



WIRES AND CABLES FOR ELECTRICAL EQUIPMENT





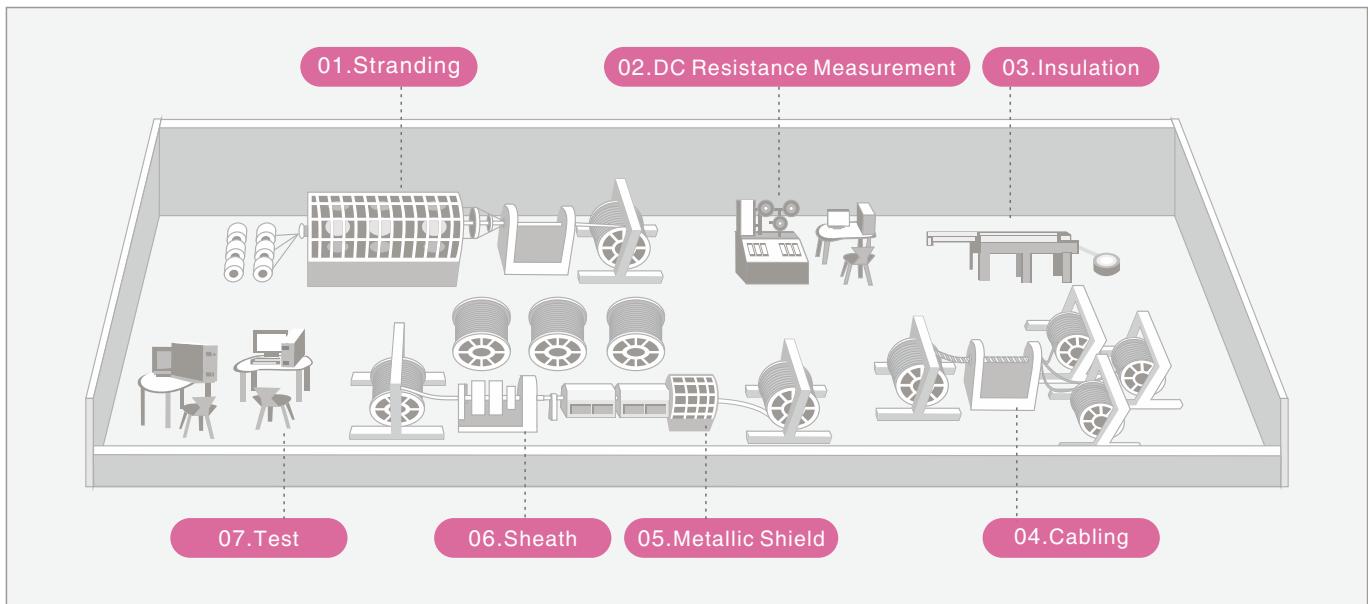
Huatong Cable Inc. was founded in 1993 in Luoyang, Henan Province, the venerable historical capital that has been sacred ground since the late Neolithic period and known for its beautiful peonies. Luoyang was among the first "National Historical and Cultural Cities" listed by the State Council, and also the most important industrial city in central China. Born during the rapid industrialization of China, Huatong Cable Inc. has made notable contributions to the development of State Grid Corporation of China, China Southern Power Grid Company and other power enterprises at home and abroad. The honors Huatong has won are well-deserved, thanks to its determined pursuit of product innovation, painstaking efforts to serve the customers and strong will to forge ahead into the future for over twenty years.

Huatong Cable Inc. is comprised of the Overhead Conductor Business Division, the Power Cable Division and the Business Division for Wires and Cables of Electrical Equipment. All three divisions are responsible for the manufacturing and sales of their respective products. In 2002, the Division for Cable Industrial Design and Technology R&D was established to provide product design and R&D support for the company. As a complement to its independent research, and in order to meet specific requirements of individual customers as well as market demand for special cables, Huatong has also sought cooperation with Shanghai Electric Cable Research Institute and China Electric Power Research Institute, among other academic institutions. So far the company enjoys 25 exclusive rights to use registered trade mark and 14 patents of proprietary intellectual property rights, among which, ACSR-720/50 has passed the technical evaluation by the China Electricity Council while its EHV(Extra High Voltage) conductor at 1000kV+ has been put into production and use, with satisfactory performance.

Products of Huatong Cable Inc. are widely applicable in power transmission, transport, energy and urban construction, etc. It adopts the team marketing method and has set up regional sales sections, with more than a hundred sales outlets and hundreds of salespersons capable of optimizing customer satisfaction all over China. Our partners are not limited to state-owned electric power companies: we have provided high quality products for China Datang Corporation, China Huaneng Group, China Guodian Corporation, China Power Investment Corporation, Sinopec Group, China National Petroleum Corporation, etc., as well. In addition, the company has also been the supplier for national key projects like the Qinghai-Tibet Railway, the Wuhan-Guangzhou Railway, the West-East Natural Gas Transmission, the South-to-North Water Diversion and the Three Gorges Dam. International partners include America, India, Burma, the Philippines, Australia, Nigeria, Kenya, Ghana, South Africa, Brazil and Chile, among other countries. Huatong becomes increasingly well-known and has won the trust of more and more customers.

In 2013, the Huatong brand was awarded the "China Famous Trade Mark" by the Trademark Office of China's State Administration of Industry and Commerce, which eloquently demonstrates Huatong's brand influence and prestige among Chinese customers. Huatong is also the first Henan-based brand to have won such an honor. In 2015 Huatong Cable was successfully listed on NEEQ stock market, which is bound to further enhance the company's reputation and help it expand in an accelerated yet steady manner. Huatong Cable Inc. is dedicated to improve itself by contributing to the customer's progress. It seeks to strengthen its strategic partnership with customers with business model innovation, product portfolio restructuring and development of environmentally-friendly high quality products. With this objective in mind, Huatong Cable Inc. will continue its unwavering efforts to better serve the customer and embrace the future.

CRAFTSMANSHIP



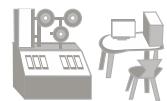
01 Stranding

Strand drawn wires into stranded conductor.



02 DC Resistance Measurement

The measurement of the semi-finished conductor can avoid the low quality.



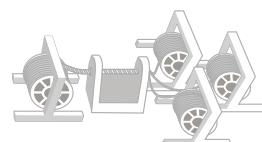
03 Insulation

Extrude the conductor with the XLPE raw material surrounding it, material cross link under high- temperature and high-pressure, then cooled to be insulation.



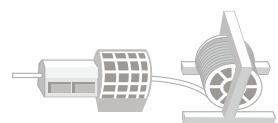
04 Cabling

The process to bunch several insulated conductors into one.



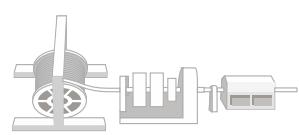
05 Metallic Shield

Weave metal material surrounding the conductors to protect internal magnetic field.



06 Sheath

Extrude the cable after surround the semi-finished armored insulated conductors with melting PVC or PE.



07 Test

Wires and Cables for Electrical Equipment are widely used in grid terminals, can be put into the market only after strict testing.



A high-speed train, likely a Shinkansen, is shown at a station platform. The train is white with a blue stripe and has its headlights illuminated. Above the train, a complex network of overhead electrical lines and insulators is visible, stretching across the frame. The platform area includes a red signal light and some yellow signs.

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WIRES AND CABLES FOR ELECTRICAL EQUIPMENT

PVC Insulated Cable

Plastic insulated wire is mainly for fixed installation and widely applicable in connecting the lighting, electrical equipment and telecommunication equipment of AC 450/750V– Rated Voltage. It is both heat proof and flame retardant.



Plastic Insulated Control Cable

It is used mainly for controlling, monitoring interlock circuits and protecting the circuits, responsible for transmitting controls and signals and widely applicable in petrochemical engineering, urban rail transit and data communications, etc. The control cable is able to safeguard the power supply and production system operation, whose role even outweighs that of the power cable trunk. In recent years in view of the rigid control of primary and secondary disasters after the fire in the field of industrial and civil equipment, we have developed different control cables that are fireproof, low-smoke, low-halogen and flame retardant.

General Rubber Sheathed Flexible Cable



It is used mainly in household appliances, electric machinery and all kinds of portable electrical equipment of AC 450/750V– Rated Voltage, which is applicable both indoors and outdoors.



Pvc Insulated Cable (wire)with Rated Voltage Up To And Including 450/750v

Including common cable,flame retardant cable,fire resistance cable and flame retardant cable

Standards Of The Products

GB/T 5023-2008, JB 8734(and enterprise standard) The production standard of flame retardant ,flame resisting, low smoke & halogen wire adopts the national standard of GB/T 19666-2005.

Product Usage

It applies to electrical appliances, instrument and telecom device with rated voltage up to and including 450/750 volts.The main features of the flame retardant cable or wire is hard to catch on fire or that the continuous burning of cables is very limited when it is on fire. It applies to places with special demands for flame retardant property. Flame retardant cable is classified as class A, B, C or D. Among the 4 class,calss A is best, while C worst.Fire-resistance cable can operate normally for some time when it is burning except that it can transmit electrical power under normal condition. It is used in places with special demands for fire resistance property. clients can select any tape of cable for practical needs.

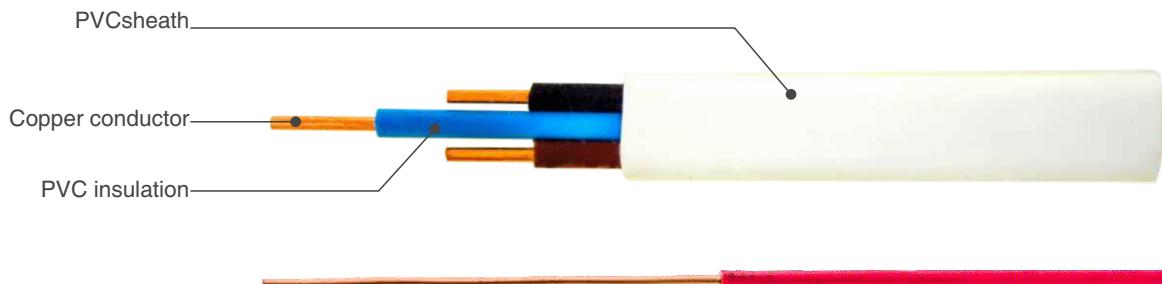
Main Characteristics Of Cable (wire)

- Rated voltage Uo/U is 450/750 volt, 300/500 volt or 300/300volt.
- Permissible continuous working temperature of cable conductor.- for type of cable RV-105 and BV-105, the temperature should be less than 105 .For others, the temperature should be not less than 70°C.
- Ambient temperature should be not less than 0°C.And permissible bending radius of cable for fixed connecting should be as follows during installation.for O.D. less than 25 millimeter, equal to or greater than 4times O.D.for O.D. not less than 25 millimeter, equal to or greater than 6 times O.D.
- Flame retardant cable should pass the test of bunched cables or wires under fire condition which is described in the standards of GB/T 8380.3-2001 or IEC60332-1.
- Low smoke, low halogen, flame retardant cable should pass the test of flame retardant described in GB/T 19216.21-2003 or IEC 60331.
- Furthermore, its optic-pentrated rate shall be not less than 30 percent, while the release value of HCL gas not larger than100mg/g.

Type And Name

- BV - Copper core PVC insulated cable (electric wire)
- BVR -Copper core PVC insulated soft cable (electric wire)
- BVV--Copper-core PVC insulating PVC sheathed round cable
- BVVB-Copper-core PVC insulating PVC sheathed flat cable
- BV-90-Copper-core PVC insulated cable with90°C of heat resistance
- RV - Copper core PVC insulated connection soft cable (electric wire)
- RVS -Copper core PVC insulated coil-buckling connection cable (electric wire)

- RVV -Copper core PVC insulated PVC sheathed round connection soft cable
- RVVP-RVVP--Copper core PVC insulated, plaited and shielded PVC sheath soft cable
- RVVB-Copper core PVC insulated PVC sheathed flat connection soft cable
- RV-90°C Copper-core PVC insulated connection soft cable with 90°C of heat resistance



Key Technical Parameter

● BV(60227IEC05,01) ZR-BV

● 300/500V,450/750V

Rated Voltage V	Nominal Crosssection mm ²	Conductor Type	Upper limit of O.D. mm	Maximum D.C.resistance at 20°C Ω./Km.	Minium Insulation resistance at 70°C MΩ./Km.	Recommended Ampacity A	Reference Weight of cable kg/km
300/600	0.5	1	2.4	36	0.015	13	8.3
	0.75	1	2.6	24.5	0.012	17	10.9
	0.75*	5	2.8	24.5	0.014	17	11.8
	1	1	2.8	18.1	0.011	20	13.7
	1.0*	2	3	18.1	0.013	20	14.8
450/750	1.5	1	3.3	12.1	0.0110	25	20.0
	1.5	2	3.4	12.1	0.0100	25	21.3
	2.5	1	3.9	7.41	0.0100	34	31.5
	2.5	2	4.2	7.41	0.0090	34	34.4
	4	1	4.4	4.61	0.0085	44	46.8
	4	2	4.8	4.61	0.0077	44	50.0
	6	1	4.9	3.08	0.0070	58	66.7
	6	2	5.4	3.08	0.0065	58	71.0
	10	2	6.8	1.83	0.0065	79	118.0
	16	2	8	1.15	0.0050	111	178.0
	25	2	9.8	0.727	0.0050	146	280.0
	35	2	11	0.524	0.0040	180	378
	50	2	13	0.387	0.0045	282	508
	70	2	15	0.268	0.0035	281	717
	95	2	17	0.193	0.0035	344	991
	120	2	19	0.153	0.0032	397	1228
	150	2	21	0.124	0.0032	456	1511
	185	2	23.5	0.0991	0.0032	519	1894
	240	2	26.5	0.0754	0.0032	592	2468
	300	2	29.5	0.0601	0.0030	685	3089
	400	2	33.5	0.047	0.0028	799	3935

● BV-105 (227 IEC 07型) ZR-BV-90

● 300/500V

Nominal Coss section mm ²	Upper limit of O.D. mm	Maximum D.C.resistance at 20 °C Ω ./Km.	Minimum insulation resistance at 70 °C MΩ ./Km.	Recommended Ampacity A	Reference weight of cable kg/km
0.5	2.4	36	0.015	13	9.3
0.75	2.6	24.5	0.013	17	12
1	2.8	18.1	0.012	20	15
1.5	3.3	12.1	0.011	25	20
2.5	3.9	7.41	0.099	34	32

● BVR ZR-BVR

● 450/750V

Nominal Cosssection mm ²	Upper limit of O.D. mm	Maximum D.C.resistance at 20 °C Ω ./Km.	Minimum insulation resistance at 70 °C MΩ ./Km.	Recommended Ampacity A	Reference weight of cable kg/km
2.5	4.2	7.41	0.011	34	34
4	4.8	4.61	0.009	44	50
6	5.3	3.08	0.0084	58	72
10	6.8	1.83	0.0072	79	127
16	8.1	1.15	0.0062	111	184
25	10.2	0.727	0.0058	146	304
35	11.7	0.524	0.0052	180	399
50	13.9	0.387	0.0051	228	548
70	16	0.268	0.0045	281	739



● BVV,BLVV ZR-BVV,ZR-BLVV

● 300/500V

Nominal Crosssection (mm ²)	Nominal thickness of insulation (mm)	Sheath thickness (mm)	Approx.overall diameter (mm)	Maximum D.C.resistance at 20 °CΩ./Km.		Minimum Insulation resistance at 70°C MΩ./Km.	Current rating when laid in the air at 25°C (A).		Approx Weight of cable (kg/km)	
				Cu	Al		Cu	Al	Cu	Al
1	0.6	0.8	4.3	18.1	-	0.011	15	12	26	21
1.5	0.7	0.8	4.8	12.1	18.1	0.011	19	16	33	25
2.5	0.8	0.8	5.4	7.41	12.1	0.01	26	20	44	30
4	0.8	0.9	6.0	4.61	7.410	0.0085	34	28	62	38
6	0.8	0.9	6.6	3.08	4.610	0.007	44	35	84	50
10	1.0	0.9	8.2	1.83	3.080	0.007	62	48	138	79
16	1.0	1.0	9.7	1.15	1.910	0.005	85	65	204	108
25	1.2	1.2	11.7	0.727	1.200	0.005	110	87	315	163
35	1.2	1.2	12.9	0.524	0.868	0.004	135	105	415	203
50	1.4	1.4	15.2	0.387	0.641	0.0045	170	130	589	284
70	1.4	1.4	16.9	0.268	0.443	0.0035	220	165	790	362
95	1.6	1.6	19.6	0.193	0.320	0.0035	270	210	1060	487
120	1.6	1.6	21.1	0.153	0.253	0.0032	320	245	1305	578
150	1.8	1.6	23.3	0.124	0.206	0.0032	360	285	1615	705
185	2.0	1.8	26.0	0.0991	0.164	0.0032	425	325	2010	871
240	2.2	1.8	29.1	0.0754	0.125	0.0032	510	390	2560	1096
300	2.4	2.0	32.0	0.0601	0.100	0.003	570	435	3190	1354

● BVVB ZR-BVVB

● 300/500V

Nominal cross section	Conductor type	upper limit of O.D	Maximum D.C resistance at 20°C	Minimum insulation resistance at 70°C	Recommended ampacity	Reference weight of cable
mm ²		mm	Ω/km	MΩ·km	A	kg/km
2×0.75	1	4.6×7.1	24.5	0.012	13	42
2×1.0	1	4.8×7.4	18.1	0.011	16	49
2×1.5	1	5.3×8.3	12.1	0.011	20	65
2×2.5	1	6.2×10.1	7.41	0.01	27	97
2×4.0	1	6.9×11.5	4.61	0.008	38	140
2×6.0	1	7.8×13.0	3.08	0.0065	50	192
2×10	2	9.5×16.2	1.83	0.0065	69	306
3×0.75	1	4.6×9.6	24.5	0.012	9.5	60
3×1.0	1	4.8×10.1	18.1	0.011	11	70
3×1.5	1	5.3×11.7	12.1	0.011	13	95
3×2.5	1	6.2×14.0	7.41	0.01	21	142
3×4.0	1	7.1×16.3	4.61	0.008	27	213
3×6.0	1	7.8×18.2	3.08	0.0065	34	284
3×10	2	9.5×23.0	1.83	0.0065	55	457

● RV(60227IEC 06、02型) ZR-RV

● 300/500V,450/750V

Rated voltage	Nominal cross section	upper limit of O.D	Maximum D.C resistance at 20 °C	Minimum insulation resistance at 70 °C	Recommended ampacity	Reference weight of cable
V	mm ²	mm	Ω/km	M Ω·km	A	kg/km
300/500	0.3*	2.3	69.2	0.016	10	6.2
	0.4*	2.5	48.2	0.014	11.7	8
	0.5	2.6	39	0.013	13.3	9
	0.75	2.8	26	0.011	17	12.2
	1	3	19.5	0.01	20	14.8
450/750	1.5	3.5	13.3	0.01	25.4	21.6
	2.5	4.2	7.98	0.009	34.5	34
	4	4.8	4.95	0.007	44.5	50
	6	6.4	3.3	0.006	58.3	75
	10	8	1.91	0.0056	79.5	132
	16	9.4	1.21	0.0046	111	197
	25	11.5	0.78	0.0044	146	289
	34	13	0.554	0.0038	180	380
	50	15	0.386	0.0037	225	549
	70	17.5	0.272	0.0032	280	754

● RVV(60227IEC 52\53型)ZR-RVV

● 300/300V,300/500V

Rated voltage	Nominal cross section	upper limit of O.D	Maximum D.C resistance at 20°C	Minimum insulation resistance at 70°C	Recommended ampacity	Reference weight of cable
V	mm ²	mm	Ω/km	M Ω·km	A	kg/km
300/300	2×0.5	6.2	39	0.012	10	37
	2×0.75	6.6	26	0.01	13	47
	3×0.5	6.6	39	0.012	7.4	44
	3×0.75	7	26	0.01	9.5	58
300/500	2×0.75	7.6	26	0.011	13	58
	2×1.0	8	19.5	0.01	16	66
	2×1.5	9	13.3	0.01	20	89
	2×2.5	11	7.98	0.009	27.5	137
	3×0.75	8	26	0.011	9.5	70
	3×1.0	8.4	19.5	0.01	11.7	80
	3×1.5	9.8	13.3	0.01	12.7	112
	3×2.5	11.5	7.98	0.009	21	172
	4×0.75	8.6	26	0.011	10	84
	4×1.0	9.4	19.5	0.01	12	101
	4×1.5	11	13.3	0.01	13	141
	4×2.5	13	7.98	0.009	21	210
	5×0.75	9.6	26	0.011	10	103
	5×1.0	11	19.5	0.01	12	119
	5×1.5	12	13.3	0.01	13	172
	5×2.5	14	7.98	0.009	22	257

● RVVB ZR-RVVB

● 300/300V,300/500V

Rated voltage	Nominal cross section	upper limit of O.D.	Maximum D.C resistance at 20°C	Minimum insulation resistance at 70°C	Recommended ampacity	Reference weight of cable
V	mm ²	mm	Ω/km	M Ω·km	A	kg/km
300/300	2×0.5	3.8×6.0	39	0.012	10	28
	2×0.75	3.9×6.4	26	0.01	13	35
300/500	2×0.75	5.0×7.6	26	0.01	13	44

● RV-90 (60227 IEC 08型) ZR-RV-90

● 300/500V

Nominal cross section	Upper limit of O.D.	Maximum D.C. resistance at 20°C	Minimum insulation resistance at 70 °C	Recommended ampacity A	Reference weight of cable
mm ²	mm	Ω/km	M Ω·km		kg/km
0.5	2.6	39.0	0.013	13.3	10.0
0.75	2.8	26.0	0.012	17.0	13.3
1.0	3.0	19.5	0.010	20.0	16.0
1.5	3.5	13.3	0.009	25.4	21.6
2.5	4.2	7.98	0.009	34.5	34.0

● RVS ZR-RVS

● 300/300V

Nominal cross section	Upper limit of O.D.	Maximum D.C. resistance at 20°C	Minimum insulation resistance at 70 °C	Recommended ampacity A	Reference weight of cable
mm ²	mm	Ω /km	M Ω ·km		kg/km
2×0.3	4.3	69.2	0.016	7.4	13.4
2×0.4	4.6	48.2	0.014	9.0	17
2×0.5	6.0	39.0	0.016	10	24
2×0.75	6.2	26.0	0.014	13	31
2×1	6.6	19.5	0.011	16	34
2×1.5	7.2	13.3	0.010	20	45
2×2.5	8.2	7.98	0.009	27	65

● RVVP ZR-RVVP

● 300/300V

Number of cores×Nominal cross section	Reference overall diameter of cable	Reference weight of cable	Maximum D.C. resistance at 20°C	Minimum insulation resistance at 70°C
mm ²	mm	kg/km	Ω /km	M Ω ·km
2×0.5	6.0	48.3	39.0	0.012
2×0.75	7.0	63.2	26.0	0.010
2×1.0	7.5	73.0	19.5	0.010
2×1.5	8.4	92.9	13.3	0.009
2×2.5	9.0	136.5	7.98	0.008
2×4.0	11.8	209.5	4.95	0.007
2×6.0	13.4	263.2	3.30	0.006
3×0.5	6.6	58.3	39.0	0.012
3×0.75	7.3	76.9	26.0	0.010
3×1.0	8.1	87.6	19.5	0.010
3×1.5	9.1	117.6	13.3	0.009
3×2.5	9.8	169.1	7.98	0.008
3×4.0	12.7	247.7	4.95	0.007
3×6.0	14.3	318.7	3.30	0.006
4×0.5	7.3	65.7	39.0	0.012
4×0.75	8.7	88.3	26.0	0.010
4×1.0	9.2	105.3	19.5	0.010
4×1.5	10.8	145.3	13.3	0.009
4×2.5	11.8	212.3	7.98	0.008
4×4.0	14.2	295.3	4.95	0.007
4×6.0	17.4	388.6	3.30	0.006

● RVVP ZR-RVVP

● 300/300V

Number of cores×Nominal cross section	Reference overall diameter of cable	Reference weight of cable	Maximum D.C. resistance at 20°C	Minimum insulation resistance at 70°C
mm ²	mm	kg/km	Ω /km	M Ω ·km
5×0.5	9.0	80.5	39.0	0.012
5×0.75	10.1	121.6	26.0	0.010
5×1.0	10.5	128.4	19.5	0.010
5×1.5	12.8	178.1	13.3	0.009
5×2.5	13.8	267.8	7.98	0.008
5×4.0	15.9	378.8	4.95	0.007
5×6.0	17.9	496.2	3.30	0.006
7×0.5	10.5	103.8	39.0	0.012
7×0.75	11.9	141.8	26.0	0.010
7×1.0	12.5	164.3	19.5	0.010
7×1.5	15.0	227.1	13.3	0.009
7×2.5	16.7	338.0	7.98	0.008
7×4.0	19.4	475.0	4.95	0.007
7×6.0	21.8	639.8	3.30	0.006
10×0.5	12.9	149.1	39.0	0.012
10×0.75	15.4	195.9	26.0	0.010
10×1.0	15.8	243.2	19.5	0.010
10×1.5	19.4	321.3	13.3	0.009
10×2.5	22.6	492.6	7.98	0.008
10×4.0	26.3	683.1	4.95	0.007

Note:

1. For fireproof cable, the value such as O.D., insulation resistance, current capacity and reference weight will be varied from the above table.
2. Type in the bracket denotes the standard type of IEC 60227.

Plastic Insulated (shield) Cable With Voltage Up To 450/750v

Including common cable, flame retardant cable, fire resistance cable and low smoke, low halogen, flame retardant cable

Standards Of The Products

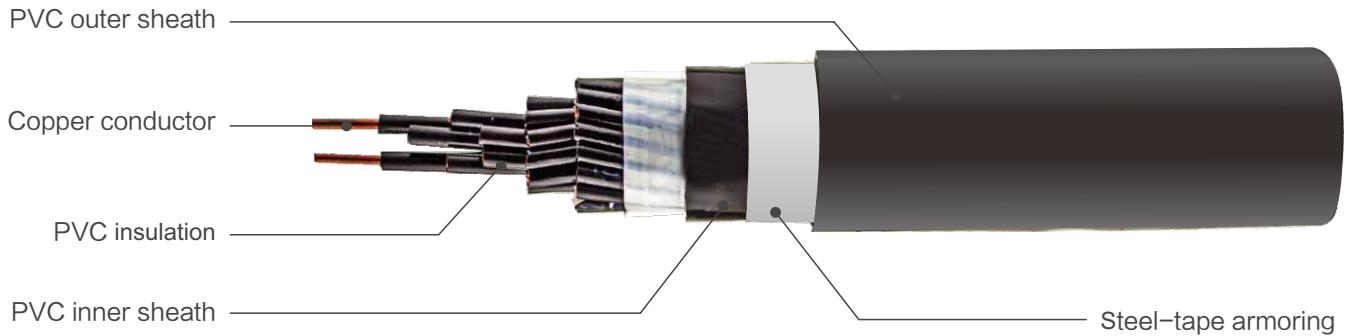
- The cable is manufactured in accordance with the standards of GB/T9330-2008. It can also be produced according to special requirements put forward by clients.
- Besides the standards mentioned above, the flame retardant property should be classified as per the standard stipulated in GA306.1 or GB/T19666 and can further be classified as per standard stipulated in GB/T18380 which can be classified into class A,B,C and D. Among the 4 classes, Class A is the best. Clients can select any type of cable for their practical needs.
- Fire resistance property should be in accordance with the standard of GA306.2 and GB/T19666. Clients can choose any type of cable for practical needs.
- The product standard of low smoke halogen free flame retardant cable is GB/T9330-2008 and GB/T19666, the rate of light transmission is not less than 60% as per GB/T17651.2.

Main Characteristics Of Cable (wire)

- Rated voltage Uo/U is 450/750 volts.
- Permissible continuous working temperature of cable conductor is 70°C.
- Ambient temperature is not lower than 0°C and its minimum bending radius is as follows when cable is installed:
for non-armored cable-not less than 6times O.D.
for armored or copper tape shielded cable -not less than 12 times.
for shielded flexible cable -not less than 6times O.D.
Note: Denotes the overall diameter of cable, unit: millimeter.

Characteristics And Application Of The Products

- PVC insulated PVC sheathed control cable is used to connect electronic equipment. It applies to controlling, monitoring and protective system with A.C.rated voltage Uo /U up to and including 450/750 volts.
- The main features of the flame retardant PVC controled cable is difficult to catch on fire or that the continuous burning of cables is very limited when it is on fire. It applies to the places withj special demands of flane retardant property.
- Fireproof cable can operate normally for some time when it is burning except that it can transmit electrical power under normal condition. It is used in the places necessary to resist fire.
- The feature of low-smoke halogen free flame retardant electric wire(cable) is also very low smoke emission and harmless(low



Type

KVV —— copper core PVC insulated PVC sheathed control cable
 KVVP₂ —— copper core PVC insulated PVC sheathed copper tape screen control cable
 KVVP —— copper core PVC insulated PVC sheathed copper-wire shied control cable
 KVV₂₂ —— copper core PVC insulated PVC sheathed steel tape armored control cable
 KVV₃₂ —— copper core PVC insulated PVC sheathed steel wire armored control cable
 KVVP₂₋₂₂ —— copper core PVC insulated PVC sheathed copper tape screen, steel tape armored control cable
 KVVR —— copper core PVC insulated PVC cover control sofe cable
 KYJV —— XLPE insulated PVC sheathed control cable
 KYJVP —— XLPE insulated PVC sheathed and braiding screen control cable
 KYJVP₂ —— XLPE insulated PVC sheathed and copper tape shield control cable
 KYJV₂₂ —— XLPE insulated PVC sheathed steel tape armoured control cable
 KYJVP₂₋₂₂ —— XLPE insulated PVC sheathed and copper tape shield steel tape armoured control cable
 KYJV₃₂ —— XLPE insulated PVC sheathed steel wire armoured control cable
 KYJY —— XLPE insulated PE sheathed control cable
 KYJYP —— XLPE insulated PE sheathed braiding screen control cable
 KYJYP₂ —— XLPE insulated PE sheathed copper tape shield control cable
 KYJY₂₃ —— XLPE insulated PE sheathed steel tape armoured control cable
 KYJYP₂₋₂₃ —— XLPE insulated PE sheathed copper tape shield steel tape armoured control cable
 KYJY₃₃ —— XLPE insulated PE sheathed steel wire armoured control cable

- Type of the flame retardant cable: ZR or Z before the model of common control cable.
- Type of the fire resistance cable: Plus NH or N before the type of common control cable.
- Type of the low smoke halogen free fire resistance cable: Plus WDZ before the type of common control cable.

Key Technical Parameter

● KVV,ZR-KVV

Number of cores×Nominal cross section	Type of conductor	Reference overall diameter of cable	Reference weight of cable	Maximum D.C. resistance at 20°C	Minimum insulation resistance at 70°C
mm ²		mm	kg/km	Ω/km	MΩ·km
2×0.75	1	7.2	61	24.5	0.012
2×0.75	2	7.5	65	24.5	0.014
2×1.0	1	7.5	69	18.1	0.011
2×1.0	2	7.8	74	18.1	0.013
2×1.5	1	8.4	90	12.1	0.011
2×1.5	2	8.8	95	12.1	0.010
2×2.5	1	9.6	124	7.41	0.010
2×2.5	2	10.2	135	7.41	0.009
2×4	1	10.6	164	4.61	0.0085
2×4	2	11.2	176	4.61	0.0077
2×6	1	11.6	215	3.08	0.0070
2×6	2	12.3	230	3.08	0.0065
2×10		15.7	377	1.83	0.0065
3×0.75	1	7.5	69	24.5	0.012
3×0.75	2	7.8	74	24.5	0.014
3×1.0	1	7.9	80	18.1	0.011
3×1.0	2	8.2	85	18.1	0.013
3×1.5	1	8.9	105	12.1	0.011
3×1.5	2	9.3	111	12.1	0.010
3×2.5	1	10.2	149	7.41	0.010
3×2.5	2	10.7	160	7.41	0.009
3×4	1	11.2	201	4.61	0.0085
3×4	2	11.8	213	4.61	0.0077
3×6	1	12.9	285	3.08	0.0070
3×6	2	13.7	301	3.08	0.0065
3×10		16.6	467	1.83	0.0065
4×0.75	1	8.1	85	24.5	0.012
4×0.75	2	8.4	90	24.5	0.014
4×1.0	1	8.5	99	18.1	0.011
4×1.0	2	8.9	105	18.1	0.013
4×1.5	1	9.6	131	12.1	0.011
4×1.5	2	10.0	139	12.1	0.010
4×2.5	1	11.1	188	7.41	0.010
4×2.5	2	11.7	203	7.41	0.009
4×4	1	12.8	274	4.61	0.0085
4×4	2	13.6	292	4.61	0.0077
4×6	1	14.1	365	3.08	0.0070
4×6	2	14.9	387	3.08	0.0065
4×10		18.2	606	1.83	0.0065
5×0.75	1	8.7	101	24.5	0.012
5×0.75	2	9.1	108	24.5	0.014
5×1.0	1	9.2	119	18.1	0.011
5×1.0	2	9.6	127	18.1	0.013
5×1.5	1	10.4	159	12.1	0.011
5×1.5	2	10.9	169	12.1	0.010
5×2.5	1	12.7	247	7.41	0.010
5×2.5	2	13.4	267	7.41	0.009
5×4	1	14.0	335	4.61	0.0085
5×4	2	14.8	357	4.61	0.0077
5×6	1	15.3	448	3.08	0.0070
5×6	2	16.3	477	3.08	0.0065
5×10		20.4	769	1.83	0.0065

● KVV,ZR-KVV

Number of cores× Nominal cross section	Type of conductor	Reference overall diameter of cable	Reference weight of cable	Maximum D.C. resistance at 20°C	Minimum insulation resistance at 70°C
mm ²		mm	kg/km	Ω/km	MΩ·km
7×0.75	1	9.4	125	24.5	0.012
7×0.75	2	9.8	134	24.5	0.014
7×1.0	1	9.9	148	18.1	0.011
7×1.0	2	10.4	158	18.1	0.013
7×1.5	1	11.3	201	12.1	0.011
7×1.5	2	11.8	213	12.1	0.010
7×2.5	1	13.7	313	7.41	0.010
7×2.5	2	14.5	338	7.41	0.009
7×4	1	15.1	431	4.61	0.0085
7×4	2	16.0	458	4.61	0.0077
7×6	1	16.7	584	3.08	0.0070
7×6	2	17.8	619	3.08	0.0065
7×10		22.2	1005	1.83	0.0065
8×0.75	1	10.1	144	24.5	0.012
8×0.75	2	10.5	154	24.5	0.014
8×1.0	1	10.6	170	18.1	0.011
8×1.0	2	11.1	182	18.1	0.013
8×1.5	1	12.8	249	12.1	0.011
8×1.5	2	13.3	264	12.1	0.010
8×2.5	1	14.8	362	7.41	0.010
8×2.5	2	15.6	391	7.41	0.009
8×4	1	16.3	498	4.61	0.0085
8×4	2	17.3	531	4.61	0.0077
8×6	1	18.4	692	3.08	0.0070
8×6	2	19.6	735	3.08	0.0065
8×10		24.1	1168	1.83	0.0065
10×0.75	1	11.6	176	24.5	0.012
10×0.75	2	12.2	189	24.5	0.014
10×1.0	1	12.9	226	18.1	0.011
10×1.0	2	13.6	242	18.1	0.013
10×1.5	1	14.8	306	12.1	0.011
10×1.5	2	15.5	325	12.1	0.010
10×2.5	1	17.2	447	7.41	0.010
10×2.5	2	18.2	483	7.41	0.009
10×4	1	19.5	634	4.61	0.0085
10×4	2	20.7	677	4.61	0.0077
10×6	1	21.5	858	3.08	0.0070
10×6	2	23.0	912	3.08	0.0065
10×10		28.4	1452	1.83	0.0065
12×0.75	1	12.6	212	24.5	0.012
12×0.75	2	13.2	227	24.5	0.014
12×1.0	1	13.3	251	18.1	0.011
12×1.0	2	13.9	269	18.1	0.013
12×1.5	1	15.2	342	12.1	0.011
12×1.5	2	15.9	363	12.1	0.010
12×2.5	1	17.7	504	7.41	0.010
12×2.5	2	18.8	544	7.41	0.009
12×4	1	20.1	720	4.61	0.0085
12×4	2	21.3	766	4.61	0.0077
12×6	1	22.2	980	3.08	0.0070
12×6	2	23.7	1039	3.08	0.0065

● KVV,ZR-KVV

Number of cores× nominal cross section	Type of conductor	Reference overall diameter of cable	Reference weight of cable	Max resistance of conductor at 20°C	Minimum insulation resistance at 70
mm ²		mm	kg/km	Ω/km	MΩ·km
14×0.75	1	13.2	240	24.5	0.012
14×0.75	2	13.8	256	24.5	0.014
14×1.0	1	13.9	285	18.1	0.011
14×1.0	2	14.6	305	18.1	0.013
14×1.5	1	15.9	390	12.1	0.011
14×1.5	2	16.7	413	12.1	0.01
14×2.5	1	18.6	577	7.41	0.01
14×2.5	2	19.8	623	7.41	0.009
14×4	1	21.1	826	4.61	0.0085
14×4	2	22.4	880	4.61	0.0077
14×6	1	23.4	1129	3.08	0.007
14×6	2	25	1197	3.08	0.0065
16×0.75	1	13.8	268	24.5	0.012
16×0.75	2	14.5	287	24.5	0.014
16×1.1	1	14.6	320	18.1	0.011
16×1.0	2	15.3	343	18.1	0.013
16×1.5	1	16.7	440	12.1	0.011
16×1.5	2	17.6	466	12.1	0.01
16×2.5	1	20	671	7.41	0.01
16×2.5	2	21.3	725	7.41	0.009
19×0.75	1	14.5	304	24.5	0.012
19×0.75	2	15.2	326	24.5	0.014
19×1.0	1	15.3	364	18.1	0.011
19×1.0	2	16.1	390	18.1	0.013
19×1.5	1	17.6	503	12.1	0.011
19×1.5	2	18.5	533	12.1	0.01
19×2.5	1	21.1	770	7.41	0.01
19×2.5	2	22.4	832	7.41	0.009
24×0.75	1	16.7	380	24.5	0.012
24×0.75	2	17.6	408	24.5	0.014
24×1.0	1	17.7	457	18.1	0.011
24×1.0	2	18.6	490	18.1	0.013
24×1.5	1	20.9	652	12.1	0.011
24×1.5	2	21.9	691	12.1	0.01
24×2.5	1	24.5	971	7.41	0.01
24×2.5	2	26.1	1105	7.41	0.009
27×0.75	1	17.1	412	24.5	0.012
27×0.75	2	17.9	441	24.5	0.014
27×1.0	1	18.1	496	18.1	0.011
27×1.0	2	19	532	18.1	0.013
27×1.5	1	21.3	709	12.1	0.011
27×1.5	2	22.4	751	12.1	0.01
27×2.5	1	25.1	1061	7.41	0.01
27×2.5	2	26.7	1147	7.41	0.009

● KVV,ZR-KVV

Number of cores×nominal cross section	Type of conductor	Reference overall diameter of cable mm	Reference weight of cable kg/km	Maxresistance of conductor at 20°C Ω/km	Minimum insulation resistance at 70°C MΩ·km
mm ²		mm	kg/km	Ω/km	MΩ·km
30×0.75	1	17.6	450	24.5	0.012
30×0.75	2	18.6	483	24.5	0.014
30×1.0	1	19.1	560	18.1	0.011
30×1.0	2	20.1	601	18.1	0.013
30×1.5	1	22.1	778	12.1	0.011
30×1.5	2	23.2	824	12.1	0.01
30×2.5	1	26	1167	7.41	0.01
30×2.5	2	27.6	1262	7.41	0.009
37×0.75	1	19.4	554	24.5	0.012
37×0.75	2	20.4	594	24.5	0.014
37×1.0	1	20.5	668	18.1	0.011
37×1.0	2	21.6	717	18.1	0.013
37×1.5	1	23.7	933	12.1	0.011
37×1.5	2	25	989	12.1	0.01
37×2.5	1	28	1408	7.41	0.01
37×2.5	2	29.8	1523	7.41	0.009
44×0.75	1	21.6	655	24.5	0.012
44×0.75	2	22.7	703	24.5	0.014
44×1.0	1	22.9	791	18.1	0.011
44×1.0	2	24.2	850	18.1	0.013
44×1.5	1	26.6	1107	12.1	0.011
44×1.5	2	28	1174	12.1	0.01
44×2.5	1	32.1	1717	7.41	0.01
44×2.5	2	34.2	1857	7.41	0.009
48×0.75	1	21.9	697	24.5	0.012
48×0.75	2	23.1	784	24.5	0.014
48×1.0	1	23.3	845	18.1	0.011
48×1.0	2	24.6	907	18.1	0.013
48×1.5	1	27	1184	12.1	0.011
48×1.5	2	28.5	1256	12.1	0.01
48×2.5	1	32.6	1840	7.41	0.01
48×2.5	2	34.7	1989	7.41	0.009
52×0.75	1	22.5	747	24.5	0.012
52×0.75	2	23.7	803	24.5	0.014
52×1.0	1	23.9	907	18.1	0.011
52×1.0	2	25.2	974	18.1	0.013
52×1.5	1	27.8	1274	12.1	0.011
52×1.5	2	29.3	1350	12.1	0.01
52×2.5	1	33.5	1980	7.41	0.01
52×2.5	2	35.7	2141	7.41	0.009
61×0.75	1	23.8	857	24.5	0.012
61×0.75	2	25.1	9.6	24.5	0.014
61×1.0	1	23.3	1043	18.1	0.011
61×1.0	2	26.7	1120	18.1	0.013
61×1.5	1	30.1	1510	12.1	0.011
61×1.5	2	31.7	1600	12.1	0.01
61×2.5	1	36	2320	7.41	0.01
61×2.5	2	38.3	2509	7.41	0.009

● KVVP,ZR-KVVP

Number of cores× nominal cross section	Reference overall diameter of cable	Reference weight of cable	Max resistance of conductor at 20 °C	Minimum insulation resistance at 70 °C
mm ²	mm	kg/km	Ω/km	M Ω·km
2×0.75	9.5	70.2	24.5	0.014
2×1.0	10.2	84.1	18.1	0.013
2×1.5	11.2	109	12.1	0.01
2×2.5	12	152	7.41	0.009
2×4	13.7	190	4.61	0.007
2×6	14.9	252	3.08	0.0065
2×10	18	405	1.83	0.0065
3×0.75	10	79	24.5	0.014
3×1.0	10.2	92	18.1	0.013
3×1.5	11.5	130	12.1	0.01
3×2.5	13	180	7.41	0.009
3×4	14.3	233	4.61	0.007
3×6	16.2	342	3.08	0.0065
3×10	19	494	1.83	0.0065
4×0.75	10.4	102	24.5	0.014
4×1.0	11	129	18.1	0.013
4×1.5	12	156	12.1	0.01
4×2.5	14.3	223	7.41	0.009
4×4	15.9	318	4.61	0.007
4×6	17.3	417	3.08	0.0065
4×10	21.2	641	1.83	0.0065
5×0.75	11	123	24.5	0.014
5×1.0	11.3	142	18.1	0.013
5×1.5	13	187	12.1	0.01
5×2.5	15.9	293	7.41	0.009
5×4	17	387	4.61	0.007
5×6	18.5	512	3.08	0.0065
5×10	23.3	809	1.83	0.0065

● KVVP,ZR-KVVP

Number of cores×nominal cross section	Reference overall diameter of cable	Reference weight of cable	Max resistance of conductor at 20 °C	Minimum insulation resistance at 70 °C
mm ²	mm	kg/km	Ω/km	M Ω·km
7×0.75	12	151	24.5	0.014
7×1.0	12.4	178	18.1	0.013
7×1.5	14	235	12.1	0.01
7×2.5	16.9	266	7.41	0.009
7×4	18.1	491	4.61	0.007
7×6	19.9	662	3.08	0.0065
7×10	25.1	1055	1.83	0.0065
8×0.75	13	174	24.5	0.014
8×1.0	13.7	204	18.1	0.013
8×1.5	16	287	12.1	0.01
8×2.5	17.9	421	7.41	0.009
8×4	19.2	563	4.61	0.007
10×0.75	14.9	207	24.5	0.014
10×1.0	15.9	256	18.1	0.013
10×1.5	17.9	355	12.1	0.01
10×2.5	20.3	515	7.41	0.009
12×0.75	15	252	24.5	0.014
12×1.0	16.1	297	18.1	0.013
12×1.5	18.1	393	12.1	0.01
12×2.5	21	579	7.41	0.009
14×0.75	16.4	284	24.5	0.014
14×1.0	16.9	337	18.1	0.013
14×1.5	19.1	450	12.1	0.01
14×2.5	21.7	663	7.41	0.009

● KVVP,ZR-KVVP

Number of cores× nominal cross section	Reference overall diameter of cable	Reference weight of cable	Max resistance of conductor at 20℃	Minimum insulation resistance at 70℃
mm ²	mm	kg/km	Ω/km	M Ω·km
16×0.75	15.4	315	24.5	0.014
16×1.0	15	378	18.1	0.013
16×1.5	18.3	506	12.1	0.01
16×2.5	21.5	770	7.41	0.009
19×0.75	17	361	24.5	0.014
19×1.0	18	427	18.1	0.013
19×1.5	20.7	573	12.1	0.01
19×2.5	24.1	877	7.41	0.009
24×0.75	18.9	446	24.5	0.014
24×1.0	20.5	535	18.1	0.013
24×1.5	23.9	736	12.1	0.01
24×2.5	27.5	1155	7.41	0.009
27×0.75	20.2	481	24.5	0.014
27×1.0	20.9	574	18.1	0.013
27×1.5	23.9	796	12.1	0.01
27×2.5	27.5	1199	7.41	0.009
30×0.75	20.8	523	24.5	0.014
30×1.0	21.9	644	18.1	0.013
30×1.5	25..1	869	12.1	0.01
30×2.5	28.9	1315	7.41	0.009

● KVVP,ZE-KVVP

Number of cores× nominal cross section	Reference overall diameter of cable	Reference weight of cable	Max resistance of conductor at 20℃	insulation resistance at 70℃
mm ²	mm	kg/km	Ω/km	M Ω·km
37×0.75	22.5	637	24.5	0.014
37×1.0	23.2	762	18.1	0.013
37×1.5	26.7	1039	12.1	0.01
37×2.5	30.9	1578	7.41	0.009
44×0.75	24.5	748	24.5	0.014
44×1.0	25.5	895	18.1	0.013
44×1.5	29.5	1229	12.1	0.01
44×2.5	34.9	1917	7.41	0.009
48×0.75	25	791	24.5	0.014
48×1.0	25.9	957	18.1	0.013
48×1.5	29.9	1309	12.1	0.01
48×2.5	35.4	2049	7.41	0.009
52×0.75	25×6	853\	24.5	0.014
52×1.0	26.5	1027	18.1	0.013
52×1.5	30.7	1405	12.1	0.01
52×2.5	36.3	2204	7.41	0.009
61×0.75	26.9	1054	24.5	0.014
61×1.0	27.8	1172	18.1	0.013
61×1.5	32.9	1657	12.1	0.01
61×2.5	38.3	2575	7.41	0.009

● KVVP₂, ZR-KVVP₂

Number of cores× Nominal cross section	Reference overall diameter of cable	Reference weight of cable	Max. resistance of conductor at 20°C	Minimum insulation resistance at 70°C
mm ²	mm	kg/km	Ω/km	MΩ·km
4×0.75	9.5	130	24.5	0.012
4×1.0	9.9	146	18.1	0.011
4×1.5	11.0	185	12.1	0.011
4×2.5	13.1	267	7.41	0.010
4×4	14.2	344	4.61	0.0085
4×6	15.5	442	3.08	0.0070
4×10	20.0	725	1.83	0.0065
5×0.75	10.1	150	24.5	0.012
5×1.0	10.6	169	18.1	0.011
5×1.5	12.4	234	12.1	0.011
5×2.5	14.1	317	7.41	0.010
5×4	15.4	412	4.61	0.0085
5×6	16.7	533	3.08	0.0070
5×10	21.8	882	1.83	0.0065
7×0.75	10.8	177	24.5	0.012
7×1	11.3	203	18.1	0.011
7×1.5	13.3	281	12.1	0.011
7×2.5	15.1	389	7.41	0.010
7×4	16.5	514	4.61	0.0085
7×6	18.1	676	3.08	0.0070
7×10	23.6	1128	1.83	0.0065
8×0.75	12.1	216	24.5	0.012
8×1.0	12.6	246	18.1	0.011
8×1.5	14.2	319	12.1	0.011
8×2.5	16.2	443	7.41	0.010
8×4	18.1	605	4.61	0.0085
8×6	19.8	794	3.08	0.0070
8×10	25.5	1302	1.83	0.0065
10×0.75	13.7	259	24.5	0.012
10×1.0	14.3	297	18.1	0.011
10×1.5	16.1	388	12.1	0.011
10×2.5	19.0	559	7.41	0.010
10×4	20.9	742	4.61	0.0085
10×6	22.9	977	3.08	0.0070
10×10	29.8	1611	1.83	0.0065
12×0.75	14.0	281	24.5	0.012
12×1.0	14.7	324	18.1	0.011
12×1.5	16.6	426	12.1	0.011
12×2.5	19.5	619	7.41	0.010
12×4	21.5	831	4.61	0.0085
12×6	23.6	1104	3.08	0.0070

● KVVP₂,ZR-KVVP₂

Number of cores× Nominal cross section	Reference overall diameter of cable	Reference weight of cable	Max.resistance of conductor at 20℃	Minimum insulation resistance at 70℃
mm ²	mm	kg/km	Ω/km	MΩ·km
14×0.75	14.6	312	24.5	0.012
14×1.0	15.3	361	18.1	0.011
14×1.5	17.3	478	12.1	0.011
14×2.5	20.4	699	7.41	0.010
14×4	22.5	943	4.61	0.0085
14×6	24.8	1259	3.08	0.007
16×0.75	15.2	344	24.5	0.012
16×1.0	16.0	400	18.1	0.011
16×1.5	18.1	533	12.1	0.011
16×2.5	21.4	781	7.41	0.010
19×0.75	15.9	384	24.5	0.012
19×1.0	16.7	449	18.1	0.011
19×1.5	19.4	618	12.1	0.011
19×2.5	22.5	887	7.41	0.010
24×0.75	18.1	473	24.5	0.012
24×1.0	19.5	572	18.1	0.011
24×1.5	22.3	768	12.1	0.011
24×2.5	25.9	1108	7.41	0.010
27×0.75	18.9	523	24.5	0.012
27×1.0	19.9	614	18.1	0.011
27×1.5	22.7	827	12.1	0.011
27×2.5	26.5	1201	7.41	0.010
30×0.75	19.5	565	24.5	0.012
30×1.0	20.5	666	18.1	0.011
30×1.5	23.4	900	12.1	0.011
30×2.5	27.4	1313	7.41	0.010
37×0.75	20.8	661	24.5	0.012
37×1.0	21.9	782	18.1	0.011
37×1.5	25.1	1065	12.1	0.011
37×2.5	30.0	1605	7.41	0.010
44×0.75	23.0	775	24.5	0.012
44×1.0	24.3	919	18.1	0.011
44×1.5	28.0	1256	12.1	0.011
44×2.5	33.5	1896	7.41	0.010
48×0.75	23.4	819	24.5	0.012
48×1.0	24.7	974	18.1	0.011
48×1.5	28.4	1336	12.1	0.011
48×2.5	34.0	2022	7.41	0.010
52×0.75	23.9	873	24.5	0.012
52×1.0	25.3	1040	18.1	0.011
52×1.5	29.8	1469	12.1	0.011
52×2.5	35.3	2198	7.41	0.010
61×0.75	25.2	990	24.5	0.012
61×1.0	26.7	1184	18.1	0.011
61×1.5	31.4	1677	12.1	0.011
61×2.5	37.4	2520	7.41	0.010

Number of cores× Nominal cross section	Reference overall diameter of cable	Reference weight of cable	Max.resistance of conductor at 20℃	Minimum insulation resistance at 70℃
mm²	mm	kg/km	Ω/km	MΩ·km
4×2.5	15.0	355	7.41	0.010
4×4	16.2	439	4.61	0.0085
4×6	17.4	545	3.08	0.0070
4×10	21.9	855	1.83	0.0065
5×2.5	16.0	410	7.41	0.010
5×4	17.3	514	4.61	0.0085
5×6	19.1	661	3.08	0.0070
5×10	23.7	1023	1.83	0.0065
7×0.75	13.4	270	24.5	0.012
7×1	13.8	299	18.1	0.011
7×1.5	15.2	370	12.1	0.011
7×2.5	17.1	489	7.41	0.010
7×4	18.5	624	4.61	0.0085
7×6	20.4	813	3.08	0.0070
7×10	25.5	1281	1.83	0.0065
8×0.75	14.0	297	24.5	0.012
8×1.0	14.6	331	18.1	0.011
8×1.5	16.1	413	12.1	0.011
8×2.5	18.1	550	7.41	0.010
8×4	20.1	723	4.61	0.0085
8×6	21.7	922	3.08	0.0070
8×10	27.4	1466	1.83	0.0065
10×0.75	15.6	351	24.5	0.012
10×1.0	16.2	392	18.1	0.011
10×1.5	18.1	494	12.1	0.011
10×2.5	20.9	683	7.41	0.010
10×4	22.8	878	4.61	0.0085
10×6	24.9	1126	3.08	0.0070
10×10	33.5	2144	1.83	0.0065
12×0.75	15.9	375	24.5	0.012
12×1.0	16.6	422	18.1	0.011
12×1.5	18.5	536	12.1	0.011
12×2.5	21.5	747	7.41	0.010
12×4	23.4	970	4.61	0.0085
12×6	25.5	1256	3.08	0.0070
14×0.75	16.5	409	24.5	0.012
14×1.0	17.2	763	18.1	0.011
14×1.5	19.7	610	12.1	0.011
14×2.5	22.4	831	7.41	0.010
14×4	24.4	1089	4.61	0.0085
14×6	26.7	1419	3.08	0.0070

● KVVP₂₋₂₂, ZR-KVVP₂₋₂₂

Number of cores× Nominal cross section	Reference overall diameter of cable	Reference weight of cable	Max. resistance of conductor at 20 °C	Minimum insulation resistance at 70 °C
mm ²	mm	kg/km	Ω/km	MΩ·km
16×0.75	17.2	445	24.5	0.012
16×1.0	17.9	506	18.1	0.011
16×1.5	20.5	670	12.1	0.011
16×2.5	13.4	920	7.41	0.010
19×0.75	17.8	489	24.5	0.012
19×1.0	19.0	576	18.1	0.011
19×1.5	21.3	744	12.1	0.011
19×2.5	24.4	1032	7.41	0.010
24×0.75	20.5	611	24.5	0.012
24×1.0	21.4	699	18.1	0.011
24×1.5	24.2	912	12.1	0.011
24×2.5	27.9	1275	7.41	0.010
27×0.75	20.8	646	24.5	0.012
27×1.0	21.8	743	18.1	0.011
27×1.5	24.6	974	12.1	0.011
27×2.5	28.4	1371	7.41	0.010
30×0.75	21.4	692	24.5	0.012
30×1.0	22.4	799	18.1	0.011
30×1.5	25.4	1052	12.1	0.011
30×2.5	29.3	1489	7.41	0.010
37×0.75	22.7	796	24.5	0.012
37×1.0	23.8	924	18.1	0.011
37×1.5	27.0	1227	12.1	0.011
37×2.5	33.1	2092	7.41	0.010
44×0.75	24.9	923	24.5	0.012
44×1.0	26.2	1075	18.1	0.011
44×1.5	31.7	1757	12.1	0.011
44×2.5	37.0	2472	7.41	0.010
48×0.75	25.3	970	24.5	0.012
48×1.0	26.6	1133	18.1	0.011
48×1.5	32.2	1845	12.1	0.011
48×2.5	37.6	2607	7.41	0.010
52×0.75	25.9	1027	24.5	0.012
52×1.0	27.2	1203	18.1	0.011
52×1.5	32.9	1952	12.1	0.011
52×2.5	38.5	2767	7.41	0.010
61×0.75	27.2	1153	24.5	0.012
61×1.0	28.6	1356	18.1	0.011
61×1.5	34.6	2187	12.1	0.011
61×2.5	40.5	3122	7.41	0.010

● KVV₂₂, ZR-KVV₂₂

Number of cores× Nominal cross section	Kind of conductor	Reference overall diameter of cable mm	Reference weight of cable kg/km	Max. resistance of conductor at 20°C Ω/km	Minimum insulation resistance at 70°C MΩ·km
mm ²		mm	kg/km	Ω/km	MΩ·km
4×2.5	1	16.4	423	7.41	0.001
4×4	1	17.6	512	4.61	0.0085
4×6	1	18.8	624	3.08	0.0070
4×10	2	23.3	948	1.83	0.0065
5×2.5	1	17.4	483	7.41	0.001
5×4	1	18.7	592	4.61	0.0085
5×6	1	20.5	746	3.08	0.0070
5×10	2	25.1	1123	1.83	0.0065
7×0.75	1	14.8	329	24.5	0.012
7×1	1	15.2	361	18.1	0.011
7×1.5	1	16.6	439	12.1	0.011
7×2.5	1	18.4	566	7.41	0.010
7×4	1	19.9	708	4.61	0.0085
7×6	1	21.8	904	3.08	0.0070
7×10	2	26.9	1387	1.93	0.0065
8×0.75	1	15.4	360	24.5	0.012
8×1.0	1	16.0	396	18.1	0.011
8×1.5	1	17.5	486	12.1	0.011
8×2.5	1	19.5	632	7.41	0.010
8×4	1	21.5	813	4.61	0.0085
8×6	1	13.1	1020	3.08	0.0070
8×10	2	28.8	1579	1.83	0.0065
10×0.75	1	17.0	421	24.5	0.012
10×1.0	1	17.6	466	18.1	0.011
10×1.5	1	19.5	576	12.1	0.011
10×2.5	1	22.3	776	7.41	0.010
10×4	1	24.2	980	4.61	0.0085
10×6	1	26.3	1237	3.08	0.0070
10×10	2	33.7	1974	1.83	0.0065
12×0.75	1	17.3	447	24.5	0.012
12×1.0	1	18.0	497	18.1	0.011
12×1.5	1	19.9	620	12.1	0.011
12×2.5	1	22.9	843	7.41	0.010
12×4	1	24.8	1076	4.61	0.0085
12×6	1	26.9	1371	3.08	0.0070
14×0.75	1	17.9	484	24.5	0.012
14×1.0	1	18.6	541	18.1	0.011
14×1.5	1	21.1	693	12.1	0.011
14×2.5	1	23.8	932	7.41	0.010
14×4	1	25.8	1199	4.61	0.0085
14×6	1	28.1	1540	3.08	0.0070
16×0.75	1	18.6	523	24.5	0.012
16×1.0	1	19.3	587	18.1	0.011
16×1.5	1	21.9	762	12.1	0.011
16×2.5	1	24.8	1025	7.41	0.010

● KVV₂₂, ZR-KVV₂₂

Number of cores x Nominal cross section	Kind of conductor	Reference overall diameter of cable	Reference weight of cable	Max. resistance of conductor at 20°C	Minimum insulation resistance at 70°C
mm ²		mm	kg/km	Ω/km	MΩ·km
19x0.75	1	19.2	570	24.5	0.012
19x1.0	1	20.4	660	18.1	0.011
19x1.5	1	22.7	840	12.1	0.011
19x2.5	1	25.8	1142	7.41	0.010
24x0.75	1	20.7	640	24.5	0.012
24x1.0	1	22.8	795	18.1	0.011
24x1.5	1	25.6	1021	12.1	0.011
24x2.5	1	29.3	1401	7.41	0.010
27x0.75	1	22.2	739	24.5	0.012
27x1.0	1	23.2	841	18.1	0.011
27x1.5	1	26.0	1085	12.1	0.011
27x2.5	1	29.8	1500	7.41	0.010
30x0.75	1	22.8	788	24.5	0.012
30x1.0	1	23.8	899	18.1	0.011
30x1.5	1	26.8	1166	12.1	0.011
30x2.5	1	30.7	1621	7.41	0.010
37x0.75	1	24.1	898	24.5	0.012
37x1.0	1	25.2	1031	18.1	0.011
37x1.5	1	28.4	1349	12.1	0.011
37x2.5	1	34.5	2247	7.41	0.010
44x0.75	1	26.3	1036	24.5	0.012
44x1.0	1	27.6	1194	18.1	0.011
44x1.5	1	31.9	1611	12.1	0.011
44x2.5	1	38.4	2642	7.41	0.010
48x0.75	1	26.7	1084	24.5	0.012
48x1.0	1	28.0	1254	18.1	0.011
48x1.5	1	33.6	1996	12.1	0.011
48x2.5	1	39.0	2780	7.41	0.010
52x0.75	1	27.3	1144	24.5	0.012
52x1.0	1	28.6	1326	18.1	0.011
52x1.5	1	34.4	2106	12.1	0.011
52x2.5	1	39.9	2945	7.41	0.010
61x0.75	1	28.6	1276	24.5	0.012
61x1.0	1	30.0	1486	18.1	0.011
61x1.5	1	36.0	2349	12.1	0.011
61x2.5	1	41.9	3309	7.41	0.010

● KVVR,ZR-KVVR

Number of cores× Nominal cross section	Reference overall diameter of cable	Reference weight of cable	Max.resistance of conductor at 20 °C	Minimum insulation resistance at 70 °C
mm ²	mm	kg/km	Ω/km	MΩ·km
4×0.5	8.0	77	39.0	0.013
4×0.75	8.7	94	26.0	0.011
4×1.0	9.0	106	19.5	0.010
4×1.5	10.1	141	13.3	0.010
4×2.5	11.8	201	7.98	0.009
5×0.5	8.7	91	39.0	0.013
5×0.75	9.4	112	26.0	0.011
5×1.0	9.7	128	19.5	0.010
5×1.5	11.0	171	13.3	0.010
5×2.5	13.6	264	7.98	0.009
7×0.5	9.3	110	39.0	0.013
7×0.75	10.1	138	26.0	0.011
7×1	10.5	159	19.5	0.010
7×1.5	11.9	216	13.3	0.010
7×2.5	14.7	333	7.98	0.009
8×0.5	10.0	127	39.0	0.013
8×0.75	10.8	159	26.0	0.011
8×1.0	11.3	184	19.5	0.010
8×1.5	13.5	268	13.3	0.010
8×2.5	15.8	386	7.98	0.009
10×0.5	11.5	115	39.0	0.013
10×0.75	12.6	196	26.0	0.011
10×1.0	13.8	244	19.5	0.010
10×1.5	15.6	330	13.3	0.010
10×2.5	18.5	476	7.98	0.009
12×0.5	11.9	171	39.0	0.013
12×0.75	13.6	234	26.0	0.011
12×1.0	14.2	270	19.5	0.010
12×1.5	16.1	368	13.3	0.010
12×2.5	19.1	535	7.98	0.009
14×0.5	12.4	194	39.0	0.013
14×0.75	14.2	265	26.0	0.011
14×1.0	14.8	307	19.5	0.010
14×1.5	16.8	420	13.3	0.010
14×2.5	20.0	613	7.98	0.009
16×0.5	13.7	235	39.0	0.013
16×0.75	14.9	297	26.0	0.011
16×1.0	15.6	344	19.5	0.010
16×1.5	17.8	473	13.3	0.010
16×2.5	21.5	713	7.98	0.009

● KVVR,ZR-KVVR

Number of cores× Nominal cross section	Reference overall diameter of cable	Reference weight of cable	Max.resistance of conductor at 20℃	Minimum insulation resistance at 70℃
mm ²	mm	kg/km	Ω/km	MΩ·km
19×0.5	14.3	265	39.0	0.013
19×0.75	15.7	336	26.0	0.011
19×1.0	16.4	392	19.5	0.010
19×1.5	18.7	541	13.3	0.010
19×2.5	22.7	818	7.98	0.009
24×0.5	16.6	331	39.0	0.013
24×0.75	18.1	422	35.0	0.011
24×1.0	18.9	492	19.5	0.010
24×1.5	22.2	702	13.3	0.010
24×2.5	26.4	1033	7.98	0.009
27×0.5	16.9	356	39.0	0.013
27×0.75	18.5	456	26.0	0.011
27×1.0	19.4	534	19.5	0.010
27×1.5	22.7	763	13.3	0.010
27×2.5	27.0	1126	7.98	0.009
30×0.5	17.5	388	39.0	0.013
30×0.75	19.1	499	26.0	0.011
30×1.0	20.4	603	19.5	0.010
30×1.5	23.5	837	13.3	0.010
30×2.5	28.0	1240	7.98	0.009
37×0.5	18.8	461	39.0	0.013
37×0.75	21.0	614	26.0	0.011
37×1.0	22.0	720	19.5	0.010
37×1.5	25.3	1004	13.3	0.010
37×2.5	30.2	1494	7.98	0.009
44×0.5	21.4	564	39.0	0.013
44×0.75	23.4	727	26.0	0.011
44×1.0	24.6	853	19.5	0.010
44×1.5	28.3	1193	13.3	0.010
44×2.5	34.6	1824	7.98	0.009
48×0.5	21.7	599	39.0	0.013
48×0.75	23.8	773	26.0	0.011
48×1.0	25.0	910	19.5	0.010
48×1.5	28.8	1475	13.3	0.010
48×2.5	35.2	1952	7.98	0.009
52×0.5	22.3	641	39.0	0.013
52×0.75	24.5	829	26.0	0.011
52×1.0	25.6	977	19.5	0.010
52×1.5	29.6	1372	13.3	0.010
52×2.5	36.2	2101	7.98	0.009
61×0.5	23.6	733	39.0	0.013
61×0.75	25.9	952	26.0	0.011
61×1.0	27.2	1124	19.5	0.010
61×1.5	32.0	1625	13.3	0.010
61×2.5	38.8	2461	7.98	0.009

General Rubber Sheathed Cable

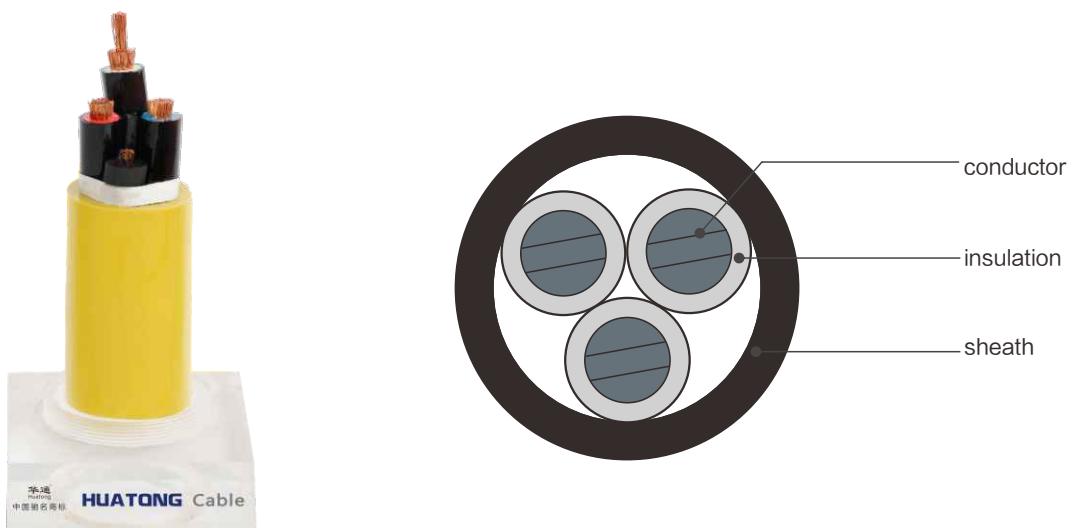
Standards Of The Products

- GB/T5013--2008、JB/T8735

Application Properties

Long operating temperature of the cable is under 70°C, Types of YZW and YCW are weatherproof and oil proof, therefor they are applicable to outdoors and oil existent place.

Structural Representation



Key Technical Parameter

- 300/500V 60245 IEC 53(YZ)
60245 IEC 57(YZW) model rubber-sheathed flexible cable

Type

Type	Uo/UV Rated voltage	Core number	Nominal section
60245 IEC53(YZ)	300/500	2~7	0.75~6
		4(3+1)	1.5~6
60245 IEC57(YZW)	300/500	2、3、4、5、6	0.75~6
		4 (3+1)	1.5~6
YC	450/750	1	1.5~400
		2、3、4	1.5~40
		5	1.5~25
		4 (3+1)	1.5~240
60245 IEC(YZW)	450/750	1	35~95
		2、3、4	2.5~240
		5	2.5~240
		4 (3+1)	2.5~240

- 300/500V60245 IEC 53(YZ)
60245 IEC 57(YZW) model rubber-sheathed flexible cable

Coer number×nominal section mm ²	20°CMax.conductor DC resistance Ω/km		Cable outer diameter mm		Cable approximate Weight kg/km
	Copper core	Tinned copper-core	Min	Max	
3×2.5	7.89	8.21	10.0	13.0	204
3×4	4.95	5.09	11.3	14.5	299
3×6	3.3	3.39	12.6	16.1	405
4×0.75	26.0	26.7	7.1	9.6	95
4×1	19.5	20.0	7.6	10.0	109
4×1.5	13.3	13.7	9.6	12.5	168
4×2.5	7.98	8.21	11.0	14.0	254
4×4	4.95	5.09	12.7	16.2	372
4×6	3.3	3.39	14.0	17.9	505
5×0.75	26.0	26.7	8.0	11.0	126.0
5×1	19.5	20.0	8.5	11.5	144
5×1.5	13.3	13.7	10.5	13.5	211
5×2.5	7.98	8.21	12.5	15.5	327
5×4	4.95	5.09	14.1	17.9	480
5×6	3.3	3.39	15.7	20.0	663
3×1.5+1×1	13.3	13.7	8.6	11.2	157
3×2.5+1×1.5	7.98	8.21	10.4	13.3	235
3×4+1×2.5	4.95	5.09	12.3	15.7	345
3×6+1×4	3.3	3.39	13.7	17.5	475
6×0.75	26.0	26.7	8.2	10.7	144
6×1	19.5	20.0	8.7	11.5	169
6×1.5	13.3	13.7	10.9	14.0	250
6×2.5	7.98	8.21	13.2	16.9	386
6×4	4.95	5.09	15.5	19.8	567
6×6	3.3	3.39	17.4	22.1	782

- 450/750V YC
60245 IEC 66 (YCW) model rubber-sheathed flexible cable

Coer number×nominal section mm ²	20°C Max.conductor DC resistance Ω/km		Cable outer diameter mm		Cable approximate Weight kg/km
	Copper core	Tinned copper-core	Min	Max	
1×1.5	13.3	13.7	5.8	7.2	58
1×2.5	7.98	8.21	6.4	8.0	78
1×4	4.95	5.09	7.4	9.0	109
1×6	3.3	3.39	8.0	11.0	143
1×10	1.91	1.95	9.8	12.5	225
1×16	1.21	1.24	11.0	14.0	300
2×1	19.5	20.0	8.0	10.5	111
2×1.5	13.3	13.7	9.0	11.5	140
2×2.5	7.98	8.21	10.5	13.5	208
2×4	4.95	5.09	12.0	15.0	295
2×6	3.3	3.39	13.5	18.5	394
2×10	1.91	1.95	18.5	24.0	713
3×1	19.5	20.0	8.6	11.5	132.0
3×1.5	13.3	13.7	9.6	12.5	167
3×2.5	7.98	8.21	11.5	14.5	249
3×4	4.95	5.09	13.0	16.0	355
3×6	3.3	3.39	14.5	20.0	476
3×10	1.91	1.95	20.0	25.5	864
4×1	19.5	20.0	9.6	12.5	166.0
4×1.5	13.3	13.7	10.5	13.5	203
4×2.5	7.98	8.21	12.5	15.5	302
4×4	4.95	5.09	14.5	18.0	433
4×6	3.3	3.39	16.5	22.0	592
4×10	1.91	1.95	21.5	28.0	1047
5×1	19.5	20.0	10.5	13.5	191.0
5×1.5	13.3	13.7	11.5	15.0	241
5×2.5	7.98	8.21	13.5	17.0	357
5×4	4.95	5.09	16.0	19.5	523
5×6	3.3	3.39	18.0	24.5	714

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