Type and name of cable

Type	Name	Application
YJLHV	Aluminum Alloy Conductor XLPE insulated PVC sheathed power cable	For laid indoors,tunnels or cable trench,no need to bear external mechanical forces,single-core cable shall not laid in magnetic duct.
YJLHV22	Aluminum Alloy Conductor XLPE insulated steel tape armoured PVC sheathed Power cable	For laid indoors,intunels and tray,cable trench,or directly in ground able to bear external mechanical forces,but unable to bear large pulling forces
YJLHS2	Aluminum Alloy Conductor XLPE insulated Interlocked armored PVC sheathed Power Cable	
YJLHV32	Aluminum Alloy Conductor XLPE insulated interlocked armoured PVC sheathed power cable	For laying in doors,intunels and direct in ground and wells,required to bear external mechanical forces and determinate pulling force.

XLPE insulated power cable for rated voltage 3.6/6kV

Nominal Cross sectional area of conductor mm²	Nominal thickness of insulation mm	YJLHV		YJLHV22/62		YJLHV32/72	
		Approx overall diameter mm	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km
1×25	2.5	17.7	367	21.0	608	24.8	738
1×35	2.5	18.8	425	22.0	669	25.8	800
1×50	2.5	20.1	487	23.5	758	27.3	900
1×70	2.5	22.0	595	25.2	879	29.0	1028
1×95	2.5	23.7	708	27.1	1025	30.9	1183
1×20	2.5	25.1	815	28.3	1136	32.1	1304
1×150	2.5	26.7	928	30.1	1283	33.9	1460
1×185	2.5	28.7	1085	31.9	1450	36.7	1742
1×240	2.6	31.0	1300	34.4	1709	39.0	2000
1×300	2.8	34.0	1565	38.8	2381	42.0	2336
1×400	3.0	37.5	1939	42.1	2813	45.5	2785
1×500	3.2	42.3	2414	47.1	3408	51.5	3526
1×630	3.2	46.1	2925	51.1	4028	55.5	4160
3×25	2.5	35.6	1258	40.2	2096	43.6	2985
3×35	2.5	37.8	1477	42.6	2383	47.0	5715
3×50	2.5	40.8	1681	45.6	2656	50.0	4067
3×70	2.5	44.7	2113	50.0	3201	54.1	4756
3×95	2.5	48.5	2472	53.5	3651	57.9	5352
3×120	2.5	51.3	2783	56.7	4081	66.1	5863
3×150	2.5	55.0	3283	60.6	4699	65.0	6588
3×185	2.5	59.1	3747	64.7	5267	69.1	7334
3×240	2.6	64.4	4538	70.2	6224	74.6	8460
3×300	2.8	70.9	5497	76.9	7403	85.0	11012
3×400	3.0	78.2	6648	85.8	9660	92.7	12800
3×500	3.2	88.6	8452	96.4	11843	103.3	15251
3×630	3.2	96.7	10156	105.1	13999	112.0	17730

XLPE insulated power cable for rated voltage 6/6kV,6/10kV

Nominal Cross sectional area of conductor mm²	Nominal thickness of Insulation mm	YJLHV		YJLHV22/62		YJLHV32/72	
		Approx overall diameter mm	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km
1×25	3.4	19.7	436	23.1	702	26.9	840
1×35	3.4	20.6	488	24.0	766	27.8	910
1×50	3.4	22.1	564	25.5	860	29.1	997
1×70	3.4	23.8	668	27.2	986	31.0	1143
1×95	3.4	25.7	796	29.1	1138	32.7	1295
1×20	3.4	26.9	895	30.3	1253	34.9	1511
1×150	3.4	28.7	1026	32.1	1405	36.7	1683
1×185	3.4	30.5	1175	33.9	1578	38.5	1863
1×240	3.4	32.8	1400	37.4	2160	40.8	2142
1×300	3.4	35.4	1650	40.0	2479	43.4	2452
1×400	3.4	38.3	1990	43.1	2904	47.5	3028
1×500	3.4	42.7	2442	47.5	3443	51.9	3571
1×630	3.4	46.5	2955	51.5	4067	55.9	4194
3×25	3.4	39.8	1510	44.7	2482	49.1	2866
3×35	3.4	41.9	1750	46.7	2750	51.3	4248
3×50	3.4	44.9	1968	50.1	3084	54.5	4637
3×70	3.4	48.8	2350	54.2	3586	58.6	5282
3×95	3.4	52.8	2750	58.0	4056	62.4	5858
3×120	3.4	55.6	3210	61.0	4612	65.4	6534
3×150	3.4	59.3	3535	64.7	5027	69.1	7058
3×185	3.4	63.4	4170	69.0	5797	73.4	8006
3×240	3.4	68.1	4831	74.1	6646	82.2	10075
3×300	3.4	73.7	5744	80.0	7761	88.0	11464
3×400	3.4	79.9	6938	87.5	10015	94.4	13178
3×500	3.4	89.4	8538	97.2	11961	104.3	15460
3×630	3.4	97.8	10317	106.0	14148	112.9	17923

XLPE insulated power cable for rated voltage 8.7/10kV,8.7/15kV

Nominal Cross sectional area of conductor mm²	Nominal thickness of insulation mm	YJLHV		YJLHV22/62		YJLHV32/72	
		Cable weight Max kg/km	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km
1×25	4.5	22.1	527	25.3	812	29.1	960
1×35	4.5	23.0	583	26.4	890	30.2	1046
1×50	4.5	24.3	653	27.7	978	31.5	1138
1×70	4.5	26.2	774	29.6	1122	33.4	1297
1×95	4.5	28.1	910	31.3	1267	36.1	1553
1×20	4.5	29.3	1014	32.7	1401	37.3	1684
1×150	4.5	31.1	1151	34.3	1545	38.9	1836
1×185	4.5	32.9	1307	37.5	2069	40.9	2050
1×240	4.5	35.2	1540	39.8	2352	43.2	2328
1×300	4.5	38.6	1894	43.2	2793	46.4	2740
1×400	4.5	41.5	2251	46.3	3238	50.7	3360
1×500	4.5	45.5	2658	50.5	3747	54.9	3875
1×630	4.5	49.3	3189	54.3	4364	58.7	4494
3×25	4.5	44.9	1857	49.9	2951	54.3	4501
3×35	4.5	47.0	2044	52.0	3187	56.4	4830
3×50	4.5	50.0	2328	55.2	3568	59.3	5287
3×70	4.5	53.9	2684	59.1	4016	61.5	5882
3×95	4.5	57.8	3217	63.4	4701	67.8	6672
3×120	4.5	60.6	3499	66.4	5085	70.8	7176
3×150	4.5	64.2	4036	70.0	5714	75.7	8801
3×185	4.5	68.3	4551	74.3	6371	82.4	9862
3×240	4.5	73.3	5414	79.5	7197	87.6	11089
3×300	4.5	80.6	6497	88.2	9599	95.1	12811
3×400	4.5	86.8	7784	94.6	11162	101.5	14623
3×500	4.5	95.4	9263	103.4	12956	110.3	16657

XLPE insulated power cable for rated voltage 12/20kV

Nominal Cross sectional area of Conductor mm²	Nominal thickness of Insulation mm	YJLHV		YJLHV22/62		YJLHV32/72	
		Approx overall diameter mm	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km
1×35	5.5	25.2	679	28.6	1012	32.2	1167
1×50	5.5	26.5	752	29.9	1104	33.7	1277
1×70	5.5	28.4	880	31.8	1255	36.4	1526
1×95	5.5	30.1	1009	33.5	1406	38.1	1693
1×120	5.5	31.5	1130	34.9	1544	39.5	1845
1×150	5.5	33.1	1259	37.7	2075	41.1	2003
1×185	5.5	35.1	1436	39.7	2245	43.1	2223
1×240	5.5	37.4	1677	42.0	2536	45.2	2490
1×300	5.5	39.8	1930	44.8	2900	49.2	3017
1×400	5.5	42.7	2289	47.7	3325	52.1	3458
1×500	5.5	47.1	2770	52.3	3920	56.7	4053
1×630	5.5	50.9	3309	56.3	4575	60.7	4720
3×35	5.5	51.4	2367	56.9	3670	61.3	5448
3×50	5.5	54.6	2751	60.2	4157	64.6	6051
3×70	5.5	58.4	3069	64.0	4570	68.4	6571
3×95	5.5	62.5	3648	68.1	5251	72.5	7395
3×120	5.5	65.3	3994	71.1	5700	76.9	8870
3×150	5.5	68.9	4431	74.7	6223	83.0	9690
3×185	5.5	73.0	5099	79.2	7076	87.3	10771
3×240	5.5	78.0	5842	85.6	8812	92.5	11882
3×300	5.5	83.4	6806	91.2	10056	98.1	13399
3×400	5.5	89.6	8122	97.8	11697	104.7	**15227**
3×500	5.5	99.1	9932	107.5	13863	114.4	17674
3×630	5.5	107.5	11723	115.9	15975	124.5	21986

XLPE insulated power cable for rated voltage 18/20kV,18/30kV

Nominal Cross sectional area of conductor mm²	Nominal thickness of Insulation mm	YJLHV		YJLHV22/62		YJLHV32/72	
		Approx overall diameter mm	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km
1×35	8.0	31.6	1020	—	—	—	—
1×50	8.0	31.9	1026	35.3	1433	39.9	1744
1×70	8.0	33.6	1155	38.4	1950	41.6	1911
1×95	8.0	35.5	1312	40.1	2131	43.5	2103
1×120	8.0	36.7	1430	41.5	2294	44.7	2246
1×150	8.0	38.5	1588	43.3	2494	47.7	2613
1×185	8.0	40.3	1964	45.3	2734	49.7	2853
1×240	8.0	42.6	2024	47.6	3044	52.0	3176
1×300	8.0	46.0	2426	51.0	3542	55.4	3680
1×400	8.0	48.9	2817	53.9	4000	58.5	4166
1×500	8.0	52.3	3261	58.1	4548	62.5	4694
1×630	8.0	46.7	3835	62.3	5289	66.7	5414
3×50	8.0	66.2	3681	66.2	3681	77.9	8565
3×70	8.0	70.0	4255	70.0	4255	84.1	9591
3×95	8.0	73.9	4722	73.9	4722	88.4	10442
3×120	8.0	76.9	5137	76.9	5137	91.4	11027
3×150	8.0	80.5	5630	80.5	5630	95.0	11828
3×185	8.0	84.6	6351	84.6	6351	99.3	12982
3×240	8.0	89.4	7323	89.4	7323	104.5	14374
3×300	8.0	96.7	8686	96.7	8686	111.8	16356
3×400	8.0	102.9	10157	102.9	10157	120.1	20283
3×500	8.0	111.6	11674	111.6	11674	129.0	22424
3×630	8.0	119.9	13671	119.9	13671	137.9	25749

XLPE insulated power cable for rated voltage 21/35kV

Nominal Cross sectional area of conductor mm²	Nominal thickness of Insulation mm	YJLHV		YJLHV22/62		YJLHV32/72	
		Approx overall diameter mm	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km
1×50	9.3	34.6	1290	—	2008	—	—
1×70	9.3	36.2	1420	—	2195	—	—
1×95	9.3	38.1	1580	—	2406	—	—
1×120	9.3	39.3	1720	—	2577	—	—
1×150	9.3	41.1	1890	—	2764	—	—
1×185	9.3	42.7	2070	—	3021	—	—
1×240	9.3	45.3	2350	—	3366	—	—
1×300	9.3	47.8	2640	—	3719	—	—
1×400	9.3	50.5	3080	—	4196	—	—
1×500	9.3	56.8	3540	—	4840	—	—
1×630	9.3	60.7	4080	—	5470	—	—
3×50	9.3	71.8	4640	78.4	6282	82.5	9960
3×70	9.3	75.4	5160	83.6	7662	86.3	10740
3×95	9.3	79.3	5730	87.7	8359	90.4	11670
3×120	9.3	82.1	6260	90.7	9050	93.4	12420
3×150	9.3	85.9	6860	94.6	9904	97.2	13330
3×185	9.3	89.6	7500	98.7	10813	100.9	14260
3×240	9.3	94.9	8520	103.8	11922	106.6	15710
3×300	9.3	100.3	9520	109.4	13351	112.0	17070
3×400	9.3	106.1	11120	116.0	15117	119.5	19290
3×500	9.3	119.0	12760	126.6	17446	132.6	21520
3×630	9.3	127.5	14710	135.2	19853	142.1	24090

XLPE insulated power cable for rated voltage 26/35kV

Nominal Cross sectional area of conductor mm²	Nominal thickness of Insulation mm	YJLHV		YLHV22/62		YLHV32/72	
		Approx overall diameter mm	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km	Approx overall diameter mm	Cable weight Max kg/km
1×50	10.5	37.3	1345	42.1	2024	46.5	2333
1×70	10.5	39.0	1488	44.0	2426	48.4	2539
1×95	10.5	40.9	1662	45.7	2622	50.1	2736
1×120	10.5	42.1	1789	47.1	2797	51.5	2923
1×150	10.5	43.9	1963	48.9	3014	53.3	3139
1×185	10.5	45.7	2154	50.9	3270	55.3	3397
1×240	10.5	48.0	2434	53.0	3579	57.4	3715
1×300	10.5	51.4	2872	56.6	4140	61.0	4284
1×400	10.5	54.3	3288	59.5	4624	63.9	4770
1×500	10.5	58.7	3793	65.6	5290	68.8	7140
1×630	10.5	62.5	4401	69.2	5920	72.6	7950
3×50	10.5	77.8	4857	85.4	7804	92.3	10823
3×70	10.5	81.6	5383	89.4	8515	96.3	11700
3×95	10.5	85.5	5983	93.3	9258	100.4	12594
3×120	10.5	88.3	6590	96.5	10057	103.4	13478
3×150	10.5	91.9	7228	103.3	10882	107.2	14474
3×185	10.5	96.2	8017	104.4	11803	111.3	15564
3×240	10.5	101.0	8980	109.6	13050	118.2	18795
3×300	10.5	108.3	10372	116.9	14778	125.5	20903
3×400	10.5	114.5	11850	123.5	16615	132.1	23130

D.C. resistance of conductor and conductor maximum short circuit current

Nominal cross-sectional area of conductor mm²	Max.D.C.resistance at of conductor at 20℃	Conductor maximun start circuit current (Is)at 90℃(Isecond)
	Aluminum alloy conductor	Aluminum alloy conductor
25	1.200	2.36
35	0.868	3.31
50	0.641	4.72
70	0.443	6.61
95	0.320	9.00
120	0.253	11.3
150	0.206	14.2
185	0.164	17.5
240	0.125	22.6
300	0.100	28.3
400	0.078	37.8
500	0.061	47.2
630	0.046	59.5

Voltage test and Partial discharge test

No.	Test items	Rated voltage kV						
		3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/20 18/30	21/35	26/35
1	Power frequency A.C Voltage test kV/5min	12.5	21	30.5	42	63	73.5 (53)*	91 (65)*
2	Power frequency A.C. Voltage test for 4 hours kV	14.4	24	34.8	48	72	84	104
3	Impluse voltage test kV	60	75	95	125	170	200	200
4	Partial diacharge test Maximum discharge at 1.73Uo pc	5	5	5	5	5	5	5

*The power-frequenc Voltage test of cables for rated voltage 21/35kV shall be done upon request according to 2.5Uo×30min of 3.5Uo×50min

Capacitance of cable(reference vale)

Nominal cross-sectional area of conductor mm	Rated voltage kV						
	3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/20 18/30	21/35	26/35
	Capacitance/phase μ F/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	0.2026	0.1815	0.1665
240	0.5430	0.4290	0.3439	0.2616	0.2207	0.1972	0.1805
300	0.5589	0.4706	0.3755	0.3175	0.2387	0.2128	0.1945
400	0.5940	0.5311	0.4213	0.3551	0.2684	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

Nominal cross-sectional area of conductor mm²	Rated voltage kV						
	3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/20 18/30	21/35	26/35
	Inductance mH/km						
1x25	0.5954	0.6143	0.6474	—	—	—	—
1x35	0.5753	0.5932	0.6248	0.6390	—	—	—
1×50	0.5543	0.5711	0.6011	0.6145	0.6501	0.6675	0.6751
1x70	0.5357	0.5486	0.5765	0.5919	0.6252	0.6394	0.6467
1×95	0.5172	0.5318	0.5608	0.5726	0.6043	0.6180	0.6279
1x120	0.5059	0.5197	0.5473	0.5586	0.5891	0.6051	0.6118
1x150	0.4949	0.5079	0.5341	0.5449	0.5740	0.5895	0.5959
1x185	0.4885	0.5006	0.5252	0.5354	0.5640	0.5760	0.5839
1x240	0.4790	0.4890	0.5143	0.5216	0.5487	0.5615	0.5677
1x300	0.4749	0.4818	0.5032	0.5102	0.5376	0.5484	0.5540
1x400	0.4660	0.4702	0.4927	0.4991	0.5219	0.5343	0.5395
1x500	0.4600	0.4619	0.4848	0.4907	0.5218	0.5224	0.5272
1x630	0.4547	0.4563	0.4748	0.4827	0.5012	0.5101	0.5161
3x25	0.3552	0.3797	0.4061	0.4274	—	—	—
3x35	0.3384	0.3613	0.3862	0.4064	—	—	—
3x50	0.3211	0.3423	0.3655	0.3845	0.4396	0.4537	0.6979
3x70	0.3040	0.3232	0.3445	0.3620	0.4145	0.4286	0.4427
3x95	0.2915	0.3092	0.3290	0.3454	0.3956	0.0482	0.4208
3x120	0.2826	0.2992	0.3178	0.3392	0.3799	0.3909	0.4019
3x150	0.2742	0.2897	0.3071	0.3217	0.3642	0.3752	0.3862
3x185	0.2672	0.2817	0.3009	0.3145	0.3485	0.3611	0.3737
3x240	0.2608	0.2726	0.2904	0.3030	0.3360	0.3486	0.3611
3x300	0.2576	0.2651	0.2817	0.2935	0.3266	0.3776	0.3485
3x400	0.2516	0.2564	0.2714	0.2822	0.3014	0.3140	0.3266
3x500	0.2480	0.2503	0.2641	0.2742	—	—	—
3x630	0.2421	0.2442	0.2596	0.2661	—	—	—

Nominal cross-sectional area of conductor mm²	Rated voltage kV						
	3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/20 18/30	21/35	26/35
	Short circuit cirrent A						
1x25	652	739	840	—	—	—	—
1x35	702	789	890	1040	—	—	—
1x50	777	852	952	1115	1278	1403	1516
1x70	852	927	1028	1203	4353	1479	1591
1×95	915	1002	1103	1253	1441	1554	1667
1x120	977	1053	1165	1328	1491	1617	1729
1×150	1053	1140	1241	1403	1566	1692	1804
1x185	1128	1216	1316	1516	1642	1767	1880
1x240	1253	1328	1429	1629	1754	1880	1992
1x300	1378	1429	1579	1742	1905	1992	2143
1×400	1516	1554	1692	1942	2018	2105	2256
1×500	1729	1742	1867	2118	2193	4625	4625
1x630	1905	1917	2043	2306	2368	4625	4625
3x25	1629	1842	2105	—	—	—	—
3x35	1754	1967	2231	2469	—	—	—
3x50	1905	2118	2358	2606	3383	3509	3784
3x70	2093	2306	2556	2794	3584	3697	3972
3x95	2293	2506	2757	2995	3734	3897	4173
3x120	2431	2644	2907	3145	3922	4035	4323
3x150	2619	2832	3095	3330	4110	4223	4511
3x185	2807	3020	3283	3521	4386	4411	4699
3x240	3120	3308	3559	3797	4762	4699	4987
3x300	3434	3571	3935	4073	5050	5072	5351
3x400	3772	3872	4223	4373	—	—	—
3x500	4311	4361	4662	4850	—	—	—
3x630	4749	4799	5100	5288	—	—	—

Aluminum alloy conductor XLPE insulated power cable for rated voltage 3.6/6~12/20kV

Conductor	Nominal Cross sectional area of conductor mm²	In the air			In the soil		
		Air temperature:40℃			Air temperature:25℃		
		Single-core		3-cores	Single-core		3-cores
		O OO	OOO		O OO	OOO	
Aluminum alloy conductor	25	110	130	90	95	98	90
	35	135	155	110	110	113	100
	50	167	202	146	130	134	120
	70	209	253	178	159	164	152
	95	255	308	219	189	196	182
	120	295	356	251	213	220	205
	150	335	400	283	237	243	219
	185	386	459	304	268	274	247
	240	457	580	378	310	315	292
	300	525	616	433	350	354	328
	400	612	700	506	397	394	374
	500	708	792	—	451	438	—
	630	812	892	—	513	487	—

Aluminum alloy conductor XLPE insulated power cable for rated voltage from 18/30-26/35kV

Conductor	Nominal Cross sectional area of Conductor mm²	In the air			In the soil		
		Air temperature:40℃			Air temperature:25℃		
		Single-core		3-cores	Single-core		3-cores
		O OO	OOO		O OO	OOO	
Aluminum alloy conductor	50	168	203	140	131	135	123
	70	210	255	180	160	165	150
	95	257	310	218	190	197	178
	120	297	358	251	214	222	203
	150	337	403	285	239	245	221
	185	389	462	328	270	276	251
	240	460	544	383	312	317	297
	300	529	620	439	352	356	333
	400	616	705	509	400	397	378
	500	713	798	—	454	441	
	630	818	898	—	—	490	—