



HEBEI HUIKE
CABLE CO., LTD.

PRODUCT CATALOGUE

POWER CABLE

Reliable solutions for power distribution



Company Profile

Hebei Huike Cable Co., Ltd. was established in September 2020 in Xinxing Industrial Park, Lutai Economic Development Zone, Tangshan, Hebei. The company specializes in the research, production, sales and service of electrical wires and cables.

Established	Site area	Production equipment	Testing equipment
2020	32,000 m ²	80+ sets	50+ sets

The product portfolio includes power cables, control cables, overhead insulated cables, computer cables, solar cables, aluminium-alloy cables and building wires. Quality control is applied from incoming materials through production and final inspection.

Catalogue Contents

- Power cable range and construction descriptions
- Complete technical data tables
- Dimensions, mass, resistance and current-carrying capacity

Power Cable Range

Product family	Rated voltage	Core arrangements	Size range shown in the catalogue
Polyvinyl chloride insulated power cables	0.6/1 kV and 1.8/3 kV	Single to five cores, including reduced-neutral arrangements	1.5-630 mm ² single-core; multicore ranges shown in the following tables
Cross-linked polyethylene insulated low-voltage power cables	0.6/1 kV and 1.8/3 kV	Single to five cores	1.5-400 mm ² single-core; multicore ranges shown in the following tables
Cross-linked polyethylene insulated medium-voltage power cables	3.6/6 kV to 26/35 kV	Single-core and three-core	10-1200 mm ² single-core; 10-400 mm ² three-core, depending on voltage
Low-smoke zero-halogen and fire-resistant power cables	0.6/1 kV to 26/35 kV	One to five cores	As listed in the technical data tables

Construction Descriptions

Construction	Complete English product description
Unarmoured	Copper or aluminium conductor, insulated and sheathed power cable
Steel tape armoured	Copper or aluminium conductor, insulated, steel tape armoured and sheathed power cable
Steel wire armoured	Copper or aluminium conductor, insulated, steel wire armoured and sheathed power cable
Flame-retardant	Flame-retardant insulated and sheathed power cable
Fire-resistant	Fire-resistant insulated and sheathed power cable
Low-smoke zero-halogen	Low-smoke zero-halogen insulated and sheathed power cable

Polyvinyl Chloride Insulated Power Cables

These cables are intended for fixed installation in 50 Hz AC power transmission and distribution circuits with rated voltages up to and including 1.8/3 kV. The range includes non-flame-retardant, flame-retardant and fire-resistant constructions with copper or aluminium conductors.

Operating Characteristics

- Maximum continuous conductor operating temperature: 70 °C.
- Maximum conductor temperature under short circuit: 160 °C for conductor sizes up to 300 mm² and 140 °C for larger sizes; maximum duration 5 seconds.
- Minimum laying temperature: 0 °C; installation is not restricted by the difference in level along the route.
- The cable provides chemical stability and resistance to acids, alkalis, oils and organic solvents, and is not easy to ignite.
- The construction is lightweight, flexible and convenient to install and maintain.
- Minimum bending radius values for armoured and unarmoured single-core and three-core cables are listed in the technical tables.

Product Constructions

Complete English product name	Main application
Copper or aluminium conductor, polyvinyl chloride insulated and polyvinyl chloride sheathed power cable	Indoor, tunnel, cable trench, conduit and fixed distribution installation
Copper or aluminium conductor, polyvinyl chloride insulated and polyethylene sheathed power cable	Fixed installation where a polyethylene outer sheath is required
Copper or aluminium conductor, polyvinyl chloride insulated, steel-tape armoured and polyvinyl chloride sheathed power cable	Direct burial and fixed locations subject to external mechanical pressure
Copper or aluminium conductor, polyvinyl chloride insulated, steel-tape armoured and polyethylene sheathed power cable	Direct burial with polyethylene sheath and resistance to external mechanical pressure
Copper or aluminium conductor, polyvinyl chloride insulated, fine steel-wire armoured and polyvinyl chloride sheathed power cable	Vertical routes and locations requiring tensile strength
Copper or aluminium conductor, polyvinyl chloride insulated, fine steel-wire armoured and polyethylene sheathed power cable	Vertical or buried routes requiring tensile strength and a polyethylene sheath
Copper or aluminium conductor, polyvinyl chloride insulated, heavy steel-wire armoured and polyvinyl chloride sheathed power cable	Locations requiring resistance to substantial pressure and pulling force
Copper or aluminium conductor, polyvinyl chloride insulated, heavy steel-wire armoured and polyethylene sheathed power cable	Locations requiring substantial mechanical protection and a polyethylene sheath
Flame-retardant versions of the above polyvinyl chloride insulated power cables	Fixed installations where flame propagation must be limited
Fire-resistant polyvinyl chloride insulated and sheathed power cable	Essential circuits required to remain operational for a defined period during fire

Cross-Linked Polyethylene Insulated Low-Voltage Power Cables

These cables are intended for fixed installation in 50 Hz AC power transmission and distribution circuits with rated voltages up to and including 1.8/3 kV. Flame-retardant and fire-resistant versions are included.

- Maximum continuous conductor operating temperature: 90 °C.
- Maximum conductor temperature under short circuit: 250 °C; maximum duration 5 seconds.
- Minimum laying temperature: 0 °C; the cable may be installed without restriction from route level differences.
- The insulation system provides chemical stability and resistance to acids, alkalis, oils and organic solvents.
- The cable is lightweight, flexible and convenient to install and maintain.
- Ambient-temperature and soil thermal-resistivity correction factors are listed in the technical tables.

0.6/1 kV Derived Power Cable Products

Complete English product name	Application characteristics	Operating temperature
Flame-retardant cross-linked polyethylene insulated power cable	Good flame-retardant performance	90 °C
Fire-resistant cross-linked polyethylene insulated power cable	Good fire-resistant performance	90 °C
Cross-linked polyethylene insulated low-smoke low-halogen flame-retardant power cable	Locations with elevated safety requirements	90 °C
Cross-linked polyethylene insulated low-smoke zero-halogen flame-retardant power cable	Locations with elevated safety requirements	90 °C
Cross-linked polyethylene insulated branch power cable	Branch distribution circuits	90 °C
Fire-resistant cross-linked polyethylene insulated branch power cable	Branch distribution circuits requiring fire resistance	90 °C
Flame-retardant cross-linked polyethylene insulated branch power cable	Convenient installation and stable performance	90 °C
Polyvinyl chloride insulated branch power cable	Convenient installation and stable performance	70 °C
Fire-resistant polyvinyl chloride insulated branch power cable	Branch distribution circuits requiring fire resistance	70 °C
Flame-retardant polyvinyl chloride insulated branch power cable	Branch distribution circuits requiring flame retardance	70 °C
Ethylene propylene rubber insulated, chloroprene-rubber sheathed power cable	Movable service down to -40 °C	90 °C
Ethylene propylene rubber insulated, nitrile-rubber sheathed power cable	Movable service down to -40 °C	90 °C
Polytetrafluoroethylene insulated, silicone-rubber sheathed power cable	High-temperature service	200 °C
Silicone-rubber insulated, steel-wire armoured and silicone-rubber sheathed power cable	High-temperature service with mechanical protection	200 °C
Silicone-rubber insulated and silicone-rubber sheathed power cable	High-temperature service	200 °C

Complete English product name	Application characteristics	Operating temperature
Silicone-rubber insulated, steel-wire armoured and silicone-rubber sheathed power cable	Locations requiring high-temperature resistance	200 °C
Fluoroplastic insulated, silicone-rubber sheathed power cable	High-temperature and chemical-resistant service	200 °C
Fluoroplastic insulated, steel-wire armoured and silicone-rubber sheathed power cable	High-temperature service with mechanical protection	200 °C
Oxygen-barrier cross-linked polyethylene insulated power cable	Fire-protection systems	90 °C

Cross-Linked Polyethylene Insulated Medium-Voltage Power Cables

The cross-linked polyethylene insulated cable range combines electrical performance, mechanical strength, heat-ageing resistance, environmental stress resistance and chemical-corrosion resistance. The construction is simple to install, is not restricted by route level differences and permits a continuous conductor operating temperature of 90 °C.

Complete English product name	Main application
Copper or aluminium conductor, cross-linked polyethylene insulated, polyvinyl chloride or polyethylene sheathed power cable	Indoor, tunnel, cable trench and conduit installation; may also be laid in loose soil. It is not designed for external mechanical force but can withstand normal installation pulling force.
Copper or aluminium conductor, cross-linked polyethylene insulated, steel-tape armoured, polyvinyl chloride or polyethylene sheathed power cable	Indoor, tunnel, cable trench and direct-buried installation where external mechanical pressure may occur; not intended for high tensile force.
Copper or aluminium conductor, cross-linked polyethylene insulated, fine steel-wire armoured, polyvinyl chloride or polyethylene sheathed power cable	Vertical routes, shafts, tunnels, mines and routes with level differences where mechanical force and significant tensile force may occur.
Copper or aluminium conductor, cross-linked polyethylene insulated, heavy steel-wire armoured, polyvinyl chloride or polyethylene sheathed power cable	Installations requiring resistance to heavy pressure and high tensile force.
Flame-retardant versions of the above cross-linked polyethylene insulated power cables	Power distribution circuits where flame propagation must be limited.

The catalogue covers single-core and three-core constructions from 3.6/6 kV through 26/35 kV. Voltage, core-count, cross-section, test-voltage and partial-discharge values are listed in the following tables.

Low-Smoke Zero-Halogen, Flame-Retardant and Fire-Resistant Power Cables

The insulation uses cross-linked polyethylene or radiation-cured cross-linked polyethylene. The outer sheath uses a 90 °C low-smoke zero-halogen flame-retardant polyolefin, and the fillers and wrapping tapes use low-smoke, halogen-free, low-toxicity, flame-retardant materials. These cables are designed to reduce flame spread, smoke, corrosive gas and environmental impact during manufacture, service and disposal.

- Maximum continuous conductor operating temperature: 90 °C.
- Maximum conductor temperature under short circuit: 250 °C; maximum duration 5 seconds.
- Minimum laying temperature: 0 °C.
- Minimum bending radius: 20 times the sum of cable diameter and conductor diameter for single-core cables, and 15 times that sum for multicore cables, with a tolerance of 5 percent.
- The product range includes 0.6/1 kV through 26/35 kV constructions, with copper or aluminium conductors and optional fire-resistant or armoured designs.

Complete English product name
Copper conductor, cross-linked polyethylene insulated, low-smoke zero-halogen polyolefin sheathed, flame-retardant power cable
Aluminium conductor, cross-linked polyethylene insulated, low-smoke zero-halogen polyolefin sheathed, flame-retardant power cable
Copper conductor, cross-linked polyethylene insulated, low-smoke zero-halogen polyolefin sheathed, fire-resistant power cable
Aluminium conductor, cross-linked polyethylene insulated, low-smoke zero-halogen polyolefin sheathed, fire-resistant power cable
Copper conductor, cross-linked polyethylene insulated, steel-tape armoured, low-smoke zero-halogen polyolefin sheathed, flame-retardant power cable
Aluminium conductor, cross-linked polyethylene insulated, steel-tape armoured, low-smoke zero-halogen polyolefin sheathed, flame-retardant power cable
Copper conductor, cross-linked polyethylene insulated, steel-tape armoured, low-smoke zero-halogen polyolefin sheathed, fire-resistant power cable
Aluminium conductor, cross-linked polyethylene insulated, steel-tape armoured, low-smoke zero-halogen polyolefin sheathed, fire-resistant power cable
Copper conductor, cross-linked polyethylene insulated, steel-wire armoured, low-smoke zero-halogen polyolefin sheathed, flame-retardant power cable
Aluminium conductor, cross-linked polyethylene insulated, steel-wire armoured, low-smoke zero-halogen polyolefin sheathed, flame-retardant power cable
Copper conductor, cross-linked polyethylene insulated, steel-wire armoured, low-smoke zero-halogen polyolefin sheathed, fire-resistant power cable
Aluminium conductor, cross-linked polyethylene insulated, steel-wire armoured, low-smoke zero-halogen polyolefin sheathed, fire-resistant power cable

Complete Technical Data Tables

Technical data covers dimensions, reference weights, electrical resistance, current-carrying capacity, core combinations, installation factors and operating-temperature values.

Installation Bending Radius Requirements

		Single core		Three core
Min bendingradius during installation	Cable construction with armour 20D	15D	15D	Cable construction with armour 12D
Cable construction with armour withcare andusetemplet	15D	12D	12D	10D
Nearjoint box or cable terminal,bending				

Nominal Conductor Cross-Section Ranges

Cross-section, mm²	1.5	2.5		6	10	16	25	35	50
0.6/1(1.2)	0.8	0.8	1.0	1.0	1.0	1.0	1.2	1.2	1.4
1.8/3k V					2.2	2.2	2.2	2.2	2.2

Nominal Insulation Thickness

Thickness Lross mm section mm 0.6/1(1.2)	70 1.4	95 1.6	120 1.6	150 1.8	185 2.0	240 2.2	300 2.4	400 2.6	500 2.8	630 2.8
1.8/3k V	2.2	2.2		2.2		2.2	2.4	2.6	2.8	2.8

Conductor DC Resistance at 20 C

Cross-section, mm²	Conductor DC resistance at 20 °C, Ω/km	Cross-section, mm²	Conductor DC resistance at 20 °C, Ω/km	Cross-section, mm²	Conductor DC resistance at 20 °C, Ω/km
mm		mm		mm	
1.5	12.1	35	0.524 0.868	240	0.0754 0.125
2.5	7.41	50	0.387 0.641	300	0.0601 0.100
4	4.61	70	0.268 0.443	400	0.0470 0.0778
6	3.08	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

Insulation Resistance and AC Voltage Test Data

Ratedvoltage U/U(Um)	Test voltage k V	Time (min)
0.6/1(1.2)	3.5	5
1.8/3(3.6)	6.5	5

Current-Carrying Capacity Correction Factors for Ambient Temperature

														Soil temperature°C	
Operating temperature°C	10	15	20	25	30	35	40	45	50	5	10	35	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

Current-Carrying Capacity Correction Factors for Soil Thermal Resistivity

Rated voltage	Cross-section, mm²					
k V	mm 35 Cable construction	0.8 1.06	1.0 1.00	1.2 0.95	1.5 0.88	2.0 0.80
0.6/1	50-150	1.08	1.00	0.94	0.87	0.77
	185 Cable construction	1.09	1.00	0.93	0.85	0.76

Single-Core Polyvinyl Chloride Insulated and Sheathed Power Cable

Specification Cable construction	Insulation thickness	Sheath thickness	Outer diameter		Calculated Weight of cable kg/km	20℃ at 20 ℃	Ω/km		In air	Cable current-carrying capacity, A	
Cross-section, mm²	mm 0.8	mm 1.4	of cable mm 5.8	Cu 53	Al	Cu 12.1	Al	Cu 24	Al	Cu 29	Al
1×2.5	0.8	1.4	6.2	66		7.41		31		39	
1×4	1.0	1.4	7.0	92		4.61		4		49	
1×6	1.0	1.4	7.6	116		3.08		52		19	
1×10	1.0	1.4	8.6	160	98	1.83	3.08	72	55	83	64
1×16	1.0	1.4	9.6	224	126	1.15	1.91	95	73	105	83
1×25	1.2	1.4	11.2	322	172	0.727	1.20	120	96	135	105
1×35	1.2	1.4	12.2	424	211	0.524	0.868	150	115	160	125
1×50	1.4	1.4	13.9	556	270	0.387	0.641	180	140	195	150
1×70	1.4	1.4	15.6	762	347	0.268	0.443	230	175	240	185
1×95	1.6	1.5	17.7	1030	460	0.193	0.320	280	215	285	220
1×120	1.6	1.5	19.2	1267	549	0.153	0.253	325	250	325	250
1×150	1.8	1.6	21.3	1586	681	0.124	0.206	375	290	365	285
1×185	2.0	1.7	23.6	1959	835	0.0991	0.164	430	335	415	320
1×240	2.2	1.8	26.4	2825	1060	0.0754	0.125	510	395	480	375
1×300	2.4	1.9	29.1	3142	1302	0.0601	0.100	585	455	545	425
1×400	2.6	2.0	32.7	4098	1663	0.0470	0.077 8	690	540	625	490
1×500	2.8	2.1	36.4	5171	2076	0.0366	0.060 5	800	630	710	560
1×630	2.8	2.2	40.0	6440	2529	0.0283	0.046 9	920	740	810	645

Three-Core Polyvinyl Chloride Insulated and Polyethylene Sheathed Power Cable

Specification\Insulation Cable construction\thickness		Sheath thickness	Outer diameter		Calculated cable weight, kg/km	Conductor DC resistance at 20 °C, Ω/km				Cable current-carrying capacity, A	Directly buried under ground
Cross-section, mm²	mm	mm	of cable mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al
3 × 1.5	0.8	1.8	10.8	155		12.1		15		22	
3 × 2.5	0.8	1.8	11.8	661		7.41		19		29	
3 × 4	1.0	81	13.8	281		4.61		26		38	
3 × 6	1.0	1.8	15.0	35.6		3.08		32		47	
3 × 10	1.0	81	16.6	493	306	1.83	3.08	46	35	65	50
3 × 16	1.0	1.8	18.8	695	399	1.15	1.91	60	47	84	65
3 × 25	1.2	1.8	22.2	1009	555	0.727	1.20	77	60	110	84
3 × 35	1.2	1.8	22.6	1272	629	0.524	0.868	95	74	130	100
3 × 50	1.4	1.8	26.4	1687	825	0.387	0.641	115	90	155	120
3 × 70	1.4	1.9	29.5	2319	1067	0.268	0.443	145	115	195	150
3 × 95	1.6	2.1	34.0	3152	1435	0.193	0.320	185	140	230	185
3 × 120	1.6	2.2	36.7	3877	1713	0.153	0.253	210	165	260	205
3 × 150	1.8	2.3	40.7	4848	2117	0.124	0.206	245	190	300	230
3 × 185	2.0	2.5	45.1	5998	2609	0.0991	0.164	280	215	335	260
3 × 240	2.2	2.7	50.3	7727	3306	0.0754	0.125	335	260	390	300
3 × 300	2.4	2.8	55.5	9604	4056	0.0601	0.100	375	295	435	340

Three-Core Polyvinyl Chloride Insulated, Steel-Tape Armoured and Sheathed Power Cable

Cross-section, mm ²	Insulation thickness	Sheath thickness	Outer diameter of cable		Calculated cable weight, kg/km	Conductor DC resistance at 20 °C, Ω/km	In air		Cable current capacity Directly buried under ground
mm ²	mm	mm	mm	Cu	Al	Cu Al	Cu	Al	Cu Al
3×1.5	0.8	1.8	13.6	284		12.1	15		22
3×2.5	0.8	1.8	14.6	338		7.41	19		29
3×4	1.0	1.8	16.6	443		4.61	26		38
3×6	1.0	1.8	17.8	532		3.08	32		47
3×10	1.0	1.8	19.4	687	5.1	1.83 3.08	46	35	65 50
3×16	1.0	1.8	21.6	914	618	1.15 1.91	60	47	84 65
3×25	1.2	1.8	25.0	1268	814	0.727 1.20	77	60	110 84
3×35	1.2	1.8	25.4	1534	892	0.524 0.868	95	74	130 100
3×50	1.4	2.0	29.4	2009	1146	0.387 0.641	115	90	155 120
3×70	1.4	2.1	32.9	2709	1457	0.268 0.443	145	115	195 150
3×95	1.6	2.2	38.6	3941	2224	0.193 0.320	185	140	230 185
3×120	1.6	2.3	41.3	4725	2561	0.153 0.253	210	165	260 205
3×150	1.8	2.5	45.9	5853	3122	0.124 0.206	245	190	300 230
3×185	2.0	2.6	50.1	7080	3692	0.0991 0.164	280	215	335 260
3×240	2.2	2.8	55.7	8986	4565	0.0754 0.125	335	260	390 300
3×300	2.4	3.0	61.1	11019	5471	0.0601 0.100	375	295	435 340

Three-Core Polyvinyl Chloride Insulated, Steel-Wire Armoured and Sheathed Power Cable

Cross-section, mm²	Insulation thickness	Sheath thickness	Outer diameter of cable		of cable	Conductor DC resistance at 20 °C, Ω/km		In air		Cable current capacity	Directly buried
mm	mm	mm	mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al
	1.0)	1.8	19.3	717		4.61		26		38	
		1.8	20.5	826		3.08		32		47	
101	1.0	1.8	22.1	1010	824	1.83	3.08	46	35	65	50
3×16	1.0	1.8	24.2	1276	980	1.15	1.91	60	47	8	65
3×25	1.2	1.8	28.4	1855	1401	0.727	1.20	77	60	110	84
3×35	1.2	1.9	28.7	2130	1487	0.524	0.868	95	74	130	001
3×50	1.4	2.0	33.0	2716	1853	0.387	0.641	15	90	155	120
3×70	1.4	2.1	37.3	3752	2501	0.268	0.443	145	115	195	150
3×95	1.6	2.3	41.5	4757	3040	0.193	0.320	185	140	230	185
3×120	1.6	2.4	44.2	5598	3435	0.153	0.253	210	165	260	205
3×150	1.8	2.6	49.8	7249	4518	0.124	0.206	245	190	300	230
3×185	2.0	2.7	54.2	8631	5243	0.0991	0.164	280	215	335	260
3×240	2.2	2.9	59.8	10710	6289	0.0754	0.125	335	260	390	300
3×300	2.4	3.2	65.3	12910	7362	0.0601	0.100	375	295	435	340

3+1-Core Polyvinyl Chloride Insulated and Sheathed Power Cable

Specification Cableconstruiatio Aness	Insulation	Sheath thickness	Outer diameter		Calculated Weight ofcable kg/k11	20°° C	conductor at 20°C			Cable current capacity	Directly buried
Cross-section, mm²	mm	tuttl	ofcable mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al
3×4+1×2.5	1.0/0.8	1.8	19.9	773		4.61		26		38	
3×6+1×4	1.0/1.0	1.8	21.5	918		3.08		32		47	
3×10+1×6	1.0/1.0	1.8	23.1	1125		1.83		46		65	
3×16+1×10	1.0/1.0	1.8	26.1	1582	1222	1.15	1.91	60	47	84	65
3×25+1×16	1.2/1.0	1.8	29.6	2081	1525	0.727	1.20	77	60	110	84
3×35+1×16	1.2/1.0	1.9	30.6	2400	1656	0.524	0.868	95	74	130	100
3×50+1×25	1.4/1.2	2.0	35.9	3331	2308	0.387	0.641	115	90	155	120
3×70+1×35	1.4/1.2	2.1	39.4	4239	2764	0.268	0.443	145	115	195	150
3×95+1×50	1.6/1.4	2.3	44.5	5463	3418	0.193	0.320	185	140	230	185
3×120+1×70	1.6/1.4	2.5	49.2	7021	4404	0.153	0.253	210	165	260	205
3×150+1×70	1.8/1.4	2.6	53.6	8267	5083	0.124	0.206	245	190	300	230
3×185+1 ×95	2.0/1.6	2.7	57.8	9863	5867	0.099 1	0.164	280	215	335	260
3×240+1×120	2.2 /1.6	2.9	64.3	1222 7	7090	0.075 4	0.125	335	260	390	300
×300+ 1×150	2.4/1.8	3.1	70.1	1481 0	8317	0.060 1	0.100	375	295	435	340

3+1-Core Flame-Retardant Polyvinyl Chloride Insulated and Sheathed Power Cable

Specification Cable constnctionss	Insulation	Sheath thickness	Outer diameter		Calculated cable weight, kg/km	20° C	conductor at 20°C Ω/km	In air		Cable current capacity Directly buried under ground	
Cross-section, mm ²	mm	mm	of cable mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al
3×4+1×2.5	1.0/0.8	1.8	17.2	488		4.61		26		38	
3×6+1×4	1.0/1.0	1.8	18.8	606		3.08		32		47	
3×10+1×6	1.0/1.0	1.8	20.5	783		1.83		46		65	"
3×16+1×10	1.0/1.0	1.8	22.7	1051	692	1.15	1.91	60	47	84	65
3×25+1×16	1.2/1.0	1.8	26.2	1464	908	0.727	1.20	77	60	110	84
3×35+1×16	1.2/1.0	1.9	27.0	1745	1005	0.524	0.868	95	74	130	100
3×50+1×25	1.4/1.2	2.0	32.9	2636	1613	0.387	0.641	115	90	155	120
3×70+1×35	1.4/1.2	2.1	36.4	3467	1992	0.268	0.443	145	115	195	150
3×95+1×50	1.6/1.4	2.3	41.5	4584	2539	0.193	0.320	185	140	230	185
3×120+1×70	1.6/1.4	2.4	45.0	5624	3007	0.153	0.253	210	165	260	205
3×150+1×70	1.8/1.4	2.5	49.4	6732	3548	0.124	0.206	245	190	300	230
3×185+1×95	2.0/1.6	2.7	53.8	8223	4226	0.099 1	0.164	280	215	335	260
3×240+1×120		2.9	60.3	1043 9	5251	0.075 4	0.125	335	260	390	300
3×300+1×150	2.4/1.8	3.1	66.2	1208 3	6300	0.060 1	0.100	375	295	435	340

3+1-Core Polyvinyl Chloride Insulated and Polyethylene Sheathed Power Cable

Specification Cable	constricti Qihness	Insulation	Sheath thickness	Outer diameter	Calculated cable weight, kg/km		20°C		In air		Cable current capacity	
Cross-section, mm²		mm	mm	of cable mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al
3×4+1×2.5		1.0/0.8	1.8	14.4	319		4.61		26		38	
3×6+1×4		1.0/1.0	1.8	16.0	418		3.08		32		47	
3×10+1×6		1.0/1.0	1.8	17.7	576		1.83		46		65	
3×16+1×10		1.0/1.0	1.8	19.9	818	459	1.15	1.91	60	47	84	65
3×25+1×16		1.2/1.0	1.8	23.4	1191	635	0.727	1.20	77	60	110	84
3×35+1×16		1.2/1.0	1.8	24.2	1466	723	0.524	0.868	95	74	130	100
3×50+1×25		1.4/1.2	1.9	28.7	1998	975	0.387	0.641	115	90	155	120
3×70+1×35		1.4/1.2	2.0	31.8	2724	1250	0.268	0.443	145	115	195	150
3×95+1×50		1.6/1.4	2.1	36.7	3714	1669	0.193	0.320	185	140	230	185
3×120+1×70		1.6/1.4	2.2	39.8	4636	2020	0.153	0.253	210	165	260	205
3×150+1×70		1.8/1.4	2.4	44.4	5661	2478	0.124	0.206	245	190	300	230
3×185+1×95		2.0/1.6	2.5	48.6	7030	3034	0.0991	0.164	280	215	335	260
3×240+1×120		2.2/1.6	2.7	54.7	9042	3855	0.0754	0.125	335	260	390	300
3×300+1×150		2.4/1.8	2.9	60.6	11264	4762	0.0601	0.100	375	295	435	340

Four-Core Polyvinyl Chloride Insulated and Armoured Power Cable

Specification Cableconstuotionss	Insulation	Sheath thickness	Outer diameter		Calculated cable weight, kg/km	20°C				Cable current capacity	under ground
Cross-section, mm²	mm		of cable	Cu	Al	Cu	Al	Cu	Al	Cu	Al
4×4	1.0	1.8	15.0	345	246			26		38	
4×6	1.0	1.8	16.3	442	291			32		47	
4×10	1.0	1.8	18.1	620	372	1.83	3.08	46	35	65	50
4×16	1.0	1.8	20.5	883	489	1.15	1.91	60	47	84	65
4×25	1.2	1.8	24.4	1292	685	0.727	1.20	77	60	110	84
4×35	1.2	1.8	25.8	1668	811	0.524	0.868	95	74	130	100
4×50	1.4	1.9	30.0	2218	1068	0.387	0.641	115	90	155	120
4×70	1.4	2.0	33.3	3045	1376	0.268	0.443	145	115	195	150
4×95	1.6	2.2	38.6	4152	1862	0.193	0.320	185	140	230	185
4×120	1.6	2.3	41.9	5122	2238	0.153	0.253	210	165	260	205
4×150	1.8	2.5	46.5	6423	2781	0.124	0.206	245	190	300	230
4×185	2.0	2.6	51.3	7920	402	0.099 1	0.164	280	215	335	260
4×240	2.2	2.9	57.8	1025 4	4360	0.075 4	0.125	335	260	390	300
4×300	2.4	3.1	63.7	1275 2	6822	0.090 0	0.100	375	295	435	340

Four-Core Flame-Retardant Polyvinyl Chloride Insulated and Sheathed Power Cable

Specification Cable construction	Insulation	Sheath thickness	Outer diameter	Calculated cable weight, kg/km	Conductor DC resistance at 20 °C, Ω/km	In air	Cable current capacity Directly buried under ground
Cross-section, mm ²	mm	mm	mm	Cu Al	Cu Al	Al	Cu Al
x	1.0	1.8	17.8	521	4.61	26	38
4×6	1.0	1.8	19.1	633	3.08	32	47
4×10	1.0	1.8	20.9	831 583	1.83 3.08	46 35	65 50
4×16	1.0	1.8	23.3	1121 728	1.15 1.91	60 47	84 65
4×25	1.2	1.8	27.2	1575 696	0.727 1.20	77 60	110 84
4×35	1.2	1.9	28.8	1981 1124	0.524 0.868	95 74	130 100
4×50	1.4	2.0	33.4	2614 1464	0.387 0.641	115 90	155 120
4×70	1.4	2.2	38.1	3838 2169	0.268 0.443	145 115	195 150
4×95	1.6	2.4	43.4	5064 2774	0.193 0.320	185 140	230 185
4×120	1.6	2.5	47.1	6158 3274	0.153 0.253	210 165	260 205
4×150	1.8	2.6	51.5	7540 3899	0.124 0.206	245 90	300 230
4×185	2.0	2.8	56.9	9234 4716	0.0991 0.164	280 215	335 260
4×240	2.2	3.0	63.2	11694 5800	0.0754 0.125	335 260	390 300
4×300	2.4	3.2	69.1	14332 6935	0.0601 0.100	375 295	435 340

Four-Core Flame-Retardant Armoured Polyvinyl Chloride Insulated Power Cable

Specification Cable constructio Rncss	Insulatio n	Sheath thickness	Outer diameter		Calculated Weight ofcable kg/kin	Conductor DC resistance at 20 °C, Ω/km		In air		Cable current capacity	Directly buried underground
Cross-section, mm²	mm	mm	ofcable mm	Cu	Al	Cu	Al		Al	Cu	Al
4×4	1.0	1.8	20.5	816		4.61		26		38	
4×6	1.0	1.8	21.8	951		3.08		32		47	
4×10	1.0	1.8	23.6	1182	934	1.83	3.08	46	35	65	50
4×16	1.0	1.8	26.7	1668	1274	1.15	1.91	60	47	84	65
4×25	1.2	1.8	30.6	2217	1610	0.727	1.20	77	60	110	84
4×35	1.2	1.9	32.1	2657	1801	0.524	0.868	95	74	130	100
4×50	1.4	2.1	37.7	3671	2521	0.387	0.641	115	90	155	120
4×70	1.4	2.2	41.1	4644	2976	0.268	0.443	145	115	195	150
4×95	1.6	2.4	47.3	6385	4095	0.193	0.320	185	140	230	185
4×120	1.6	2.5	51.1	7594	4710	0.153	0.253		165	260	205
4×150	1.8	2.7	55.7	9318	5497	0.124	0.206	245	190	300	230
4×185	2.0	2.9	61.1	10999	6482	0.0991	0.164	280	215	335	260
4×240	2.2	3.1	67.4	13654	7759	0.0754	0.125	335	260	390	300
4×300	2.4	3.3	73.2	16472	9076	0.0601	0.100	375	295	435	340

Five-Core Polyvinyl Chloride Insulated and Armoured Power Cable

Specification Cable construction cross section	Insulation	Sheath thickness	Outer diameter of cable		Calculated cable weight, kg/km	Conductor DC resistance at 20 °C, Ω/km	In air	Cable current capacity	Directly buried under ground
mm	mm	mm	mm	Cu	Al	Cu Al	Cu Al	Cu	Al
5×4	1.0	1.8	16.3	412		4.61	26	38	
5×6	1.0	1.8	17.7	532		3.08	32	47	
5×10	1.0	1.8	19.7	752	442	1.83 3.08	46 35	65	50
5×16	1.0	1.8	22.4	1078	585	1.15 1.91	60 47	84	65
5×25	1.2	1.8	27.2	1597	839	0.727 1.20	77 60	110	84
5×35	1.2	1.9	30.1	2121	1050	0.524 0.868	95 74	130	100
5×50	1.4	2.0	33.1	2747	1310	0.387 0.641	115 90	155	120
5×70	1.4	2.2	37.1	3794	1709	0.268 0.443	145 115	195	150
5×95	1.6	2.3	42.8	5185	2294	0.193 0.320	185 140	230	185
5×120	1.6	2.5	46.7	6387	2781	0.153 0.253	210 165	260	205
5×150	1.8	2.6	51.6	7975	3424	0.124 0.206	245 190	300	230
5×185	2.0	2.8	57.2	9870	4224	0.0991 0.164	280 215	335	260
5×240	2.2	3.1	64.1	12755	5388	0.0754 0.125	335 260	390	300
5×300	2.4	3.3	70.8	15879	6634	0.0601 0.100	375 295	435	340

Five-Core Flame-Retardant Polyvinyl Chloride Insulated Power Cable

Specification Cable construction cross section	Insulation	Sheath thickness	Outer diameter of cable		Calculated cable weight, kg/km	Conductor DC resistance at 20 °C, Ω/km	In air	Cable current capacity Directly buried under ground
mm	mm	mm	mm	Cu	Al	Al	Cu Al	Cu Al
5×4	1.0	1.8	19.1	603		4.61	26	38
5×6	1.0	1.8	20.5	739		3.08	32	47
5×10	1.0	1.8	22.5	982	672	1.83 3.08	46 35	65 50
5×16	1.0	1.8	25.2	1339	846	1.15 1.91	60 47	84 65
5×25	1.2	1.9	30.2	1928	1170	0.727 1.20	77 60	111 84
5×35	1.2	2.0	34.3	2789	1719	0.524 0.868	95 74	130 100
5×50	1.4	2.2	37.9	3536	2099	0.387 0.641	115 90	155 120
5×70	1.4	2.3	41.7	4651	2565	0.268 0.443	145 115	195 150
5×95	1.6	2.5	48.0	6211	3350	0.193 0.320	185 140	230 185
5×120	1.6	2.6	51.7	7509	3904	0.153 0.253	210 165	260 205
5×150	1.8	2.8	57.2	9295	4744	0.124 0.206	245 190	300 230
5×185	2.0	3.0	62.8	11327	5681	0.0991 0.164	280 215	335 260
5×240	2.2	3.3	69.7	14378	7010	0.0754 0.125	335 260	390 300
5×300	2.4	3.5	76.8	17742	8497	0.0601 0.100	375 295	435 340

Five-Core Flame-Retardant Armoured Polyvinyl Chloride Insulated Power Cable

Specification Cable construction cross section	Insulation	Sheath thickness	Outer diameter of cable		Calculated cable weight, kg/km	20°C			In air	Cable current capacity	Directly buried under ground
mm	mm	mm	mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al
5×4	1.0	1.8	21.7	921		4.61		26		38	
5×6	1.0	1.8	23.2	1083		3.08		32		47	
5×10	1.0	1.8	25.9	1509	1198	1.83	3.08	46	35	65	50
5×16	1.0	1.8	28.6	1932	1439	1.15	1.91	60	47	84	65
5×25	1.2	1.9	33.6	2641	1883	0.727	1.20	77	60	110	8
5×35	1.2	2.0	37.3	3517	2446	0.524	0.868	95		130	100
5×50	1.4	2.2	40.9	4338	2900	0.387	0.641	115	90	155	120
5×70	1.4	2.3	44.6	5534	3448	0.268	0.443	145	115	195	150
5×95	1.6	2.5	51.9	7675	4813	0.193	0.320	185	140	230	185
5×120	1.6	2.7	55.9	9115	5509	0.153	0.253	210	165	260	205
5×150	1.8	2.9	61.3	11067	6516	0.124	0.206	245	190	300	230
5×185	2.0	3.0	66.8	13242	7595	0.0991	0.164	280	215	335	260
5×240	2.2	3.3	75.0	17346	9978	0.0754	0.125	335	260	390	300
5×300	2.4	3.6	82.3	21051	11805	0.0601	0.100	375	295	435	340

Cross-Linked Polyethylene Insulated Power Cable Bending Radius Requirements

		Single core		Threecore
				Cableconstrlctionth Armour
Min bending radius during installation	20D	15D	15D	12D
Nearjoint box orcable terminal,bending with care and use templet	15D	12D	12D	10D
Nearjoint box or cable terminal,bending				

Cross-Linked Polyethylene Cable Current Correction Factors for Ambient Temperature

Operating temperature	Air temperaturc	C		Soil temprature C
°C°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 0.960.95

Cross-Linked Polyethylene Cable Current Correction Factors for Soil Thermal Resistivity

Rated voltage	Cross-section, mm ²	Heat-resistance coefficient of soil	
		0.8 1.00 1.2 1.5	2.0
	≤35	1.06 1.00 0.95 0.88	0.80
0.6/1	50-150	1.08 1.00 0.94 0.87	0.77
	≥185	1.09 1.00 0.93 0.86	0.76

0.6/1 kV Single-Core Cross-Linked Polyethylene Insulated and Sheathed Power Cable

Cross-section, mm ²	Nominal Insulation thickness mm	Nominal Sheath thickness mm	outer diameter of cable mm	Calculated weight of cable Cu	Calculated kg/km Al	Conductor DC resistance at 20 °C, Ω/km	Al	Testing voltage k V	Insulation resistance MΩ/km	In air Cu	Al	Cable current-carrying capacity, A	Al
1.5	0.7	1.4	5.8	48		≤12.1		3.5	1.10	25		35	
2.5	0.7	1.4	6.2	60		≤7.41		3.5	≥0.916	30		45	
4	0.7	1.4	6.7	79		≤4.61		3.5	≥0.757	45		60	
6	0.7	1.4	7.2	101		3.08		3.5	≥0.645	55		70	
10	0.7	1.4	8.0	143	81	1.83	≤3.08	3.5	≥0.523	75	60	95	75
16	0.7	1.4	8.9	205	106	1.15	1.91	3.5	0.431	100	80	125	100
25	0.9	1.4	10.4	297	145	0.727	1.20	3.5	0.444	140	115	160	130
35	0.9	1.4	11.5	396	183	0.524	0.868	3.5	0.379	175	140	190	150
50	1.0	1.4	13.0	516	230	0.387	0.641	3.5	≥0.355	210	170	225	180
70	1.1	1.4	15.0	721	306	0.268	0.443	3.5	≥0.335	270	215	280	225
95	1.1	1.5	16.7	968	399	0.193	0.320	3.5	≥0.290	340	275	335	270
120	1.2	1.5	18.4	1205	488	0.153	0.253	3.5	≥0.282	400	320	380	305
150	1.4	1.6	20.5	1513	607	0.124	0.206	3.5	≥0.294	460	370	425	340
185	1.6	1.6	22.6	1861	738	0.0991	0.164	3.5	≥0.303	530	415	480	375
240	1.7	1.7	25.2	2401	935	0.0751	0.125	3.5	≥0.283	625	490	555	435
300	1.8	1.8	27.7	2988	1148	0.0601	≤0.100	3.5	≥0.263	720	565	630	495
400	2.0	1.9	31.3	3915	1481	0.0470	0.0778	3.5	≥0.243s	815	640	705	555

0.6/1 kV Two-Core Cross-Linked Polyethylene Insulated and Sheathed Power Cable

Nominal	Calculated outer diameter of cable mm			Calculated cable weight, kg/km	20 °C conductor at 20°C			In air	Cable current-carrying capacity	Directly buried under ground
Cross-section, mm²	Coable onstruction Arm pamo	pam o	Cu [NOH Am oured	Al Cable construction Am armoured pamo	Cu	Al	Cu	Al	Cu	Al
2×1.5	9.9			12.1	23		31			
2×2.5	10.8		148	89	7.41		31		41	
2×4	11.9	14.7	191 331	116	4.61		41		53	
2×6	13.0	15.8	242 395	136	3.08		52		67	
2×10	14.5	17.3	336 506	212 361	1.83	3.08	73	56	92	71
2×16	16.5	19.3	425 668	278 446	1.15	1.91	97	75	120	93
2×25	19.7	22.5	690 919	387 576	0.727	1.20	130	100	155	120
2×35	21.7	24.5	901 1153	472 675	0.524	0.86 8	155	120	185	145
2×50	21.1	23.9	1074 1320	499 680	0.387	0.64 1	190	145	220	170
2×70	23.6	26.6	1484 1771	650 854	0.268	0.44 3	235	185	275	210
2×95	27.3	30.7	2011 2371	866 1131	0.193	0.32 0	290	225	330	255
2×120	29.8	34.6	2499 3210	1056 1652	0.153	0.25 3	335	260	375	290
2×150	33.3	37.9	3146 3917	1326 1945	0.124	0.20 6	385	295	420	325
2×185	36.7	41.9	3876 4784	1617 2334	0.0991	0.16 4	440	345	480	370
2×240	40.9	45.9	4992 5975	2045 2798	0.0754	0.12 5				

0.6/1 kV Three-Core Cross-Linked Polyethylene Insulated and Sheathed Power Cable

Cross-section, mm ²	Calculated outer diameter of cable mm			Calculated cable weight, kg/km	20°C conductor at 20°C			In air	Cable current-carrying capacity	Directly buried under ground
of conductor mm 3×1.5	UON pamo 10.4	Arm pamo	Cu armoured pamo 139	Al Cable construction Am I armoured pamo	Cu	Al	Cu 20	Al	Cu 27	IV
3×2.5	11.4		179				26		35	
3×4	12.5	15.3	236 384				34		45	
3×6	13.7	16.5	306 468				43		57	
3×10	15.3	18.1	437 617	251 430	1.83	3.08	60	47	77	59
3×16	17.5	20.3	631 835	335 539	1.15	1.91	83	64	105	80
3×25	20.9	23.7	926 1170	472 715	0.727	1.20	105	82	125	100
3×35	23.1	25.9	1274 1493	582 851	0.524	0.86 8	125	100	155	120
3×50	25.6	28.6	1576 1887	714 1024	0.387	0.64 1	160	125	185	145
3×70	28.9	32.3	2202 2584	951 1333	0.268	0.44 3	200	155	225	175
3×95	32.7	37.5	2963 3743	1246 2026	0.193	0.32 0	245	200	270	210
3×120	35.6	40.5	3682 4528	1519 2364	0.153	0.25 3	285	220	310	240
3×150	39.8	44.8	4634 5597	1903 2867	0.124	0.20 6	325	250	345	270
3×185	44.0	49.2	5721 6805	2333 3417	0.091	0.16 4	375	295	390	305
3×240	49.0	54.6	7375 8361	2954 4210	0.0754	0.12 5	440	345	450	335

0.6/1 kV 3+1-Core Cross-Linked Polyethylene Insulated and Sheathed Power Cable

Nominal	Calculated outer diameter of cable mm				Calculated cable weight, kg/km	20°C conductor at 20°C			In air	Cable current-carrying capacity	Directly buried under ground
Cross-section, mm ²	Cable construction armoured	Armoured	Cable construction Armoured	Cu pamo	Al Cable construction Al armoured	Cu	Al	Cu	Al	Cu	Al
3×4+2.5	13.2	16.0	273	427		4.61		34		45	
3×6+4	14.5	17.3	358	528		3.08		43		57	
3×10+6	16.2	19.0	508	698		1.83		60		77	
3×16+10	18.5	21.3	740	956	381 596	1.15	1.91	83	64	105	80
3×25+16	22.0	24.8	1091	1347	535 791	0.727	1.20	105	82	125	100
3×35+16	23.6	26.4	1376	1651	633 907	0.524	0.868	125	100	155	120
3×50+25	27.7	30.7	1855	2191	832 1168	0.387	0.641	160	125	185	145
3×70+35	31.0	35.8	2573	3316	1099 1842	0.268	0.443	200	155	225	175
3×95+50	35.6	40.2	3511	4338	1467 2293	0.193	0.320	245	200	270	210
3×120+70	39.0	43.6	4427	5327	1811 2711	0.153	0.253	285	220	310	240
3×150+70	43.4	48.2	5394	6465	2210 3281	0.124	0.206	325	250	345	270
3×185+95	47.6	52.8	6730	7878	2735 3882	0.0991	0.164	375	295	390	305
3×240+120	53.4	59.0	8640	10007	3453 4820	0.0754	0.125	440	345	450	355

0.6/1 kV Four-Core Cross-Linked Polyethylene Insulated and Sheathed Power Cable

Cross-section, mm²	Calculated outer diameter of cable mm			Calculated cable weight, kg/km	20°C conductor at 20°C			In air	Cable current carrying capacity	Directly buried under ground
of conductor mm	Cable construction Am pamo	Cable construction armoured	Cu paun o	IV IVOH AITI armoured pono	Cu	Al	Cu	Al	Cu	Al
4 × 1.5	11.2 14.0	164	296		12.1		20		27	
4 × 2.5	12.3 15.1	216	360		7.41		26		35	
4 × 4	13.6 16.4	289	448		4.61		34		45	
4 × 6	14.9 17.7	380	554		3.08		43		57	
4 × 10	16.7 19.5	550	745	302 496	1.83	3.08	60	47	77	59
4 × 16	19.1 21.9	802	1025	408 630	1.15	1.91	83	64	105	80
4 × 25	23.0 25.8	1185	1452	579 846	0.727	1.20	105	82	125	100
4 × 35	25.9 28.7	1589	1889	733 1033	0.524	0.86 8	125	100	155	120
4 × 50	28.9 31.9	2061	2412	912 1262	0.387	0.64 1	160	125	185	145
4 × 70	32.7 37.3	2894	3656	1226 1987	0.268	0.44 3	200	155	225	175
4 × 95	37.3 42.1	3911	4796	1622 2507	0.193	0.32 0	245	200	270	210
4 × 120	41.1 46.1	4893	5887	2009 3002	0.153	0.25 3	285	220	310	240
4 × 150	45.5 50.7	6123	7242	2482 3601	0.124	0.20 6	325	250	345	270
4 × 185	50.5 55.5	7588	8797	3071 4280	0.091	0.16 4	375	295	390	305
4 × 240	56.6 62.2	9800	1124 1	3906 5347	0.0754	0.12 5	440	345	450	335

0.6/1 kV 4+1-Core Cross-Linked Polyethylene Insulated and Sheathed Power Cable

Nominal	Calculated outer diameter of cable mm		Calculated cable weight, kg/km		Conductor DC resistance at 20 °C, Ω/km			In air	Cable current carrying capacity	Directly buried under ground
Cross-section, mm²	Cable construction Am armoured pamo	Cu armoured pamo	Al Cable construction Am armoured		Cu	Al	Cu	Al	Cu	Al
4×4+2.5	14.4 17.2	327 495			4.61		34		45	
4×6+4	15.8 18.6	434 620			3.08		43		57	
4×10+6	17.7 20.5	625 832			1.83		60		77	
4×16+10	20.3 23.1	917 1154	459	695	1.15	1.91	83	64	105	80
4×25+16	24.8 27.6	1372 1659	664	952	0.727	1.20	105	82	125	100
4×35+16	26.9 29.7	1758 2071	801	1113	0.524	0.86 8	125	100	155	120
4×50+25	31.0 35.6	2354 3080	1044	1770	0.387	0.64 1	160	125	185	145
4×70+35	35.0 39.6	3281 4095	1390	2203	0.268	0.44 3	200	155	225	175
4×95+50	40.0 44.6	4465 5389	1848	2772	0.193	0.32 0	245	200	270	210
4×120+70	44.0 49.0	5627 6690	2290	3352	0.153	0.25 3	285	220	310	240
4×150+70	48.6 53.6	6893 8060	2799	3966	0.124	0.20 6	325	250	345	270
4×185+95	53.9 59.5	8586 9964	3461	4838	0.0991	0.16 4	375	295	390	305
4×240+120	60.3 65.7	11073 12575	4413	5914	0.0754	0.12 5	440	345	450	355

0.6/1 kV 3+2-Core Cross-Linked Polyethylene Insulated and Sheathed Power Cable

Cross-section, mm²					Calculated cable weight, kg/km		20°C conductor at 20°C			In air	Cable current carrying capacity	Directly buried under ground
of conductor mm 3×4+2×2.5	Cable construction 14.1	Am pamo 16.9	o amoured 309	Cu Am 479	Al pamo	pamo	Cu 4.61	Al	Cu 34	Al	Cu 45	Al
3×6+2×4	15.5	18.3	413	595			3.08		43		57	
3×10+2×6	17.3	20.1	584	787			1.83		60		77	
3×16+2×10	19.7	22.5	856	1087	433	663	1.15	1.91	83	64	105	80
3×25+2×16	23.4	26.2	1266	1539	609	881	0.727	1.20	105	82	125	100
3×35+2×16	25.5	28.3	1567	1864	722	1018	0.524	0.868	125	100	155	120
3×50+2×25	30.8	35.2	2173	2876	990	1692	0.387	0.641	160	125	185	145
3×70+2×35	35.0	39.6	3028	3842	1330	2144	0.268	0.443	200	155	225	175
3×95+2×50	39.8	44.6	4114	5057	1742	2684	0.193	0.320	245	200	270	210
3×120+2×70	44.0	49.0	5263	6327	2194	3257	0.153	0.253	285	220	310	240
3×150+2×70	48.4	53.4	6254	7419	2617	3782	0.124	0.206	325	250	345	270
3×185+2×95	53.7	58.9	7862	9176	3258	4572	0.091	0.164	375	295	390	305
3×240+2×120	59.9	65.5	10070	11598	4118	5645	0.0754	0.125	440	345	450	335

0.6/1 kV Five-Core Cross-Linked Polyethylene Insulated and Sheathed Power Cable

Nominal		Calculated outer diameter of cable mm			Calculated cable weight, kg/km	20°° C	Conductor DC resistance at 20 °C, Ω/km		In ar	Cable current-carrying capacity, A	under ground
Cross-section, mm²	Cable construcion panour	Am pano	Cable constructon	Cu Arm pano	Al Cable constructi9m panoue pamo	Cu	Al	Cu	Al	Cu	Al
5×1.5	12.0		192			12.1		20		27	
5×2.5	13.2		255			7.41		26		35	
5×4	14.7	17.5	344	516		4.61		34		45	
5×6	16.7	18.9	456	645		3.08		43		57	
5×10	18.1	20.9	666	878	356 567	1.83	3.08	60	47	77	59
5×16	20.8	23.6	978	1221	486 728	1.15	1.91	83	64	105	80
5×25	25.6	28.4	1465	1763	708 1005	0.727	1.20	105	82	125	100
5×35	28.3	31.3	1952	2295	881 1224	0.524	0.868	125	100	155	120
5×50	33.1	37.9	2595	3387	1158 1950	0.387	0.641	160	125	185	145
5×70	36.2	40.8	3593	4433	1507 2347	0.268	0.443	200	155	225	175
5×95	41.5	46.7	4863	5891	2002 3030	0.193	0.320	245	200	270	210
5×120	45.7	50.9	6084	7208	2478 3603	0.153	0.253	285	220	310	240
5×150	50.7	55.7	7635	8849	3084 4298	0.124	0.206	325	250.	345	270
5×185	56.4	61.8	9462	10869	3816 5222	0.099 1	0.164	375	295	390	305
5×240	62.9	68.5	12201	13795	4834 6427	0.075 4	0.125	440	345	450	335

Medium-Voltage Cable Voltage, Core Count and Cross-Section Ranges

	Category A,B	3.6/6k V	6/10k V	8.7/15k V	12/20k V	18/30k V	21/35k V
	Category C	6.6k V	8.7/10k V	12/15k V	18/20k V		26/35k V
Single core		10-1200mm	16-1200mm	25-1200mm	35-1200mm	50-1200mm	50-1200mm
Three-core		10-400mm	16-400mm	25-400mm	50-400mm	50-400mm	50-400mm

Medium-Voltage Test Voltage and Partial Discharge Data

			6/6 6/10	8.7/10 8.7/15	12/20	18/20 18/30	21/35	26/35
		Test voltage k V	21	31	42	63	74	16
	Voltage test	Test time min.						
B		Test voltage k V	10.4	15.1	20.8	31.2	36.4	45
	Partial discharge test	Discharge quantity	10	10	10	10	10	10

6/6 and 6/10 kV Single-Core Cross-Linked Polyethylene Insulated Power Cable

		Sheath			Calculated	20° °C	DC-resistance of			Cable current-carrying capacity, A				Short circuit current k A/IS	
Cross-section, mm²	tion thick Cable constn	thick Cable constn tion	Calcu iouter lated dianm		weight of ca ble kg/km		at20 °C Ω/km		In air	Directly buried under ground		Condu ctor			Shiel d
conductor mm	mm	mm	eter of cable mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape	Cul Wire
25	3.4	1.8	20.1	611	457	0.7 27	1.200	165	130	160	120	3.69	2.4 2	1.083	3.506
35	3.4	1.8	21.1	728	513	0.5 24	0.868	205	155	190	145	5.15	3.3 7	1.082	3.501
50	3.4	1.8	22.4	897	590	0.3 87	0.641	245	190	225	175	7.31	4.7 9	1.079	3.496
70	3.4	1.8	24.3	611 1	689	0.2 68	0.443	305	235	275	215	10.2	6.6 8	1.077	3.491
95	3.4	1.8	25.6	138 4	800	0.1 93	0.320	370	290	330	255	13.8	9.6 8	1.077	5.449
120	3.4	1.8	27.0	164 4	907	0.1 53	0.253	430	335	375	290	17.4	11. 4	1.077	5.449
150	3.4	1.9	28.8	196 7	1045	0.1 24	0.206	490	380	425	330	21.7	14. 2	1.076	5.440
185	3.4	1.9	30.2	231 6	1179	0.0 991	0.164	560	435	480	370	26.7	17. 5	1.251	7.590
240	3.4	2.0	32.8	288 5	1411	0.0 754	0.125	665	515	555	435	34.6	22. 6	1.250	7.583
300	3.4	2.1	35.2	349 4	1651	0.0 601	0.100	765	595	630	490	43.1	28. 2	1.246	7.560
400	3.4	2.2	38.2	447 5	2108	0.0 470	0.078	890	695	725	565	57.4	37. 6	1.245	7.553
500	3.4	2.3	42.4	550 8	2437	0.0 366	0.0605	103 0	810	825	650	71.7	47. 0	1.244	7.547

6/6 and 6/10 kV Three-Core Cross-Linked Polyethylene Insulated Power Cable

					Calculated	20° °C	DC resistance of			Cable current carrying capacity A				Short circuit current k A/IS
Cross-section, mm²	tion thick Cable constr	thick Cable consn ction	Calcu lated outer diam		weight of cable kg/km		at 20°C Ω/km			under ground			Conduc tor	Shield
mm	mm	mm	eler of cable mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape
25	3.4	2.3	39.9	194 9	1487	0.7 27	1.200	120	90	125	100	3.6 9	2.42	2.958
35	3.4	2.3	42.1	230 1	1654	0.5 24	0.868	140	110	155	120	5.1 5	3.37	2.958
50	3.4	2.4	45.1	285 7	1933	0.3 87	0.641	165	130	180	140	7.3 1	4.79	2.958
70	3.4	2.6	49.0	360 8	2314	0.2 68	0.443	210	165	220	170	10. 2	6.68	2.958
95	3.4	2.7	52.6	447 6	2720	0.1 93	0.320	355	200	265	210	13. 8	9.68	2.958
120	3.4	2.8	55.8	532 7	3109	0.1 53	0.253	290	225	300	235	17. 4	11.4	2.958
150	3.4	2.9	59.5	634 1	3569	0.1 24	0.206	330	255	340	360	21. 7	14.2	2.958
185	3.4	3.0	62.7	747 0	4051	0.0 991	0.164	375	295	380	300	26. 7	17.5	3.301
240	3.4	3.2	68.3	929 3	4857	0.0 754	0.125	435	345	435	345	34. 6	22.6	3.301
300	3.4	3.3	73.2	112 06	5661	0.0 601	0.100	495	390	485	390	43. 1	28.2	3.301
400	3.4	3.6	79.9	143 46	6054	0.0 470	0.078	555	435	535	435	57. 4	37.6	3.301
500	3.4	3.5				0.0 366	0.0605	615	480	585	480	71. 7	47.0	3.301

6/6 and 6/10 kV Single-Core Steel-Tape Armoured Cross-Linked Polyethylene Power Cable

		Sheath			C'alculated	20° °C	D resistance of			Cablecurrent-carrying capacity A				Shortcircuitcurrent k A/IS
Cross-section, mm²	tion thick Cable constn	thick Cable consin ction	Laicu lated tiobuter		weight of cable kgkm		conductor at20 °C Ω/km		In air				Condu ctor	Shield
mm`	lutu	mm	eter of cable Cable construo	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape
25	3.4	2.4	44.7	292 4	2462	0.7 27	1.200	120	90	125	100	3.6 9	2.42	2.958
35	3.4	2.5	47.1	335 1	2704	0.5 24	0.868	140	110	155	120	5.1 5	3.37	2.958
50	3.4	2.6	50.3	400 4	3080	0.3 87	0.641	165	130	180	140	7.3 1	4.79	2.958
70	3.4	2.7	54.2	484 9	3555	0.2 68	0.443	210	165	220	170	10. 2	6.68	2.958
95	3.4	2.8	57.8	580 5	4049	0.1 93	0.320	255	200	265	210	13. 8	9.68	2.958
120	3.4	2.9	61.2	676 4	4546	0.1 53	0.253	290	225	300	235	17. 4	11.4	2.958
150	3.4	3.0	65.1	790 2	5130	0.1 24	0.206	330	255	340	260	21. 7	14.2	2.958
185	3.4	3.1	68.3	911 1	5692	0.0 991	0.164	375	295	380	300	26. 7	17.5	3.301
240	3.4	3.3	74.1	111 12	6676	0.0 754	0.125	435	345	435	345	34. 6	22.6	3.301
300	3.4	3.5	79.4	132 26	7681	0.0 601	0.100	495	390	485	390	43. 1	28.2	3.301
400	3.4	3.8	87.5	174 37	10045	0.0 470	0.0778	555	435	535	435	57. 4	37.6	3.301

6/6 and 6/10 kV Three-Core Steel-Wire Armoured Cross-Linked Polyethylene Power Cable

		Sheath		Calculated		20° °C	Dresistance of			Cablecurrent-carrying capacity A			Shortcircuitcurrent k A/IS	
Cross-section, mm²	tion thick Cable constr	thick Cable consin ction	lated criguter dian	weight of ca ble kg/km			conductor Al20°°C Ω/km		In air				Conductor	Shie ld
mm	mm	mm	eter of cable mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Tap e Cu
25	3.4	2.5	49.1	4280	381 8	0.7 27	1.200	120	90	125	100	3.6 9	2.42	2.95 8
35	3.4	2.6	51.5	4775	412 8	0.5 24	0.868	140	110	155	120	5.1 5	3.37	2.95 8
50	3.4	2.7	54.7	5525	460 1	0.3 87	0.641	165	130	180	140	7.3 1	4.79	2.95 8
70	3.4	2.8	58.6	6486	519 3	0.2 68	0.443	210	165	220	170	10. 2	6.68	2.95 8
95	3.4	2.9	62.2	7555	579 9	0.1 93	0.320	255	200	265	210	13. 8	9.68	2.95 8
120	3.4	3.0	65.6	8619	640 1	0.1 53	0.253	290	225	300	235	17. 4	11.4	2.95 8
150	3.4	3.1	69.4	9860	708 8	0.1 24	0.206	330	255	340	260	21. 7	14.2	2.95 8
185	3.4	3.3	72.9	11213	779 4	0.0 991	0.164	375	295	380	300	26. 7	17.5	3.30 1
240	3.4	3.5	80.0	14291	985 5	0.0 754	0.125	435	345	435	345	34. 6	22.6	3.30 1
300	3.4	3.6	85.1	16593	110 49	0.0 601	0.100	495	390	485	390	43. 1	28.2	3.30 1
400	3.4	3.9	91.9	20216	128 40	0.0 470	0.0778	555	435	535	435	57. 4	37.6	3.30 1

8.7/10 and 8.7/15 kV Single-Core Cross-Linked Polyethylene Insulated Power Cable

					Calculated	20° C	DC resistance of			Cable current-carrying capacity A				Short circuit current k A/IS	
Cross-section, mm²	Insulation thick Cable constr	thick Cable constn ction	(calculated outer diam		weight of cable kg/km		conductor at 20 °C Ω/km		In air	Directly buried under ground			Conductor	Shield	
mm² 25	mm 4.5	1.8	eler of cable mm 22.3	Cu 694	Al 540	Cu 0.72 7	Al 1.200	Cu 165	Al 130	Cu 160	Al 120	Cu 3.6 9	Al 2.42	(u Tape 1.094	Cu Wire 3.540
35	4.5	1.8	23.3	814	599	0.52 4	0.868	205	155	190	145	5.1 5	3.37	1.092	3.536
50	4.5	1.8	24.6	987	680	0.38 7	0.641	245	190	225	175	7.3 1	4.79	1.091	3.532
70	4.5	1.8	26.2	121 4	784	0.26 8	0.443	305	235	275	215	10. 2	6.68	1.090	3.527
95	4.5	1.8	27.8	148 5	901	0.19 3	0.320	370	290	330	255	13. 8	9.68	1.086	5.494
120	4.5	1.9	29.4	176 3	1026	0.15 3	0.253	430	335	375	290	17. 4	11.4	1.266	5.489
150	4.5	1.9	31.0	207 8	1157	0.12 4	0.206	490	380	425	330	21. 7	14.2	1.265	5.484
185	4.5	2.0	32.6	244 7	1310	0.09 91	0.164	560	435	480	370	26. 7	17.5	1.266	7.680
240	4.5	2.1	35.2	302 5	1551	0.07 54	0.125	665	515	555	435	34. 6	22.6	1.266	7.659
300	4.5	2.1	37.4	362 6	1784	0.06 01	0.100	765	595	630	490	43. 1	28.2	1.261	7.652
400	4.5	2.2	40.4	461 7	2161	0.04 70	0.0778	890	695	725	565	57. 4	37.6	1.256	7.622
500	4.5	2.3	44.6	566 4	2594	0.03 66	0.0605	103 0	810	825	650	71. 7	47.0	1.253	7.603

8.7/10 and 8.7/15 kV Three-Core Cross-Linked Polyethylene Insulated Power Cable

					Calculated	20° C	DC resistance of			Cable current-carrying capacity A				Short circuit current k A/S
Cross-section, mm²	tion thick Cable constr	thick Catle cons7uc tion	lated outer		weight of cable kg/km		conductor at20 °C Ω/km		Inai r		Directly buried		Cond uctor	Shield
mm 25	mm 4.5	mm 2.4	eler of cable mm 44.9	Cu 223 7	Al 1775	Cu 0.72 7	Al 1.200	Cu 120	Al 90	Cu 125	Al 100	Cu 3.6 9	Al 2.42	Cu Tape 2.958
35	4.5	2.5	57.2	264 1	1994	0.52 4	0.868	140	110	155	120	5.1 5	3.37	2.958
50	4.5	2.6	50.2	321 8	2204	0.38 7	0.641	165	130	180	140	7.3 1	4.79	2.958
70	4.5	2.7	53.9	397 0	2677	0.26 8	0.443	210	165	220	170	10. 2	6.68	2.958
95	4.5	2.8	57.6	486 2	3107	0.19 3	0.320	255	200	265	210	13. 8	9.68	2.958
120	4.5	2.9	60.8	573 3	3516	0.15 3	0.253	290	225	300	235	17. 4	11.4	2.958
150	4.5	3.0	64.6	679 8	4026	0.12 4	0.206	330	255	340	260	21. 7	14.2	2.958
185	4.5	3.1	67.9	794 9	4530	0.09 91	0.164	375	295	380	300	26. 7	17.5	3.301
240	4.5	3.3	73.2	977 4	5339	0.07 54	0.125	435	345	435	345	34. 6	22.6	3.301
300	4.5	3.5	78.4	117 53	6209	0.06 01	0.100	495	390	485	390	43. 1	28.2	3.301
400	4.5	3.7	84.8	148 97	7505	0.04 70	0.0778	555	435	535	435	59. 8	37.6	3.301

8.7/10 and 8.7/15 kV Three-Core Steel-Tape Armoured Cross-Linked Polyethylene Power Cable

						20°C	DC resistance of			Cable current-carrying capacity A				Short circuit current kA/IS
Cross-section, mm²	Insulation thickness of Cable	Cable construction	Rated voltage	Weight of cable kg/km			conductor at 20 °C Ω/km			under ground			Conductor	Shield
mm 25	mm 4.5	mm 2.6	Rated voltage of cable mm 50.1	Cu 3379	Al 2917	Cu 0.727	Al 1.200	Cu 120	Al 90	Cu 125	Al 100	Cu 3.69	Al 2.42	Cu Tape 2.958
35	4.5	2.6	52.2	3814	3167	0.524	0.868	140	110	155	120	5.15	3.37	2.958
50	4.5	2.7	55.4	4490	3556	0.387	0.641	165	130	180	140	7.31	4.79	2.958
70	4.5	2.9	59.5	5389	4096	0.268	0.443	210	165	220	170	10.2	6.68	2.958
95	4.5	3.0	63.2	6374	4619	0.193	0.320	255	200	265	210	13.8	9.68	2.958
120	4.5	3.1	66.6	7359	5141	0.153	0.253	290	225	300	235	17.4	11.4	2.958
150	4.5	3.2	70.4	8521	5749	0.124	0.206	330	255	340	260	21.7	14.2	2.958
185	4.5	3.3	73.7	9757	6338	0.0991	0.164	375	295	380	300	26.7	17.5	3.301
240	4.5	3.5	79.4	11794	7359	0.0754	0.125	435	345	435	345	34.6	22.6	3.301
300	4.5	3.7	86.0	14791	9247	0.0601	0.100	495	390	485	390	43.1	28.2	3.301
400	4.5	3.9	92.6	18218	10826	0.0470	0.0778	555	435	535	435	57.4	37.6	3.301

8.7/10 and 8.7/15 kV Three-Core Steel-Wire Armoured Cross-Linked Polyethylene Power Cable

		Sheath				20° °C	DCresistance of			Cablecurrent-carrying capacity A				Short circuit current k A/IS
Cross-section, mm²	tion thick Calble constn	thick Cabieconstnu tion	lated piouter	weight ofca ble kg/km			conductor Al20 °C Ω/km	In air		under ground			Conduc tor	Shield
conductor. mm	mm	mm	eter of cable	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape
25	4.5	2.7	54.5	4893	443 1	0.7 27	1.200	120	90	125	100	3.6 9	2.42	2.958
35	4.5	2.7	56.6	5398	475 1	0.5 24	0.868	140	110	155	120	5.1 5	3.37	2.958
50	4.5	2.9	60.0	6199	527 5	0.3 87	0.641	165	130	180	140	7.3 1	4.79	2.958
70	4.5	3.0	63.9	7188	589 5	0.2 68	0.443	210	165	220	170	10. 2	6.68	2.958
95	4.5	3.1	69.6	8283	652 7	0.1 93	0.320	255	200	265	210	13. 8	9.68	2.958
120	4.5	3.2	71.0	9372	715 4	0.1 53	0.253	290	225	300	235	17. 4	11.4	2.958
150	4.5	3.1	76.2	11533	876 1	0.1 24	0.206	330	255	340	260	21. 7	14.2	2.958
185	4.5	3.5	79.6	12916	949 7	0.0 991	0.164	375	295	380	300	26. 7	17.5	3.301
240	4.5	3.6	85.1	15162	107 27	0.0 754	0.125	435	345	435	345	34. 6	22.6	3.301
300	4.5	3.8	90.5	17540	119 96	0.0 601	0.100	495	390	485	390	43. 1	28.2	3.301
400	4.5	4.0	97.0	21167	137 75	0.0 470	0.0778	555	435	535	435	57. 4	37.6	3.301

12/20 kV Single-Core Cross-Linked Polyethylene Insulated Power Cable

						20°° C	DCresistance of			C'able current carrying capacity A			Shortcircuit current k A/S		
Nominal Cr OSS section of	Insula tion thick Cable constr	thick Cable constn- ction	(alcu lated tioouter				conductor at20 °C Ω/km		In air		Directly buried under ground	Cond- uctor		Shield	
mm 35	mm 5.5	mm 1.8	eier of cable mm 25.3	Cu 898	Al 683	Cu 0.52 4	Al 0.868	Cu 205	Al 155	Cu 190	Al 145	Cu 5.15	Al 3.3 7	'Tape Lu 1.096	Cu Wire 3.547
50	5.5	1.8	26.6	107 5	768	0.38 7	0.641	245	061	225	175	7.31	4.7 9	1.095	3.544
70	5.5	1.8	28.2	130 7	877	0.26 8	0.443	305	235	275	215	10.2	6.6 8	1.0901	3.533
95	5.5	1.9	30.0	159 6	101 3	0.19 3	0.320	370	290	330	255	13.8	9.6 8	1.272	5.512
120	5.5	2.0	31.6	188 0	114 3	0.15 3	0.253	430	335	375	290	17.4	11. 4	1.271	5.11
150	5.5	2.0	33.2	220 1	128 0	0.12 4	0.206	490	380	425	330	21.7	14. 2	1.270	5.506
185	5.5	2.1	34.8	257 5	143 9	0.09 91	0.164	560	435	480	370	26.7	17. 5	1.267	7.689
240	5.5	2.1	37.2	314 6	167 1	0.07 54	0.125	665	515	555	435	34.6	22. 6	1.266	7.682
300	5.5	2.2	39.6	377 1	192 9	0.06 01	0.100	765	595	630	490	43.1	28. 2	1.265	7.678
400	5.5	2.3	42.6	477 3	231 6	0.04 70	0.0778	890	695	725	565	57.4	37. 6	1.260	7.648
500	5.5	2.4	46.8	583 4	276 4	0.03 66	0.0605	103 0	810	825	650	71.7	47. 0	1.257	7.629

12/20 kV Three-Core Cross-Linked Polyethylene Insulated Power Cable

						20° C	DCresistance of			Cable current-carrying capacity, A				Short circuit current k A/IS
Cross-section, mm²	tion thick Cablecons	thick ction	Lalcu Cableconstucioguter lated diam				conductor al20 °C Ω/km		Inai r		Directly buried under ground		Condu ctor	Shield
mm 35	mm 5.5	mm 2.7	eler of cable mm 52.0	Cu 299 5	Al 234 8	Cu 0.52 4	Al 0.868	Cu 140	Al 110	Cu 155	Al 120	Cu 5.15	Al 3.37	Cu Tape 2.958
50	5.5	2.8	55.0	359 2	266 8	0.38 7	0.641	165	130	180	140	7.31	4.79	2.958
70	5.5	2.9	58.6	436 7	307 3	0.26 8	0.443	210	165	220	170	10.2	6.68	2.958
95	5.5	3.0	62.3	528 2	352 6	0.19 3	0.320	255	200	265	210	13.8	9.68	2.958
120	5.5	3.1	65.5	617 4	395 7	0.15 3	0.253	290	225	300	235	17.4	11.4	2.958
150	5.5	3.2	69.2	723 4	446 2	0.12 4	0.206	330	255	340	260	21.7	14.2	2.958
185	5.5	3.3	72.4	840 3	498 5	0.09 91	0.164	375	295	380	300	26.7	17.5	3.301
240	5.5	3.5	78.0	102 98	586 3	0.07 54	0.125	435	345	435	345	34.6	22.6	3.301
300	5.5	3.6	82.9	122 71	672 7	0.06 01	0.100	495	390	485	390	43.1	28.2	3.301
400	5.5	3.9	89.6	159 97	810 5	0.04 70	0.0778	555	435	535	435	59.8	37.6	3.301

12/20 kV Three-Core Steel-Tape Armoured Cross-Linked Polyethylene Power Cable

						20°C	Resistance of			Cable current-carrying capacity, A			Short circuit current kA/S	
Cross-section, mm²	Insulation thickness of cable	Thickness of conductor insulation	Rated outer diameter of cable	Weight of cable, kg/km	Al	Cu	conductor at 20°C Ω/km	Cu	Al				Conductor	Shield
mm² 35	mm 5.5	mm 2.8	Diameter of cable 57.2	Cu 4309	Al 3663	Cu 0.524	Al 0.868	Cu 140	Al 110	Cu 155	Al 120	Cu 5.15	Al 3.37	Cu Tape 2.958
50	5.5	2.9	60.4	5009	4085	0.387	0.641	165	130	180	140	7.31	4.79	2.958
70	5.5	3.0	64.0	5873	4579	0.268	0.443	210	165	220	170	10.2	6.68	2.958
95	5.5	3.1	67.9	6923	5158	0.193	0.320	255	200	265	210	13.8	9.68	2.958
120	5.5	3.3	71.5	7954	5736	0.153	0.253	290	225	300	235	17.4	11.4	2.958
150	5.5	3.4	75.2	9111	6339	0.124	0.206	330	255	340	260	21.7	14.2	2.958
185	5.5	3.5	78.6	10402	6983	0.100	0.164	375	295	380	300	26.7	17.5	3.301
240	5.5	3.7	85.6	13321	8885	0.0754	0.125	435	345	435	345	34.6	22.6	3.301
300	5.5	3.9	90.9	15565	10021	0.0601	0.100	495	390	485	390	43.1	28.2	3.301
400	5.5	4.1	97.6	19044	11652	0.0470	0.0778	555	435	535	435	57.4	37.6	3.301

12/20 kV Three-Core Steel-Wire Armoured Cross-Linked Polyethylene Power Cable

					Calculated	20 °C	DCresistance of			Cable current-carrying capacity, A				Shortcircuit current kA/IS	
Cross-section, mm²	tion thick Cable cons1	thick Cable constnction	Calcu lated tibuter		weight ofcable kgkm		conductor at20°C Ω/km		Inai r		Directly buried under ground		Cond uctor		Shi eld
conductor mm	mm	mm	eter of cable mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape	Lu Wir e
50	8.0	2.0	32.0	1351	1044	0.387	0.641	245	190	225	175	7.31	4.79	1.284	3.563
70	8.0	2.0	33.6	1596	1166	0.268	0.443	305	235	275	215	10.2	6.68	1.281	3.554
95	8.0	2.1	35.4	1061	1318	0.193	0.320	370	285	330	255	13.8	9.68	1.280	5.548
120	8.0	2.1	36.8	2182	1445	0.153	0.253	125	330	375	290	17.4	11.4	1.279	5.544
150	8.0	2.2	38.6	2533	1611	0.124	0.206	485	375	420	325	21.7	14.2	1.278	5.541
185	8.0	2.2	40.0	2902	1766	0.0991	0.164	555	430	475	370	26.7	17.5	1.275	7.736
240	8.0	2.3	42.6	3511	2037	0.0754	0.125	650	505	555	430	34.6	22.6	1.274	7.730
300	8.0	2.4	45.0	4157	2315	0.0601	0.100	745	580	630	490	43.1	28.2	1.271	7.713
400	8.0	2.5	48.0	5185	2728	0.0470	0.0778	870	680	720	565	57.4	37.6	1.27	7.706

18/20 and 18/30 kV Three-Core Cross-Linked Polyethylene Insulated Power Cable

Nominal	Insula	Sheath	Calcu			20° °C	Dresistance of			Cable current-carrying capacity, A				Short circuit current k A/IS
Cross-section, mm²	lion thick mm	thick Caxle oonsruc uction mm	lated outer diam eler				conductor at20 °C Ω/km		Inai r	Directly buried under ground			Conduc tor	Shield
mm²			of cable mm	Cu	IV	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Tape Cu Cu Wire
50	8.0	3.1	66.4	460 0	367 5	0.3 87	0.641	220	061	225	175	7.3 1	4.79	1.284 3.563
70	8.0	3.3	70.2	546 2	416 9	0.2 68	0.443	305	235	275	215	10. 2	6.68	1.281 3.554
95	8.0	3.4	73.9	633 5	468 0	0.1 93	0.320	370	285	330	255	13. 8	9.68	1.280 5.548
120	8.0	3.5	77.1	737 9	516 1	0.1 53	0.253	125	330	375	290	17. 4	11.4	1.279 5.544
150	8.0	3.6	80.8	849 7	572 5	0.1 24	0.206	485	375	420	325	21. 7	14.2	1.278 5.541
185	8.0	3.7	84.0	971 7	629 8	0.0 991	0.164	555	430	475	370	26. 7	17.5	1.275 7.736
240	8.0	3.9	89.6	117 00	726 5	0.0 754	0.125	650	505	555	430	34. 6	22.6	1.274 7.730
300	8.0	4.0	94.5	137 51	820 7	0.0 601	0.100	745	580	630	490	43. 1	28.2	1.271 7.713
400	8.0	4.2	101.0	170 38	964 6	0.0 470	0.0778	870	680	720	565	57. 4	37.6	1.27 7.706

18/20 and 18/30 kV Three-Core Steel-Tape Armoured Cross-Linked Polyethylene Power Cable

				Calculated		20° °C	DCresistance of			Cablecurrent-carrying capacity A				Short circuit current KA/IS
Cr OSS section of	tion thick Cable constr	thick ction	(alcul ated diam	weight of ca ble kg/km			conductor at20 °C Ω/km		Inai r		Directly buried under ground		Condu ctor	Shield
nm'	mm	mm	eter of cable mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape
50	8.0	3.3	72.4	6403	547 9	0.3 87	0.641	220	168	228	176	7.3 1	4.79	2.958
70	8.0	3.4	76.2	7366	607 2	0.2 68	0.443	272	212	280	216	10. 2	6.68	2.958
95	8.0	3.6	81.3	9264	750 8	0.1 93	0.320	332	256	335	260	13. 8	9.68	2.958
120	8.0	3.7	84.7	10367	814 9	0.1 53	0.253	380	296	384	296	17. 4	11.4	3.301
150	8.0	3.8	88.6	11667	889 5	0.1 24	0.206	432	336	432	336	21. 7	14.2	3.301
185	8.0	3.9	91.8	13006	958 8	0.0 991	0.164	496	384	496	384	26. 7	17.5	3.301
240	8.0	4.1	97.6	15248	108 12	0.0 754	0.125	584	468	580	464	34. 6	22.6	3.301
300	8.0	4.2	102.7	17537	119 93	0.0 601	0.100	672	520	744	624	43. 1	28.2	3.301
400	8.0	4.5	109.6	21178	137 86	0.0 470	0.0778	796	624	776	672	57. 4	37.6	3.301

26/35 kV Single-Core Cross-Linked Polyethylene Insulated Power Cable

Nominal	Insula	Sheath	Calcu		Calculated	20° °C	D resistance of			Cablecurrent- carrying capacity A			Shon circuit current k A/IS	
Cross-section, mm²	tion thick Cable cons1r mm	thick Cable constn ction mim	lated iobuter dian eter		weight ofca ble kg/km		conductor al20°°C Ω/km		Inai r		Directly buried under ground		Cond uctor	Shi eld
mm¹			of cable mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape Cu Wire
50	10.5	2.1	37.2	165 7	1349	0.3 87	0.641	245	190	221	175	7.3 1	4.79	1.288 3.5 72
70	10.5	2.2	39.0	193 2	1501	0.2 68	0.443	305	235	270	215	10. 2	6.68	1.286 3.5 69
95	10.5	2.3	40.8	225 2	1668	0.1 93	0.320	370	285	323	255	13. 8	9.68	1.283 5.6 1
120	10.5	2.3	42.2	254 5	1807	0.1 53	0.253	425	330	366	290	17. 4	11.4	1.282 5.5 58
150	10.5	2.4	44.0	291 1	1990	0.1 24	0.206	485	375	412	325	21. 7	14.2	1.282 5.5 55
185	10.5	2.4	45.4	329 2	2156	0.0 991	0.164	555	430	466	370	26. 7	17.5	1.279 7.7 62
240	10.5	2.5	48.0	392 3	2449	0.0 754	0.125	650	505	541	430	34. 6	22.6	1.278 7.7 56
300	10.5	2.6	50.4	459 0	2747	0.0 601	0.100	745	580	611	490	43. 1	28.2	1.277 7.7 51
400	10.5	2.7	53.4	564 3	3186	0.0 470	0.0778	870	680	700	565	57. 4	37.6	1.274 7.7 30
500	10.5	2.9	60.3	718 9	4118	0.0 366	0.0605	100 0	790	801	645	71. 7	47.0	7.7 26

26/35 kV Single-Core Armoured Cross-Linked Polyethylene Insulated Power Cable

				Calculated		20° °C	DCresistanceof			Cablecurrent-carrying capacity A				Shor circuit current k AIS
Cross-section, mm²	Insula tion thick Cable constr	thick Cabeconsintiouter tion	lated diam	weight of ca ble kg/km			conductor Al20 °C Ω/km						Condu ctor	Shield
mm'	mm	mm	eter ofcable mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape
50	10.5	3.5	78.0	5817	489 3	0.3 87	0.641	220	168	212	165	7.3 1	4.79	2.958
70	10.5	3.6	81.6	6206	541 2	0.2 68	0.443	272	212	259	201	10. 2	6.68	2.958
95	10.5	3.7	85.3	7735	597 9	0.1 93	0.320	332	256	309	240	13. 8	9.68	2.958
120	10.5	3.9	88.7	8768	655 1	0.1 53	0.253	380	296	350	272	17. 4	11.4	3.301
150	10.5	4.0	92.4	9944	717 2	0.1 24	0.206	432	336	393	305	21. 7	14.2	3.301
185	10.5	4.1	95.6	11215	779 6	0.0 991	0.164	496	384	443	345	26. 7	17.5	3.301
240	10.5	4.2	101.0	13241	880 6	0.0 754	0.125	584	468	512	400	34. 6	22.6	3.301
300	10.5	4.4	106.1	15415	987 1	0.0 601	0.100	672	520	576	451	43. 1	28.2	3.301
400	10.5	4.6	112.6	18804	114 12	0.0 470	0.0778	796	624	654	516	57. 4	37.6	3.301

26/35 kV Three-Core Steel-Tape Armoured Cross-Linked Polyethylene Power Cable

		Sheath		Calculated		20° °C	DCresistance of			Cable current-carrying capacity, A				Short circuit current KA/IS
Cross-section, mm²	lion thick Cable constr	thick Cable constru l lon	Laicu lated diam	weight ofcable kg/km			conductor at20°°C Ω/km		Inai r		Directly buried under ground		Cond uctor	Shield
mm`	mm	mm	ofcable eter mm	Cu	IV	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape
50	10.5	3.7	85.6	8840	791 6	0.3 87	0.641	214	161	229	160	7.3 1	4.79	2.958
70	10.5	3.8	89.4	9907	861 3	0.2 68	0.443	285	200	255	196	10. 2	6.68	2.958
95	10.5	4.0	93.3	11118	936 2	0.1 93	0.320	318	239	303	235	13. 8	9.68	2.958
120	10.5	4.1	96.7	12280	100 63	0.1 53	0.253	363	274	343	264	17. 4	11.4	3.301
150	10.5	4.2	100.6	13647	108 75	0.1 24	0.206	411	310	385	296	21. 7	14.2	3.301
185	10.5	4.3	103.8	15041	116 22	0.0 991	0.164	467	354	433	334	26. 7	17.5	3.301
240	10.5	4.5	109.6	17381	129 46	0.0 754	0.125	545	414	530	387	34. 6	22.6	3.301
300	10.5	4.6	114.7	19758	142 14	0.0 601	0.100	618	470	565	435	43. 1	28.2	3.301
400	10.5	4.9	121.6	23578	161 26	0.0 470	0.0778	711	549	635	498	57. 4	37.6	3.301

26/35 kV Three-Core Steel-Wire Armoured Cross-Linked Polyethylene Power Cable

		Sheath				20° °C	DCresistance of			Cable current-carrying capacity, A				Short circuit current KA/IS
Cr OSS section of conductor	tion thick	thick Cable consru uetion	laled triouter				conductor at20°°C Ω/km				Directly buried under ground		Condu ctor	Shield
mm	mm	mm	eler of cable mm	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu Tape
50	10.5	3.8	90.1	115 86	106 62	0.3 87	0.641	214	161	229	160	7.3 1	4.79	2.958
70	10.5	4.0	94.1	128 24	115 30	0.2 68	0.443	285	200	255	196	10. 2	6.68	2.958
95	10.5	4.1	97.8	141 10	123 54	0.1 93	0.320	318	239	303	235	13. 8	9.68	2.958
120	10.5	4.2	101.2	153 83	131 66	0.1 53	0.253	363	274	343	264	17. 4	11.4	3.301
150	10.5	4.3	105.0	168 54	140 82	0.1 24	0.206	411	310	385	296	21. 7	14.2	3.301
185	10.5	4.4	108.3	183 71	149 52	0.0 991	0.164	467	354	433	334	26. 7	17.5	3.301
240	10.5	4.6	114.1	208 96	164 61	0.0 754	0.125	545	414	530	387	34. 6	22.6	3.301
300	10.5	4.7	119.2	234 44	179 00	0.0 601	0.100	618	470	565	435	43. 1	28.2	3.301
400	10.5	5.0	126.0	273 97	200 05	0.0 470	0.0778	711	549	635	498	57. 4	37.6	3.301

Low-Smoke Low-Toxicity Flame-Retardant Cable Characteristics

, % Smoke density	PH Value	≤, μs/mm Conductance	Flame retardant grade	Toxin index	Ro Hs ppm Ro Hs Restriction
70	4.3	10	A、B、C、D		
	PBDE≤1000				

Low-Smoke Zero-Halogen Power Cable Size and Core Ranges

Main conductor	4	6	10	16	25	35	50	70	95	120	150	185	240	300
Neutral conductor	2.5	4	6	10	16	16	25	35	50	70	70	95	120	150

Low-Smoke Zero-Halogen Power Cable Main Technical Data

Nominal cross	Conductor DC resistance at 20 °C, Ω/km		Nominal cross	Conductor DC resistance at 20 °C, Ω/km	
section mm	Copper	Aluminum	sectionmm	Copper	Aluminum
1.5	12.1		95	0.193	0.320
2.5	7.41		120	0.153	0.253
4	4.61		150	0.124	0.206
6	3.08		185	0.0991	0.164

Low-Smoke Zero-Halogen Power Cable Conductor DC Resistance

	Ratedvoltagek VU/U Test voltagek V	0.6/1 3.5	1.8/3 6.5	3.6/6 12.6	6/6 6/10 21	8.7/10 8.7/15 30.5	12/20 42	18/20 18/30 63	21/35 73.5	26/35 91
Voltage test	Test time min	5	5		5	5	5	5		5
	Test voltagek V			6.3	10.4	15.1	20.8	31.2	36.4	45
Partial discharge test	dischargecapacity<p C			10	10	10	10	10	10	10



HEBEI HUIKE CABLE

Powering dependable connections
