



Coleman Wires & Cables

POWER**CABLE**

Contents

Introduction to Power Cable	08
Technical Requirements	10
Structure Size, Reference Weight And Main Technical Parameters	12
Power Cable Structure Diagram	28
Rated Voltage 6/10kV and 18/36kV XLPE-Insulated Power Cable	32
XLPE Power Cable Structure	38
Environmental Conservation Cable (EC)	40
LSZH Low Toxin Flame Retardant and Fire Resistant EC Power Cables With Voltage Up to 26/36kV	41
Low Smoke and Zero Halogen Low Toxin Flame Retardant and Fire Resistant EC Cables	42
Low Smoke and Low Halogen	43

PowerCABLE

Introduction

PVC Insulated Flame retardant cables are fixed laid in the circuit with frequency 50Hz and voltage up to 0.6/1 kV.

We can also produce Fire Resistant (FR) and Fire Resistant Low Smoke (FRLS) Power Cables

Rated voltage 0.6/1 kV

Conductor of cables can be Copper and Aluminium.

The cables can be single core, two cores, three cores, four cores, (include three main cores and neutral) five cores (include three main cores and one neutral and one earthing core, Four main cores and one neutral), We also produce Control/Auxiliary cables from 5-cores up to and including 48-cores. The cables can be with armour and without armour.

We can produce cables with PVC outer sheath, Fire Resistant PVC outer sheath or with Fire resistant Low Smoke insulation.

The cables are produced according to NIS/IEC 60227, IEC60502, IEC60332 or IEC60331 and or the BS, DIN, or other international standards. And we also design and produce cables according to the requirement of our clients.

Application

1. Long term Working temperature is up to 70°C
2. The highest conductor temperature is not more than 160°C (lasting time not over 5 seconds)
3. Laying temperature not less than 0°C and the drop height is out of consideration.
4. The cable with chemical stability, anti acid, anti alkali, anti oil, anti organic solvent, not easy to be burning.
5. Easy for installation, easy bending and light.

Minimum Bending Radius Table

Cable Type	Bending Radius Bending when laying	
	One Time	Several Times
Paper/Lead, XLPE or PVC Cables without armouring but with concentric Conductor	12D	15D
XLPE or PVC 1 - Core Cables	12D	15D
Muti-Core Cable	9D	12D
XLPE or PVC with Armouring	12D	15D
Note: D is the overall diameter of Cable		

Technical Requirements

1. Cable Type And Name

PVC insulated , non sheathed Power Cable NCY

Description	
NCYY	PVC insulated and sheathed power cable with CU/Al core
NCYY...F	PVC insulated and sheathed flat wiring cable
NCYY...f	PVC insulated and sheathed flexible wiring cable
NCY2Y	PVC insulated and PE sheathed power cable with Cu/Al core
NC2XRY	Steel tape armored, XLPE insulated and PVC sheathed power cable with Cu/Al core
NC2YRY	Steel wire armored, PE insulated and PVC sheathed power cable with Cu/Al core
NCYRY	Steel tape armored, PVC insulated and sheathed power cable with Cu/Al core
NC2XRY	Steel tape armored, XLPE insulated and PVC sheathed power cable with Cu/Al core

2. Nominal Cross Section Area of the Conducting Core (mm²)

1-Core	1.5, 2.5, 4, 6, 10, 16, 25, 35, 50, 70, 95, 120, 150, 185, 240, 300, 400, 500, 630, 800, 1000
2-Core	1.5, 2.5, 4, 6, 10, 16, 25, 35, 50, 70, 95, 120, 150, 185, 240, 300
3-Core	1.5, 2.5, 4, 6, 10, 16, 25, 35, 50, 70, 95, 120, 150, 185, 240, 300
4-Core	1.5, 2.5, 4, 6, 10, 16, 25, 35, 50, 70, 95, 120, 150, 185, 240, 300
5-Core	1.5, 2.5, 4, 6, 10, 16, 25, 35, 50, 70, 95, 120, 150, 185, 240, 300

3. Nominal Thickness of the Insulation

Thickness mm	cross section mm ²	Voltage	kV										
			1	1.5	2.5	4	6	10	16	25	35	50	70
0.6/1(1.2)			0.8	0.8	0.8	1.0	1.0	1.0	1.0	1.2	1.2	1.4	1.4
			95	120	150	185	240	300	400	500	630	800	1000
			1.6	1.6	1.8	2.0	2.2	2.4	2.6	2.8	2.8	2.8	3.0

4. DC Resistance of Conductor

Nominal cross section mm ²	DC Resistance at 20°C not more than		Nominal cross section mm ²	DC Resistance at 20°C not more than		Nominal cross section mm ²	DC Resistance at 20°C not more than	
	Cu	Al		Cu	Al		Cu	Al
1.5	12.1	18.1	35	0.524	0.868	240	0.0754	0.125
2.5	7.41	12.1	50	0.387	0.641	300	0.0601	0.100
4	4.61	7.41	70	0.268	0.443	400	0.0470	0.0778
6	3.08	4.61	95	0.193	0.320	500	0.0366	0.0605
10	1.83	3.08	120	0.153	0.253	630	0.0283	0.0469
16	1.15	1.91	150	0.124	0.206	800	0.0221	0.0369
25	0.727	1.20	185	0.0991	0.164	1000	0.0176	0.0291

5. Insulation Resistance

A.	0.6/1kV	Volume Resistivity (Ωcm)
	@ 20°C min.	1 x 10 ¹³
	@ 70°C min.	1 x 10 ¹⁰
B.	0.6/1kV	Constant of Insulation Resistance (MΩKm)
	@ 20°C min.	36.7
	@ 70°C min.	0.037

6. AC voltage test

Rated voltage U ₀ /U(Um)P	Test voltage kV	Time (min)
0.6/1.0	3.5	5

7. Correction Coefficient of Current Carrying Capacity

Correction coefficient of the current carrying capacity under the different environment temperature

Operating Temperature °C	Air temperature °C										Soil temperature °C							
	10	15	20	25	30	40	35	45	50		5	10	15	20	25	30	35	
70	1.26	1.22	1.18	1.14	1.09	1.04	1.00	0.94	0.89		1.14	1.11	1.07	1.04	1.00	0.96	0.92	

Correction coefficient of the current carrying capacity under the different soil with the heat-resistance coefficient

Rated voltage kV	Scope of cross section mm	Soil heat resistance				
		0.8	1.0	1.2	1.5	2.0
0.6/1	Not more than 35	1.06	1.00	0.95	0.88	0.80
	50-150	1.08	1.00	0.94	0.87	0.77
	Not less than 185	1.09	1.00	0.93	0.85	0.76

STRUCTURE SIZE, REFERENCE WEIGHT AND MAIN TECHNICAL PARAMETERS

1. Single-core, PVC insulated and sheathed power cable

Single-core, PVC insulated and PE sheathed power cable

Single-core, PVC insulated and sheathed, flame-retardant power cable

Specification Core Number x cross section mm ²	Insulation thickness mm	Sheath thickness mm	Outer diameter of cable mm	Calculated Weight of cable kg/km		DC resistance of conductor at 20°C Ω/km		Cable current carrying Capacity Amps			
								In air		Directly buried under ground	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al
1x 1.5	0.8	1.4	6.6	59	-	12.1	18.1	24	-	29	-
1 x 2.5	0.8	1.4	7.0	72	57	7.41	12.1	31	24	39	30
1 x 4	1.0	1.4	7.9	98	73	4.61	7.41	41	25	49	39
1 x 6	1.0	1.4	8.4	122	85	3.08	4.61	52	32	61	50
1 x 10	1.0	1.4	9.7	173	111	1.83	3.08	72	44	83	64
1 x 16	1.0	1.4	9.9	227	140	1.15	1.91	88	59	107	83
1x 25	1.2	1.4	11.6	337	186	0.727	1.20	110	73	138	105
1x 35	1.2	1.4	12.8	442	222	0.524	0.868	137	90	164	125
1 x 50	1.4	1.4	14.5	579	284	0.387	0.641	167	110	195	150
1 x 70	1.4	1.4	16.5	803	364	0.268	0.443	216	140	238	185
1 x 95	1.6	1.5	19	1095	477	0.193	0.320	269	170	286	220
1 x 120	1.6	1.5	20.6	1343	563	0.153	0.253	308	197	325	250
1 x 150	1.8	1.6	22.8	1626	692	0.124	0.206	356	227	365	285
1 x 185	2.0	1.7	25.2	2050	859	0.0991	0.164	409	259	413	320
1 x 240	2.2	1.8	28.5	2662	1060	0.0754	0.125	485	305	479	375
1 x 300	2.4	1.9	31.5	3312	1322	0.0601	0.100	561	351	541	425
1 x 400	2.6	2.0	35.1	4194	1675	0.0470	0.0778	656	404	614	490
1 x 500	2.8	2.1	38.8	5238	2080	0.0366	0.0605	749	460	693	560
1 x 630	2.8	2.2	42.9	6634	2538	0.0283	0.0469	855	525	777	645
1 x 800	2.8	2.3	47.4	8330	3166	0.0221	0.0367	983	740	859	735
1 x 1000	3.0	2.5	52.5	10348	3866	0.0176	0.0291	1129	860	936	825

Note: The reference current carrying capacity of the single-core cable is defined by laying the 3-core cable evenly. Adjacent distance equals to outer diameter of cable. Environment temperature: 40°C in the air, 25°C in the soil. Heat-resistant coefficient is 1.0km/w.

2. 3-Core, PVC Insulated And Sheathed Power Cable

Specification core Number x cross section mm ²	Insulation thickness mm	Sheath thickness mm	Outer diameter of cable mm	Calculated Weight of cable Kg/km		DC resistance of conductor at 20°C Ω/km		Cable current capacity Amps			
								In air		Directly buried underground	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al
3 x 1.5	0.8	1.8	10.1	145	122	12.1	18.1	18.5	-	26	-
3 x 2.5	0.8	1.8	10.9	186	160	7.41	12.1	25	15	34	23
3 x 4	1.0	1.8	12.9	220	211	4.61	7.41	34	20	44	30
3 x 6	1.0	1.8	13.9	345	244	3.08	4.61	43	26	56	39
3 x 10	1.0	1.8	16.7	557	337	1.83	3.08	60	35	74	50
3 x 16	1.0	1.8	18.9	707	370	1.15	1.91	80	61	96	74
3 x 25	1.2	1.8	22.6	1054	523	0.727	1.20	101	78	123	94
3 x 35	1.2	1.8	25.4	1408	654	0.524	0.868	126	96	147	114
3 x 50	1.4	1.8	26.5	1758	793	0.387	0.641	153	117	174	134
3 x 70	1.4	1.9	28.9	2398	1028	0.268	0.443	196	150	216	167
3 x 95	1.6	2.1	30.3	3234	1366	0.193	0.320	238	183	256	197
3 x 120	1.6	2.2	32.9	4098	1652	0.153	0.253	276	212	290	224
3 x 150	1.8	2.3	36.6	4894	2020	0.124	0.206	319	245	329	254
3 x 185	2.0	2.5	41.5	6116	2512	0.0991	0.164	364	280	369	286
3 x 240	2.2	2.7	45.2	7938	3208	0.0754	0.125	420	330	424	329
3 x 300	2.4	2.8	49.7	9964	3980	0.0601	0.100	497	381	480	371

3-Core, PVC Insulated, Steel-Tape Armoured, PVC Sheathed Power Cable

Specification core Number x cross section mm ²	Insulation thickness mm	Sheath thickness mm	Outer diameter of cable mm	Calculated Weight of cable Kg/km		DC resistance of conductor at 20°C Ω/km		Cable current capacity Amps			
								In air		Directly buried underground	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al
3 x 1.5	0.8	1.8	14.8	306	278	12.1	18.1	15	-	22	-
3 x 2.5	0.8	1.8	15.7	374	327	7.41	12.1	19	15	29	23
3 x 4	1.0	1.8	17.6	477	402	4.61	7.41	26	20	38	30
3 x 6	1.0	1.8	18.7	561	449	3.08	4.61	32	26	47	39
3 x 10	1.0	1.8	21.5	765	578	1.83	3.08	46	35	65	50
3 x 16	1.0	1.8	23.7	1007	708	1.15	1.91	60	47	84	65
3 x 25	1.2	1.8	27.0	1361	896	0.727	1.20	77	60	110	84
3 x 35	1.2	1.8	28.9	1682	1047	0.524	0.868	95	74	130	100
3 x 50	1.4	2.0	33.9	2533	1668	0.387	0.641	115	90	155	120
3 x 70	1.4	2.1	37.8	3282	2030	0.268	0.443	145	115	195	150
3 x 95	1.6	2.2	42.3	4207	2493	0.193	0.320	185	140	230	185
3 x 120	1.6	2.3	45.7	5047	2886	0.153	0.253	210	165	260	205
3 x 150	1.8	2.5	50.4	6147	3450	0.124	0.206	245	190	300	230
3 x 185	2.0	2.6	55.4	7542	4125	0.0991	0.164	280	215	335	260
3 x 240	2.2	2.8	61.1	9291	4971	0.0754	0.125	335	260	390	300
3 x 300	2.4	3.0	67.8	11603	6062	0.0601	0.100	375	295	435	340

3-core, PVC Insulated, Steel-Wire Armored, PVC Sheathed Power Cable

Specification core Number x cross section mm ²	Insulation thickness mm	Sheath thickness mm	Outer diameter of cable mm	Calculated Weight of cable Kg/km		DC resistance of conductor at 20°C Ω/km		Cable current capacity Amps			
								In air		Directly buried underground	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al
3 x 4	1.0	1.8	17.4	626	584	4.61	7.41	34	20	44	30
3 x 6	1.0	1.8	18.4	739	651	3.08	4.61	43	26	56	39
3 x 10	1.0	1.8	21.5	1037	840	1.83	3.08	60	35	74	50
3 x 16	1.0	1.8	23.7	1327	913	1.15	1.91	80	61	96	74
3 x 25	1.2	1.8	26.2	1382	1003	0.727	1.20	101	78	123	94
3 x 35	1.2	1.9	29.2	1873	1226	0.524	0.868	126	96	147	114
3 x 50	1.4	2.0	27.6	2249	1317	0.387	0.641	153	117	174	134
3 x 70	1.4	2.1	30.4	2934	1606	0.268	0.443	196	150	216	167
3 x 95	1.6	2.3	34.7	3942	2098	0.193	0.320	238	183	256	197
3 x 120	1.6	2.4	37.3	4868	2432	0.153	0.253	276	212	290	224
3 x 150	1.8	2.6	41.0	5204	2884	0.124	0.206	319	245	329	254
3 x 185	2.0	2.7	46.1	7138	3514	0.0991	0.164	364	280	369	286
3 x 240	2.2	2.9	50.0	8993	4395	0.0754	0.12	430	330	424	329
3 x 300	2.4	3.2	54.3	11152	5396	0.0601	0.100	497	381	480	371

3. 3+1/2- Core, PVC Insulated, Steel-Wire Armored, PVC Sheathed Power Cable

Specification core Number x cross section mm ²	Insulation thickness mm	Sheath thickness mm	Outer diameter of cable mm	Calculated Weight of cable Kg/km		DC resistance of conductor at 20°C Ω/km		Cable current capacity Amps			
				Cu	Al	Cu	Al	In air		Directly buried underground	
3 x 4 + 1 x 2.5	1.0 / 0.8	1.8	15.0	330	240	4.61/7.41	7.41/12.1	26	20	38	30
3 x 6 + 1 x 4	1.0 / 1.0	1.8	16.4	422	286	3.08/4.61	4.61/7.41	32	26	47	39
3 x 10 + 1 x 6	1.0 / 1.0	1.8	19.1	591	367	1.83/3.08	3.08/4.61	46	35	65	50
3 x 16 + 1 x 10	1.0 / 1.0	1.8	21.8	832	471	1.15/1.83	1.91/3.08	60	47	84	65
3 x 25 + 1 x 16	1.2 / 1.0	1.8	25.1	1216	652	0.727/1.15	1.20/1.91	77	60	110	84
3 x 35 + 1 x 16	1.2 / 1.0	1.8	27.3	2039	1215	0.524/1.15	0.868/1.91	126	96	147	114
3 x 50 + 1 x 25	1.4 / 1.2	1.8	30.8	2420	1534	0.387/0.727	0.641/1.20	153	117	174	134
3 x 70 + 1 x 35	1.4 / 1.2	1.9	34.7	3518	1952	0.268/0.524	0.443/0.868	196	150	216	167
3 x 95 + 1 x 50	1.6 / 1.4	2.0	39.2	4620	2446	0.193/0.387	0.320/0.641	238	183	256	197
3 x 120 + 1 x 70	1.6 / 1.4	2.1	42.9	5802	2888	0.153/0.268	0.253/0.443	276	212	290	224
3 x 150 + 1 x 70	1.8 / 1.4	2.2	46.6	6394	3396	0.124/0.268	0.206/0.443	319	245	329	254
3 x 185 + 1 x 95	2.0 / 1.6	2.4	51.2	8372	4132	0.0991/0.193	0.164/0.320	364	280	369	286
3 x 240 + 1 x 120	2.2 / 1.6	2.5	57.4	9928	4688	0.0754/0.153	0.125/0.253	430	330	424	329
3 x 300 + 1 x 150	2.4 / 1.8	2.7	63.5	11299	6200	0.0601/0.124	0.100/0.206	497	381	480	371

3+1/2- Core, PVC Insulated, Steel-Wire Armored, PE Sheathed Power Cable

Specification core Number x cross section mm ²	Insulation thickness mm	Sheath thickness mm	Outer diameter of cable mm	Calculated Weight of cable Kg/km		DC resistance of conductor at 20°C Ω/km		Cable current capacity Amps			
				Cu	Al	Cu	Al	In air		Directly buried underground	
3 x 4 + 1 x 2.5	1.0 / 0.8	1.8	18.2	491	401	4.61/7.41	7.41/12.1	26	20	38	30
3 x 6 + 1 x 4	1.0 / 1.0	1.8	19.6	601	464	3.08/4.61	4.61/7.41	32	26	47	39
3 x 10 + 1 x 6	1.0 / 1.0	1.8	22.3	831	607	1.83/3.08	3.08/4.61	46	35	65	50
3 x 16 + 1 x 10	1.0 / 1.0	1.8	25.0	1116	755	1.15/1.83	1.91/3.08	60	47	84	65
3 x 25 + 1 x 16	1.2 / 1.0	1.8	28.	1544	981	0.727/1.15	1.20/1.91	77	60	110	84
3 x 35 + 1 x 16	1.2 / 1.0	1.8	29.9	1841	1107	0.524/1.15	0.868/1.91	95	74	130	100
3 x 50 + 1 x 25	1.4 / 1.2	1.9	35.1	2771	1752	0.387/0.727	0.641/1.20	115	90	15	120
3 x 70 + 1 x 35	1.4 / 1.2	2.0	38.9	3599	2136	0.268/0.524	0.443/0.868	145	115	195	150
3x 95 + 1 x 50	1.6 / 1.4	2.2	43.9	4685	2683	0.193/0.387	0.320/0.641	185	140	230	185
3 x 120 + 1 x 70	1.6 / 1.4	2.3	47.7	5730	3153	0.153/0.268	0.253/0.443	210	165	260	205
3 x 150 + 1 x 70	1.8 / 1.4	2.4	51.5	6779	3661	0.124/0.268	0.206/0.443	245	190	300	230
3 x 185 + 1 x 95	2.0 / 1.6	2.5	57.	8454	4465	0.0991/0.193	0.164/0.320	280	215	335	260
3 x 240 + 1 x 120	2.2 / 1.6	2.7	62.9	10443	5403	0.0754/0.153	0.125/0.253	335	260	390	300
3 x 300 + 1 x 150	2.4 / 1.8	2.9	69.7	13031	6591	0.0601/0.124	0.100/0.206	375	295	435	340

3 + 1/2 - Core, PVC Insulated, Steel-Wire Armored, PVC Sheathed, Flame-Retardant Power Cable

Specification core Number x cross section mm ²	Insulation thickness mm	Sheath thickness mm	Outer diameter of cable mm	Calculated Weight of cable Kg/km		DC resistance of conductor at 20°C Ω/km		Cable current capacity Amps			
								In air		Directly buried underground	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al
3 x 4 + 1 x 2.5	1.0/0.8	1.8	15.0	609	594	4.61/7.41	7.41/12.1	26	20	38	30
3 x 6 + 1 x 4	1.0/1.0	1.8	16.4	691	666	3.08/4.61	4.61/7.41	32	26	47	39
3 x 10 + 1 x 6	1.0/1.0	1.8	19.1	866	828	1.83/3.08	3.08/4.61	46	35	65	50
3 x 16 + 1 x 10	1.0/1.0	1.8	21.8	1271	1209	1.15/1.83	1.91/3.08	60	47	84	65
3 x 25 + 1 x 16	1.2/1.0	1.8	25.1	2177	1614	0.727/1.15	1.20/1.91	77	60	110	84
3 x 35 + 1 x 16	1.2/1.0	1.8	27.3	2513	1778	0.524/1.15	0.868/1.91	95	74	130	100
3 x 50 + 1 x 25	1.4/1.2	2.0	30.8	3232	2212	0.387/0.727	0.641/1.20	115	90	155	120
3 x 70 + 1 x 35	1.4/1.2	2.1	34.7	4404	2940	0.268/0.524	0.443/0.868	145	115	195	150
3 x 95 + 1 x 50	1.6/1.4	2.2	39.2	5575	3573	0.193/0.387	0.320/0.641	185	140	230	185
3 x 120 + 1 x 70	1.6/1.4	2.3	42.9	6690	4112	0.153/0.268	0.253/0.443	210	165	260	205
3 x 150 + 1 x 70	1.8/1.4	2.5	46.6	8310	5192	0.124/0.268	0.206/0.443	245	190	300	230
3 x 185 + 1 x 95	2.0/1.6	2.6	51.2	10176	6188	0.0991/0.193	0.164/0.320	280	215	335	260
3 x 240 + 1 x 120	2.2/1.6	2.8	57.4	13123	8084	0.0754/0.153	0.125/0.253	335	260	390	300
3 x 300 + 1 x 150	2.4/1.8	3.0	63.5	15989	9549	0.0601/0.124	0.100/0.206	375	295	435	340

4. 4-Core, PVC Insulated, Steel-Wire Armoured, PVC Sheathed Power Cable

Specification core Number x cross section mm ²	Insulation thickness mm	Sheath thickness mm	Outer diameter of cable mm	Calculated Weight of cable Kg/km		DC resistance of conductor at 20°C Ω/km		Cable current capacity Amps			
								In air		Directly buried underground	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al
4 x 1.5	0.8	1.8	14.8	399	-	12.1	18.1	18.5	-	26	-
4 x 2.5	0.8	1.8	16.5	549	-	7.41	12.1	25	-	34	-
4 x 4	1.0	1.8	18.7	710	454	4.61	7.41	34	20	44	30
4 x 6	1.0	1.8	20.0	837	512	3.08	4.61	43	26	56	39
4 x 10	1.0	1.8	23.3	1211	677	1.83	3.08	60	35	74	50
4 x 16	1.0	1.8	24.5	1430	601	1.15	1.91	80	61	96	74
4 x 25	1.2	1.8	28.8	1992	888	0.727	1.20	101	78	123	94
4 x 35	1.2	1.9	27.3	2243	1285	0.524	0.868	126	96	147	114
4 x 50	1.4	2.1	29.9	2869	1620	0.387	0.641	153	117	174	134
4 x 70	1.4	2.2	34.2	3858	2072	0.268	0.443	196	150	216	167
4 x 95	1.6	2.4	39.2	5074	2612	0.193	0.320	238	183	256	197
4 x 120	1.6	2.5	42.6	6330	3072	0.153	0.253	276	212	290	224
4 x 150	1.8	2.6	46.6	7460	3692	0.124	0.206	319	245	329	254
4 x 185	2.0	2.8	51.2	9263	4453	0.0991	0.164	364	280	369	286
4 x 240	2.2	3.0	57.4	11820	5595	0.0754	0.125	430	330	424	329
4 x 300	2.4	3.2	63.4	14744	6784	0.0601	0.100	497	381	480	371

4-Core, PVC Insulated, Steel-Wire Armoured, PE Sheathed Power Cable

Specification core Number x cross section mm ²	Insulation thickness mm	Sheath thickness mm	Outer diameter of cable mm	Calculated Weight of cable Kg/km		DC resistance of conductor at 20°C Ω/km		Cable current capacity Amps			
								In air		Directly buried underground	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al
4 x 4	1.0	1.8	20.3	766	666	4.61	7.41	26	20	38	30
4 x 6	1.0	1.8	21.6	891	742	3.08	4.61	32	26	47	39
4 x 8	1.0	1.8	25.9	1437	1189	1.83	3.08	46	35	65	50
4 x 16	1.0	1.8	28.4	1792	1394	1.15	1.91	60	47	84	65
4 x 25	1.2	1.9	32.4	2380	1761	0.727	1.20	77	60	110	84
4 x 35	1.2	2.0	34.8	2869	2022	0.524	0.868	95	74	130	100
4 x 50	1.4	2.1	39.7	3857	2703	0.387	0.641	115	90	155	120
4 x 70	1.4	2.3	44.2	4958	3288	0.268	0.443	145	115	195	150
4 x 95	1.6	2.5	50.6	6691	4406	0.193	0.320	185	140	230	185
4 x 120	1.6	2.6	54.4	7921	5041	0.153	0.253	210	165	260	205
4 x 150	1.8	2.7	59.2	9477	5882	0.124	0.206	245	190	300	230
4 x 185	2.0	3.0	66.6	12265	7708	0.0991	0.164	280	215	335	260
4 x 240	2.2	3.2	73.2	14841	9082	0.0754	0.125	335	260	390	300
4 x 300	2.4	3.4	80.5	18155	10767	0.0601	0.100	375	295	435	340

4-Core, PVC Insulated, Steel-Wire Armoured, PVC Sheathed, Flame Retardant Power Cable

Specification core Number x cross section mm ²	Insulation thickness mm	Sheath thickness mm	Outer diameter of cable mm	Calculated Weight of cable Kg/km		DC resistance of conductor at 20°C Ω/km		Cable current capacity			
								In air		Directly buried underground	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al
4 x 4	1.0	1.8	18.7	348	248	4.61	7.41	26	20	38	30
4 x 6	1.0	1.8	20.0	440	290	3.08	4.61	32	26	47	39
4 x 10	1.0	1.8	23.3	664	415	1.83	3.08	46	35	65	50
4 x 16	1.0	1.8	24.5	921	523	1.15	1.91	60	47	84	65
4 x 25	1.2	1.8	28.8	1331	712	0.727	1.20	77	60	110	84
4 x 35	1.2	1.8	27.3	1723	876	0.524	0.868	95	74	130	100
4 x 50	1.4	1.9	29.9	2310	1156	0.387	0.641	115	90	155	120
4 x 70	1.4	2.0	34.2	3176	1507	0.268	0.443	145	115	195	150
4 x 95	1.6	2.2	39.2	4242	1957	0.193	0.320	185	140	230	185
4 x 120	1.6	2.3	42.6	5257	2377	0.153	0.253	210	165	260	205
4 x 150	1.8	2.5	46.6	6549	2954	0.124	0.206	245	190	300	230
4 x 185	2.0	2.6	51.2	8227	3670	0.0991	0.164	280	215	335	260
4 x 240	2.2	2.9	57.4	10324	4564	0.0754	0.125	335	260	390	300
4 x 300	2.4	3.1	63.4	13081	5693	0.0601	0.100	375	295	435	340

5. 5-Core, PVC Insulated, Steel-Wire Armoured, PVC Sheathed Power Cable

Specification core Number x cross section mm ²	Insulation thickness mm	Sheath thickness mm	Outer diameter of cable mm	Calculated Weight of cable Kg/km		DC resistance of conductor at 20°C Ω/km		Cable current capacity Amps			
								In air		Directly buried underground	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al
5 x 4	1.0	1.8	19.9	423	298	4.61	7.41	26	20	38	30
5 x 6	1.0	1.8	21.6	536	394	3.08	4.61	32	26	47	39
5 x 10	1.0	1.8	23.9	776	465	1.83	3.08	46	35	65	50
5 x 16	1.0	1.8	26.6	1093	596	1.15	1.91	60	47	84	65
5 x 25	1.2	1.8	31.6	1602	829	0.727	1.20	77	60	110	84
5 x 35	1.2	1.9	35.4	2073	1015	0.524	0.868	95	74	130	100
5 x 50	1.4	2.0	40.4	2821	1379	0.387	0.641	115	90	155	120
5 x 70	1.4	2.2	45.9	3916	1829	0.268	0.443	145	115	195	150
5 x 95	1.6	2.3	52.7	5248	2393	0.193	0.320	185	140	230	185
5 x 120	1.6	2.5	50.5	6476	2875	0.153	0.253	210	165	260	205
5 X 150	1.8	2.6	55.8	8013	3519	0.124	0.206	245	190	300	230
5 x 185	2.0	2.8	62.2	10087	4390	0.0991	0.164	280	215	335	260
5 x 240	2.2	3.1	69.2	12648	5448	0.0754	0.125	335	260	390	300
5 x 300	2.4	3.3	77.2	16043	6807	0.0601	0.100	375	295	435	340

5-Core, PVC Insulated, Steel-Wire Armoured, PE Sheathed Power Cable

Specification core Number x cross section mm ²	Insulation thickness mm	Sheath thickness mm	Outer diameter of cable mm	Calculated Weight of cable Kg/km		DC resistance of conductor at 20°C Ω/km		Cable current capacity Amps			
								In air		Directly buried underground	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al
5 x 4	1.0	1.8	19.9	396	520	4.61	7.41	30	20	39	30
5 x 6	1.0	1.8	21.6	523	589	3.08	4.61	38	26	47	39
5 x 10	1.0	1.8	23.9	752	749	1.83	3.08	53	35	63	50
5 x 16	1.0	1.8	26.6	1076	971	1.15	1.91	71	55	81	61
5 x 25	1.2	1.9	31.6	3254	1270	0.727	1.20	89	67	109	80
5 x 35	1.2	2.0	35.4	2178	1853	0.524	0.868	111	83	126	96
5 x 50	1.4	2.2	40.4	2892	2288	0.387	0.641	135	101	149	113
5 x 70	1.4	2.3	45.9	4024	2860	0.268	0.443	174	130	183	140
5 x 95	1.6	2.5	52.7	5623	3609	0.193	0.320	212	158	216	166
5 x 120	1.6	2.6	50.5	7770	4170	0.153	0.253	210	165	260	205
5 X 150	1.8	2.8	55.8	9496	5002	0.124	0.206	245	190	300	230
5 x 185	2.0	3.0	62.2	11764	6067	0.0991	0.164	280	215	335	260
5 x 240	2.2	3.3	69.2	14577	7378	0.0754	0.125	335	260	390	300
5 x 300	2.4	3.5	77.2	18226	8990	0.0601	0.100	375	295	435	340

5-Core, PVC Insulated, Steel-Wire Armoured, PVC Sheathed, Flame-Retardant Power Cable

Specification core Number x cross section mm ²	Insulation thickness mm	Sheath thickness mm	Outer diameter of cable mm	Calculated Weight of cable Kg/km		DC resistance of conductor at 20°C Ω/km		Cable current capacity Amps			
								In air		Directly buried underground	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al
5 x 4	1.0	1.8	19.9	645	520	4.61	7.41	26	20	38	30
5 x 6	1.0	1.8	21.6	776	589	3.08	4.61	32	26	47	39
5 x 10	1.0	1.8	23.9	1060	749	1.83	3.08	46	35	65	50
5 x 16	1.0	1.8	26.6	1468	971	1.15	1.91	60	47	84	65
5 x 25	1.2	1.9	31.6	2043	1270	0.727	1.20	77	60	110	84
5 x 35	1.2	2.0	35.4	2911	1853	0.524	0.868	95	74	130	100
5 x 50	1.4	2.2	40.4	3730	2288	0.387	0.641	115	90	155	120
5 x 70	1.4	2.3	45.9	4947	2860	0.268	0.443	145	115	195	150
5 x 95	1.6	2.5	52.7	6465	3609	0.193	0.320	185	140	230	185
5 x 120	1.6	2.6	50.5	7770	4170	0.153	0.253	210	165	260	205
5 X 150	1.8	2.8	55.8	9496	5002	0.124	0.206	245	190	300	230
5 x 185	2.0	3.0	62.2	11764	6067	0.099	0.164	280	215	335	260
5 x 240	2.2	3.3	69.2	14577	7378	0.0754	0.125	335	260	390	300
5 x 300	2.4	3.5	77.2	18226	8990	0.0601	0.100	375	295	435	340

Rated Voltage 1kV (1.2kV) XLPE Insulated Flame Retardant And Fire Resistant Power Cables

Product Standard

XLPE insulated Flame retardant and Fire resistant Power cables are fixed laid in the circuit with frequency 50Hz and voltage upto 1kV (1.2kV)

We can also produce Fire Resistant (FR) and Fire Resistant Low Smoke (FRLS) Power Cables

material use for the Conductor of cables can be Copper or Aluminium.

The cables can be single core, two cores, three cores, four cores, (include three main cores and neutral) five cores (include three main cores and one neutral and one earthing core, four main cores and one neutral). The cables can be with armoured and unarmoured.

We can produce cables with PVC outer sheath, Flame retardant PVC outer sheath or with fire resistant insulation. The cables are produced according to IEC60502 and IEC60332 or IEC60331 and or the BS, DIN. And we also design and produce cables according to the requirement of our clients.

Note: XLPE Cross Linked Polyethylene

Application Characteristics

1. Long term working temperature is upto 90°C
2. The highest conductor temperature is not more than 250°C (lasting time not over 5 seconds)
3. Laying temperature not less than 0°C and the drop height is out of consideration.
4. The cable with chemical stability anti acid, anti alkali, anti oil, anti organic solvent, not easy to be burning.
5. Easy for installation, easy bending and light.
6. Bending ratio

Minimum Bending Radius of Cable

Cable Type	Bending Radius Bending when laying	
	One Time	Several Times
Paper/Lead, XLPE or PVC Cables without armouring but with concentric Conductor	12D	15D
XLPE or PVC 1 - Core Cables	12D	15D
Muti-Core Cable	9D	12D
XLPE or PVC with Armouring	12D	15D
Note: D is the overall diameter of cable		

Correction Coefficient of Current Carrying Capacity at Different Temperature

Operating Temperature °C	Air Temperature									Soil Temperature °C						
	10	15	20	25	30	35	40	45	50	5	10	15	20	25	30	35
90	1.26	1.22	1.18	1.14	1.09	1.04	1.00	0.94	0.89	1.14	1.11	1.07	1.04	1.00	0.96	0.95

Correction Coefficient of Current Carrying at Different Heat-resistance Coefficient of Soil

Rated voltage	Nominal cross section mm ²	Heat-Resistance coefficient of soil				
0.6/1		0.8	1.0	1.2	1.5	2.0
	≤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	0.86	0.76

Cable Type, Name and Application

Type		Description	Application
Cu	Al		
NC2XY	NA2XY	XLPE insulated and PVC sheathed power cable	Can be laid in indoors, tunnels, cable canal, pipelines and loose soil. Cable should not bear outside mechanic force, but can bear a certain breaking force.
		XLPE insulated and PVC sheathed power cable	
NC2XRY	NA2XRY	XLPE - Insulated, Steel - Tape armonred, PVC - Sheathed Power Cables	Laid underground, cable can bear mechanic force, but should not bear large breaking force
		XLPE - Insulated, Steel Tape armonred, PE - Sheathed Power Cables	
		XLPE - Insulated, Steel Wire armonred, PE - Sheathed Power Cables	Laid in water or soil with drop height, the cable can bear mechanic force and large breaking force.
		XLPE - Insulated, Steel wire armonred, PE - Sheathed Power Cables	
		XLPE - Insulated, Steel wire armonred, PVC - Sheathed Power Cables	Can be laid in water or soil with drop height, the cable can bear larger breaking force.

Structure Size, Reference Weight and Main Technical Parameters

1. 0.6/1kV Single-Core, XLPE Insulated, PVC Sheathed Power Cable

Nominal cross-section of conductor mm²	Nominal insulation thickness mm	Nominal Sheath thickness mm	outer diameter of cable mm	Calculated weight of cable Kg/km		DC resistance of conductor at 20°C Ω/km		Insulation resistance MΩ x km	Cable current carrying Capacity Amps A				Delivery length M
									In air		Directly buried under the ground		
				Cu	Al	Cu	Al		Cu	Al	Cu	Al	
1.5	0.7	1.5	5.8	53		≤12.1	≤18.1	≥1.10	25		35		100
2.5	0.7	1.5	6.2	68	53	≤7.41	≤12.1	≥0.916	30	25	45	35	100
4	0.7	1.5	6.7	87	64	≤4.61	≤7.41	≥0.757	45	35	60	50	100
6	0.7	1.5	7.2	110	73	≤3.08	≤4.61	≥0.645	55	45	70	50	100
10	0.7	1.5	8.0	115	95	≤1.83	≤3.08	≥0.523	75	60	95	75	1000
16	0.7	1.5	9.4	210	111	≤1.15	≤1.91	≥0.431	108	66	115	86	1000
25	0.9	1.5	11.1	314	155	≤0.727	≤1.20	≥0.444	135	103	148	106	1000
35	0.9	1.5	12.3	414	195	≤0.524	≤0.868	≥0.379	169	129	177	130	1000
50	1.0	1.5	13.8	542	244	≤0.387	≤0.641	≥0.355	207	159	209	161	1000
70	1.1	1.5	16.0	764	325	≤0.268	≤0.443	≥0.335	268	206	256	204	1000
95	1.1	1.5	17.9	1042	419	≤0.193	≤0.320	≥0.290	328	253	307	252	1000
120	1.2	1.5	19.9	1289	530	≤0.153	≤0.253	≥0.282	383	296	349	295	1000
150	1.4	2.0	22.1	1574	650	≤0.124	≤0.206	≥0.294	444	343	393	339	1000
185	1.6	2.0	24.4	1961	795	≤0.0991	≤0.164	≥0.303	510	395	445	395	500
240	1.7	2.0	27.5	2558	1009	≤0.0754	≤0.125	≥0.283	607	471	517	472	500
300	1.8	2.5	30.3	3178	1238	≤0.0601	≤0.100	≥0.263	823	547	583	547	500
400	2.0	2.5	33.9	4018	1598	≤0.0470	≤0.0778	≥0.243s	946	663	663	643	500
500	2.2	2.6	37.9	5054	1946	≤0.0366	-	≥0.223	1088	770	749	754	500
630	2.4	2.6	42.3	6452	2448	≤0.0283	-	≥0.200	1251	899	843	882	500
800	2.6	2.8	47.2	8154	-	≤0.0221	-	≥0.180	1439	-	935	-	500
1000	2.8	3.0	52.1	10110	-	≤0.0176	-	≥0.160	1023	-	1023	-	400

2. 0.6/1kV 2-Core, XLPE Insulated, PVC Sheathed Power Cable

Nominal cross-section of conductor mm ²	Outer diameter of cable mm		Calculated Weight of cable Kg/km				DC resistance of conductor at 20°C Ω/km		Cable current carrying Capacity Amps A			
									In air		Directly buried under the ground	
	Non-Armoured	Armo-ured	Cu		Al		Cu	Al	Cu	Al	Cu	Al
2 x 1.5	9.7	13.2	102	312	12.1	-	23	-	26	-	37	-
2 x 2.5	10.5	14.0	129	355	89	-	7.41	12.1	36	24	49	32
2 x 4	12.3	15.0	165	416	116	334	4.61	7.41	49	32	63	42
2 x 6	13.3	16.7	216	570	136	311	3.08	4.61	63	43	80	54
2 x 10	15.8	19.3	330	720	183	459	1.83	3.08	86	56	104	71
2 x 16	16.8	21.6	467	955	267	756	1.15	1.91	115	91	136	104
2 x 25	20.3	23.8	696	1150	378	830	0.727	1.20	149	108	173	133
2 x 35	22.6	26.3	915	1410	477	961	0.524	0.868	185	135	209	160
2 x 50	25.6	29.4	1196	1770	599	1172	0.387	0.641	225	164	247	189
2 x 70	29.8	34.2	1675	2362	813	1516	0.268	0.443	289	211	304	233
2 x 95	33.8	38.2	2262	3076	1066	1880	0.193	0.320	352	257	360	276
2 x 120	37.8	42.0	2842	3724	1326	2208	0.153	0.253	410	300	410	314
2 x 150	42.3	46.8	3480	4518	1620	2656	0.124	0.206	473	396	463	356
2 x 185	-	-	-	-	1663	2696	0.0991	0.164	-	-	-	-
2 x 240	-	-	-	-	2157	3498	0.0754	0.125	-	-	-	-

3. 3-Core 0.6/1kV XLPE Insulated, PVC Sheathed Power Cable

Nominal cross-section of conductor mm ²	Outer diameter of cable mm		Calculated Weight of cable Kg/km				DC resistance of conductor at 20°C Ω/km		A Cable current carrying Capacity Amps			
									In air		Directly buried under the ground	
	Non-Armoured	Armoured	Cu		Al		Cu	Al	Cu	Al	Cu	Al
3 x 1.5	9.8	13.6	118	336	64	-	12.1	18.1	23	-	31	-
3 x 2.5	10.7	14.4	159	390	106	-	7.41	12.1	32	20	41	27
3 x 4	11.8	16.2	205	545	141	369	4.61	7.41	42	27	53	36
3 x 6	12.9	17.3	271	650	170	525	3.08	4.61	54	35	66	46
3 x 10	15.7	20.1	420	835	233	556	1.83	3.08	75	47	87	59
3 x 16	17.8	22.6	611	1135	311	831	1.15	1.91	100	77	113	87
3 x 25	21.5	25.1	921	1380	446	902	0.727	1.20	127	97	144	111
3 x 35	24.1	27.7	1223	1750	565	1089	0.524	0.868	158	120	174	134
3 x 50	22.2	25.8	1619	2110	673	1160	0.387	0.641	192	146	206	160
3 x 70	25.2	29.0	2259	2830	909	1471	0.268	0.443	246	187	254	197
3 x 95	27.8	31.8	3030	3650	1170	1396	0.193	0.320	298	222	301	234
3 x 120	30.9	35.3	3908	4646	1456	2196	0.153	0.253	346	263	343	266
3 x 150	34.8	39.0	4648	5454	1804	2610	0.124	0.206	399	304	387	300
3 x 185	38.5	43.8	5868	6774	2238	3124	0.0991	0.164	456	347	434	337
3 x 240	42.7	47.5	7548	8620	3538	4680	0.0754	0.125	538	409	501	389

4. 3+1/2 - Core, 0.6/1kV XLPE Insulated, PVC Sheathed Power Cable

Nominal cross-section of conductor mm ²	Outer diameter of cable mm		Calculated Weight of cable Kg/km				DC resistance of conductor at 20°C Ω/km		A Cable current carrying Capacity Amps			
									In air		Directly buried under the ground	
	Non-Armoured	Armoured	Cu		Al		Cu	Al	Cu	Al	Cu	Al
3 x 4 + 2.5	13.6	17.2	251	486	162	401	4.61/7.41	7.41/12.1	34	27	45	36
3 x 6 + 4	14.8	18.4	332	590	198	457	3.08/4.61	4.61/7.41	43	35	57	46
3 x 10 + 6	17.6	24.8	489	828	279	618	1.83/3.08	3.08/4.61	60	47	77	59
3 x 16 + 10	21.2	27.7	765	1108	393	736	1.15/1.83	1.91/3.08	83	64	105	80
3 x 25 + 16	25.0	29.4	1124	1721	562	1158	0.727/1.15	1.20/1.91	105	82	125	100
3 x 35 + 16	27.3	31.7	1419	2068	675	1324	0.524/1.15	0.868/1.91	125	100	155	120
3 x 50 + 25	28.8	33.2	1987	2671	874	1558	0.387/0.727	0.641/1.20	160	125	185	145
3 x 70 + 35	32.1	37.5	2665	3500	1150	1986	0.268/0.524	0.443/0.868	200	155	225	175
3 x 95 + 50	37.9	42.3	3665	4534	1548	2458	0.193/0.387	0.320/0.641	245	200	270	210
3 x 120 + 70	40.6	46.2	4532	5668	1885	2941	0.153/0.268	0.253/0.443	285	220	310	240
3 x 150 + 70	44.7	50.5	5441	6625	2236	3420	0.124/0.268	0.206/0.443	325	250	345	270
3 x 185 + 95	50.5	55.5	6863	8094	2844	4076	0.0991/0.193	0.164/0.320	375	295	390	305
3 x 240 + 120	56.0	61.2	8703	10095	3519	4912	0.0754/0.153	0.125/0.253	440	345	450	335

5. 4-Core, 0.6/1kV XLPE Insulated, PVC Sheathed Power Cable

Nominal cross-section of conductor mm ²	Outer diameter of cable mm		Calculated Weight of cable Kg/km				DC resistance of conductor at 20°C Ω/km		Cable current carrying Capacity Amps			
									In air		Directly buried under the ground	
	Non-Armoured	Armoured	Cu		Al		Cu	Al	Cu	Al	Cu	Al
4 x 1.5	11.6	14.3	142	375	64	156	12.1	18.1	23	-	31	-
4 x 2.5	12.5	15.2	187	450	106	260	7.41	12.1	32	20	41	27
4 x 4	14.0	17.1	254	615	141	416	4.61	7.41	42	27	53	36
4 x 6	15.2	18.3	340	745	170	511	3.08	4.61	54	35	66	46
4 x 10	18.3	21.9	539	1050	233	639	1.83	3.08	75	47	87	59
4 x 16	21.9	24.3	784	1360	385	803	1.15	1.91	100	77	113	87
4 x 25	25.9	27.2	1189	1715	556	1078	0.727	1.20	127	97	144	111
4 x 35	28.7	25.8	1625	2115	663	1147	0.524	0.868	158	120	174	134
4 x 50	27.9	28.7	2125	2700	863	1405	0.387	0.641	192	146	206	160
4 x 70	31.7	32.5	2983	3630	1184	1805	0.268	0.443	246	187	254	197
4 x 95	36.3	36.4	4030	4790	1548	2310	0.193	0.320	298	222	301	234
4 x 120	38.8	40.5	5208	6070	1934	2772	0.153	0.253	346	263	343	266
4 x 150	43.8	44.4	6148	7140	2356	3346	0.124	0.206	399	304	387	300
4 x 185	48.0	49	7798	8900	2953	3586	0.0991	0.164	456	347	434	337
4 x 240	53.2	54.3	10063	11300	3743	5014	0.0754	0.125	538	409	501	389

6. 4+1/2 - Core, 0.6/1kV XLPE Insulated, PVC Sheathed Power Cable

Nominal cross-section of conductor mm ²	Outer diameter of cable mm		Calculated Weight of cable Kg/km				DC resistance of conductor at 20°C Ω/km		Cable current carrying Capacity Amps			
									In air		Directly buried under the ground	
	Non-Armoured	Armoured	Cu		Al		Cu	Al	Cu	Al	Cu	Al
4 x 4 + 2.5	17.3	20.7	342	673	251	329	4.61/7.41	7.41/12.1	34	27	45	36
4 x 6 + 4	19.0	22.4	546	846	328	558	3.08/4.61	4.61/7.41	43	35	57	46
4 x 10 + 6	22.3	25.7	710	1092	426	809	1.83/3.08	3.08/4.61	60	47	77	59
4 x 16 + 10	25.4	28.9	1031	1491	574	1033	1.15/1.83	1.91/3.08	83	64	105	80
4 x 26 + 16	30.1	34.7	1547	2308	831	1591	0.727/1.15	1.20/1.91	105	82	125	100
4 x 35 + 16	32.7	37.5	1925	2715	959	1750	0.524/1.15	0.868/1.91	125	100	155	120
4 x 50 + 25	37.7	42.4	2735	3668	1343	2276	0.387/0.727	0.641/1.20	160	125	185	145
4 x 70 + 35	41.9	46.9	3624	4692	1674	2742	0.268/0.524	0.443/0.868	200	155	225	175
4 x 95 + 50	47.6	52.4	4894	6088	2232	3427	0.193/0.387	0.320/0.641	245	200	270	210
4 x 120 + 10	52.0	57.1	6260	7787	2855	4383	0.153/0.268	0.253/0.443	285	220	310	240
4 x 150 + 70	56.8	61.7	7625	9486	3478	5340	0.124/0.268	0.206/0.443	325	250	345	270
4 x 185 + 95	63.0	67.9	9503	11822	4334	6855	0.0991/0.193	0.164/0.320	375	295	390	305
4 x 240 + 20	74.7	79.1	2292	15291	5606	8607	0.0754/0.153	0.125/0.253	440	345	450	355

7. 3+2-Core, 0.6/1kV XLPE Insulated, PVC Sheathed Power Cable

Nominal cross-section of conductor mm ²	Outer diameter of cable mm		Calculated Weight of cable Kg/km				DC resistance of conductor at 20°C Ω/km		A Cable current carrying Capacity Amps			
									In air		Directly buried under the ground	
	Non-Armoured	Armoured	Cu		Al		Cu	Al	Cu	Al	Cu	Al
3 x 4 + 2 x 2.5	16.9	20.3	283	561	183	235	4.61	7.41	34	27	45	36
3 x 6 + 2 x 4	18.7	22.1	449	727	284	415	3.08	4.61	43	35	57	46
3 x 10 + 2 x 6	21.5	25.0	658	1029	401	771	1.83	3.08	60	47	77	59
3 x 16 + 2 x 10	24.8	28.3	961	1410	541	993	1.15	1.91	83	64	105	80
3 x 25 + 2 x 16	29.0	33.8	1439	2149	778	1293	0.727	1.20	105	82	125	100
3 x 35 + 2 x 16	31.1	35.8	1724	2485	876	1449	0.524	0.868	125	100	155	120
3 x 50 + 2 x 25	36.1	41.0	2444	3325	1206	2088	0.387	0.641	160	125	185	145
3 x 70 + 2 x 18	40.3	45.0	3264	4285	1531	2552	0.268	0.443	200	155	225	175
3 x 95 + 2 x 50	45.4	50.4	4428	5532	2044	3149	0.193	0.320	245	200	270	210
3 x 120 + 2 x 70	50.1	54.9	5735	7106	2624	4042	0.153	0.253	285	220	310	240
3 x 150 + 2 x 70	53.6	58.4	6957	8593	3137	4888	0.124	0.206	325	250	345	270
3 x 185 + 2 x 95	65.7	70.7	8698	10742	3966	6110	0.0991	0.164	375	295	390	305
3 x 240 + 2 x 120	74.4	79.6	11238	13881	5125	7896s	0.0754	0.125	440	345	450	355

8. 5-Core, 0.6/1kV XLPE Insulated, PVC Sheathed Power Cable

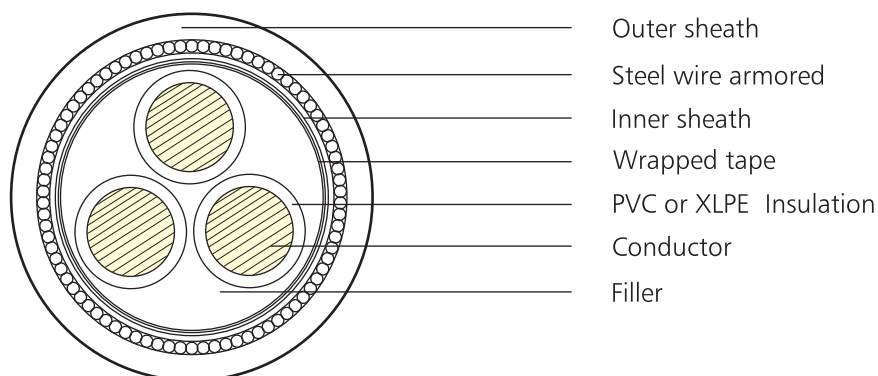
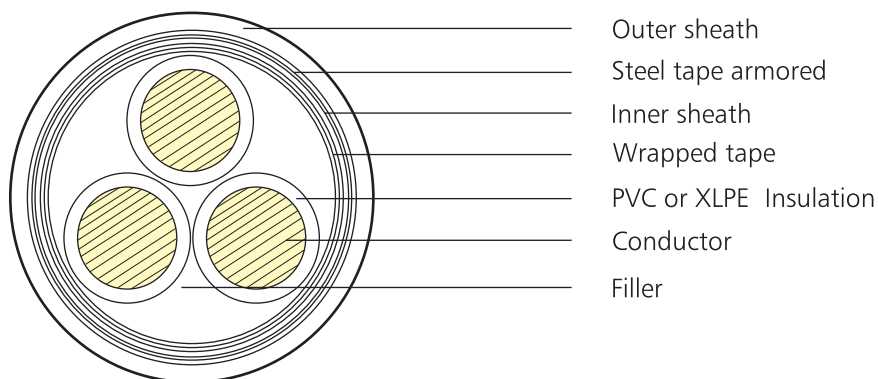
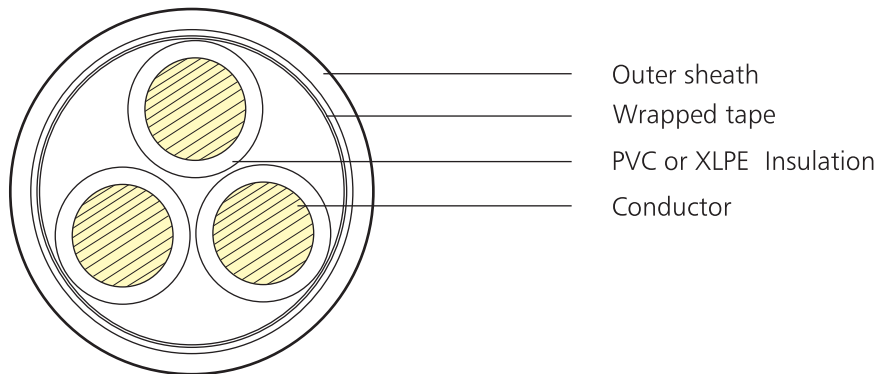
Nominal cross-section of conductor mm ²	Outer diameter of cable mm		Calculated Weight of cable Kg/km				DC resistance of conductor at 20°C Ω/km		A Cable current carrying Capacity Amps			
									In air		Directly buried under the ground	
	Non-Armoured	Armoured	Cu		Al		Cu	Al	Cu	Al	Cu	Al
5 x 1.5	16.4	15.1	169	423	119		12.1	18.1	19.5	18.1	26	-
5 x 2.5	17.5	16.8	226	590	199		7.41	12.1	22	20	34	27
5 x 4	19.9	18.2	310	714	318	422	4.61	7.41	37	27	44	36
5 x 6	21.6	19.5	416	848	372	701	3.08	4.61	47	35	56	46
5 x 10	23.9	23.5	665	1255	452	848	1.83	3.08	65	47	73	59
5 x 16	26.6	25.0	973	1482	474	930	1.15	1.91	86	68	96	73
5 x 25	31.6	29.8	1485	2112	514	1268	0.727	1.20	112	81	121	93
5 x 35	35.4	33.6	1998	2734	902	1588	0.524	0.868	139	101	146	111
5 x 50	40.4	38.0	2648	3514	1154	1940	0.387	0.641	169	123	173	131
5 x 70	45.9	43.8	3762	4776	1606	2618	0.268	0.443	217	158	213	163
5 x 95	52.7	49.8	5120	5930	2130	3246	0.193	0.320	264	194	251	193
5 x 120	53.7	58.5	6769	8391	3056	3858	0.153	0.253	285	225	310	220
5 x 150	59.5	64.5	8461	10489	3819	5848	0.124	0.206	325	250	345	270
5 x 185	65.3	70.7	10435	12936	4711	7213	0.0991	0.164	375	295	390	305
5 x 240	74.4	79.9	13538	16782	6111	9357	0.0754	0.125	440	345	450	355

Derivative Product from 0.6/1kV Power Cable

No.	Description	Application Characteristics	Operating Temperature
1	Flame-retardant XLPE insulated power cable	Good flame retardant property	90
2	Fire-Resistant XLPE insulated power cable	Good fire –resistance Property	90
3	XLPE insulated low smoke and low Halogen power cable	For Situations where higher Safety requirements are desired	90
4	Flame-retardant XLPE insulated low–smoke and halogen –free power cable	For Situations where higher Safety requirements are desired	90
5	XLPE insulated power cable with branch	Easy installation stable performance	90
6	Fire-resistant XLPE insulated power cable with branch		90
7	Fire-resistant XLPE insulated power cable with branch		90
8	PVC insulated power cable with branch		70
9	Fire-resistant PVC insulated power cable with branch		70
10	Fire resistant PVC insulated power cable with branch		70

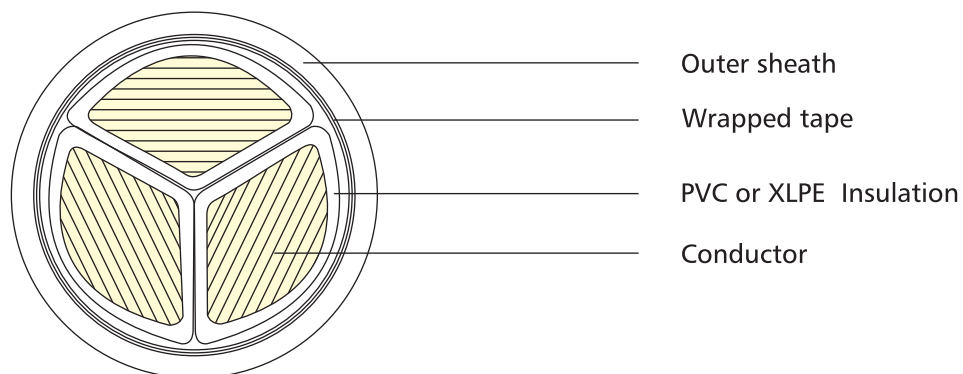
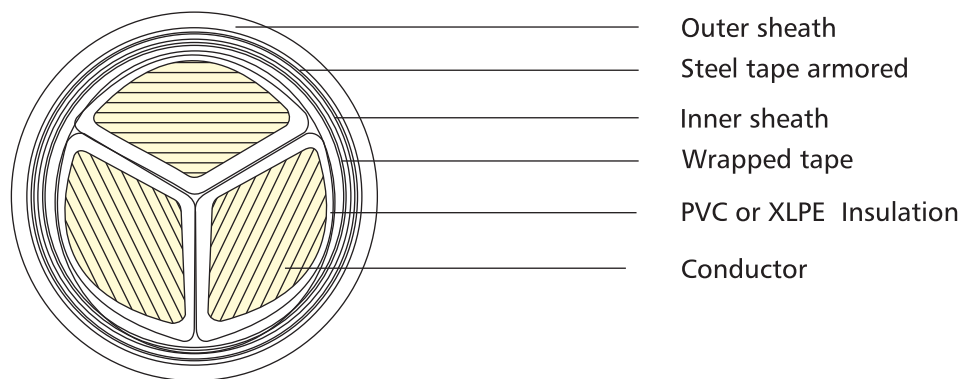
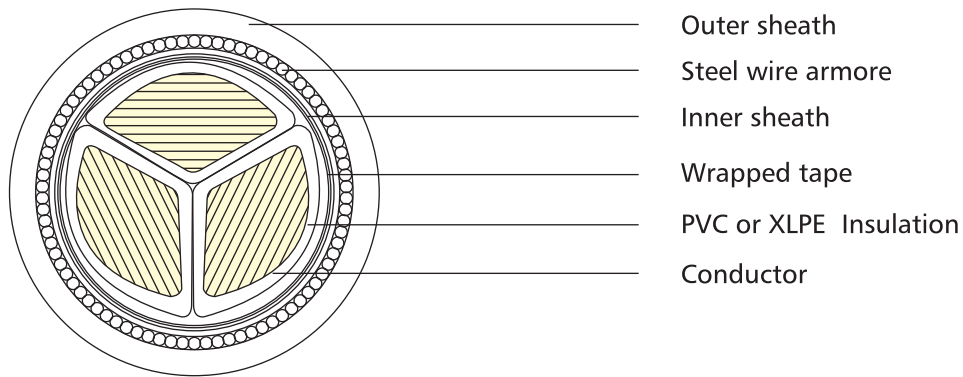
Power Cable Structure Diagram 0.6/1kV Power Cable

Structure of 0.6/1kV 3-core, power cable (Round Cores)



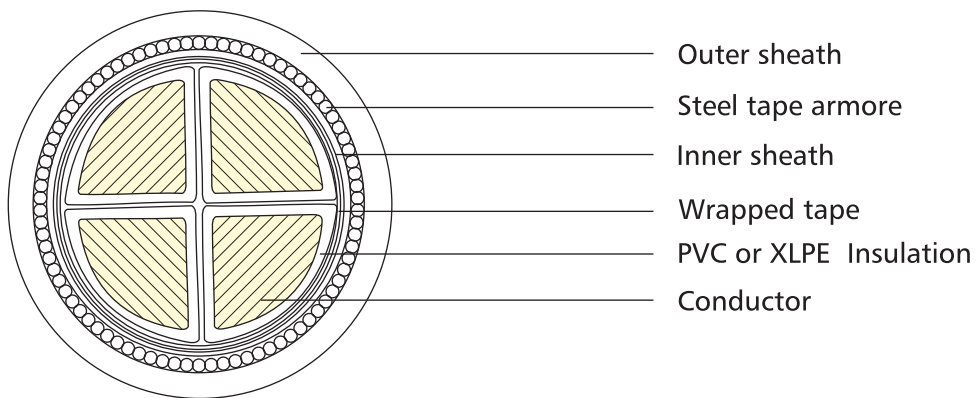
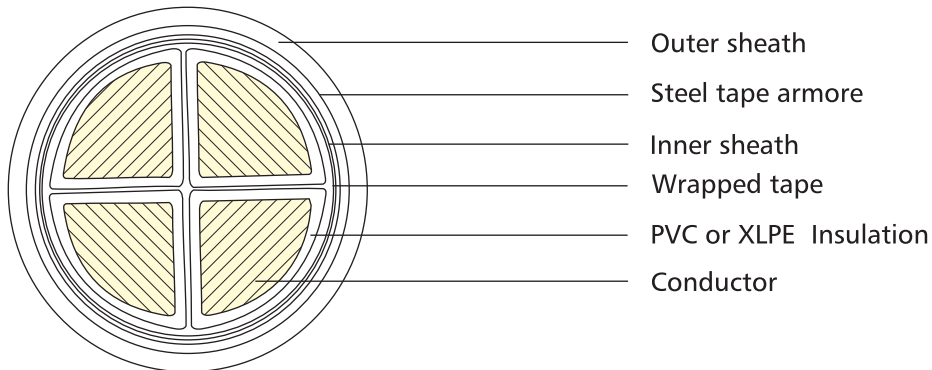
Power Cable Structure Diagram 0.6/1kV Power Cable

0.6/1kV 3-Core Power Cable (Sector Shaped Cores)



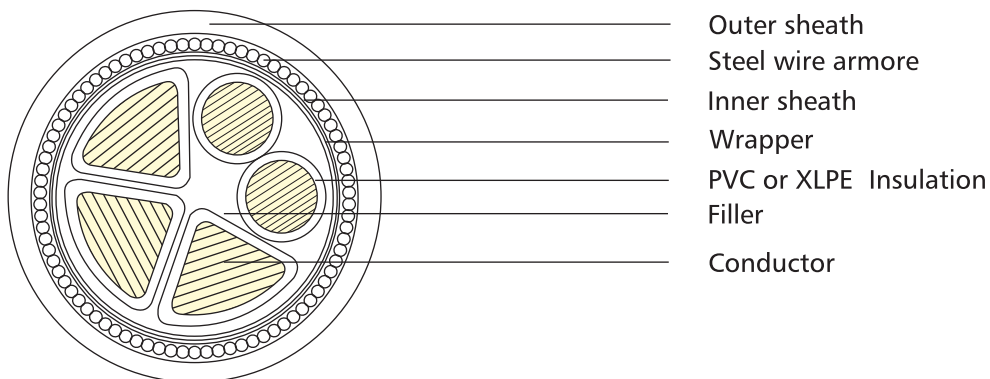
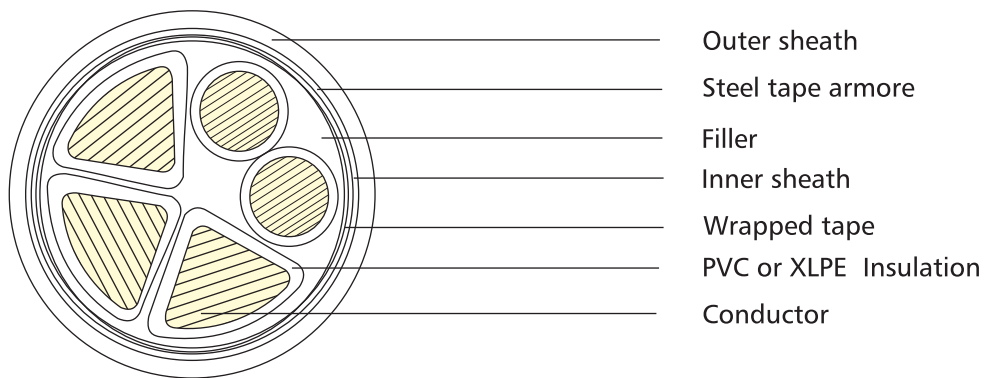
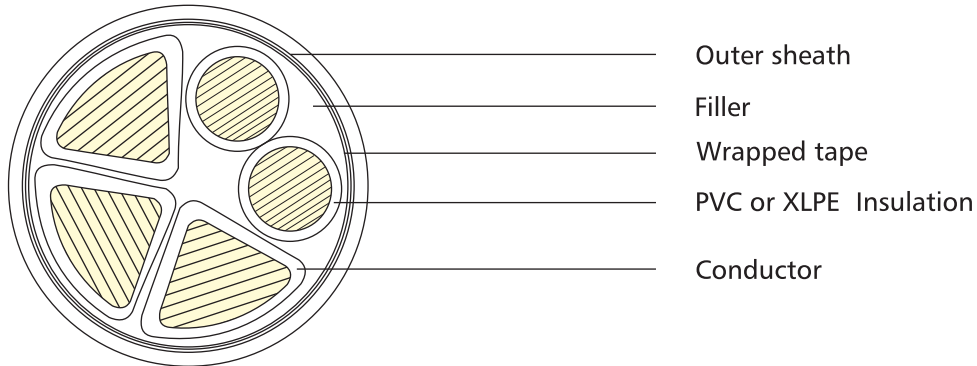
Power Cable Structure Diagram 0.6/1kV Power Cable

Structure of 0.6/1kV 4-core, power cable (Sector Shaped Cores)



Power Cable Structure Diagram 0.6/1kV Power Cable

Structure of 0.6/1kV 3 + 2-core, power cable



Rated Voltage 6/10kV and 18/36kV XLPE-Insulated Power Cable

The XLPE insulated cable has good electrical and physical properties, resistant to aging, resistant to the environment stress and chemical corrosion operation, with the characteristics of simple structure, easy to use, no drop-height restriction when laying, higher long-term working temperature (90°C).

Implemented standard IEC60502.

We are also capable of providing tailor made cable solutions upon the request of customers.

Table of the Voltage, Cores and Cross-Section

	Category A, B	6/10kV	18/36kV
	Category C	8.7/15kV	-
Single Core		25- 1200mm ²	50- 1200mm ²
Three- Core		25-400mm ²	50-400mm ²

The cable with category A rated voltage is used in the situation requiring not over 1 min. of grounding fault lasting time. For the cable with Category B rated voltage, the grounding fault lasting time normally is not over 1 hour, max. lasting time is not over 8 hours, annual ground fault lasting time altogether should not be over 125 hours, category C includes all the system except Category A and B.

Cable Types and Application

Type		Name	Application
Cu core	Al core		
NC2XY		XLPE insulated, PVC or PE sheathed power cable	Can be laid indoor, in tunnels, cables, canals, pipelines and loose soil, cable should not bear mechanic force, but can bear a certain breaking force
NC2XRY		XLPE insulated, steel tape armoured and PVC sheathed power cable	Laid indoor, in tunnels, cable canal and underground, cable can bear mechanic force, but can not bear large breaking force
NC2XRY		XLPE insulated, steel wire armoured and PVC or PE sheathed power cable	Laid indoor, in tunnels and mines cable can bear mechanic force and large breaking force

Voltage Test and Partial Discharge Test

			6/10kV (11)	18/36kV (33kV)
A	Voltage test	Test voltage kV	21	63
		Test time min.	5	5
	Partial discharge test	Magnitude of discharge at $1.73 U_0$ quantity $\leq PC$	5	5

1. 6/10 kV (11kV) Single-Core XLPE Insulated, PVC Sheathed Power Cable

Nominal cross section of conductor mm ²	Insulation thickness mm	Sheath Thickness mm	outer diameter of cable mm	Calculated weight of cable kg/km		DC resistance of conductor at 20 ^{0c} Ω/km		Cable current carrying capacity A				Short circuit current kA			
								In air		Directly buried under ground		conductor		Shield	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape	Cu Wire
25	3.4	1.8	25	906	889	0.727	1.200	165	130	160	120	3.57	2.37	1.083	3.506
35	3.4	1.8	26	1040	1015	0.524	0.868	205	155	190	145	5.00	3.33	1.082	3.501
50	3.4	1.9	28	1227	1192	0.387	0.641	245	190	225	175	7.15	4.75	1.079	3.496
70	3.4	2.0	29	1471	1422	0.268	0.443	305	235	275	215	10.01	6.65	1.077	3.491
95	3.4	2.0	31	1778	1712	0.193	0.320	370	290	330	255	13.58	9.02	1.077	5.449
120	3.4	2.1	32	2056	1972	0.153	0.253	430	335	375	290	17.16	11.4	1.077	5.449
150	3.4	2.2	35	2482	2376	0.124	0.206	490	380	425	330	21.45	14.2	1.076	5.440
185	3.4	2.3	37	2921	2791	0.0991	0.164	560	435	480	370	26.45	17.5	1.251	7.590
240	3.4	2.3	40	3541	3372	0.0754	0.125	665	515	555	435	34.32	22.8	1.250	7.583
300	3.4	2.4	42	4191	3981	0.0601	0.100	765	595	630	490	42.9	28.5	1.246	7.560
400	3.4	2.5	46	5363	5089	0.0470	0.078	890	695	725	565	57.2	38.0	1.245	7.553
500	3.4	2.6	50	6493	6143	0.0366	0.0605	1030	810	825	650	71.5	47.5	1.244	7.547

2. 6/10kV (11kV) 3-Core XLPE Insulated, PVC Sheathed Power Cable

Nominal cross section of conductor mm ²	Insulation thickness mm	Sheath Thickness mm	Calculated outer diameter of cable mm	Calculated weight of cable kg/km		DC resistance of conductor at 20 ^{0c} Ω/km		Cable current carrying capacity A				Short circuit current kA		
								In air		Directly buried under ground		conductor		Shield
				Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape
25	3.4	2.3	43.0	2200	1731	0.727	1.200	120	90	125	100	3.57	2.37	2.958
35	3.4	2.3	45.0	2590	1933	0.524	0.868	140	110	155	120	5.00	3.33	2.958
50	3.4	2.4	48.0	3133	2195	0.387	0.641	165	130	180	140	7.15	4.75	2.958
70	3.4	2.6	52.0	3850	2537	0.268	0.443	210	165	220	170	10.01	6.65	2.958
95	3.4	2.7	56.0	4825	3044	0.193	0.320	355	200	265	210	13.58	9.02	2.958
120	3.4	2.8	59.0	5656	3407	0.153	0.253	290	225	300	235	17.16	11.4	2.958
150	3.4	2.9	63.0	6588	3776	0.124	0.206	330	255	340	260	21.45	14.2	2.958
185	3.4	3.0	66.0	7852	4384	0.0991	0.164	375	295	380	300	26.45	17.5	3.301
240	3.4	3.2	77.0	9818	5319	0.0754	0.125	435	345	435	345	34.32	22.8	3.301
300	3.4	3.3	77.0	11758	6134	0.0601	0.100	495	390	485	390	42.9	28.5	3.301
400	3.4	3.4	79.0	14874	7376	0.0470	0.0778	555	435	535	435	57.2	38.0	3.301
500	3.4	3.5	81.0	18049	8676	0.0366	0.0605	615	480	585	480	71.5	47.5	3.301

3 . 6/10kV (11kV) 3-Core XLPE Insulated, Steel-Tape Armoured and PVC Sheathed Power Cable.

Nominal cross section of conductor mm ²	Insulation thickness mm	Sheath Thickness mm	outer diameter of cable mm	Calculated weight of cable kg/km		DC resistance of conductor at 20°C Ω/km		Cable current carrying capacity A				Short circuit current kA		
								In air		Directly buried under ground		conductor		Shield
				Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape
25	3.4	2.4	48.0	3190	2176	0.727	1.200	120	90	125	100	3.57	2.37	2.958
35	3.4	2.5	50.0	3731	3068	0.524	0.868	140	110	155	120	5.00	3.33	2.958
50	3.4	2.6	53.0	4396	3449	0.387	0.641	165	130	180	140	7.15	4.75	2.958
70	3.4	2.7	57.0	5198	3872	0.268	0.443	210	165	220	170	10.01	6.65	2.958
95	3.4	2.9	62.0	6350	4551	0.193	0.320	355	200	265	210	13.58	9.02	2.958
120	3.4	3.0	65.0	7257	4984	0.153	0.253	290	225	300	235	17.16	11.4	2.958
150	3.4	3.1	69.0	8383	5542	0.124	0.206	330	255	340	260	21.45	14.2	2.958
185	3.4	3.2	72.0	9741	6237	0.0991	0.164	375	295	380	300	26.45	17.5	3.301
240	3.4	3.3	78.0	11854	7309	0.0754	0.125	435	345	435	345	34.32	22.8	3.301
300	3.4	3.4	84.0	14861	9178	0.0601	0.100	495	390	485	390	42.9	28.5	3.301
400	3.4	3.5	90.0	17868	11047	0.0470	0.0778	555	435	535	435	57.2	38.0	3.301
500	3.4	3.6	96.0	29875	12916	0.0366	0.0605	615	480	585	480	71.5	47.5	3.301

4. 6/10kV (11kV) 3-Core XLPE Insulated, Steel-Wire Armoured and PVC Sheathed Power Cable.

Nominal cross section of conductor mm ²	Insulation thickness mm	Sheath Thickness mm	Calculated outer diameter of cable mm	Calculated weight of cable kg/km		DC resistance of conductor at 20°C Ω/km		Cable current carrying capacity A				Short circuit current kA		
								In air		Directly buried under ground		conductor		Shield
				Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape
25	3.4	2.6	49.3	4535	4067	0.727	1.200	120	90	125	100	3.57	2.37	2.958
35	3.4	2.7	52.8	5055	4399	0.524	0.868	140	110	155	120	5.00	3.33	2.958
50	3.4	2.8	55.8	5749	4812	0.387	0.641	165	130	180	140	7.15	4.75	2.958
70	3.4	2.9	59.7	6653	5341	0.268	0.443	210	165	220	170	10.01	6.65	2.958
95	3.4	3.0	63.7	8007	6226	0.193	0.320	355	200	265	210	13.58	9.02	2.958
120	3.4	3.1	67.2	9001	6752	0.153	0.253	290	225	300	235	17.16	11.4	2.958
150	3.4	3.4	72.1	10150	7336	0.124	0.206	330	255	340	260	21.45	14.2	2.958
185	3.4	3.6	77.3	11644	8175	0.0991	0.164	375	295	380	300	26.45	17.5	3.301
240	3.4	3.8	82.0	14912	10412	0.0754	0.125	435	345	435	345	34.32	22.8	3.301
300	3.4	3.9	84.2	17215	11591	0.0601	0.100	495	390	485	390	42.9	28.5	3.301
400	3.4	4.0	96.5	20794	13295	0.0470	0.0778	555	435	535	435	57.2	38.0	3.301
500	3.4	4.2	102.3	25501	15109	0.0366	0.0605	615	480	585	480	71.5	47.5	3.301

5. 18/36kV (33kV) Single-Core XLPE Insulated PVC Sheath Power Cable

Nominal cross section of conductor mm ²	Insulation thickness mm	Sheath Thickness mm	outer diameter of cable mm	Calculated weight of cable kg/km		DC resistance of conductor at 20°C Ω/km		Cable current carrying capacity A				Short circuit current kA			
								In air		Directly buried under ground		conductor		Shield	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape	Al Wire
50	8.0	2.2	36.0	1964	1924	0.387	0.641	245	190	225	175	7.15	4.75	1.284	3.563
70	8.0	2.3	38.0	2236	2182	0.268	0.443	305	235	275	215	10.01	6.65	1.281	3.554
95	8.0	2.3	39.0	2580	2505	0.193	0.320	370	285	330	255	13.58	9.02	1.280	5.548
120	8.0	2.4	40.0	2883	2789	0.153	0.253	425	330	375	290	17.16	11.4	1.279	5.544
150	8.0	2.5	42.0	3395	3279	0.121	0.206	485	375	420	325	21.45	14.2	1.278	5.541
185	8.0	2.6	44.0	3883	3738	0.0991	0.164	555	430	475	370	26.45	17.5	1.275	7.736
240	8.0	2.7	46.0	4554	4367	0.0754	0.125	650	505	555	430	34.32	22.8	1.274	7.730
300	8.0	2.8	49.0	5251	5019	0.0601	0.100	745	580	630	490	42.9	28.5	1.271	7.713
400	8.0	2.89	51.0	6350	6040	0.0470	0.0778	870	680	720	565	57.2	38.0	1.27	7.706

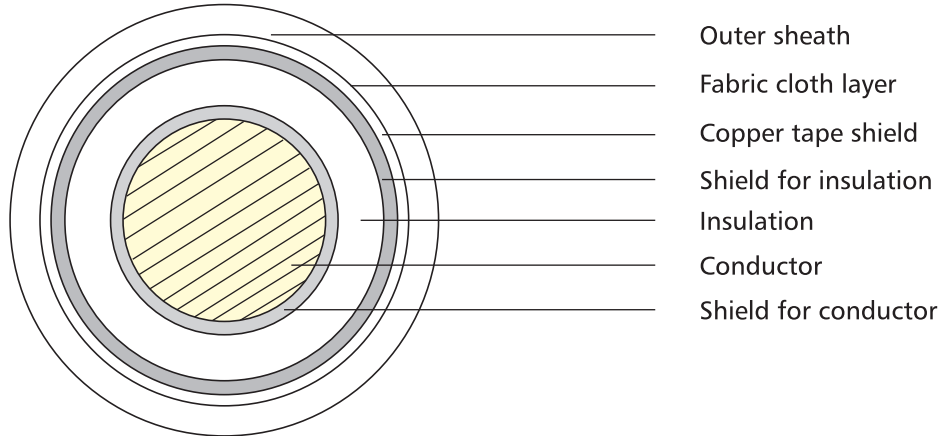
6. 18/36kV (33kV) Single-Core XLPE Insulated PVC Sheath Power Cable

Nominal cross section of conductor mm ²	Insulation thickness mm	Sheath Thickness mm	outer diameter of cable mm	Calculated weight of cable kg/km		DC resistance of conductor at 20°C Ω/km		Cable current carrying capacity A				Short circuit current kA			
								In air		Directly buried under ground		conductor		Shield	
				Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape	Cu Wire
50	8.0	2.2	36.0	1964	1924	0.387	0.641	245	190	225	175	7.15	4.75	1.284	3.563
70	8.0	2.3	38.0	2236	2182	0.268	0.443	305	235	275	215	10.01	6.65	1.281	3.554
95	8.0	2.3	39.0	2580	2505	0.193	0.320	370	285	330	255	13.58	9.02	1.280	5.548
120	8.0	2.4	40.0	2883	2789	0.153	0.253	125	330	375	290	17.16	11.4	1.279	5.544
150	8.0	2.5	42.0	3395	3279	0.12	0.206	485	375	420	325	21.45	14.2	1.278	5.541
185	8.0	2.6	44.0	3883	3738	0.0991	0.164	555	430	475	370	26.45	17.5	1.275	7.736
240	8.0	2.7	46.0	4554	4367	0.0754	0.125	650	505	555	430	34.32	22.8	1.274	7.730
300	8.0	2.8	49.0	5251	5019	0.0601	0.100	745	580	630	490	42.9	28.5	1.271	7.713
400	8.0	2.89	51.0	6350	6040	0.0470	0.0778	870	680	720	565	57.2	38.0	1.27	7.706

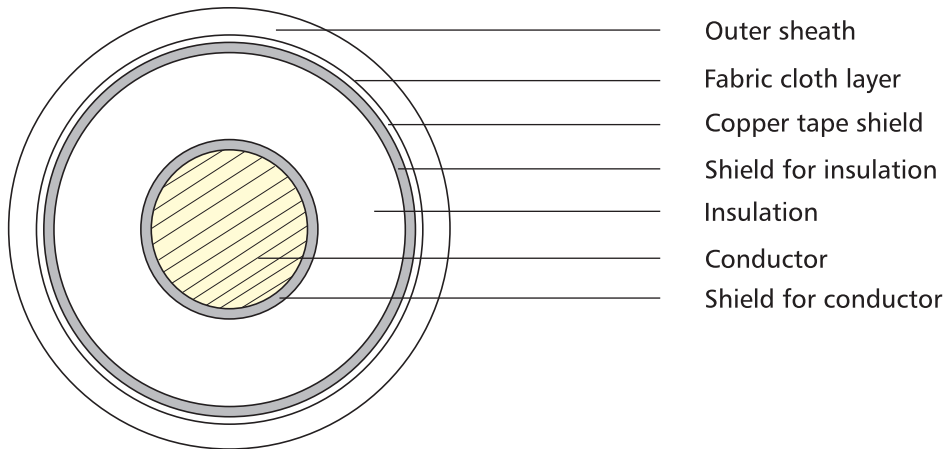
7. 18/36kV (33kV) 3-Cores XLPE Insulated, Steel-Tape Armoured and PVC Sheathed Power Cable.

Nominal cross section of conductor mm ²	Insulation thickness mm	Sheath Thickness mm	outer diameter of cable mm	Calculated weight of cable kg/km		DC resistance of conductor at 20°C Ω/km		Cable current carrying capacity A				Short circuit current kA		
								In air		Directly buried under ground		conductor		Shield
				Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape
50	8.0	3.4	75.9	9692	8750	0.387	0.641	220	168	228	176	7.15	4.75	2.958
70	8.0	3.6	81.2	11016	9698	0.268	0.443	272	212	280	216	10.01	6.65	2.958
95	8.0	3.7	85.1	12324	10536	0.193	0.320	332	256	336	260	13.58	9.02	2.958
120	8.0	3.9	88.4	13424	11165	0.153	0.253	380	296	384	296	17.16	11.14	2.958
150	8.0	4.0	92.3	14715	11892	0.124	0.206	432	336	432	336	21.45	14.20	2.958
185	8.0	4.1	96.1	16360	12878	0.0991	0.164	496	384	496	384	26.45	17.50	2.958
240	8.0	4.3	101.9	19117	14600	0.0754	0.125	584	468	580	464	34.30	22.8	2.958
300	8.0	4.5	107.3	21569	15900	0.0601	0.100	672	520	744	624	42.9	28.5	3.301
400	8.0	4.7	115.0	25318	17789	0.0470	0.0778	796	624	776	672	57.2	38.0	3.301
500	8.0	4.9	121.9	29203	22416	0.0366	0.0605	920	728	808	720	71.5	47.5	3.301

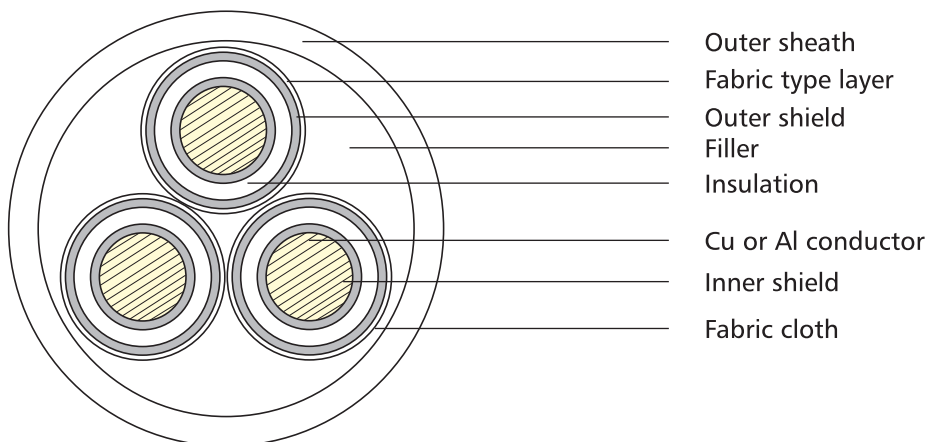
XLPE Power Cable Structure



6/10kV (11kV) Single-Core XLPE Insulated Power Cable

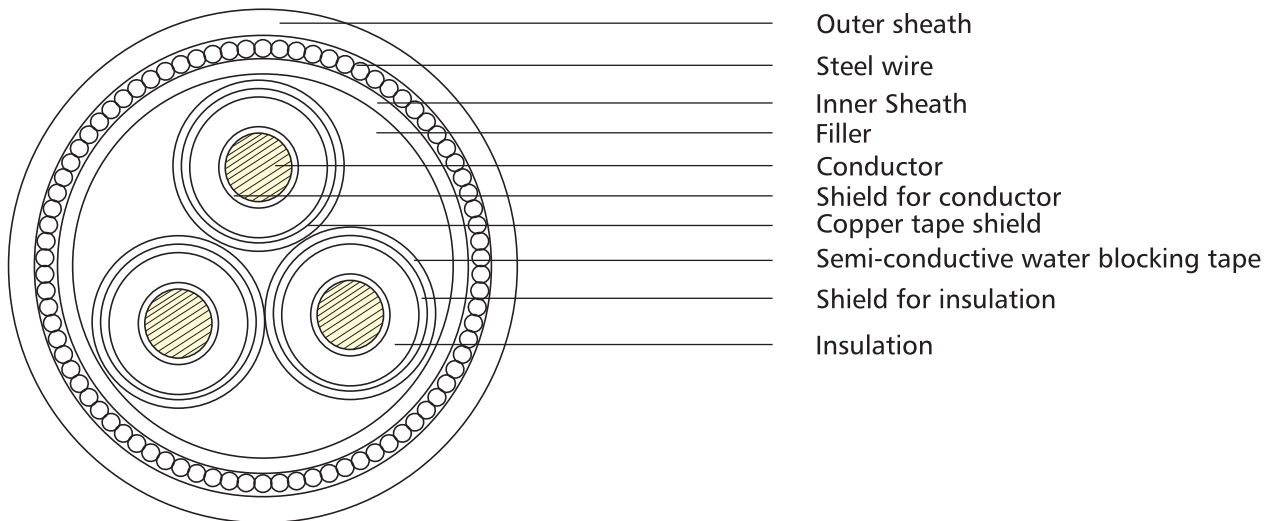


18/36kV (33kV) Single-Core XLPE Insulated Power Cable

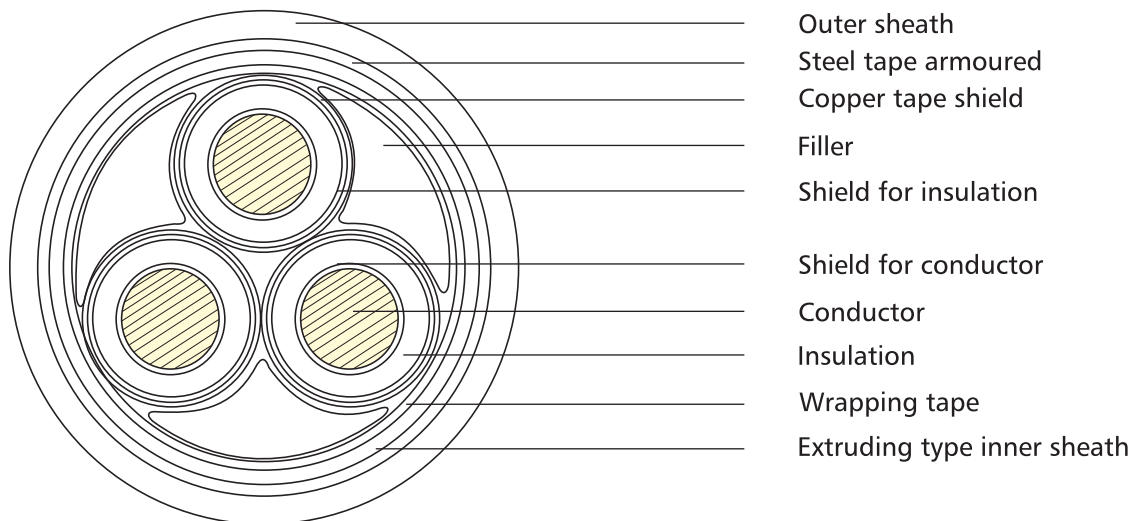


6/10kV (11kV) or 18/36kV (33kV) 3-core XLPE Insulated Power Cable

XLPE Power Cable Structure



6/10kV (11kV) or 18/36kV (33kV) 3-core XLPE Insulated Water-Proof, Steel-Wire Armoured Power Cable



6/10kV (11kV) or 18/36kV (33kV) 3-core XLPE Insulated, Steel-Tape Armoured Power Cable

ENVIRONMENTAL CONSERVATION CABLES (EC)

Some toxic materials are present in materials used in the manufacture of cables can harm environment cause ill effect on health of people and also damage environment including soil, water and air.

EC cable have the performance of Flame retardant, Low smoke, low toxin, no Lead, no cadmium and other harmful heavy metal, no phosphorus, and less smog, can be used in application where full environment protection is a perquisite. The cable can prevent the spread of toxic and gases and decrease the calamity when exposed to fire condition as we use flame retardant material. The subtle smog generated when these cables are exposed to fire are low in toxins and hence make it easy for people to be evacuated. As there is no Halogen and phosphorus, so the cable does not give off any toxic gases such as HCL, so there is no damage for the instrument, machines and personell

There is no Lead, cadmium and other heavy metals so the cable cannot cause any ill effect to soil and water during running and its residue.

We follow the principle of environment and health protection during cable designing, purchasing, production, and sales. And we also consider the environment and health protection during regeneration.

LSZH LOW TOXIN FLAME RETARDANT AND FIRE RESISTANT EC POWER CABLES WITH VOLTAGE UPTO 26/36kV

The insulation of LSZH Low toxin flame retardant and fire resistant EC Power cables is XLPE and or radiation cured XLPE. The outer sheath of the EC cables adopt the material of 90°C degree Celsius halogen free flame retardant polyolefin. The filler and the wrapping tape of the cables is Low smog halogen free, low toxin, flame retardant environmental conservation material.

Application Characteristic

1. Conductor working temperature
 - Long term allow working temperature 90°C
 - Max working temperature during short circuit (last time not more than 1 seconds) 250°C
2. Lay temperature not below 0°C
3. Bending radius
 - 20 times (D + d) ± 5% for single core cables
 - 15 times (D + d) ± 5% for multi-cores cables
 - D- is the diameter of cable
 - d- is the diameter of conductor

Low Smoke and Low Halogen Low Toxin Flame Retardant and Fire Resistant EC Cables

This group of cables can be of the following

1. Rated voltage up to 0.6/1kV LSZH and Low toxin and Flame retardant and fire resistant EC power cables.
2. EC cables for Lighting and internal wiring cables.
3. EC cables for control system
4. For rated voltage up to 18/36kV LSLH Low toxin XLPE insulated power EC cables

This group of cables does not include Halogen, no Lead, no cadmium no phosphorus and other toxic materials The cable does not burn easily and in the event of exposure to fire, it does not give off any toxic gases. So the cable is safe during application and no harmful effect to the environment due to its Low Smoke and low halogen, low toxin flame retardant and safety and environmental conservation performance/properties.

The cable is suitable for High density population construction (such as altitude building), central business district, Super marketplace, hospitals, office buildings, stations, landings, port underground and other directly populated and other commonality situation. These cables are also used for important places which require high level safety.

Low smoke and Zero Halogen

Characteristics of flame retardant is according to IEC60332

Smoke density is according to IEC61034)

PH Value and conductance is according to IEC60754-2)

Toxicity index is according to NES713

Fire resistant performance is according to IEC60331)

As the material consist of no Halogen no Lead, no cadmium etc it is safe for use.

LSOH Low toxin flame retardant characteristic

≥, % Smoke density	≥ PH Value	≤, s/mm Conductance	Flame retardant grade	Toxin index	RoHs ppm RoHs Restriction
	4.3	10	A, B, C, D	<5	
Remark: Pb () ≤ 1000; Cd () ≤ 100; Hg () ≤ 1000; Cr(VI) () ≤ 1000; PBB () ≤ 1000; PBDE () ≤ 1000					

TYPE AND NAME OF CABLES

Copper conductor XLPE insulated LSZH outersheath EC power cables (A,BCD)
Aluminium Conductor XLPE insulated LSZH outer sheath EC power cables (ABCD)
Fire resistant Copper conductor XLPE insulated LSZH sheath EC power cable
Fire resistant Aluminium conductor XLPE insulated LSZH sheath EC power cable
Copper conductor XLPE insulated Steel tape armoured LSZH outersheath EC power cables (A,B,C)
Aluminium conductor XLPE insulated Steel tape armoured LSZH outersheath EC power cables (A, B, C)
Fire resistant Copper conductor XLPE insulated Steel tape armoured LSZH sheath EC power cable
Fire resistant Aluminium conductor XLPE insulated Steel tape armoured LSZH Outersheath EC powercable
Copper conductor XLPE insulated Steel wires armoured LSZH outersheath EC power cables (A,BC)
Aluminium conductor XLPE insulated Steel wires armoured LSZH outersheath EC power cables (A,BC)
Aluminum conductor XPLE insulated Steel wires armoured LSZH outersheath EC power cables (A,BC)
Fire resistant Copper conductor XLPE insulated Steel wires armoured LSZH outersheath EC power cables
Fire resistant Aluminium conductorXLPE insulated Steel wires armoured LSZH outersheath EC power cables
Copper conductor XLPE insulated thick Steel wires armoured LSZH outersheath EC power cables (A,BC)
Aluminum conductor XLPE insulated thick Steel wires a rnoured LSZH outersheath EC power cables (A,BC)
Fire resistant Copper conductor XLPE insulated thick steel wires armoured LSZH outersheath EC power cables
Fire resistant Aluminium conductor XLPE insulated thick Steel wires armoured LSZH outersheath EC power cables

Size

Cores	1	2,3,4,5	3+1, 3+2, 4+1
mm ² Cross section	1.5 - 1000	1.5 - 1000	2.5 - 300

"3+1", "3+2", "4+1"

Main conductor and neutral cross section

Sort	mm															
Main conductor	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
Neutral Conductor	1	1.5	2.5	4	6	10	16	16	25	35	50	70	70	95	120	150

Main technical datas

1. DC Resistance of conductor

Nominal cross section mm ²	Max. DC resistance ohms/km at 20 degree C		Nominal cross section mm ²	Max. DC resistance ohms/km at 20 degree C	
	Copper	Aluminium		Copper	Aluminium
1.5	12.1	18.1	95	0.193	0.320
2.5	7.41	12.1	120	0.153	0.253
4	4.61	7.41	150	0.124	0.206
6	3.08	4.61	185	0.0991	0.164

Rated Voltage kV U ₀ /U		0.6/1	3/3	3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/20 18/20	21/35	26/35
Voltage test	Test voltage kV	3.5	10.5	12.5	21	30.5	42	63	73.5	91
	Test time min	5	5	5		5	5	5	5	5
Partial discharge test	Test voltage kV	-	-	6.3		15.1	20.8	31.2	36.4	45
	Discharge capacity < pC	-	-	≤5	≤5	≤5	≤5	≤5	≤5	≤5