低烟阻燃耐火电力电缆 Copper core XLPE insulation low smoke no halogen flame retardant fire resistant power cable
WDZN-YJY23	/	铜芯交联聚乙烯绝缘钢带铠装无卤低烟阻燃耐火电力电缆 Copper core XLPE insulation steel tape armoring low smoke no halogen flame retardant fire resistant power cable
WDZN-YJY33	/	铜芯交联聚乙烯绝缘细钢丝铠装无卤低烟阻燃耐火电力电缆 Copper core XLPE insulation thin steel wire armoring low smoke no halogen flame retardant fire resistant power cable

The product is used for controlling and supervising return circuit or power system with requirement of rated voltage 600/1000V or lower, low smoke and no halogen.

Executive standard:

Use enterprise standard or refer to GB9330-88、GB/T12706-2002 standard.

Working condition

Long-term working temperature of cable is 90℃.
Cable installation temperature is no less than 0℃.
Recommended bending radius is as following:
No halogen flame retardant control cable:
Bending radius is no less than 12 times that of cable outer diameter for cable with structure of armoring and copper tape shielding.
Bending radius is no less than 6 times that of cable outer diameter for cable with other structure.
No halogen flame retardant power cable:
Bending radius is no less than 20 times that of cable outer diameter for cable with single core
Bending radius is no less than 15 times that of cable outer diameter for cable with multi cores.

cable type & name

cable type & name as following:

型号 type	名称name
WDZ-KYJY	铜芯交联聚乙烯绝缘无卤低烟阻燃控制电缆 Copper core XLPE insulation low smoke no halogen flame retardant control cable
WDZ-KYJYP	铜芯交联聚乙烯绝缘铜丝屏蔽无卤低烟阻燃控制电缆 Copper core XLPE insulation copper wire shielding low smoke no halogen flame retardant control cable
WDZ-KYJYP2	铜芯交联聚乙烯绝缘铜带屏蔽无卤低烟阻燃控制电缆 Copper core XLPE insulation copper tape shielding low smoke no halogen flame retardant control cable
WDZ-KYJYP2-23	铜芯交联聚乙烯绝缘铜带屏蔽钢带铠装无卤低烟阻燃控制电缆 Copper core XLPE insulation copper tape shielding steel tape armoring low smoke no halogen flame retardant control cable
WDZ-KYJY33	铜芯交联聚乙烯绝缘细钢丝铠装无卤低烟阻燃控制电缆 Copper core XLPE insulation thin steel wire armoring low smoke no halogen flame retardant control cable
WDZN-KYJY	铜芯交联聚乙烯绝缘无卤低烟阻燃耐火控制电缆 Copper core XLPE insulation low smoke no halogen flame retardant fire resistant control cable
WDZN-KYJYP2	铜芯交联聚乙烯绝缘铜带屏蔽无卤低烟阻燃耐火控制电缆 Copper core XLPE insulation copper tape shielding low smoke no halogen flame retardant fire resistant control cable
WDZN-KYJYP2-23	铜芯交联聚乙烯绝缘铜带屏蔽钢带铠装无卤低烟阻燃耐火控制电缆 Copper core XLPE insulation copper tape shielding steel tape armoring low smoke no halogen flame retardant fire resistant control cable

2、主要名词术语解释

低烟：在规定试验条件下，试样受热分解或燃烧释放出的烟比较少，符合规定指标的特性。

无卤：在规定试验条件下，试样燃烧时放出的卤化氢气体的含量极少，符合规定指标的特性。

阻燃：在一定的试验条件下，试样被燃烧，在撤去火源后，火焰的蔓延仅在规定的范围内，残焰或残灼在规定的时间内能自行熄灭的特性。

definition of main noun glossary

Low smoke: cable sample discharges little smoke when be heated or be burn under stipulated test condition, meeting the requirement of stipulated target.

No halogen: cable sample discharges little hydrogen halogen gas when being burn under stipulated test condition, meeting the requirement of stipulated target.

Flame retardant: under certain test condition, cable sample is burn. When fire resource is withdrawn, spark spreading is controlled within stipulated range. Remnant spark or burning can put out by itself within stipulated time.

四、电缆的规格如下表所示

cable specification as followings:

型号type	额定电压 V Rated voltage	导体标称截面mm2 nominal cross section area of conductor							
		0.5	0.75	1.0	1.5	2.5	4	6	10
		芯数 core number							
WDZ-KYJY、WDZ-KYJYP	600/1000V	2~61				2~37	2~14		
WDZ-KYJYP2、WDZ-KYJY33 WDZ-KYJYP2-23		4~61							
WDZN-KYJY		/		2~61					
4~61									
WDZN-KYJYP2 WDZN-KYJYP2-23		单芯single core：2.5mm2~500mm2 2、3、4、5、3+1、3+2、4+1芯core：2.5~300mm2							
WDZ-YJY、WDZ-YJLY									
WDZ-YJY23、WDZ-YJLY23									
WDZ-YJY33、WDZ-YJLY33									
WDZN-YJY、WDZN-YJY23									
WDZN-YJY33									

五、主要技术指标

- 1、导体直流电阻符合GB/T3956的规定。
- 2、90℃绝缘电阻常数不小于3.67MΩ·km，体积电阻率不小于1012Ω·Cm。
- 3、电缆均应经受3.5kV交流电压试验，5min绝缘不击穿。
- 4、无卤低烟阻燃性能指标：

main technical parameter

Conductor DC resistance is in accordance with GB/T3956 standard.

Insulated resistance constant is no less than 3.67MΩ·km at 90℃. Volume resistance ratio is no less than 1012Ω·Cm.

Cable shall endure 3.5kv A.C. voltage test for 5 minutes without puncture.

performance target of no halogen, low smoke and flame retardant

试验项目 test item	单位 unit	性能要求performance requirement	试验方法 test method
烟密度试验 Smoke density test 最小透光率 Min. permeate ratio	%	60	GB/T17651-1998
腐蚀性试验 Corrosive test 最小PH值 Min. PH value 电导率最大值 Max. conductive ratio	μ S/mm	4.3 10	GB/T17650.2-1998(idtIEC60754)
卤化氢气体含量 Hydrogen halogen gas content	mg/g	≤5	GB/T17650.1-1998(idtIEC60754)
成束试验 Bundle burning test 试验级别 test class 供火时间 time for fire 每米可燃物总体积 Total volume of combustibile per meter 炭化高度carbide height	min L m	A B C 40 40 2 7 3.5 1.5 2.5 2.5 2.5	GB/T18380.3-2001 (替代replace for GB12666.5-90)

六、交货长度

允许根据双方协议长度交货，长度计量误差不超过±0.5%。

delivery length

Delivery length depends on both agreement with length error no more than ±0.5%.

耐火电缆

Fire Resistant Cable

本产品适用于高层建筑、油田、电站、电厂、矿山、化工、地铁等要求防火条件高的场合，也时应急电源、消防泵、电梯通讯信号系统的应备电缆。该产品具有较高的耐火能力，在经受火焰直接燃烧情况下，在一定的时间内（不小于3h）不发生短路和断路故障，确保继续供电以维持照明和传输信号，保护人员有足够的时间安全撤离，且有利于灭火和减少损失。

一、生产执行标准 采用企业标准

二、使用条件

- 1、交流额定电压：U0/U（V系列：600/1000V，K系列：450/750V，B系列450/750V）。
- 2、电缆最高长期工作温度
 - ① 阻燃聚氯乙烯绝缘及护套：70℃和105℃两种；
 - ② 交联聚乙烯绝缘：90℃；。
- 3、电缆安装敷设温度应不低于0℃。
- 4、敷设推荐的允许弯曲半径：电力电缆：单芯电缆≥40D；多芯电缆≥30D。控制电缆：≥12D。B系列塑料电线：≥4D（D<25mm时）；≥6D（D≥25mm时）。

三、基本型号、名称如表1

It is used in the environment with high demand on fire resistant performance such as high-rise building, oil field, power station, power plant, mine, chemical industry, subway and so on. It is also necessary cable prepared for emergency power, fire-flight pump and communication system for elevator. In time of being directly fired by flame, it could endure continually supplying power and transmitted signal to keep lighting within certain time (no less than 3 hours) for people to retreat safely and also to benefit fighting fire to lower damage.

Executive standard: enterprise standard

Working Condition

- 1: AC rated voltage: U0/U（V series: 600/1000V; K series: 450/750V; Bseries450/750V）
- 2: Max temperature of long term working is 70℃ &105℃ for flame retardant cable with PVC insulation and 90℃ for cable with XLPE insulation.
- 3: Temperature for installation is no lower than 0℃.
- 4: Recommended bending radius for installing: ≥40D for power cable with single core; ≥30D for power cable with multi-core; ≥12D for control cable.
B series plastic wire: ≥4D（D<25mmw）; ≥6D（D≥25mm）
Note: D means outer diameter

Type and Description in Table 1

Table 1

型 号 Type	名称 Description	
NH-BV NH-BVV	铜芯聚氯乙烯绝缘耐火电线 Fire resistant wire with Cu core, PVC insulation 铜芯聚氯乙烯绝缘聚氯乙烯护套圆形耐火电线 Round type fire resistant wire with Cu core, PVC insulation and sheath	注：本公司 还可以向用户提供钢丝 铠装结构的耐火电缆， 订货时可将原型号中的 “22”改为“32”即可。 Note: We also produce fire resistant cable with steel wire armor. “22” should be replaced by “32” when ordering
NH-KVV NH-KVV22	铜芯聚氯乙烯绝缘聚氯乙烯护套耐火控制电缆 Fire resistant control cable with Cu core, PVC insulation and sheath 铜芯聚氯乙烯绝缘聚氯乙烯护套钢带铠装耐火控制电缆 Fire resistant control cable with Cu core, PVC insulation and sheath, steel tape armor	
NH-VV NH-VV22	铜芯聚氯乙烯绝缘聚氯乙烯护套耐火电力电缆 Fire resistant power cable with Cu core, PVC insulation and sheath 铜芯聚氯乙烯绝缘聚氯乙烯护套钢带铠装耐火电力电缆 Fire resistant power cable with Cu core, PVC insulation and sheath, steel tape armor	
NH-YJV NH-YJV22	铜芯交联聚乙烯绝缘聚氯乙烯护套耐火电力电缆 Fire resistant power cable with Cu core, XLPE insulation and PVC sheath 铜芯交联聚乙烯绝缘聚氯乙烯护套钢带铠装耐火电力电缆 Fire resistant power cable with Cu core, XLPE insulation and PVC sheath, steel tape armor	

四、规格范围如表2

Specification Range in Table 2

Table 2

型 号 Type	电压等级 (V) Voltage degree	规格、截面 Specification Cross section area
NH-VV、NH-VV22、NH-YJV、NH-YJV22	600/1000	芯 数: 1~5芯, 3+2芯 截 面: 2.5~240 (mm ²) Core No.: 1~5 core, 3+2 core Cross section area: 2.5~240 (mm ²)
NH-KVV、NH-KVV22	450/750	芯 数: 2~61芯 截 面: 2.5~10 (mm ²) Core No.: 2~61 core Cross section area: 2.5~10 (mm ²)
NH-BV、NH-BVV	450/750	芯 数: 1~5芯 截 面: 2.5~240 (mm ²) Core No.: 1~5 core Cross section area: 2.5~240 (mm ²)

五、技术特性

- 1、产品的电气性能和物理机械性能与普通同类产品相同;
- 2、电缆的载流量和普通同类产品相同;
- 3、耐火特性应符合IEC60331标准要求: 电缆在燃烧试验期间3A熔丝不熔断。
- 4、耐火电缆的参考外径, 截面在25mm²及以下的比普通同型号的产品规格大15%, 截面在25mm²以上的比普通同型号产品规格大25%。

六、使用注意事项

- 1、电缆接头时, 导体和绝缘之间应用四的云母带重叠绕包扎紧作为耐火层, 其它施工方法与同类产品一致;
- 2、电缆应严格避免锐器损坏, 否则会降低电缆的耐火性能。

七、交货要求

允许根据双方协议长度交货; 长度计量误差不超过±0.5%。

Technical Performance

- 1: Electric performance and mechanical & physical performance of cable is the same to common cable in similar category.
- 2: Current-loading capacity of cable is the same to common cable in similar category.
- 3: Fire resistant performance shall meet the requirement of IEC60331 standard. 3A fuse wire won't break during burning test period.
- 4: Out diameter of fire resistant cable with cross section 25mm² or lower is bigger than that of common cable by 15%. Out diameter of fire resistant cable with cross section more than 25mm² is bigger than that of common cable by 25%.

Cautions

- 1: Four layers of mica tape should be wrapped around between insulation and conductor as fire resistant layer in connection of cable. Other installing measures may be taken according to that for similar type cable.
- 2: User should strictly avoid damage on cable with sharp-edged objects. Otherwise it would affect fire resistant performance of cable.

Delivery length

Delivery length of cable depends on both agreements with length error allowance of ±0.5%

氟塑料绝缘耐高温控制电缆

High-temperature resistant Control Cable with Fluoroplastics Insulation

一、产品特点及用途

本产品适用于交流额定电压450/750V及以下控制、监控回路以及电器仪表的连接线和自动控制系统的传输线。产品具有耐油、防水、耐磨、耐酸碱及各种化学试剂（除氯仿外）和各种腐蚀性气体、耐老化、不燃烧等优异性能；本产品主要适用于冶金、电力、化工、石油等工矿企业在高温、低温及各种恶劣环境中作电器、仪表的连接线和自动控制系统的传输线。氟塑料绝缘和护套耐高温控制电缆采用聚全氟乙丙烯或改性聚四氟乙烯材料，产品具有比普通控制电缆更高的耐热等级，

二、产品执行标准

采用企业标准。

三、产品使用特性

- 1、交流额定电压：U₀/U为450/750V；
- 2、电缆导体长期允许工作温度为：
氟塑料外护层为200℃/260℃；
聚氯乙烯外护层为105℃；
硅橡胶外护层为180℃。
- 3、电缆的敷设温度应不低于：
聚氯乙烯护套电缆0℃；
硅橡胶护套电缆-20℃；
氟塑料护套电缆-20℃。
- 4、电缆推荐允许弯曲半径：
无铠装层的电缆，应不小于电缆外径的6倍；
有铠装层的电缆或带铜带屏蔽结构的电缆，应不小于电缆外径的12倍；
有屏蔽层结构的软电缆，应不小于电缆外径的6倍；
氟塑料绝缘护套材料的电缆应不小于电缆外径的8倍。

Product Characteristic and Application

It is used as connection cable for electric appliances & instruments and transmission cable for automatic control system in controlling and supervising loop of A.C. rated voltage of 450/750V or lower. It has good feature of oil resistance, abrasion resistance, acid & alkali resistance, various chemical reagent(except chloroform) and corrosive gas resistance, aging resistance and bad weather resistance etc. It is used as connection cable for electric appliances & instruments and transmission cable for automatic control system under bad environment of extreme temperature mainly in the field of metallurgy, power, chemical and petroleum enterprises. F46 or Teflon insulation material is adopted by control cable with fluoroplastics insulation & sheath and high temperature resistance. It has better heat resistant degree compared with common control cable.

Executive standard:

enterprise standard

Performance for Usage

- A.C. rated voltage U₀/U: 450/750V
- 2: Long-term working temperature of cable conductor:
- Temperature of fluoroplastic outer protecting layer is 200℃/260℃.
- Temperature of PVC outer protecting layer is 105℃.
- Temperature of silicon rubber outer protecting layer is 180℃.
- Temperature for installing cable is no lower than:
- 0℃ for cable with PVC sheath
- 20℃ for cable with silicon rubber sheath
- 20℃ for cable with fluoroplastic sheath
- Bending radius allowed by cable:
- It is no less than 6 times that of cable OD for cable with inarmored layer
- It is no less than 12 times that of cable OD for cable with armored layer or copper tape shielding
- It is no less than 6 times that of cable OD for soft cable with shielding structure
- It is no less than 8 times that of cable OD for cable with fluoroplastic insulation and sheath

四、电缆型号及名称

Type and Description

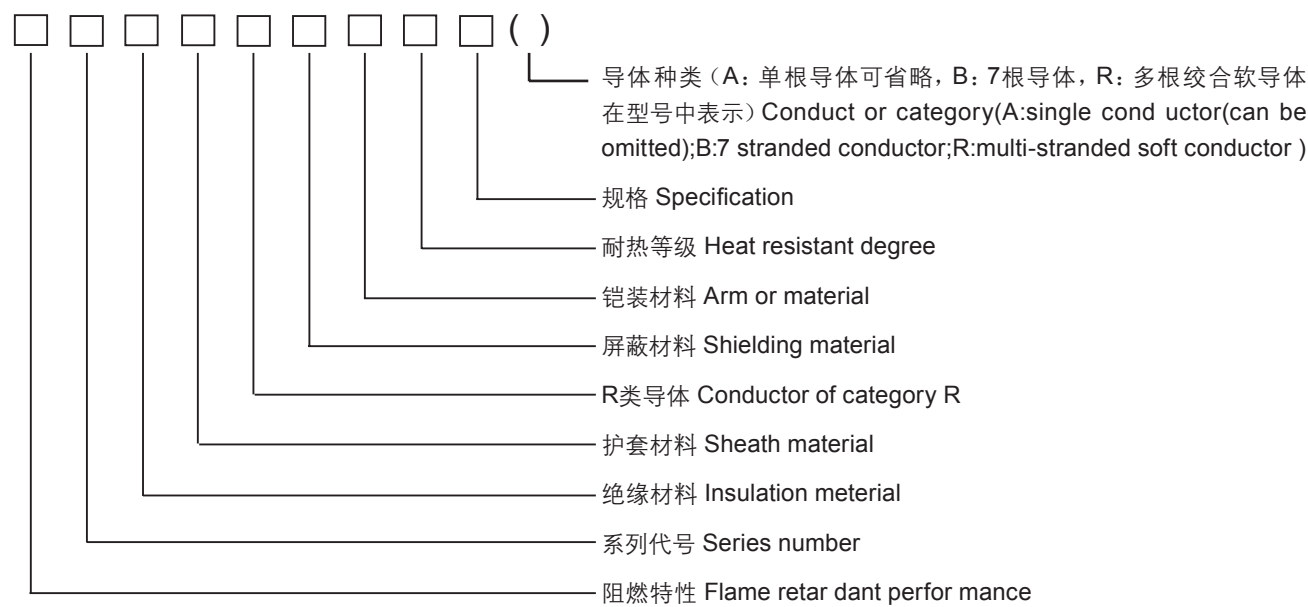
1、基本型号及名称

Basic Type and Description

型 号 Type	名 称 Description
KFF	氟塑料绝缘氟塑料护套控制电缆 Control cable with fluoroplastic insulation and sheath
KFFP	氟塑料绝缘氟塑料护套铜丝编织屏蔽控制电缆 Control cable with fluoroplastic insulation and sheath, copper wire braided shielding
KFFR	氟塑料绝缘氟塑料护套控制软电缆 Control soft cable with fluoroplastic insulation and sheath
KFFRP	氟塑料绝缘氟塑料护套铜丝编织屏蔽控制软电缆 Control soft cable with fluoroplastic insulation and sheath, copper wire braided shielding
KFV	氟塑料绝缘聚氯乙烯护套控制电缆 Control cable with fluoroplastic insulation and PVC sheath
KFVP	氟塑料绝缘聚氯乙烯护套铜丝编织屏蔽控制电缆 Control cable with fluoroplastic insulation, PVC sheath, copper wire braided shielding
KFVR	氟塑料绝缘聚氯乙烯护套控制软电缆 Control soft cable with fluoroplastic insulation and PVC sheath
KFVRP	氟塑料绝缘聚氯乙烯护套铜丝编织屏蔽控制软电缆 Control soft cable with fluoroplastic insulation, PVC sheath, copper wire braided shielding
KFV22	氟塑料绝缘钢带铠装聚氯乙烯护套控制电缆 Control cable with fluoroplastic insulation, PVC sheath, steel tape armor
KFVP22	氟塑料绝缘钢带铠装聚氯乙烯护套铜丝编织屏蔽控制电缆 Control cable with fluoroplastic insulation, PVC sheath, steel tape armor, copper wire braided shielding
KFVR22	氟塑料绝缘钢带铠装聚氯乙烯护套控制软电缆 Control soft cable with fluoroplastic insulation, PVC sheath, steel tape armor
KFVRP22	氟塑料绝缘钢带铠装聚氯乙烯护套铜丝编织屏蔽控制软电缆 Control soft cable with fluoroplastic insulation, PVC sheath, steel tape armor, copper wire braided shieldin
KFG	氟塑料绝缘硅橡胶护套控制电缆 Control cable with fluoroplastic insulation, silicon rubber sheath
KFGP	氟塑料绝缘硅橡胶护套铜丝编织屏蔽控制电缆 Control cable with fluoroplastic insulation, silicon rubber sheath, copper wire braided shielding
KFGR	氟塑料绝缘硅橡胶护套控制软电缆 Control soft cable with fluoroplastic insulation, silicon rubber sheath
KFGRP	氟塑料绝缘硅橡胶护套铜丝编织屏蔽控制软电缆 Control soft cable with fluoroplastic insulation, silicon rubber sheath, copper wire braided shielding
KFG22	氟塑料绝缘钢带铠装硅橡胶护套控制电缆 Control cable with fluoroplastic insulation, silicon rubber sheath, steel tape armor

2、型号结构组合形式

Type-naming Indication



五、代号名称及含义

Codes Meaning

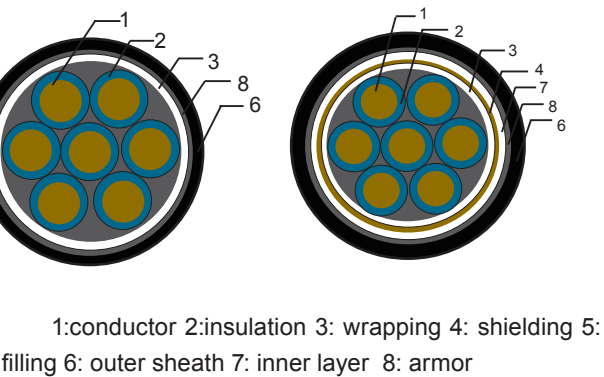
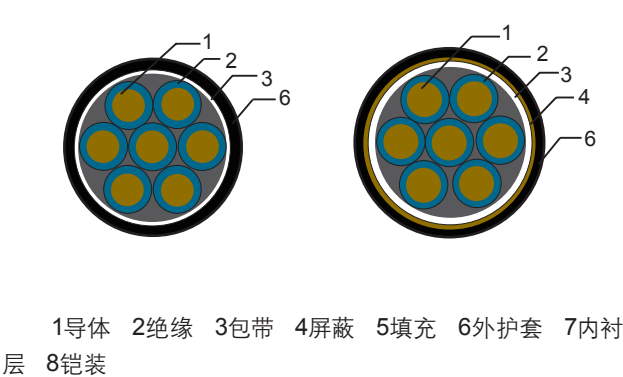
项 目 Item	代 号Code	说 明 Description
阻燃特性 flame retardant performance	ZRA	A类阻燃 Flame retardance of category A
	ZRB	B类阻燃 Flame retardance of category B
	ZRC	C类阻燃(C可以省略) Flame retardance of category C
系列代号 series number	K	控制电缆 Control cable
绝缘材料 insulation material	F	聚全氟乙烯/聚四氟乙烯 F ₄₆ /teflon
护套材料 sheath material	F	聚全氟乙烯/聚四氟乙烯 F ₄₆ /teflon
	G	硅橡胶silicon rubber
	V	耐热105℃聚氯乙烯 heat resistance 105℃ PVC
屏蔽材料 shielding material	P	铜丝编织屏蔽 copper wire braided shielding
	P1	镀锡铜丝编织屏蔽tinned copper wire braided shielding
	P2	铜带屏蔽copper tape shielding
铠装材料 armor material	22	钢带铠装聚氯乙烯护套 steel tape armor PVC sheath

注：可根据用户需要生产、设计特殊规格和型号电缆。

Note: we also produce cable with special specification and type according to the requirement of customer.

六、电缆的结构图如下所示

The figure of cable structure



七、电缆的规格如下表所示

Specification of Cable in Following Table

型 号 Type	额定 电压 V Rated voltage	Nominal cross section area导体标称截面mm ²							
		0.5	0.75	1.0	1.5	2.5	4	6	10
		芯 数 core number							
KFF、KFV KFG、KFFP KFVP、KFGP	450/750	2~61					2~37	2~14	
KFFR、KFVR KFGR、FFRP KFVRP、KFGRP		4~61					2~37		
KFV22、KFVP22、KFVR22 KFVRP22		2~61					2~37		

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、61芯,但根据用户需要,可生产61芯以下任意芯数的电缆。
Note: recommended core No. series: 2、3、4、5、7、8、10、12、14、16、19、24、27、30、37、44、48、52、61core. We also produce cable with 61 cores or lower according to the requirement of customer.

八、主要技术指标

Main Technical Indices

标称截面 (mm ²) nominal cross section area	导体结构conductor structure 根数/直径(mm) Pieces/diameter	20℃时导体电阻(Ω/km) conductor resistance at 20℃		耐电压强度 voltage withstand stress
		不镀锡 non-tinned	镀锡 tinned	
0.5	1/0.8	36.0	36.7	3kV/5min绝缘无击穿 Without puncture of insulation
	7/0.30	36.0	36.7	
	16/0.20	39.0	40.1	
0.75	1/0.97	24.5	24.8	
	7/0.37	24.5	24.8	
	24/0.20	26.0	26.7	
1.0	1/1.13	18.1	18.2	
	7/0.43	18.1	18.2	
	32/0.20	19.5	20.0	
1.5	1/1.38	12.1	12.2	
	7/0.52	12.1	12.2	
	30/0.25	13.3	13.7	
2.5	1/1.78	7.41	7.56	
	7/0.68	7.41	7.56	
	19/0.41	7.41	7.56	
	49/0.26	7.98	8.21	
4	1/2.25	4.61	4.70	
	7/0.85	4.61	4.70	
	19/0.52	4.61	4.70	
	56/0.30	4.95	5.09	
6	1/2.76	3.08	3.11	
	7/1.04	3.08	3.11	
	19/0.64	3.08	3.11	
	84/0.30	3.30	3.39	
10	7/1.35	1.83	1.84	

九、常用规格结构尺寸及参考重量如下表

Common Specification and Weight for Reference

Table 1 KFF, KFFP, KFFP2

芯数×标称 截面mm ² core No.*nominal cross section area	线芯结构 (根数/直径) mm core structure (pieces/diameter)	最大外径mm Max. outer diameter			参考重量kg/km weight for reference		
		KFF	KFFP	KFFP2	KFF	KFFP	KFFP2
2×0.5	1/0.80	4.5	5.4	5.0	35	51	69
2×0.75	1/0.97	4.9	5.8	5.4	45	63	84
2×1.0	1/1.13	5.2	6.1	5.7	52	72	95
2×1.5	1/1.38	5.8	6.7	6.3	65	86	111
2×2.5	1/1.78	6.5	7.4	7	92	118	151
2×4	1/2.25	7.8	8.7	8.3	142	165	175
2×6	1/2.76	8.9	9.8	9.4	211	245	279
3×0.5	1/0.80	4.7	5.6	5.2	44	62	80
3×0.75	1/0.97	5.2	6.1	5.7	57	77	99
3×1.0	1/1.13	5.3	6.2	5.8	69	89	114
3×1.5	1/1.38	6.1	7	6.6	88	110	141
3×2.5	1/1.78	7.1	8	7.6	126	153	191
3×4	1/2.25	8.5	9.4	9	215	255	278
4×0.5	1/0.80	5.1	6	5.6	54	73	94
4×0.75	1/0.97	5.7	6.6	6.2	70	92	118
4×1.0	1/1.13	6.2	7.1	6.7	86	109	140
4×1.5	1/1.38	6.8	7.7	7.3	111	136	174
4×2.5	1/1.78	7.7	8.6	8.2	157	187	234
4×4	1/2.25	9.6	10.5	10.1	270	295	311
5×0.5	1/0.80	5.9	6.8	6.4	64	85	110
5×0.75	1/0.97	6.4	7.3	6.9	85	108	138
5×1.0	1/1.13	6.8	7.7	7.3	103	129	165
5×1.5	1/1.38	7.5	8.4	8	134	162	207
5×2.5	1/1.78	8.8	9.7	9.3	191	224	280
5×4	1/2.25	10.6	11.5	12.1	325	362	395
7×0.5	1/0.80	6.3	7.3	6.8	82	106	136
7×0.75	1/0.97	7.1	8.1	7.6	110	136	174
7×1.0	1/1.13	7.4	8.4	7.9	135	164	208
7×1.5	1/1.38	8.2	9.2	8.7	177	208	260
7×2.5	1/1.78	9.5	10.5	10	262	300	369
7×4	1/2.25	11.6	12.6	12.1	415	458	485
8×0.5	1/0.80	6.8	7.8	7.3	97	122	150
8×0.75	1/0.97	7.5	8.5	8	128	157	192
8×1.0	1/1.13	7.9	8.9	8.4	157	189	229
8×1.5	1/1.38	8.7	9.7	9.2	207	241	284
8×2.5	1/1.78	10.3	11.3	10.8	314	367	426

Sequel table1 KFF、KFFP、KFFP2

芯数×标称 截面mm ² Core No.*nominal cross section area	线芯结构 (根数/直径) mm core structure (pieces/diameter)	最大外径mm Max. outer diameter			参考重量kg/km weight for reference		
		KFF	KFFP	KFFP2	KFF	KFFP	KFFP2
10×0.5	1/0.80	7.9	8.9	8.4	113	153	188
10×0.75	1/0.97	8.7	9.7	9.2	152	186	227
10×1.0	1/1.13	9.3	10.3	9.8	202	241	292
10×1.5	1/1.38	10.3	11.3	10.8	263	316	373
10×2.5	1/1.78	12.1	13.1	12.6	378	442	513
12×0.5	1/0.80	8.2	9.2	8.7	130	161	198
12×0.75	1/0.97	9.0	10	9.5	177	212	259
12×1.0	1/1.13	9.6	10.6	10.1	233	274	332
12×1.5	1/1.38	10.8	11.8	11.3	305	360	425
12×2.5	1/1.78	12.5	13.5	13	442	508	589
14×0.5	1/0.80	8.8	9.8	9.3	147	179	220
14×0.75	1/0.97	9.9	10.9	10.4	215	255	311
14×1.0	1/1.13	11.5	12.6	12.3	265	319	386
14×1.5	1/1.38	11.6	12.7	12.4	350	409	483
14×2.5	1/1.78	13.3	14.4	14.1	533	613	675
16×0.5	1/0.80	9.5	10.6	10.3	165	199	245
16×0.75	1/0.97	10.4	11.5	11.2	241	282	344
16×1.0	1/1.13	11.0	12.1	11.8	298	355	430
16×1.5	1/1.38	13.0	14.3	13.8	394	457	539
16×2.5	1/1.78	15.1	16.4	16.0	604	694	764
19×0.5	1/0.80	10.3	11.4	11.1	205	243	296
19×0.75	1/0.97	11.3	12.4	12.1	279	336	407
19×1.0	1/1.13	12.7	14.0	14.0	345	407	480
19×1.5	1/1.38	13.7	15.2	14.8	459	525	609
19×2.5	1/1.78	16.0	17.2	16.8	707	813	894
24×0.5	1/0.80	11.7	12.8	12.5	255	312	378
24×0.75	1/0.97	13.2	14.4	14.0	348	414	489
24×1.0	1/1.13	15.2	16.4	16.0	423	486	535
24×1.5	1/1.38	15.9	17.1	17.0	586	674	741
24×2.5	1/1.78	19.1	20.6	20.1	901	1036	1139
27×0.5	1/0.80	12.2	13.7	13.2	280	339	410
27×0.75	1/0.97	13.4	14.9	14.5	384	452	533
27×1.0	1/1.13	14.5	16.5	16.0	469	539	593
27×1.5	1/1.38	16.3	18.0	17.5	651	749	824
27×2.5	1/1.78	19.5	21.0	20.5	1002	1153	1268
30×0.5	1/0.80	12.6	14.2	13.6	307	367	444
30×0.75	1/0.97	13.7	15.4	14.7	422	485	534
30×1.0	1/1.13	14.6	17.0	15.6	516	593	652
30×1.5	1/1.38	16.9	18.6	18.1	718	825	908
30×2.5	1/1.78	20.3	21.8	21.3	1106	1271	1399

Sequel table1 KFF、KFFP、KFFP2

芯数×标称 截面mm ² core No.*nominal cross section area	线芯结构 (根数/直径) mm core structure (pieces/diameter)	最大外径mm Max. outer diameter			参考重量kg/km weight for reference		
		KFF	KFFP	KFFP2	KFF	KFFP	KFFP2
33×0.5	1/0.80	13.1	14.6	14.1	333	396	479
33×0.75	1/0.97	14.2	15.5	15.0	460	529	582
33×1.0	1/1.13	15.2	16.7	16.2	563	648	712
33×1.5	1/1.38	17.8	19.3	18.8	797	917	1008
33×2.5	1/1.78	21.1	--	--	1209	--	--
37×0.5	1/0.80	13.6	15.2	14.6	268	434	525
37×0.75	1/0.97	14.8	16.3	15.8	510	587	645
37×1.0	1/1.13	15.9	17.6	17.1	625	719	791
37×1.5	1/1.38	18.5	20.0	19.5	886	1018	1120

37×2.5	1/1.78	22.0	--	--	1346	--	--
44×0.5	1/0.80	14.3	15.6	15.1	433	497	547
44×0.75	1/0.97	16.9	18.4	17.9	615	707	777
44×1.0	1/1.13	18.1	19.6	19.1	752	865	951
44×1.5	1/1.38	20.9	21.9	--	1047	1205	--
48×0.5	1/0.80	14.5	16.0	15.5	467	537	590
48×0.75	1/0.97	17.2	18.7	18.2	663	763	839
48×1.0	1/1.13	18.4	19.9	19.4	813	935	1028
48×1.5	1/1.38	21.3	--	--	1134	--	--
52×0.5	1/0.80	15.0	16.5	16.0	502	577	634
52×0.75	1/0.97	17.7	19.2	18.7	713	820	902
52×1.0	1/1.13	18.9	20.4	19.9	875	1006	1107
52×1.5	1/1.38	21.9	--	--	1222	--	--

Table 2 KFFR、KFFRP、KFFRP2

芯数×标称 截面mm ² Core No.*nominal cross section area	线芯结构 (根数/直径) mm core structure (pieces/diameter)	最大外径mm Max. outer diameter			参考重量kg/km weight for reference		
		KFFR	KFFRP	KFFRP2	KFFR	KFFRP	KFFRP2
2×0.5	16/0.20	5.1	6.3	5.7	38	55	74
2×0.75	24/0.20	5.9	7.1	6.5	50	68	92
2×1.0	32/0.20	6.3	7.5	6.9	58	79	104
2×1.5	30/0.25	6.7	7.9	7.3	72	94	121
2×2.5	49/0.25	8.5	9.7	9.1	104	132	169
3×0.5	16/0.20	5.4	6.6	6	48	66	85
3×0.75	24/0.20	6.4	7.6	7	64	86	85
3×1.0	32/0.20	6.8	8	7.4	76	98	125
3×1.5	30/0.25	7.3	8.5	7.9	97	121	155
3×2.5	49/0.25	8.9	10.1	9.5	144	173	216
4×0.5	16/0.20	5.9	7.1	6.5	59	79	102
4×0.75	24/0.20	7.0	8.2	7.6	80	102	131
4×1.0	32/0.20	7.6	8.8	8.2	96	121	155
4×1.5	30/0.25	8.1	9.3	8.7	123	149	191
4×2.5	49/0.25	9.8	11	10.4	181	213	266
5×0.5	16/0.20	6.4	7.6	7	69	91	117
5×0.75	24/0.20	7.7	8.9	8.3	96	121	155
5×1.0	32/0.20	8.4	9.6	9	116	143	183
5×1.5	30/0.25	8.9	10.1	9.5	149	178	228
5×2.5	49/0.25	10.6	11.8	11.2	219	255	319
7×0.5	16/0.20	7.2	8.4	7.8	90	115	147
7×0.75	24/0.20	8.5	9.7	9.1	125	153	196
7×1.0	32/0.20	9.1	10.3	9.7	151	182	233
7×1.5	30/0.25	9.7	10.9	10.3	197	230	288
7×2.5	49/0.25	11.8	13	12.4	303	343	422
8×0.5	16/0.20	7.9	9.1	8.5	105	133	164
8×0.75	24/0.20	9.2	10.4	9.8	145	176	215
8×1.0	32/0.20	9.9	11.1	10.5	177	210	254
8×1.5	30/0.25	10.6	11.8	11.2	231	267	315
8×2.5	49/0.25	12.8	14	13.4	262	418	485
10×0.5	16/0.20	9.1	10.3	9.7	124	156	192
10×0.75	24/0.20	10.8	12	11.4	173	210	256
10×1.0	32/0.20	11.6	12.8	12.2	227	269	325
10×1.5	30/0.25	12.4	13.6	13	294	350	413
10×2.5	49/0.25	15.4	16.6	16	438	507	588
12×0.5	16/0.20	9.4	10.6	10	142	172	212
12×0.75	24/0.20	11.2	12.4	11.8	200	238	290
12×1.0	32/0.20	12.0	13.2	12.6	261	304	368
12×1.5	30/0.25	12.8	14	13.4	340	398	470
12×2.5	49/0.25	16.0	17.2	16.6	512	584	677

Sequel table2 KFFR、KFFRP、KFFRP2

芯数×标称 截面mm ² Core No.*nominal cross section area	线芯结构 (根数/直径) mm core structure (pieces/diameter)	最大外径mm Max. outer diameter			参考重量kg/km weight for reference		
		KFFR	KFFRP	KFFRP2	KFFR	KFFRP	KFFRP2
14×0.5	16/0.20	9.9	11.0	10.6	162	196	241
14×0.75	24/0.20	10.7	11.8	11.4	244	286	349
14×1.0	32/0.20	12.8	13.9	13.5	298	355	430
14×1.5	30/0.25	13.7	14.8	14.4	390	452	533
14×2.5	49/0.25	16.3	17.4	17	597	687	756
16×0.5	16/0.20	10.4	11.5	11.1	181	217	267
16×0.75	24/0.20	12.4	13.5	13.1	274	318	388
16×1.0	32/0.20	13.5	14.6	14.2	335	396	479
16×1.5	30/0.25	14.5	15.6	15.2	440	506	597
16×2.5	49/0.25	17.2	18.3	17.9	625	719	791
19×0.5	16/0.20	11.0	12.1	11.7	225	265	323
19×0.75	24/0.20	13.3	14.4	14	318	385	466
19×1.0	32/0.20	14.3	15.4	15	389	454	536
19×1.5	30/0.25	14.8	15.9	15.5	507	583	641
19×2.5	49/0.25	18.3	19.4	19	792	850	1002
24×0.5	16/0.20	13.1	14.2	13.8	281	341	413
24×0.75	24/0.20	14.4	15.5	15.1	388	446	491
24×1.0	32/0.20	15.3	16.4	16	456	524	577
24×1.5	30/0.25	17.8	18.9	18.5	635	730	803
24×2.5	49/0.25	22.3	23.4	23	1009	--	--
27×0.5	16/0.20	13.4	14.5	14.1	308	370	448
27×0.75	24/0.20	14.4	15.5	15.1	429	494	543
27×1.0	32/0.20	15.3	16.4	16	505	581	639
27×1.5	30/0.25	17.8	18.9	18.5	705	811	892
27×2.5	49/0.25	22.3	23.4	23	1122	--	--
30×0.5	16/0.20	13.9	15	14.6	338	402	486
30×0.75	24/0.20	15.0	16.1	15.7	472	543	597
30×1.0	32/0.20	15.9	17	16.6	556	639	703
30×1.5	30/0.25	18.5	19.6	19.2	777	894	983
33×0.5	16/0.20	13.9	15	14.6	366	433	524
33×0.75	24/0.20	15.6	16.7	16.3	515	592	651
33×1.0	32/0.20	16.6	17.7	17.3	607	698	765
33×1.5	30/0.25	19.5	20.6	20.2	860	995	1101
37×0.5	16/0.20	14.5	15.6	15.2	420	480	530
37×0.75	24/0.20	16.2	17.3	16.9	568	650	720
37×1.0	32/0.20	17.3	18.4	18	670	775	855
37×1.5	30/0.25	20.3	21.4	21	965	1150	1215
44×0.5	16/0.20	16.3	17.4	17	495	570	625
44×0.75	24/0.20	18.5	19.6	19.2	685	785	870
44×1.0	32/0.20	19.7	20.8	20.4	810	935	1050
48×0.5	16/0.20	16.8	17.9	17.5	536	616	678
48×0.75	24/0.20	18.9	20.0	19.6	742	854	945
48×1.0	32/0.20	20.6	21.7	21.3	880	1108	1172
52×0.5	16/0.20	17.5	18.6	18.2	582	665	735
52×0.75	24/0.20	19.5	20.6	20.2	799	925	1015
52×1.0	32/0.20	20.8	21.9	21.5	945	1100	1205

注：KFV系列电缆的外径在上表相应的型号规格后的外径上加上2~3mm，KFG系列电缆的外径在上表相应的型号规格后的外径上加上2~5mm。

Note: Outer diameter of KFV series cable should be added by 2~3mm after relevant specification in the above table; Outer diameter of KFG series cable should be added by 2~5mm after relevant specification in the above table;

九、交货长度

根据双方协议允许任何长度交货；长度计量误差不超过±0.5%。

Delivery length

Delivery length of cable depends on both agreements with length error allowance of ±0.5%

丁腈聚氯乙烯复合物软电缆

Butadiene PVC Compound Soft Cable

本产品适用于交流额定电压450/750V及以下控制、监控回路、各种移动电器、无线电设备和照明灯座接线用以及保护线路等要求在低温下运行的场合。

一、生产执行标准
企业标准及JB1170-75标准。

二、使用条件

- 1、电导体长期工作温度：硅橡胶绝缘不超过180℃；聚氯乙烯绝缘不超过70℃。
- 2、电线最低环境温度为-40℃；
- 3、允许弯曲半径一般应不小于电缆外径的8倍,软结构电缆应不小于电缆外径的6倍。

三、电缆型号见表1

型号 Type	电缆名称 Cable description	备注 Note
YVFR	铜芯丁腈聚氯乙烯绝缘及护套软电力电缆 Soft power cable with Cu core, butadiene PVC insulation and sheath	1 电缆如需镀锡铜线编织屏蔽结构,应将原型号中的“P”改为“P1”。 2 如导体需采用镀锡铜线,应在订货中说明,型号中不另作规定。 If tin-plated copper wire braided shielding is needed, the letter “P” in the original type of cable shall be changed into the letter “P1”. If tinned copper wire conductor is used, the relevant description shall be made in the order, but it is not necessary to give other description in cable type.
YVFB	铜芯丁腈聚氯乙烯绝缘及护套扁平型软电力电缆 Flat type soft power cable with Cu core, butadiene PVC insulation and sheath	
YGVFB	铜芯硅橡胶绝缘丁腈聚氯乙烯护套扁平型软电力电缆 Flat type soft power cable with Cu core, silicon rubber insulation and butadiene PVC sheath	
KVFR	铜芯丁腈聚氯乙烯绝缘及护套软控制电缆 Soft control cable with Cu core, butadiene PVC insulation and sheath	
KVFRP	铜芯丁腈聚氯乙烯绝缘及护套铜丝编织屏蔽软控制电缆 Soft control cable with Cu core, butadiene PVC insulation and sheath, copper wire braided shielding	
KVFB	铜芯丁腈聚氯乙烯绝缘及护套扁平型软控制电缆 Flat type soft control cable with Cu core, butadiene PVC insulation and sheath	
KGVFB	铜芯硅橡胶绝缘丁腈聚氯乙烯护套扁平型软控制电缆 Flat type soft control cable with Cu core, silicon rubber insulation and butadiene PVC sheath	

四、规格范围如下表

型号Type	规格范围 Specification scope
YVFR YVFB YGVFB	1 core: 1.5~300mm ² 2、3、4、5、3+1core: 1.5~185mm ²
KVFR KVFRP	2~61cores: 0.5~2.5mm ²
KVFB KGVFB	2~10cores: 1.5~6mm ²

It is used for supervising and controlling return circuit of A.C. rated voltage of 450/750V or lower, power connection of various mobile electrical equipments, radio devices, and lighting & protection line with operation under low temperature.

Executive standard:
enterprise standard and JB1170-75 standard

Working Condition

- 1: Long-term working temperature of wire conductor is no more than 180℃ for cable with silicon insulation, 70℃ for that with PVC insulation.
- 2: Min. environment temperature of wire is -40℃.
- 3: Bending radius allowed by wire is no less than 8 times that of cable O.D OR 6 times for cable with soft structure.

Type and description in table 1

Type and Specification scope

五、主要技术指标

1、20℃时导体最大直流电阻值应满足表2规定：

Main Technical Parameter

Max. DC resistance of conductor at 20℃ shall meet the requirement of the following table

Table 2

标称截面 (mm ²) Nominal cross section area	导体结构 根数/直径(mm) Conductor structure Pieces/diameter	20℃时导体直流电阻 $\leq \Omega/\text{km}$ Conductor DC resistance at 20℃	
		不镀锡 Not tinned	镀锡 tinned
0.5	16/0.20	39.0	40.1
0.75	24/0.20	26.0	26.7
1.0	32/0.20	19.5	20.0
1.5	30/0.25	13.3	13.7
2.5	49/0.26	7.98	8.21
4	56/0.30	4.95	5.09
6	84/0.30	3.30	3.39
10	84/0.40	1.91	1.95
16	110/0.43	1.21	1.24
25	170/0.43	0.78	0.795
35	240/0.43	0.554	0.565
50	342/0.43	0.386	0.393
70	482/0.43	0.272	0.277
95	654/0.43	0.206	0.210
120	827/0.43	0.161	0.164
150	1033/0.43	0.129	0.132
185	1274/0.43	0.106	0.108

2、成品控制电缆应经受工频交流试验电压3000V、5min电压试验，绝缘无击穿。

3、成品电力电缆应经受工频交流试验电压3500V、5min电压试验，绝缘无击穿。

2: Finished control cable shall bear A.C. test voltage of 3000V under power frequency for 5min without puncture of insulation.

3: Finished power cable shall bear A.C. test voltage of 3500V under power frequency for without puncture of insulation.

六、交货长度

允许根据双方协议长度交货；长度计量误差不超过±0.5%。

Delivery length

Delivery length of cable depends on both agreements with length error allowance of ±0.5%

自控温伴热电缆

Self-thermal Control Heating Cable

自控温伴热电缆是由导电聚合物和两根平行金属导线及绝缘护层构成。其特点是导电聚合物具有很高的正温度系数特性，且互相并联，能随被加热体系的温度变化自动调节输出功率，自动限制加热的温度。可以任意截短或在一定范围内接长使用，并允许多次交叉重叠而无高温热点及烧毁之虑。

一、生产执行标准： 采用企业标准。

二、自控温电热带使用特性：

- 1、电热带相应被伴热体系具有自动调节输出功率，因此不会因自身发热而烧毁，却因实际需要热量进行补偿；
- 2、低温状态快速起动，温度均匀，因每一局部皆可因其被伴热处的温度变化自动调节；
- 3、安装简便、维护简单、全天服务，自动化水平高，运行及维护费用低；
- 4、安全可靠、用途广、不污染环境、寿命长。

三、产品介绍

1、低温系列（DXW）

本产品专用于工艺管线或容器储罐及仪表的防冻和恒温，最高维持温度为 $70\pm 5^{\circ}\text{C}$ ，伴热线适用于普通区、危险区和腐蚀区。

性能参数：

- a、标准颜色：黑色、蓝色，
- b、温度范围：最高维持温度 65°C ，
最高表面温度 70°C ，
最高承受温度 105°C 。
- c、施工温度：最低 -40°C 。
- d、热稳定性：通断1000次连续22天，热线发热量维持在90%以上。
- e、绕曲半径： 20°C 室温时为12.7mm， -30°C 低温时为35.0mm。
- f、绝缘电阻：环境温度 75°C 时，用2500VDC摇表摇试验1分钟，绝缘电阻（导线与屏蔽间）最小值为 $100\text{M}\Omega$ 。
- g、工作电压：12V、24V、36V、110V、220V、380V。
- h、 10°C 时输出功率：10、15、25、35、45 W/m。

2、中温系列（ZXW）

It consists of conductive polymer, two pieces of parallel metallic conductor and insulation layer. Its conductive polymer has very high plus thermal coefficient and is in parallel connection. Automatic regulation on output power as thermal change of the system being heated results in automatic regulation on heating temperature. There are many choices on the cable length according to the application occasion. The overlapping of the cable is allowed, which results in no extreme heat point or burning.

Executive standard: enterprise standard

Performance for Usage

- 1: The automatic regulation on output power could be realized on heating part according to the change of heated system, which results in no extreme heat point or burning.
- 2: quick start at low temperature; each part temperature is under automatic regulation results in evenly heating.
- 3: easy installation, simple maintenance, 24 hours in service, high automatic level and low cost of operating and maintenance.
- 4: safe, reliable, wide application, environment-kindly, long lifetime

Product Introduction

Low Temperature Series (DXW)

It is specially used to resist freezing and keep constant temperature for pipes, containers or instruments. Max. lasting temperature is $70\pm 5^{\circ}\text{C}$. It is suitable for common area, danger area and corrosion resistant area.

Performance Parameter

Standard color: black, blue

Temperature scope: Max lasting temperature is 65°C .

Max surface temperature is 70°C .

Max sustainable temperature is

105°C .

Temperature for mounting: min. -40°C

Thermal stability: break and contact for 1000 times for continual 22 days; heating volume maintains above 90%.

Bending radius: 12.7mm for room temperature at 20°C ; 35.0mm for low temperature at -30°C

Insulated resistance: Min insulated resistance (between conductor and shielding) should $100\text{M}\Omega$ for one minute test with D.C 2500v instrument at the environment temperature of 75°C .

Working voltage: 12V、24V、36V、110V、220V、380V.

Output power at 10°C : 10、15、25、35、45 W/m

Middle Temperature Series (ZXW)

本产品专用于工艺管线或容器储罐及仪器仪表的防冻和恒温及局部加热，最高维持温度为105℃，伴热线适用于普通区、危险区和腐蚀区。

性能参数：

- a、标准颜色：黑色、褐色、桔黄色。
- b、温度范围：最高维持温度105℃，
最高表面温105℃，
最高承受温度135℃。
- C. 施工温度：最低-30℃。
- d、热稳定性：通断1000次连续22天，热线发热量维持在90%以上。
- e、绕曲半径：20℃室温时为12.7mm,-30℃低温时为35.0mm。
- f. 绝缘电阻：环境温度75℃时，用2500VDC摇表摇 试验1分钟，绝缘电阻（导线与屏蔽间）
最小值为100MΩ。
- g. 工作电压：12V、24V、36V、110V、220V、380V。
- h. 10℃时输出功率：25、35、40、45、55、60 W/m。

3、高温系列（GXW）

本产品专用于需间歇性高温蒸气吹扫（最高至215℃，30min）的工艺管线或容器储罐的防冻和恒温及局部加热，最高维持温度为135℃，伴热线适用于普通区、危险区和腐蚀区。

性能参数：

- a、标准颜色：棕色、蓝色、桔黄色、红色。
- b、温度范围：最高维持温度135℃，
最高表面温135℃，
最高承受温度155℃。
- C. 施工温度：最低-30℃。
- d、热稳定性：通断1000次连续22天，热线发热量维持在95%以上。
- e、绕曲半径：20℃室温时为25.4mm,-30℃低温时为50.8mm。
- f. 绝缘电阻：环境温度75℃时，用2500VDC摇表摇试验1分钟，绝缘电阻（导线与屏蔽间）最小值为100MΩ。
- g. 工作电压：12V、24V、36V、110V、220V、380V。
- h. 10℃时输出功率：25、35、45、55、65、75 W/m。

4、特长系列（GXW）

本产品专用于长输管线的防冻和恒温，最高维持温度为65、105、135℃。单一电源线路长度可达2000m（双向供电可达4000m）。伴热线适用于普通区、危险区和腐蚀区。

It is specially used to resist freezing, keep constant temperature and discharge partially for pipes, containers and instruments. Max. lasting temperature is 105℃. It is suitable for common area, danger area and corrosion resistant area.

Performance parameter

Standard color: black, drab, orange
Temperature scope: Max lasting temperature is 105℃.

Max surface temperature is 105℃.

Max sustainable temperature is 135℃.

Temperature for mounting: min. -30℃

Thermal stability: break and contact for 1000 times for continual 22 days; heating volume maintains above 90%.

Bending radius:12.7mm for room temperature at 20℃; 35.0mm for low temperature at -30℃

Insulated resistance: Min insulated resistance(between conductor and shielding)should 100MΩfor one minute test with D.C 2500v instrument at the environment temperature of 75℃.

Working voltage: 12V、24V、36V、110V、220V、380V

Output power at 10℃: 25、35、40、45、55、60 W/m.

High Temperature Series（GXW）

It is specially used to resist freezing, keep constant temperature and heat partially for pipes and containers with demands of periodical heat vapor sweeping(max. 215℃ for 30min). Max. lasting temperature is 135℃. It is suitable for common area, danger area and corrosion resistant area.

Performance parameter

Standard color: brown, blue, orange, red
Temperature scope: Max lasting temperature is 135℃.

Max surface temperature is 135℃.

Max sustainable temperature is 155℃

Temperature for mounting: min. -30℃

Thermal stability: break and contact for 1000 times for continual 22 days; heating volume maintains above 95%

Bending radius: 25.4mm for room temperature at 20℃; 50.8mm for low temperature at -30℃

Insulated resistance: Min insulated resistance(between conductor and shielding)should 100MΩfor one minute test with D.C 2500v instrument at the environment temperature of 75℃.

Working voltage: 12V、24V、36V、110V、220V、380V.

Output power at 10℃: 25、35、45、55、65、75 W/m.

Special Long Series（GXW）

It is specially used in long-distance transmission pipes to resist freezing and keep constant temperature. Max. lasting temperature is 65、105、135℃. Length of single power line reaches 2000m(4000m for that of power supply in double direction). It is suitable for common area, danger area and corrosion resistant area.

性能参数:

a、标准颜色: 黑色(电热带护层颜色:黑色、棕色、红色)。

b、温度范围: 最高维持温度 65、105、135℃,

最高表面温 70、105、135℃,

最高承受温度 105、135、155℃。

C. 施工温度: 最低-30℃。

d、电压等级: 380-600VAC, 3相4芯。

e、线路长度如下表

Performance parameter

Standard color: black(color of electric heating layer: black, brown, red)

Temperature scope: Max lasting temperature is 65、105、135℃.

Max surface temperature is 70、105、135℃.

Max sustainable temperature is 105、135、155℃

Temperature for mounting: min. -30℃

Voltage degree: 380-600VAC, 3 phrases 4cores

Wire Length in the following table

	单一电源 Single power	单向供电 Single direction power supply	双向供电 Double direction power supply
380VAC	最小线路长度 Min wire length	305m	610m
	最大线路长度 Max wire length	1000m	2000m
600VAC	最小线路长度 Min wire length	1000m	2000m
	最大线路长度 Max wire length	2000m	4000m

四、主要技术参数如表1:

Main Technical Parameter in the Following Table

型号 Type	品名 Description	功率 W/m Power	工作电压working voltage						最高承受温度℃ Max sustain- nable tem.	最低安装温度℃ Min tem.for mounting	最大使用长度 M Max length for usage
			12V	24V	36V	110V	220V	380-600V			
DXW	低温系列 Lower temperature series	最高维持温度 ±5℃ Max. lasting temperature	5-15 60	5-25 60	10-25 60	10-35 70	15-45 70	15-45 70	105	-40	150
DXzW	低温窄系列 Lower temperature narrow series		5-15 50	5-25 50	10-25 50	10-35 70	10-35 70	10-35 70	105	-40	50
BXW	薄型系列 thin series		3-10 50-70	3-15 50-70	3-20 50-70	5-25 50-70	5-25 70-105		105-135	-40	30
ZXW	中温系列 middle temperature series		5-15 70	5-25 90	10-35 90	25-45 105	40-60 105	40-60 105	135	-30	100
ZXzW	中温窄系列 middle temperature narrow series		5-15 70	5-25 90	15-35 90	15-45 105	15-60 105	15-60 105	135	-30	50
ZXkW	中温宽系列 middle temperature wide series					40-60 105	40-60 105	40-60 105	135	-30	150
GXW	高温系列 high temperature series		10-25 135	10-30 135	10-40 135	25-70 135	35-70 135	35-70 135	155	-30	100
GXzW	高温窄系列 high temperature narrow series		10-25 135	10-30 135	10-40 135	25-50 135	25-50 135	35-70 135	155	-30	50
GXkW	高温宽系列 high temperature wide series					25-70 135	35-70 135	35-70 135	155	-30	150
TDXW	低温特长系列 Lower temperature and special length series						15-35 60	15-45 60	105	-20	300-2000
TZXW	中温特长系列 middle temperature and special length series						15-60 90	15-60 90	135	-20	300-2000
TGXW	高温特长系列 high temperature and special length series						25-70 130	25-70 130	155	-20	300-2000

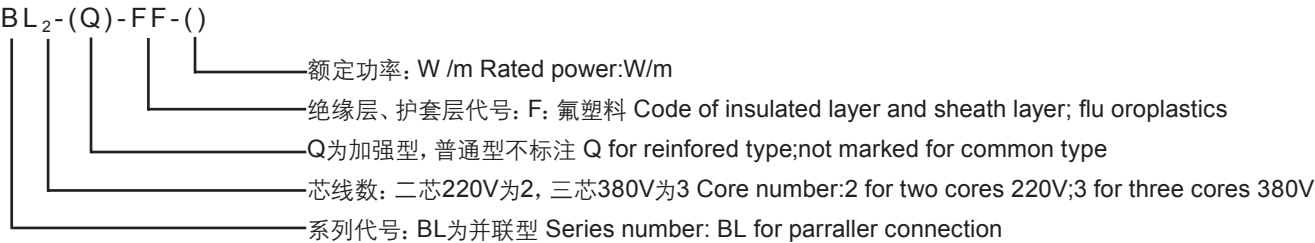
恒功率电热带

Constant Power Electrically-heated Tape

本产品适用于交流额定电压220V单项和380V三相电路中，本产品主要用于各种管道、仪表的防冻、保温，最高维持温度150℃。

一、型号含义

型号表示方法如下：



例: BL2-Q-FF-20: 表示绝缘材料为F46氟塑料二相220V, 20W/米加强型恒功率电热带

BL3-FF-20: 表示绝缘材料为F46氟塑料三相380V, 20W/米普通型恒功率电热带

二、产品结构与工作原理

电源母线为二根/三根平行绝缘铜线，在内绝缘层上缠绕电热丝，并将电热丝每隔一定距离

(即‘发热节长’)与母线连接，形成连续并联电阻，母线通电后，各并联电阻发热，因而形成一条连续的加热带。

三、产品规格及主要技术特性

1、二相220V恒功率电热带技术特性如表1

产品型号 Type		额定 功率 W/m Rated voltage	最大使 用长度 M Max length for usage	流体最高维持温度 ℃ Max sustainable temperature of liquid	绝缘 着色 Insulation color	内护套 着色 Inner sheath color	外护套着 色 Outer sheath color
普通型 Common type	加强型 Reinforced type						
BL ₂ -FF-10	BL ₂ -Q-FF-10	10	210	150	红、兰 read, blue	绿 green	黑 black
BL ₂ -FF-20	BL ₂ -Q-FF-20	20	180	120	红、兰 read, blue	绿 green	黑 black
BL ₂ -FF-30	BL ₂ -Q-FF-30	30	150	90	红、兰 read, blue	绿 green	黑 black
BL ₂ -FF-40	BL ₂ -Q-FF-40	40	140	65	红、兰 read, blue	绿 green	黑 black

It is used in circuit of AC rated voltage single-phase 220V and three-phase 380V. It is mainly used to resist freezing and keep constant temperature for various pipes and instrument. Its Max maintaining temperature is 150℃.

Type Meaning

Type-naming Method

Eg. BL2-Q-FF-20: Reinforced type constant power electrically-heated tape with F46 fluoroplastics insulation two-pharse 220V,20W/m;

BL3-FF-20: Common type constant power electrically-heated tape with F46 fluoroplastics insulation three-phrases 380V,20W/m

Product Structure and Working Theory

Power main lead consists of two pieces (three pieces) of insulated copper wire in parallel. Heating wire should be wrapped on inner insulation layer and connected with main lead with certain space(heating pitch) to form continuous parallel-connection resistance. One piece of continuous heating tape will come into being after current through main lead and heat from each parallel connection resistance.

Specification & Main Technical Performance

Technical performance of two-phase 200V constant power electrically-heated tape listed in table 1

Table 1

2、三相380V恒功率电热带技术特性如表2

Technical performance of three-phase 380V constant power electrically-heated tape listed in table 2

Table 2

产品型号 Type		额定 功率 W/m Rated voltage	最大使用长度 m Max length for usage	流体最高维持 温度℃ Max sustainable temperature of liquid	绝缘 着色 Insulation color	内护套 着色 Inner sheath color	外护套着色 Outer sheath color
普通型 Common type	加强型Reinforced type						
BL ₃ -FF-30	BL ₃ -Q-FF-30	30	330	120	红、兰 read, blue	绿 green	黑 black
BL ₃ -FF-40	BL ₃ -Q-FF-40	40	280	100	红、兰 read, blue	绿 green	黑 black
BL ₃ FF-50	BL ₃ -Q-FF-50	50	275	80	红、兰 read, blue	绿 green	黑 black
BL ₃ FF-60	BL ₃ -Q-FF-60	60	250	60	红、兰 read, blue	绿 green	黑 black

注：流体最高维持温度：是指管道内介质需要维持的最高工艺温度，超过本表规定的不在本标准规定范围内。

Note: 1: Max sustainable temperature of liquid is that of process temperature required by medium in the pipes, except which is beyond the range of standard stipulated in the table.

3、电热带的电气性能指标

电热带的常态绝缘电阻不小于30MΩ/100m,介电强度2000V 1min不击穿。

Electric performance indices of electrically-heated tape

Normal insulated resistance of electrically-heated tape is no less than 30MΩ/100m. Dielectric strength is 2000V for 1min without puncture.

四、产品特点

恒功率电热带单位长度的发热量恒定，使用的电热带越长，办输出的总功率越大。此电热带在现场能按实际需要长度任意剪开使用，电热带比较柔软，能够紧贴在管道表面，便于更好的伴热。加强型伴热带不仅起着传热和散热作用，而且增强了电热带的机械强度。

Product Character

Heating volume of constant power electrically-heated tape for unit length is invariable. The longer electrically-heated tape you will use, the higher total output power you will get. There are many choices on the cable length according to the practical application occasion. Electrical-ly-heated tape has the feature of softness, which is easy to be pastes tightly on the surface of pipe and easy to be heated. Reinforced type electrically-heated tape can not only transmit & emit heat, but also reinforce the mechanical force.

五、交货长度

允许根据双方协议长度交货。长度计量误差不超过±0.5%。

Delivery Length

Delivery length of cable depends on both agreements with length error allowance of ±0.5%

AF-200、AF-260氟塑料安装电线

AF-200 & AF-260 Fluoroplastics Installation Wire

本产品适用于耐低温导线、耐高温加热导线及阻燃耐老化导线也可用于空调机、微波炉、电子消毒柜、电子热水瓶、电暖器、电烤箱、电炒锅、灯具灯饰等内部布线。

生产执行标准

采用Q/TK.TY.J.04.19-2001标准及GJB773标准

二、使用条件

- 1、电导体最高工作温度为200℃和260℃，最低环境温度-60℃；
- 2、额定电压：300V/500V。

三、技术特性

- 1、电线具有优良的耐腐蚀性能，几乎不溶于任何有机溶剂，可抗油、强酸、强碱、强氧化剂；
- 2、具有优良的电绝缘性能，耐高电压、高频损耗小，不吸湿，绝缘电阻大；
- 3、具有优良的不燃、耐老化性能，氧指数 ≥ 70 ，使用寿命长。
- 4、也可向用户提供屏蔽型安装线。

四、技术参数如下表

标称截面 (mm ²) Nominal cross section area	电线最大外径 (mm) Max. O.D of cable	载流量 (A) Current-loading capacity	20℃导体最大电阻 (Ω/km) Max. resistance of conductor at 20℃
0.3	1.55	2.5	71.2
0.5	1.65	6	40.1
0.75	1.86	10	22.2
1.0	2.10	14	20.0
1.5	2.52	22	13.7
2.0	2.75	26	8.86
2.5	2.92	30	8.21
3.5	3.58	37	6.1
4.0	3.76	40	5.09
5.5	4.05	50	4.5
6.0	4.58	55	3.39
8.0	5.15	65	2.35
10.0	5.58	75	1.95
16.0	5.86	82	1.21

五、交货长度

根据双方协议允许任何长度交货，计量误差允许不超过 $\pm 0.5\%$ 。

It is used as low temperature resistant wire, high temperature resistant heating wire or flame retardant and aging resistant wire. It is used as inner wiring in air conditioner, microwave stove, electronic sterilizer, electric water heater, electrical heating machine, electronic oven, electrical frying pan and lightings etc.

Executive standard:

Q/TK.TY.J.04.19-2001 standard and GJB773 standard

Working Condition

- 1: Max working temperature of wire conductor is 200℃ & 260℃.
Min. environment temperature is -60℃.
- 2: Rated voltage: 300/500V

Technical Performance

- 1: It has good feature of corrosion resistant, and it is almost insoluble in any organic solvent. It is resistant to grease, strong acid and strong alkali.
- 2: It has good electric insulation character, and is resistant to high voltage, with small H.F. loss, without absorbing moisture, and with high insulation resistance.
- 3: It has good performance of resisting fire and aging, oxygen index ≥ 70 , with long lifetime.
- 4: We also produce shielding installation wire according to the requirement of customer.

Main Technical Parameter

Delivery Length

Delivery length of cable depends on both agreements with length error allowance of $\pm 0.5\%$

AF-125氟塑料安装电线

AF-125 Fluoroplastics Installation Wire

本产品适用于耐低温导线、耐高温加热导线及阻燃耐老化导线也可用于空调机、微波炉、电子消毒柜、灯具灯饰等内部布线，建筑行业中可作为500V及以下的照明及动力机械的阻燃耐老化导线。

一、生产执行标准

采用Q/TK.TY.J.04.19-2001标准

二、使用条件

- 1、电线导体最高工作温度为125℃，最低环境温度为-50℃；
- 2、额定电压：300/500V。

三、技术特性

- 1、电线具有优良的耐腐蚀性能，几乎不溶于任何有机溶剂，可抗油、强酸、强碱、强氧化剂；
- 2、具有优良的电绝缘性能，耐高电压、高频损耗小，不吸湿，绝缘电阻大；
- 3、具有优良的阻燃、耐老化性能，氧指数 ≥ 43 ，使用寿命长。

四、技术参数如下表

标称截面 (mm ²) Nominal cross section area	电线最大外径 (mm) Max. O.D of wire	载流量 (A) Current-loading capacity	20℃导体最大电阻 (Ω/km) Max. resistance of conductor at 20℃
0.3	1.62	2.5	71.2
0.5	1.75	6	40.1
0.75	1.96	10	22.2
1.0	2.20	14	20.0
1.5	2.62	22	13.7
2.0	2.85	26	8.86
2.5	3.00	30	8.21
3.5	3.68	37	6.1
4.0	3.86	40	5.09
5.5	4.10	50	4.5
6.0	4.68	55	3.39
8.0	5.25	65	2.35
10.0	5.68	75	1.95
16.0	5.96	82	1.21

五、交货长度

根据双方协议允许任何长度交货，计量误差允许不超过 $\pm 0.5\%$ 。

It is used as low temperature resistant wire, high temperature resistant heating wire or flame retardant and aging resistant wire. It is used for inner wiring in air conditioner, microwave stove, electronic sterilizer, lighting etc or as flame retardant and aging resistant wire for lighting and engine of voltage 500V in construction industry.

Executive standard:

Q/TK.TY.J.04.19-2001

Working Condition

- 1: Max working temperature of wire conductor is 125℃. Min. environment temperature is -50℃.
- 2: Rated voltage: 300/500V

Technical Performance

- 1: It has good feature of corrosion resistant, and it is almost insoluble in any organic solvent. It is resistant to grease, strong acid and strong alkali.
- 2: It has good electric insulation character, and is resistant to high voltage, with small H.F. loss, without absorbing moisture, and with high insulation resistance.
- 3: It has good performance of resisting fire and aging, oxygen index ≥ 43 , with long lifetime.

Main Technical Parameter

Delivery length

Delivery length of cable depends on both agreements with length error allowance of $\pm 0.5\%$

180℃电机绕组引接软电缆

180℃ Soft Cable for Motor Winding Connection

本产品适用于连续运行导体温度为180℃的电机绕组作引接线用。

It is used as connection cable of motor with continual working temperature of 180℃.

一、 生产执行标准 JB 6213.4-92

Executive standard: JB 6213.4-92

二、使用条件

Working Condition

- 1、连续运行导体最高温度为180℃；
- 2、电缆(电线)的额定电压为500V、1000V；
- 3、敷设时的允许弯曲半径应不小于电缆（电线）外径的4倍。

Max. temperature of conductor for continual working is 180℃.
Rated voltage of cable/wire is 500V,1000V.
Bending radius for installation is no less than 4 times that of cable outer diameter.

三、型号及名称如表1

Type & Description listed in Table 1

Table 1

型 号 Type	名 称 Description
JG	铜芯硅橡胶绝缘电机绕组引接电缆（电线） Motor winding connection cable(wire) with cu core, silica rubber insulation

四、电缆（电线）的规格如表2

Specification of cable(wire) listed in table 2

Table 2

型 号 Type	额定电压 (V) Rated voltage	芯 数 Core no.	标称截面(mm²) Nominal cross section area
JG	500、1000	1	0.75~95

五、电缆（电线）的参考外径如表3

Cable outer diameter for reference listed in table 3

Table 3

标称截面(mm²) Nominal cross section area	平均外径上限 (mm) Max. average O.D		标称截面(mm²) Nominal cross section area	平均外径上限 (mm) Max. average O.D	
	500V	1000V		500V	1000V
0.75	3.7	4.1	16	10.0	10.5
1.0	3.9	4.3	25	12.1	12.6
1.5	4.2	4.6	35	14.1	14.6
2.5	5.3	5.7	50	16.5	17.6
4	6.2	6.6	70	18.8	19.3
6	7.0	7.4	95	21.5	21.9
10	8.7	9.2	--	--	--

六、交货要求

Delivery Requirement

产品交货长度按双方协议规定，计量误差允许不超过±0.5%。

Delivery length of cable depends on both agreements with length error allowance of ±0.5%

具有屏蔽和耐化学品功能的电缆

Power Cable with Shielding and Chemical Medicine Resistance

一、适用范围

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配电线路或电气控制线路，电缆具有较好的耐化学药品、油类、溶剂腐蚀能力，同时具有防磁场、静电干扰的能力，电缆可用于直埋和穿管敷设。

二、执行标准

参照GB9330-88及GB/T12706-2002标准。

三、工作条件

- 1、电缆额定电压 $U_0/U=0.6/1kV$ 。
- 2、电缆导体的长期允许工作温度为 $90^{\circ}C$ 。
- 3、电缆安装时的最小弯曲半径：单芯电缆 $\geq 25D$ ；多芯电缆 $\geq 20D$ （ D 为电缆外径）。
- 4、敷设电缆时的环境温度不低于 $0^{\circ}C$ 。

四、型号名称

电缆型号 Cable type		电缆名称cable name
铜芯 Copper core	铝芯 Aluminum core	
LH-YJA	LH-YJLA	铜芯或铝芯交联聚乙烯绝缘涂塑铝带粘接护套具有屏蔽和耐化学品功能的电力电缆 Power cable with copper core or aluminum core, XLPE insulation, plastic coated aluminum tape, bonded jacket, shielding, chemical medicine resistance
LH-YJA23	LH-YJLA23	铜芯或铝芯交联聚乙烯绝缘涂塑铝带粘接内护套镀锌钢带铠装聚乙烯外护套具有屏蔽和耐化学品功能的电力电缆 Power cable with copper core or aluminum core, XLPE insulation, plastic coated aluminum tape, bonded inner jacket, galvanized steel tape armoring, PE outer sheath, shielding, chemical medicine resistance
LH-KYJA	/	铜芯交联聚乙烯绝缘涂塑铝带粘接护套具有屏蔽和耐化学品功能的控制电缆 Control cable with copper core, XLPE insulation, plastic coated aluminum tape, bonded jacket, shielding, chemical medicine resistance
LH-KYJA23	/	铜芯交联聚乙烯绝缘涂塑铝带粘接内护套镀锌钢带铠装聚乙烯外护套具有屏蔽和耐化学品功能的控制电缆 Control cable with copper core, XLPE insulation, plastic coated aluminum tape, bonded inner jacket, galvanized steel tape armoring, PE outer sheath, shielding, chemical medicine resistance

Application

The cable is widely used in the field of refinery, petrochemical industry and common chemical plant for transmitting & distributing power or controlling electrical return circuit, which often contact with aromatic solvent. The cable has good features of chemical medicine resistance, oil proof; dissolvent corrosive resistance, magnetic field proof and static interfere. The cable can be laid underground or be laid in pipe.

Working condition

Rated voltage U_0/U is $0.6/1kV$.
Long-term working temperature of cable conductor is $90^{\circ}C$.
When installing cables, min bending radius is more than $25D$ for single core cable; more than $20D$ for multi-core cable.(D means outer diameter of cable)
Environment temperature for installation is no less than $0^{\circ}C$.

Type & Name

五、规格

specification

电缆型号cable type	芯数core number	导体标称截面 (mm ²) Nominal cross section area of conductor
LH-YJA、LH-YJLA LH-YJA23、LH-YJLA23	1	2.5~300
	2	
	3	
	4	
	5	2.5~185
	3+1	
	3+2	4~300
	4+1	4~185
		4~240

电缆型号cable type	导体标称截面 (mm ²) Nominal cross section area of conductor				
	0.75、1.0	1.5	2.5	4	6、10
	芯数core number				
LH-KYJA	2~61		2~37	2~14	2~10
LH-KYJA23	6~61	4~61	4~37	4~14	4~10

六、产品特点

- 1、本产品耐药品性和抑制药品透过性能较好，仅次于全封闭金属护套，且相比之下电缆外径小，重量轻，可弯曲性能好。
- 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。
- 3、金属屏蔽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。

product characteristic

The cable has good feature of medicine resistance, medicine permeation resistance. It is only inferior to full enclosure metal sheath. By comparison, it also has feature of small cable OD, light weight and good bending performance.

Compared with wrapping structure of cable, shielding effect of cable with vertical wrapping structure as shielding layer is much better.

Both metal shielding and armoring layer inner side have drain wire, which helps to form full shielding structure. Drain wire not only is good for cable earthing, but also is good for ensuring continuity of shielding layer.

七、交货长度

- 1、电缆根据双方的协议长度交货。
- 2、长度计量误差不超过 $\pm 0.5\%$ 。

delivery length

Delivery length of cable depends on both agreement with length error allowance of $\pm 0.5\%$.

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