



稀土高铁铝合金电力电缆

产 品 介 绍

广东欣意合金科技有限责任公司

产品资料整理

一、交联聚乙烯绝缘聚氯乙烯护套稀土高铁铝合金电力电缆

Cross-linked polyethylene-insulated, polyvinyl chloride sheathed, rare-earth-based high-temperature resistant aluminum alloy power cable

1. 产品结构特点 (Product Structure Characteristics):

TC90-YJ(XG)LHV 非铠装电缆, 采用紧压绞股式稀土高铁铝合金导体, 截面规格从 10mm² 到 400mm², 绝缘采用阻燃交联聚乙烯, 具有防燃烧、耐潮湿等特点; 电缆的内屏蔽和外屏蔽采用国际尖端技术和设备生产而成, 其特有的三层共挤技术加上公司引进的西科拉公司 X-射线测偏仪, 自动控制绝缘以及内外屏蔽层厚度, 最大程度上保证了产品质量; 外层绕包加强纤维带和防辐射 PVC 护套。适用范围广泛, 环保耐用。

The TC90-YJ (XG) LHV non-armored cable utilizes a compacted stranded rare-earth high-conductivity aluminum alloy conductor with cross-sectional areas ranging from 10 mm² to 400 mm². The insulation is made of flame-retardant cross-linked polyethylene, offering flame resistance and moisture resistance; the internal and external shielding layers are manufactured using cutting-edge international technology and equipment. The unique three-layer co-extrusion process, combined with the X-ray profilometer imported from Xikola Company, enables automatic control over the thickness of the insulation and both internal and external shielding layers, thereby ensuring optimal product quality. The cable also features an outer wrapping of reinforced fiber tape and a radiation-resistant PVC sheath. This cable offers a wide range of applications, is environmentally friendly, and is highly durable.

2. 产品特性分析 (Product Feature Analysis):

交联聚乙烯是利用硅烷交联或过氧化物交联方法, 使聚乙烯转变成热固性的交联聚乙烯, 从而大幅度地提高了电缆的耐热性能、耐老化性能和使用寿命, 并且环保。我公司自主研发的稀土高铁铝合金导体抗蠕变、高柔韧、连接稳定、强延展、低反弹, 与纯铝导体相比, 不仅经济性能优良, 而且具有优异的机械性能、安全性能、连接性能等多项特性。电缆护套采用环保型的 PVC, 可在潮湿场所安装, 亦可直埋或敷设在混凝土中使用; 根据使用场合要求的不同, 亦可根据用户需要生产低烟无

卤、耐火阻燃电缆，能达到阻燃 IA 级、耐火 I 级，符合 GA306.1 及 GA306.2 标准。

Cross-linked polyethylene is produced by utilizing silane cross-linking or peroxide cross-linking methods to transform polyethylene into thermosetting cross-linked polyethylene, thereby significantly enhancing the cable's heat resistance, aging resistance, and service life, while also ensuring environmental friendliness. The rare-earth high-temperature aluminum alloy conductor independently developed by our company features excellent creep resistance, high flexibility, stable connections, strong ductility, and low rebound; compared with pure aluminum conductors, it not only offers superior economic performance but also possesses outstanding mechanical properties, safety characteristics, and connection performance. The cable sheath is made of environmentally friendly PVC, which can be installed in humid environments, buried directly, or laid within concrete; depending on the specific application requirements and user needs, we can also produce low-smoke halogen-free and flame-retardant cables that achieve Flame Retardant Class IA and Fire Resistance Class I ratings, fully complying with the GA306.1 and GA306.2 standards.

3.产品使用要求（Product Usage Requirements）：

TC90-YJ(XG)LHV 非铠装电缆，适用于 600V—35KV 电压等级，适用于 90℃以下干燥或潮湿场所，可室内、室外安装，可垂直安装，也可托架或沿墙敷设，也可地下直埋安装；弯曲半径最小为 7 倍外径，也可 360 度弯曲；适用于无机械破坏的环境下，如民用、办公楼、学校、旅馆、商业、购物中心、工厂大型场馆等用电线路。

The TC90-YJ (XG) LHV non-armored cable is suitable for voltage levels ranging from 600V to 35kV; it is designed for use in dry or damp environments below 90° C; it can be installed indoors or outdoors, whether vertically, via supports, along walls, or directly buried underground; its minimum bending radius is 7 times its outer diameter, though it can also undergo 360-degree bending; this cable is suitable for applications in environments free from mechanical damage, such as power circuits in residential areas, office buildings, schools, hotels, commercial establishments, shopping centers, factories, and other large-scale venues.

4.电缆的型号、名称及主要用途（Cable model, name, and primary applications）:

型号 model	名称 name	主要用途 main application
YJ(XG)LHV (TC90)	交联聚乙烯绝缘聚氯乙烯护套稀土高铁铝合金电力电缆 Cross-linked polyethylene-insulated, polyvinyl chloride sheathed, rare-earth-based high-temperature resistant aluminum alloy power cable	敷设在室内、隧道、管道、电缆沟及松散土壤中，电缆不能承受机械外力作用，但可承受一定的牵引力。 These cables are installed indoors, in tunnels, along pipelines, in cable trenches, or in loose soil; they cannot withstand mechanical external forces but can withstand a certain amount of pulling force.
YJ(XG)LHV22	交联聚乙烯绝缘钢带铠装聚氯乙烯护套稀土高铁铝合金电力电缆 Cross-linked polyethylene-insulated steel tape-armored PVC sheathed rare-earth high-strength aluminum alloy power cable	敷设在地下，电缆能承受机械外力的作用，但不能承受大的拉力。 installed underground; the cable can withstand mechanical external forces but cannot withstand significant tensile forces.
注：本公司生产的各种阻燃电力电缆在原型号前加“ZR”；各种耐火电力电缆在原型号前加“NH”；各种低烟无卤、阻燃、耐火电缆在原型号前加“WDZN”；内衬及护套材料选用低烟无卤材料。 Note: For all types of flame-retardant power cables produced by our company, "ZR" is added before the original model designation; for all types of fire-resistant power cables, "NH" is added before the original model designation; for all types of low-smoke, halogen-free, flame-retardant, and fire-resistant cables, "WDZN" is added before the original model designation; the inner lining and sheath materials shall be made of low-smoke, halogen-free materials.		
		YJ(XG)LHV
		YJ(XG)LHV22

5. 电缆的型号、芯数及额定电压、截面：

(Cable model, number of conductors, rated voltage, and cross-sectional area) :

1) YJ(XG)LHV(TC90) 稀土高铁铝合金电力电缆重要参数

Key parameters of YJ (XG) LHV (TC90) rare-earth high-iron aluminum alloy power cables

型号 model	芯数 Number of cores	额定电压/截面 Nominal voltage cross-section				
		0.6/1KV		8.7/10KV 8.7/15KV		26/35KV
YJ (XG) LHV (TC90)	1	10-400		25-500		50-500
	3	16-400		25-500		50-500
	3+1	16-400				
	3+2	16-400				
	4	10-400				
	4+1	16-400				

a. 0.6/1KV 单芯交联聚乙烯绝缘聚氯乙烯护套稀土高铁铝合金电力电缆

0.6/1 kV single-core cross-linked polyethylene-insulated, polyvinyl chloride sheathed, rare-earth high-strength aluminum alloy power cable

导体 截面 Conductor cross-section	导体 直径 Conductor diameter	绝缘 厚度 insulation thickness	护套 厚度 Sheath thickness	外径 external diameter	重量 weight	绝缘电阻 insulation resistance	20℃时导体 直流电阻 DC resistance of conductor at 20° C	载流量 current-carrying capacity	
								在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	≥MΩ/km	≤Ω/km	A	A
1×10	3.80	0.7	1.5	8.0	95	0.523	3.08	60	75
1×16	4.80	0.7	1.5	8.9	120	0.431	1.91	80	100
1×25	6.00	0.9	1.5	10.4	190	0.444	1.20	115	130
1×35	7.00	0.9	1.5	11.5	207	0.379	0.868	140	150
1×50	8.40	1.0	1.5	13.0	245	0.355	0.641	170	180
1×70	10.00	1.1	1.5	14.0	336	0.335	0.443	215	225
1×95	11.60	1.1	1.5	16.4	455	0.290	0.320	275	270
1×120	13.00	1.2	1.5	17.8	550	0.282	0.253	320	305
1×150	14.60	1.4	2.0	20.6	650	0.294	0.206	370	340
1×185	16.20	1.6	2.0	22.5	804	0.303	0.164	415	375
1×240	18.40	1.7	2.0	24.9	1021	0.283	0.125	490	435
1×300	20.60	1.8	2.5	27.3	1238	0.263	0.100	565	495
1×400	23.80	2.0	2.5	34.1	1455	0.243	0.0778	640	555

b. 0.6/1KV 三芯交联聚乙烯绝缘聚氯乙烯外护套稀土高铁铝合金电力电缆

0.6/1 kV three-core cross-linked polyethylene-insulated, polyvinyl chloride sheathed, rare-earth high-temperature resistant aluminum alloy power cable

导体 截面 Conductor cross-section	导体 直径 Conductor diameter	绝缘 厚度 insulation thickness	护套 厚度 Sheath thickness	外径 external diameter	重量 weight	绝缘电阻 insulation resistance	20℃时导体 直流电阻 DC resistance of conductor at 20° C	载流量 current-carrying capacity	
								在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	≥MΩ/km	≤Ω/km	A	A
3×10	3.80	0.7	1.5	14.6	260	0.523	3.08	50	60
3×16	4.80	0.7	1.5	16.5	340	0.431	1.91	65	80
3×25	6.00	0.9	2.0	20.8	470	0.444	1.20	90	100
3×35	7.00	0.9	2.0	23.2	600	0.379	0.868	110	120
3×50	8.40	1.0	2.0	26.4	730	0.355	0.641	130	140
3×70	10.00	1.1	2.0	29.9	970	0.335	0.443	170	175
3×95	11.60	1.1	2.0	33.3	1240	0.290	0.320	205	210
3×120	13.00	1.2	2.5	37.8	1540	0.282	0.253	240	235
3×150	14.60	1.4	2.5	41.7	1940	0.294	0.206	275	265
3×185	16.20	1.6	2.5	44.6	2248	0.303	0.164	320	301
3×240	18.40	1.7	2.5	50.1	2723	0.283	0.125	385	355
3×300	20.60	1.8	3.0	55.6	3218	0.263	0.100	450	409
3×400	23.80	2.0	3.0	61.6	3693	0.243	0.0778	515	463

c. 0.6/1KV （3+1）芯交联聚乙烯绝缘聚氯乙烯外护套稀土高铁铝合金电力电缆

0.6/1 kV (3+1)-core cross-linked polyethylene-insulated, polyvinyl chloride sheathed, rare-earth high-temperature resistant aluminum alloy power cable

导体 截面 Conductor cross-section	导体 直径 Conductor diameter	绝缘 厚度 insulation thickness	护套 厚度 Sheath thickness	外径 external diameter	重量 weight	绝缘电阻 insulation resistance	20℃时导体 直流电阻 DC resistance of conductor at 20° C	载流量 current-carrying capacity	
								在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	≥MΩ /km	≤Ω /km	A	A
3×16+1×10	4.80	0.7	1.5	17.5	407	0.431	1.91	70	90
3×25+1×16	6.00	0.9	2.0	21.8	566	0.444	1.20	105	120
3×35+1×16	7.00	0.9	2.0	23.8	683	0.379	0.868	130	140
3×50+1×25	8.40	1.0	2.0	27.4	849	0.355	0.641	160	170
3×70+1×35	10.00	1.1	2.0	31.0	1123	0.335	0.443	203	203
3×95+1×50	11.60	1.1	2.5	25.8	1473	0.290	0.320	255	250
3×120+1×70	13.00	1.2	2.5	39.7	1821	0.282	0.253	300	285
3×150+1×70	14.60	1.4	2.5	42.9	2199	0.294	0.206	350	320
3×185+1×95	16.20	1.6	3.0	47.4	2696	0.303	0.164	376	382
3×240+1×120	18.40	1.7	3.0	52.7	3408	0.283	0.125	435	439
3×300+1×150	20.60	1.8	3.5	58.0	4401	0.263	0.100	484	489
3×400+1×185	23.80	2.0	3.5	63.5	5590	0.243	0.0778	555	561

d. 0.6/1KV （3+2）芯交联聚乙烯绝缘聚氯乙烯外护套稀土高铁铝合金电力电缆

0.6/1 kV (3+2)-core cross-linked polyethylene-insulated, polyvinyl chloride sheathed, rare-earth high-temperature resistant aluminum alloy power cable

导体 截面 Conductor cross-section	导体 直径 Conductor diameter	绝缘 厚度 insulation thickness	护套 厚度 Sheath thickness	外径 external diameter	重量 weight	绝缘电阻 insulation resistance	20℃时导体 直流电阻 DC resistance of conductor at 20° C	载流量 current-carrying capacity	
								在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	≥MΩ /km	≤ Ω /km	A	A
3×16+2×10	4.80	0.7	1.80	21.68	510	0.431	1.91	72	85
3×25+2×16	6.00	0.9	1.80	25.88	707	0.444	1.20	85	92
3×35+2×16	7.00	0.9	1.80	27.88	821	0.379	0.868	102	110
3×50+2×25	8.40	1.0	2.00	32.08	1149	0.355	0.641	123	131
3×70+2×35	10.00	1.1	2.10	36.88	1513	0.335	0.443	152	159
3×95+2×50	11.60	1.1	2.30	41.76	1687	0.290	0.320	184	190
3×120+2×70	13.00	1.2	2.50	46.01	2106	0.282	0.253	213	216
3×150+2×70	14.60	1.4	2.60	51.32	2512	0.294	0.206	241	240
3×185+2×95	16.20	1.6	2.80	56.89	3097	0.303	0.164	277	271
3×240+2×120	18.40	1.7	3.00	62.89	4154	0.283	0.125	325	312
3×300+2×150	20.60	1.8	3.20	70.02	5080	0.263	0.100	361	346
3×400+2×185	23.80	2.0	3.40	76.87	6446	0.243	0.0778	424	410

e. 0.6/1KV 四芯交联聚乙烯绝缘聚氯乙烯外护套稀土高铁铝合金电力电缆

0.6/1 kV four-core cross-linked polyethylene-insulated, polyvinyl chloride sheathed, rare-earth high-temperature resistant aluminum alloy power cable

导体 截面 Conductor cross-section	导体 直径 Conductor diameter	绝缘 厚度 insulation thickness	护套 厚度 Sheath thickness	外径 external diameter	重量 weight	绝缘电阻 insulation resistance	20℃时导体 直流电阻 DC resistance of conductor at 20° C	载流量 current-carrying capacity	
								在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	≥MΩ /km	≤ Ω /km	A	A
4×10	3.80	0.7	1.5	15.9	327	0.523	3.08	49	59
4×16	4.80	0.7	2.0	19.1	428	0.431	1.91	64	78
4×25	6.00	0.9	2.0	22.7	594	0.444	1.20	87	98
4×35	7.00	0.9	2.0	25.4	739	0.379	0.868	120	130
4×50	8.40	1.0	2.0	29.0	949	0.355	0.641	151	161
4×70	10.00	1.1	2.0	32.9	1271	0.335	0.443	183	192
4×95	11.60	1.1	2.5	37.7	1627	0.290	0.320	238	234
4×120	13.00	1.2	2.5	41.6	2016	0.282	0.253	285	276
4×150	14.60	1.4	3.0	47.6	2505	0.294	0.206	328	318
4×185	16.20	1.6	3.0	50.6	3044	0.303	0.164	375	351
4×240	18.40	1.7	3.0	56.4	4100	0.283	0.125	405	391
4×300	20.60	1.8	3.5	62.2	5020	0.263	0.100	422	392
4×400	23.80	2.0	3.5	68.0	6428	0.243	0.0778	465	425

f. 0.6/1KV （4+1）芯交联聚乙烯绝缘聚氯乙烯外护套稀土高铁铝合金电力电缆

0.6/1 kV (4+1)-core cross-linked polyethylene-insulated, polyvinyl chloride sheathed, rare-earth high-temperature resistant aluminum alloy power cable

导体 截面 Conductor cross-section	导体 直径 Conductor diameter	绝缘 厚度 insulation thickness	护套 厚度 Sheath thickness	外径 external diameter	重量 weight	绝缘电阻 insulation resistance	20℃时导体 直流电阻 DC resistance of conductor at 20° C	载流量 current-carrying capacity	
								在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	≥MΩ/km	≤Ω/km	A	A
4×16+1×10	4.80	0.7	1.5	17.5	515	0.431	1.91	74	77
4×25+1×16	6.00	0.9	2.0	21.8	717	0.444	1.20	88	97
4×35+1×16	7.00	0.9	2.0	23.8	831	0.379	0.868	115	125
4×50+1×25	8.40	1.0	2.0	27.4	1162	0.355	0.641	150	159
4×70+1×35	10.00	1.1	2.0	31.0	1623	0.335	0.443	178	183
4×95+1×50	11.60	1.1	2.5	25.8	2231	0.290	0.320	228	237
4×120+1×70	13.00	1.2	2.5	39.7	2665	0.282	0.253	279	287
4×150+1×70	14.60	1.4	2.5	42.9	3190	0.294	0.206	323	338
4×185+1×95	16.20	1.6	3.0	47.4	3842	0.303	0.164	359	364
4×240+1×120	18.40	1.7	3.0	52.7	5001	0.283	0.125	415	419
4×300+1×150	20.60	1.8	3.5	58.0	5679	0.263	0.100	461	466
4×400+1×185	23.80	2.0	3.5	63.5	7185	0.243	0.0778	529	535

g. 8. 7/10KV、8. 7/15KV 单芯交联聚乙烯绝缘聚氯乙烯外护套稀土高铁铝合金电力电缆

8. 7/10 kV and 8. 7/15 kV single-core cross-linked polyethylene-insulated, polyvinyl chloride sheathed, rare-earth high-strength aluminum alloy power cable

导体 截面 Conductor cross-section	导体 直径 Conductor diameter	绝缘 厚度 insulation thickness	护套 厚度 Sheath thickness	外径 external diameter	重量 weight	绝缘电阻 insulation resistance	20℃时导体 直流电阻 DC resistance of conductor at 20° C	载流量 current-carrying capacity	
								在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	KA	≤ Ω /km	A	A
1×25	6.00	4.5	1.8	23.0	617	2.42	1.200	130	120
1×35	7.00	4.5	1.8	24.0	678	3.37	0.868	155	145
1×50	8.40	4.5	1.8	26.0	757	4.79	0.641	190	175
1×70	10.00	4.5	1.8	27.0	866	6.68	0.443	235	215
1×95	11.60	4.5	1.8	29.0	996	9.68	0.320	290	255
1×120	13.00	4.5	1.9	30.0	1116	11.4	0.253	335	290
1×150	14.60	4.5	1.9	32.0	1250	14.2	0.206	380	330
1×185	16.20	4.5	2.0	34.0	1481	17.5	0.164	435	370
1×240	18.40	4.5	2.1	36.0	1719	22.6	0.125	515	435
1×300	20.60	4.5	2.1	38.0	1971	28.2	0.100	595	490
1×400	23.80	4.5	2.3	42.0	2354	37.6	0.0778	695	565
1×500	26.60	4.5	2.4	44.0	2373	47.0	0.0605	810	650

h. 8.7/10KV、8.7/15KV 三芯交联聚乙烯绝缘聚氯乙烯外护套稀土高铁铝合金电力电缆

8.7/10 kV and 8.7/15 kV three-core cross-linked polyethylene-insulated, polyvinyl chloride sheathed, rare-earth high-temperature-resistant aluminum alloy power cable

导体 截面 Conductor cross-section	导体 直径 Conductor diameter	绝缘 厚度 insulation thickness	护套 厚度 Sheath thickness	外径 external diameter	重量 weight	绝缘电阻 insulation resistance	20℃时导体 直流电阻 DC resistance of conductor at 20° C	载流量 current-carrying capacity	
								在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	KA	≤ Ω /km	A	A
3×25	6.00	4.5	2.4	48.0	2102	2.42	1.200	95	100
3×35	7.00	4.5	2.5	50.0	2300	3.37	0.868	122	127
3×50	8.40	4.5	2.6	53.0	2534	4.79	0.641	150	157
3×70	10.00	4.5	2.7	57.0	2911	6.68	0.443	187	194
3×95	11.60	4.5	2.8	61.0	3348	9.68	0.320	225	231
3×120	13.00	4.5	2.9	64.0	3843	11.4	0.253	270	276
3×150	14.60	4.5	3.1	68.0	4346	14.2	0.206	308	313
3×185	16.20	4.5	3.2	72.0	4874	17.5	0.164	350	357
3×240	18.40	4.5	3.3	77.0	5845	22.6	0.125	418	422
3×300	20.60	4.5	3.5	82.0	6653	28.2	0.100	470	475
3×400	23.80	4.5	3.6	87.0	7459	37.6	0.0778	520	526
3×500	26.60	4.5	3.8	92.0	8265	47.0	0.0605	578	583

i. 26/35KV 单芯交联聚乙烯绝缘聚氯乙烯外护套稀土高铁铝合金电力电缆

26/35 kV Single-Core Cross-linked Polyethylene Insulated, Polyvinyl Chloride Outer Sheathed, Rare Earth-Based High-Current Aluminum Alloy Power Cable

导体 截面 Conductor cross-section	导体 直径 Conductor diameter	绝缘 厚度 insulation thickness	护套 厚度 Sheath thickness	外径 external diameter	重量 weight	绝缘电阻 insulation resistance	20℃时导体 直流电阻 DC resistance of conductor at 20° C	载流量 current-carrying capacity	
								在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	KA	≤ Ω /km	A	A
1×50	8.40	10.5	2.2	38.0	1487	4.79	0.641	190	175
1×70	10.00	10.5	2.2	40.0	1628	6.68	0.443	235	215
1×95	11.60	10.5	2.3	42.0	1793	9.68	0.320	285	255
1×120	13.00	10.5	2.3	43.0	1942	11.4	0.253	330	290
1×150	14.60	10.5	2.4	45.0	2104	14.2	0.206	375	325
1×185	16.20	10.5	2.4	47.0	2294	17.5	0.164	430	370
1×240	18.40	10.5	2.5	49.0	2577	22.6	0.125	505	430
1×300	20.60	10.5	2.6	51.0	2982	28.2	0.100	580	490
1×400	23.80	10.5	2.7	55.0	3424	37.6	0.0778	680	565
1×500	26.60	10.5	2.8	57.0	3866	47.0	0.0605	790	645

j. 26/35KV 三芯交联聚乙烯绝缘聚氯乙烯外护套稀土高铁铝合金电力电缆

26/35 kV three-core cross-linked polyethylene-insulated, polyvinyl chloride sheathed, rare-earth high-temperature resistant aluminum alloy power cable

导体 截面 Conductor cross-section	导体 直径 Conductor diameter	绝缘 厚度 insulation thickness	护套 厚度 Sheath thickness	外径 external diameter	重量 weight	绝缘电阻 insulation resistance	20℃时导体 直流电阻 DC resistance of conductor at 20° C	载流量 current-carrying capacity	
								在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	KA	≤ Ω/km	A	A
3×50	8.40	10.5	3.4	82	5865	4.79	0.641	168	176
3×70	10.00	10.5	3.5	86	6432	6.68	0.443	212	216
3×95	11.60	10.5	3.6	89	7053	9.68	0.320	256	260
3×120	13.00	10.5	3.7	92	7612	11.4	0.253	296	296
3×150	14.60	10.5	3.8	96	8295	14.2	0.206	336	336
3×185	16.20	10.5	3.9	100	8991	17.5	0.164	384	384
3×240	18.40	10.5	4.0	105	10100	22.6	0.125	468	464
3×300	20.60	10.5	4.1	110	11200	28.2	0.100	520	624
3×400	23.80	10.5	4.2	115	12246	37.6	0.0778	624	672
3×500	26.60	10.5	4.3	121	13300	47.0	0.0605	728	720

2) YJ(XG)LHV22 稀土高铁铝合金电力电缆重要参数

Key Parameters of YJ (XG) LHV22 Rare Earth High-Strength Aluminum Alloy Power Cable

型号 model	芯数 Number of cores	额定电压/截面 Nominal voltage cross/section				
		0.6/1KV		8.7/10KV 8.7/15KV		26/35KV
YJ(XG)LHV ₂₂	3	10-400		25-500		50-500
	3+1	16-400				
	3+2	16-400				
	4	10-400				
	4+1	16-400				

a. 0.6/1KV 三芯交联聚乙烯绝缘钢带铠装聚氯乙烯外护套稀土高铁铝合金电力电缆

0.6/1 kV Three-core Cross-linked Polyethylene Insulated Steel Band Armored PVC Outer Sheathed Rare Earth High-Performance Aluminum Alloy Power Cable

导体截面 Conductor cross-sectional area	导体直径 Conductor diameter	绝缘厚度 insulation thickness	护套厚度 Sheath thickness	外径 external diameter	重量 weight	20℃时导体直流电阻 DC resistance of the conductor at 20° C	电缆载流量 Cable Current-carrying Capacity	
							在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	≤ Ω /km	A	A
3×10	3.80	1.00	1.80	20.53	569	3.08	47	50
3×16	4.80	1.00	1.80	22.69	686	1.91	59	62
3×25	6.00	1.20	1.80	26.14	889	1.20	80	88
3×35	7.00	1.20	2.00	28.30	1049	0.868	95	105
3×50	8.40	1.40	2.00	29.83	1549	0.641	137	150
3×70	10.00	1.40	2.10	32.83	1866	0.443	163	178
3×95	11.60	1.60	2.30	38.50	2389	0.320	227	248
3×120	13.00	1.60	2.40	40.70	2722	0.253	257	281
3×150	14.60	1.80	2.50	43.96	3220	0.206	293	321
3×185	16.20	2.00	2.70	48.02	3785	0.164	326	357
3×240	18.40	2.20	2.90	53.28	4647	0.125	419	457
3×300	20.60	2.40	3.10	58.56	5434	0.100	476	520
3×400	23.80	2.60	3.30	64.01	6299	0.0778	553	606

b. 0.6/1KV（3+1）芯交联聚乙烯绝缘钢带铠装聚氯乙烯外护套稀土高铁铝合金电力电缆

0.6/1 kV (3+1)-core cross-linked polyethylene insulated, steel tape armored, PVC sheathed, rare-earth high-temperature resistant aluminum alloy power cable

导体截面 Conductor cross-sectional area	导体直径 Conductor diameter	绝缘厚度 insulation thickness	护套厚度 Sheath thickness	外径 external diameter	重量 weight	20℃时导体直流电阻 DC resistance of the conductor at 20° C	电缆载流量 Cable Current-carrying Capacity	
							在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	≤ Ω /km	A	A
3×16+1×10	4.80	1.00	1.80	23.79	770	1.91	59	62
3×25+1×16	6.00	1.20	1.80	27.28	997	1.20	80	88
3×35+1×16	7.00	1.20	1.90	29.29	1161	0.868	95	105
3×50+1×25	8.40	1.40	2.10	32.07	1763	0.641	137	150
3×70+1×35	10.00	1.40	2.20	35.27	2123	0.443	163	178
3×95+1×50	11.60	1.60	2.30	40.19	2672	0.320	227	248
3×120+1×70	13.00	1.60	2.40	42.59	3081	0.253	257	281
3×150+1×70	14.60	1.80	2.60	46.52	3619	0.206	293	321
3×185+1×95	16.20	2.00	2.70	50.44	4263	0.164	326	357
3×240+1×120	18.40	2.20	2.90	55.56	5195	0.125	419	457
3×300+1×150	20.60	2.40	3.10	60.66	6078	0.100	476	520
3×400+1×185	23.80	2.60	3.30	65.98	7123	0.0778	553	606

c. 0.6/1KV（3+2）芯聚氯乙烯绝缘钢带铠装聚氯乙烯外护套合金铝电力电缆

0.6/1 kV (3+2)-core PVC-insulated, steel tape armored, PVC-covered alloy-aluminum power cable

导体截面 Conductor cross-sectional area	导体直径 Conductor diameter	绝缘厚度 insulation thickness	护套厚度 Sheath thickness	外径 external diameter	重量 weight	20℃时导体直流电阻 DC resistance of the conductor at 20° C	电缆载流量 Cable Current-carrying Capacity	
							在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	≤ Ω /km	A	A
3×16+2×10	4.80	1.00	1.80	27.40	942	1.91	54	56
3×25+2×16	6.00	1.20	2.00	33.20	1601	1.20	73	80
3×35+2×16	7.00	1.20	2.10	35.40	1796	0.868	87	96
3×50+2×25	8.40	1.40	2.20	40.80	2299	0.641	125	137
3×70+2×35	10.00	1.40	2.40	45.40	2814	0.443	149	162
3×95+2×50	11.60	1.60	2.60	4079	2955	0.320	207	226
3×120+2×70	13.00	1.60	2.70	43.18	3418	0.253	234	256
3×150+2×70	14.60	1.80	2.80	46.93	3963	0.206	267	292
3×185+2×95	16.20	2.00	3.00	51.04	4739	0.164	297	325
3×240+2×120	18.40	2.20	3.20	55.22	5608	0.125	381	416
3×300+2×150	20.60	2.40	3.40	59.89	6512	0.100	433	473
3×400+2×185	23.80	2.60	3.60	65.43	8904	0.0778	503	551

d. 0.6/1KV 四芯交联聚乙烯绝缘钢带铠装聚氯乙烯外护套稀土高铁铝合金电力电缆

0.6/1 kV four-core cross-linked polyethylene-insulated, steel tape armored, PVC outer sheathed, rare-earth high-temperature resistant aluminum alloy power cable

导体截面 Conductor cross-sectional area	导体直径 Conductor diameter	绝缘厚度 insulation thickness	护套厚度 Sheath thickness	外径 external diameter	重量 weight	20℃时导体直流电阻 DC resistance of the conductor at 20° C	电缆载流量 Cable Current-carrying Capacity	
							在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	≤ Ω /km	A	A
4×10	3.80	1.00	1.80	22.04	657	3.08	45	47
4×16	4.80	1.00	1.80	24.46	802	1.91	54	56
4×25	6.00	1.20	1.80	28.33	1045	1.20	73	80
4×35	7.00	1.20	2.00	32.35	1604	0.868	87	96
4×50	8.40	1.40	2.10	33.36	1904	0.641	125	137
4×70	10.00	1.40	2.20	37.36	2329	0.443	149	162
4×95	11.60	1.60	2.40	41.72	2909	0.320	207	226
4×120	13.00	1.60	2.50	44.72	3357	0.253	234	256
4×150	14.60	1.80	2.70	48.69	4021	0.206	267	292
4×185	16.20	2.00	2.80	52.86	4709	0.164	297	325
4×240	18.40	2.20	3.00	58.05	5512	0.125	381	416
4×300	20.60	2.40	3.20	63.11	6456	0.100	433	473
4×400	23.80	2.60	3.40	69.32	7403	0.0778	503	551

e. 0.6/1KV（4+1）芯交联聚乙烯绝缘钢带铠装聚氯乙烯外护套稀土高铁铝合金电力电缆

0.6/1 kV (4+1)-core cross-linked polyethylene insulated, steel tape armored, PVC sheathed, rare-earth high-temperature resistant aluminum alloy power cable

导体截面 Conductor cross-sectional area	导体直径 Conductor diameter	绝缘厚度 insulation thickness	护套厚度 Sheath thickness	外径 external diameter	重量 weight	20℃时导体直流电阻 DC resistance of the conductor at 20° C	电缆载流量 Cable Current-carrying Capacity	
							在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	≤ Ω /km	A	A
4×16+1×10	4.80	1.00	1.8	24.36	988	1.91	54	56
4×25+1×16	6.00	1.20	1.8	28.71	1667	1.20	73	80
4×35+1×16	7.00	1.20	1.9	31.32	1879	0.868	87	96
4×50+1×25	8.40	1.40	2.1	33.00	2372	0.641	125	137
4×70+1×35	10.00	1.40	2.2	38.20	2897	0.443	149	162
4×95+1×50	11.60	1.60	2.4	43.80	2993	0.320	207	226
4×120+1×70	13.00	1.60	2.6	49.00	3600	0.253	234	256
4×150+1×70	14.60	1.80	2.7	53.80	4235	0.206	267	292
4×185+1×95	16.20	2.00	2.9	58.40	5120	0.164	297	325
4×240+1×120	18.40	2.20	3.1	65.00	6308	0.125	381	416
4×300+1×150	20.60	2.40	3.3	68.60	7512	0.100	433	473
4×400+1×185	23.80	2.60	3.7	85.30	9904	0.0778	503	551

f. 8. 7/10KV、8. 7/15KV 三芯交联聚乙烯绝缘钢带铠装聚氯乙烯外护套稀土高铁铝合金电力电缆

8. 7/10 kV and 8. 7/15 kV three-core cross-linked polyethylene insulated, steel tape armored, PVC sheathed rare-earth high-temperature resistant aluminum alloy power cable

导体截面 Conductor cross-sectional area	导体直径 Conductor diameter	绝缘厚度 insulation thickness	护套厚度 Sheath thickness	外径 external diameter	重量 weight	短路电流 short-circuit current, short circuit current	20℃时导体直流电阻 DC resistance of the conductor at 20° C	电缆载流量 Cable Current-carrying Capacity	
								在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	KA	≤ Ω /km	A	A
3×25	6.00	4.5	2.6	53.0	3323	2.42	1.200	95	100
3×35	7.00	4.5	2.6	56.0	3589	3.37	0.868	122	127
3×50	8.40	4.5	2.8	59.0	3881	4.79	0.641	140	150
3×70	10.00	4.5	2.9	63.0	4508	6.68	0.443	175	180
3×95	11.60	4.5	3.0	67.0	5085	9.68	0.320	210	220
3×120	13.00	4.5	3.1	70.0	5534	11.4	0.253	235	245
3×150	14.60	4.5	3.2	74.0	6154	14.2	0.206	265	270
3×185	16.20	4.5	3.3	78.0	6989	17.5	0.164	305	310
3×240	18.40	4.5	3.6	84.0	8835	22.6	0.125	355	355
3×300	20.60	4.5	3.7	89.0	9881	28.2	0.100	400	400
3×400	23.80	4.5	3.8	94.0	10927	37.6	0.0778	445	445
3×500	26.60	4.5	4.0	99.0	11973	47.0	0.0605	490	490

g. 26/35KV 三芯交联聚乙烯绝缘钢带铠装聚氯乙烯外护套稀土高铁铝合金电力电缆

26/35 kV three-core cross-linked polyethylene insulated, steel tape armored, PVC sheathed, rare-earth high-temperature resistant aluminum alloy power cable

导体截面 Conductor cross-sectional area	导体直径 Conductor diameter	绝缘厚度 insulation thickness	护套厚度 Sheath thickness	外径 external diameter	重量 weight	短路电流 short-circuit current, short circuit current	20℃时导体直流电阻 DC resistance of the conductor at 20° C	电缆载流量 Cable Current-carrying Capacity	
								在空气中 in the air	直埋土壤中 Directly buried in soil
mm ²	mm	mm	mm	mm	kg/km	KA	≤ Ω /km	A	A
3×50	8.40	10.5	3.90	90.44	9455	4.79	0.641	168	176
3×70	10.00	10.5	4.00	94.30	10177	6.68	0.443	212	216
3×95	11.60	10.5	4.10	97.96	10951	9.68	0.320	256	260
3×120	13.00	10.5	4.20	102.04	11694	11.4	0.253	296	296
3×150	14.60	10.5	4.30	105.04	12530	14.2	0.206	336	336
3×185	16.20	10.5	4.40	108.89	13434	17.5	0.164	384	384
3×240	18.40	10.5	4.60	114.24	14814	22.6	0.125	468	464
3×300	20.60	10.5	4.80	119.60	16191	28.2	0.100	520	624
3×400	23.80	10.5	5.00	124.78	17782	37.6	0.0778	624	672
3×500	26.60	10.5	5.20	130.11	19687	47.0	0.0605	728	720