

**XLPE INSULATED CABLE**

*3.6/6kV~26/35kV*

# 交联电缆



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# 交联聚乙烯绝缘电力电缆

交联聚乙烯绝缘，是利用化学方法或物理方法，使聚乙烯分子由线型结构转变成三维网状结构，即把热塑性的聚乙烯转变为热固性的交联聚乙烯，从而大幅度地提高了它的机械性能、热老化性能和耐环境应力能力，以及优良的电气性能。

交联聚乙烯绝缘电缆导体的正常运行温度90℃，具有结构简单，外径小，重量轻，使用方便，不受敷设落差限制等特点。

For XLPE insulated power cable, either chemical method or physical method had been employed to transform the molecular of PE from liner structure into three-dimensional network structure,i.e.thermoplastic PE and been transformed into thermosetting XLPE. After cross-linking, the mechanical performance, heat aging property and ambient stress resistance have been greatly improved ,while its excellent electrical properties are still maintained.

The normal conductor operating temperature of XLPE insulation cable is 90℃ , and XLPE insulated cable has advantages of lightness in weight, simplicity in structure and easy operation. It can also be laid with no limitation of level difference along the cabling route.



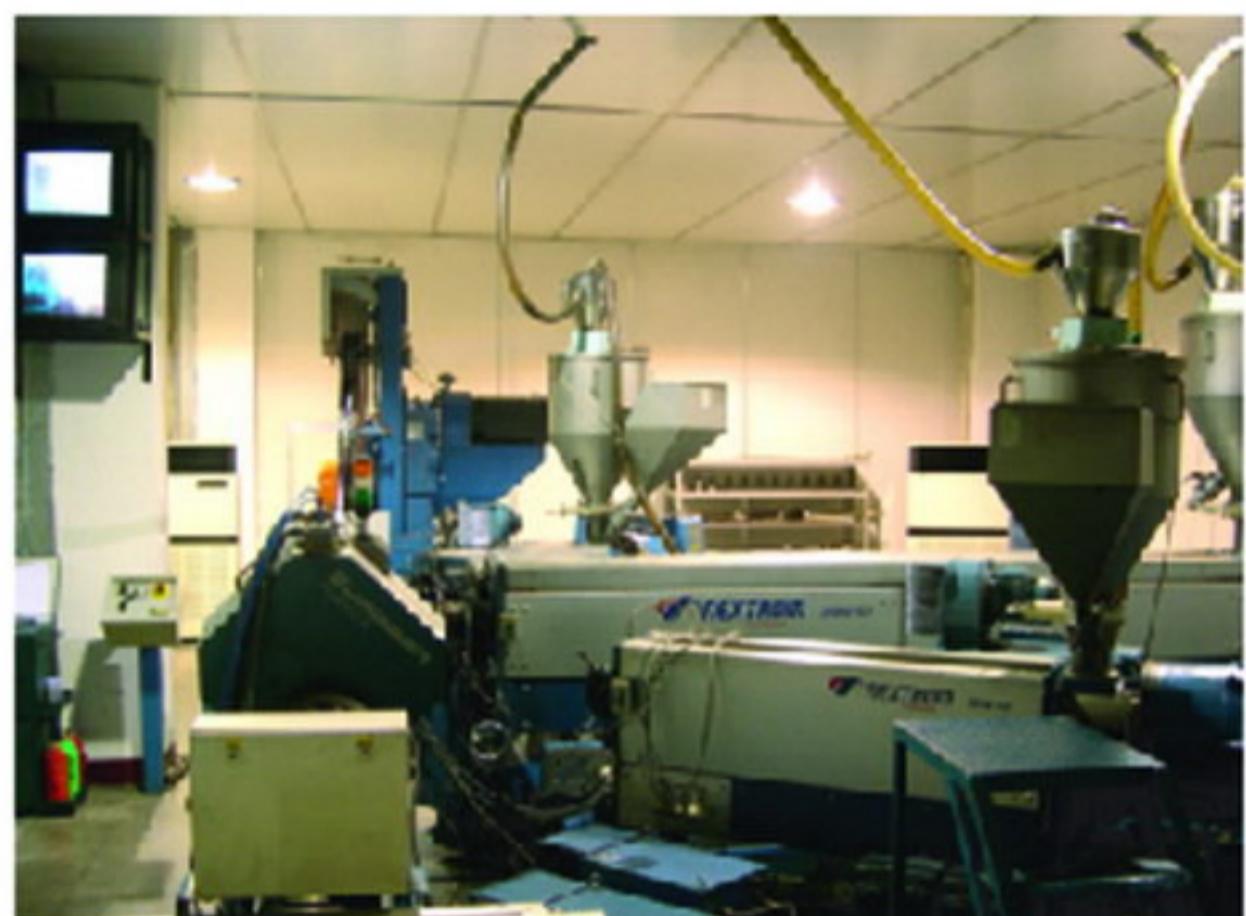
引进芬兰诺基亚公司110kV及以下交联生产线  
110kV CDCC line imported from NOKIA



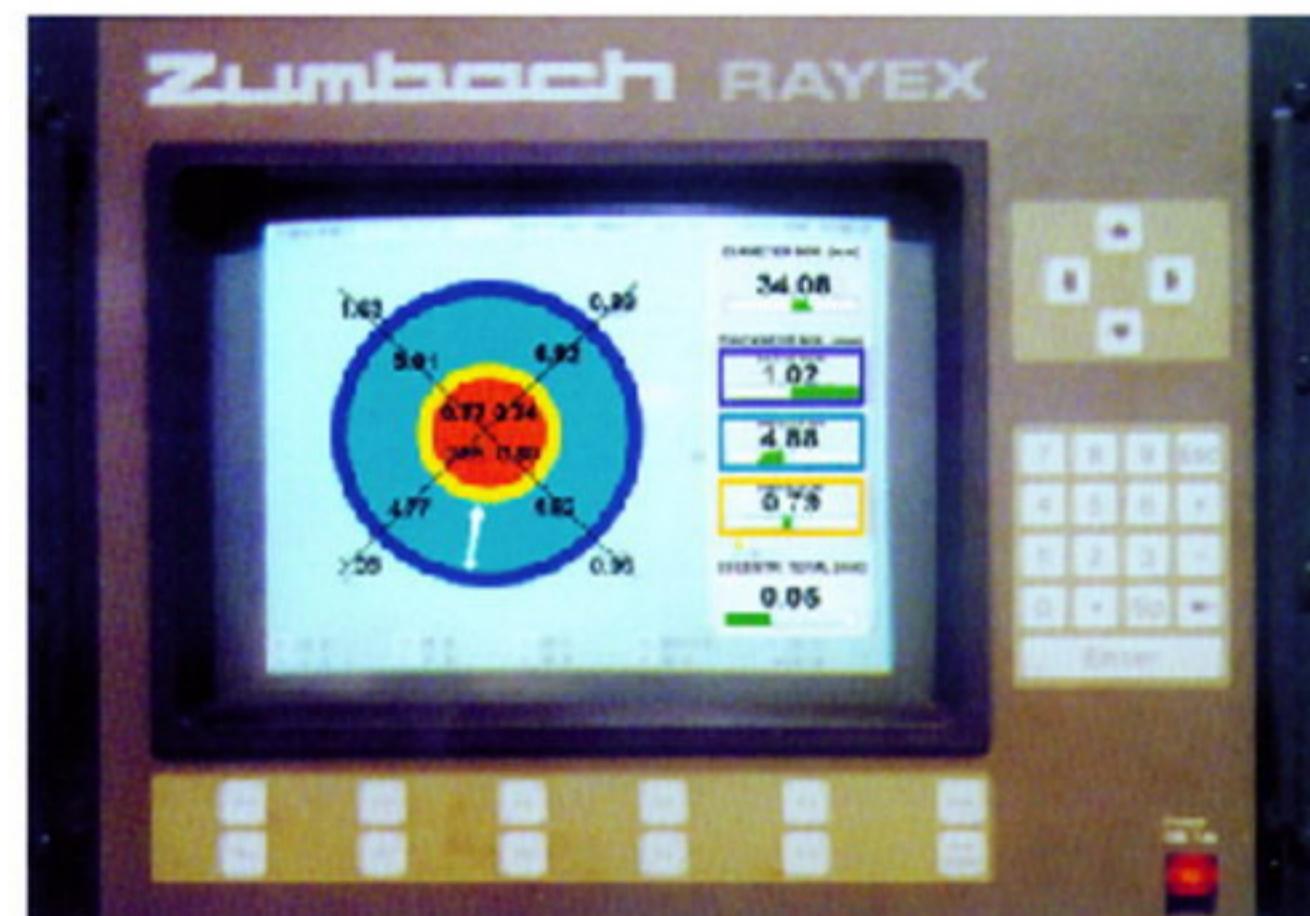
引进德国特乐斯特公司35kV交联生产线  
35kV ccv line from TROESTER



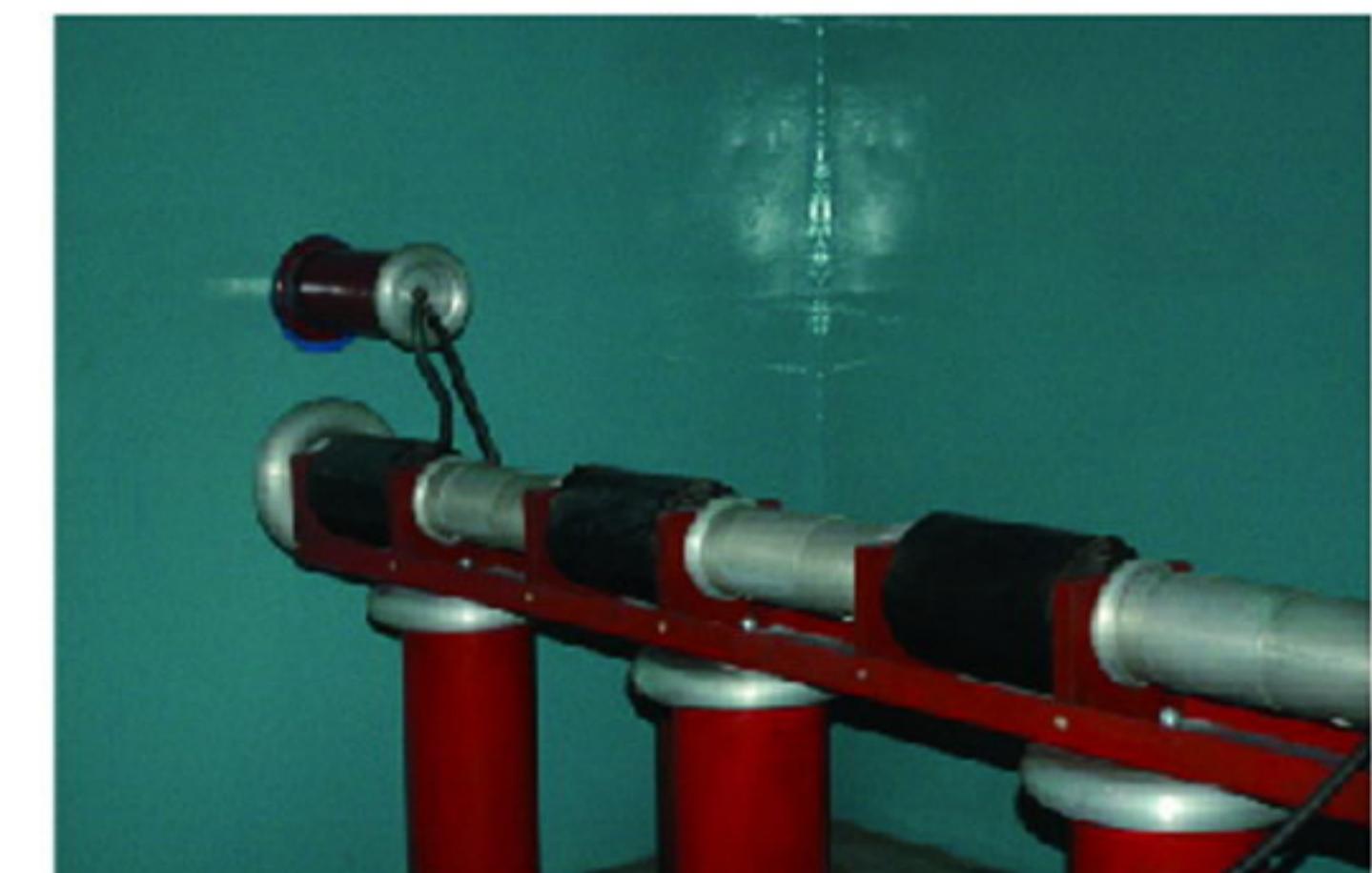
引进芬兰麦拉菲尔公司110kV交联生产线  
110kV ccv line from MAILLEFER



引进芬兰耐世隆公司35kV交联生产线  
35kV ccv line from NEXTROM



引进瑞士仲巴赫公司三层在线自动测偏仪  
Three-layer thickness and eccentricity tester im-  
ported from Zumbach in Switzerlang



引进美国希波公司高压测试仪  
High voltage Partial discharge equipment  
imported from Hipotronics USA



质量管理体系认证证书  
ISO9001 certificate



环境管理体系认证证书  
ISO14001 certificate



职业健康安全管理体系认证证书  
GB/T 28001 certificate

# 适用范围 Application

本产品适用于额定电压3.6/6~26/35kV中、高压输配电系统。

电缆导体最高额定温度：90℃

短路（最长持续时间5秒）电缆导体的最高温度不超过：250℃

电缆敷设温度低于0℃时，应预先加热。

电缆安装时的电缆最小弯曲半径：无铠装单芯电缆 20D，无铠装三芯电缆 15D

有铠装单芯电缆 15D，有铠装三芯电缆 12D

The cable is suitable for installing in transmission and distribution system of rated voltage from 3.6/6~26/35kV.

Maximum rated operation temperature of conductor:90℃

Maximum short circuit temperature of conductor(duration 5sec):250℃

It should be pre-warmed before installation when the ambient temperature is below 0℃.

Minimum bending radius of cable for installation(D is the overall diameter of cable):

For non-armoured single core cable:20D

For non-armoured three core cable:15D

For armoured single-core cable:15D

For armoured three-core cable:12D

# 执行标准 Standard

额定电压3.6/6~26/35kV交联聚乙烯绝缘防水电力电缆执行标准 Q/320481SS032-2015( 主要性能指标高于IEC60502.2-2008 , IEC60840-2011, GB/T12706-2008等标准要求 )

XLPE insulated power cable with rated voltage from 3.6/6kV to 26/35kV shall be produced according to the Enterprise Standard Q/320481SS032-2015 ,the main properties index of which are higher than the requirements of IEC60502.2-2008,IEC60840-2011,GB/T12706-2008,ect.

# 标准主要技术性能对比表

Contest Table of Main technical Properties among different standards.

项目 Items	Q/320481SS032-2015 (本公司标准) (Enterprise Standard)	IEC60502.2-2008 IEC60840-2011	GB/T12706-2008
例行局部放电试验 Routine Partial discharge test	试验灵敏度6pC或更优，在1.73Uo下，应无任何被试电缆产生的超过声明试验灵敏度的可检测到的放电。The sensitivity shall be 6pC or better, at 1.73Uo. There shall be no detectable discharge exceeding the sensitivity from the test object	Uo为18kV 及以下电缆，试验灵敏度应为10pC或更优，在1.73Uo下，应无任何被试电缆产生的超过声明试验灵敏度的可检测到的放电。For cable of Uo≤18kV,sensitivity shall be 10pC or better .There shall be no detectable discharge exceeding the sensitivity form the test object at 1.73Uo	试验灵敏度应为10pC或更优，在1.73Uo下，应无任何被试电缆产生的超过声明试验灵敏度的可检测到的放电。The sensitivity shallbe 10pC or better, at 1.73Uo. There shall be no detectable discharge exceeding the sensitivity form the test object
例行交流耐压试验 Routine A.C.voltage test	Uo为18kV及以下电缆，施加3.5Uo，持续5min绝缘不击穿；Uo为18kV以上电缆，施加3.5Uo，持续5min或施加2.5Uo，持续30min绝缘不击穿。For cable of Uo≤18kV, test voltage of 3.5Uo shall be applied for 5 minutes and no breakdown of insulation shall occur;For cable of Uo > 18kV,test voltage of 3.5Uo shall be applied for 5 minutes or 2.5Uo shall be applied for 30 minutes ,no breakdown of insulation shall occur.	Uo为18kV及以下电缆，施加3.5Uo，持续5min 绝缘不击穿；Uo为18kV以上电缆，施加2.5Uo，持续30min 绝缘不击穿。For cable of Uo≤18kV,test voltage of 3.5Uo shall be applied fot 5 minutes and no breakdown of insulation shall occur;For cable of Uo > 18kV, test voltage of 2.5Uo shall be applied for 30minutes,no breakdown of insulation shall occur.	Uo为18kV 及以下电缆，施加3.5Uo持续5min 绝缘不击穿；Uo为18kV 以上电缆，施加3.5Uo，持续 5min 或施加2.5Uo，持续30min 绝缘不击穿For cable of Uo≤18kV,test voltage of 3.5Uo shall be applied for 5 minutes and no breakdown of insulation shall occur;For cable of Uo > 18kV, test voltage of 3.5Uo shall be applied for 5 minutes or 2.5Uo shall be applied for 30 minutes,no breakdown of insulation shall occur.
热延伸试验 Hot set test	不大于130% Not more than 130%	不大于175% Not more than 175%	不大于175% Not more than 175%
Tg δ ( 电缆最高额定温度下对线芯进行测量 ) Measurement on cores at the maximum temperature of cable	Uo为6kV及以上、18kV 及以下电缆，不大于 $40 \times 10^{-4}$ ;Uo为18kV以上电缆，不大于 $5 \times 10^{-4}$ 。 For cable of Uo≥6kV and Uo≤18kV, not more than $40 \times 10^{-4}$ ; For cable of Uo > 18kV,not more than $5 \times 10^{-4}$ .	Uo为6kV及以上、18kV 及以下电缆，不大于 $80 \times 10^{-4}$ ;Uo为18kV以上电缆，不大于 $10 \times 10^{-4}$ 。 For cable of Uo≥6kV and Uo≤18kV, not more than $80 \times 10^{-4}$ ; For cable of Uo > 18kV,not more than $10 \times 10^{-4}$ .	Uo为6kV及以上、18kV 及以下电缆，不大于 $80 \times 10^{-4}$ ;Uo为18kV以上电缆，不大于 $10 \times 10^{-4}$ 。 For cable of Uo≥6kV and Uo≤18kV, not more than $80 \times 10^{-4}$ ; For cable of Uo > 18kV,not more than $10 \times 10^{-4}$ .
绝缘偏心度 <sup>1)</sup> Insulation eccentricity <sup>1)</sup>	不大于10% Not more than10%	—	15%

注：1) 绝缘偏心度计算公式： $P = (S_{max} - S_{min}) / S_{max}$

P-绝缘偏心度：S<sub>max</sub>-绝缘同一截面中最大厚度；S<sub>min</sub>-绝缘同一截面中最小厚度

Note:1)Insulation calculating formula: $P=(S_{max}-S_{min})/S_{max}$

P-Insulation eccentricity S<sub>max</sub>-Max.insulation thickness of the same section;S<sub>min</sub>-Min.insulation thickness of the same section.

# 型号、名称及敷设场合 Type、Description and Installation location

3.6/6kV~26/35kV交联聚乙烯绝缘电力电缆

For rated voltage 3.6/6kV~26/35kV XLPE insulated power cable

型号 Type		名 称 Description	敷设场合 Installation location
铜 芯 Copper core	铝 芯 Aluminium core		
YJV	YJLV	交联聚乙烯绝缘聚氯乙烯护套电力电缆 XLPE insulated PVC sheathed power cable	架空、室内、隧道、电缆沟及管道 Aerial、indoor、trench channel and conduit
YJY	YJLY	交联聚乙烯绝缘聚乙稀护套电力电缆 XLPE insulated PE sheathed power cable	
YJV22	YJLV22	交联聚乙烯绝缘钢带铠装聚氯乙烯护套电力电缆 XLPE insulated steel tape armoured and PVC sheathed power cable	
YJV62	YJLV62	交联聚乙烯绝缘非磁性金属带铠装聚氯乙烯护套电力电缆	
YJV63	YJLV63	交联聚乙烯绝缘非磁性金属带铠装聚乙稀护套电力电缆	
YJV23	YJLV23	交联聚乙烯绝缘钢带铠装聚乙稀护套电力电缆 XLPE insulated steel tape armoured and PE sheathed power cable	
YJV32	YJLV32	交联聚乙烯绝缘细钢丝铠装聚氯乙烯护套电力电缆 XLPE insulated fine steel-wire armoured and PVC sheathed power cable	
YJV33	YJLV33	交联聚乙烯绝缘细钢丝铠装聚乙稀护套电力电缆 XLPE insulated fine steel-wire armoured and PE sheathed power cable	
YJV73	YJLV73	交联聚乙烯绝缘非磁性金属丝铠装聚乙稀护套电力电缆	
YJV72	YJLV72	交联聚乙烯绝缘非磁性金属丝铠装聚氯乙烯护套电力电缆	
YJV42	YJLV42	交联聚乙烯绝缘粗钢丝铠装聚氯乙烯护套电力电缆 XLPE insulated thick steel-wire armoured and PVC sheathed power cable	高落差、竖井及下水 Large difference shaft and underwater
YJV43	YJLV43	交联聚乙烯绝缘粗钢丝铠装聚乙稀护套电力电缆 XLPE insulated thick steel-wire armoured and PE sheathed power cable	

## 电缆的额定电压、标称截面及芯数

Rated voltage of cable, nominal sectional area and no.of cores

型 号 Type	芯 数 No.of Cores	额定电压 Rated Voltage(kV)			
		3.6/6、6/6	6/10、8.7/10 8.7/15	12/20	18/30、26/35
		标称截面 Nominal cross sectional area(mm <sup>2</sup> )			
YJV	YJLV	25~1200	25~1200	25~1200	35~1200
YJY	YJLY	25~1200	25~1200	25~1200	35~1200
YJV72	YJLV62	25~1200	25~1200	25~1200	35~1200
YJV73	YJLV63	25~1200	25~1200	25~1200	35~1200
YJV	YJLV	25~500	25~500	25~500	35~500
YJY	YJLY	25~500	25~500	25~500	35~500
YJV22	YJLV22	25~500	25~500	25~500	35~500
YJV23	YJLV23	25~500	25~500	25~500	35~500
YJV32	YJLV32	25~500	25~500	25~500	35~500
YJV33	YJLV33	25~500	25~500	25~500	35~500
YJV42	YJLV42	25~500	25~500	25~500	35~500
YJV43	YJLV43	25~500	25~500	25~500	35~500

注：“7”为非磁性金属丝铠装；通常可选用不锈钢丝。“6”为非磁性金属带铠装；通常可选用不锈钢带。

# 单芯交联聚乙烯绝缘电力电缆

## Single core XLPE insulated power cable

3.6/6kV

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参考 直径 Reference conductor diameter mm	绝缘标称 厚度 Nominal insulation thickness mm	电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km	
				YJV YJY	YJLV YJLY		YJV72 YJV73	YJLV72 YJLV73		YJV62 YJV63	YJLV62 YJLV63
25	6.0	2.5	19	420	270	26	1045	894	22	593	441
35	7.0	2.5	20	521	310	27	1170	960	23	706	496
50	8.2	2.5	21	670	370	28	1357	1055	24	869	566
70	9.7	2.5	23	885	460	30	1629	1199	26	1100	672
95	11.4	2.5	24	1138	554	31	1937	1352	28	1370	785
120	12.8	2.5	26	1370	642	33	2224	1496	29	1615	888
150	14.3	2.5	27	1657	749	35	2761	1853	31	1919	1011
185	15.9	2.5	29	1992	871	37	3179	2057	33	2670	1148
240	18.4	2.6	32	2566	1085	40	3841	2357	36	2871	1386
300	20.6	2.8	35	3171	1315	43	4561	2705	39	3052	1648
400	23.3	3.0	38	3982	1660	47	5899	3576	43	4713	2391
500	26.6	3.2	42	5044	2027	52	7150	4122	47	5863	2836
630	30.3	3.2	46	6260	2460	56	8614	4798	51	7173	3357
800	34.1	3.2	50	7824	2995	60	10375	5529	55	8832	3986

注：电缆近似重量为聚氯乙烯护套电缆重量  
Note: The approx weight of cable is the weight of PVC sheathed cable.

# 三芯交联聚乙烯绝缘电力电缆

## Three core XLPE insulated power cable

3.6/6kV

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参 考直径 Reference conductor diameter mm	绝缘标 称厚度 Nominal insulation thickness mm	电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		
				YJV YJY	YJLV YJLY		YJV22 YJV23	YJLV22 YJLV23		YJV32 YJV33	YJLV32 YJLV33	
25	6.0	2.5	36	1623	1167	40	2174	1718	45	3215	2760	51
35	7.0	2.5	38	2042	1409	43	2641	2008	48	4116	3483	54
50	8.2	2.5	41	2602	1693	45	3241	2332	51	4819	3910	56
70	9.7	2.5	45	3332	2041	49	4044	2753	55	5753	4462	60
95	11.4	2.5	49	4223	2466	53	4988	3231	59	6833	5077	64
120	12.8	2.5	52	5040	2852	57	5894	3706	62	7877	5688	67
150	14.3	2.5	56	5994	3265	61	6923	4195	66	9039	6310	71
185	15.9	2.5	59	7129	3758	64	8115	4745	70	10326	6955	75
240	18.4	2.6	65	9050	4688	71	10153	5092	76	12549	8138	81
300	20.6	2.8	72	11101	5324	77	12324	6747	84	15872	10294	87
400	23.3	3.0	79	13831	6850	86	15871	8841	92	19165	12184	95
500	26.6	3.2	88	17393	5290	95	19669	10567	101	23334	14231	104

注：电缆近似重量为聚氯乙烯护套电缆重量  
Note: The approx weight of cable is the weight of PVC sheathed cable.



# 单芯交联聚乙烯绝缘电力电缆

## Single core XLPE insulated power cable

6/6 6/10kV

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参考 直径 Reference conductor diameter mm	绝缘标称厚度 Nominal insulation thickness mm	电缆近似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km	
				YJV YJY	YJLV YJLY		YJV72 YJV73	YJLV72 YJLV73		YJV62 YJV63	YJLV62 YJLV63
25	6.0	3.4	21	570	418	27	1296	1144	23	785	634
35	7.0	3.4	22	681	471	28	1428	1218	24	907	697
50	8.2	3.4	23	842	539	30	1654	1352	26	1090	788
70	9.7	3.4	25	1071	642	31	1941	1511	27	1338	908
95	11.4	3.4	26	1337	752	33	2259	1675	29	1632	1048
120	12.8	3.4	29	1581	853	36	2798	2070	31	1904	1176
150	14.3	3.4	30	1892	984	37	3159	2251	32	2222	1315
185	15.9	3.4	31	2241	1119	39	3581	2460	34	2602	1481
240	18.4	3.4	34	2840	1356	41	3947	2799	37	3416	1932
300	20.6	3.4	36	3461	1606	44	4996	3141	40	4079	2223
400	23.3	3.4	39	4290	1968	48	6356	4034	43	4975	2652
500	26.6	3.4	43	5396	2368	52	7664	4637	47	6142	3114
630	30.3	3.4	47	6665	2849	56	9156	5340	51	7517	3701
800	34.1	3.4	51	8284	3439	60	10979	6134	55	9224	4379

注：电缆近似重量为聚氯乙烯护套电缆重量

Note: The approx weight of cable is the weight of PVC sheathed cable.

# 三芯交联聚乙烯绝缘电力电缆

## Three core XLPE insulated power cable

6/6 6/10kV

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参 考直径 Reference conductor diameter mm	绝缘标 称厚度 Nominal insulation thickness mm	电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km				
				YJV YJY	YJLV YJLY		YJV22 YJV23	YJLV22 YJLV23		YJV32 YJV33	YJLV32 YJLV33	YJV42 YJV43	YJLV42 YJLV43	
25	6.0	3.4	40	1880	1425	44	2526	2071	50	3970	3514	56	5608	5153
35	7.0	3.4	42	2274	1641	47	3936	2303	52	4457	3823	59	6233	5600
50	8.2	3.4	45	2773	1901	50	3512	2603	55	5142	4233	61	6901	5992
70	9.9	3.4	49	3497	2265	54	4372	3021	60	6126	4834	65	7995	6704
95	11.5	3.4	53	4377	2799	58	5407	3469	63	7285	5528	69	9216	7459
120	12.9	3.4	56	5165	3164	61	6271	3895	66	8236	6048	72	10353	8164
150	14.5	3.4	60	6156	3630	65	7333	4401	70	9423	6693	76	11599	8870
185	16.1	3.4	63	7293	4104	68	8527	4974	74	10738	7368	79	12955	9585
240	18.5	3.4	69	9205	4899	74	10555	5937	81	13805	9343	85	15338	10876
300	20.6	3.4	74	11159	5764	80	12647	6887	87	16163	10586	91	17784	12207
400	23.5	3.4	81	13805	7000	88	16081	8924	93	19189	12209	97	20899	13918
500	26.6	3.4	89	17228	8125	96	19680	10577	102	23089	13986	105	24861	15609

注：电缆近似重量为聚氯乙烯护套电缆重量

Note: The approx weight of cable is the weight of PVC sheathed cable.



上上品质

# 单芯交联聚乙烯绝缘电力电缆

## Single core XLPE insulated power cable

8.7/10 8.7/15kV

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参考 直径 Reference conductor diameter mm	绝缘标称 厚度 Nominal insulation thickness mm	电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km	
				YJV YYJ	YJLV YJLY		YJV72 YJV73	YJLV72 YJLV73		YJV62 YYJ63	YJLV62 YJLY63
25	6.0	4.5	23	648	497	30	1461	1309	26	896	745
35	7.0	4.5	24	763	552	31	1596	1386	27	1022	811
50	8.2	4.5	25	927	625	32	1799	1497	28	1199	897
70	9.7	4.5	27	1162	732	35	2336	1906	30	1464	1034
95	11.4	4.5	28	1444	859	36	2680	2096	32	1765	1180
120	12.8	4.5	30	1692	964	38	2987	2259	33	2029	1301
150	14.3	4.5	31	2011	1103	40	3368	2460	35	2367	1459
185	15.9	4.5	33	2365	1244	41	3781	2660	37	2937	1816
240	18.4	4.5	36	2974	1490	44	4508	3024	40	3589	2105
300	20.6	4.5	38	3604	1749	47	5626	3770	43	4276	2421
400	23.3	4.5	41	4445	2122	50	6606	4284	46	5169	2847
500	26.6	4.5	45	5563	2536	54	7943	4915	50	6367	3339
630	30.3	4.5	49	6847	3031	58	9453	5637	54	7696	3904
800	34.1	4.5	53	8480	3635	63	11315	6469	58	9437	4592

注：电缆近似重量为聚氯乙烯护套电缆重量

Note: The approx weight of cable is the weight of PVC sheathed cable.

# 三芯交联聚乙烯绝缘电力电缆

Three core XLPE insulated power cable

8.7/10 8.7/15kV

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参 考直径 Reference conductor diameter mm	绝缘标 称厚度 Nominal insulation thickness mm	电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km				
				YJV YYJ	YJLV YJLY		YJV22 YJV23	YJLV22 YJLV23		YJV32 YJY33	YJLV32 YJLY33	YJV42 YJY43	YJLV42 YJLY43	
25	6.0	4.5	45	2219	1763	49	2946	2491	55	4538	4083	61	6295	5840
35	7.0	4.5	48	2546	1913	52	3309	2675	57	5072	4439	63	6926	6293
50	8.2	4.5	50	3076	2167	55	3898	2989	60	5775	4866	66	7712	6803
70	9.7	4.5	54	3841	2550	59	4723	3431	64	6795	5504	69	8794	7503
95	11.4	4.5	58	4711	2954	63	5694	3937	68	7910	6153	73	10058	8300
120	12.8	4.5	61	5644	3356	66	6600	4411	72	8958	6769	77	11145	8956
150	14.3	4.5	65	6653	3824	70	7668	4939	76	10891	8162	80	12376	9647
185	15.9	4.5	68	7849	4378	74	8946	5576	80	12296	8926	84	13890	10520
240	18.4	4.5	74	9678	5216	80	10994	6533	86	14633	10171	90	16214	11752
300	20.6	4.5	79	11717	6140	86	13794	8217	92	12046	11469	95	18712	13135
400	23.3	4.5	86	14341	7360	93	16611	9631	99	20260	13279	102	21948	14967
500	26.6	4.5	94	17650	8547	101	20643	11540	107	24216	15112	110	25931	16828

注：电缆近似重量为聚氯乙烯护套电缆重量

Note: The approx weight of cable is the weight of PVC sheathed cable.



上上品质

**单芯交联聚乙烯绝缘电力电缆**  
**Single core XLPE insulated power cable**  
**12/20kV**

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参考 直径 Reference conductor diameter mm	绝缘标称 厚度 Nominal insulation thickness mm	电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km	
				YJV YJY	YJLV YJLY		YJV72 YJV73	YJLV72 YJLV73		YJV62 YJV63	YJLV62 YJLV63
35	7.0	5.5	26	843	632	33	1764	1553	29	1135	924
50	8.2	5.5	27	1011	708	35	2186	1884	30	1316	1014
70	9.7	5.5	29	1261	832	37	2500	2070	33	1760	1331
95	11.4	5.5	30	1538	953	38	2861	2277	35	2064	1479
120	12.8	5.5	32	1803	1075	40	3188	2460	36	2355	1627
150	14.3	5.5	34	2114	1206	41	3558	2651	38	2693	1785
185	15.9	5.5	35	2487	1365	43	3993	2872	40	3095	1974
240	18.4	5.5	38	3104	1620	47	5125	3640	43	3771	2286
300	20.6	5.5	40	3727	1872	49	5859	4004	45	4452	2596
400	23.3	5.5	43	4577	2255	53	6925	4603	48	5372	3050
500	26.6	5.5	47	5686	2678	56	8220	5212	52	6566	3538
630	30.3	5.5	51	6978	3163	61	9717	5901	56	7951	4135
800	34.1	5.5	55	8642	3797	65	11592	6746	60	9710	4865

注：电缆近似重量为聚氯乙烯护套电缆重量  
Note: The approx weight of cable is the weight of PVC sheathed cable.

**三芯交联聚乙烯绝缘电力电缆**  
**Three core XLPE insulated power cable**  
**12/20kV**

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参 考直径 Reference conductor diameter mm	绝缘标 称厚度 Nominal insulation thickness mm	电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km				
				YJV YJY	YJLV YJLY		YJV22 YJV23	YJLV22 YJLV23		YJV32 YJV33	YJLV32 YJLV33	YJV42 YJV43	YJLV42 YJLV43	
35	7.0	5.5	52	2824	2190	57	3827	3194	62	5672	5039	68	7641	7008
50	8.2	5.5	55	3387	2478	60	4491	3582	65	6428	5519	71	8477	7568
70	9.7	5.5	59	4164	2873	63	5409	4118	69	7468	6177	75	9579	8788
95	11.4	5.5	63	5107	3350	67	6433	4675	73	8614	6857	79	10868	9111
120	12.8	5.5	66	5957	3768	71	7335	5146	78	10459	8270	82	11966	9778
150	14.3	5.5	69	7026	4297	74	8436	5707	82	11717	8988	86	13252	10523
185	15.9	5.5	73	8199	4828	78	9739	6369	86	13143	9773	89	14785	11414
240	18.4	5.5	79	10215	5754	84	11895	7433	91	15560	11098	95	17186	12724
300	20.6	5.5	84	12192	6615	91	14725	9048	97	17969	12392	100	19675	14098
400	23.3	5.5	90	15282	8301	98	17739	10758	104	21241	14266	107	22972	15991
500	26.6	5.5	91	18644	9541	106	22413	13309	112	25241	16138	105	26860	17757

注：电缆近似重量为聚氯乙烯护套电缆重量  
Note: The approx weight of cable is the weight of PVC sheathed cable.



# 单芯交联聚乙烯绝缘电力电缆

Single core XLPE insulated power cable

18/20kV、18/30kV

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参考 直径 Reference conductor diameter mm	绝缘标称 厚度 Nominal insulation thickness mm	电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km	
				YJV YJY	YJLV YJLY		YJV72 YJV73	YJLV72 YJLV73		YJV62 YJY63	YJLV62 YJLY63
50	8.2	8.0	33	1289	986	41	2677	2374	37	1851	1549
70	9.7	8.0	34	1543	1113	43	3033	2603	39	2150	1720
95	11.4	8.0	36	1846	1261	44	3382	2798	40	2467	1883
120	12.8	8.0	38	2111	1383	47	4104	3376	42	2787	2059
150	14.3	8.0	39	2451	1543	49	4537	3629	44	3157	2250
185	15.9	8.0	41	2823	1702	50	4999	3878	46	3558	2437
240	18.4	8.0	44	3463	1979	53	5811	4327	48	4260	2775
300	20.6	8.0	46	4104	2249	55	6550	4694	51	4941	3085
400	23.3	8.0	49	4980	2658	59	7624	5302	54	5889	3567
500	26.6	8.0	53	6140	3112	62	8931	5903	58	7115	4087
630	30.3	8.0	57	7468	3653	66	10508	6692	62	8536	4721
800	34.1	8.0	60	9146	4301	71	12395	7549	66	10307	5462

注：电缆近似重量为聚氯乙烯护套电缆重量

Note: The approx weight of cable is the weight of PVC sheathed cable.

# 三芯交联聚乙烯绝缘电力电缆

Three core XLPE insulated power cable

18/20kV、18/30kV

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参 考直径 Reference conductor diameter mm	绝缘标 称厚度 Nominal insulation thickness mm	电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km				
				YJV YJY	YJLV YJLY		YJV22 YJY23	YJLV22 YJLY23		YJV32 YJY33	YJLV32 YJLY33	YJV42 YJY43	YJLV42 YJLY43	
50	8.2	8.0	68	4673	3764	73	5850	4941	79	8994	8085	83	10545	9636
70	9.7	8.0	71	5545	4254	76	6785	5494	83	10146	8855	86	11661	10370
95	11.4	8.0	75	6525	4768	80	7851	6094	87	11399	9641	91	13022	11265
120	12.8	8.0	78	2537	5348	85	9578	7390	91	12617	10428	94	14240	12051
150	14.3	8.0	83	8665	5936	88	10795	8066	94	13961	11232	97	15609	12880
185	15.9	8.0	85	10010	6639	92	12261	8890	98	15549	12118	101	17299	13928
240	18.4	8.0	91	12131	7669	98	14594	10132	103	18097	13636	106	19823	15362
300	20.6	8.0	96	14280	8703	103	16858	11280	109	20507	14949	111	22287	16709
400	23.3	8.0	102	17156	10175	110	19980	12999	116	23912	16931	119	25186	18800
500	26.6	8.0	110	20151	11412	119	24695	15592	124	28400	19297	126	29763	20660

注：电缆近似重量为聚氯乙烯护套电缆重量

Note: The approx weight of cable is the weight of PVC sheathed cable.



**单芯交联聚乙烯绝缘电力电缆**  
**Single core XLPE insulated power cable**  
**26/35kV**

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参考 直径 Reference conductor diameter mm	绝缘标称 厚度 Nominal insulation thickness mm	电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km	
				YJV YJY	YJLV YJLY		YJV72 YJV73	YJLV72 YJLV73		YJV62 YJV63	YJLV62 YJLV63
50	8.2	10.5	38	1595	1292	47	3633	3331	43	2278	1976
70	9.7	10.5	40	1878	1449	49	3991	3562	44	2577	2147
95	11.4	10.5	42	2181	1596	51	4416	3831	46	2941	2357
120	12.8	10.5	43	2474	1746	52	4761	4033	48	3243	2514
150	14.3	10.5	45	2812	1904	54	5210	4303	50	3628	2721
185	15.9	10.5	47	3215	2094	56	5708	4587	51	4063	2942
240	18.4	10.5	49	3877	2393	59	6503	5018	54	4768	3283
300	20.6	10.5	51	4518	2663	61	7261	5405	56	5469	3613
400	23.3	10.5	54	5419	3097	64	8323	6001	60	6445	4123
500	26.6	10.5	58	6877	3892	68	10113	7128	66	8019	5034
630	30.3	10.5	62	8228	4460	73	11715	7948	70	9466	5698
800	34.1	10.5	66	9954	5161	78	14529	9736	74	11292	6499

注：电缆近似重量为聚氯乙烯护套电缆重量  
Note: The approx weight of cable is the weight of PVC sheathed cable.

**三芯交联聚乙烯绝缘电力电缆**  
**Three core XLPE insulated power cable**  
**26/35kV**

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参 考直径 Reference conductor diameter mm	绝缘标 称厚度 Nominal insulation thickness mm	电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近 似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km				
				YJV YJY	YJLV YJLY		YJV22 YJV23	YJLV22 YJLV23		YJV32 YJV33	YJLV32 YJLV33	YJV42 YJV43	YJLV42 YJLV43	
50	8.2	10.5	79	5886	4977	86	7976	7067	92	11061	10152	95	11195	10286
70	9.7	10.5	83	6928	5637	90	9115	7823	96	12323	11031	98	12385	11094
95	11.4	10.5	87	7992	6235	94	10300	8543	100	13670	11912	102	13698	11940
120	12.8	10.5	90	8941	6753	97	11329	9141	103	14835	12647	106	14793	12604
150	14.3	10.5	93	10043	7314	101	12596	9867	107	16186	13457	109	16035	13306
185	15.9	10.5	97	11327	7956	105	14007	10637	111	17720	14349	113	17558	14187
240	18.4	10.5	103	13484	9022	111	16342	11880	117	20273	15811	118	19892	15430
300	20.6	10.5	108	15698	10121	116	18673	13095	123	24571	18993	123	22384	16807
400	23.3	10.5	114	18793	11812	123	22026	15046	130	28169	21189	130	25729	18749
500	26.6	10.5	130	23560	14402	139	28914	19784	146	34900	25743	146	35020	25863

注：电缆近似重量为聚氯乙烯护套电缆重量  
Note: The approx weight of cable is the weight of PVC sheathed cable.

# 单芯交联聚乙烯绝缘防水电力电缆

## Single core XLPE insulated water-proof power cable

8.7/10kV 8.7/15kV

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参考 直径 Reference conductor diameter mm	绝缘标称 厚度 Nominal insulation thickness mm	电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似 外径 Approx overall diameter of cable mm
				FS-YJYV	FS-YJLYV		FS-YJY72	FS-YJLY72	
25	6.0	4.5	26	804	653	31	1553	1401	39
35	7.0	4.5	27	926	715	32	1708	1497	40
50	8.2	4.5	28	1101	799	33	1918	1615	41
70	9.7	4.5	30	1348	918	36	2456	2027	43
95	11.4	4.5	32	1638	1053	37	2802	2218	45
120	12.8	4.5	33	1899	1171	39	3117	2389	46
150	14.3	4.5	35	2224	1316	41	3502	2594	48
185	15.9	4.5	37	2595	1474	42	3949	2828	50
240	18.4	4.5	39	3215	1731	45	4623	3138	52
300	20.6	4.5	42	3862	2007	48	5781	3926	55
400	23.3	4.5	45	4684	2399	51	6738	4454	58
500	26.6	4.5	49	5774	2846	55	8090	5062	61
630	30.3	4.5	53	7071	3368	59	9570	5754	65
800	34.1	4.5	57	8715	4007	63	11435	6590	69
1000	37.8	4.5	60	11219	4710	67	14203	7531	73

# 三芯交联聚乙烯绝缘防水电力电缆

## Three core XLPE insulated water-proof power cable

8.7/10kV 8.7/15kV

标称截面 Nominal cross sectional area mm <sup>2</sup>	导体参 考直径 Reference conductor diameter mm	绝缘标 称厚度 Nominal insulation thickness mm	电缆近似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km		电缆近似外径 Approx overall diameter of cable mm	电缆近似重量 Approx weight of cable kg/km	
				FS-YJYV	FS-YJLYV		FS-YJY22 FS-YJY23	FS-YJLY22 FS-YJLY23		FS-YJY32 FS-YJY33	FS-YJLY32 FS-YJLY33
25	6.0	4.5	48	2480	1916	52	3320	2865	56	4718	4263
35	7.0	4.5	50	2805	2245	54	3766	3125	59	5215	4610
50	8.2	4.5	53	3381	2570	58	4417	3505	62	5975	5063
70	9.7	4.5	57	4293	2978	61	5294	3979	66	6955	5640
95	11.4	4.5	61	5212	3426	65	6305	4519	70	8074	6288
120	12.8	4.5	65	6093	3863	69	7249	5019	73	9125	6895
150	14.3	4.5	68	7102	4352	72	8315	5565	78	11114	8364
185	15.9	4.5	72	8337	4906	76	9626	6195	82	12553	9121
240	18.4	4.5	78	10334	5818	82	11716	7200	87	14885	10369
300	20.6	4.5	83	12384	6773	88	14716	9105	93	17208	11597
400	23.3	4.5	90	14976	8127	95	17491	10642	99	20139	13290
500	26.6	4.5	98	18776	9618	103	21526	12368	108	24515	15358

注：防水电缆主要用于潮湿及水汽较严重的场合，钢丝铠装型电缆还可用于水下敷设。

Note: Water-proof cable may be suitable for some fields where there is more serious humidity and water vapour, and steel wire armored cable may also be laid under water.

# 主要技术性能

## Main technical properties

序号 No.	技术性能 Technical properties	额定电压 Uo/U(kV) Rated voltage							
		3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/30	21/35	26/35	
1	线芯直流电阻(Ω/km) Conductor DC resistance(Ω/km)	见下表 See next table							
2	例行局部放电试验 Routine partial discharge test at 2Uo	试验灵敏度为6pC或更优，在1.73Uo下，应无任何被试电缆产生的超过声明试验灵敏度的可检测到的放电。 The sensitivity shall be 6pC or better, at 1.73Uo, There shall be no discharge exceeding the sensitivity from the test object							
3	例行交流耐压试验(kV/min) Rovtine A.C. Voltage test Uo 为 18kV 及以下电缆，施加3.5Uo持续5分钟不击穿。 For cable of Uo ≤18kV, test voltage of 3.5Uo shall be applied for 5 minutes and no breakdown of insulation shall occur; Uo 为 18kV 以上电缆，施加3.5Uo持续5分钟或施加2.5Uo持续30分钟不击穿。 For cable of Uo > 18kV, test voltage of 3.5Uo shall be applied for 5 minutes or 2.5Uo shall be applied for 30 minutes, no breakdown of insulation shall occur.	12.6/5	21/5	30.5/5	42/5	63/5	73.5/5 或(or) 52.5/30	91/5 或(or) 65/30	
4	4h工频电压试验(kV) Power frequency AC voltage test for 4 hours(kV)	14.4	24	34.8	48	72	84	104	
5	热延伸试验： Hot set test 200℃ 15min,20N/cm <sup>2</sup> 载荷下最大伸长率(%) Max.elongation at loading(%) 冷却后最大永久伸长率(%) Max.permanent elongation after cooling(%)	130 15							
6	热冲击试验：(kV) (加热到长期工作温度高5℃(正负极各10次)) Hot impact test(kV) (Heating till 5℃ higer than continuous operating temperature(positive & negative pole each 10 times))	60	75	95	125	170	200	250	
7	其它试验 Other tests	见 Q/320481SS032-2015 See Q/320481S032-2015							

## 线芯直流电阻

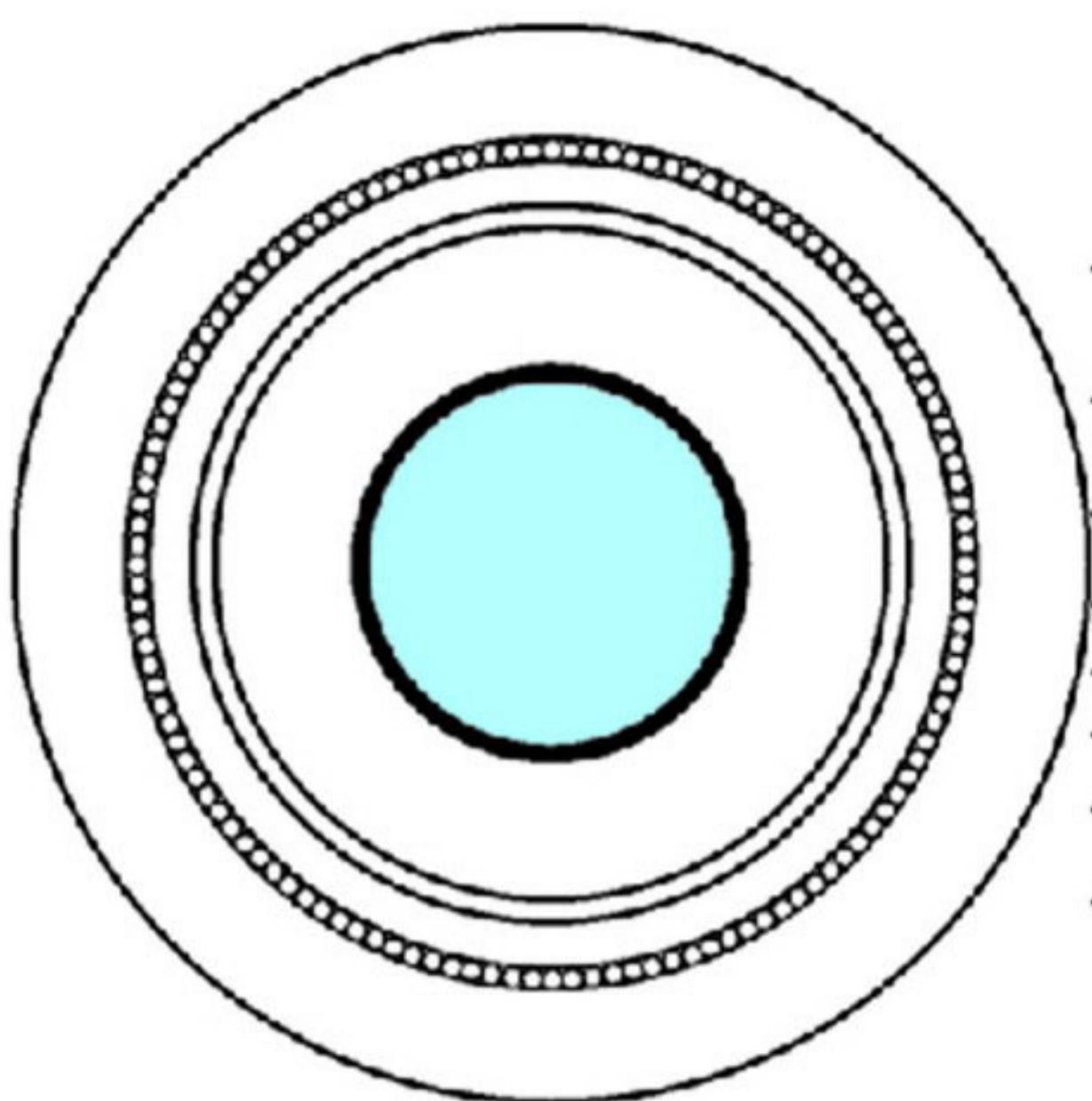
### Conductor DC resistance

20℃时直流电阻不大于 (Ω/km)20℃,the DC. resistance is not more than	标称截面(mm <sup>2</sup> ) Nominal cross sectional area (mm <sup>2</sup> )	25	35	50	70	95	120	150	185
		Cu	Al	Cu	Al	Cu	Al	Cu	Al
20℃时直流电阻不大于 (Ω/km)20℃,the DC. resistance is not more than	25	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991
Cu	35	0.524	0.400	0.300	0.210	0.145	0.110	0.085	0.065
Al	50	0.387	0.268	0.193	0.135	0.095	0.070	0.050	0.035
	70	0.268	0.193	0.145	0.100	0.070	0.050	0.035	0.025
	95	0.193	0.135	0.095	0.065	0.045	0.030	0.020	0.015
	120	0.153	0.110	0.070	0.045	0.030	0.020	0.015	0.010
	150	0.124	0.085	0.050	0.035	0.025	0.018	0.012	0.008
	185	0.0991	0.065	0.040	0.025	0.018	0.012	0.008	0.005

20℃时直流电阻不大于 (Ω/km)20℃,the DC. resistance is not more than	标称截面(mm <sup>2</sup> ) Nominal cross sectional area (mm <sup>2</sup> )	240	300	400	500	630	800	1000
		Cu	Al	Cu	Al	Cu	Al	Cu
20℃时直流电阻不大于 (Ω/km)20℃,the DC. resistance is not more than	240	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	0.0176
Cu	300	0.0601	0.0450	0.0330	0.0250	0.0185	0.0140	0.0105
Al	400	0.0470	0.0330	0.0230	0.0170	0.0125	0.0095	0.0070
	500	0.0366	0.0250	0.0170	0.0125	0.0095	0.0070	0.0055
	630	0.0283	0.0195	0.0130	0.0095	0.0070	0.0055	0.0045
	800	0.0221	0.0155	0.0105	0.0075	0.0055	0.0045	0.0035
	1000	0.0176	0.0125	0.0085	0.0060	0.0045	0.0035	0.0028

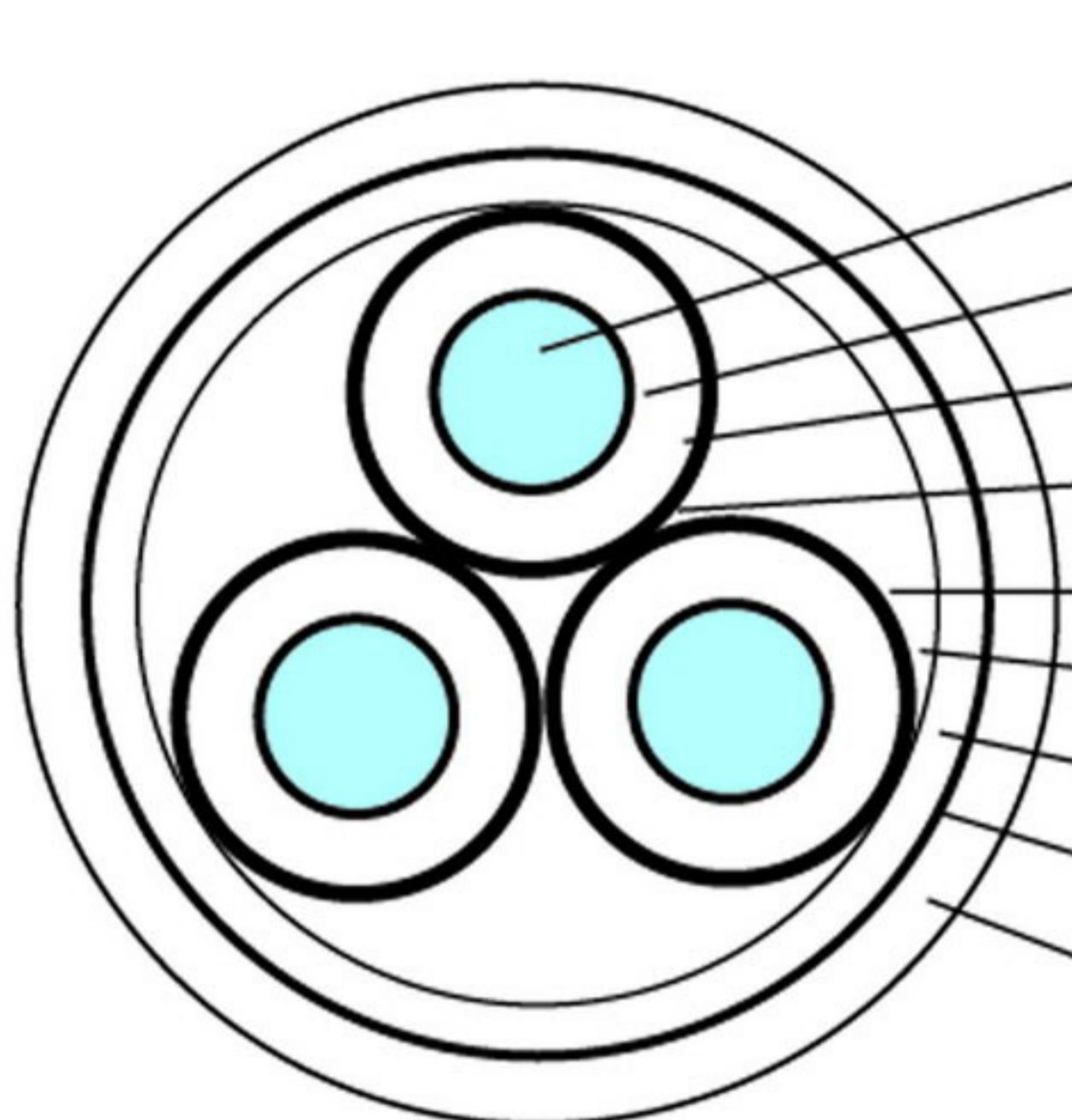


## 电缆结构 (Cable construction)



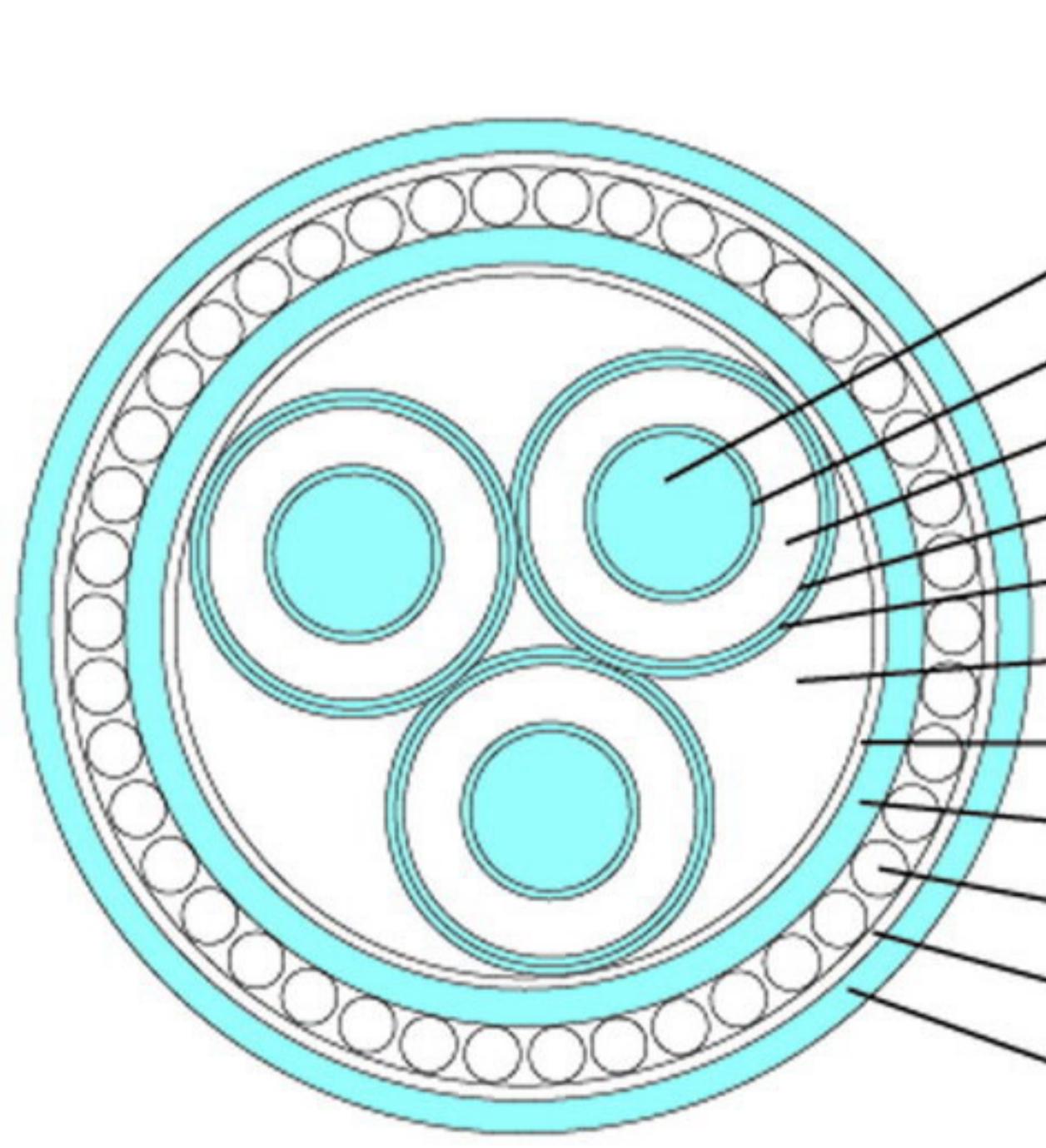
- 导电线芯 (Conductor)
- 导体屏蔽 (Conductor screen)
- 交联聚乙烯绝缘 (XLPE Insulation)
- 绝缘屏蔽 (Insulation screen)
- 铜带屏蔽 (Copper tape screen)
- 内护套 (Inner sheath)
- 非磁性金属丝铠装 (Non-magnetic metal wire armor)
- 聚氯乙烯护套 (PVC sheath)

YJV72-18/20kV、18/30kV单芯非磁性金属丝铠装电力电缆  
18/20kV、18/30kV single core Non-magnetic metal wire armor power cable



- 导电线芯(Conductor)
- 导体屏蔽(Conductor screen)
- 交联聚乙烯绝缘(XLPE Insulation)
- 绝缘屏蔽(Insulation screen)
- 铜带屏蔽(Copper tape screen)
- 填充 (Filler)
- 内护套(Inner sheath)
- 钢带铠装(Steel tape armor)
- 聚氯乙烯护套(PVC sheath)

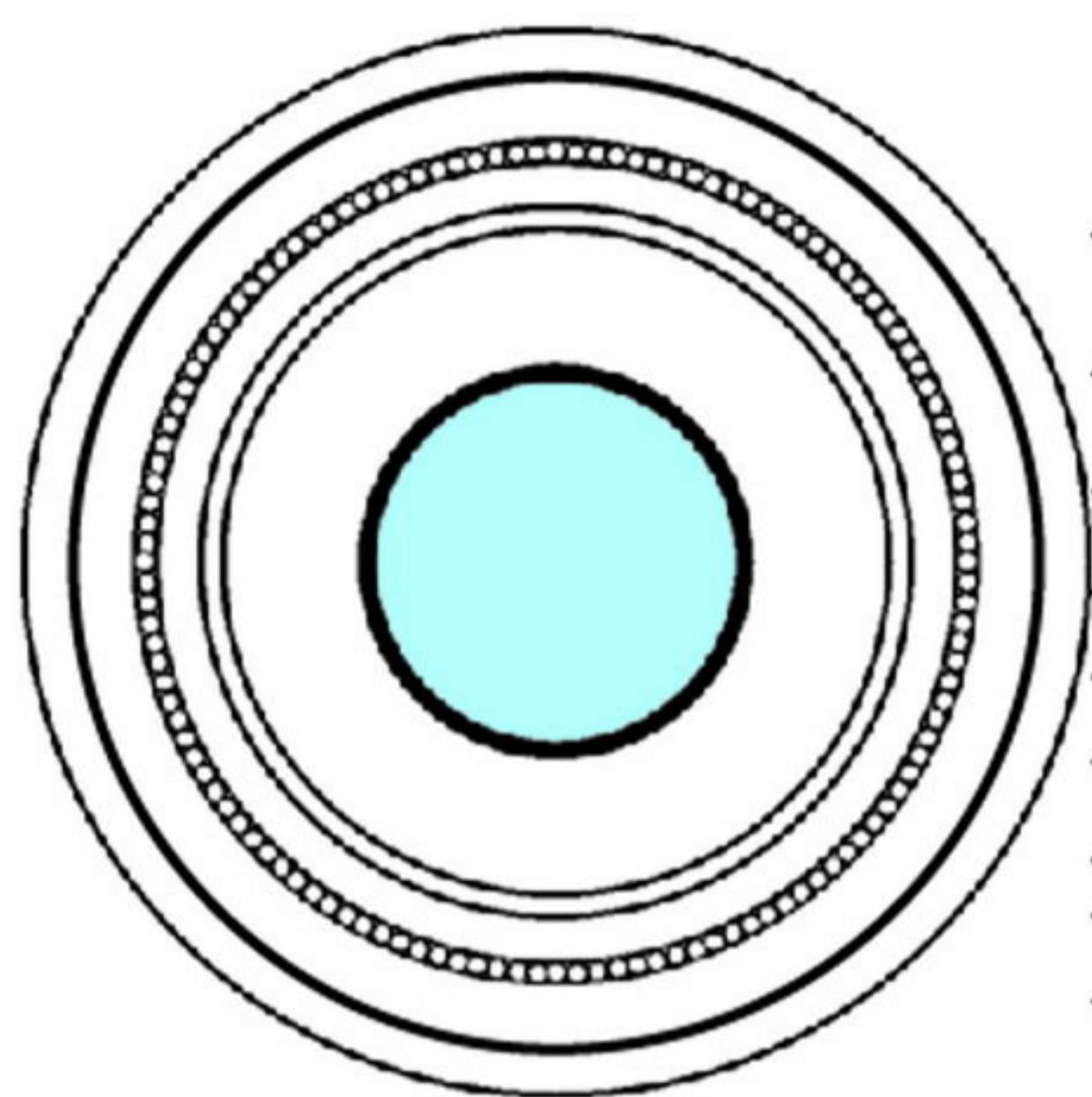
YJV22-18/20kV、18/30kV 三芯钢带铠装电力电缆  
18/20kV、18/30kV three cores steel tape armoured power cable



- 导电线芯 (Conductor)
- 导体屏蔽 (Conductor screen)
- 交联聚乙烯绝缘 (XLPE Insulation)
- 绝缘屏蔽 (Insulation screen)
- 铜带屏蔽 (Copper tape screen)
- 填充 (Filler)
- 绕包带 (Binder tape)
- 内衬层 (Inner Bedding)
- 钢丝铠装 (Steel wires armor)
- 绕包带 (Biner tape)
- 外护套 (Out sheath)

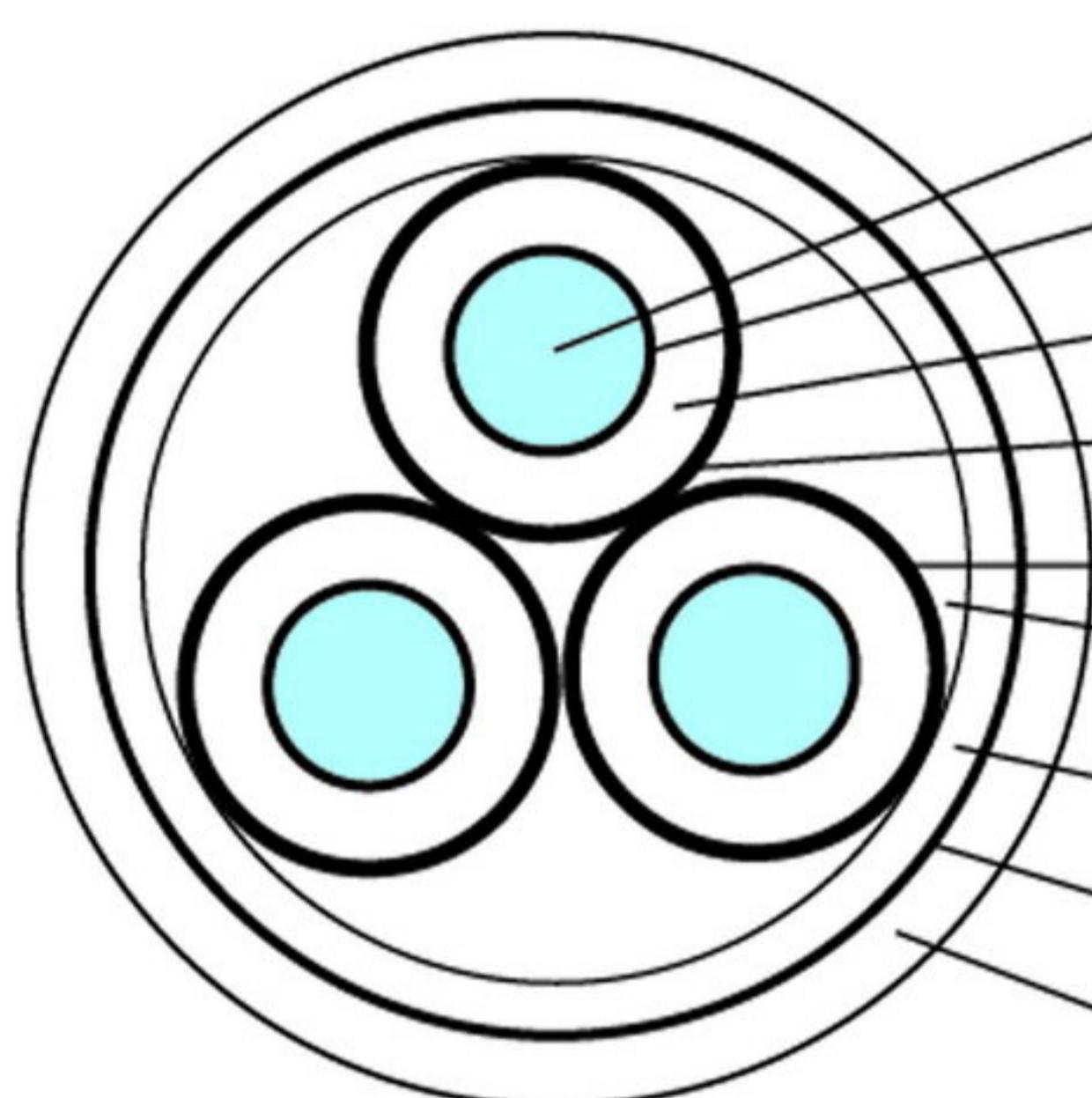
YJV32-18/20kV、18/30kV 三芯钢丝铠装电力电缆  
18/20kV、18/30kV three cores XLPE insulated steel wire armoured power cable

## 电缆结构 (Cable construction)



- 导电线芯(Conductor)
- 导体屏蔽(Conductor screen)
- 交联聚乙烯绝缘(XLPE Insulation)
- 绝缘屏蔽(Insulation screen)
- 铜带屏蔽(Copper tape screen)
- 内护套(Inner sheath)
- 非磁性金属丝铠装 ( Non-magnetic metal wire armor )
- 绕包带 ( Biner tape )
- 聚氯乙烯护套(PVC sheath)

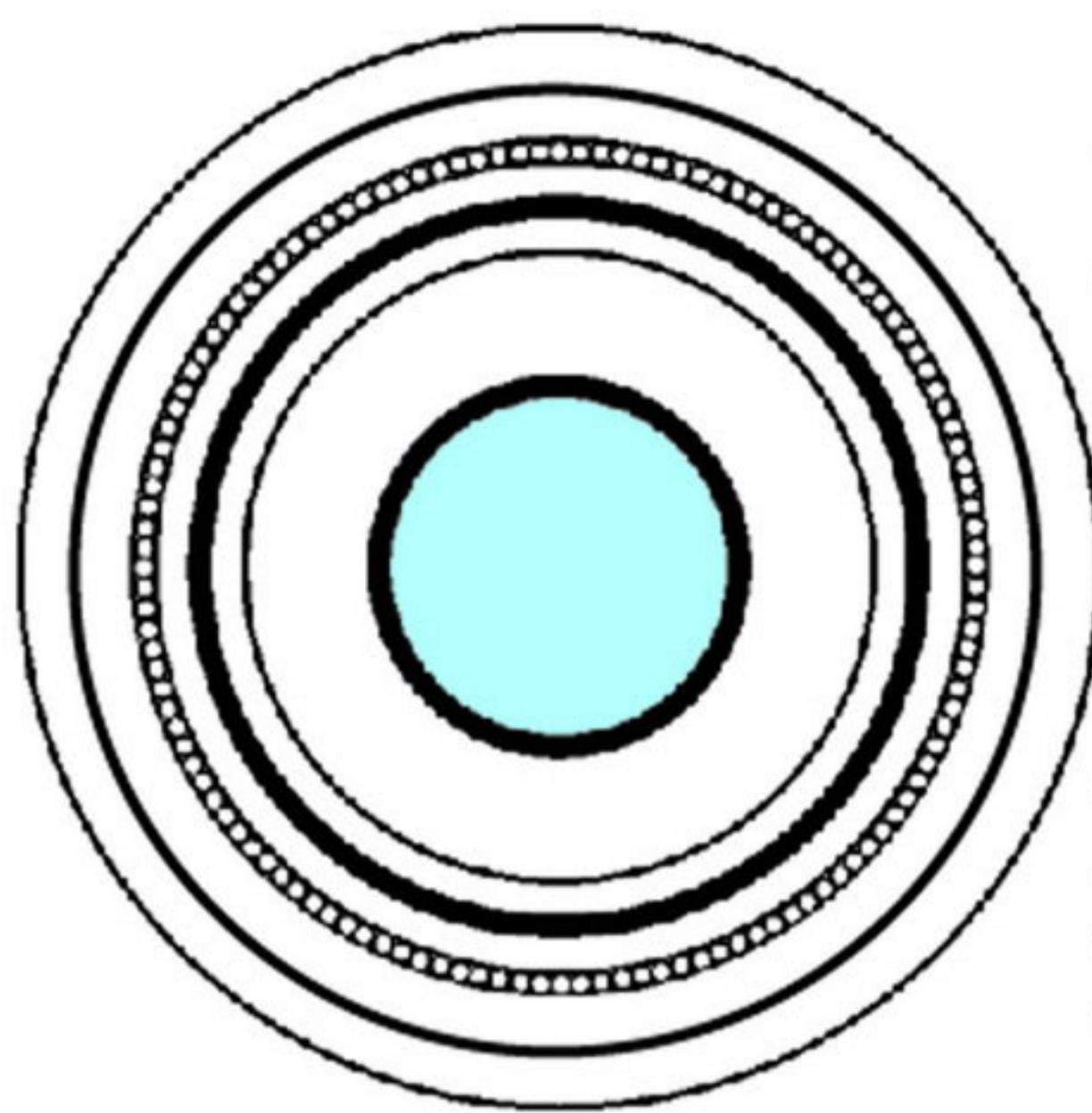
YJV72-26/35kV单芯非磁性金属丝铠装电力电缆  
26/35kv single core Non-magnetic metal wire armor power cable



- 导电线芯(Conductor)
- 导体屏蔽(Conductor screen)
- 交联聚乙烯绝缘(XLPE Insulation)
- 绝缘屏蔽(Insulation screen)
- 铜带屏蔽(Copper tape screen)
- 填充 ( Filler )
- 内护套(Inner sheath)
- 钢带铠装(Steel tape armor)
- 聚氯乙烯护套(PVC sheath)

YJV22-8.7/15kV 三芯钢带铠装电力电缆  
8.7/15kv three cores steel tape armoured power cable

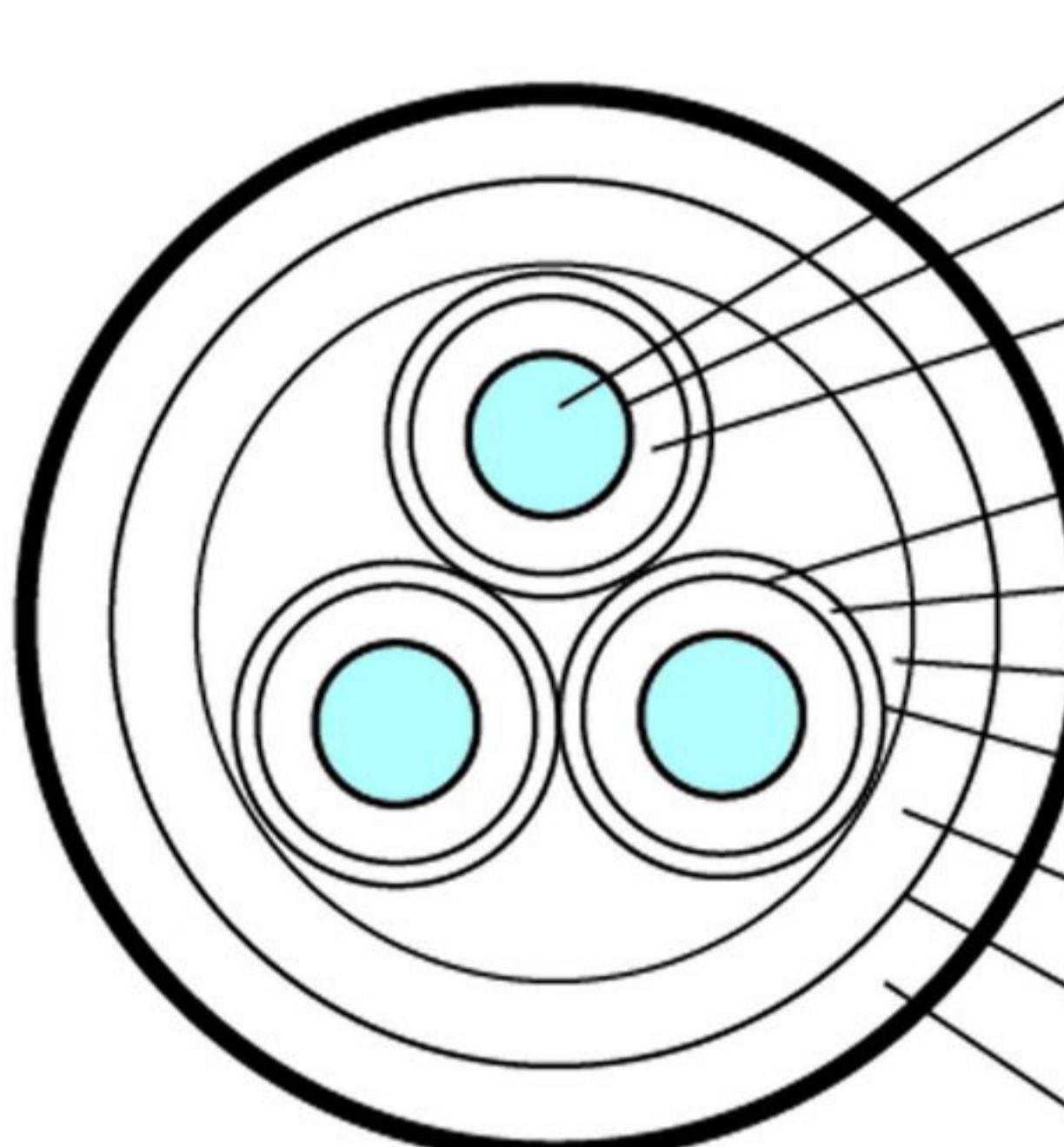
## 电缆结构 (Cable construction)



- 导电线芯(Conductor)
- 导体屏蔽(Conductor screen)
- 交联聚乙烯绝缘(XLPE Insulation)
- 绝缘屏蔽(Insulation screen)
- 铜带屏蔽(Copper tape screen)
- 绕包带(Binder tape)
- 防水聚乙烯内护套(Water-proof PE inner sheath)
- 非磁性金属丝铠装 ( Non-magnetic metal wire armor )
- 绕包带 ( Binder tape )
- 聚氯乙烯护套(PVC sheath)

FS-YJY72-8.7/15kV单芯非磁性金属丝铠装电力电缆

8.7/15kV XLPE insulated Non-magnetic metal wire armor water proof power cable

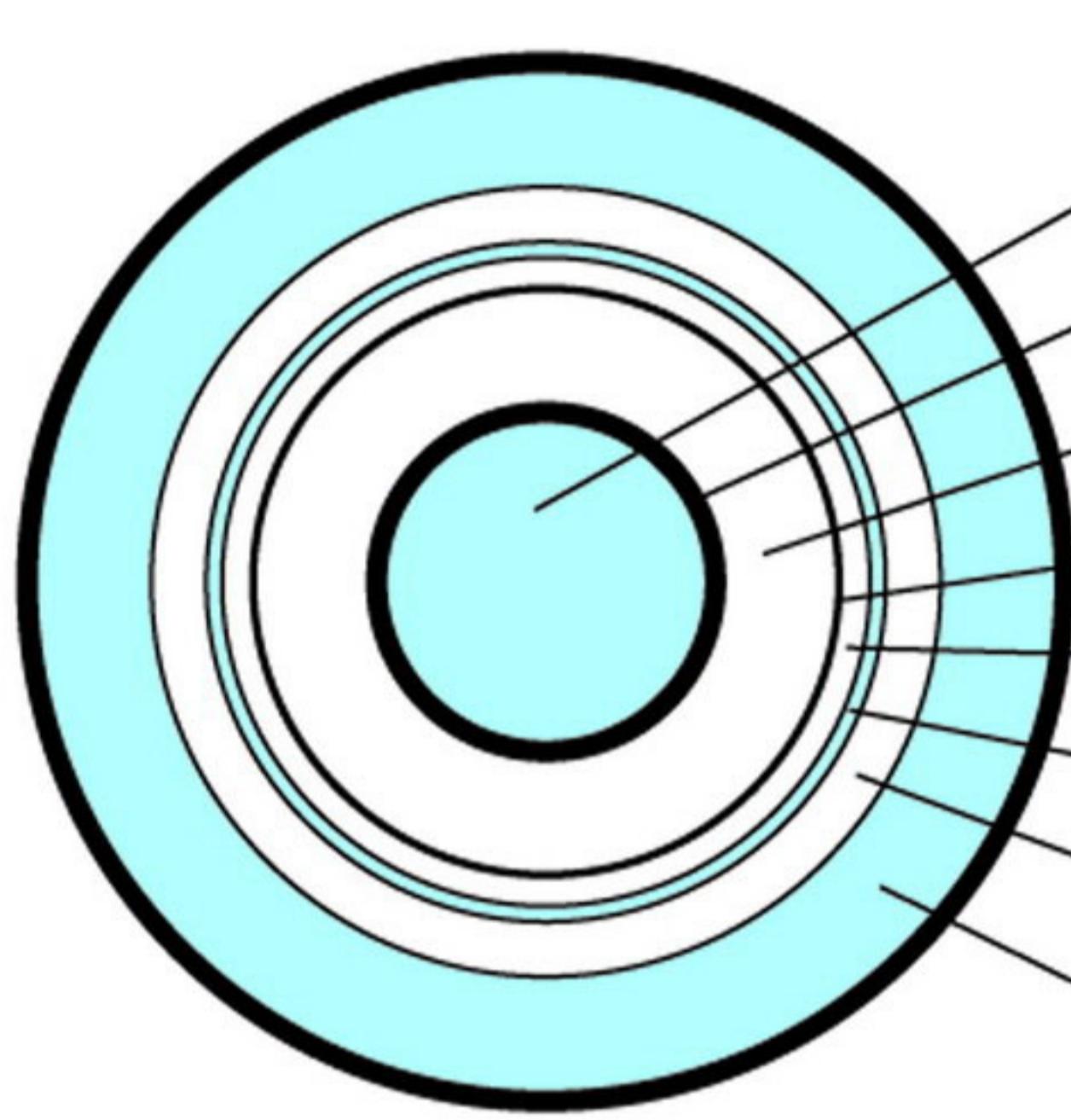


- 导电线芯(Conductor)
- 导体屏蔽(Conductor screen)
- 交联聚乙烯绝缘(XLPE Insulation)
- 绝缘屏蔽(Insulation screen)
- 铜带屏蔽(Copper tape screen)
- 填充(Filler)
- 绕包带(Binder tape)
- 防水聚乙烯内护套(Water-proof PE inner sheath)
- 钢带铠装(Steel tape armor)
- 聚氯乙烯护套(PVC sheath)

FS-YJY22-8.7/15kV 三芯交联聚乙烯绝缘防水电力电缆

8.7/15kV XLPE insulated steel tape armoured water-proof power cable

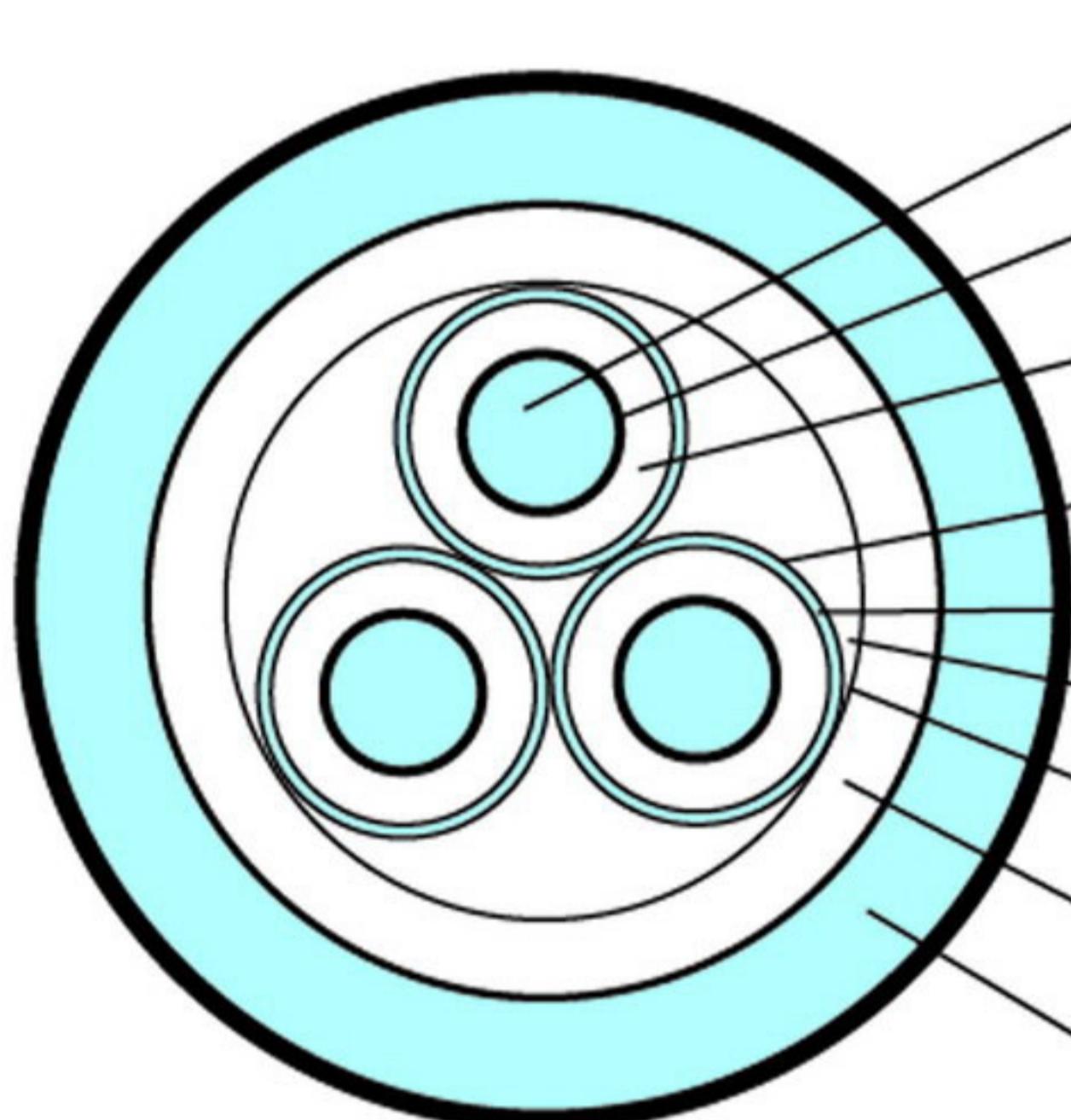
## 电缆结构 (Cable construction)



- 导电线芯(Conductor)
- 导体屏蔽(Conductor screen)
- 交联聚乙烯绝缘(XLPE Insulation)
- 绝缘屏蔽(Insulation screen)
- 铜带屏蔽(Copper tape screen)
- 绕包带(Binder tape)
- 防水聚乙烯内护套(Water-proof PE inner sheath)
- 聚氯乙烯护套(PVC sheath)

FS-YJYV-8.7/15kV 单芯交联聚乙烯绝缘防水电缆

FS-YJYV-8.7/15kV XLPE insulated steel wire armoured water-proof cable



- 导电线芯(Conductor)
- 导体屏蔽(Conductor screen)
- 交联聚乙烯绝缘(XLPE Insulation)
- 绝缘屏蔽(Insulation screen)
- 铜带屏蔽(Copper tape screen)
- 填充(Filler)
- 绕包带(Binder tape)
- 防水聚乙烯内护套(Water-proof PE inner sheath)
- 聚氯乙烯护套(PVC sheath)

FS-YJYV-8.7/15kV 三芯交联聚乙烯绝缘防水电缆

FS-YJYV-8.7/15kV XLPE insulated steel wire armoured water-proof cable

**18/30~26/35kV单芯交联聚乙烯绝缘电力电缆连续负荷参考载流量(A)**  
 Continuous current capacity of single core XLPE insulated power cable with rated voltage 18/30kV to 26/35kV

型 号 Type	YJV		YJLV		YJY		YJLY	
排列方式 arrange type	三角形(相互接触) Delta(connect each other)				扁平形(相邻间距等于电缆外径) Flat (the space between adjacent cores is the overall diameter of the cable)			
敷设方式 laying method Nominal cross section area(mm <sup>2</sup> )	在空气中 in air		直埋土壤中 direct buried		在空气中 in air		直埋土壤中 direct buried	
	Cu	Al	Cu	Al	Cu	Al	Cu	Al
50	215	170	260	200	250	190	225	175
70	270	210	320	250	305	240	275	215
95	330	255	390	300	375	290	335	260
120	380	295	445	345	435	335	380	295
150	430	330	500	395	490	380	425	330
185	490	380	570	440	565	435	485	375
240	575	450	665	515	665	520	565	438
300	660	515	750	585	760	590	635	495
400	765	600	865	680	890	695	730	570
500	875	695	980	775	1030	810	830	655
630	1010	810	1110	895	1200	950	950	755
800	1150	940	1250	1020	1380	1110	1080	865
1000	1260	1050	1360	1130	1540	1250	1190	960
环境温度 Ambient temperature	40℃		25℃		40℃		25℃	
工作环境 Opererting temperature	90℃							

注：1)土壤中未考虑迁移问题，土壤热阻系数按  $\rho_w=1.0K \cdot m/W$ 。截流量修正系数见下表。

The moisture in soil is not considered. The soil thermal resistivity  $\rho_w=1.0K \cdot m/W$ . See following table for correction coefficient of reference current carrying capacity.

2)金属屏蔽一端接地。

One end of metal screen shall be earthed.

**18/30~26/35kV三芯交联聚乙烯绝缘电力电缆连续负荷参考载流量(A)**  
 Continuous current capacity of three core XLPE insulated power cable with rated voltage 18/30kV to 26/35kV

型 号 Type	YJV YJLV YJY YJLY				YJV22 YJLV22 YJV32 YJLV32 YJV42 YJLV42 YJY22 YJLY22 YJY32 YJLY32 YJY42 YJLY42			
排列方式 arrange type	三角形(相互接触) Delta(connect each other)				扁平形(相邻间距等于电缆外径) Flat (the space between adjacent cores is the overall diameter of the cable)			
敷设方式 laying method Nominal cross section area(mm <sup>2</sup> )	在空气中 in air		直埋土壤中 direct buried		在空气中 in air		直埋土壤中 direct buried	
	Cu	Al	Cu	Al	Cu	Al	Cu	Al
3×35	150	115	160	125	150	115	160	125
3×50	180	140	190	145	180	140	190	145
3×70	220	170	230	180	220	170	230	180
3×95	265	205	275	215	265	205	275	215
3×120	305	235	315	245	310	240	315	245
3×150	345	270	355	275	350	270	355	275
3×185	390	305	400	310	400	310	400	310
3×240	455	355	460	360	465	360	460	360
3×300	525	410	520	410	535	420	520	410
3×400	600	470	590	465	615	485	590	465
环境温度 Ambient temperature	40℃		25℃		40℃		25℃	
工作环境 Operating temperature	90℃							

注：1)土壤中未考虑迁移问题，土壤热阻系数按  $\rho_w=1.0K \cdot m/W$ 。截流量修正系数见下表。

The moisture in soil is not considered. The soil thermal resistivity  $\rho_w=1.0K \cdot m/W$ . See following table for correction coefficient of reference current carrying capacity.

2)单根电缆分离敷设，相邻电缆对该电缆没有热效应。

Cable is installed separately, the adjacent cable has no thermal effect on each other.

## 3.6/6~12/20kV 单芯交联聚乙烯绝缘电力电缆连续负荷参考载流量(A)

Continuous current capacity of single core XLPE insulated power cable with rated voltage 3.6/6kV to 12/20kV

型 号 Type	YJV		YJLY		YJY		YJLY	
排列方式 arrange type	三角形(相互接触) Delta(connect each other)				扁平形(相邻间距等于电缆外径) Flat (the space between adjacent cores is the overall diameter of the cable)			
敷设方式 Laying method 标称截面mm <sup>2</sup> Nominal cross section area(mm <sup>2</sup> )	在空气中 in air		直埋土壤中 direct buired		在空气中 in air		直埋土壤中 direct buired	
	Cu	Al	Cu	Al	Cu	Al	Cu	Al
25	145	110	185	145	170	130	160	125
35	175	135	225	175	205	160	190	150
50	210	160	270	210	245	190	230	175
70	260	200	330	255	310	240	280	215
95	320	245	400	310	380	295	335	260
120	370	285	460	345	440	340	385	295
150	420	325	520	400	500	385	430	335
185	460	375	585	455	570	445	490	380
240	565	440	680	530	675	525	565	440
300	650	510	775	605	780	610	640	500
400	755	595	885	700	910	710	735	575
500	865	690	1000	795	1050	825	835	660
630	1000	810	1140	920	1230	970	960	760
800	1140	940	1270	1040	1420	1140	1080	865
1000	1250	1050	1370	1150	1580	1290	1180	970
环境温度 Ambient temperature	40℃		25℃		40℃		25℃	
工作环境 Operating temperature	90℃							

注：1) 土壤中未考虑迁移问题，土壤热阻系数按  $\rho_w=1.0K \cdot m/W$ 。截流量修正系数见下表。

The moisture in soil is not considered. The soil thermal resistivity  $\rho_w=1.0K \cdot m/W$ . See following table for correction coefficient of reference current carrying capacity.

2) 金属屏蔽一端接地。

One end of metal screen shall be earthed.

## 3.6/6~12/20kV 三芯交联聚乙烯绝缘电力电缆连续负荷参考载流量(A)

Continuous current capacity of three core XLPE insulated power cable with rated voltage 3.6/6kV to 12/20kV

型 号 Type	YJV YJLV YJY YJLY				YJV22 YJLV22 YJV32 YJLV32 YJV42 YJLV42 YJY22 YJLY22 YJY32 YJLY32 YJY42 YJLY42			
排列方式 arrange type	三角形(相互接触) Delta(connect each other)				扁平形(相邻间距等于电缆外径) Flat (the space between adjacent cores is the overall diameter of the cable)			
敷设方式 Laying method 标称截面mm <sup>2</sup> Nominal cross section area(mm <sup>2</sup> )	在空气中 in air		直埋土壤中 direct buired		在空气中 in air		直埋土壤中 direct buired	
	Cu	Al	Cu	Al	Cu	Al	Cu	Al
3×25	120	96	135	105	120	90	135	105
3×35	150	115	160	125	145	110	160	125
3×50	175	135	190	150	170	130	190	150
3×70	220	170	235	185	210	165	235	185
3×95	265	205	285	220	265	200	285	220
3×120	305	235	320	250	300	235	320	250
3×150	350	270	365	280	340	265	365	280
3×185	395	310	410	320	390	305	410	320
3×240	465	365	475	370	455	355	475	370
3×300	530	415	535	420	520	410	535	420
3×400	615	485	605	480	600	475	605	480
环境温度 Ambient temperature	40℃		25℃		40℃		25℃	
工作环境 Operating temperature	90℃							

注：1) 土壤中未考虑迁移问题，土壤热阻系数按  $\rho_w=1.0K \cdot m/W$ 。截流量修正系数见下表。

The moisture in soil is not considered. The soil thermal resistivity  $\rho_w=1.0K \cdot m/W$ . See following table for correction coefficient of reference current carrying capacity.

2) 单根电缆分离敷设，相邻电缆对该电缆没有热效应。 Cable is installed separately, the adjacent cable has no thermal effect on each other.

## 不同环境温度下载流量修正系数

Correction coefficient of current-carrying capacity under different ambient temperature

导体工作温度 (℃) Operating temperature of conductor	环境温度(℃)(空气中) Ambient temperature(in air)								
	10	15	20	25	30	35	40	45	50
90	1.26	1.22	1.18	1.14	1.09	1.04	1.00	0.94	0.89

## 不同环境温度下载流量修正系数

Correction coefficient of current-carrying capacity under different ambient temperature

导体工作温度 (℃) Operating temperature of conductor	环境温度(℃)(土壤中) Ambient temperature(in Soil)					
	10	15	20	25	30	35
90	1.11	1.07	1.04	1.00	0.96	0.92

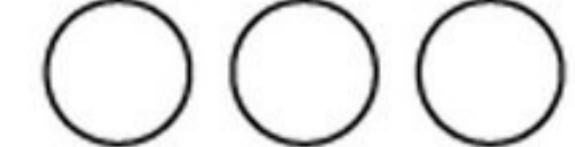
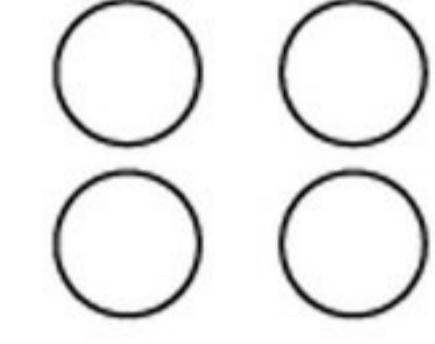
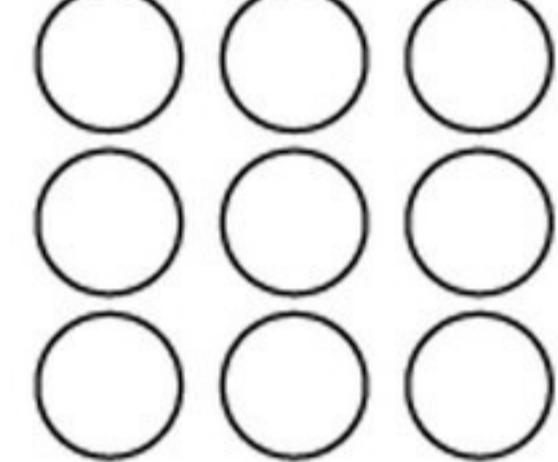
## 不同土壤热阻系数的载流量修正系数

Correction coefficient of current-carrying capacity for different specific thermal resistivity of ground

电压 Voltage	截面 Sectional area	土壤热阻系数 $\rho_t$ (k.m/w) Specific thermal resistivity of ground						
		(kV)	(mm <sup>2</sup> )	0.8	1.0	1.2	1.5	2.0
3.6/6~6/6	≤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		1.00	0.94	0.83	0.80	

# 空气中多根电缆并列敷设时的载流量修正系数

Correction coefficient of current-carrying capacity for multi-cable laid in parallel in air

排列 Array	层数 Layer no.	层数×根数 Layers × Pcs	电缆间隙与电缆直径比 Gap between cable/cable Dia. d/De		载流量的 修正系数 Correction factor of current rating	备注 Note
			水平 Level	垂直 Vertical		
多芯电缆平面 排列 Plane parallel array of multi-cable	一层 One layer	1×2	—	<5	0.89	e – 电缆的间隙 De – 电缆外径 排列图例： e=Gap between cables De=outer Dia.of cables array cutline one layer 一层 One layer: 1×3  二层 Two layers: 2×2  三层 Three layers: 3×3 
		1×3	—	<0.75	0.84	
	二层 Two layers	2×1	<0.5	1.9~1.5	0.99	
				1.4~1.0	0.97	
				<0.5	0.90	
	二层 Two layers	2×2	<0.5	2~1.5	0.99	
				1.49~1.5	0.97	
				0.9~0.5	0.90	
	三层 Three layers	3×1	—	4~3	0.99	
				2.9~2.0	0.97	
				1.9~1.0	0.94	
				<0.5	0.85	
				4~3	0.99	
	三层 Three layers	3×2 3×3	<0.5 <0.75	2.9~2.0	0.97	
				1.9~1.0	0.94	
				<0.5	0.85	
				4~3	0.99	

注：电缆置于电缆托盘、夹板、电缆桥架等非连续性支撑物上，并距离墙壁一个电缆外径。

Note:Cables are parked on incontinuous underprops cable stock,splint cable rack,etc.and keep away one cable Dia.from the wall.

## 导体计算允许最大短路电流

Max.calculated permissible short-circuit current for conductor.

导体标称截面 Nominal cross-section area of conductor mm <sup>2</sup>	导体允许最大短路电流(1秒) Maximum permissible short-circuit for conductor(1 sec.) kA	
	铜导体 Copper conductor	铝导体 Aluminum conductor
10	1.51	0.988
16	2.39	1.56
25	3.69	2.42
35	5.15	3.37
50	7.31	4.79
70	10.2	6.68
95	13.8	9.03
120	17.4	11.4
150	21.7	14.2
185	26.7	17.5
240	34.6	22.6
300	43.1	28.2
400	57.4	37.6
500	71.7	47.0
630	88.8	58.0

## 金属屏蔽层(铜带屏蔽)的允许最大短路电流(参考值)

Max.permissible short-circuit for current for metallic screen(copper tape screen)

YJV型单芯电缆 Single-core cable

导体标称截面 Nominal cross-section of conductor mm <sup>2</sup>	电缆额定电压 Rated voltages of cable(kV)						
	3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/30	21/35	26/35
	短路电流 Short-circuit current A						
25	1075	1083	1094	-	-	-	-
35	1074	1082	1092	1096	-	-	-
50	1072	1080	1091	1095	1284	1286	1288
70	1070	1079	1090	1091	1281	1285	1286
95	1069	1077	1086	1272	1280	1284	1283
120	1068	1077	1286	1271	1279	1280	1282
150	1067	1076	1265	1270	1278	1279	1282
185	1064	1251	1264	1267	1275	1279	1279
240	1241	1250	1262	1266	1274	1276	1278
300	1239	1246	1261	1265	1271	1275	1277
400	1240	1245	1256	1260	1270	1272	1274
500	1243	1244	1253	1257	1266	1272	1273
630	1236	1238	1252	1253	1265	1270	1270

## 电缆的电容(参考值)

Capacitance of cable(reference value)

导体标称截面 Nominal cross-section of conductor mm <sup>2</sup>	电缆额定电压 Rated voltages of cable(kV)						
	3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/30	21/35	26/35
	每相电容 Capacitance for each phase μF/km						
25	0.2423	0.1922	0.1576	0.1378	0.1163	0.1064	0.0992
35	0.2684	0.2116	0.1725	0.1502	0.1251	0.1140	0.1061
50	0.3022	0.2367	0.1917	0.1661	0.1363	0.1239	0.1150
70	0.3462	0.2693	0.2167	0.1868	0.1508	0.1365	0.1263
95	0.3875	0.2999	0.2400	0.2060	0.1643	0.1483	0.1368
120	0.4236	0.3266	0.2603	0.2228	0.1760	0.1584	0.1460
150	0.4647	0.3570	0.2834	0.2418	0.1893	0.1700	0.1563
185	0.5059	0.3873	0.3123	0.2656	0.2060	0.1815	0.1665
240	0.5430	0.4290	0.3439	0.2916	0.2207	0.1972	0.1805
300	0.5589	0.4706	0.3755	0.3175	0.2387	0.2128	0.1745
400	0.5940	0.5311	0.4213	0.3551	0.2648	0.2354	0.2146
500	0.6167	0.5839	0.4613	0.3880	0.2876	0.2551	0.2321
630	0.6848	0.6481	0.5099	0.4278	0.3151	0.2789	0.2533

## 单芯电缆电感(参考值)

Inductance for single-core cable(reference value)

导体标称截面 Nominal cross-section of conductor mm <sup>2</sup>	电缆额定电压 Rated voltages of cable(kV)						
	3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/30	21/35	26/35
	电感 Inductance mH/Km						
25	0.5954	0.6143	0.6474	0.6621	0.7006	0.7168	0.7273
35	0.5753	0.5932	0.6248	0.6390	0.6762	0.6942	0.7021
50	0.5543	0.5711	0.6011	0.6145	0.6501	0.6675	0.6751
70	0.5357	0.5486	0.5765	0.5919	0.5252	0.6394	0.6467
95	0.5172	0.5318	0.5608	0.5726	0.6043	0.6180	0.6279
120	0.5059	0.5197	0.5473	0.5586	0.5891	0.6051	0.6118
150	0.4949	0.5079	0.5341	0.5449	0.5740	0.5895	0.5959
185	0.4885	0.5006	0.5252	0.5351	0.5640	0.5760	0.5839
240	0.4790	0.4890	0.5143	0.5216	0.5487	0.5615	0.5677
300	0.4749	0.4818	0.5032	0.5102	0.5376	0.5484	0.5540
400	0.4660	0.4702	0.4927	0.4991	0.5219	0.5343	0.5395
500	0.4600	0.4619	0.4848	0.4907	0.5128	0.5224	0.5272
630	0.4547	0.4563	0.4748	0.4827	0.5012	0.5101	0.5161

S-相邻两根电缆的中心距离，D-电缆外径

S-The distance between the two adjacent cable center,D-The overall diameter of the cable.

## 三芯电缆电感(参考值)

Inductance for three-core cable(reference value)

导体标称截面 Nominal cross-section of conductor mm <sup>2</sup>	电缆额定电压 Rated voltages of cable(kV)						
	3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/30	21/35	26/35
	电感 Inductance mH/Km						
25	0.3552	0.3797	0.4016	-	-	-	-
35	0.3384	0.3613	0.3862	0.4064	-	-	-
50	0.3211	0.3423	0.3655	0.3845	0.4396	0.4396	0.4679
70	0.3040	0.3232	0.3445	0.3620	0.4145	0.4145	0.4427
95	0.2915	0.3092	0.3290	0.3454	0.3956	0.3956	0.4208
120	0.2826	0.2992	0.3178	0.3392	0.3799	0.3799	0.4019
150	0.2742	0.2897	0.3071	0.3217	0.3642	0.3642	0.3862
185	0.2672	0.2817	0.3009	0.3145	0.3485	0.3485	0.3737
240	0.2608	0.2726	0.2904	0.3030	0.3360	0.3360	0.3611
300	0.2576	0.2651	0.2817	0.2935	0.3266	0.3266	0.3485
400	0.2516	0.2564	0.2714	0.2822	0.3041	0.3041	0.3266
500	0.2480	0.2503	0.2641	0.2742	-	-	-
630	0.2421	0.2442	-	-	-	-	-