



# 江苏港宏电线电缆有限公司

Jiangsu Ganghong Electric Wire and Power Cable Co., Ltd.

## Company Introduction

Danyang Ganghong Electric Wire and Power Cable Co., Ltd. is a modern enterprise for manufacturing and selling wires and cables with over 20 years' history. The company occupies an area of 30,000 square meters, the construction area is 26,000 square meters, total more than 200 people in the company. It's located at Jiangshu, Danyang city, Jiangsu province, has Office in Shanghai. The company is based on high efficient management models, advanced production facilities, complete test and measuring conditions and an integrated quality control system.

At present, our main products consist of bare stranded conductor, power cable, aerial insulated cable, wire and cable for electrical equipment, power cable, control cable, marine cable etc. multi series common and special cables and PVC granules etc. products. Now we have ISO, CE, SASO, CCC etc. Certificates.

Our products have been exported to over 50 countries and territories in Europe, Oceania, Latin America, Africa, Mid East, Southeast Asia etc. For example Romania, Australia, Cuba, Kenya, Saudi Arabia, Singapore, Hongkong and so on.

Stable product quality, competitive prices and excellent service has enjoyed a high reputation for many years in the world market.

We can produce the cables according to ASTM ICEA BS DIN IEC GB AS/NZS etc. standards, also can do upon customers' special requests. Please contact our sales persons for detailed product specification information based on different standards, if need.

We are looking for cooperating with you and benefiting each other.



# Company Qualification



GHCABLE



**KINGDOM OF SAUDI ARABIA**  
 Product Conformity Programme Statement for Registration  
 PCP ref. No.: KSA-R-3092862  
 Revision

**Issued to:** Danyang Ganghong Electric Wire And Power Cable Co., Ltd.  
 Danyang Road, Jiangshu, Huaiqing Town, Danyang 212364, Jiangsu, China

**Product:** R-22 - Electric and Data Transmission Wires and Cables

**Brand Name:** NCM BRAND / DANYANG GANGHONG ELECTRIC WIRE & POWER CABLE CO., LTD. / GHCABLE / GANGHONG / HEKI / JIRRE / JIRRE ELECTRIC WIRE & POWER CABLE CO., LTD. / HEKI

**Model/Type:** See appendix (1 page)

**Applicable standards/Reference:** ISO9001:2008, IATF16949

**Additional Information:** Subscription Date: 23 December 2010

**Intertek**

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Appendix to Statement for Registration  
 KSA-R-3092862  
 Issued for: 01 March 2010  
 R-22 - Electric and Data Transmission Wires and Cables

Model/Type	Information	Review Date if Verified
TC10024A94S	CONTROL WIRE	24 December 2011
TC10024A94S	CONTROL WIRE	24 December 2011
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TC10024A94S	CONTROL WIRE	12 February 2012
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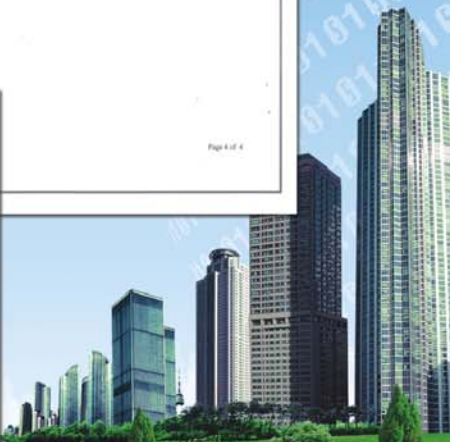
Subscription Date: 23 December 2010

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## Bare Stranded Conductor



### Applicaton

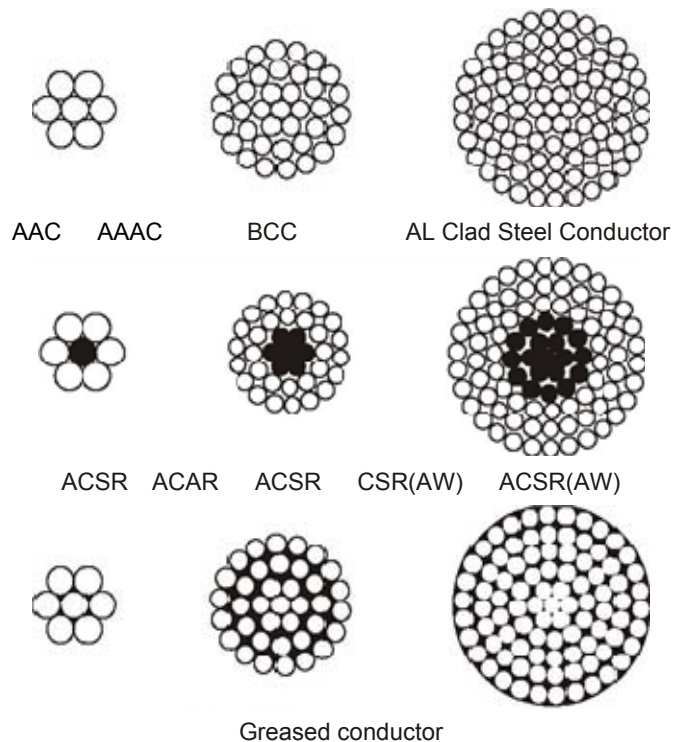
The cables are designed for aerial power transmission lines .

### Manufacturing standards

ASTM ICEA BS DIN IEC GB AS/NZS etc.

### Specification

Description	Short name	Chinese type
All aluminium conductor	AAC	JL
Aluminium conductor steel reinforced	ACSR	JL/G1A
All aluminium alloy conductor	AAAC	JLHA1 JLHA2
Aluminium alloy conductor steel reinforced	AACSR	JLHA1/G1A
Aluminium conductor alloy reinforced	ACAR	JL/LHA1
All aluminium clad steel conductor		JLB1A JLB1B
Aluminium conductor aluminium clad steel reinforced	ACSR/AW(AS)	JL/LB1A
Aluminium alloy conductor aluminium clad steel reinforced	AACSR/AW(AS)	JLHA1/LB1A
Bare copper stranded conductor (Hard Drawn)	BCC	TJ
Anti-corrosive stranded conductor	Greased conductor	JL/G1AF



## Main technical parameter

### AAC-ASTM Standard

Code name	Total Area		Stranding and Wire diameter mm	Approximate Overall Diameter mm	Linear Mass kg/km	Nominal Breaking Load daN	Maximum DC Resistance at 20 °C Ω/km
	AWG or MCM	mm <sup>2</sup>					
Peachbell	6	13.29	7/1.554	4.67	37	249	2.1692
Pose	4	21.16	7/1.961	5.89	58	396	1.3624
Iris	2	33.61	7/2.474	7.42	93	597	0.8577
Pansy	1	42.39	7/2.776	8.33	117	732	0.6801
Poppy	1/0	53.48	7/3.119	9.36	147	873	0.5390
Aster	2/0	67.42	7/3.503	10.51	186	1100	0.4276
Phlox	3/0	85.03	7/3.932	11.80	234	1347	0.3390
Oxlip	4/0	107.23	7/4.417	13.26	296	1698	0.2688
Valerian	250	126.71	19/2.913	14.57	349	2062	0.2275
Sneezewort	250	126.71	7/4.80	14.4	349	2007	0.2275
Laurel	266.8	135.16	19/3.01	15.05	373	2200	0.2133
Daisy	266.8	135.16	7/4.96	14.9	373	2141	0.2133
Peony	300	152.0	19/3.193	15.97	419	2403	0.1896
Tulip	336.4	170.45	19/3.381	16.91	470	2695	0.1691
Daffodil	350	177.35	19/3.447	17.24	489	2804	0.1625
Canna	397.5	201.42	19/3.673	18.36	555	3184	0.1431
Goldentuft	450	228	19/3.909	19.55	629	3499	0.1264
Syringa	477	241.68	37/2.882	20.19	666	3849	0.1193
Cosmos	477	241.68	19/4.023	20.12	666	3708	0.1193
Hyacinth	500	253.35	37/2.951	20.65	698	4035	0.1138
Zinnia	500	253.35	19/4.12	20.6	698	3888	0.1138
Dahlia	556.5	282	19/4.346	21.73	777	4327	0.1022
Mlstacle	556.5	282	37/3.114	21.79	777	4362	0.1022
Meadowsweet	600	304	37/3.233	22.63	838	4703	0.0948
Orchid	636	322.25	37/3.33	23.31	838	4985	0.0894
Flag	700	354.71	61/2.72	24.48	978	5146	0.0813
Verbena	700	354.71	37/3.493	24.45	978	5487	0.0813
Nasturtium	715.5	362.58	61/2.75	24.76	1000	5874	0.0795
Violet	715.5	362.58	37/3.533	24.74	1000	5609	0.0795
Cattail	750	380	61/2.817	25.35	1048	5985	0.0759
Petunia	750	380	37/3.617	25.32	1048	5875	0.0759
Lilac	795	402.84	61/2.90	26.06	1111	6345	0.0715
Artubus	795	402.84	37/3.724	26.05	1111	6232	0.0715
Snapdragon	900	456.06	61/3.086	27.78	1257	6978	0.0632
Cockscomb	900	456.06	37/3.962	27.73	1257	6848	0.0632
Goldenrod	954	483.42	61/3.177	28.6	1333	7896	0.0596
Magnolia	954	483.42	37/4.079	28.55	1333	7258	0.0596
Camelia	1000	506.71	61/3.251	29.36	1397	7753	0.0569
Hawweed	1000	506.71	37/4.176	29.23	1397	7608	0.0569
Larkspur	1033.5	523.68	61/3.307	29.76	1444	8012	0.0550
Bluebell	1033.5	523.68	37/4.244	29.72	1444	7863	0.0550
Marigold	1113	563.93	61/3.432	30.89	1555	8628	0.0511
Hawthorn	1192.5	604.26	61/3.551	31.05	1666	9245	0.0477



### AAC-ASTM Standard

Continue Table

Code name	Total Area		Stranding and Wire diameter mm	Approximate Overall Diameter mm	Linear Mass kg/km	Nominal Breaking Load daN	Maximum DC Resistance at 20 °C Ω/km
	AWG or MCM	mm <sup>2</sup>					
Narcissus	1272	644.51	61/3.668	33.02	1777	9861	0.0477
Colubine	1351.5	684.84	61/3.78	34.01	1888	10478	0.0421
Canation	1431	725.10	61/3.89	35.03	1999	10768	0.0398
Gladiolus	1510.5	765.35	61/4.00	35.09	2110	11365	0.0376
Coreopsis	1590	805.68	61/4.099	36.51	2221	11964	0.0358
Jessamine	1750	886.71	61/4.302	38.73	2445	13168	0.0325
Cowslip	2000	1013.42	91/3.76	41.40	2791	15300	0.0285
Lupine	2500	1266.67	91/4.21	46.30	3524	18700	0.0230
Trillum	3000	1520.13	127/3.90	50.75	4232	22500	0.0192
Blue Bonnet	3500	1773.50	127/4.21	54.80	4985	26200	0.0166

### AAC-BS Standard

Code name	Nominal Aluminium Area	Stranding and Wire diameter mm	Sectional Area mm <sup>2</sup>	Approximate Overall Diameter mm	Linear Mass kg/km	Nominal Breaking Load DaN	Maximum DC Resistance at 20°C Ω/km
	mm <sup>2</sup>						
Midge	22	7/2.06	23.33	6.18	64	399	1.227
Aphis	25	7/3.35	26.40	7.2	73	411	1.081
Ghat	25	7/2.21	26.8	6.6	73	459	1.066
Weevil	30	3/3.33	31.6	7.9	86	486	0.9082
Mosquito	35	7/2.59	37.0	7.9	101	603	0.7762
Ladybird	40	7/2.79	42.8	8.4	117	687	0.6689
Ant	50	7/3.10	52.83	9.30	145	828	0.5419
Fly	60	7/3.40	63.55	10.20	174	990	0.4505
Bluebottle	70	7/3.66	73.7	11.0	202	1134	0.3881
Earwing	75	7/3.78	78.5	11.4	215	1194	0.3644
Grasshopper	80	7/3.91	84.1	11.7	230	1278	0.3406
Clegg	90	7/4.17	95.6	12.5	262	1453	0.2994
Wasp	100	7/4.39	106.0	13.17	290	1600	0.2702
Beetle	100	19/2.67	106.0	13.4	293	1742	0.2704
Bee	125	7/4.90	132.0	14.7	361	1994	0.2169
Cricket	150	7/5.36	157.9	16.1	432	2385	0.1818
Hornet	150	19/3.25	157.6	16.25	434	2570	0.1825
Caterpillar	175	19/3.53	186	17.7	512	2863	0.1547
Chafer	200	19/3.78	213.2	18.90	587	3240	0.1349
Spider	225	19/3.99	236.9	20.0	652	3601	0.1211
Cockroach	250	19/4.22	265.7	21.10	731	4040	0.1083
Butterfly	300	19/4.65	322.7	23.25	888	4875	0.08916
Moth	350	19/5.00	373.2	25.0	1027	5637	0.07711
Drone	350	37/3.58	373.3	25.1	1029	5745	0.07741
Locust	400	19/5.36	428.5	26.8	1179	6473	0.06710
Centipede	400	37/3.78	415.5	26.46	1145	6310	0.06944
Maybug	450	37/4.09	486.9	28.6	1342	7401	0.05931
Scorpion	500	37/4.27	529.5	29.9	1460	7998	0.5441
Cicada	600	37/4.65	628.6	32.6	1733	9495	0.04588
Tarantula	750	37/5.23	794.6	36.6	2191	12010	0.03627

### AAC-DIN Standard

Area		Stranding and Wire diameter	Approximate Overall Diameter	Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20°C
Nominal [mm <sup>2</sup> ]	2Actual [mm <sup>2</sup> ]					
16	15.89	7/1.71	5.1	44	290	1.8018
25	24.25	7/2.10	6.3	67	425	1.1808
35	34.36	7/2.50	7.5	94	585	0.8332
50	49.48	7/3.00	9.0	135	810	0.5786
50	48.36	19/1.80	9.0	133	860	0.5950
70	65.82	19/2.10	10.5	181	1150	0.4371
95	93.27	19/2.50	12.5	256	1595	0.3084
120	117.00	19/2.80	14.0	322	1910	0.2459
150	147.10	37/2.25	15.2	406	2570	0.1960
185	181.60	37/2.50	17.5	501	3105	0.1587
240	242.54	61/2.25	20.2	670	4015	0.1191
300	299.43	61/2.50	22.5	827	4850	0.09650
400	400.14	61/2.89	26.0	1105	6190	0.07221
500	499.83	61/3.23	29.1	1381	7600	0.05781
625	626.20	91/2.96	32.6	1733	9690	0.04625
800	802.10	91/3.35	36.8	2219	12055	0.03611
1000	999.71	91/3.74	41.1	2766	14845	0.02897

### AAC-DIN Standard

Code name	Area	Number of wires	Diameter		Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20°C
			Wire	Cond.			
	mm <sup>2</sup>		mm	mm	kg/km	kN	Ω/km
10	10	7	1.35	4.05	27.4	1.95	2.8633
16	16	7	1.71	5.12	43.8	3.04	1.7896
25	25	7	2.13	6.40	68.4	4.50	1.1453
40	40	7	2.70	8.09	109.4	6.80	0.7158
63	63	7	3.39	10.2	172.3	10.39	0.4545
100	100	19	2.59	12.9	274.8	17.00	0.2877
125	125	19	2.89	14.5	343.6	21.25	0.2302
160	160	19	3.27	16.4	439.8	26.40	0.1798
200	200	19	3.66	18.3	549.7	32.00	0.1439
250	250	19	4.09	20.5	687.1	40.00	0.1151
315	315	37	3.29	23.0	867.9	51.97	0.0916
400	400	37	3.71	26.0	1102.0	64.00	0.0721
450	450	37	3.94	27.5	1239.8	72.00	0.0641
600	600	37	4.15	29.0	1377.6	80.00	0.0577
560	560	37	4.39	30.7	1542.9	89.60	0.0515
630	630	61	3.63	32.6	1738.3	100.80	0.0458
710	710	61	3.85	34.6	1959.1	113.60	0.0407
800	800	61	4.09	36.8	2207.4	128.00	0.0361
900	900	61	4.33	39.0	2483.3	144.00	0.0321
1000	1000	61	4.57	41.1	2759.2	160.00	0.0289
1120	1120	91	3.96	43.5	3093.5	179.20	0.0258
1250	1250	91	4.18	46.0	3452.6	200.00	0.0231
1400	1400	91	4.43	48.7	3866.9	224.00	0.0207
1500	1500	91	4.58	50.4	4143.1	240.00	0.0193

### AAC(JL)-GB Standard

Cond.	Area /mm <sup>2</sup>	No.of stranding	Diameter/mm		Linear Mass kg/km	Nominal Breaking Load kN	Maximum DC Resistance at 20°C Ω/km
			Wire	Cond.			
35	34.36	7	2.50	7.50	94.0	6.01	0.8333
50	49.48	7	3.00	9.00	135.3	8.41	0.5787
70	71.25	7	3.60	10.8	194.9	11.40	0.4019
95	95.14	7	4.16	12.5	260.2	15.22	0.3010
120	121.21	19	2.85	14.3	333.2	20.61	0.2374
150	148.07	19	3.15	15.8	407.0	24.43	0.1943
185	182.80	19	3.50	17.5	502.4	30.16	0.1574
210	209.85	19	3.75	18.8	576.8	33.58	0.1371
240	238.76	37	4.00	20.0	656.3	38.20	0.1205
300	297.57	37	3.20	22.4	819.8	49.10	0.0969
500	502.90		4.16	29.1	1385.5	80.46	0.0573

### ACSR-ASTM Standard

Code name	Area				Stranding and Wire diameter		Approximate Overall Diameter	Linear Mass			Nominal Breaking Load	Maximum DC Resistance at 20°C
	Aluminium		Steel	Total	AL	St		AL	St	Total		
	AWG or MCM	mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>	mm	mm		kg/km	kg/km	kg/km		
Turkey	6	13.29	2.19	15.48	6/1.68	1/1.68	5.04	37	17	54	524	2.1586
Swan	4	21.16	3.55	24.71	6/2.12	1/2.12	6.36	58.0	27	85	832	1.3557
Swanate	4	21.16	5.35	26.51	7/1.96	1/2.61	6.53	58.0	42	100	1053	1.3557
Sparrow	2	33.61	5.61	39.22	6/2.67	1/2.67	8.01	92.0	44	136	1270	0.8535
Sparate	2	33.61	8.52	42.13	7/2.47	1/3.30	8.24	92.0	67	159	1611	0.8535
Robin	1	42.39	7.10	49.49	6/3.00	1/3.00	9.00	116	55	171	1585	0.6767
Raven	0	53.48	8.90	62.38	6/3.37	1/3.37	10.11	147	69	216	1932	0.5364
Quail	00	67.42	11.23	78.65	6/3.78	1/3.78	11.34	185	88	273	2362	0.4255
Pigeon	000	85.03	14.19	99.22	6/4.25	1/4.25	12.75	233	110	343	2941	0.3373
Penguin	0000	107.23	17.87	125.10	6/4.77	1/4.77	14.31	294	139	433	3706	0.2675
Waxwing	266.800	135.16	7.48	142.64	18/3.09	1/3.09	15.45	373	58	431	3027	0.2133
Partridge	266.800	135.16	22.00	157.16	26/2.57	7/2.00	16.28	374	172	546	5029	0.2143
Ostrich	300.000	152.00	24.71	176.71	26/2.73	7/2.12	17.28	421	193	614	5652	0.1906
Mertin	336.400	170.45	9.48	179.93	18/3.47	1/3.47	17.35	470	74	544	3823	0.1691
Linnet	336.400	170.45	27.81	198.26	26/2.89	7/2.25	18.31	472	217	689	6271	0.1699
Oriole	336.400	170.45	39.61	210.26	30/2.69	7/2.69	18.83	473	311	784	7745	0.1704
Chickadee	397.500	201.42	11.16	212.58	18/3.77	1/3.77	18.85	555	87	642	4399	0.1431
Brant	397.500	201.42	26.13	227.55	24/3.27	7/2.18	19.61	558	204	762	6469	0.1438
Ibis	397.500	201.42	32.77	234.19	26/3.14	7/2.44	19.88	558	256	814	7211	0.1438
Lark	397.500	201.42	46.97	248.39	30/2.92	7/2.92	20.44	560	367	927	8869	0.1442
Pelican	477.00	241.68	13.42	255.10	18/4.14	1/4.14	20.70	666	105	771	5216	0.1193
Flicker	477.00	241.68	31.29	272.97	24/3.58	7/2.39	21.49	670	245	915	7666	0.1199
Hawk	477.00	241.68	39.42	281.10	26/3.44	7/2.67	21.79	670	308	978	8665	0.1199
Hen	477.00	241.68	56.39	298.07	30/3.20	7/3.20	22.40	671	441	1112	10534	0.1201
Osprey	556.500	282.00	15.68	297.68	18/4.47	1/4.47	22.35	777	122	899	6088	0.1022
Parackeet	556.500	282.00	36.58	318.58	24/3.87	7/2.58	23.22	781	286	1067	8822	0.1027
Dove	556.500	282.00	45.94	327.94	26/3.72	7/2.89	23.55	781	359	1140	10103	0.1027

### ACSR-ASTM Standard

Continue Table

Code name	Area				Stranding and Wire diameter		Approximate Overall Diameter	Linear Mass			Nominal Breaking Load	Maximum DC Resistance at 20 °C
	Aluminium		Steel	Total	AL	St		AL	St	Total		
	AWG or MCM	mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>	mm	mm	mm	kg/km	kg/km	kg/km	daN	Ω/km
Eagle	556.500	282.00	65.81	347.81	30/3.46	7/3.46	24.21	783	515	1298	12292	0.1030
Peacock	605.00	306.58	39.74	346.32	24/4.03	7/2.69	24.20	849	311	1160	9588	0.0945
Squab	605.00	306.58	49.94	356.52	26/3.87	7/3.01	24.51	850	390	1240	10841	0.0945
Wood Duck	605.00	306.58	71.55	378.13	30/3.16	7/3.61	25.25	851	560	1411	12884	0.0947
Teal	605.00	306.58	69.87	376.45	30/3.61	9/2.16	25.24	851	548	1399	13359	0.0947
Kingbird	636.00	322.26	17.90	340.16	18/4.78	1/4.78	23.88	889	139	1028	6956	0.08945
Rook	636.00	322.26	41.61	364.07	24/4.14	7/2.76	24.84	893	326	1219	10083	0.08989
Grosbeak	636.00	322.26	52.45	374.71	26/3.97	7/3.09	25.15	893	409	1302	11180	0.08989
Scoter	636.00	322.26	75.22	397.48	30/3.70	7/3.70	25.88	895	589	1484	13544	0.09011
Egret	636.00	322.26	73.55	395.81	30/3.70	19/2.22	25.90	894	576	1470	14055	0.09011
Swift	636.00	322.26	8.96	331.22	36/3.38	1/3.38	23.62	888	70	958	6052	0.08945
Flamingo	666.600	337.74	43.81	381.55	24/4.23	7/2.82	25.40	936	342	1278	10566	0.08577
Gannet	666.600	337.74	55.03	392.77	26/4.07	7/3.16	25.76	936	429	1365	11733	0.08577
Stilt	715.500	362.58	46.97	409.55	24/4.39	7/2.92	26.31	1005	367	1372	11335	0.07989
Strawling	715.500	362.58	59.03	421.61	26/4.21	7/3.28	26.68	1005	461	1466	12591	0.07989
Redwing	715.500	362.58	82.58	445.16	30/3.92	19/2.35	27.43	1006	647	1653	15394	0.08009
Tern	795.00	402.84	27.87	430.71	45/3.38	7/2.25	27.03	1116	217	1666	9737	0.07191
Condor	795.00	402.84	52.19	455.03	54/3.08	7/3.08	27.72	1116	408	1524	12445	0.07911
Cuckoo	795.00	402.84	52.19	455.03	24/4.62	7/3.08	27.74	1116	408	1522	12394	0.07191

### ACSR-BS Standard

Code name	Nominal Aluminium Area	Stranding and wire diameter mm		Sectional area of aluminium	Total Sectional area	Approx. Overall Diameter	Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20	Final Modulus of elasticity	Coefficient of linear expansion
	mm <sup>2</sup>	AL	St	mm <sup>2</sup>	mm <sup>2</sup>	mm	kg/km	daN	/km	hhar	/ °C
Mole	10	6/1.50	1/2.50	10.62	12.39	4.50	43	414	2.706	7900	-19.1 10
Squirrel	20	6/2.11	1/2.11	20.94	24.43	6.33	85	788	1.368	7900	-19.1 10
Gopher	25	6/2.36	1/2.36	26.24	30.62	7.08	106	961	1.093	7900	-19.1 10
Weasel	30	6/2.59	1/2.59	31.61	36.88	7.77	128	1146	0.9077	7900	-19.1 10
Fox	35	6/2.79	1/2.79	36.66	42.77	8.37	149	1320	0.7822	7900	-19.1 10
Ferret	40	6/3.00	1/3.00	42.41	49.48	9.00	172	1520	0.6766	7900	-19.1 10
Rabbit	50	6/3.35	1/3.35	52.88	61.70	10.05	214	1835	0.5426	7900	-19.1 10
Mink	60	6/3.66	1/3.66	63.18	73.71	10.98	255	2180	0.4545	7900	-19.1 10
Shurk	60	12/2.59	7/2.59	63.27	100.30	12.95	465	5300	0.4567	10500	-15.3 10
Beaver	70	6/3.99	1/3.99	74.82	87.29	11.97	302	2570	0.3825	7900	-19.1 10
Horse	70	12/2.79	7/2.79	73.37	116.2	13.95	538	6120	0.3936	10500	-19.1 10
Racoon	75	6/4.10	1/4.10	79.20	92.4	12.30	320	2720	0.3622	7900	-15.3 10
Otter	80	6/4.22	1/4.22	83.88	97.86	13.98	339	2880	0.3419	7900	-19.1 10
Cat	90	6/4.50	1/4.50	95.40	111.30	15.90	386	3270	0.3007	7900	-19.1 10
Hare	100	6/4.72	1/4.72	105.0	122.50	17.50	425	3600	0.2733	7900	-19.1 10
Dog	100	6/4.72	7/1.57	105.0	118.5	14.15	394	3270	0.2733	7500	-19.8 10
Hyena	100	7/4.39	7/1.93	105.8	126.2	14.57	450	4090	0.2712	7500	-19.8 10
Leopard	125	8/5.28	7/1.75	131.3	148.1	15.81	492	4070	0.2184	7500	-19.8 10

### ACSR-BS Standard

Continue Table

Code name	Nominal Aluminium Area	Stranding and wire diameter mm		Sectional area of aluminium	Total Sectional area	Approx. Overall Diameter	Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20	Final Modulus of elasticity	Coefficient of linear expansion
	mm <sup>2</sup>	AL	St	mm <sup>2</sup>	mm <sup>2</sup>	mm	kg/km	daN	/km	hhar	/ °C
Coyotte	125	26/2.54	7/1.91	132.1	152.2	15.89	522	4640	0.2187	8500	-17.10
Congar	125	18/3.05	1/3.05	130.3	137.5	15.25	419	2980	0.2189	6600	-21.2.10
Tiger	125	30/2.36	7/2.36	131.1	161.7	16.52	602	5800	0.2202	8000	-17.8.10
Dingo	150	18/3.35	1/3.35	158.7	167.5	16.75	506	3570	0.1815	6600	-21.2.10
Woff	150	30/2.59	7/2.59	158.1	194.9	18.13	726	6920	0.1828	8000	-17.8.10
Caracal	175	18/3.81	1/3.61	184.6	194.5	18.05	587	4110	0.1563	6600	-21.2.10
Lynx	175	30/2.79	7/2.79	183.4	226.2	19.53	842	7980	0.1576	8000	-17.8.10
Jaguar	200	18/3.86	1/3.86	210.6	222.3	19.30	671	4655	0.1367	6600	-21.2.10
Panther	200	30/3.00	7/3.00	212.1	261.5	21.00	974	9225	0.1363	8000	-17.8.10
Lion	225	30/3.18	7/3.18	236.5	294.2	22.26	1095	10060	0.1212	8000	-17.8.10
Bear	250	30/3.35	7/3.35	264.0	325.6	23.45	1213	11110	0.1093	8000	-17.8.10
Goat	300	30/3.71	7/3.71	324.3	400.0	25.97	1489	13570	0.08910	8000	-17.8.10
Sheep	350	30/3.99	7/3.99	374.1	461.4	27.93	1718	15590	0.07704	8000	-17.8.10
Antilope	350	54/2.97	7/2.97	373.1	421.5	26.73	1411	11820	0.07727	6900	-19.3.10
Bizon	350	54/3.00	7/3.00	381.8	431.3	27.00	1444	12090	0.07573	6900	-19.3.10
Deer	400	30/4.27	7/4.27	429.3	529.5	28.89	1971	17850	0.0674	8000	-17.8.10
Zebra	400	54/3.18	7/3.18	428.9	484.5	28.62	1621	13190	0.0674	6900	-19.3.10
Elk	450	30/4.50	7/4.50	477.0	588.3	31.50	2190	19820	0.06056	8000	-17.8.10
Camel	450	54/3.35	7/3.35	475.2	536.0	30.15	1797	14570	0.06073	6900	-19.3.10
Moose	500	54/3.53	7/3.53	528.7	597.2	31.77	1999	16110	0.05470	6900	-19.3.10
Finch	500	54/3.65	19/2.29	564.7	642.9	33.35	2243	18070	0.0512	6800	-18.3.10

### ACSR-DIN Standard

Area				Stranding and Wire diameter mm		Overall Diameter	Linear Mass			Nominal Breaking Load	Maximum DC Resistance at 20°C
Nominal	Actual			AL	St		AL	St	Total		
AL St mm <sup>2</sup>	AL mm <sup>2</sup>	St mm <sup>2</sup>	Total mm <sup>2</sup>			mm				kg/km	kg/km
16/2.5	15.3	2.5	17.8	6/1.80	1/1.80	5.4	42	20	62	595	1.8780
25/4.0	23.9	4.0	27.8	6/2.25	1/2.25	6.8	65	32	97	920	1.2002
35/6.0	34.3	5.7	40.0	6/2.70	1/2.70	8.1	94	46	140	1265	0.8352
44/32.0	44.0	31.7	75.7	14/2.00	7/2.40	11.2	122	250	372	4500	0.6573
50/8.0	48.3	8.0	56.3	6/3.20	1/3.20	9.6	132	64	196	1710	0.5946
50/9.0	51.2	29.8	81.0	12/2.33	7/2.33	11.7	141	237	378	4380	0.5643
70/12	69.9	11.4	81.3	26/1.85	7/1.44	11.7	193	91	284	2680	0.4130
95/15	94.4	15.3	109.7	26/2.15	7/1.67	13.6	260	123	383	3575	0.3058
95/55	96.5	56.3	152.8	12/3.20	7/3.20	16.0	266	446	712	7935	0.2992
105/75	105.7	75.5	181.5	14/3.10	19/2.25	17.5	292	299	891	10845	0.2735
120/20	121.6	19.8	141.4	26/2.44	7/1.90	15.5	336	158	494	4565	0.2374
120/70	122.0	71.3	193.3	12/3.60	7/3.60	18.0	337	564	901	10000	0.2364
125/30	127.9	29.8	157.7	30/2.33	7/2.33	16.3	353	238	591	5760	0.2259
150/25	148.9	24.2	173.1	26/2.70	7/2.10	17.1	411	194	605	5525	0.1939
170/40	171.8	40.1	211.9	30/2.70	7/2.70	18.9	475	319	794	7675	0.1682
185/30	163.8	29.8	213.6	26/3.00	7/2.33	19.0	507	239	746	6620	0.1571
210/35	209.1	34.1	243.2	26/3.20	7/2.49	20.3	577	273	850	7490	0.1380

### ACSR-DIN Standard

Continue Table

Area				Stranding and Wire diameter mm		Overall Diameter	Linear Mass			Nominal Breaking Load	Maximum DC Resistance at 20°C
Nominal	Actual			AL	St		AL	St	Total		
AL St mm <sup>2</sup>	AL mm <sup>2</sup>	St mm <sup>2</sup>	Total mm <sup>2</sup>	AL	St	mm	kg/km	kg/km	kg/km	daN	Ω/km
210/50	212.1	49.5	261.6	30/3.00	7/3.00	21.0	587	394	981	9390	0.1362
230/30	230.9	29.8	260.7	24/3.50	7/2.33	21.0	638	239	877	7310	0.1249
240/40	243.0	39.5	282.5	26/3.45	7/2.68	21.9	671	316	987	8640	0.1188
265/35	263.7	34.1	297.8	24/3.74	7/2.49	22.4	728	274	1002	8305	0.1094
300/50	304.3	49.5	353.7	26/3.86	7/3.00	24.5	840	396	1236	10700	0.09487
305/40	304.6	39.5	344.1	54/2.68	7/2.68	24.1	843	317	1160	9940	0.09490
340/30	339.3	29.8	369.1	48/3.00	7/2.33	25.0	938	242	1180	9290	0.08509
380/50	382.0	49.5	431.5	54/3.00	7/3.00	27.0	1056	397	1453	12310	0.07573
385/35	386.0	31.4	420.1	48/3.20	7/2.49	26.7	1067	277	1344	10480	0.07478
435/55	434.3	56.3	490.6	54/3.20	7/3.20	28.8	1203	450	1653	13645	0.06656
450/40	448.7	39.5	488.2	48/3.45	7/2.68	28.7	1241	320	1561	12075	0.06434
490/65	490.3	63.6	553.9	54/3.40	7/3.40	30.6	1356	510	1866	15310	0.05896
495/35	494.1	34.1	526.2	45/3.74	7/2.49	29.9	1363	283	1646	12180	0.05846
510/45	510.2	45.3	555.5	48/3.68	7/2.87	30.7	1413	365	1778	13665	0.05655
550/70	550.0	71.3	621.3	54/3.60	7/3.60	32.4	1520	572	2092	17060	0.05259
560/50	561.7	49.5	611.2	48/3.86	7/3.00	32.2	1553	401	1954	14895	0.05140
570/40	565.5	39.5	610.3	45/4.00	7/2.68	32.2	1563	325	1888	13900	0.05108
650/45	698.8	45.3	653.49	45/4.30	7/2.87	34.4	1791	372	2163	15552	0.0442
680/85	678.8	86.0	764.8	54/4.00	19/2.40	36.0	1866	702	2570	21040	0.04260
1045/45	1045.58	45.3	1090.9	72/4.30	7/2.87	43.0	2879	370	3249	21787	0.0277

### ACSR-IEC Standard

Code name	Area			Number of wires		Wire dia.		Diameter		Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20°C
	AL	St	Total			AL	St	Core	Cond.			
	mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>	AL	St	mm	mm	mm	mm	Kg/km	daN	Ω/km
16	16	2.67	18.7	6	1	1.84	1.84	1.84	5.53	64.6	6.08	1.7934
25	25	4.17	29.2	6	1	2.30	2.30	2.30	6.91	100.9	9.13	101478
40	40	6.67	46.7	6	1	2.91	2.91	2.91	8.74	161.5	14.40	0.7174
63	63	10.5	73.5	6	1	3.66	3.66	3.66	11.0	254.4	21.63	0.4555
100	100	16.7	117	6	1	4.61	4.61	4.61	13.8	403.8	34.33	0.2869
125	125	6.94	132	18	1	2.97	2.97	2.97	14.9	397.9	29.17	0.2304
125	125	20.4	145	26	7	2.47	1.92	5.77	15.7	503.9	45.69	0.2310
160	160	8.89	169	18	1	3.36	3.36	3.36	16.8	508.3	36.18	0.1800
160	160	26.1	186	26	7	2.80	2.18	6.53	17.7	644.9	57.69	0.1805
200	200	11.1	211	18	1	3.76	3.76	3.76	18.8	636.7	44.22	0.1440
200	200	32.6	233	26	7	3.13	2.43	7.30	19.8	806.2	70.13	0.1444
250	250	24.6	275	22	7	3.80	2.11	6.34	21.6	880.6	68.72	0.1154
250	250	40.7	291	26	7	3.50	2.72	8.16	22.2	1007.7	87.67	0.1155
315	315	21.6	337	45	7	2.99	1.99	5.97	23.9	1039.6	79.03	0.0917
315	315	51.3	366	26	7	3.93	3.05	9.16	24.9	1269.7	106.83	0.0917
400	400	27.7	428	45	7	3.36	2.24	6.73	26.9	1320.1	98.36	0.0722
400	400	51.9	452	54	7	3.07	3.07	9.21	27.6	1510.3	123.04	0.0723
450	450	31.1	481	45	7	3.57	2.38	7.14	28.5	1485.2	107.47	0.0642

**ACSR-IEC Standard**

Continue Table

Code name	Area			Number of wires		Wire dia.		Diameter		Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20 °C
	AL	St	Total			AL	St	Core	Cond.			
	mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>	AL	St	mm	mm	mm	mm	Kg/km	daN	Ω/km
450	450	58.3	508	54	7	3.26	3.26	9.77	29.3	1699.1	138.42	0.0643
500	500	34.6	535	45	7	3.76	2.51	7.52	30.1	1650.2	119.41	0.0578
500	500	64.8	565	54	7	3.43	3.43	10.3	30.9	188.9	153.80	0.0578
560	560	38.7	599	45	7	3.98	2.65	7.96	31.8	1848.2	133.74	0.0516
560	560	70.9	631	54	19	3.63	2.18	10.9	32.7	2103.4	172.59	0.0516
630	630	43.6	674	45	7	4.22	2.81	8.44	33.8	2079.2	150.45	0.0459
630	630	79.6	710	54	19	3.85	2.31	11.6	34.7	2366.3	191.77	0.0459
710	710	49.1	759	45	7	4.48	2.99	8.96	35.9	2343.2	169.56	0.0407
710	710	89.9	800	54	19	4.09	2.45	12.3	36.8	2666.8	216.12	0.0407
800	800	34.6	835	72	7	3.76	2.51	7.52	37.6	2480.2	167.41	0.0361
800	800	66.7	867	84	7	3.48	3.48	10.4	38.3	2732.7	205.33	0.0362
800	800	101	901	54	19	4.34	2.61	13.0	39.1	3004.9	243.52	0.0362
900	900	38.9	939	72	7	3.99	2.66	7.98	39.9	2790.2	188.33	0.0321
900	900	75.0	975	84	7	3.69	3.69	11.1	40.6	3074.2	226.50	0.0322
1000	1000	43.2	1043	72	7	4.21	2.80	8.41	42.1	3100.3	209.26	0.0259
1120	1120	47.3	1167	72	19	4.45	1.78	8.90	44.5	3464.9	234.53	0.0258
1120	1120	91.2	1211	84	19	4.12	2.47	12.4	45.3	3811.5	283.17	0.0258
1250	1250	102	1352	84	19	4.35	2.61	13.1	47.9	4253.9	316.04	0.0232
1250	1250	52.8	1303	72	19	4.70	1.68	9.40	47.0	3867.1	261.75	0.0231

**ACSR(JL/GIA)-GB Standard**

Nom.area AL/St mm <sup>2</sup>	Area/mm <sup>2</sup>			Number of wires		Wire dia.		Diameter		Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20 °C
	AL	St	Total	AL	St	AL	St	Core	Cond.			
10/2	10.60	1.77	12.37	6	1	1.50	1.50	1.50	4.50	42.8	4.14	2.7062
16/3	16.13	2.69	18.82	6	1	1.85	1.85	1.85	5.55	65.1	6.13	1.7791
35/6	34.86	5.81	40.67	6	1	2.72	2.72	2.72	8.16	140.8	12.55	0.8230
50/8	48.25	8.04	56.30	6	1	3.20	3.20	3.20	9.60	194.8	16.81	0.5946
50/30	50.73	29.59	80.32	12	7	2.32	2.32	6.96	11.6	371.1	42.61	0.5693
70/10	68.05	11.34	79.39	6	1	3.80	3.80	3.80	11.4	274.8	23.36	0.4217
70/40	69.73	40.67	110.40	12	7	2.72	2.72	8.16	13.6	510.2	58.22	0.4141
95/15	94.39	15.33	109.73	26	7	2.15	1.67	5.01	13.6	380.2	34.93	0.3059
95/20	95.14	18.82	113.96	7	7	4.16	1.85	5.55	13.9	408.2	37.24	0.3020
95/55	96.51	56.30	152.81	12	7	3.20	3.20	9.60	16.0	706.1	77.85	0.2992
120/7	118.89	6.61	125.50	18	1	2.90	2.90	2.90	14.5	378.5	27.74	0.2422
120/20	115.67	18.82	134.49	26	7	2.38	1.85	5.55	15.1	466.1	42.26	0.2496
120/25	122.48	24.25	146.73	7	7	4.72	2.10	6.30	15.7	525.7	47.96	0.2346
120/70	122.15	71.25	193.40	12	7	3.60	3.60	10.8	18.0	893.7	97.92	0.2364
150/8	144.76	8.04	152.80	18	1	3.20	3.20	3.20	16.0	460.9	32.73	0.1990
150/20	145.68	18.82	164.50	24	7	2.78	1.85	5.55	16.7	548.5	46.78	0.1981
150/25	148.86	24.25	173.11	26	7	2.70	2.10	6.30	17.1	600.1	53.67	0.1940
150/35	147.26	34.36	181.62	30	7	2.50	2.50	7.50	17.5	675.0	64.94	0.1962
185/10	183.22	10.18	193.40	18	1	3.60	3.60	3.60	18.0	583.3	40.51	0.1572

### ACSR(JL/GIA)-GB Standard

Continue Table

Nom.area AL/St mm <sup>2</sup>	Area/mm <sup>2</sup>			Number of wires		Wire dia.		Diameter		Linear Mass kg/km	Nominal Breaking Load daN	Maximum DC Resistance at 20°C Ω/km
	AL	St	Total	AL	St	AL	St	Core	Cond.			
185/25	187.03	24.25	211.28	24	7	3.15	2.10	6.30	18.9	704.9	59.23	0.1543
185/30	181.34	29.59	210.93	26	7	2.98	2.32	6.96	18.9	731.4	64.56	0.1592
185/45	184.73	43.10	227.83	30	7	2.80	2.80	8.40	19.6	846.7	80.54	0.1564
210/10	204.14	11.34	215.48	18	1	3.80	3.80	3.80	19.0	649.9	45.14	0.1411
210/25	209.02	27.10	236.12	24	7	3.33	2.22	6.66	20.0	787.8	66.19	0.1380
210/35	211.73	34.36	246.09	26	7	3.22	2.50	7.50	20.4	852.5	74.11	0.1364
210/50	209.24	48.82	258.06	30	7	2.98	2.98	8.94	20.9	959.0	91.23	0.1381
240/30	244.29	31.67	275.96	24	7	3.60	2.40	7.20	21.6	920.7	75.19	0.1181
240/40	238.84	38.90	277.74	26	7	3.42	2.66	7.98	21.7	962.8	83.76	0.1209
240/55	241.27	56.30	297.57	30	7	3.20	3.20	9.60	22.4	1105.8	101.74	0.1198
300/15	296.88	15.33	312.21	42	7	3.00	1.67	5.01	23.0	938.7	68.41	0.0973
300/20	303.42	20.91	324.32	45	7	2.93	1.95	5.85	23.4	1000.8	76.04	0.952
300/25	306.21	27.10	333.31	48	7	2.85	2.22	6.66	23.8	1057.0	83.76	0.0944
300/40	300.09	38.90	338.99	24	7	3.99	2.66	7.98	23.9	1131.0	92.36	0.0961
300/50	299.54	48.82	348.37	26	7	3.83	2.98	8.94	24.3	1207.7	103.58	0.0964
300/70	305.36	71.25	376.61	30	77	3.60	3.60	10.8	25.2	1399.6	127.23	0.0946
400/20	406.40	20.91	427.31	42	7	3.51	1.95	5.85	26.9	1284.3	89.48	0.0710
400/25	391.91	27.10	419.01	45	7	3.33	2.22	6.66	26.6	1293.5	96.37	0.0737
400/35	390.88	34.36	425.24	48	7	3.22	2.50	7.50	26.8	1347.5	103.67	0.0739
400/65	398.94	65.06	464.00	26	7	4.42	3.44	10.3	28.0	1608.7	135.39	0.0724
400/95	407.75	93.27	501.02	30	19	4.16	2.50	12.5	29.1	1856.7	171.56	0.0709
500/45	488.58	43.10	531.68	48	7	3.60	2.80	8.40	30.0	1685.5	127.31	0.0591
630/55	639.92	56.30	696.22	48	7	4.12	3.20	9.60	34.3	2206.4	164.31	0.0452
800/55	814.30	56.30	870.60	45	7	4.80	3.20	9.60	38.4	2687.5	192.22	0.0355
800/70	808.15	71.25	879.40	48	7	4.63	3.60	10.8	38.6	2787.6	207.68	0.0358

### AAAC-ASTM Standard

Code word	Conductor size	Stranding	Section area	Diameter of conductor	Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20°C
	AWG MCM	No./mm	mm <sup>2</sup>	mm	kg/km	kgf	Ω/km
Alton	4	7/1.96	21.14	5.89	57.89	685	1.5860
	48.69(4)	7/2.12	24.67	6.35	67.56	799	1.3557
Amas	2	7/2.47	33.65	7.42	92.14	1091	0.9987
	77.47(2)	7/2.67	39.26	8.02	107.50	1275	0.8547
Azusa	1/0	7/3.12	53.49	9.35	146.50	1733	0.6259
	123.3(1/0)	7/3.37	62.46	10.11	171.00	2019	0.5365
Anahelm	2/0	7/3.50	67.45	10.52	184.70	2090	0.4974
	155.4(2/0)	7/3.78	78.75	11.35	215.16	2447	0.4264
Amherst	3/0	7/3.93	85.00	11.79	232.70	2641	0.3945
	195.7(3/0)	7/4.25	99.20	12.75	271.50	3079	0.3373
Altiance	4/0	7/4.42	107.20	13.26	293.70	3334	0.3119
	246.9(4/0)	7/4.77	125.10	14.30	342.60	3885	0.2678
	250.0	19/2.91	126.70	14.58	346.90	3977	0.2651



### AAAC-ASTM Standard

Continue Table

Code word	Conductor size	Stranding	Section area	Diameter of conductor	Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20 °C
	AWG MCM	No./mm	mm <sup>2</sup>	mm	kg/km	kgf	Ω/km
Butte	300.0	19/3.19	152.10	15.89	418.60	4772	0.2206
	312.8	19/3.26	158.50	16.31	434.00	4976	0.2112
Canton	350.0	19/3.46	177.30	17.25	485.50	5333	0.1886
	394.5	19/3.66	199.00	18.31	547.40	6016	0.1676
Calro	400.0	19/3.69	202.70	18.44	555.10	6098	0.1649
	450.0	19/3.91	228.00	19.56	624.40	6862	0.1468
	465.4	19/3.98	235.80	19.89	645.70	7097	0.1431
	500.0	19/4.12	253.40	20.60	693.60	7617	0.1322
Darien	550.0	37/3.10	278.70	21.67	762.90	8555	0.1200
	559.5	19/4.36	283.50	21.79	776.30	8525	0.1181
Elgin	600.0	37/3.23	304.00	22.63	832.00	9330	0.1105
	650.0	37/3.37	329.40	23.57	909.80	10105	0.1015
Flint	652.4	19/4.71	330.60	23.55	970.60	9942	0.1012
	700.0	37/3.49	354.50	24.46	910.60	10401	0.09464
	740.8	37/3.59	375.40	25.15	1028	11013	0.08944
	750.0	37/3.62	380.20	25.32	1041	11216	0.08796
Greeley	800.0	37/3.73	405.40	26.14	1109	11930	0.08285
	900.0	37/3.96	456.30	27.74	1249	13460	0.07351
	927.2	37/4.02	469.80	28.14	1287	13868	0.07133
	1000	37/4.18	506.70	29.24	1388	14887	0.06597
	1077.4	61/3.38	483.40	30.42	1496	15907	0.06120
	1165.1	61/3.51	523.70	31.59	1617	17233	0.05675
	1250	61/3.63	633.30	32.67	1733	18354	0.05306
	1259.6	61/3.65	564.00	32.85	1748	18558	0.05248
	1348.8	61/3.78	604.20	34.02	1872	19884	0.04893
	1439.2	61/3.90	644.50	35.1	1997	21209	0.04597
	1500.0	61/3.98	760.00	35.82	2081	22127	0.04414
	1750.0	61/4.30	886.70	38.7	2429	25798	0.03781

### AAAC-BS Standard

Code word	Conductor size	Stranding	Section area	Diameter of conductor	Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20 °C
	AWG MCM	No./mm	mm <sup>2</sup>	mm	kg/km	kgf	Ω/km
Box	15	7/1.85	18.82	5.55	51	537	1.7495
Acacia	20	7/2.08	23.79	6.24	65	680	1.3840
Almond	25	7/2.34	30.10	7.02	82	861	1.0934
Cedar	30	7/2.54	35.47	7.62	97	1014	0.9281
	35	7/2.77	42.18	8.31	115	1205	0.7804
Fir	40	7/2.95	47.84	8.85	131	1367	0.6880
Hazel	50	7/3.30	59.87	9.9	164	1711	0.55498
Pine	60	7/3.61	71.65	10.83	196	2048	0.4594
	70	7/3.91	84.05	11.73	230	2402	0.3917
Willow	75	7/4.04	89.73	12.12	245	2565	0.3669

### AAAC-BS Standard

Continue Table

Code word	Conductor size	Stranding	Section area	Diameter of conductor	Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20 °C
	AWG MCM	No./mm	mm <sup>2</sup>	mm	kg/km	kgf	Ω/km
	80	7/4.19	96.52	12.57	264	2758	0.3441
	90	7/4.44	108.00	13.32	298	3112	0.3023
Oak	100	7/4.65	118.90	13.95	325	3398	0.2769
	100	19/2.82	118.70	14.1	326	3393	0.2787
Mulberry	125	19/3.18	150.90	15.9	415	4312	0.2192
Ash	150	19/3.48	180.70	17.4	497	5164	0.1831
Elm	175	19/3.76	211.00	18.8	580	6030	0.1568
Poplar	200	37/2.87	239.40	20.09	659	8841	0.1385
	225	37/3.05	270.30	21.35	744	7724	0.1227
Sycamore	250	37/3.22	303.20	22.54	835	8864	0.1093
Upas	300	37/3.53	362.10	24.71	997	10350	0.09156
Walnut	350	37/3.81	421.80	26.67	1162	12053	0.07860
Yew	400	37/4.06	479.00	28.42	1319	13685	0.06921
Totara	425	37/4.14	498.10	28.98	1372	14233	0.06656
Rubus	500	61/3.50	586.90	31.5	1620	16771	0.05662
Araucaria	700	61/4.14	821.10	37.26	2266	23450	0.04047

### AAAC-DIN Standard

Conductor size	Alloy area	Number of wires	Diameter of wire	Overall diameter of conductor	Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20 °C
mm <sup>2</sup>	mm <sup>2</sup>		mm	mm	kg/km	daN	Ω/km
16	15.89	7	1.70	5.1	43	444	2.0910
25	24.25	7	2.10	6.3	66	677	1.3703
35	34.36	7	2.50	7.5	94	960	0.9669
50	49.48	7	3.00	9.0	135	1382	0.6714
50	48.35	19	1.80	9.0	133	1350	0.6905
70	65.81	19	2.10	10.5	181	1838	0.5073
95	93.27	19	2.50	12.5	256	2605	0.3579
120	116.99	19	2.80	14.0	322	3268	0.2854
150	147.11	37	2.25	15.8	406	4109	0.2274
185	181.62	37	2.50	17.5	500	5073	0.1842
240	242.54	61	2.25	20.3	670	6774	0.1383
300	299.43	61	2.50	22.5	827	8363	0.1120
400	400.14	61	2.89	26.0	1104	11176	0.0838
500	499.63	61	3.23	29.1	1379	13960	0.06709
625	626.20	91	2.96	32.6	1732	17490	0.0540
800	802.09	91	3.35	36.9	2218	22402	0.0418
1000	999.71	91	3.74	41.1	2767	27922	0.0335

### AAAC-IEC Standard

Code name	Area/ mm <sup>2</sup>	No. of wires	Diameter/mm		Linear Mass kg/km	Nominal Breaking Load kN	Maximum DC Resistance at 20 °C Ω/km
			Wire	Cond.			
16	18.4	7	1.83	5.49	50.4	5.43	1.7896
25	28.8	7	2.29	6.86	78.7	8.49	1.1453
40	46.0	7	2.89	8.68	125.9	13.58	0.7158
63	72.5	7	3.63	10.9	198.3	21.39	0.4545
100	115	19	2.78	13.9	316.3	33.95	0.2877
125	144	19	3.10	15.5	395.4	42.44	0.2302
160	184	19	3.51	17.6	506.1	54.32	0.1798
200	230	19	3.93	19.6	632.7	67.91	0.1439
250	288	19	4.39	22.0	790.8	84.88	0.1151
315	363	37	3.53	24.7	998.9	106.95	0.0916
400	460	37	3.98	27.9	1268.4	135.81	0.0721
450	518	37	4.22	29.6	1426.9	152.79	0.0641
500	575	37	4.45	31.2	1585.5	169.76	0.0577
560	645	61	3.67	33.0	1778.4	190.14	0.0516
630	725	61	3.89	35.0	2000.7	213.90	0.0458
710	817	61	4.13	37.2	1154.8	241.07	0.0407
800	921	61	4.38	39.5	2540.6	271.62	0.0361
900	1036	91	3.81	41.8	2861.1	305.58	0.0321
1000	1151	91	4.01	44.1	3179.0	339.53	0.0289
1120	1289	91	4.25	46.7	3560.5	380.27	0.0258
1250	1439	91	4.49	49.4	3973.7	424.41	0.0231

Code name	Area/ mm <sup>2</sup>	No. of wires	Diameter/mm		Linear Mass kg/km	Nominal Breaking Load kN	Maximum DC Resistance at 20 °C Ω/km
			Wire	Cond.			
16	18.6	7	1.84	5.52	50.8	6.04	1.7896
25	29.0	7	2.30	6.90	79.5	9.44	1.1453
40	46.5	7	2.91	8.72	127.1	15.10	0.7158
63	73.2	7	3.65	10.9	200.2	23.06	0.4545
100	116	19	2.79	14.0	319.3	37.76	0.2877
125	145	19	3.12	15.6	399.2	47.20	0.2302
160	186	19	3.53	17.6	511.0	58.56	0.1798
200	232	19	3.95	19.7	638.7	73.20	0.1439
250	290	19	4.41	22.1	798.4	91.50	0.1151
315	366	37	3.55	24.8	1008.4	115.29	0.0913
400	465	37	4.00	28.0	1280.5	146.40	0.0721
450	523	37	4.24	29.7	1440.5	164.70	0.0641
500	581	37	4.47	31.3	1600.6	183.00	0.0577
560	651	61	3.69	33.2	1795.3	204.96	0.0516
630	732	61	3.91	35.2	2019.8	230.58	0.0458
710	825	61	4.15	37.3	2276.2	259.86	0.0407
800	930	61	4.40	39.6	2564.8	292.80	0.0361
900	1046	91	3.83	42.1	2888.3	329.40	0.0321
1000	1162	91	4.03	44.4	3209.3	366.00	0.0289
1120	1301	91	4.27	46.9	3594.4	409.92	0.0258

### AAAC(JLHA1 JLHA2)-GB Standard

Nom. Alloy Area/mm <sup>2</sup>	Area/mm <sup>2</sup>	No. of wires	Diameter/mm		Linear Mass kg/km	Nominal Breaking Load kN	Maximum DC Resistance at 20°C Ω/km
			Wire	Cond.			
10	10.02	7	1.35	4.05	27.4	3.26	3.3205
16	16.08	7	1.71	5.13	44.0	5.22	2.0695
25	24.94	7	2.13	6.39	68.2	8.11	1.3339
35	34.91	7	2.52	7.56	95.5	11.35	0.9529
50	50.14	7	3.02	9.06	137.2	16.30	0.6635
70	70.07	7	3.57	10.7	191.7	22.07	0.4748
95	95.14	7	4.16	12.5	261.5	29.97	0.3514
150	149.96	19	3.17	15.9	412.2	48.74	0.2229
210	209.85	19	3.75	18.8	576.8	66.10	0.1593
240	239.96	19	4.01	20.1	661.1	75.59	0.1397
300	299.43	37	3.21	22.5	825.0	97.32	0.1119
400	399.98	37	3.71	26.0	1102.0	125.99	0.0838
500	500.48	37	4.15	29.1	1380.9	157.65	0.0671
630	631.30	61	3.63	32.7	1741.8	198.86	0.0532
800	801.43	61	4.09	36.8	2211.3	252.45	0.0419
1000	1000.58	61	4.57	41.1	2760.7	315.18	0.0335

Nom. Alloy Area/mm <sup>2</sup>	Area/mm <sup>2</sup>	No. of wires	Diameter/mm		Linear Mass kg/km	Nominal Breaking Load kN	Maximum DC Resistance at 20°C Ω/km
			Wire	Cond.			
10	10.02	7	1.35	4.05	27.4	2.96	3.2891
16	16.08	7	1.71	5.13	44.0	4.74	2.0500
25	24.94	7	2.13	6.39	68.2	7.36	1.3213
35	34.91	7	2.52	7.56	95.5	10.30	0.9439
50	50.14	7	3.02	9.06	137.2	14.79	0.6573
70	70.07	7	3.57	10.7	191.7	20.67	0.4703
95	95.14	7	4.16	12.5	261.5	28.07	0.3481
120	120.36	19	2.84	14.2	330.8	35.51	0.2751
150	149.96	19	3.17	15.9	412.2	44.24	0.2208
210	209.85	19	3.75	18.8	576.8	61.91	0.1578
240	239.96	19	4.01	20.1	661.1	70.79	0.1383
300	299.43	37	3.21	22.5	825.0	88.33	0.1109
400	399.98	37	3.71	26.0	1102.0	117.99	0.0830
500	500.48	37	4.15	29.1	1380.9	147.64	0.0664
630	631.30	61	3.63	32.7	1741.8	186.23	0.0527
800	801.43	61	4.09	36.8	2211.3	236.42	0.0415
1000	1000.58	61	4.57	41.1	2760.7	295.17	0.0332

### AACSR-ASTM Standard

Conductor Area	Alloy area	Steel area	No. of alloy wires	Diameter of alloy wire	Number of Steel wires	Diameter of Steel wire	Diameter of conductor	Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20 °C
mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>		mm		mm	mm			
163	140	23	26	2.62	7	2.04	16.6	560	7500	0.240
173	140	33	30	2.44	7	2.44	17.1	650	8740	0.240
186	160	26	26	2.80	7	2.18	17.7	645	8560	0.210
198	160	38	30	2.61	7	2.61	18.3	740	10600	0.210
209	180	29	256	2.97	7	2.31	18.8	725	9510	0.187
222	180	42	30	2.76	7	2.76	19.3	825	11200	0.187
232	200	32	26	3.13	7	2.43	19.8	800	10600	0.168
247	200	47	30	2.91	7	2.91	20.4	920	12400	0.168
260	224	36	26	3.31	7	2.57	21.0	900	11800	0.150
276	224	52	30	3.08	7	3.08	21.6	1025	13900	0.150
291	250	41	26	3.50	7	2.72	22.2	1010	12900	0.135
308	250	58	30	3.26	7	3.26	22.8	1145	15600	0.135
326	280	46	26	3.70	7	2.88	23.4	1140	14400	0.120
345	280	65	30	3.45	7	3.45	24.2	1280	17100	0.120
367	315	52	26	3.93	7	3.06	24.9	1276	16300	0.107
387	315	72	30	3.66	19	2.20	25.6	1433	19000	0.107
413	355	58	26	4.17	7	3.24	26.4	1433	18300	0.0950
436	355	81	30	3.88	19	2.33	27.2	1614	21100	0.0950
465	400	65	26	4.43	7	3.45	28.1	1612	20700	0.0842
491	400	91	30	4.12	19	2.47	28.8	1816	23700	0.0842
509	450	59	54	3.26	19	1.98	29.5	1703	21500	0.0748
563	500	63	54	3.43	19	2.06	30.9	1873	22900	0.0673
631	560	71	54	3.63	19	2.18	32.7	2101	25700	0.06010
710	630	80	54	3.85	19	2.31	34.6	2365	28600	0.0534
800	710	90	54	4.09	19	2.45	36.8	2665	32200	0.0474
901	800	101	54	4.34	19	2.60	39.0	3000	36300	0.0420
973	900	73	84	3.69	19	2.21	40.6	3062	35500	0.0374
1081	1000	81	84	3.89	19	2.33	42.8	3395	39100	0.0337
1211	1120	91	84	4.12	19	2.47	45.3	3803	43900	0.0300
1352	1250	102	84	4.35	19	2.61	47.8	4250	49000	0.0270

### AACSR-DIN Standard

Conductor Area	Alloy area	Steel area	No. of alloy wires	Diameter of alloy wire	Number of Steel wires	Diameter of Steel wire	Diameter of conductor	Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20 °C
mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>		mm		mm	mm			
16/2.5	15.27	2.54	6	1.80	1	1.80	5.4	62	748	2.1800
25/4	23.86	3.98	6	2.25	1	2.28	6.8	97	1171	1.3952
35/6	34.35	5.73	6	2.70	1	2.70	8.1	140	1685	0.9689
44/32	43.98	31.67	14	2.00	7	2.40	11.2	373	5027	0.7625
50/8	48.25	8.04	6	3.20	1	3.20	9.6	196	2366	0.6898
50/30	51.17	29.85	12	2.33	7	2.33	11.7	378	5024	0.6547
70/12	69.89	11.40	26	1.85	7	1.44	11.7	284	3399	0.4791
95/15	94.39	15.33	26	2.15	7	1.67	13.6	383	4582	0.3547

### AACSR-DIN Standard

Continue Table

Conductor Area	Alloy area	Steel area	No. of alloy wires	Diameter of alloy wire	Number of Steel wires	Diameter of Steel wire	Diameter of conductor	Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20 °C
				mm		mm				
mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>		mm		mm	mm	kg/km	daN	Ω/km
95/55	96.51	56.30	12	3.20	7	3.20	16.0	714	9475	0.3471
105/75	105.67	75.55	14	3.10	19	2.25	17.5	899	12014	0.3174
120/20	121.57	19.85	26	2.44	7	1.90	15.5	494	5914	0.2754
120/70	122.15	71.25	12	3.60	7	3.60	18.0	904	11912	0.2742
125/30	127.92	29.85	30	2.33	7	2.33	16.3	590	7280	0.2621
150/25	148.86	24.25	26	2.70	7	2.10	17.1	604	7236	0.2249
170/40	171.77	40.08	30	2.70	7	2.70	18.9	794	9775	0.1952
185/30	183.78	29.85	26	3.00	7	2.33	19.0	744	8922	0.1822
210/35	209.10	34.09	26	3.20	7	2.49	20.3	848	10167	0.1601
210/50	212.06	49.48	30	3.00	7	3.00	21.0	979	12068	0.1581
230/30	230.91	29.85	24	3.50	7	2.33	21.0	874	10308	0.1449
240/40	243.05	39.49	26	3.45	7	2.68	21.8	985	11802	0.1378
265/35	263.66	34.09	24	3.74	7	2.49	22.4	998	11771	0.1269
300/50	304.26	49.48	26	3.86	7	3.00	24.5	1233	14779	0.1101
305/40	304.62	39.49	54	2.68	7	2.68	24.1	1155	13612	0.1101
340/30	339.29	29.85	48	3.00	7	2.33	25.0	1174	13494	0.0988
380/50	381.70	49.48	54	3.00	7	3.00	27.0	1448	17056	0.0879
385/35	386.04	34.09	48	3.20	7	2.49	26.7	1336	15369	0.0868
435/55	434.29	56.30	54	3.20	7	3.20	28.8	1647	19406	0.0772
450/40	448.71	39.49	48	3.45	7	2.68	28.7	1553	17848	0.0747
490/65	490.28	63.55	54	3.60	7	3.40	30.6	1860	21907	0.0684
550/70	549.65	71.25	54	3.40	7	3.60	32.4	2085	24560	0.0610
560/50	561.70	49.48	48	3.86	7	3.00	32.2	1943	22348	0.0597
680/85	678.58	85.95	54	4.00	19	2.40	36.0	2564	30084	0.0494

### AACSR-IEC Standard

Code name	Area			Number of wires		Wire dia.		Diameter		Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20 °C
	Alloy	St	Total			Alloy	St	Core	Cond.			
	mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>	Alloy	St	mm	mm	mm	mm	kg/km	daN	Ω/km
16	18.4	3.07	21.5	6	1	1.98	1.98	1.98	5.93	74.4	9.02	1.7934
25	28.8	4.80	33.6	6	1	2.47	2.47	2.47	7.41	116.2	13.96	1.1478
40	46.0	7.67	53.7	6	1	3.13	3.13	3.13	9.38	185.9	22.02	0.7174
63	72.5	12.1	84.6	6	1	3.92	3.92	3.92	11.8	292.8	34.68	0.4555
100	115	6.39	121	18	1	2.85	2.85	2.85	14.3	366.4	41.24	0.2880
125	144	7.99	152	18	1	3.19	3.19	3.19	16.0	458.0	51.23	0.2304
125	144	23.4	167	26	7	2.65	2.06	6.19	16.8	579.9	69.86	0.2310
160	184	10.2	194	18	1	3.61	3.61	3.61	18.0	586.2	65.58	0.1800
160	184	30.0	214	26	7	3.00	2.34	7.01	19.0	742.3	88.52	0.1805
200	230	12.8	243	18	1	4.04	4.04	4.04	20.2	732.8	81.97	0.1440
200	230	37.5	268	26	7	3.36	2.61	7.83	21.3	927.9	110.64	0.1444
250	288	28.3	316	22	7	4.08	2.27	6.80	23.1	1013.5	117.09	0.1154
250	288	46.9	335	26	7	3.75	2.92	8.76	23.8	1159.8	138.31	0.1155
315	383	25.1	388	45	7	3.20	2.14	6.41	25.8	1196.5	136.28	0.0917

### AACSR-IEC Standard

Continue Table

Code name	Area			Number of wires		Wire dia.		Diameter		Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20°C
	Alloy	St	Total			Alloy	St	Core	Cond.			
	mm <sup>2</sup>	mm <sup>2</sup>	mm <sup>2</sup>	Alloy	St	mm	mm	mm	mm	kg/km	daN	Ω/km
315	383	59.0	422	26	7	4.21	3.28	9.83	26.7	1461.4	171.90	0.0917
400	460	31.8	492	45	7	3.61	2.41	7.22	28.9	1519.4	172.10	0.0722
400	460	59.7	520	54	7	3.29	3.29	9.88	29.7	1738.3	201.46	0.0723
450	518	35.8	554	45	7	3.83	2.55	7.66	30.6	1709.3	193.61	0.0642
450	518	67.1	585	54	7	3.49	3.49	10.5	31.5	1955.6	226.64	0.0643
500	575	39.8	615	45	7	4.04	2.69	8.07	32.3	1899.3	215.12	0.0578
500	575	74.6	650	54	7	3.68	3.68	11.1	33.2	2172.9	251.82	0.0578
560	645	44.6	689	45	7	4.27	2.85	8.54	34.2	2127.2	240.93	0.0516
560	645	81.6	726	54	19	3.90	2.34	11.7	35.1	2420.9	283.21	0.0516
630	725	31.3	756	72	7	3.58	2.39	7.16	35.8	2248.0	249.62	0.0459
630	725	91.8	817	54	19	4.13	2.48	12.4	37.2	2723.5	318.61	0.0459
710	817	35.3	852	72	7	3.80	2.53	7.60	38.0	2533.4	281.32	0.0407
710	817	104	921	54	19	4.39	2.63	13.2	39.5	3069.4	359.98	0.0407
800	921	39.8	961	72	7	4.04	2.69	8.07	40.4	2854.6	316.98	0.0361
800	921	76.7	997	84	7	3.74	3.74	11.2	41.1	3145.1	356.03	0.0362
900	1036	44.8	1081	72	7	4.28	2.85	8.56	42.8	3211.4	356.60	0.0321
900	1036	86.3	1122	84	7	3.96	3.96	11.9	43.6	3538.3	400.53	0.0322
1000	1151	93.7	1245	84	19	4.18	2.51	12.5	45.9	3916.8	446.37	0.0289
1120	1289	105	1394	84	19	4.42	2.65	13.3	48.6	4386.8	499.93	0.0258

### AACSR(JLHA1/G1A) -GB Standard

Nom. area Alloy/St mm <sup>2</sup>	Area / mm <sup>2</sup>			Number of wires		Wire dia. /mm		Diameter /mm		Linear Mass	Nominal Breaking Load	Maximum DC Resistance at 20°C
	Alloy	St	Total	Alloy	St	Alloy	St	Core	Cond.			
10/2	10.60	1.77	12.37	6	1	1.50	1.50	1.50	4.50	42.8	5.51	3.1444
16/3	16.13	2.69	18.82	6	1	1.85	1.85	1.85	5.55	65.1	8.39	2.0671
25/4	25.36	4.23	29.59	6	1	2.32	2.32	2.32	6.96	102.4	13.06	1.3144
35/6	34.86	5.81	40.67	6	1	2.72	2.72	2.72	8.16	140.8	17.96	0.9563
50/8	48.25	8.04	56.30	6	1	3.20	3.20	3.20	9.60	194.8	24.53	0.6909
50/30	50.73	29.59	80.32	12	7	2.32	2.32	6.96	11.6	371.1	50.22	0.6614
70/10	68.05	11.34	79.39	6	1	3.80	3.80	3.80	11.4	274.8	33.91	0.4899
70/40	69.73	40.67	110.40	12	7	2.72	2.72	8.16	13.6	510.2	69.03	0.4812
95/15	94.39	15.33	109.73	26	7	2.15	1.67	5.01	13.6	380.2	48.62	0.3554
95/55	96.51	56.30	152.81	12	7	3.20	3.20	9.60	16.0	706.1	93.29	0.3477
120/7	118.89	6.61	125.50	18	1	2.90	2.90	8.70	14.5	378.5	46.17	0.2815
120/20	115.67	18.82	134.49	26	7	2.38	1.85	5.55	15.1	466.1	59.61	0.2900
120/70	122.15	71.25	193.40	12	7	3.60	3.60	10.8	18.0	893.7	116.85	0.2747
150/8	144.76	8.04	152.81	18	1	3.20	3.20	3.20	16.0	460.9	55.90	0.2312
150/25	148.86	24.25	173.11	26	7	2.70	2.10	6.30	17.1	600.1	76.75	0.2254
185/10	183.22	10.18	193.40	18	1	3.60	3.60	3.60	18.0	583.3	68.91	0.1826
210/10	204.14	11.34	215.48	18	1	3.80	3.80	3.80	19.0	649.9	76.78	0.1639
210/35	211.73	34.36	246.09	26	7	3.22	2.50	7.5	20.4	852.5	107.98	0.1585
240/30	244.29	31.67	275.96	24	7	3.60	2.40	7.20	21.6	920.7	113.05	0.1372

### AACSR(JLHA1/G1A) Standard

Continue Table

Nom. area Alloy/St mm <sup>2</sup>	Area / mm <sup>2</sup>			Number of wires		Wire dia. /mm		Diameter /mm		Linear Mass kg/km	Nominal Breaking Load daN	Maximum DC Resistance at 20°C Ω/km
	Alloy	St	Total	Alloy	St	Alloy	St	Core	Cond.			
240/40	238.84	38.90	277.74	26	7	3.42	2.66	7.98	21.7	962.8	121.97	0.1405
300/20	303.42	20.91	324.32	45	7	2.93	1.95	5.85	23.4	1000.8	123.07	0.1106
300/50	299.54	48.82	348.37	26	7	3.83	2.98	8.94	24.3	1207.7	150.01	0.1120
300/70	305.36	71.25	376.61	30	7	3.60	3.60	10.8	25.2	1399.6	174.57	0.1099
400/25	391.91	27.10	419.01	45	7	3.33	2.22	6.66	26.6	1293.5	159.07	0.0857
400/50	399.72	51.82	451.54	54	7	3.07	3.07	9.21	27.6	1509.3	186.91	0.0841
400/95	407.75	93.27	501.02	30	19	4.16	2.50	12.5	29.1	1856.7	234.77	0.0823
500/35	497.01	34.36	531.37	45	7	3.75	2.50	7.50	30.0	1640.3	195.73	0.0675
500/65	501.88	65.06	566.94	54	7	3.44	3.44	10.3	31.0	1895.0	234.68	0.0670
630/45	623.45	43.10	666.55	45	7	4.20	2.80	8.40	33.6	2057.6	245.52	0.0538
630/80	635.19	80.32	715.51	54	19	3.87	2.32	11.6	34.8	2384.7	291.65	0.0529
800/55	814.30	56.30	870.60	45	7	4.80	3.20	9.60	38.4	2687.5	318.43	0.0412
800/100	795.17	100.88	896.05	54	19	4.33	2.60	13.0	39.0	2987.8	365.48	0.0423
1000/45	1002.27	43.10	1045.38	72	7	4.21	2.80	8.40	42.1	3106.8	364.85	0.0335
1000/125	993.51	125.50	1119.01	54	19	4.84	2.90	14.5	43.5	3728.9	456.03	0.0338

### ACAR-ASTM Standard

Size AWG or MCM	Section mm <sup>2</sup>	Stranding		Diameter mm	Weight kg/km	Nominal Breaking Load kg	Maximum DC Resistance at 20°C Ω/km
		AL	Alloy 6201				
30.58	15.5	4×1.68	3×1.68	5.04	42.7	375	1.9786
4	21.15	4×1.96	3×1.96	5.88	58.3	507	1.4506
48.69	24.67	4×2.12	3×2.12	6.36	68	588	1.2428
2	33.62	4×2.47	3×2.47	7.42	92.7	792	0.9112
77.47	39.25	4×2.67	3×2.67	8.02	108	910	0.781
1/0	53.51	4×3.12	3×3.12	9.36	147	1222	0.5732
123.3	62.48	4×3.37	3×3.37	10.11	172	1425	0.4909
2/0	67.44	4×3.5	3×3.50	10.51	186	1501	0.4545
155.4	78.74	4×3.78	3×3.78	11.35	217	1735	0.3893
3/0	85.02	4×3.93	3×3.93	11.8	234	1859	0.3607
195.7	99.16	4×4.25	3×4.25	12.74	273	2174	0.3092
4/0	107	4×4.42	3×4.42	13.25	296	2352	0.2858
246.9	125	4×4.77	3×4.77	14.31	345	2739	0.2451
250	127	15×2.91	4×2.91	14.57	349	2482	0.2344
250	127	12×2.91	7×2.91	14.57	349	2806	0.2399
300	152	15×3.19	4×3.19	15.96	419	2943	0.1952
300	152	12×3.19	7×3.19	15.96	419	3340	0.1997
350	177	15×3.45	4×3.45	17.23	489	3395	0.1675
350	177	12×3.45	7×3.45	17.23	489	3823	0.1714
400	203	15×3.69	4×3.69	18.43	559	3831	0.1465
400	203	12×3.69	7×3.69	18.43	559	4330	0.1499
450	228	15×3.91	4×3.91	19.55	629	4243	0.1302
450	228	12×3.91	7×3.91	19.55	629	4813	0.1332



**ACAR-ASTM Standard**

Continue Table

Size	Section	Stranding		Diameter	Weight	Nominal Breaking Load	Maximum DC Resistance at 20°C
AWG or MCM	mm <sup>2</sup>	AL	Alloy 6201	mm	kg/km	kg	Ω/km
500	253	15×4.12	4×4.12	20.6	698	4711	0.1172
500	253	12×4.12	7×4.12	20.6	698	5344	0.1199
500	253	33×2.95	4×2.95	20.66	698	4521	0.1156
500	253	30×2.95	7×2.95	20.66	698	4891	0.1169
500	253	24×2.12	13×2.12	20.66	698	5384	0.1197
500	253	18×2.95	19×2.95	20.66	698	5990	0.1226
550	279	15×4.32	4×4.32	21.6	768	5179	0.1066
550	279	12×4.32	7×4.32	21.6	768	5876	0.1091
550	279	33×3.1	4×3.10	21.67	768	4913	0.1051
550	279	30×3.1	7×3.10	21.67	768	5327	0.1063
550	279	24×3.1	13×3.10	21.67	768	5886	0.1088
550	279	18×3.1	19×3.10	21.67	768	6568	0.1114
600	304	15×4.51	4×4.51	22.57	838	5645	0.0977
600	304	12×4.51	7×4.51	22.57	838	6404	0.0999
600	304	33×3.23	4×3.23	22.63	838	5333	0.0963
600	304	30×3.23	7×3.23×	22.63	838	5783	0.0974
600	304	24×3.23	13×3.23	22.63	838	6391	0.0997
600	304	18×3.23	19×3.23	22.63	838	7131	0.1022
650	329	37×3.37	4×3.37	23.56	908	5806	0.0889
650	329	30×3.37	7×3.37	23.56	908	6296	0.0899
650	329	24×3.37	13×3.37	23.56	908	6957	0.0921
650	329	18×3.37	19×3.37×	23.56	908	7762	0.0943
700	354	33×3.49	4×3.49×	24.45	978	6178	0.0826
700	354	30×3.49	7×3.49×	24.45	978	6666	0.0835
700	354	24×3.49	13×3.49	24.45	978	7306	0.0855
700	354	18×3.49	19×3.49	24.45	978	8099	0.0876
750	380	33×3.62	4×3.62	25.32	1048	6538	0.077
750	380	30×3.62	7×3.62	25.32	1048	7071	0.0779
750	380	24×3.62	13×3.62	25.32	1048	7780	0.0797
750	380	18×3.62	19×3.62	25.32	1048	8651	0.0817
800	405	33×3.73	4×3.73	26.14	1117	6941	0.0722
800	405	30×3.73	7×3.73	26.14	1117	7507	0.0731
800	405	24×3.73	13×3.73	26.14	1117	8260	0.0748
800	405	18×3.73	19×3.73	26.14	1117	9185	0.0766
850	431	33×3.85	4×3.85	26.95	1187	7272	0.0679
850	431	30×3.85	7×3.85	26.95	1187	7884	0.0687
850	431	24×3.85	13×3.85	26.95	1187	8709	0.0703
850	431	18×3.85	19×3.85	26.95	1187	9715	0.0721
900	456	33×3.96	4×3.96	27.74	1257	7694	0.0641
900	456	30×3.96	7×3.96	27.74	1257	8341	0.0649
900	456	24×3.96	13×3.96	27.74	1257	9214	0.0664
900	456	18×3.96	19×3.96	27.74	1257	10274	0.068
950	481	33×4.07	4×4.07	28.48	1327	8127	0.0608

**ACAR-ASTM Standard**

Continue Table

Size AWG or MCM	Section mm <sup>2</sup>	Stranding		Diameter mm	Weight kg/km	Nominal Breaking Load kg	Maximum DC Resistance at 20°C Ω/km
		AL	Alloy 6201				
950	481	30×4.07	7×4.07	28.48	1327	8811	0.0615
950	481	24×4.07	13×4.07	28.48	1327	9733	0.063
950	481	18×4.07	19×4.07	28.48	1327	10857	0.0645
1000	507	33×4.18	4×4.18	29.23	1394	8572	0.0578
1000	507	30×4.18	7×4.18	29.23	1393	9294	0.0584
1000	507	24×4.18	13×4.18	29.23	1393	10266	0.0598
1000	507	18×4.18	19×4.18	29.23	1391	11452	0.0613
1000	507	54×3.25	7×3.25	29.26	1393	8950	0.0578
1000	507	48×3.25	13×3.25	29.26	1393	9584	0.0586
1000	507	42×3.25	19×3.25	29.26	1391	10395	0.0595
1000	507	33×3.25	28×3.25	29.26	1391	11251	0.0608
1100	557	24×4.38	13×4.38	30.65	1534	11272	0.0544
1100	557	18×4.38	19×4.38	30.65	1534	12574	0.0557
1100	557	54×3.41	7×3.41	30.7	1534	9773	0.0525
1100	557	48×3.41	13×3.41	30.7	1534	10404	0.0533
1100	557	42×3.41	19×3.41	30.7	1534	11228	0.0541
1100	557	33×3.41	28×3.4	30.7	1534	12076	0.0552
1200	608	33×4.58	4×4.58	32.02	1673	10292	0.0481
1200	608	30×4.58	7×4.58	32.02	1673	11157	0.0487
1200	608	24×4.58	13×4.58	32.02	1673	12325	0.0498
1200	608	18×4.58	19×4.58	32.02	1673	13748	0.0514
1200	608	54×3.56	7×3.56	32.07	1673	10480	0.0482
1200	608	48×3.56	13×3.56	32.07	1673	11185	0.0488
1200	608	42×3.56	19×3.56	32.07	1673	12101	0.0495
1200	608	33×3.56	28×3.56	32.07	1673	12941	0.0506
1250	633	33×4.67	4×4.67	32.7	1741	10700	0.0462
1250	633	30×4.67	7×4.67	32.7	1741	11600	0.0467
1250	633	24×4.67	13×4.67	32.07	1741	12814	0.0479
1250	633	18×4.67	19×4.67	32.07	1741	14294	0.049
1250	633	54×3.64	7×3.64	32.72	1741	10956	0.0463
1250	633	48×3.64	13×3.64	32.72	1741	11694	0.0469
1250	633	42×3.64	19×3.64	32.72	1741	12650	0.0476
1250	633	33×3.64	28×3.64	32.72	1741	13529	0.0486
1300	659	33×4.76	4×4.76	33.32	1812	11116	0.0444
1300	659	30×4.76	7×4.76	33.32	1812	12052	0.045
1300	659	24×4.76	13×4.76	33.32	1812	13312	0.046
1300	659	18×4.76	19×4.76	33.32	1812	14851	0.0472
1300	659	54×3.71	7×3.71×	33.38	1812	11381	0.0444
1300	659	48×3.71	13×3.71	33.38	1812	12148	0.0451
1300	659	42×3.71	19×3.71	33.38	1812	13142	0.0457
1300	659	33×3.71	28×3.71	33.38	1812	14055	0.0467
1400	709	54×3.85	7×3.85	34.63	1952	12056	0.0413
1400	709	48×3.85	13×3.85	34.63	1952	12905	0.0419

Size AWG or MCM	Section mm <sup>2</sup>	Stranding		Diameter mm	Weight kg/km	Nominal Breaking Load kg	Maximum DC Resistance at 20°C Ω/km
		AL	Alloy 6201				
1400	709	42×3.85	19×3.85	34.63	1952	13993	0.0425
1400	709	33×3.85	28×3.85	34.63	1952	15013	0.0434
1500	760	54×3.98	7×3.98	35.85	2090	12884	0.0385
1500	760	48×3.98	13×3.98	35.85	2090	13791	0.0391
1500	760	42×3.98	19×3.98	35.85	2090	14954	0.0397
1500	760	33×3.98	28×3.98	35.85	2090	16044	0.0405
1600	811	54×4.12	7×4.12	37.04	2231	13087	0.0361
1600	811	48×4.12	13×4.12	37.04	2231	14778	0.0366
1600	811	42×4.12	19×4.12	37.04	2231	16025	0.0371
1600	811	33×4.12	28×4.12	37.04	2231	17341	0.038
1700	861	54×4.24	7×4.24	38.15	2367	14623	0.034
1700	861	48×4.24	13×4.24	38.15	2367	15561	0.0345
1700	861	42×4.24	19×4.24	38.15	2367	16972	0.035
1700	861	33×4.24	28×4.24	38.15	2367	18366	0.0358
1750	887	54×4.3	7×4.30	38.73	2439	15039	0.033
1750	887	48×4.3	13×4.30	38.73	2439	16098	0.0335
1750	887	42×4.3	19×4.30	38.73	2439	17455	0.034
1750	887	33×4.3	28×4.30	38.73	2439	18889	0.0347
1800	912	54×4.36	7×4.36	39.28	2510	15462	0.0321
1800	912	48×4.36	13×4.36	39.28	2510	16550	0.0326
1800	912	42×4.36	19×4.36	39.28	2510	17946	0.033
1800	912	33×4.36	28×4.36	39.28	2510	19420	0.0338
1900	963	54×4.48	7×4.48	40.35	2649	16325	0.0304
1900	963	48×4.48	13×4.48	40.35	2649	17473	0.0309
1900	963	42×4.48	19×4.48	40.35	2649	18947	0.0313
1900	963	33×4.48	28×4.48	40.35	2649	20504	0.032
2000	1013	54×4.6	7×4.60	41.4	2790	17211	0.0289
2000	1013	48×4.6	13×4.60	41.4	2790	18422	0.0293
2000	1013	42×4.6	19×4.60	41.4	2790	19976	0.0297
2000	1013	33×4.6	28×4.60	41.4	2790	21617	0.0304
2000	1013	72×3.76	19×3.76	41.4	2790	18558	0.0293
2000	1013	63×3.76	28×3.76	41.4	2790	19657	0.0298
2000	1013	54×3.76	37×3.76	41.4	2790	21091	0.0302

### ACAR-IEC Standard

Code name	Diameter/mm		No. of Wires		Area/mm <sup>2</sup>			Linear Mass kg/km	Nominal Breaking Load kN	Maximum DC Resistance at 20°C
	Wire	Cond.	AL	Alloy	AL	Alloy	Total			
16	1.76	5.29	4	3	9.78	7.33	17.1	46.8	4.07	1.7896
25	2.21	6.62	4	3	15.3	11.5	26.7	73.1	6.29	1.1453
40	2.79	8.37	4	3	24.4	18.3	42.8	117	9.82	0.7158
63	3.5	10.5	4	3	38.5	28.9	67.4	184.3	14.8	0.4545
100	4.41	13.2	4	3	61.1	45.8	107	292.5	23.49	0.2863
125	2.98	14.9	12	7	84	48.8	132	364.1	29.49	0.2302

### ACAR-IEC Standard

Continue Table

Code name	Diameter/mm		No. of Wires		Area/mm <sup>2</sup>			Linear Mass kg/km	Nominal Breaking Load kN	Maximum DC Resistance at 20°C
	Wire	Cond.	AL	Alloy	AL	Alloy	Total			
160	3.37	16.9	12	7	107	62.5	170	466.0	36.95	0.1798
200	3.77	18.8	12	7	134	78.1	212	582.5	44.78	0.1439
250	4.21	21.1	12	7	167	97.6	265	728.1	55.98	0.1151
250	3.05	21.4	18	19	132	139	271	746	64.67	0.1154
315	3.34	23.4	30	7	263	61.4	325	894.4	62.40	0.0916
315	3.43	24.0	18	19	166	175	341	940.0	81.48	0.0916
400	3.77	26.4	30	7	334	78	412	1135.8	76.82	0.0721
400	3.86	27.0	18	19	211	222	433	1193.7	100.30	0.0721
450	3.99	28.0	30	7	376	87.7	464	1277.8	86.42	0.0641
450	4.10	28.7	18	19	237	250	487	1342.9	112.84	0.0641
500	4.21	29.5	30	7	418	97.5	515	1419.8	96.03	0.0577
500	4.32	30.2	18	19	263	278	542	1492.1	125.38	0.0577
560	4.46	31.2	30	7	468	109	577	1590.1	107.55	0.0515
560	3.45	31.1	54	7	505	65.5	570	1573.9	103.53	0.0516
630	3.72	33.4	42	19	456	206	662	1826.0	134.59	0.0458
630	3.80	34.2	24	37	272	420	692	1909.0	169.14	0.0458
710	3.95	35.5	42	19	514	232	746	2057.8	151.68	0.0407
710	4.03	36.3	24	37	307	473	780	2151.4	190.61	0.0407
800	4.19	37.7	42	19	579	262	840	2318.7	170.9	0.0361
800	4.28	38.5	24	37	346	533	879	2424.2	214.78	0.0361
900	4.44	40.0	42	19	651	294	945	2608.5	192.27	0.0321
900	3.66	40.3	54	37	569	390	959	2649.5	207.79	0.0321
1000	3.80	41.8	72	19	818	216	1034	2855.4	195.47	0.0289
1000	3.86	42.5	54	37	632	433	1066	2943.9	230.88	0.0289
1120	4.02	44.3	72	19	916	242	1158	3198.1	218.92	0.0258
1120	4.09	45.0	54	37	708	485	1194	3297.2	258.58	0.0258
1250	4.25	46.8	72	19	1022	270	1292	3569.3	244.33	0.0231
1250	4.32	47.5	54	37	791	542	1332	3679.9	288.6	0.0231
1400	4.50	49.5	72	19	1145	302	1447	3997.6	273.65	0.0207

### All Aluminium Clad Steel Conductor (JLB1A JLB1B)-GB Standard

Nom. St area mm <sup>2</sup>	Code name	Area /mm <sup>2</sup>	No. of stranding	Diameter/mm		Linear Mass kg/km		Nominal Breaking Load kN		Max. DC Resistance at 20 °C Ω/km
				Wire	Cond.	JLB1A	JLB1B	JLB1A	JLB1B	
15	4	12	7	1.48	4.43	80.1	79.4	16.08	15.84	7.1592
20	6.3	18.9	7	1.85	5.56	126.2	125.0	25.33	24.95	205455
30	10	30	7	2.34	7.01	200.3	198.5	40.20	39.60	2.8637
35	12.5	37.5	7	2.61	7.84	250.4	248.1	50.25	49.50	2.2910
50	16	48	7	2.95	8.86	320.5	317.5	64.32	63.36	1.7898
75	25	75	7	3.69	11.08	500.7	496.2	93.75	99.00	1.1455
120	40	120	7	4.67	14.02	801.2	793.9	132.00	158.40	0.7159
120	40	120	19	2.84	14.18	805.0	797.7	160.80	158.40	0.7194
200	63	189	19	3.56	17.79	1267.9	1256.4	240.03	249.40	0.4568
300	100	300	37	3.21	22.49	2017.3	1999.0	402.00	396.00	0.2884
350	125	375	37	3.59	25.15	2521.7	2498.3	476.25	495.00	0.2307
450	160	480	37	4.06	28.45	3227.7	3198.3	580.80	633.60	0.1803
600	200	600	37	4.54	31.81	4034.7	3997.9	684.00	792.00	0.1442
600	200	600	61	3.54	31.85	4040.6	4003.8	762.00	792.00	0.1444

### All Aluminium Clad Steel Conductor(JLB2)-GB Standard

Nom. St area mm <sup>2</sup>	Code name	Area /mm <sup>2</sup>	No. of stranding	Diameter/mm		Linear Mass kg/km	Nominal Breaking Load kN	20 Max. DC Resistance at 20 /km
				Wire	Cond.			
35	16	36.2	7	2.56	7.69	216.4	39.04	1.7896
55	25	56.5	7	3.21	9.62	338.2	61.00	1.1454
100	40	90.4	7	4.05	12.2	541.7	97.61	0.7159
100	40	90.4	19	2.46	12.3	743.7	97.61	0.7193
150	63	142	19	3.09	15.4	856.4	153.73	0.4567
220	100	226	37	2.79	19.5	1362.6	244.02	0.2884
300	125	282	37	3.12	21.8	1703.2	305.02	0.2307
350	160	362	37	3.53	24.7	2180.1	390.43	0.1803
450	200	452	37	3.94	27.6	2725.1	488.03	0.1442
450	200	452	61	3.7	27.6	2729.1	488.03	0.1444

### ACSR/AW-ASTM Standard

Code Name	Conductor Size				Class	Stranding						Nominal Breaking Load		Linear Mass	
	Cross-sectional Area Using Only Aluminum Strand Wires		Approximate Cross-sectional Area including Nominal Aluminum Area in AW Strand Wires <sup>B</sup>			AL			AL Clad Steel			(1000lbf)	kN	Lb/1000 ft	kg/km
	cmil	mm <sup>2</sup>	cmil	mm <sup>2</sup>		No. of Wires	Nom. Diameter		No. of Wires	Nom. Diameter					
							in.	mm		in.	mm				
#2(4/3)	55890	28.3	60100	30.5	AA(+)	4	0.1182	3.00	3	0.1182	3.00	6.6	29	147	219
#3 Swallow /AW	52620	26.7	53900	27.3	A	6	0.0937	2.38	1	0.0937	2.38	2.2	10	69	103
#1(2/5)	51500	26.1	64600	32.7	AA(+)	2	0.1605	4.08	5	0.1605	4.08	16.5	73	341	507
#2(3/4)	49780	25.2	56500	28/6	AA(+)	3	0.1288	3.27	4	0.1288	3.27	9.7	43	197	293
#3(5/2)	47850	24.3	49900	25.3	AA(+)	5	0.0978	2.48	2	0.0978	2.48	3.5	16	88	131
#3(4/3)	44320	22.5	47200	23.9	AA(+)	4	0.1053	2.68	3	0.1053	2.68	5.3	23	117	174
#4 Swanate /AW	41740	21.2	43000	21.8	AA,A	7	0.0772	1.96	1	0.1029	2.61	2.3	10	62.7	93
#4Swan /AW	41740	21.2	42700	21.6	AA,A	6	0.0834	2.12	1	0.0834	2.12	1.8	8	54.5	81
#2(2/5)	40840	20.7	51000	25.8	AA(+)	2	0.1429	3.63	5	0.1429	3.63	13.5	60	270	402
#3(3/4)	39470	20.0	44100	22.3	AA(+)	3	0.1147	2.91	4	0.1147	2.91	7.7	34	156	232
#4(5/2)	37950	19.2	39500	20.0	AA(+)	5	0.0871	2.21	2	0.0871	2.21	2.8	12	69.8	104
#4(4/3)	35150	17.8	37600	19.1	AA(+)	4	0.0937	2.38	3	0.0937	2.38	4.2	19	92.6	138
#3(2/5)	32390	16.4	39900	20.2	AA(+)	2	0.1273	3.23	5	0.1273	3.23	11.3	50	215	320
#4(3/4)	31300	15.9	35100	17.8	AA(+)	3	0.1022	2.60	4	0.1022	2.60	6.1	27	124	185
#4(2/5)	25690	13.0	32300	16.4	AA(+)	2	0.1133	2.88	5	0.1133	2.88	9.0	40	170	253

<sup>A</sup> Metric Conversion Factors-the following conversion factors were used in building the table.

1cmil=5.067 E-04mm<sup>2</sup> 1in=25.4mm 1lb/1000ft=1.488kg/km 1kip(1000lbf)=4.448kN

<sup>B</sup> The cmil area of the aluminum in the aluminum clad steel wire is calculated based on the requirement that the minimum thickness of aluminum is 10% of the nominal wire radius (as per Specification B 502 requirements for the aluminum clad steel wire component). The approximate total cross-sectional area for both the aluminum strands and the aluminum in the aluminum clad steel strands is provided for information purposes only.



**ACSR/AW-ASTM Standard**

Continue Table

Code Name	Conductor Size				Class	Stranding						Nominal Breaking Load		Linear Mass	
	Cross-sectional Area Using Only Aluminum Strand Wires		Approximate Cross-sectional Area including Nominal Aluminum Area in AW Strand Wires <sup>B</sup>			AL		AL Clad Steel				(1000lbf)	kN	Lb/1000 ft	kg/km
	cmil	mm <sup>2</sup>	cmil	mm <sup>2</sup>		No. of Wires	Nom. Diameter		No. of Wires	Nom. Diameter					
							in.	mm		in.	mm				
#3/0Pigeon/AW	167800	85.0	170700	86.5	AA, A	6	0.1672	4.25	1	0.1672	4.25	6.3	28	219	326
Guinea/AW	159000	80.6	168000	85.1	AA(+)	12	0.1151	2.92	7	0.1151	2.92	15.3	68	359	534
#3/0(5/2)	152500	77.3	159000	80.6	AA(+)	5	0.1747	4.44	2	0.1747	4.44	9.7	43	281	418
#3/0(12/7)	141300	71.6	151300	76.7	AA(+)	4	0.1880	4.78	3	0.1880	4.78	14.2	63	373	555
leghorn/AW	134600	68.2	142700	72.3	AA(+)	12	0.1059	2.69	7	0.1059	2.69	13.0	58	304	452
#2/0Quail /AW	133100	67.4	135200	68.5	AA, A	6	0.1489	3.78	1	0.1489	3.78	5.1	23	174	259
#2.0(5/2)	121000	61.3	125700	63.7	AA(+)	5	0.1556	3.95	2	0.1556	3.95	8.0	36	223	332
#2/0(4/3)	112100	56.8	120200	60.9	AA(+)	4	0.1674	4.25	3	0.1674	4.25	11.9	53	296	441
Minorca/AW	110800	56.1	117300	59.4	AA(+)	12	0.0961	2.44	7	0.0961	2.44	10.8	48	250	372
#1/0Raven /AW	105600	53.5	107700	54.6	AA, A	6	0.1327	3.37	1	0.1327	3.37	4.3	19	138	205
Petrel/AW	101800	51.6	107800	54.6	AA(+)	12	0.0921	2.34	7	0.0921	2.34	9.9	44	230	342
#2/0(3/4)	99830	50.6	113000	57.3	AA(+)	3	0.1824	4.63	4	0.1824	4.63	16.4	73	395	588
#1/0(5/2)	95910	48.6	99700	50.5	AA(+)	5	0.1385	3.52	2	0.1385	3.52	6.6	29	177	263
#1/0(4/3)	88800	45.0	95500	48.4	AA(+)	4	0.1490	3.79	3	0.1490	3.79	9.7	43	234	348
#1 Robin /AW	83690	42.4	85400	43.3	AA, A	6	0.1181	3.00	1	0.1181	3.00	3.5	15	109	162
Grouse/AW	80000	40.5	82700	41.9	AA(+)	8	0.1000	2.54	1	0.1670	4.24	4.9	22	138	205
#1/0(3/4)	79130	40.1	89300	45.2	AA(+)	3	0.1624	4.13	4	0.1624	4.13	13.8	61	313	466
#1(5/2)	76080	39.6	79000	40.0	AA(+)	5	0.1234	3.13	2	0.1234	3.13	5.5	24	140	208
#1(4/3)	70480	35.7	75200	38.1	AA(+)	4	0.1327	3.37	3	0.1327	3.37	8.1	36	186	277
#2 Sparate/AW	66360	33.6	67600	34.3	AA, A	7	0.0974	2.47	1	0.1299	3.30	3.5	16	100	149
#2 Sparrow/AW	66360	33.6	67100	34.0	AA, A	6	0.1052	2.67	1	0.1052	2.67	2.8	12	87	129
#1/0(2/5)	64920	32.9	80800	40.9	AA(+)	2	0.1802	4.58	5	0.1802	4.58	19.5	87	430	640
#1(3/4)	62770	31.8	71200	36.1	AA(+)	3	0.1446	3.67	4	0.1446	3.67	11.2	50	248	369
#2(5/2)	60340	30.6	62400	31.6	AA(+)	5	0.1099	2.79	2	0.1099	2.79	4.4	19	111	165
Egret/AW	636000	322	650200	329	AA	30	0.1456	3.70	19	0.0874	2.22	29.9	133	928	1381
Sooter/AW	636000	322	650500	330	AA	30	0.1456	3.70	7	0.1456	3.70	29.3	130	935	1391
Grosbeak /AW	636000	322	646100	327	AA	26	0.1564	3.97	7	0.1216	3.09	24.8	110	832	1238
Rook/AW	636000	322	644000	326	AA	24	0.1628	4.14	7	0.1085	2.76	22.0	98	785	1168
Swift/AW	636000	322	637700	323	AA	36	0.1329	3.38	1	0.1329	3.38	13.6	61	636	946
Kingbird /AW	636000	322	639400	324	AA	18	0.1880	4.78	1	0.1880	4.78	15.0	67	676	1006
Teal/AW	605000	307	618400	313	AA	30	0.1420	3.61	19	0.0852	2.16	28.5	127	883	1314
Wood Duck /AW	605000	307	618800	314	AA	30	0.1420	3.61	7	0.1420	3.61	28.4	126	889	1323
Squab/AW	605000	307	614600	311	AA	26	0.1525	3.87	7	0.1186	3.01	23.6	105	791	1177
Peacock /AW	605000	307	612700	310	AA	24	0.1588	4.03	7	0.1059	2.69	21.0	93	747	1112
Eagle/AW	556500	282	569700	289	AA	30	0.1362	3.46	7	0.1362	3.46	26.8	119	818	1217
Dove/AW	556500	282	564800	286	AA	26	0.1463	3.72	7	0.1138	2.89	21.9	97	728	1083
Parakeet /AW	556500	282	564000	286	AA	24	0.1523	3.87	7	0.1015	2.58	19.3	86	687	1022
Ospray /AW	556500	282	559000	283	AA	18	0.1758	4.47	1	0.1758	4.47	13.2	59	591	880
Hen/AW	477000	242	487900	247	AA	30	0.1261	3.20	7	0.1261	3.20	23.4	104	701	1043
Hawk/AW	477000	242	484600	246	AA	26	0.1354	3.44	7	0.1053	2.68	18.9	84	624	929

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Continue Table

Code Name	Conductor Size				Class	Stranding						Nominal Breaking Load		Linear Mass	
	Cross-sectional Area Using Only Aluminum Strand Wires		Approximate Cross-sectional Area including Nominal Aluminum Area in AW Strand Wires <sup>B</sup>			AL		AL Clad Steel		(1000lbf)	kN	Lb/1000 ft	kg/km		
	cmil	mm <sup>2</sup>	cmil	mm <sup>2</sup>		No. of Wires	Nom. Diameter		No. of Wires					Nom. Diameter	
							in.	mm						in.	mm
Flicker/AW	477000	242	483000	245	AA	24	0.1410	3.58	7	0.0940	2.39	16.7	74	589	877
Pelican/AW	477000	242	479600	243	AA	18	0.1628	4.14	1	0.1628	4.14	11.5	51	507	755
Lark/AW	397500	201	406000	206	AA	30	0.1151	2.92	7	0.1151	2.92	19.6	87	584	869
Ibbs/AW	397500	201	403300	204	AA	26	0.1236	3.14	7	0.0961	2.44	15.8	70	520	774
Brant/AW	397500	201	403000	204	AA	24	0.1287	3.27	7	0.0858	2.18	14.1	63	491	731
Chickadee /AW	397500	201	399200	202	AA	18	0.1486	3.77	1	0.1486	3.77	9.8	44	422	628
Oriole/AW	336400	170	343700	174	AA	30	0.1059	2.69	7	0.1059	2.69	16.7	74	495	737
Linnet/AW	336400	170	341300	173	AA	26	0.1137	2.89	7	0.0884	2.25	13.5	60	440	655
Merlin/AW	336400	170	337800	171	AA	189	0.1367	3.47	1	0.1367	3.47	8.5	38	357	531
Ostrich/AW	300000	152	304800	154	AA	26	0.1074	2.73	7	0.0835	2.12	12.1	54	392	583
Partridge /AW	266800	135	271200	137	AA	26	0.1013	2.57	7	0.0788	2.00	10.8	48	349	519
Waxwing /AW	266800	135	268400	136	AA	18	0.1217	3.09	1	0.1217	3.09	6.8	30	283	421
#4/0 Penguin /AW	211600	107	215400	109	AA, A	6	0.1878	4.77	1	0.1878	4.77	7.7	34	277	412
Cochin/AW	211300	107	223000	113	AA(+)	12	0.1327	3.37	7	0.1327	3.37	19.8	88	477	710
Brahma/AW	203200	103	220700	112	AA(+)	16	0.1127	2.86	19	0.0977	2.48	27.1	121	601	894
Dorking/AW	190800	96.7	201900	102	AA(+)	12	0.1261	3.20	7	0.1261	3.20	18.3	81	431	641
Dotterel/AW	176900	89.6	187100	95	AA(+)	12	0.1214	3.08	7	0.1214	3.08	16.9	75	399	594
Thrasher /AW	2312000	1171	2324300	1178	AA	76	0.1744	4.43	19	0.0814	2.07	55.3	246	2472	3679
Kiwi/AW	2167000	1098	2176100	1103	AA	72	0.1735	4.41	7	0.1157	2.94	49.1	218	2262	3366
Bluebird /AW	2156000	1092	2173100	1101	AA	84	0.1602	4.07	19	0.0961	2.44	59.0	262	2437	3627
Chukar/AW	1780000	902	1795200	910	AA	84	0.1456	3.70	19	0.0874	2.22	49.4	220	2013	2993
Falcon/AW	1590000	806	1609800	816	AA	54	0.1716	4.36	19	0.1030	2.62	53.0	236	1960	2917
Lapwing/AW	1590000	806	1601200	811	AA	45	0.1880	4.78	7	0.1253	3.18	41.8	186	1746	2598
Parrot/AW	1510500	765	1528200	774	AA	54	0.1672	4.25	19	0.1003	2.55	50.3	224	1860	2768
Nuthatch /AW	1510500	765	1520500	770	AA	45	0.1832	4.65	7	0.1221	3.10	39.7	177	1658	2467
Plover/AW	1431000	725	1448900	734	AA	54	0.1628	4.14	19	0.0977	2.48	47.7	212	1764	2625
Bobolink /AW	1431000	725	1440200	730	AA	45	0.1783	4.53	7	0.1189	3.02	37.6	167	1570	2336
Martin/AW	1351500	685	1367700	693	AA	54	0.1582	4.02	19	0.0949	2.41	45.1	201	1665	2478
Dipper/AW	1351500	685	1360100	689	AA	45	0.1733	4.40	7	0.1155	2.93	35.5	158	1483	2207
Pheasant /AW	1272000	645	1287700	652	AA	54	0.1535	3.90	19	0.0921	2.34	42.4	189	1568	2333
Bittern/AW	1272000	645	1280600	649	AA	45	0.1681	4.27	7	0.1121	2.85	33.4	149	1396	2078
Skylark/AW	1272000	645	1275400	646	AA	36	0.1880	4.78	1	0.1880	4.78	25.7	114	1272	1893
Grackle/AW	1192500	604	1206700	611	AA	54	0.1486	3.77	19	0.0892	2.27	40.2	179	1470	2188
Bunting/AW	1192500	604	1201000	609	AA	45	0.1628	4.14	7	0.1085	2.76	31.3	139	1309	1948
Finch/AW	1113000	564	1127800	571	AA	54	0.1436	3.65	19	0.0862	2.19	37.5	167	1373	2043
Bluejay/AW	1113000	564	1120500	568	AA	45	0.1573	4.00	7	0.1049	2.66	29.3	130	1222	1819
Curlew/AW	1033500	524	1046100	530	AA	54	0.1383	3.51	7	0.1383	3.51	35.6	158	1274	1896
Ortolan/AW	1033500	524	1040000	527	AA	45	0.1515	3.85	7	0.1010	2.57	27.1	121	1134	1688
Tanager /AW	1033500	524	1035800	525	AA	36	0.1694	4.30	1	0.1694	4.30	21.1	94	1033	1537
Cardinal /AW	954000	483	966100	490	AA	54	0.1329	3.38	7	0.1329	3.38	32.9	146	1177	1752

### ACSR/AW-ASTM Standard

Continue Table

Code Name	Conductor Size				Class	Stranding						Nominal Breaking Load		Linear Mass	
	Cross-sectional Area Using Only Aluminum Strand Wires		Approximate Cross-sectional Area including Nominal Aluminum Area in AW Strand Wires <sup>B</sup>			AL			AL Clad Steel			(1000lb)	kN	Lb/1000 ft	kg/km
	cmil	mm <sup>2</sup>	cmil	mm <sup>2</sup>		No. of Wires	Nom. Diameter		No. of Wires	Nom. Diameter					
							in.	mm		in.	mm				
Rail/AW	954000	483	960400	487	AA	45	0.1456	3.70	7	0.0971	2.47	25.4	113	1047	1558
Catbrid/AW	954000	483	956600	485	AA	36	0.1628	4.14	1	0.1628	4.14	19.5	87	954	1420
Canary/AW	900000	456	911400	462	AA	54	0.1291	3.28	7	0.1291	3.28	31.0	138	1111	1653
Ruddy/AW	900000	456	906100	459	AA	45	0.1414	3.59	7	0.0943	2.40	24.0	107	988	1470
Mailary/AW	795000	403	812700	412	AA	30	0.1628	4.14	19	0.0977	2.48	37.1	165	1160	1726
Condor/AW	795000	403	805000	408	AA	54	0.1213	3.08	7	0.1213	3.08	27.8	124	980	1458
Tern/AW	795000	403	800400	406	AA	45	0.1329	3.38	7	0.0886	2.25	21.5	96	872	1298
Drake/AW	795000	403	807600	409	AA	26	0.1749	4.44	7	0.1360	3.45	30.5	136	1041	1549
Cuckoo/AW	795000	403	805000	408	AA	24	0.1820	4.62	7	0.1213	3.08	27.5	122	981	1460
Coot/AW	795000	403	797200	404	AA	36	0.1486	3.77	1	0.1486	3.77	16.6	74	795	1183
Redwing /AW	715500	363	730900	370	AA	30	0.1544	3.92	19	0.0926	2.35	33.4	149	1043	1552
Starling/AW	715500	363	727400	369	AA	26	0.1659	4.21	7	0.1290	3.28	27.5	122	936	1393
Stilt/AW	715500	363	725000	367	AA	24	0.1727	4.39	7	0.1151	2.92	24.8	110	883	1314
Gannet/AW	666600	338	676600	343	AA	26	0.1601	4.07	7	0.1245	3.16	26.0	116	872	1298
Flamingo /AW	666600	338	675400	342	AA	24	0.1667	4.23	7	0.1111	2.82	23.1	103	823	1225

### ACSR/AW-IEC Standard

Nom. Area AL/AL clad St mm <sup>2</sup>	Code name	St/ %	Area/mm <sup>2</sup>			No. of Wires		Wire Dia./mm		Diameter/mm		Linear Mass kg/km	Nominal Breaking Load kN	Max. DC Resistance at 20 °C Ω/km
			AL	AL clad St	Total	AL	AL clad St	AL	AL clad St	AL clad St core	Cond.			
15/3	16	16.7	15	2.56	17.9	6	1	1.81	1.81	1.81	5.43	59.0	5.91	1.7923
24/4	25	16.7	24	4.00	28.0	6	1	2.26	2.62	2.26	6.78	92.1	9.00	1.1471
38/5	40	16.7	38	6.40	44.8	6	1	2.85	2.85	2.85	8.55	147.4	14.21	0.7169
60/10	63	16.7	60	10.08	70.6	6	1	3.58	3.58	3.58	10.7	232.2	21.17	0.4552
95/15	100	16.7	96	16.00	112	6	1	4.51	4.51	4.51	13.5	368.6	31.84	0.2868
125/5	125	5.6	123	6.85	130	18	1	2.95	2.95	2.95	14.8	384.3	29.18	0.2304
120/20	125	16.3	120	19.6	140	26	7	2.43	1.89	5.66	15.4	460.8	44.49	0.2308
160/10	160	5.6	158	8.77	167	18	1	3.34	3.34	3.34	16.7	491.9	36.38	0.1800
155/25	160	16.3	154	25.00	179	26	7	2.74	2.13	6.40	17.4	589.8	56.18	0.1803
200/10	200	5.6	197	10.96	208	18	1	3.74	3.74	3.74	18.7	614.9	43.62	0.1440
200/30	200	16.3	192	31.3	223	26	7	3.07	2.39	7.16	19.4	737.2	69.27	0.1443
250/25	250	9.8	244	24.0	268	22	7	3.76	2.09	6.26	21.3	830.9	67.80	0.1153
250/40	250	16.3	240	39.1	279	26	7	3.43	2.67	8.00	21.7	921.5	86.58	0.1154
310/20	315	6.9	310	21.4	331	45	7	2.96	1.97	5.92	23.7	996.4	78.33	0.0917
300/50	315	16.3	303	49.3	352	26	7	3.85	2.99	8.98	24.4	1161.1	107.58	0.0916
395/25	400	6.9	393	27.2	420	45	7	3.34	2.22	6.67	26.7	1265.3	97.50	0.0722
387/50	400	13.0	387	50.2	438	54	7	3.02	3.02	9.07	27.2	1402.9	124.20	0.0723
440/30	450	6.9	442	30.6	473	45	7	3.54	2.36	7.08	28.3	1423.4	107.48	0.0642
435/35	450	13.0	436	36.5	492	54	7	3.21	3.21	9.62	28.9	1578.2	139.7	0.0642
490/35	500	6.9	492	34.0	525	45	7	3.73	2.49	7.46	29.8	1581.6	119.4	0.0578



### ACSR/AW-IEC Standard

Continue Table

Nom. Area AL/AL clad Stmm <sup>2</sup>	Code name	St/ %	Area/mm <sup>2</sup>			No. of Wires		Wire Dia./mm		Diameter/mm		Linear Mass kg/km	Nominal Breaking Load kN	Max. DC Resistance at 20 °C Ω /km
			AL	AL clad St	Total	AL	AL clad St	AL	AL clad St	AL clad St core	Cond.			
485/60	500	13.0	484	62.8	547	54	7	3.38	3.38	10.14	30.4	1753.6	153.9	0.0578
550/40	560	3.9	550	38.1	589	45	7	3.95	2.63	7.89	31.6	1771.4	133.7	0.0516
545/70	560	12.7	543	68.8	612	54	19	3.58	2.15	10.73	32.2	1956.3	169.3	0.0516
620/40	630	6.9	619	42.8	662	45	7	4.19	2.79	8.37	33.5	1992.8	150.47	0.0458
610/75	630	12.7	611	77.3	688	54	19	3.79	2.28	11.38	34.2	2200.9	190.5	0.0459
700/50	710	6.9	698	48.3	746	45	7	4.44	2.96	8.89	35.6	2245.8	169.5	0.0407
700/85	710	12.7	688	87.2	775	54	19	4.03	2.42	12.08	36.3	2480.3	214.7	0.0407
790/35	800	4.3	791	34.2	826	72	7	3.74	2.49	7.48	37.4	2412.8	167.6	0.0631
785/65	800	8.3	784	65.3	849	84	7	3.45	3.45	10.34	37.9	2598.9	206.3	0.0362
775/100	800	12.7	775	98.2	874	54	19	4.28	2.57	12.83	38.5	2794.7	241.9	0.0361
900/40	900	4.3	890	38.5	929	72	7	3.97	2.65	7.94	39.7	2714.4	188.63	0.0321
880/75	900	8.3	882	73.5	955	84	7	3.66	3.66	10.97	40.2	2923.8	224.8	0.0321
990/45	1000	4.3	989	42.7	1032	72	7	4.18	2.79	8.37	41.8	3016.0	209.5	0.0289
1110/45	1120	4.2	1108	46.8	1155	72	19	4.43	1.77	8.85	44.3	3372.4	233.4	0.0258
1100/90	1120	8.1	1098	89.4	1187	84	19	4.08	2.45	12.24	44.9	3628.4	282.8	0.0258
1235/50	1250	4.2	1237	52.2	1289	72	19	4.68	1.87	9.35	46.8	3764.1	260.5	0.0231
1225/100	1250	8.1	1225	99.8	1325	84	19	4.31	2.59	12.93	47.4	4049.5	315.7	0.0231

### AACSR/AW(JLHA1/LB1A)-GB Standard

Code name	St/ %	Area/mm <sup>2</sup>			No. of Wires		Wire Dia./mm		Diameter/mm		Linear Mass kg/km	Nominal Breaking Load kN	Max. DC Resistance at 20 °C Ω /km
		Alloy	AL clad St	Total	Alloy	AL clad St	Alloy	AL clad St	AL clad St core	Cond.			
16	16.7	17.7	2.96	20.7	6	1	1.94	1.94	1.94	5.82	68.1	9.31	1.7691
25	16.7	27.7	4.62	32.3	6	1	2.42	2.42	2.41	7.26	106.4	14.54	1.1323
40	16.7	44.3	7.39	51.7	6	1	3.07	3.07	3.07	9.21	170.2	23.27	0.7077
63	16.7	69.8	11.6	81.4	6	1	3.85	3.85	3.85	11.6	268.0	34.79	0.4493
100	16.7	110	18.5	129	6	1	4.85	4.85	4.85	14.6	425.5	53.38	0.2831
125	5.6	143	7.94	151	18	1	3.18	3.18	3.18	15.9	445.5	55.97	0.2293
125	16.3	139	22.6	161	26	7	2.61	2.03	6.08	16.5	532.0	72.17	0.2279
160	5.6	183	10.2	193	18	1	3.60	3.60	3.60	18.0	570.3	69.21	0.1792
160	16.3	178	28.9	206	26	7	2.95	2.29	2.29	18.7	680.9	92.38	0.1781
200	5.6	229	12.7	241	18	1	4.02	4.02	4.02	20.1	712.8	86.00	0.1433
200	16.3	222	36.1	358	26	7	3.30	2.56	7.69	20.9	851.2	115.4	0.1424
250	9.8	282	27.7	310	22	7	4.04	2.25	6.74	22.9	961.7	122.25	0.1144
250	16.3	277	45.2	323	26	7	3.69	2.87	8.60	23.4	1064.0	141.5	0.1140
315	6.9	359	24.8	384	45	7	3.19	2.12	6.37	25.5	1154.6	146.3	0.0912
315	16.3	349	56.9	406	26	7	4.14	3.22	9.65	26.2	1340.6	178.38	0.0904
400	6.9	456	31.5	487	45	7	3.59	2.39	7.18	28.7	1466.1	181.32	0.0718
400	13.0	448	58.1	506	54	7	3.25	3.25	9.75	29.3	1621.6	215.22	0.0715
450	6.9	513	35.4	548	45	7	3.81	2.54	7.62	30.5	1649.4	203.99	0.0638
450	13.0	504	65.3	569	54	7	3.45	3.45	10.3	31.0	1824.3	240.8	0.0636
500	3.9	570	39.4	609	45	7	4.01	2.68	8.03	32.1	1832.6	226.6	0.0574
500	13.0	560	72.6	632	54	7	3.63	3.63	10.9	32.7	2027.0	259.0	0.0572

### AACSR/AW(JLHA1/LB1A)-GB Standard

Continue Table

Code name	St/ %	Area/mm <sup>2</sup>			No. of Wires		Wire Dia./mm		Diameter/mm		Linear Mass kg/km	Nominal Breaking Load kN	Max. DC Resistance at 20 °C Ω/km
		Alloy	AL clad St	Total	Alloy	AL clad St	Alloy	AL clad St	AL clad St core	Cond.			
560	6.9	638	44.1	682	45	7	4.25	2.83	8.50	34.0	2052.6	253.8	0.0513
560	12.7	638	79.5	707	54	19	3.85	2.31	11.5	34.6	2261.6	293.0	0.0511
630	3.9	718	49.6	767	45	7	4.51	3.00	9.01	36.1	2309.1	285.58	0.0456
630	12.7	706	89.4	795	54	19	4.08	2.45	12.2	36.7	2544.3	329.6	0.0454
710	6.9	809	55.9	865	45	7	4.78	3.19	9.57	38.3	2602.3	321.8	0.0405
710	12.7	796	101	896	54	19	4.33	2.60	13.0	39.0	2867.4	371.5	0.0403
800	4.3	918	39.7	958	72	7	4.03	2.69	8.06	40.3	2798.8	336.7	0.0360
800	8.3	908	75.6	983	84	7	3.71	3.71	11.1	40.8	3010.8	369.1	0.0359
800	12.7	896	114	1010	54	19	4.60	2.76	13.8	41.4	3230.9	418.6	0.0358
900	4.3	1033	44.6	1077	72	7	4.27	2.85	8.55	42.7	3148.6	378.9	0.0320
900	8.3	1021	85.1	1106	84	7	3.9	3.93	11.8	43.2	3386.3	415.2	0.0319
1000	4.3	1148	49.6	1197	72	7	4.50	3.00	9.01	45.0	3498.5	420.9	0.0288
1120	4.2	1286	54.3	1340	72	19	4.77	1.91	9.54	47.7	3912.3	470.1	0.0257
1120	8.1	1271	104	1375	84	19	4.39	2.63	13.2	48.3	4202.7	524.73	0.0257
1250	4.2	1435	60.6	1495	72	19	5.04	2.01	10.1	50.4	4366.4	524.6	0.0231
1250	8.1	1419	116	1535	84	19	4.64	2.78	13.9	51.0	4690.5	585.6	0.0230

### Bare Copper Stranded Conductor(Hard Drawn)-ASTM Standard

B Class B										
Size	Section		Number of Wires	Wire Diameter	Conductor Diameter	Max. DC Resistance at 20°C	Min. Wire Elongation Before Stranding	Min. Tensile Strength	Min. Tensile Strength After Stranding	Total Weight
AWG/MCM	Cmils	mm <sup>2</sup>		mm	mm	Ω/km	%	kg/mm <sup>2</sup>	kg	kg/km
6	26240	13.3	7	1.56	4.67	1.38	1.0	46.4	555	121
4	41740	21.1	7	1.96	5.88	0.865	1.1	46.4	883	192
2	66360	33.6	7	2.47	7.42	0.544	1.2	45.4	1373	305
1/0	105600	53.5	19	1.89	9.47	0.342	1.1	46.4	2234	485
2/0	133100	67.4	19	2.13	10.6	0.271	1.1	45.9	2785	611
4/0	211600	107.2	19	2.68	13.4	0.171	1.2	45.4	4379	972
250	250000	126.7	37	2.09	14.6	0.144	1.1	45.9	5231	1149
300	300000	152.0	37	2.29	16.0	0.120	1.1	45.9	6278	1379
350	350000	177.3	37	2.47	17.3	0.103	1.2	45.4	7243	1609
400	400000	202.7	37	2.64	18.5	0.090	1.2	45.4	8277	1838
500	500000	253.4	37	2.95	20.7	0.072	1.3	44.9	10230	2298
600	600000	304.0	61	2.52	22.7	0.060	1.2	45.4	12416	2758
700	700000	354.7	61	2.72	24.5	0.052	1.2	45.4	14485	3216
750	750000	380.0	61	2.82	25.3	0.048	1.2	45.4	15520	3447
800	800000	405.4	61	2.91	26.2	0.045	1.3	44.9	16369	3676
900	900000	456.0	61	3.09	27.8	0.040	1.3	44.9	18415	4136
1000	1000000	506.7	61	3.25	29.3	0.036	1.3	44.9	20461	4596

### Bare Copper Stranded Conductor(Hard Drawn)-IEC Standard

Nominal Sectional Area	Number & Diameter of Wire	Overall Diameter	Maximum DC Resistance at 20°C	Breaking Strength	Allowable Ampacities in Free Air	Approx. Weight
mm <sup>2</sup>	No. /mm	mm	Ω/km	Kgf	A	kg/km
10	7/1.35	4.05	1.8054	438	90	90
16	7/1.70	5.10	1.1385	694	125	143
25	7/2.14	6.42	0.7185	1076	160	227
35	7/2.52	7.56	0.5181	1459	200	314
50	7/3.02	9.06	0.3589	2095	250	452
50	19/1.78	8.90	0.3825	2021	250	428
70	19/2.14	10.70	0.2646	2921	310	618
95	19/2.52	12.60	0.1918	3961	380	858
120	19/2.85	14.25	0.1492	5067	440	1097
150	37/2.25	15.75	0.1238	6289	510	1334
185	37/2.52	17.64	0.0981	7713	585	1673
240	61/2.25	20.25	0.0752	10369	700	2200
300	61/2.52	22.68	0.0600	12717	800	2760
400	61/2.85	25.65	0.0469	16266	900	3350
500	61/3.20	28.80	0.0370	20506	1110	4451

# Aerial Insulated Cable (ABC)

## Aerial Insulated Cable with rated voltage 1kV and below

### Applications

The cables are designed for aerial power lines and room-entrance wires with AC rated voltage 1kV and below.

### Manufacturing standards

ASTM ICEA BS IEC NFC GB AS/NZS etc.

### Operating features

Rated voltage  $U_0/U$  is 0.6/1kV

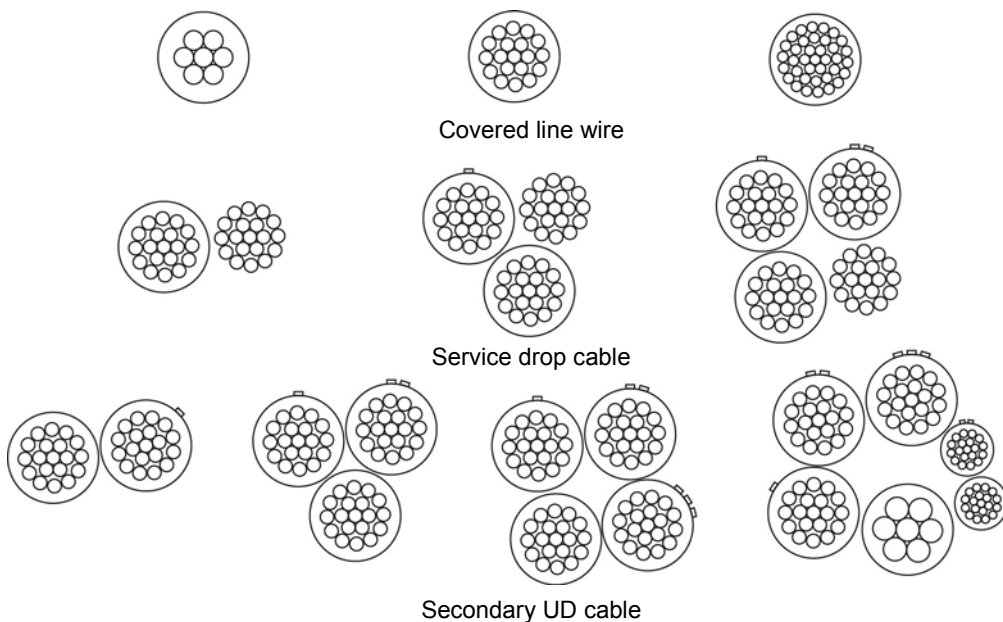
Max. Continuous permissible working temperature of conductor: PVC insulation should be not more than 70°C, and XLPE insulation should be not more than 90°C.

The installation temperature of cable should be not less than -20°C

When overall diameter of cable (D) is less than 25mm, permissible bending radius of cable should be not less than 4D. When overall diameter (D) of cable is equal to and above 25mm, permissible bending radius of cable should be not less than 6D.

### Models, diagrams

Description	Short name	Chinese type
Copper core PE insulated aerial cable	Covered line wire Service drop cable Secondary UD cable	JKY
Copper core XLPE insulated aerial cable		JKYJ
Aluminium core PE insulated aerial cable		JKLY
Aluminium core XLPE insulated aerial cable		JKLYJ
Aluminium alloy core PE insulated aerial cable		JKLHY
Aluminium alloy core XLPE insulated aerial cable		JKLHYJ

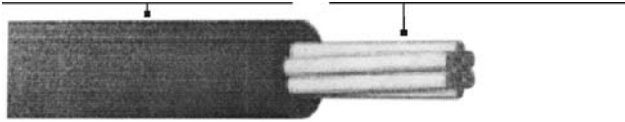


## Technical parameter GB Standard

Type	Nom. conductor cross section mm	DC conductor resistance at 20°C ( $\Omega$ /km) $\leq$	M km Min. insulation resistance		Nom. Thickness of insulation mm	approx. OD mm	approx. Weight Kg/km	abruption force of cable N
			70°C	90°C				
JKY	1×16	1.198	0.0065	-	1.2	7.2	161	5486
	1×25	0.749	0.0054	-	1.2	8.4	244	8465
	1×35	0.540	0.0054	-	1.4	9.8	340	11731
	1×50	0.399	0.0046	-	1.4	11.1	474	16502
	1×70	0.276	0.0040	-	1.4	12.8	655	23461
	1×95	0.199	0.0039	-	1.6	14.8	888	31759
	1×120	0.158	0.0035	-	1.6	16.2	1110	39911
	1×150	0.128	0.0035	-	1.8	18.1	1385	49505
	1×185	0.1021	0.0035	-	2.0	20.3	1712	61846
1×240	0.0777	0.0034	-	2.2	22.7	2213	79823	
JKYJ	1×10	1.906	-	0.67	1.0	5.8	105	3471
	1×16	1.198	-	0.65	1.2	7.2	161	5486
	1×25	0.749	-	0.54	1.2	8.4	244	8465
	1×35	0.540	-	0.54	1.4	9.8	340	11731
	1×50	0.399	-	0.46	1.4	11.1	474	16502
	1×70	0.276	-	0.40	1.4	12.8	655	23461
	1×95	0.199	-	0.39	1.6	14.8	888	31759
	1×120	0.158	-	0.35	1.6	16.2	1110	39911
	1×150	0.128	-	0.35	1.8	18.1	1385	49505
1×185	0.1021	-	0.35	2.0	20.3	1712	61846	
1×240	0.0777	-	0.34	2.2	22.7	2213	79823	
JKLY	1×16	1.91	0.0065	-	1.2	7.2	66	2517
	1×25	1.20	0.0054	-	1.2	8.4	94	3762
	1×35	0.868	0.0054	-	1.4	9.8	130	5177
	1×50	0.641	0.0046	-	1.4	11.1	175	7011
	1×70	0.443	0.0040	-	1.4	12.8	235	10345
	1×95	0.320	0.0039	-	1.6	14.8	317	13727
	1×120	0.253	0.0035	-	1.6	16.2	390	17339
	1×150	0.206	0.0035	-	1.8	18.1	486	21033
	1×185	0.164	0.0035	-	2.0	20.3	600	26732
1×240	0.125	0.0034	-	2.2	22.7	772	34679	
JKLYJ	1×16	1.91	-	0.65	1.2	7.2	66	2512
	1×25	1.20	-	0.54	1.2	8.4	94	3762
	1×35	0.868	-	0.54	1.4	9.8	130	5177
	1×50	0.641	-	0.46	1.4	11.1	175	7011
	1×70	0.443	-	0.40	1.4	12.8	235	10345
	1×95	0.320	-	0.39	1.6	14.8	317	3727
	1×120	0.253	-	0.35	1.6	16.2	390	17339
	1×150	0.206	-	0.35	1.8	18.2	486	21033
	1×185	0.164	-	0.35	2.0	20.1	600	26732
1×240	0.125	-	0.34	2.2	22.8	772	34679	
JKLHY	1×16	2.217	0.0065	-	1.2	7.2	66	4022
	1×25	1.393	0.0054	-	1.2	8.4	94	6284
	1×35	1.007	0.0054	-	1.4	9.8	130	8800
	1×50	0.744	0.0046	-	1.4	11.1	175	12569
	1×70	0.514	0.0040	-	1.4	12.8	235	17396
	1×95	0.371	0.0039	-	1.6	14.8	317	23886
	1×120	0.294	0.0035	-	1.6	16.2	390	30164
	1×150	0.239	0.0035	-	1.8	18.1	486	37706
	1×185	0.19	0.0035	-	2.0	20.3	600	46503
1×240	0.145	0.0034	-	2.2	22.7	772	60329	
JKLHYJ	1×16	2.217	-	0.65	1.2	7.2	66	4022
	1×25	1.393	-	0.54	1.2	8.4	94	6284
	1×35	1.007	-	0.54	1.4	9.8	130	8800
	1×50	0.744	-	0.46	1.4	11.1	175	12569
	1×70	0.514	-	0.4	1.4	12.8	235	17396
	1×95	0.371	-	0.39	1.6	14.8	317	23886
	1×120	0.294	-	0.35	1.6	16.2	390	30164
	1×150	0.239	-	0.35	1.8	18.1	486	37706
	1×185	0.19	-	0.35	2.0	20.3	600	46503
1×240	0.145	-	0.34	2.2	22.7	772	60329	

(LDPE)  
(HDPE)  
(XLPE)

Conductor AAC / AAAC / ACSR



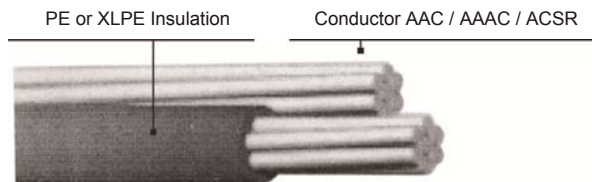
### ASTM Standard covered line wire

Code word	Size	No. of Wires	Insulation Thickness	Nominal Diameter		Rated Strength	Nominal Weight			Ampacity	Standard Package		
				mm			kg/km				Coils	Reels	
	AWG or Kcmil			mm	Bare		O.D.	kg	Total				
									LDPE		HDPE	XLPE	A
AAC													
Plum	6	7	0.762	4.674	6.198	255	36.61	50.66	51.27	51.27	100	1000	3000
Apricot	4	7	0.762	5.715	7.239	400	58.19	75.57	76.33	76.33	135	500	2000
Peach	2	7	1.143	7.417	9.703	612	92.56	126.09	127.55	127.55	180	500	2000
Nectarine	1	7	1.143	8.328	11.481	789	116.67	167.31	169.52	169.52	210	305	1500
Quince	1/0	7	1.524	9.347	12.395	903	147.48	203.70	206.14	206.14	240	305	1000
Haw	1/0	19	1.524	9.474	12.522	980	147.48	204.49	209.96	206.96	240	305	1000
Orange	2/0	7	1.524	10.513	13.561	1139	186.02	257.90	261.02	261.02	280	-	1000
Ironwood	2/0	19	1.524	10.643	13.691	1211	186.02	250.41	253.21	253.21	280	-	1000
Fig	3/0	7	1.524	11.801	14.849	1377	233.64	315.53	319.08	319.08	320	-	1000
Lemon	3/0	19	1.524	11.938	14.986	1501	233.64	306.53	309.70	309.70	320	-	1000
Olive	4/0	7	1.524	13.259	16.307	1728	296.14	378.04	381.58	381.58	370	-	1000
Pomegranate	4/0	19	1.524	13.411	16.459	1823	296.14	379.09	382.69	382.69	370	-	1000
Sassafras	250	19	1.524	14.580	17.628	2043	348.68	439.88	443.84	443.84	420	-	500
Mulberry	266.8	19	1.524	14.605	17.653	2182	372.19	463.59	467.55	467.55	430	-	500
Basswood	300	19	1.524	15.957	18.999	2404	419.66	520.91	525.30	525.30	478	-	500
Anona	336.4	19	1.524	16.916	19.964	2697	469.51	578.04	582.75	582.75	495	-	500
Chinquapin	350	19	1.524	17.221	20.269	2790	488.12	598.98	603.79	603.79	525	-	500
Molles	397.5	19	2.032	18.390	22.454	3123	555.08	707.29	713.88	713.88	550	-	500
Sumac	450	19	2.032	19.609	23.673	3719	628.00	791.79	798.89	798.89	600	-	1000
Huckleberry	477	37	2.032	20.193	24.257	3810	665.21	834.63	841.98	841.98	610	-	1000
AAAC													
Maple	6	7	0.762	5.029	6.553	503	42.41	59.53	61.01	61.01	78	823	2500
Hornbeam	4	7	0.762	6.350	7.874	798	67.56	89.29	90.78	92.12	145	500	1500
Linden	2	7	1.143	8.026	10.312	1270	107.44	147.33	147.33	148.82	190	305	2000
Oilnut	1/0	7	1.524	8.839	11.887	2023	170.99	238.11	247.03	247.03	250	305	1000
Waterash	2/0	7	1.524	11.354	14.402	2445	215.63	291.68	302.01	302.01	290	-	1000
Shellbark	3/0	7	1.524	12.751	15.799	3080	271.59	358.65	370.55	370.55	335	-	1000
Planetree	4/0	7	1.524	14.300	17.348	3883	342.57	443.47	456.86	456.86	385	-	914
ACSR													
Walnut	6	6/1	0.762	5.029	6.553	540	36.46	69.94	71.43	71.43	105	823	2500
Butternut	4	6/1	0.762	6.350	7.874	844	58.04	107.15	107.15	108.64	135	500	1889
Hickory	4	7/1	0.762	6.528	8.052	1070	58.04	120.54	122.03	123.52	135	500	1828

### ASTM Standard covered line wire

Continue Table

Code word	Size	No. of Wires	Insulation Thickness	Nominal Diameter		Rated Strength	Nominal Weight			Ampacity	Standard Package		
				mm			kg/km				Coils	Reels	
	AWG or Kcmil		mm	Bare	O.D.	kg	AL or Alloy	Total					
								LDPE	HDPE	XLPE	A	m	M
ACSR													
Pignut	2	6/1	1.143	8.026	10.312	1293	92.27	175.60	177.09	178.58	180	366	2000
Beech	2	7/1	1.413	8.357	10.643	1651	92.27	199.41	199.41	202.39	180	335	2000
Chestnut	1	6/1	1.143	9.017	11.303	1610	116.39	217.27	218.76	220.25	210	305	1500
Almond	1/0	6/1	1.524	10.109	13.157	1987	146.73	282.75	284.24	287.21	235	305	1000
Pecan	2/0	6/1	1.524	11.354	14.402	2404	184.98	348.23	349.72	349.72	290	-	1000
Filbert	3/0	6/1	1.524	12.751	15.799	3003	233.34	430.08	433.05	437.52	305	-	1000
Buckeye	4/0	6/1	1.524	14.300	17.343	3787	294.21	531.27	535.74	540.20	345	-	914
Hackberry	266.8	18/1	1.524	15.469	18.517	3121	372.63	525.32	528.30	534.25	356	-	500



### ASTM Standard Service Drop Cable(Duplex)

Code word	Phase Conductors				Bare Neutral		Nominal Weight			Ampacity	Standard Package	
	Size & Number of Wires	Insulation Thickness	Nominal Diameter		Size & Number of Wires	Rated Strength	kg/km				Coils	Reels
			Bare	O.D.			kg	XLPE	AL or Alloy	Total		
	mm	mm	mm	mm	kg	A	m	m				
AAC												
Pekingese	6-1	1.14	4.1	6.4	6-7	255	20.8	72.9	94	78	305	1000
Collie	6-7	1.14	4.6	6.9	6-7	255	23.8	72.9	97	78	305	1000
Cocker	6-7	1.52	4.6	7.7	6-7	255	32.7	72.9	106	78	305	1000
Dachshund	4-1	1.14	5.2	7.5	6-7	400	26.8	114.6	141	103	305	500
Spaniel	4-7	1.14	5.9	8.2	6-7	400	29.8	116.1	146	103	305	500
Cairn	4-7	1.52	5.9	8.9	6-7	400	40.2	116.1	156	103	305	500
Doberman	2-7	1.14	7.4	9.7	2-7	612	38.7	184.5	223	136	152	500
Airedale	1-19	1.52	8.4	11.5	1-7	-	56.5	233.6	290	158	152	500
Basset	1/0-7	1.52	9.3	12.4	1/0-7	903	64.0	294.7	359	182	152	457
Malemure	1/0-19	1.52	9.4	12.5	1/0-7	903	64.0	294.7	359	182	152	457
AAAC												
Chihuahua	6-1	1.14	4.1	6.4	6-7	499	20.8	72.9	94	78	305	1000
Vizsla	6-7	1.14	4.6	6.9	6-7	499	23.8	72.9	97	78	305	1000
Harner	4-1	1.14	5.2	7.5	4-7	798	26.8	116.1	143	103	305	500
Whippet	4-7	1.14	5.9	8.2	4-7	798	29.8	116.1	146	103	305	500
Schnauzer	2-7	1.14	7.4	9.7	2-7	1270	38.7	184.5	223	136	152	500
Afghan	1/0-7	1.52	9.3	12.4	1/0-7	2023	64.0	296.1	360	182	152	457
Heeler	1-19	1.52	9.4	12.5	1/0-7	2023	64.0	296.1	360	182	152	457

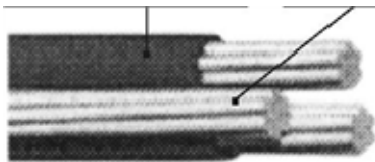
### ASTM Standard Service Drop Cable(Duplex)

Continue Table

Code word	Phase Conductors				Bare Neutral		Nominal Weight			Ampacity A	Standard Package	
	Size & Number of Wires	Insulation Thickness mm	Nominal Diameter		Size & Number of Wires	Rated Strength kg	kg/km				Coils m	Reels m
			Bare	O.D.			XLPE	AL or Alloy	Total			
			mm	mm								
ACSR												
Setter	6-1	1.14	4.1	6.4	6-6/1	540	20.8	72.9	94	78	305	1000
Shepherd	6-7	1.14	4.6	6.9	6-6/1	540	23.8	72.9	97	78	305	1000
Retriever	6-7	1.52	4.6	7.7	6-6/1	540	32.7	72.9	106	78	305	1000
Eskimo	4-1	1.14	5.2	7.5	4-6/1	844	26.8	114.6	141	103	305	500
Terrier	4-7	1.14	5.9	8.2	4-6/1	844	29.8	116.1	146	103	305	500
Yorkshire	4-7	1.52	5.9	8.9	4-6/1	844	40.2	116.1	156	103	305	500
Chow	2-7	1.14	7.4	9.7	2-6/1	1293	38.7	184.5	223	136	152	500
Labrador	1-19	1.52	8.4	11.5	1-6/1	1610	56.5	233.6	290	158	152	500
Bloodhound	1/0-7	1.52	9.3	12.4	1/0-6/1	1987	64.0	294.7	359	182	152	457
Bull	1/0-19	1.52	9.4	12.5	1/0-6/1	1987	64.0	294.7	359	182	152	457

PE or XLPE Insulation

Conductor AAC / AAAC / ACSR



### ASTM Standard Service Drop Cable(Triplex)

Code word	Phase Conductors				Bare Neutral		Nominal Weight			Ampacity A	Standard Package	
	Size & Number of Wires	Insulation Thickness mm	Nominal Diameter		Size & Number of Wires	Rated Strength kg	kg/km				Coils m	Reels m
			Bare	O.D.			XLPE	AL or Alloy	Total			
			mm	mm								
AAC												
Halotis	6-1	1.14	4.115	6.4	6-7	255	42	110	152	78	305	762
Pike	6-7	0.76	4.67	6.2	6-7	255	31	112	143	78	305	762
Patella	6-7	1.14	4.67	7.0	6-7	255	48	112	159	78	305	762
Albus	6-7	1.52	4.67	7.7	6-7	255	64	132	198	78	305	762
Fusus	4-1	1.14	5.182	7.5	4-7	400	52	177	229	103	152	518
Oyster	4-7	1.14	5.89	8.2	4-7	400	60	177	237	103	152	457
Argo	4-7	1.52	5.89	8.9	4-7	400	80	177	258	103	152	457
Clam	2-7	1.14	7.42	9.7	2-7	612	76	281	359	136	152	549
Thia	2-7	1.52	7.42	10.5	2-7	612	100	281	383	136	152	549
Mussel	2-7	1.14	7.42	9.7	2-7	612	76	281	359	136	152	549
Pyruia	1-7	1.52	8.33	11.4	1-7	744	113	356	467	158	152	457
Hyas	1-19	1.52	8.43	11.5	1-7	744	115	356	469	158	152	457
Murex	1/0-7	1.52	9.35	12.4	1/0-7	903	128	385	513	182	152	366
Purpura	1/0-19	1.52	9.47	12.5	1/0-7	903	130	385	515	182	152	366
Nasa	2/0-7	1.52	10.52	13.6	2/0-7	1139	146	566	710	210	-	457
Trophon	2/0-19	1.52	10.64	13.7	2/0-7	1139	147	566	713	210	-	457
Quahog	3/0-7	2.03	11.79	15.9	3/0-7	1379	214	713	926	242	-	396
Ione	3/0-19	2.03	11.94	16.0	3/0-7	1379	217	713	929	242	-	396



**ASTM Standard Service Drop Cable(Triplex)**

Continue Table

Code word	Phase Conductors				Bare Neutral		Nominal Weight			Ampacity A	Standard Package	
	Size & Number of Wires	Insulation Thickness mm	Nominal Diameter		Size & Number of Wires	Rated Strength kg	kg/km				Coils m	Reels m
			Bare	O.D.			XLPE	AL or Alloy	Total			
			mm	mm								
AAC												
Melita	3/0-19	1.52	11.94	15.0	3/0-19	1501	168	713	881	242	-	396
Coquina	4/0-7	1.52	13.26	16.3	4/0-7	1737	191	899	1089	279	-	305
Tusk	4/0-7	2.03	13.26	17.3	4/0-7	1737	243	899	1141	279	-	305
Apus	4/0-19	2.03	13.41	17.5	4/0-7	1737	246	899	1144	279	-	305
Portunus	4/0-19	1.52	13.41	16.5	4/0-19	1823	194	899	1091	279	-	305
Chiton	266.8-19	2.03	14.88	18.9	266.8-19	2254	277	1133	1409	310	-	305
Nannynose	336.4-19	2.03	16.92	21.0	336.4-19	2790	321	1427	1749	330	--	305
AAAC												
Homarus	6-1	1.14	4.115	6.4	6-7	499	42	118	159	78	305	762
Minex	6-1	1.14	4.115	13.3	6-7	499	42	118	159	78	305	762
Cabera	6-7	1.14	4.65	6.9	6-7	499	48	118	165	78	305	671
Hippa	6-7	1.14	4.65	6.9	6-7	499	48	118	165	78	305	671
Artemia	4-1	1.14	5.182	7.5	6-7	499	52	162	214	103	305	518
Maira	4-7	1.14	5.89	8.2	6-7	499	60	188	247	103	305	518
Crab	4-7	1.14	5.89	8.2	6-7	499	60	162	222	103	305	518
Luidia	4-1	1.14	5.182	7.5	6-7	499	52	162	214	103	152	518
Prawn	4-1	1.14	5.182	7.5	4-7	798	52	188	240	103	152	518
Metalia	4-7	1.14	5.89	8.2	4-7	798	60	188	247	103	152	457
Barnacles	4-7	1.14	5.89	8.2	4-7	798	60	188	247	103	152	457
Solaster	2-7	1.14	7.42	9.7	4-7	798	76	258	333	136	152	549
Pagarus	2-7	1.52	7.42	10.5	4-7	798	100	258	357	136	152	549
Shrimp	2-7	1.14	7.42	9.7	2-7	1270	76	298	374	136	152	549
Lobster	2-7	1.52	7.42	10.5	2-7	1270	100	298	397	136	152	549
Encope	1-19	1.52	8.43	11.5	2-7	1270	115	347	461	158	152	366
Sanderab	1/0-7	1.52	9.35	12.4	2-7	1270	128	409	537	182	152	366
Echinus	1/0-19	1.52	9.47	12.5	2-7	1270	130	409	539	182	152	366
Gammarus	1/0-7	1.52	9.35	12.4	1/0-7	2023	128	473	601	182	152	366
Leda	1/0-19	1.52	9.47	12.5	1/0-7	2023	130	473	603	182	152	366
Crayfish	2/0-7	1.52	10.5	13.6	2-7	1270	146	487	631	210	-	457
Sipho	2/0-19	1.52	10.6	13.7	2-7	1270	147	487	634	210	-	457
Dungenese	2/0-7	1.52	10.5	13.6	2/0-7	2445	146	595	740	210	-	457
Cyclops	2/0-7	1.52	10.6	13.7	2/0-7	2445	147	595	743	210	-	457
Slug	3/0-7	1.52	11.8	14.8	1/0-7	2023	165	650	816	242	-	366
Fulgur	3/0-19	1.52	11.9	15.0	1/0-7	2023	168	650	819	242	-	366
Balanus	3/0-19	2.03	11.9	16.0	1/0-7	2023	216	650	868	242	-	366
Stonecrab	3/0-7	1.52	11.8	14.8	3/0-7	3080	165	752	917	242	-	366
Flustra	3/0-7	1.52	11.9	15.0	3/0-7	3080	168	752	920	242	-	366
Crisia	3/0-19	2.03	11.9	16.0	3/0-7	3080	216	752	969	242	-	305
Squid	4/0-7	1.52	13.3	16.3	2/0-7	2431	191	820	1011	279	-	305
Arca	4/0-19	1.52	13.4	16.5	2/0-7	2431	192	820	1012	279	-	305
Bugula	4/0-19	2.03	13.4	17.5	2/0-7	2431	246	820	1066	279	-	305

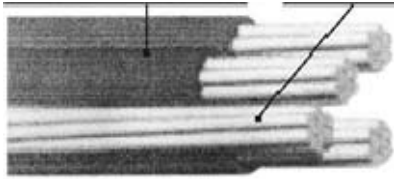
### ASTM Standard Service Drop Cable(Triplex)

Continue Table

Code word	Phase Conductors				Bare Neutral		Nominal Weight			Ampacity A	Standard Package	
	Size & Number of Wires	Insulation Thickness mm	Nominal Diameter		Size & Number of Wires	Rated Strength kg	kg/km				Coils m	Reels m
			Bare	O.D.			XLPE	AL or Alloy	Total			
			mm	mm								
AAAC												
Kingerab	4/0-7	1.52	13.3	16.3	4/0-7	3883	191	948	1137	279	-	305
Lepas	4/0-19	1.52	13.4	16.5	4/0-7	3883	192	948	1140	279	-	305
Cassi	4/0-19	20.03	13.4	17.5	4/0-7	3883	246	948	1194	279	-	305
Paludina	6-1	1.14	4.115	6.401	6-6/1	540	42	112	170	79	305	762
Voluta	6-7	1.14	4.67	6.960	6-6/1	540	48	112	176	79	305	671
Bolma	6-7	1.52	4.67	7.722	6-6/1	540	64	112	194	79	305	671
Scallop	4-1	1.14	5.182	7.468	6-6/1	540	52	155	225	138	152	518
Strombus	4-7	1.14	5.89	8.179	6-6/1	540	60	155	232	138	152	457
Carnea	4-7	1.52	5.89	8.941	6-6/1	540	80	155	253	138	152	457
Wheik	4-1	1.14	5.182	7.468	4-6/1	844	52	177	258	138	152	518
Periwinkle	4-7	1.14	5.89	8.179	4-6/1	844	60	177	263	138	152	457
Calma	4-7	1.52	5.89	8.941	4-6/1	844	80	177	284	138	152	457
Cockle	2-7	1.14	5.89	8.179	4-6/1	844	60	247	335	183	152	549
Gebia	2-7	1.52	5.89	8.941	4-6/1	844	80	247	354	183	152	549
Conch	2-7	1.14	5.89	8.179	2-6/1	1293	60	281	384	183	152	549
Uca	2-7	1.52	5.89	8.941	2-6/1	1293	80	281	405	183	152	549
Vermeths	1-7	1.52	8.33	11.379	1-6/1	1610	113	354	522	210	152	457
Atya	1-19	1.52	8.33	11.379	1-6/1	1610	113	430	524	210	152	457
Janthina	1/0-7	1.52	8.33	11.379	2-6/1	1293	113	393	549	242	152	366
Ranella	1/0-19	1.52	9.47	12.522	2-6/1	1293	130	393	566	242	152	366
Neritina	1/0-7	1.52	9.35	12.395	1/0-6/1	1987	128	448	644	242	152	366
Cenia	1/0-19	1.52	9.47	12.522	1/0-6/1	1987	130	448	646	242	152	366
Cavolinia	2/0-7	1.52	10.5	13.564	1-6/1	1610	146	496	697	279	-	579
Clio	2/0-19	1.52	10.6	13.691	1-6/1	1610	147	496	698	279	-	457
Runcina	2/0-7	1.52	10.5	13.564	2/0-6/1	2404	146	564	796	279	-	457
Triton	2/0-19	1.52	10.6	13.691	2/0-6/1	2404	147	564	799	279	-	457
Sanddollar	3/0-7	1.52	11.8	14.834	1/0-6/1	1987	165	625	860	322	-	396
Aega	3/0-19	1.52	11.9	14.986	1/0-6/1	1987	168	625	862	322	-	396
Pisa	3/0-19	2.03	11.9	16.002	1/0-6/1	1987	216	625	911	322	-	396
Cherrystone	3/0-7	1.52	11.8	14.834	3/0-6/1	3003	165	711	987	322	-	396
Mursia	3/0-19	1.52	11.9	14.986	3/0-6/1	3003	168	711	990	322	-	396
Mysis	3/0-19	2.03	11.9	16.002	3/0-6/1	3003	216	711	990	322	-	396
Cuttlefish	4/0-7	1.52	13.3	16.307	2/0-6/1	2404	191	787	1066	372	-	305
Cerapus	4/0-19	1.52	13.4	16.459	2/0-6/1	2404	192	787	1069	372	-	305
Nepatus	4/0-19	2.03	13.4	17.475	2/0-6/1	2404	246	787	1121	372	-	305
Razor	4/0-7	1.52	13.3	16.307	4/0-6/11	3788	191	897	1225	372	-	305
Zuzara	4/0-19	1.52	13.4	16.459	4/0-6/1	3788	192	897	1229	372	-	305
Alima	4/0-19	2.03	13.4	17.475	4/0-6/1	3788	246	897	1281	372	-	305
Callista	266.8-19	2.03	15.1	19.126	3/0-6/1	3003	280	994	1384	410	-	305
Dosinia	266.8-19	2.03	15.1	19.126	266.8-18/1	3121	280	1133	1472	410	-	305
Cowry	336.4-19	2.03	16.9	20.980	4/0-6/1	3788	320	1253	1713	506	-	305
Limpet	336.4-19	2.03	16.9	20.980	336.4-18/1	3937	320	1429	1823	506	-	305

PE or XLPE Insulation

Conductor AAC / AAAC / ACSR



### ASTM Standard Service Drop Cable(Quadruplex)

Code word	Phase Conductors				Bare Neutral		Nominal Weight			Ampacity	Standard Package	
	Size & Number of Wires	Insulation Thickness	Nominal Diameter		Size & Number of Wires	Rated Strength	kg/km				A	Coils
			Bare	O.D.			XLPE	AL or Alloy	Total			
			mm	mm								
AAC												
Quarter	6-1	1.143	4.115	6.401	6-7	256.371	63	149	211	78	152.4	762.0
Clydesdale	4-1	1.143	5.182	7.468	4-7	399.613	79	237	315	103	152.4	518.2
Pinto	4-7	1.143	5.893	8.179	4-7	399.613	89	237	326	136	152.4	518.2
Mustang	2-7	1.143	7.417	9.703	2-7	612.347	115	377	491	158	-	548.6
Shire	1-19	1.524	8.433	11.481	1-19	743.886	171	475	646	158	-	457.2
Libyan	1/0-7	1.524	9.347	12.395	1/0-7	902.644	192	598	790	182	-	365.8
Criollo	1/0-19	1.524	9.474	12.522	1/0-19	902.644	193	598	793	182	-	365.8
Orloff	2/0-7	1.524	10.516	13.564	2/0-7	1138.511	217	754	973	210	-	457.2
Percheron	2/0-19	1.524	10.643	13.691	2/0-19	1138.511	220	754	976	210	-	457.2
Mongolian	3/0-7	1.524	11.786	14.834	3/0-7	1378.914	249	951	1199	242	-	396.2
Hanoverian	3/0-19	1.524	11.938	14.986	3/0-19	1378.914	251	951	1204	242	-	396.2
Singlefoot	4/0-7	1.524	13.259	16.307	4/0-7	1737.250	286	1199	1485	279	-	335.3
Oldenburg	4/0-19	1.524	13.411	16.459	4/0-19	1737.250	289	1199	1490	279	-	335.3
AAAC												
Bay	6-1	1.143	4.115	6.401	6-7	503.485	63	155	217	78	152.4	762.0
French-conch	6-7	1.143	4.674	6.960	6-7	503.485	71	155	226	78	152.4	762.0
German-conch	4-1	1.143	5.182	7.468	4-7	798.318	79	247	324	103	152.4	518.2
Arabian	4-7	1.143	5.893	8.179	4-7	784.711	89	247	336	103	152.4	518.2
Belgian	2-7	1.143	7.417	9.703	2-7	1270.052	115	391	506	136	-	548.6
Saddle	1-19	1.524	8.433	11.481	2-7	1270.052	171	466	637	158	-	457.2
Plow	1/0-7	1.524	9.347	12.395	1/0-7	2023.011	192	624	814	182	-	365.8
Sherland	1/0-19	1.524	9.474	12.522	1/0-7	2023.011	193	624	817	182	-	365.8
Dapple-grey	2/0-7	1.524	10.516	13.564	2/0-7	2444.850	217	786	1005	210	-	457.2
Thoroughbred	2/0-19	1.524	10.643	13.691	2/0-7	2444.850	220	786	1007	210	-	457.2
Dobbin	3/0-7	1.524	11.786	14.834	3/0-7	3079.876	249	991	1238	242	-	396.2
Trotter	3/0-19	1.524	11.938	14.986	3/0-7	3079.876	251	991	1243	242	-	396.2
Pony	4/0-7	1.524	13.259	16.307	4/0-7	3882.730	286	1250	1534	279	-	335.3
Walking	4/0-19	1.524	13.411	16.459	4/0-7	3882.730	289	1250	1539	279	-	335.3

### ASTM Standard Service Drop Cable(Quadruplex)

Continue Table

Code word	Phase Conductors				Bare Neutral		Nominal Weight			Ampacity A	Standard Package	
	Size & Number of Wires	Insulation Thickness mm	Nominal Diameter		Size & Number of Wires	Rated Strength kg	kg/km				Coils m	Reels m
			Bare	O.D.			XLPE	AL or Alloy	Total			
			mm	mm								
ACSR												
Morochuca	6-1	1.143	4.115	6.401	6-6/1	539.772	63	149	229	78	152.4	762.0
Chola	6-7	1.143	4.674	6.960	6-6/1	539.772	71	149	237	78	152.4	762.0
Morgan	4-1	1.143	5.182	7.468	4-6/1	843.677	79	238	344	103	152.4	518.2
Hackney	4-7	1.143	5.893	8.179	4-6/1	843.677	90	238	356	103	152.4	518.2
Palomino	2-7	1.143	7.417	9.703	2-6/1	1292.732	115	377	557	136	-	548.6
Albino	1-19	1.524	8.433	11.481	1-6/1	1610.245	171	473	699	158	-	365.8
Standardbred	1/0-7	1.524	9.347	12.395	1/0-6/1	1986.724	192	598	859	182	-	365.8
Costena	1/0-19	1.524	9.474	12.522	1/0-6/1	1986.724	193	598	862	182	-	365.8
Chicoteagues	2/0-7	1.524	10.516	13.564	2/0-6/1	2404.027	217	753	1060	210	-	457.2
Grullo	2/0-19	1.524	10.643	13.691	2/0-6/1	2404.027	220	753	1063	210	-	457.2
Mare	3/0-7	1.524	11.786	14.834	3/0-6/1	3002.766	249	951	1306	242	-	396.2
Suffolk	3/0-19	1.524	11.938	14.986	3/0-6/1	3002.766	251	951	1313	242	-	396.2
Stallion	4/0-7	1.524	13.259	16.307	4/0-6/1	3787.477	286	1198	1622	279	-	335.3
Appaloosa	4/0-19	1.524	13.411	16.459	4/0-6/1	3787.477	289	1198	1627	279	-	335.3



### ASTM Standard Secondary UD Cable(Duplex)

Code word	Phase Conductors			Neutral			Diameter		Approx. Weight Kg/km	Allowable Ampacities (Raceway, Cable Tray, Direct Burial)
	Size	Number of Wires	Insulation Thickness	Size	Number of Wires	Insulation Thickness	Single Phase Conductor	Complete Cable		
	AWG		mm	AWG		mm	mm	mm		
Bard	8	7	1.52	8	7	1.52	6.7	13.5	93	55
Clafin	6	7	1.52	6	7	1.52	7.6	15.1	135	70
Delgado	4	7	1.52	4	7	1.52	8.7	17.5	192	110
Everett	2	7	1.52	2	7	1.52	11.1	22.3	303	180



### ASTM Standard Secondary UD Cable(Triplex)

Code word	Phase Conductors			Neutral			Diameter		Approx. Weight Kg/km	Allowable Ampacities (Raceway, Cable Tray, Direct Burial)
	Size	Number of Wires	Insulation Thickness	Size	Number of Wires	Insulation Thickness	Single Phase Conductor	Complete Cable		
	AWG		mm	AWG		mm	mm	mm		
Erskine	6	7	1.52	6	7	1.52	7.6	16.3	201	60
Vassar	4	7	1.52	4	7	1.52	8.7	18.8	287	75

### ASTM Standard Secondary UD Cable(Triplex)

Continue Table

Code word	Phase Conductors			Neutral			Diameter		Approx. Weight	Allowable Ampacities (Raceway, Cable Tray, Direct Burial)
	Size	Number of Wires	Insulation Thickness	Size	Number of Wires	Insulation Thickness	Single Phase Conductor	Complete Cable		
	AWG			mm					AWG	
Stephens	2	7	1.52	4	7	1.52	10.2	22.1	375	110
Ramapo	2	7	1.52	2	7	1.52	10.2	22.1	419	110
Brenau	1/0	19	2.03	2	7	1.52	13.2	28.5	583	150
Bergen	1/0	19	2.03	1/0	19	2.03	13.2	28.5	665	150
Converse	2/0	19	2.03	1	19	2.03	14.3	30.9	723	165
Hunter	2/0	19	2.03	2/0	19	2.03	14.3	30.9	808	165
Hollins	3/0	19	2.03	1/0	19	2.03	15.6	33.6	877	190
Rockland	3/0	19	2.03	3/0	19	2.03	15.6	33.6	983	190
Sweetbriar	4/0	19	2.03	2/0	19	2.03	17.1	36.8	1070	225
Monmouth	4/0	19	2.03	4/0	19	2.03	17.1	36.8	1201	225
Pratt	250	37	2.41	3/0	19	2.03	19.0	40.9	1285	250
Wesleyan	350	37	2.41	4/0	19	2.03	21.6	46.6	1686	305
Newark	350	37	2.41	350	37	2.41	22.8	49.1	2171	305
Holyoke	500	37	2.41	300	37	2.41	24.9	53.7	2325	380
Rider	500	37	2.41	350	37	2.41	24.9	53.7	2407	380
Seton Hall	750	61	2.79	750	61	2.79	30.2	65.1	3908	470



### ASTM Standard Secondary UD Cable(Quadruplex)

Code word	Phase Conductors			Neutral			Diameter		Approx. Weight	Allowable Ampacities (Raceway, Cable Tray, Direct Burial)
	Size	Number of Wires	Insulation Thickness	Size	Number of Wires	Insulation Thickness	Single Phase Conductor	Complete Cable		
	AWG			mm					AWG	
Tulsa	4	7	1.52	4	7	1.52	8.7	21.1	385	85
Dyke	2	7	1.52	4	7	1.52	10.2	24.7	518	110
Wittenberg	2	7	1.52	2	7	1.52	10.2	24.7	562	110
Notre Dame	1/0	19	2.03	2	7	1.52	13.2	32.0	810	150
Purdue	1/0	19	2.03	1/0	19	2.03	13.2	32.0	892	150
Syracuse	2/0	19	2.03	1	19	2.03	14.3	34.6	998	165
Lafayette	2/0	19	2.03	2/0	19	2.03	14.3	34.6	1084	165
Swarthmore	3/0	19	2.03	1/0	19	2.03	15.6	37.7	1211	190
Davidson	3/0	19	2.03	3/0	19	2.03	15.6	37.7	1317	190
McPherson	4/0	19	2.03	2	7	1.52	17.1	41.2	1338	225
Wake Forest	4/0	19	2.03	2/0	19	2.03	17.1	41.2	1478	225
Earlham	4/0	19	2.03	4/0	19	2.03	17.1	41.2	1609	225
Rust	250	37	2.41	3/0	19	2.03	19.0	45.8	1810	260
Slippery Rock	350	37	2.41	4/0	19	2.03	21.6	52.1	2326	305
Wofford	500	37	2.41	350	37	2.41	24.9	60.1	3301	380
Westminster	750	61	2.79	350	37	2.41	30.2	73.0	4567	470

### BS IEC Standards Aerial Bundled Cable (ABC)

Nominal area mm <sup>2</sup>	Number/Dia. mm	Insulation thickness mm
1×16+16	7/1.70	1.30
2×16+16	7/1.70	1.30
3×16+16	7/1.70	1.30
4×16	7/1.70	1.30
1×25+25	7/2.10	1.30
2×25+25	7/2.10	1.30
3×25+25	7/2.10	1.30
4×25	7/2.10	1.30
1 35+35	7/2.50	1.30

Nominal area mm <sup>2</sup>	Number/Dia. mm	Insulation thickness mm
2×35+35	7/2.50	1.30
3×35+35	7/2.50	1.30
4×35	7/2.50	1.30
1×50+50	7/3.0	1.50
3×50+50	7/3.0	1.50
1×70+70	19/2.10	1.50
3×70+70	19/2.10	1.50
3×95+95	19/2.50	1.60

### NFC Standard Aerial Bundled Cable (ABC)

Item	Phase / No./Dia. mm	XLPE Thickness mm	Neutral / No./Dia. mm	XLPE Thickness mm	EP / No./Dia. mm	XLPE Thickness mm
3 35+54 6AAAC+16	7/2.52	1.60	7/3.15	1.60	7/1.70	1.20
3 70+54 6AAAC+2 16	12/2.72	1.60	7/3.15	1.60	7/1.70	1.20

## Aerial Insulated Cable (ABC)

### Aerial Insulated Cable with Rated Voltage 10kV and below

#### Applications

The cables are designed for aerial power lines with rated voltage  $U_0(U_m)$  10(12)kV.

#### Manufacturing standards

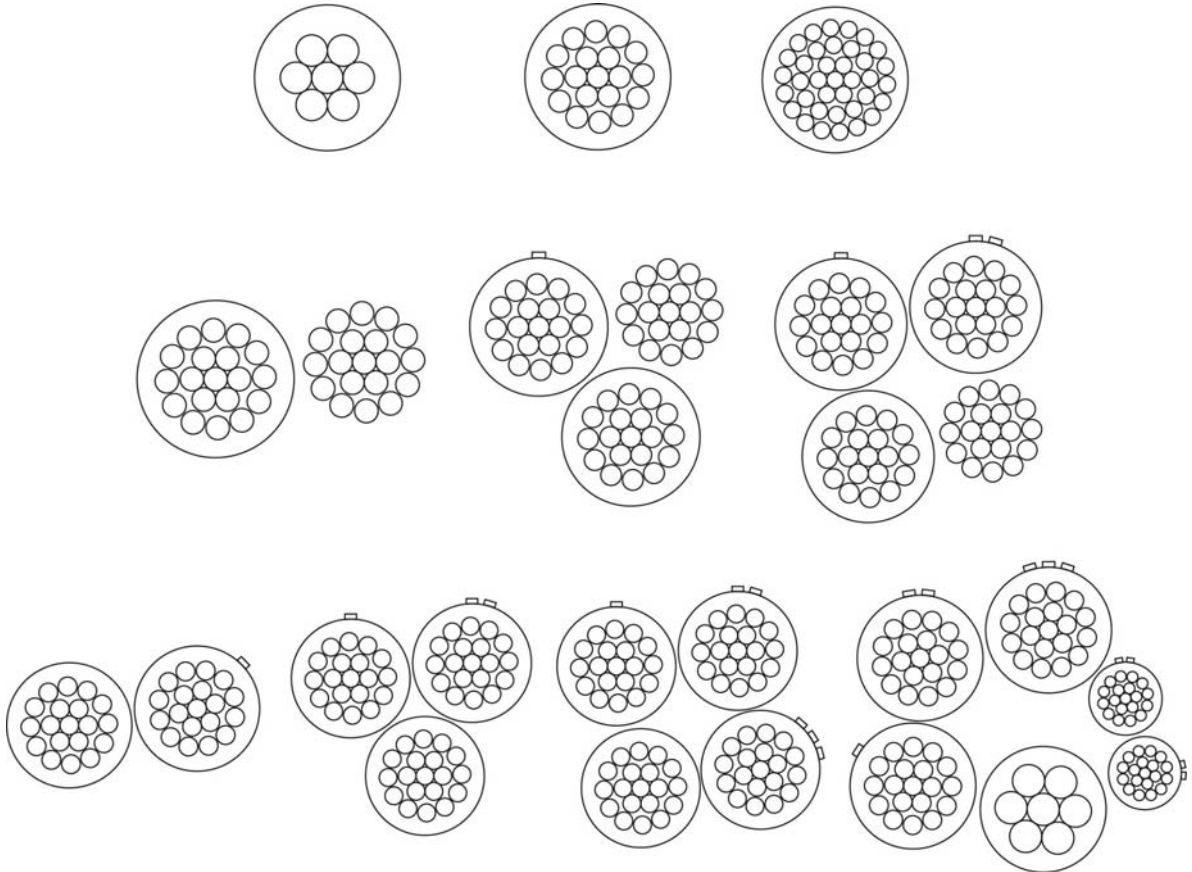
GB14049 etc.

#### Operating features

- Rated voltage is 10kV
- Max. Continuous permissive working temperature of conductor:  
XLPE insulation should be not more than  $90^{\circ}\text{C}$ 。
- Max. Temperature at short circuit (the longest continuous time is not more than 5S)  
XLPE insulation is  $250^{\circ}\text{C}$ 。
- Installation temperature of cable should be not less than  $-20^{\circ}\text{C}$ 。
- Permissive bending radius of cable should be not less than  $20(D+d)$  mm.  
D -the actual overall diameter of cable ,mm;  
d-the actual overall diameter of conductor ,mm.
- Insulation resistance of common insulation construction of aerial cable should be not less than  $1500\text{M}\Omega \cdot \text{km}$ , and insulation resistance of thin XLPE insulated construction of light aerial cable should be not less than  $1000\text{m}\Omega \cdot \text{km}$ .
- AC Voltage test: immerse cables in water at least for 1h before implementing testing voltage. (common insulation construction cable is 15KV, and thin XLPE insulated light cable is 12kV) The continuous time of test is 1min. The cable should not be breakdown.
- Partial discharge test: implementing AC Voltage 9kV on insulationshield cable. The discharge volume of cable should be not more than 20pc.

Types, diagrams

Description	Chinese type
Aluminium core XLPE insulated aerial cable	JKLYJ/Q
Aluminium alloy core XLPE insulated aerial cable	JKLHYJ/Q
Copper core XLPE insulated aerial cable	JKYJ
Aluminium core XLPE insulated aerial cable	JKLYJ
Aluminium alloy core XLPE insulated aerial cable	JKLHYJ





### Main technical parameter(Single Core Cable)

Type	Nom. conductor cross section mm <sup>2</sup>	DC conductor resistance at 20°C Ω/km ≤	approx. Min thickness conductor shield mm	Nom. Thickness of insulation mm	approx. OD mm	approx. Weight m	abruption force of cable N
JKLYJ/Q	16	1.91	0.5	2.5	10.8	116	2517
	25	1.20	0.5	2.5	12	149	3762
	35	0.868	0.5	2.5	13	184	5177
	50	0.641	0.5	2.5	14.3	236	7011
	70	0.443	0.5	2.5	16	304	10345
	95	0.320	0.6	2.5	17.8	389	13727
	120	0.253	0.6	2.5	19.2	469	17339
	150	0.206	0.6	2.5	20.8	562	21033
	185	0.164	0.6	2.5	22.3	656	26732
	240	0.125	0.6	2.5	24.6	835	34679
300	0.100	0.6	2.5	26.9	1014	43349	
JKLHYJ/Q	16	2.217	0.5	2.5	10.8	116	4022
	25	1.393	0.5	2.5	12	149	6284
	35	1.007	0.5	2.5	13	184	8800
	50	0.744	0.5	2.5	14.3	236	12569
	70	0.514	0.5	2.5	16	304	17396
	95	0.371	0.6	2.5	17.8	389	23886
	120	0.294	0.6	2.5	19.2	469	30164
	150	0.239	0.6	2.5	20.8	562	37706
	185	0.19	0.6	2.5	22.3	656	46503
	240	0.145	0.6	2.5	24.6	835	60329
300	0.11	0.6	2.5	26.9	1014	75411	
JKYJ	25	0.749	0.5	3.4	13.8	335	8465
	35	0.540	0.5	3.4	14.8	432	11731
	50	0.399	0.5	3.4	16.1	577	16502
	70	0.276	0.5	3.4	17.8	769	23461
	95	0.199	0.6	3.4	19.6	1009	31759
	120	0.158	0.6	3.4	21.0	1274	39911
	150	0.128	0.6	3.4	22.6	1514	49505
	185	0.1021	0.6	3.4	24.1	1792	61846
	240	0.0777	0.6	3.4	26.4	2328	79823
300	0.0619	0.6	3.4	28.7	2870	99788	
JKLYJ	16	1.91	0.5	3.4	12.6	148	2512
	25	1.20	0.5	3.4	13.8	184	3762
	35	0.868	0.5	3.4	14.8	222	5177
	50	0.641	0.5	3.4	16.1	277	7011
	70	0.443	0.5	3.4	17.8	350	10345
	95	0.320	0.6	3.4	19.6	440	13727
	120	0.253	0.6	3.4	21.0	523	17339
	150	0.206	0.6	3.4	22.6	621	21033
	185	0.164	0.6	3.4	24.1	719	26732
	240	0.125	0.6	3.4	26.4	904	34679
300	0.100	0.6	3.4	28.7	1089	43349	
JKLHYJ	16	2.217	0.5	3.4	12.6	148	4022
	25	1.393	0.5	3.4	13.8	184	6284
	35	1.007	0.5	3.4	14.8	222	8800
	50	0.744	0.5	3.4	16.1	277	12569
	70	0.514	0.5	3.4	17.8	350	17396
	95	0.371	0.6	3.4	19.6	440	23886
	120	0.294	0.6	3.4	21	523	30164
	150	0.239	0.6	3.4	22.6	621	37706
	185	0.19	0.6	3.4	24.1	719	46503
	240	0.145	0.6	3.4	26.4	904	60329
300	0.11	0.6	3.4	28.7	1089	75411	

## Aerial Insulated Cable (ABC)

### Aerial Insulated Cable with Rated Voltage 35kV and below

#### Applications

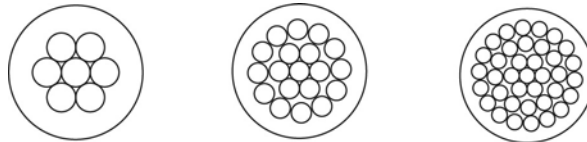
The cables are designed for aerial power lines with rated voltage  $U_0(U_m)$  35(42)kV.

#### Manufacturing standards

GB14049 etc.

#### Types, diagrams

Description	Chinese type
Copper core XLPE insulated aerial cable	JKYJ
Aluminium core XLPE insulated aerial cable	JKLYJ
Aluminium alloy core XLPE insulated aerial cable	JKLHYJ



#### Main technical parameter(Single Core Cable)

Type	Nom. conductor cross section $\text{mm}^2$	DC conductor resistance at 20°C $\Omega/\text{km}$ $\leq$	approx. Min thickness conductor shield $\text{mm}$	Nom. Thickness of insulation $\text{mm}$	approx. OD $\text{mm}$	approx. Weight $\text{m}$	abruption force of cable $\text{N}$
JKYJ	50	0.399	0.5	9.3	27.9	964	16502
	70	0.276	0.5	9.3	29.6	1186	23461
	95	0.199	0.6	9.3	31.4	1458	31759
	120	0.158	0.6	9.3	32.8	1747	39911
	150	0.128	0.6	9.3	34.4	2015	49505
	185	0.1021	0.6	9.3	35.9	2320	61846
	240	0.0777	0.6	9.3	38.2	2896	79823
JKLYJ	300	0.0619	0.6	9.3	40.5	3479	99788
	50	0.641	0.5	9.3	27.9	664	7011
	70	0.443	0.5	9.3	29.6	767	10345
	95	0.320	0.6	9.3	31.4	889	13727
	120	0.253	0.6	9.3	32.8	996	17339
	150	0.206	0.6	9.3	34.4	1122	21033
	185	0.164	0.6	9.3	35.9	1247	26732
JKLHYJ	240	0.125	0.6	9.3	38.2	1472	34679
	300	0.100	0.6	9.3	40.5	1698	43349
	50	0.744	0.5	9.3	27.9	664	12569
	70	0.514	0.5	9.3	29.6	767	17396
	95	0.371	0.6	9.3	31.4	889	23886
	120	0.294	0.6	9.3	32.8	996	30164
	150	0.239	0.6	9.3	34.4	1122	37706
JKLHYJ	185	0.19	0.6	9.3	35.9	1247	46503
	240	0.145	0.6	9.3	38.2	1472	60329
	300	0.11	0.6	9.3	40.5	1698	75411

# Welding Cable

## Applications

The cables are suitable for welding machine as secondary earth wire with secondary side to-ground voltage not more than 200V AC and impulse voltage peak 400V DC, or for connecting electrode holders.

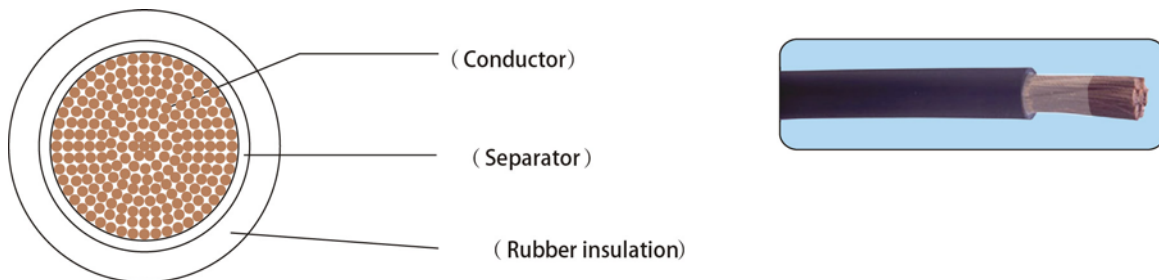
Continuous operating temperature  $\leq 60^{\circ}\text{C}$ .

## Manufacturing standards

ASTM ICEA BS DIN IEC GB AS/NZS etc.

## Types, diagrams

Description	International type	Chinese type
Welding cable with Rubber compound sheath	H01N2-D ( Common flexible)	60245 IEC 81 YH
Welding cable with Polychloroprene compound (PCP) or other equivalent synthetic elastomer sheath	H01N2-E ( Extra flexible)	60245 IEC 82 YHF



## Main technical parameter

### H01N2-D 60245 IEC 81 (YH) 60245 IEC 82 (YHF)

Nom. Area $\text{mm}^2$	Max. Dia. of wire mm	Nom. Cover Thickness mm	Average O.D. mm		Maximum DC Resistance at 20°C $\Omega/\text{km}$	
			Min.	Max.	Tinned copper	Untinned copper
10	0.21	2.0	7.7	9.7	1.95	1.91
16		2.0	8.8	11.0	1.24	1.21
25		2.0	10.1	12.7	0.795	0.780
35		2.0	11.4	14.2	0.565	0.554
50		2.2	13.2	16.5	0.393	0.386
70		2.4	15.3	19.2	0.277	0.272
95		2.6	17.1	21.4	0.210	0.206
120	0.51	2.8	19.2	24.0	0.164	0.161
150		3.0	21.1	26.4	0.132	0.129
185		3.2	23.1	28.9	0.108	0.106

**H01N2-E 60245 IEC 81 (YH) 60245 IEC 82 (YHF)**

Nom. Area mm <sup>2</sup>	Max. Dia. of wire mm	Nom. Cover Thickness mm	Average O.D. mm		Maximum DC Resistance at 20°C Ω/km	
			Min.	Max.	Tinned copper	Untinned copper
10	0.21	1.2	6.2	7.8	1.95	1.91
16		1.2	7.3	9.1	1.24	1.21
25		1.2	8.6	10.8	0.795	0.780
35		1.2	9.8	12.3	0.565	0.554
50		1.5	11.9	14.8	0.393	0.386
70		1.5	13.6	17.0	0.277	0.272
95		1.8	15.6	19.5	0.210	0.206
120	0.51	1.8	17.2	21.6	0.164	0.161
150		1.8	18.8	23.5	0.132	0.129
185		1.8	20.4	25.5	0.108	0.106

# General Purpose Rubber Sheathed Cable

## Rated voltage 450/750V and below rubber insulated cables

### Applications

The cables are suitable for use in household electrical appliances, tools, movable appliances and power distribution network for rated voltage 450/750V AC and below.

Continuous operating temperature:  $\leq 60^{\circ}\text{C}$ 。

### Manufacturing standards

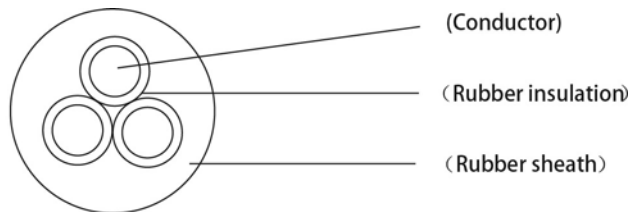
ASTM ICEA BS DIN IEC GB AS/NZS etc.

### Types, diagrams

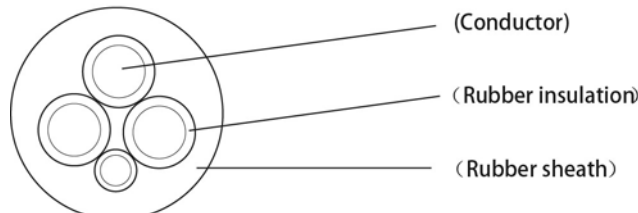
Description	International type	Chinese type
Heat resistant silicone rubber insulated cable		60245 IEC 03 YG
Middle-duty rubber sheathed flexible wire	H05RR-F	60245 IEC 53 YZ
Polychloroprene compound (PCP) or other equivalent synthetic elastomer sheathed flexible wire	H05RN-F	60245 IEC 57 YZW
Heavy-duty Polychloroprene compound (PCP) or other equivalent synthetic elastomer sheathed flexible wire	H07RN-F	60245 IEC 66 YCW
Heavy-duty rubber sheathed elevator cable		60245 IEC 74 YT
Polychloroprene compound (PCP) or other equivalent synthetic elastomer sheathed elevator cable		60245 IEC 75 YTF



Silicone cable(YG)



60245 IEC 53(YZ), 60245 IEC57(YZW), YZ,



60245 IEC 66(YCW), YC, YCW

**Main technical parameter**

**Heat resistant silicone rubber insulated cable 60245 IEC 03(YG)**

Nom. Area mm <sup>2</sup>	Max. Dia. of wire mm	Nom. Cover Thickness mm	Average O.D. mm		Maximum DC Resistance at 20°C Ω/km	
			Min.	Max.	Tinned copper	Untinned copper
0.5	0.21	0.6	2.6	3.3	40.1	39.0
0.75	0.21	0.6	2.8	3.5	26.7	26.0
1	0.21	0.6	2.9	3.7	20.0	19.5
1.5	0.26	0.7	3.4	4.2	13.7	13.3
2.5	0.26	0.8	4.0	5.0	8.21	7.98
4	0.31	0.8	4.5	5.6	5.09	4.95
6	0.31	0.8	5.0	6.2	3.39	3.30
10	0.41	1.0	6.2	7.8	1.95	1.91
16	0.41	1.0	7.3	9.1	1.24	1.21

**Middle-duty rubber sheathed flexible wire 60245 IEC 53(YZ)**

**Polychloroprene compound (PCP) or other equivalent synthetic elastomer sheathed flexible wire 60245 IEC 57(YZW)**

**H05RR-F H05RN-F 300/500V**

Nom. Area mm <sup>2</sup>	Nom. Insulation Thickness mm	Nom. Sheath Thickness mm	Average O. D. mm		Maximum DC Resistance at 20°C Ω/km	
			Min.	Max.	Tinned copper	Untinned copper
2*0.75	0.6	0.8	5.7	7.4	26.7	26.0
2*1	0.6	0.9	6.1	8.0	20.0	19.5
2*1.5	0.8	1.0	7.6	9.8	13.7	13.3
2*2.5	0.9	1.1	9.0	11.6	8.21	7.98
3*0.75	0.6	0.9	6.2	8.1	26.7	26.0
3*1	0.6	0.9	6.5	8.5	20.0	19.5
3*1.5	0.8	1.0	8.0	10.4	13.7	13.3
3*2.5	0.9	1.1	9.6	12.4	8.21	7.98
4*0.75	0.6	0.9	6.8	8.8	26.7	26.0
4*1	0.6	0.9	7.1	9.3	20.0	19.5
4*1.5	0.8	1.1	9.0	11.6	13.7	13.3
4*2.5	0.9	1.2	10.7	13.8	8.21	7.98
5*0.75	0.6	1.0	7.6	9.9	26.7	26.0
5*1	0.6	1.0	8.0	10.3	20.0	19.5
5*1.5	0.8	1.1	9.8	12.7	13.7	13.3
5*2.5	0.9	1.3	11.9	15.3	8.21	7.98

**Heavy-duty Polychloroprene compound (PCP) or other equivalent synthetic elastomer sheathed flexible wire 60245 IEC 66(YCW)**

**H07RN-F**

Nom. Area mm <sup>2</sup>	Nom. Insulation Thickness mm	Nom. Sheath Thickness mm			Average O. D. mm	
		Single layer	Double layer		Min	Max.
			Inner	Outer		
1 1.5	0.8	1.4	-	-	5.7	7.1
1 2.5	0.9	1.4	-	-	6.3	7.9
14	1.0	1.5	-	-	7.2	9.0

**Heavy-duty Polychloroprene compound (PCP) or other equivalent synthetic elastomer sheathed flexible wire 60245 IEC 66(YCW)**

**H07RN-F**

Continue Table

Nom. Area mm <sup>2</sup>	Nom. Insulation Thickness mm	Nom. Sheath Thickness mm			Average O. D. mm	
		Single layer	Double layer		Min	Max.
			Inner	Outer		
16	1.0	1.6	-	-	7.9	9.8
110	1.2	1.8	-	-	9.5	11.9
116	1.2	1.9	-	-	10.8	13.4
125	1.4	2.0	-	-	12.7	15.8
135	1.4	2.2	-	-	14.3	17.9
150	1.6	2.4	-	-	16.5	20.6
170	1.6	2.6	-	-	18.6	23.3
195	1.8	2.8	-	-	20.8	26.0
1 120	1.8	3.0	-	-	22.8	28.6
1 150	2.0	3.2	-	-	25.2	31.4
1 185	2.2	3.4	-	-	27.6	34.4
1 240	2.4	3.5	-	-	30.6	38.3
1 300	2.6	3.6	-	-	33.5	41.9
1 400	2.8	3.8	-	-	37.4	46.8
21	0.8	1.3	-	-	7.7	10.0
2 1.5	0.8	1.5	-	-	8.5	11.0
2 2.5	0.9	1.7	-	-	10.2	13.1
24	1.0	1.8	-	-	11.8	15.1
26	1.0	2.0	-	-	13.1	16.8
210	1.2	3.1	-	-	17.7	22.6
216	1.2	3.3	1.3	2.0	20.2	25.7
225	1.4	3.6	1.4	2.2	24.3	30.7
31	0.8	1.4	-	-	8.3	10.7
3 1.5	0.8	1.6	-	-	9.2	11.9
3 2.5	0.9	1.8	-	-	10.9	14.0
34	1.0	1.9	-	-	12.7	16.2
36	1.0	2.1	-	-	14.1	18.0
310	1.2	3.3	-	-	19.1	24.2
316	1.2	3.5	1.4	2.1	21.8	27.6
325	1.4	3.8	1.5	2.3	26.1	33.0
335	1.4	4.1	1.6	2.5	29.3	37.1
350	1.6	4.5	1.8	2.7	34.1	42.9
370	1.6	4.8	1.9	2.9	38.4	48.3
395	1.8	5.3	2.1	3.2	43.3	54.0
41	0.8	1.5	-	-	9.2	11.9
4 1.5	0.8	1.7	-	-	10.2	13.1
4 2.5	0.9	1.9	-	-	12.1	15.5
44	1.0	2.0	-	-	14.0	17.9
46	1.0	2.3	-	-	15.7	20.0
410	1.2	3.4	-	-	20.9	26.5
416	1.2	3.6	1.4	2.2	23.8	30.1
425	1.4	4.1	1.6	2.5	28.9	36.6

**Heavy-duty Polychloroprene compound (PCP) or other equivalent synthetic elastomer sheathed flexible wire 60245 IEC 66(YCW)**

**H07RN-F**

Continue Table

Nom. Area mm <sup>2</sup>	Nom. Insulation Thickness mm	Nom. Sheath Thickness mm			Average O. D. mm	
		Single layer	Double layer		Min	Max.
			Inner	Outer		
435	1.4	4.4	1.7	2.7	32.5	41.1
450	1.6	4.8	1.9	2.9	37.7	47.5
470	1.6	5.2	2.0	3.2	42.7	54.0
495	1.8	5.9	2.3	3.6	48.4	61.0
4 120	1.8	6.0	2.4	3.6	53.0	66.0
4 150	2.0	6.5	2.6	3.9	58.0	73.0
51	0.8	1.6	-	-	10.2	13.1
5 1.5	0.8	1.8	-	-	11.2	14.4
5 2.5	0.9	2.0	-	-	13.3	17.0
54	1.0	2.2	-	-	15.6	19.9
56	1.0	2.5	-	-	17.5	22.2
510	1.2	3.6	-	-	22.9	29.1
515	1.2	3.9	-	-	26.4	33.3
525	1.4	4.4	-	-	32.0	40.4

**Heavy-duty rubber sheathed elevator cable 60245 IEC 74(YT)**

**Polychloroprene compound (PCP) or other equivalent synthetic elastomer sheathed elevator cable 60245 IEC 75(YTF)**

Nom. Area mm <sup>2</sup>	Nom. Insulation Thickness mm	Nom. Sheath Thickness mm	Maximum DC Resistance at 20°C Ω /km	
			Tinned copper	Untinned copper
6*0.75	0.8	1.5	26.7	26.0
6*1	0.8	1.5	20.0	19.5
9*0.75	0.8	1.5	26.7	26.0
9*1	0.8	1.5	20.0	19.5
12*0.75	0.8	1.5	26.7	26.0
12*1	0.8	1.5	20.0	19.5
18*0.75	0.8	1.5	26.7	26.0
18*1	0.8	1.5	20.0	19.5
24*0.75	0.8	1.5	26.7	26.0
24*1	0.8	1.5	20.0	19.5
30*0.75	0.8	1.5	26.7	26.0
30*1	0.8	1.5	20.0	19.5



# Wire & Cable for Electrical Equipment

## PVC Insulated Wire and Cable with rated voltage 450/750V and below







### Applications

The product is designed for power equipments fixed wiring and flexible connection for electrical appliances with A.C.rated voltage 450/750V and below.

### Manufacturing standards

ASTM ICEA UL BS DIN IEC GB AS/NZS etc.

### Types and description

Serial number	Type	Description
1	60227 IEC 01 (BV)	Single core rigid conductor unsheathed cable for general purposes(H07V-U or H07V-R) 
2	60227 IEC 02 (RV)	Single core flexible conductor unsheathed cable for general purposes(H07V-U or H07V-R) 
3	60227 IEC 05 (BV)	Single core 70°C solid conductor unsheathed cable for internal wiring(H07V-U or H07V-R)
4	60227 IEC 06 (RV)	Single core 70°C flexible conductor unsheathed cable for internal wiring(H07V-K)
5	60227 IEC 07 (BV-90)	Single core 90°C solid conductor unsheathed cable for internal wiring(H07V-U or H07V-R)
6	60227 IEC 08 (RV-90)	Single core 90°C flexible conductor unsheathed cable for internal wiring(H07V-K)
7	60227 IEC 10 (BVV)	Light PVC sheathed cable(NYY or NYM) 
8	60227 IEC 42 (RVB)	Flat unsheathed flexible wire 
9	60227 IEC 52 (RVV)	Light PVC sheathed flexible wire(H03VV-F、H03VV2-F) 
10	60227 IEC 53 (RVV)	Common PVC sheathed flexible wire(H05VV-F、H05VV2-F) 
11	BV	Copper core PVC insulated wire(H07V-U or H07V-R)
12	B L V	Aluminum core PVC insulated wire
13	BVR	Copper core PVC insulated flexible cable(H07V-R)
14	BVV	Copper core PVC insulated sheathed circular cable(NYY or NYM)
15	BLVV	Aluminum core PVC insulated and sheathed round cable
16	BVVB	Copper core PVC insulated and sheathed flat cable
17	BLVVB	Aluminum core PVC insulated sheathed flat cable
18	NMD	Copper core PVC/Nylon Insulated PVC Jacked flat cable
19	RVS	Twisted copper core PVC insulated flexible cable for conection
20	AVP	Copper core PVC insulated wire with shield for installation
21	RVP	Copper core PVC insulated flexible wire with shield
22	RVVP	Copper core PVC insulated, shielded, PVC sheathed flexible cable

## Wire & Cable for Electrical Equipment

### Specification and property

Table 1

Type	Nom. cross section mm <sup>2</sup>	No ./Dia. of Strand mm	Nom. Thickness of insulation mm	Average OD(Max.) mm	Max.DC conductor resistance at 20°C Ω/km		Min. Insulating resistance at 70°C MΩ·km
					Copper core	Tinned copper core	
60227 IEC 01(BV) 450/750V	1.5	1/1.37	0.7	3.3	12.1	12.2	0.011
	1.5	7/0.52	0.7	3.4	12.1	12.2	0.010
	2.5	1/1.76	0.8	3.9	7.41	7.56	0.010
	2.5	7/0.68	0.8	4.2	7.41	7.56	0.009
	4	1/2.24	0.8	4.4	4.61	4.70	0.0085
	4	7/0.85	0.8	4.8	4.61	4.70	0.0077
	6	1/2.73	0.8	4.9	3.08	3.11	0.0070
	6	7/1.04	0.8	5.4	3.08	3.11	0.0065
	10	7/1.33	1.0	6.8	1.83	1.84	0.0065
	16	7/1.70	1.0	8.0	1.15	1.16	0.0050
	25	7/2.12	1.2	9.8	0.727	0.734	0.0050
	35	7/2.50	1.2	11.0	0.524	0.529	0.0040
	50	19/1.78	1.4	13.0	0.387	0.391	0.0045
	70	18/2.12	1.4	15.0	0.268	0.270	0.0035
	95	19/2.50	1.6	17.0	0.193	0.195	0.0035
120	37/2.00	1.6	19.0	0.153	0.154	0.0032	
60227 IEC 01(BV) 450/750V	150	37/2.24	1.8	21.0	0.124	0.126	0.0032
	185	37/2.50	2.0	23.5	0.0991	0.100	0.0032
	240	61/2.24	2.2	26.5	0.0754	0.0762	0.0032
	300	61/2.50	2.4	29.5	0.0601	0.0607	0.0030
	400	61/2.85	2.6	33.5	0.0470	0.0475	0.0028
60227 IEC 02(RV) 450/750V	1.5	30/0.25	0.7	3.5	13.3	13.7	0.010
	2.5	50/0.25	0.8	4.2	7.98	8.21	0.009
	4	77/0.26	0.8	4.8	4.95	5.09	0.007
	6	78/0.31	0.8	6.3	3.30	3.39	0.006
	10	84/0.39	1.0	7.6	1.91	1.95	0.0056
	16	133/0.39	1.0	8.8	1.21	1.24	0.0046
	25	189/0.41	1.2	11.0	0.780	0.795	0.0044
	35	259/0.41	1.2	12.5	0.554	0.565	0.0038
	50	361/0.41	1.4	14.5	0.386	0.393	0.0037
70	337/0.51	1.4	17.0	0.272	0.277	0.0032	
60227 IEC 05(BV) 300/500V	0.5	1/0.80	0.6	2.4	36.0	36.7	0.015
	0.75	1/0.97	0.6	2.6	24.5	24.8	0.012
	1.0	1/1.13	0.6	2.8	18.1	18.2	0.011
60227 IEC 06(RV) 300/500V	0.5	16/0.2	0.6	2.6	39.0	40.1	0.013
	0.75	24/0.2	0.6	2.8	26.0	26.7	0.011
	1.0	32/0.2	0.6	3.0	19.5	20.0	0.010
60227 IEC 07(BV-90) 300/500V	0.5	1/0.80	0.6	2.4	36.0	36.7	0.015
	0.75	1/0.97	0.6	2.6	24.5	24.8	0.013
	1.0	1/1.13	0.6	2.8	18.1	18.2	0.012
	1.5	1/1.37	0.7	3.3	12.1	12.2	0.011
60227 IEC 08(RV-90) 300/500V	2.5	1/1.76	0.8	3.9	7.41	7.56	0.009
	0.5	16/0.2	0.6	2.6	39.0	40.1	0.013
	0.75	24/0.2	0.6	2.8	26.0	26.7	0.012
	1.0	32/0.2	0.6	3.0	19.5	20.0	0.010
	1.5	30/0.25	0.7	3.5	13.3	13.7	0.009
	2	50/0.25	0.8	4.2	7.98	8.21	0.009

## Wire & Cable for Electric Equipment

Table 2

Type	No. of cores × Nom. Cross Section mm <sup>2</sup>	No. /Dia. of strand mm	Nom. Thickness of insulation mm	Nom. thickness of sheath mm	Average O.D. mm		Max.DC conductor resistance at 20°C Ω/km		Min. Insulating resistance at 70°C MΩ·km
					Min.	Max.	Copper core	Tinned copper core	
60227 IEC 10(BVV) 300/500V	2×1.5	1/1.37	0.7	1.2	7.6	10.0	12.1	12.2	0.011
	2×1.5	7/0.52	0.7	1.2	7.8	10.5	12.1	12.2	0.01
	3×1.5	1/1.37	0.7	1.2	8.0	10.5	12.1	12.2	0.011
	3×1.5	7/0.52	0.7	1.2	8.2	11.0	12.1	12.2	0.01
	4×1.5	1/1.37	0.7	1.2	8.6	11.5	12.1	12.2	0.011
	4×1.5	7/0.52	0.7	1.2	9.0	12.0	12.1	12.2	0.01
	5×1.5	1/1.37	0.7	1.2	9.4	12.0	12.1	12.2	0.011
	5×1.5	7/0.52	0.7	1.2	9.8	12.5	12.1	12.2	0.01
	2×2.5	1/1.76	0.8	1.2	8.6	11.5	7.41	7.56	0.01
	2×2.5	7/0.68	0.8	1.2	9.0	12.0	7.41	7.56	0.009
	3×2.5	1/1.76	0.8	1.2	9.2	12.0	7.41	7.56	0.01
	3×2.5	7/0.68	0.8	1.2	9.4	12.5	7.41	7.56	0.009
	4×2.5	1/1.76	0.8	1.2	10.0	13.0	7.41	7.56	0.01
	4×2.5	7/0.68	0.8	1.2	10.0	13.5	7.41	7.56	0.009
	5×2.5	1/1.76	0.8	1.2	11.0	14.0	7.41	7.56	0.01
	5×2.5	7/0.68	0.8	1.2	11.0	14.5	7.41	7.56	0.009
	2×4	1/2.24	0.8	1.2	9.6	12.5	4.61	4.7	0.0085
	2×4	7/0.85	0.8	1.2	10.0	13.0	4.61	4.7	0.0077
3×4	1/2.24	0.8	1.2	10.0	13.0	4.61	4.7	0.0085	
3×4	7/0.85	0.8	1.2	10.5	13.5	4.61	4.7	0.0077	
60227IEC10 (BVV) 300/500V	4×4	1/2.24	0.8	1.4	11.5	14.5	4.61	4.7	0.0085
	4×4	7/0.85	0.8	1.4	12.0	15.0	4.61	4.7	0.0077
	5×4	1/2.24	0.8	1.4	12.5	16.0	4.61	4.7	0.0085
	5×4	7/0.85	0.8	1.4	13.0	17.0	4.61	4.7	0.0077
	2×6	1/2.73	0.8	1.2	10.5	13.5	3.08	3.11	0.007
	2×6	7/1.04	0.8	1.2	11.0	14.0	3.08	3.11	0.0065
	3×6	1/2.73	0.8	1.4	11.5	14.5	3.08	3.11	0.007
	3×6	7/1.04	0.8	1.4	12.0	15.5	3.08	3.11	0.0065
	4×6	1/2.73	0.8	1.4	12.5	16.0	3.08	3.11	0.007
	4×6	7/1.04	0.8	1.4	13.0	17.0	3.08	3.11	0.0065
	5×6	1/2.73	0.8	1.4	13.5	17.5	3.08	3.11	0.007
	5×6	7/1.04	0.8	1.4	14.5	18.5	3.08	3.11	0.0065
	2×10	7/1.33	1.0	1.4	13.5	17.5	1.83	1.84	0.0065
	3×10	7/1.33	1.0	1.4	14.5	19.0	1.83	1.84	0.0065
	4×10	7/1.33	1.0	1.4	16.0	20.5	1.83	1.84	0.0065
	5×10	7/1.33	1.0	1.4	17.5	22.0	1.83	1.84	0.0065
	2×16	7/1.70	1.0	1.4	15.5	20.0	1.15	1.16	0.0052
	3×16	7/1.70	1.0	1.4	16.5	21.5	1.15	1.16	0.0052
	4×16	7/1.70	1.0	1.4	18.0	23.5	1.15	1.16	0.0052
	5×16	7/1.70	1.0	1.6	20.5	26.0	1.15	1.16	0.0052
	2×25	7/2.12	1.2	1.4	18.5	24.0	0.727	0.734	0.005
	3×25	7/2.12	1.2	1.4	20.5	26.0	0.727	0.734	0.005
	4×25	7/2.12	1.2	1.6	22.5	28.5	0.727	0.734	0.005
	5×25	7/2.12	1.2	1.6	24.5	31.5	0.727	0.734	0.005
2×35	7/2.50	1.2	1.6	21.0	27.5	0.524	0.529	0.0044	
3×35	7/2.50	1.2	1.6	22.0	29.0	0.524	0.529	0.0044	
4×35	7/2.50	1.2	1.6	24.5	32.0	0.524	0.529	0.0044	
5×35	7/2.50	1.2	1.6	27.0	35.0	0.524	0.529	0.0044	
60227 IEC 42(RVB) 300/300V	2×0.5	28/0.15	0.8	—	2.5 5.0	3.0 6.0	39	40.1	0.016
	2×0.75	42/0.15	0.8	—	2.7 5.4	3.2 6.4	26	26.7	0.014
60227 IEC 52(RVV) 300/300V	2×0.5	16/0.2	0.5	0.6	4.8	6.0	39	40.1	0.012
	2×0.5	16/0.2	0.5	0.6	3.0 4.8	3.6 6.0	39	40.1	0.012
	2×0.75	24/0.2	0.5	0.6	5.2	6.4	26	26.7	0.01
	2×0.75	24/0.2	0.5	0.6	3.2 5.2	3.9 6.4	26	26.7	0.01
	3×0.5	16/0.2	0.5	0.6	5.0	6.2	39	40.1	0.012
	3×0.75	24/0.2	0.5	0.6	5.4	6.8	26	16.7	0.01

## Wire & Cable for Electrical Equipment

Continue Table

Type	No. of cores × Nom. Cross Section mm <sup>2</sup>	No. /Dia. of strand mm	Nom. Thickness of insulation mm	Nom. thickness of sheath mm	Average O.D. mm		Max.DC conductor resistance at 20°C Ω/km		Min. Insulating resistance at 70°C MΩ·km
					Min.	Max.	Copper core	Tinned copper core	
60227 IEC 53(RVV) 300/500V	2×0.75	24/0.2	0.6	0.8	6.0	7.6	26.0	26.7	0.011
	2×0.75	24/0.2	0.6	0.8	3.8×6.0	5.2×7.6	26.0	26.7	0.011
	2×1	32/0.2	0.6	0.8	6.4	8.0	19.5	20.0	0.010
	2×1.5	30/0.25	0.7	0.8	7.4	9.0	13.3	13.7	0.010
	2×2.5	50/0.25	0.8	1.0	8.9	11.0	7.98	8.21	0.009
	3×0.75	24/0.2	0.6	0.8	6.4	8.0	26.0	26.7	0.011
	3×1	32/0.2	0.6	0.8	6.8	8.4	19.5	20.0	0.010
	3×1.5	30/0.25	0.7	0.9	8.0	9.8	13.3	13.7	0.010
	3×2.5	50/0.25	0.8	1.0	9.6	12.0	7.98	8.21	0.009
	4×0.75	24/0.2	0.6	0.8	6.8	8.6	26.0	26.7	0.011
	4×1	32/0.2	0.6	0.9	7.6	9.4	19.5	20.0	0.010
	4×1.5	30/0.25	0.7	1.0	9.0	11.0	13.3	13.7	0.010
	4×2.5	50/0.25	0.8	1.1	10.5	13.0	7.98	8.21	0.009
	5×0.75	24/0.2	0.6	0.9	7.4	9.6	26.0	26.7	0.011
	5×1	32/0.2	0.6	0.9	8.3	10.0	19.5	20.0	0.010
5×1.5	30/0.25	0.7	1.1	10.0	12.0	13.3	13.7	0.010	
5×2.5	50/0.25	0.8	1.2	11.5	14.0	7.98	8.21	0.009	

Table 3

Type	Nom. cross section mm <sup>2</sup>	No. /Dia. of strand mm	Nom. Thickness of insulation mm	Average OD(Max.) mm	Max.DC conductor resistance at 20°C Ω/km			Min. Insulating resistance at 70°C MΩ·km
					Copper core	AL core	Tinned copper core	
BV 300/500V	0.75	7/0.37	0.6	2.6	24.5	-	24.8	0.014
	1.0	7/0.43	0.6	2.8	18.1	-	18.2	0.013
BLV 450/750V	2.5	1/1.78	0.8	3.9		12.1		0.010
	4	1/2.25	0.8	4.4		7.41		0.0085
	6	1/2.76	0.8	5.0		4.61		0.0070
	10	7/1.35	1.0	6.7		3.08		0.0065
	16	7/1.70	1.0	7.8		1.91		0.0050
	25	7/2.12	1.2	9.7		1.20		0.0050
	35	7/2.50	1.2	10.9		0.868		0.0040
	50	19/1.83	1.4	12.8		0.641		0.0045
	70	19/2.12	1.4	14.6		0.443		0.0035
	95	19/2.50	1.6	17.1		0.320		0.0035
	120	37/2.0	1.6	18.8		0.253		0.0032
150	37/2.25	1.8	20.9		0.206		0.0032	

Type	Nom. cross section mm <sup>2</sup>	No ./Dia. of strand mm	Nom. Thickness of insulation mm	Average OD(Max.) mm	Max.DC conductor resistance at 20°C Ω/km			Min. Insulating resistance at 70°C MΩ·km
					Copper core	AL core	Tinned copper core	
B L V 450/750V	185	37/2.50	2.0	23.2		0.614		0.0032
	240	61/2.25	2.2	26.6		0.125		0.0032
	300	61/2.50	2.4	29.6		0.100		0.0030
	400	61/2.85	2.6	33.2		0.0778		0.0028
B VR 450/750V	2.5	19/0.41	0.8	4.1	7.41		7.56	0.011
	4	19/0.52	0.8	4.8	4.61		4.70	0.009
	6	19/0.64	0.8	5.3	3.08		3.11	0.0084
	10	49/0.52	1.0	6.8	1.83		1.84	0.0072
	16	49/0.64	1.0	8.1	1.15		1.16	0.0062
	25	98/0.58	1.2	10.2	0.727		0.734	0.0058
	35	133/0.58	1.2	11.7	0.524		0.529	0.0052
	50	133/0.68	1.4	13.9	0.387		0.391	0.0051

Table4

Type	Nom. Cross section Conductor mm <sup>2</sup>	No ./Dia. of strand mm	Nom. Thickness of insulation mm	Nom. thickness of sheath mm	Average O.D . mm		Max.DC conductor resistance at 20°C Ω/km			Min. Insulating resistance at 70°C MΩ·km
					Min.	Max.	Copper core	AL core	Tinned copper core	
BVV 300/500V	0.75	1/0.97	.06	0.8	3.6	4.4	24.5		24.8	0.012
	1.0	1/1.13	0.6	0.8	3.6	4.4	18.1		18.2	0.011
	1.5	1/1.37	0.6	0.8	3.7	4.5	12.1		12.2	0.011
	1.5	7/0.52	0.7	0.8	4.2	5.0	12.1		12.2	0.010
	2.5	1/1.76	0.7	0.8	4.3	5.2	7.41		7.56	0.010
	2.5	7/0.68	0.8	0.8	4.8	5.7	7.41		7.56	0.009
	4	1/2.24	0.8	0.9	4.8	5.9	4.61		4.7	0.0085
	4	7/0.85	0.8	0.9	5.4	6.5	4.61		4.7	0.0077
	6	1/2.73	0.8	0.9	5.5	6.8	3.08		3.11	0.0070
	6	7/1.04	0.8	0.9	5.9	7.1	3.08		3.11	0.0065
BLVV 300/500V	2.5	1/1.78	1.0	0.8	7.3	7.8		12.1		0.010
	4	1/2.25	0.8	0.9	4.8	5.7		7.41		0.0085
	6	1/2.76	0.8	0.9	5.4	6.5		4.61		0.0070
	10	7/1.35	0.8	0.9	5.9	7.1		3.08		0.0065

Table5

Type	No . of cores Nom. Cross Section mm <sup>2</sup>	No ./Dia. of strand mm	Nom. Thickness of insulation mm	Nom. thickness of sheath mm	Average O.D . mm		Max.DC conductor resistance at 20°C Ω/km			Min. Insulating resistance at 70°C MΩ·km
					Min.	Max.	Copper core	AL core	Tinned copper core	
BVVB 300/500V	2×0.75	1/0.97	0.6	0.9	3.8×5.9	4.6×7.1	24.5	-	24.8	0.012
	2×1.0	1/1.13	0.6	0.9	3.9×6.1	4.8×7.4	18.1	-	18.2	0.011
	2×1.5	1/1.37	0.7	0.9	4.4×7.0	5.3×8.5	12.1	-	12.2	0.011
	2×2.5	1/1.76	0.8	1.0	5.1×8.4	6.2×10.1	7.41	-	7.56	0.010
	2×4	1/2.24	0.8	1.0	5.6×9.2	6.7×11.1	4.61	-	4.70	0.0085
	2×4	7/0.85	0.8	1.0	5.7×9.5	6.9×11.5	4.61	-	4.70	0.0080
	2×6	1/2.73	0.8	1.1	6.2×10.4	7.5×12.5	3.08	-	3.11	0.0070
	2×6	7/1.04	0.8	1.1	6.4×10.8	7.8×13.0	3.08	-	3.11	0.0065
	2×10	7/1.33	1.0	1.2	7.9×13.4	9.5×16.2	1.83	-	1.84	0.0065
	3×0.75	1/0.97	0.6	0.9	3.8×7.9	4.6×9.6	24.5	-	24.8	0.012
	3×1.0	1/1.13	0.6	0.9	3.9×8.4	4.8×10.1	18.1	-	18.2	0.011
	3×1.5	1/1.37	0.7	0.9	4.4×9.6	5.3×11.7	12.1	-	12.2	0.011
	3×2.5	1/1.76	0.8	1.0	5.1×11.6	6.2×14.0	7.41	-	7.56	0.010
	3×4	1/2.24	0.8	1.1	5.8×13.1	7.0×15.8	4.61	-	4.70	0.0085

## Wire & Cable for Electrical Equipment

Continue Table

Type	No. of cores Nom. Cross Section mm <sup>2</sup>	No./Dia. of strand mm	Nom. Thickness of insulation mm	Nom. thickness of sheath mm	Average O.D . mm		Max.DC conductor resistance at 20°C Ω/km			Min. Insulating resistance at 70°C MΩ·km
					Min.	Max.	Copper core	AL core	Tinned copper core	
BVVB 300/500V	3×4	7/0.85	0.8	1.1	5.9×13.5	7.1×16.3	4.61	-	4.70	0.0080
	3×6	1/2.73	0.8	1.1	6.2×14.5	7.5×17.5	3.08	-	3.11	0.0070
	3×6	7/1.04	0.8	1.1	6.4×15.1	7.8×18.2	3.08	-	3.11	0.0065
	3×10	7/1.33	1.0	1.2	7.9×19.0	9.5×23.0	1.83	-	1.84	0.0065
BLVVB 450/750V	2 ×2.5	1/1.78	0.8	1.0	5.1×8.4	6.2×10.1	-	12.1	-	0.010
	2×4	1/2.25	0.8	1.0	5.6×9.2	6.7×11.1	-	7.41	-	0.0085
	2×6	1/2.76	0.8	1.1	6.2×10.4	7.5×12.5	-	4.61	-	0.070
	2×10	7/1.35	1.0	1.2	7.9×13.4	9.5×16.2	-	3.08	-	0.0065
	3 ×2.5	1/1.78	0.8	1.0	5.1×11.6	6.2×14.0	-	12.1	-	0.010
	3×4	1/2.25	0.8	1.1	5.8×13.1	7.0×15.8	-	7.41	-	0.0085
	3×6	1/2.76	0.8	1.1	6.2×14.5	7.5×17.5	-	4.61	-	0.0070
	3×10	7/1.35	1.0	1.2	7.9×19.0	9.5×23.0	-	3.08	-	0.0065

**NMD90,Copper,PVC/Nylon Insulated,PVC Jacked 90°C 300V**

**Table 6**

Conductor					Ground Wire		Approx. Jacket Thickness		Approx. Dimensions		Approx. Weight		Capacity Amps
Size AWG	No. of Cores	No. of strands	Insulation Thickness		Size AWG	No. of strands	mm	in.	mm	in.	Kg/k m	lbs/1000ft	
			mm	in.									
2 Two conductor													
14	2	1	0.86	0.034	14	1	0.76	0.030	9.86×4.88	0.388×0.192	101	68	15
12	2	1	0.86	0.034	14	1	0.76	0.030	10.71×5.30	0.422×0.209	129	86	20
10	2	1	0.86	0.034	12	1	0.76	0.030	12.21×5.84	0.481×0.230	182	122	30
8	2	7	1.02	0.040	10	7	1.14	0.045	16.15×7.92	0.636×0.312	310	208	45
6	2	7	1.30	0.051	8	7	1.14	0.045	20.12×9.40	0.792×0.370	468	315	65
3 Three conductor													
14	3	1	0.86	0.034	14	1	0.76	0.030	8.77	0.345	128	86	15
12	3	1	0.86	0.034	14	1	0.76	0.030	9.69	0.381	169	114	20
10	3	1	0.86	0.034	12	1	0.76	0.030	10.85	0.427	242	163	30
8	3	7	1.02	0.040	10	7	1.14	0.045	14.47	0.570	408	275	45
6	3	7	1.30	0.051	8	7	1.14	0.045	17.65	0.695	627	421	65
3	3	7	1.30	0.051	6	7	2.03	0.080	23.48	0.925	1189	799	105

**Table 7**

Type	No. of cores ×Nom. Cross section mm <sup>2</sup>	No./Dia. of strand mm	Nom. thickness of insulation mm	Average O.D. mm	Max.DC conductor resistance at 20°C Ω/km		Min. Insulating resistance at 70°C MΩ·km
					Copper core	Tinned copper core	
RVS	2 0.5	28 0.15	0.8	6.0	39.0	40.1	0.016
300/300V	2 0.75	42 0.15	0.8	6.2	26.0	26.7	0.014

**Table 8**

Type	No. of cores ×Nom. Cross section mm <sup>2</sup>	No./Dia. of strand mm	Nom. thickness of insulation mm	Dia.of single wire of shield mm	Averag e O.D. mm	Max.DC conductor resistance at 20°C Ω/km		Min. Insulating resistance at 70°C MΩ·km
						Copper core	Tinned copper core	
AVP 300/300V	1×0.08	1/0.032	0.4	0.10	1.9	22.5.2	229.6	0.019
	1×0.12	1/0.4	0.4	0.10	2.0	144.1	146.9	0.015
	1×0.2	1/0.5	0.4	0.10	2.1	92.3	94.0	0.015
	1×0.3	1/0.6	0.4	0.10	2.2	64.1	65.3	0.014
	1×0.4	1/0.7	0.4	0.10	2.3	47.1	48.0	0.012

## Wire & Cable for Electrical Equipment

Continue Table

Type	No. of cores ×Nom. Cross section mm <sup>2</sup>	No./Dia. of strand mm	Nom. thickness of insulation mm	Dia. of single wire of shield mm	Average O.D. mm	Max.DC conductor resistance at 20°C Ω/km		Min. Insulating resistance at 70°C MΩ·km
						Copper core	Tinned copper core	
RVP 300/300V	1×0.08	7/0.12	0.4	0.10	1.9	247	254	0.018
	1×0.12	7/0.15	0.4	0.10	2.0	158	163	0.016
	1×0.2	12/0.15	0.4	0.10	2.2	92.3	95.0	0.013
	1×0.3	16/0.15	0.5	0.10	2.6	69.2	71.2	0.014
	1×0.4	23/0.15	0.5	0.15	3.0	48.2	49.6	0.013
	1×0.5	16/0.2	0.5	0.15	3.1	39.0	40.1	0.012
	1×0.75	24/0.2	0.5	0.15	3.4	26.0	26.7	0.010
	1×1.0	32/0.2	0.6	0.15	3.8	19.5	20.0	0.010
	1×1.5	30/0.25	0.6	0.15	4.1	13.3	13.7	0.009
	1×2.5	50/0.25	0.7	0.15	4.9	7.98	8.21	0.008
	2×0.08	7/0.12	0.4	0.10	3.3/1.9×3.3	247	254	0.018
	2×0.12	7/0.15	0.4	0.10	3.5/2.0×3.5	158	163	0.016
	2×0.2	12/0.15	0.4	0.10	3.9/2.2×3.9	92.3	95.0	0.013
	2×0.3	16/0.15	0.5	0.10	4.8/2.8×4.8	69.2	71.2	0.014
	2×0.4	23/0.15	0.5	0.15	5.2/3.0×5.2	48.2	49.6	0.013
	2×0.5	16/0.2	0.5	0.15	5.4/3.1×5.4	39.0	40.1	0.012
	2×0.75	24/0.2	0.5	0.15	6.0/3.4×6.0	26.0	26.7	0.010
	2×1.0	32/0.2	0.6	0.15	6.8/3.8×6.8	19.5	20.0	0.010
2×1.5	30/0.25	0.6	0.15	7.4/4.1×7.4	13.3	13.7	0.009	

**Table 9**

Type	No. of cores Nom. Cross Section mm <sup>2</sup>	No./Dia. of strand mm	Dia. of single wire of shield mm	Nom. Thickness of insulation mm	Nom. thickness of sheath mm	Average O.D. mm		Max.DC conductor resistance at 20°C Ω/km		Min. Insulating resistance at 70°C MΩ·km
						Min.	Max.	Copper core	Tinned copper core	
RVVP 300/300V	1×0.08	0.13	0.10	0.4	0.4	2.4	2.9	247	254	0.018
	1×0.12	0.16	0.10	0.4	0.4	2.4	3.0	158	163	0.016
	1×0.2	0.16	0.10	0.4	0.4	2.6	3.2	92.3	95.0	0.013
	1×0.3	0.16	0.10	0.5	0.4	2.9	3.5	69.2	71.2	0.014
	1×0.4	0.16	0.10	0.5	0.4	3.0	3.7	48.2	49.6	0.013
	1×0.5	0.21	0.10	0.5	0.4	3.1	3.8	39.0	40.1	0.012
	1×0.75	0.21	0.10	0.5	0.4	3.4	4.1	26.0	26.7	0.010
	1×1.0	0.21	0.10	0.6	0.6	4.1	4.9	19.5	20.0	0.010
	1×1.5	0.26	0.10	0.6	0.6	4.3	5.2	13.3	13.7	0.009
	1×2.5	0.26	0.15	0.6	0.6	4.9	6.0	7.98	8.21	0.008
	2×0.08	0.13	0.10	0.4	0.4	3.2/2.4×3.5	4.2/2.9×4.2	247	254	0.018
	2×0.12	0.16	0.10	0.4	0.6	3.7/2.8×4.0	4.9/3.4×4.9	158	163	0.016
	2×0.2	0.16	0.10	0.4	0.6	4.1/3.0×4.4	5.3/3.6×5.3	92.3	95.0	0.013
	2×0.3	0.16	0.15	0.5	0.6	4.8/3.5×5.1	6.2/4.2×6.2	69.2	71.2	0.014
	2×0.4	0.16	0.15	0.5	0.6	5.1/3.6×5.4	6.6/4.4×6.6	48.2	49.6	0.013
	2×0.5	0.21	0.15	0.5	0.6	5.3/3.7×5.6	6.8/4.5×6.8	39.0	40.1	0.012
	2×0.75	0.21	0.15	0.5	0.6	5.8/4.0×6.1	7.4/4.8×7.4	26.0	26.7	0.010
	2×1.0	0.21	0.15	0.6	0.6	6.4/4.3×6.7	8.2/5.2×8.3	19.5	20.0	0.010
	2×1.5	0.26	0.15	0.6	0.8	7.3/4.9×7.6	9.2/6.0×9.3	13.3	13.7	0.009
	3×0.12	0.16	0.10	0.4	0.6	3.9	5.1	158	163	0.016
	3×0.2	0.16	0.15	0.4	0.6	4.5	5.8	92.3	95.0	0.013
	3×0.3	0.16	0.15	0.5	0.6	5.1	6.5	69.2	71.2	0.014
	3×0.4	0.16	0.15	0.5	0.6	5.4	6.9	48.2	49.6	0.013
	3×0.5	0.21	0.15	0.5	0.6	5.6	7.1	39.0	40.1	0.012
	3×0.75	0.21	0.15	0.5	0.6	6.1	7.8	26.0	26.7	0.010
	3×1.0	0.21	0.15	0.6	0.8	7.2	9.1	19.5	20.0	0.010
	3×1.5	0.26	0.20	0.6	0.8	8.0	10.0	13.3	13.7	0.009
	4×0.12	0.16	0.15	0.4	0.6	4.5	5.8	158	163	0.016
	4×0.2	0.16	0.15	0.4	0.6	4.9	6.2	92.3	95.0	0.013
	4×0.3	0.16	0.15	0.5	0.6	5.5	7	69.2	71.2	0.014
	4×0.4	0.16	0.15	0.5	0.6	5.9	7.5	48.2	49.6	0.013
	5×0.12	0.16	0.15	0.4	0.6	4.8	6.2	158	163	0.016
	5×0.2	0.16	0.15	0.4	0.6	5.3	6.7	92.3	95.0	0.013
	5×0.3	0.16	0.15	0.5	0.6	6.0	7.6	69.2	71.2	0.014
	5×0.4	0.16	0.15	0.4	0.6	6.4	8.1	48.2	49.6	0.013
	6×0.12	0.16	0.15	0.4	0.6	5.2	6.6	158	163	0.016
6×0.2	0.16	0.15	0.4	0.6	5.7	7.2	92.3	95.0	0.013	

## Wire & Cable for Electrical Equipment

Continue Table

Type	No. of cores Nom. Cross Section mm <sup>2</sup>	No. /Dia. of strand mm	Dia. of single wire of shield mm	Nom. Thickness of insulation mm	Nom. thickness of sheath mm	Average O.D. mm		Max. DC conductor resistance at 20°C Ω/km		Min. Insulating resistance at 70°C MΩ·km
						Min.	Max.	Copper core	Tinned copper core	
RVVP 300/300V	6×0.3	0.16	0.15	0.5	0.7	6.5	8.2	69.2	71.2	0.014
	6×0.4	0.16	0.15	0.5	0.8	7.3	9.2	48.2	49.6	0.013
	7×0.12	0.16	0.15	0.4	0.6	5.2	6.6	158	163	0.016
	7×0.2	0.16	0.15	0.4	0.6	5.7	7.2	92.3	95.0	0.013
	7×0.3	0.16	0.15	0.5	0.6	6.5	8.2	69.2	71.2	0.014
	7×0.4	0.16	0.15	0.5	0.8	7.3	9.2	48.2	49.6	0.013
	10×0.12	0.16	0.15	0.4	0.6	6.4	8.1	158	163	0.016
	10×0.2	0.16	0.15	0.4	0.8	7.4	9.3	92.3	95.0	0.013
	10×0.3	0.16	0.20	0.5	0.8	8.7	10.9	69.2	71.2	0.014
	10×0.4	0.16	0.20	0.5	0.8	9.3	11.6	48.2	49.6	0.013
	12×0.12	0.16	0.15	0.4	0.6	6.6	8.3	158	163	0.016
	12×0.2	0.16	0.15	0.4	0.8	7.6	9.6	92.3	95.0	0.013
	12×0.3	0.16	0.20	0.5	0.8	9.0	11.2	69.2	71.2	0.014
	12×0.4	0.16	0.20	0.5	0.8	9.6	11.9	48.2	49.6	0.013
	14×0.12	0.16	0.15	0.4	0.8	7.2	9.1	158	163	0.016
	14×0.2	0.16	0.20	0.4	0.8	8.2	10.3	92.3	95.0	0.013
	14×0.3	0.16	0.20	0.5	0.8	9.4	11.7	69.2	71.2	0.014
	14×0.4	0.16	0.20	0.5	0.8	10.0	9.5	48.2	49.6	0.013
	16×0.12	0.16	0.15	0.4	0.8	7.6	10.8	158	163	0.016
	16×0.2	0.16	0.20	0.4	0.8	8.6	12.3	92.3	95.0	0.013
	16×0.3	0.16	0.20	0.5	0.8	9.9	13.1	69.2	71.2	0.014
	16×0.4	0.16	0.20	0.5	0.8	10.5	11.3	48.2	49.6	0.013
	19×0.12	0.16	0.20	0.4	0.8	8.2	10.3	158	163	0.016
	19×0.2	0.16	0.20	0.4	0.8	9.0	11.3	92.3	95.0	0.013
19×0.3	0.16	0.20	0.5	0.8	10.4	12.9	69.2	71.2	0.014	
19×0.4	0.16	0.20	0.5	1.0	11.5	14.2	48.2	49.6	0.013	
24×0.12	0.16	0.20	0.4	0.8	9.4	11.7	158	163	0.016	
24×0.2	0.16	0.20	0.4	0.8	10.4	12.9	92.3	95.0	0.013	
24×0.3	0.16	0.20	0.5	1.0	12.4	14.4	69.2	71.2	0.014	
24×0.4	0.16	0.20	0.5	1.0	13.2	16.4	48.2	49.6	0.013	



# PVC Insulated and Nylon Sheathed Wire

## Applications

The product is used as fixed wiring for electrical equipments、 switches buildings with A.C rated voltage up to and including 450/750V.

## Features

- 1 Increasing laying capacity in tube, decreasing transportation costs.
- 2 Increasing the mechanical strength of wire's surface,wear resistance property.
- 3 Increasing the heat resistance property of wire,especially in and overheated state of instantaneous hot deformation.
- 4 Good chemical stability, oil resistance,hydrocarbons resistance etc.

## Use conditions

- Rated voltage Uo/U is 450/750V.
- Permissively continuous working temperature for BVN wire is 70 , for BVN-90 is 90 .
- Installation temperature of wire should be not less than 0 .
- Allowed bending radius should be not less than 4 times of overall diameter of wire.

## Type and description

TYPE	Description	Main Application
BVN	Copper core heat-resistant 70°C PVC insulated and Nylon sheathed wire	For fixed installation
BVN-90	Copper core heat-resistant 90°C PVC insulated and Nylon sheathed wire	

## Specification

Type	AC Rated Voltage	Core No .	Nom.Cross section mm <sup>2</sup>
BVN	450/750	1	0.5~400
BVN-90	450/750	1	0.5~400

## Main technical requirements

- Conductor:Conductor structure and D.C. Resistance should conform with the stipulation of table 1.
- Insulation:Nom. and min. thickness of insulation should conform with the stipulations of table 1.
- Insulation resistance of heat-resistance 70°C and 90°C wire should conform with table 1.
- Sheath:Nylon sheath should be tightly extruded around insulated core,and min. Thickness of Nylon sheath should conform with Table 1.
- Finished wire can withstand A.C. 50Hz,2500V, 5min immersion test in water.

## PVC Insulated and Nylon Sheathed Wire

**Table 1**

Nom. Cross section mm <sup>2</sup>	Conductor structure No./Dia. mm	Insulation thickness mm		Min. Sheath thickness mm	Average OD (Max.) mm	Maximum DC Resistance at 20 °C		Min. Insulating resistance MΩ·km	
		Nom.	Min. Thickness			Copper core	Tinned copper core	BVN	BVN-90
0.5	1/0.80	0.40	0.33	0.10	2.0	36.0	24.8	0.015	
0.75	1/0.97	0.40	0.33	0.10	2.2	24.5	24.8	0.012	0.013
0.75	7/0.37	0.40	0.33	0.10	2.4	24.5	18.2	0.014	0.013
1	1/1.13	0.40	0.33	0.10	2.4	18.1	18.2	0.011	0.012
1	7/0.43	0.40	0.33	0.10	2.6	18.1	12.2	0.013	0.012
1.5	1/1.38	0.40	0.33	0.10	2.7	12.1	12.2	0.011	0.011
1.5	7/0.52	0.40	0.33	0.10	2.9	12.1	7.56	0.010	0.011
2.5	1/1.78	0.40	0.33	0.10	3.1	7.41	7.56	0.010	0.009
2.5	7/0.68	0.40	0.33	0.10	3.4	7.41	4.70	0.009	0.009
4	1/2.25	0.40	0.33	0.10	3.6	4.61	4.70	0.0085	
4	7/0.85	0.40	0.33	0.10	4.0	4.61	3.11	0.0077	
6	1/2.76	0.55	0.46	0.10	4.5	3.08	3.11	0.0070	
6	7/1.04	0.55	0.46	0.10	4.9	3.08	1.84	0.0065	
10	7/1.35	0.80	0.69	0.13	6.5	1.83	1.16	0.0065	
16	7/1.70	0.80	0.69	0.13	7.7	1.15	24.8	0.0050	

### THHN/THWN/THWN-2(UL83)

**Table 2**

Size AWG / MCM	No. of Strands	PVC Insulation Thickness mm	Nylon Jacket Thickness mm	Approx. Outside Diameter mm	Ampacity			Approx. Weight kg/km	Standard Put-up ft
					THWN 75 °C	TMHN 90 °C	MTW 90 °C		
14	solid	0.38	0.1	2.6	15	15	-	22	S500/R2500
12	solid	0.38	0.1	3.02	20	20	-	34	S500/R2500
10	solid	0.51	0.1	3.81	30	30	-	54	S500/R2500
14	solid	0.38	0.1	2.6	15	15	-	22	S500/R2500
12	solid	0.38	0.1	3.02	20	20	-	34	S500/R2500
10	solid	0.51	0.1	3.81	30	30	-	54	S500/R2500
14	19	0.38	0.1	2.78	15	15	16	23	S500/R2500
12	19	0.38	0.1	3.27	20	20	20	34	S500/R2500
10	19	0.51	0.1	4.11	30	30	30	55	S500/R2500
8	19	0.76	0.13	5.43	50	65	40	90	S500/R1000
6	19	0.76	0.13	6.36	65	75	55	136	S500/R1000
4	19	1.02	0.15	8.11	85	95	70	218	S500/R1000
3	19	1.02	0.15	8.82	100	110	80	270	S500/R1000
2	19	1.02	0.15	9.63	115	130	95	334	S500/R1000
1	19	1.27	0.18	11.09	130	150	110	428	S500/R1000
1/0	19	1.27	0.18	12.08	150	170	125	531	S500/R1000
2/0	19	1.27	0.18	13.34	175	195	145	669	S500/R1000
3/0	19	1.27	0.18	14.64	200	225	165	832	S500/R1000
4/0	19	1.27	0.18	16.04	230	280	185	1037	S500/R1000
250	37	1.52	0.2	17.79	255	290	215	1234	S500/R1000
300	37	1.52	0.2	19.09	286	320	240	1467	S500/R1000
350	37	1.52	0.2	20.39	310	350	280	1701	S500/R1000
400	37	1.52	0.2	21.49	335	380	280	1931	S500/R1000
500	37	1.52	0.2	23.59	380	430	320	2394	S500/R1000
600	61	1.78	0.23	26.17	420	475	355	2880	S500/R1000
750	61	1.78	0.23	28.77	475	535	400	3570	S500/R1000
1000	61	1.78	0.23	32.57	545	615	455	4717	-

# Instrumentation cable

## BS5308 Mutipair Instrumentation Cables

### BS5308 Part 1 PE Insulated 300/500V



#### Construction

- **conductors** Plain annealed copper conductors complying with Bs 6360
- **Insulation** Polyethylene type 03 to BS 6234
- **Pairing** Two insulated conductors uniformly twisted together with a lay length not exceeding 100mm

#### Pair identification

- **Collectively Screened Cables** – Colour coded in accordance with Appendix 1 or by numbered tape
- **Individual Pair Screened Cables** One blue core and one black core in each pair. Pairs are identified by a numbered pair screen isolation tape or colour coded as per appendix-1.
- **Pair Screens** An aluminum / polyester tape applied with a metallic side down in continuous electrical conduct with a 0.5mm tinned copper drain wire. An isolation tape is applied over the screen tape.
- **Cable Assembly** Pairs are assembled in concentric layers using the reciprocating lay technique. 0.5mm<sup>2</sup>
- **Binder** A non-hygroscopic binder tape is applied over the final pair of pairs.
- **Collective Screen** An aluminum / polyester tape is applied with the metallic side down in continuous electrical conduct with a 0.5mm tinned copper drain wire over the binder tape.

#### Outer Protection

- Type 1 Extruded PVC sheath of type Tm1
- Type 2 Extruded polyethylene bedding of type 2C or type 03 black Galvanized steel wire Armour Extruded PVC sheath type TM1 .

## Electrical characteristics

	Unit	0.5mm <sup>2</sup>	0.5mm <sup>2</sup>	0.75mm <sup>2</sup>	1.00mm <sup>2</sup>	1.5mm <sup>2</sup>
		1/0.8mm	16/0.2mm	24/0.2mm	1/1.13mm	7/0.53mm
Capacitance: Cables with only collective screen (excl. one pair and two pairs [quad])	pF/m	75	75	75	75	85
Capacitance: One pair and two pair cables with collective screened and all cables with individually screened pairs.	pF/m	115	115	115	115	115
L/R ratio (Max.)		25	25	25	25	25
Max. Conductor Resistance (D.C.) at 20°C	Ohms	36.8	39.7	26.5	18.4	12.3
Insulation resistance (Min.) Core to Core / Screen / Armour for 1km at 70°C	M.ohm	5	5	5	5	5
Insulation resistance (Min.) Screen to Screen for 1km at 70 °C.	M.ohm	1	1	1	1	1

### Rated voltage 300/500V, test voltage 1000V for 1 min

Nominal Conductor Area mm <sup>2</sup>	Nom. Construction No ./mm	Insulation Thickness mm	Max. Core Diameter mm
0.5	(1/0.8)	0.5	1.60
0.5	(16/0.2)	0.5	2.0
0.75	(24/0.2)	0.5	2.3
1.0	(1/1.13)	0.6	2.45
1.5	(7/0.53)	0.6	3.00

### BS5308 Part 1 collectively screened, unarmored type-1 cables

Multipair Polyethylene insulated without Individual pair screens but collectively screened.

Table 1

Conductor size (No ./mm)	Number of Pairs	Thickness of Sheath mm	Nominal Overall Diameter mm
0.50 (1/0.8)	1	10	6.3
	2(Quad)	15	7.1
	5	20	11.6
	10	30	15
	15	50	17.1
	20	0.8	19.4
	30	0.8	23
	50	1.1	28.9

**BS5308 Part 1 collectively screened, unarmored type-1 cables**

Multipair Polyethylene insulated without Individual pair screens but collectively screened.

Continue Table

Conductor size (No ./mm)	Number of Pairs	Thickness of Sheath mm	Nominal Overall Diameter mm
0.50 (16/0.2)	1	0.8	7
	2(Quad)	0.8	7.9
	5	1.1	13.1
	10	1.2	17.2
	15	1.3	19.8
	20	1.3	22.3
	30	1.5	26.9
	50	1.7	33.9
1.0 (1/1.13)	1	0.8	7.4
	2(Quad)	0.8	8.4
	5	1.2	14.2
	10	1.2	18.4
	15	1.3	21.3
	20	1.5	24.4
	30	1.5	29
	50	2	37.3
1.5 (7/0.53)	1	0.8	8.3
	2(Quad)	0.9	9.7
	5	1.2	16.4
	10	1.3	21.6
	15	1.5	25.2
	20	1.5	28.5
	30	1.7	34.3
	50	2	43.6

**BS5308 Part 1 collectively screened, armored type-2 cables**

Multipair Polyethylene insulated without Individual pair screens but collectively screened.

Table 2

Conductor size (No ./mm) mm <sup>2</sup>	Number of Pairs	Thickness of Bedding	Dia. of Armour wire	Thickness of Sheath	Nominal Overall Diameter
		mm	mm	mm	mm
0.50 (1/0.8)	1	0.8	0.9	1.3	10.7
	2(Quad)	0.8	0.9	1.3	11.5
	5	1.1	0.9	1.4	16.2
	10	1.2	1.25	1.6	20.7
	15	1.2	1.25	1.6	22.8
	20	1.3	1.6	1.7	26
	30	1.3	1.6	1.8	29.8
	50	1.5	1.6	2	36.1
0.50 (16/0.2)	1	0.8	0.9	1.3	11.4
	2(Quad)	0.8	0.9	1.3	12.3
	5	1.1	0.9	1.5	17.9
	10	1.2	1.25	1.6	22.9
	15	1.3	1.6	1.7	26.4
	20	1.3	1.6	1.8	29.1
	30	1.5	1.6	1.9	33.9
	50	1.7	2	2.1	42.1

**BS5308 Part 1 collectively screened, armored type-1 cables**

Multipair Polyethylene insulated without Individual pair screens but collectively screened.

Continue Table

Conductor size (No ./mm)	Number of Pairs	Thickness of Bedding	Dia. of Armour wire	Thickness of Sheath	Nominal Overall Diameter
mm <sup>2</sup>		mm	mm	mm	mm
1.0 (1/1.13)	1	0.8	0.9	1.3	11.8
	2(Quad)	0.8	0.9	1.4	13
	5	1.2	1.25	1.5	19.7
	10	1.2	1.25	1.7	24.3
	15	1.6	1.6	1.8	28.1
	20	1.5	1.6	1.8	30.2
	30	1.5	1.6	2	36.2
	50	2	2	2.2	45.7
1.5 (7/0.53)	1	0.8	0.9	1.4	12.9
	2(Quad)	0.9	0.9	1.4	14.3
	5	1.2	1.25	1.6	22.1
	10	1.3	1.6	1.8	28.4
	15	1.5	1.6	1.9	32.2
	20	1.5	1.6	2	35.7
	30	1.7	2	2.1	42.5
	50	2	2.5	2.4	53.4

**BS5308 Part 1 Individually & collectively screened, unarmored type-1 cables**

Multipair Polyethylene insulated with Individual pair screens and collectively screened.

Table 3

Conductor size (No ./mm)	Number of Pairs	Thickness of Sheath	Nominal Overall Diameter
mm <sup>2</sup>		mm	mm
0.50 (1/0.8)	2	0.9	10.3
	5	1.2	13.5
	10	1.2	18.3
	15	1.3	21.1
	20	1.3	23.5
	30	1.5	27.9
	50	2	36.1
0.50 (16/0.2)	2	1.1	12
	5	1.2	15.2
	10	1.3	21.1
	15	1.5	24.5
	20	1.5	27.3
	30	1.7	32.3
	50	2.2	41.7
1 (1/1.13)	2	1.1	12.8
	5	1.2	15.2
	10	1.3	22.6
	15	1.5	26.2
	20	1.7	29.8
	30	2	35.4
	50	2.2	44.9

**BS5308 Part 1 Individually & collectively screened, unarmored type-1 cables**

Multipair Polyethylene insulated with Individual pair screens and collectively screened.

Continue Table

Conductor size (No./mm)	Number of Pairs	Thickness of Sheath	Nominal Overall Diameter
mm <sup>2</sup>		mm	mm
1.5 (7/0.53)	2	1.2	14.7
	5	1.3	18.8
	10	1.5	26.5
	15	1.7	30.8
	20	1.7	34.4
	30	2	41
	50	2.2	52.2

**BS5308 Part 1 Individually & collectively screened, armored type-2 cables**

Multipair Polyethylene insulated with Individual pair screens and collectively screened.

Table 4

Conductor size	Number of Pairs	Thickness of Bedding	Dia. of Armour wire	Thickness of Sheath	Nominal Overall Diameter
mm <sup>2</sup>		mm	mm	mm	mm
0.50 (1/0.8)	2	0.8	0.9	1.3	11.5
	5	1.1	0.9	1.4	16.2
	10	1.2	1.25	1.6	20.7
	15	1.2	1.25	1.6	22.8
	20	1.3	1.6	1.7	26
	30	1.3	1.6	1.8	29.8
	50	1.5	1.6	2	36.1
0.50 (16/0.2)	2	1.1	0.9	1.5	16.8
	5	1.2	1.25	1.6	20.9
	10	1.3	1.6	1.8	27.9
	15	1.5	1.6	1.8	31.3
	20	1.5	1.6	1.9	34.3
	30	1.7	2	2.1	40.5
	50	2.2	2.5	2.4	51.5
1 (1/1.13)	2	1.1	0.9	1.5	17.6
	5	1.2	1.25	1.6	21.9
	10	1.3	1.6	1.8	29.4
	15	1.5	1.6	1.9	33.2
	20	1.7	2	2	37.8
	30	2	2	2.2	43.8
	50	2.2	2.5	2.5	54.9
1.5 (7/0.53)	2	1.2	1.25	1.6	20.4
	5	1.3	1.6	1.7	25.4
	10	1.5	1.6	1.9	33.5
	15	1.7	2	2	38.8
	20	1.7	2	2.1	42.6
	30	2	2.5	2.4	50.8
	50	2.2	2.5	2.7	62.6

# Instrumentation cable

## BS5308 Muticore & Mutipair Instrumentation Cables

### BS5308 Part 2 PVC Insulated 300/500V



#### Construction

- **conductors** Plain annealed copper conductors complying with Bs 6360
- **Insulation** PVC type T11 to BS 7655
- **Pairing** Two insulated conductors uniformly twisted together with a lay length not exceeding 100mm

#### Pair identification

- **Collectively Screened Cables** - Colour coded in accordance with Appendix 1 or by 1 numbered tape
- **Individual Pair Screened Cables** One blue core and one black core in each pair. Pairs are identified by a numbered pair screen isolation tape or colour coded as per appendix-1.
- **Pair Screens** An aluminum / polyester tape applied with a metallic side down in continuous electrical conduct with a 0.5mm tinned copper drain wire. An isolation tape is applied over the screen tape.
- **Cable Assembly** Pairs are assembled in concentric layers using the reciprocating lay technique.
- **Binder** A non-hygroscopic binder tape is applied over the final pair of pairs.
- **Collective Screen** An aluminum / polyester tape is applied with the metallic side down in continuous electrical conduct with a 0.5mm tinned copper drain wire over the binder tape.

#### Outer Protection

- Type 1 Extruded PVC sheath of type TM1 or type 6
- Type 2 Extruded PVC bedding of type TM1 Galvanized steel wire armour Extruded PVC sheath of type TM1 .

### Electrical characteristics

	Unit	0.5mm <sup>2</sup>	0.5mm <sup>2</sup>	0.75mm <sup>2</sup>	1.00mm <sup>2</sup>	1.5mm <sup>2</sup>
		1/0.8mm	16/0.2mm	24/0.2mm	1/1.13mm	7/0.53mm
Capacitance: Cables with only collective screen (excl.one pair and two pairs [quad])	pF/m	250	250	250	250	250
Capacitance: One pair and two pair cables with collective screened and all cables with individually screened pairs.	pF/m	450	450	450	450	450
L/R ratio (Max.)		25	25	25	25	25
Max. Conductor Resistance (D.C.) at 20°C	Ohms	39 39.7	39 39.7	26 26.5	18 18.3	12.1 12.3
Insulation resistance (Min.)Core to Core / Screen / Armour for 1km at 70°C	M.ohm	5	5	5	5	5
Insulation resistance (Min.) Screen to Screen for 1km at 70°C	M.ohm	1	1	1	1	1

### Rated voltage 300/500V, test voltage 1000V for 1 min

Nominal Conductor Area mm <sup>2</sup>	Nom. Construction No ./mm	Insulation Thickness mm	Max. Core Diameter mm
0.5	(1/0.8)	0.5	1.60
0.5	(16/0.2)	0.5	2.0
0.75	(24/0.2)	0.5	2.3
1.0	(1/1.13)	0.6	2.45
1.5	(7/0.53)	0.6	3.00

### BS5308 Part 2 collectively screened, unarmored type-1 cables

Multipair PVC insulated without Individual pair screens but collectively screened.

Table 1

Conductor size (No ./mm) mm <sup>2</sup>	Number of Pairs	Thickness of Sheath	Nominal Overall Diameter
		mm	mm
0.50 (1/0.8)	1	0.8	7
	2(Quad)	0.8	7.9
	5	1.1	13.1
	10	1.2	17.2
	15	1.3	19.8
	20	1.3	22.3
	30	1.5	26.9
	50	1.7	33.9

**BS5308 Part 2 collectively screened, unarmored type-1 cables**

Multipair PVC insulated without Individual pair screens but collectively screened.

Continue Table

Conductor size (No ./mm) mm <sup>2</sup>	Number of Pairs	Thickness of Sheath	Nominal Overall Diameter
		mm	mm
0.75 (24/0.2)	1	0.8	7.3
	2 (Quad)	0.8	8.3
	5	1.2	14.3
	10	1.3	18.7
	15	1.3	21.4
	20	1.5	24.5
	30	1.7	29.5
1.5 (7/0.53)	50	2	37.4
	1	0.8	8.3
	2 (Quad)	0.9	9.7
	5	1.2	16.4
	10	1.3	21.6
	15	1.5	25.2
	20	1.5	28.5
	30	1.7	34.3
50	2	43.6	

**BS5308 Part 2 collectively screened, armored type-2 cables**

Multipair PVC insulated without Individual pair screens but collectively screened.

Table 2

Conductor size (No ./mm) mm <sup>2</sup>	Number of Pairs	Thickness of Bedding	Dia. of Armour wire	Thickness of Sheath	Nominal Overall Diameter
		mm	mm	mm	mm
0.50 (16/0.2)	1	0.8	0.9	1.3	11.4
	2 (Quad)	0.8	0.9	1.3	12.3
	5	1.1	0.9	1.5	17.9
	10	1.2	1.25	1.6	22.9
	15	1.3	1.6	1.7	26.4
	20	1.3	1.6	1.8	29.1
	30	1.5	1.6	1.9	33.9
	50	1.7	2	2.1	42.1
0.75 (24/0.2)	1	0.8	0.9	1.3	11.7
	2 (Quad)	0.8	0.9	1.4	12.9
	5	1.2	1.25	1.5	19.8
	10	1.3	1.6	1.7	25.3
	15	1.3	1.6	1.8	28.2
	20	1.5	1.6	1.8	31.3
	30	1.7	2	2	37.5
	50	2	2	2.2	45.8
0.75 (24/0.2)	1	0.8	0.9	1.4	12.9
	2 (Quad)	0.9	0.9	1.4	14.3
	5	1.2	1.25	1.6	22.1
	10	1.3	1.6	1.8	28.4
	15	1.5	1.6	1.9	32.2
	20	1.5	1.6	2	35.7
	30	1.7	2	2.1	42.5
	50	2	2.5	2.4	53.4



**BS5308 Part 2 Individually & collectively screened, unarmored type-1 cables**

Multipair PVC insulated with Individual pair screens and collectively screened.

Table 3

Conductor size (No ./mm) mm <sup>2</sup>	Number of Pairs	Thickness of Sheath	Nominal Overall Diameter
		mm	mm
0.5 (16/0.2)	2	1.1	12
	5	1.2	15.2
	10	1.3	21.1
	15	1.5	24.5
	20	1.7	27.3
	30	2.2	32.3
0.75 (24/0.2)	50	1.1	41.7
	2	1.2	12.8
	5	1.3	16.3
	10	1.5	22.7
	15	1.7	26.4
	20	2	28.8
1.5 (7/0.53)	30	2.2	35.5
	50	1.2	45
	2	1.3	14.7
	5	1.5	18.8
	10	1.7	26.5
	15	1.7	30.8
	20	1.7	34.4
	30	2	41
	50	2.2	52.2

**BS5308 Part 2 Individually & collectively screened, armored type-2 cables**

Multipair PVC insulated with Individual pair screens and collectively screened.

Table 4

Conductor size	Number of Pairs	Thickness of Bedding	Dia. of Armour wire	Thickness of Sheath	Nominal Overall Diameter
mm <sup>2</sup>		mm	mm	mm	mm
0.5 (16/0.2)	2	1.1	0.9	1.5	16.8
	5	1.2	1.25	1.6	20.9
	10	1.3	1.6	1.8	27.9
	15	1.5	1.6	1.8	31.3
	20	1.5	1.6	1.9	34.3
	30	1.7	2	2.1	40.5
0.75 (24/0.2)	50	2.2	2.5	2.4	51.5
	2	1.1	0.9	1.5	17.6
	5	1.2	1.25	1.6	22
	10	1.3	1.6	1.8	29.5
	15	1.5	1.6	1.9	33.4
	20	1.7	2	2	37.8
	30	2	2	2.2	43.9
	50	2.2	2.5	2.5	55

**BS5308 Part 2 Individually & collectively screened, armored type-2 cables**

Multipair PVC insulated with Individual pair screens and collectively screened.

Continue Table

Conductor size	Number of Pairs	Thickness of Bedding	Dia. of Armour wire	Thickness of Sheath	Nominal Overall Diameter
mm <sup>2</sup>		mm	mm	mm	mm
1.5 (7/0.53)	2	1.2	1.25	1.6	20.4
	5	1.3	1.6	1.7	25.4
	10	1.5	1.6	1.9	33.5
	15	1.7	2	2	38.8
	20	1.7	2	2.1	42.6
	30	2	2.5	2.4	50.8
	50	2.2	2.5	2.7	62.6

**BS5308 Part 2 collectively screened, unarmored type-1 cables**

Multicore PVC insulated without Individual pair screens but collectively screened.

Table 5

Conductor size (No./mm) mm <sup>2</sup>	Number of Pairs	Thickness of Sheath	Nominal Overall Diameter
		mm	mm
0.5 (16/0.2)	2	0.8	7
	3	0.8	7.3
	4	0.8	7.9
	6	0.9	9.3
	10	1.1	11.9
	20	1.2	14.9
	40	1.3	20.1
	80	1.5	26.3
0.75 (24/0.2)	2	0.8	7.3
	3	0.8	7.7
	4	0.8	8.3
	6	0.9	9.9
	10	1.1	12.7
	20	1.2	16
	40	1.3	21.7
	80	1.5	28.5
1.5 (7/0.53)	2	0.8	8.3
	3	0.9	8.9
	4	0.9	9.7
	6	1.1	11.7
	10	1.2	14.7
	20	1.3	18.7
	40	1.5	24.6
	80	1.7	33.6

**BS5308 Part 2 collectively screened, armored type-2 cables**

Multicore PVC insulated without individual pair screens but collectively screened.

Table 6

Conductor size mm <sup>2</sup>	Number of Pairs	Thickness of Bedding mm	Dia. of Armour wire mm	Thickness of Sheath mm	Nominal Overall Diameter mm
0.50 (16/0.2)	2	0.8	0.9	1.3	11.4
	3	0.8	0.9	1.3	11.7
	4	0.8	0.9	1.3	12.3
	6	0.9	0.9	1.4	13.9
	10	1.1	0.9	1.5	16.7
	20	1.2	1.3	1.6	19.6
	40	1.3	1.6	1.7	26.7
	80	1.5	1.6	1.9	33.3
0.75 (24/0.2)	2	0.8	0.9	1.3	11.7
	3	0.8	0.9	1.3	12.1
	4	0.8	0.9	1.4	12.9
	6	0.9	0.9	1.4	14.5
	10	1.1	0.9	1.5	17.5
	20	1.2	1.25	1.6	21.7
	40	1.3	1.6	1.8	28.5
	80	1.5	1.6	2	35.7
1.5 (7/0.53)	2	0.8	0.9	1.4	12.9
	3	0.9	0.9	1.4	13.5
	4	0.9	0.9	1.4	14.3
	6	1.1	0.9	1.4	16.3
	10	1.2	1.25	1.6	20.4
	20	1.3	1.6	1.7	25.3
	40	1.5	1.6	1.9	31.6
	80	1.7	2	2.1	41.8

## Instrumentation cable

### Color Code Sheet

### Appendix 1

No. of Pairs	'A' Wire	'B' Wire	No. of Pairs	'A' Wire	'B' Wire
1	Black	Blue	26	White	Yellow
2	Black	Green	27	Red	Yellow
3	Black	Green	28	Orange	Yellow
4	Black	Brown	29	Black	Grey
5	Blue	Brown	30	Blue	Grey
6	Green	Brown	31	Green	Grey
7	Black	White	32	Brown	Grey
8	Blue	White	33	White	Grey
9	Green	White	34	Red	Grey
10	Brown	White	35	Orange	Grey
11	Black	Red	36	Yellow	Grey
12	Blue	Red	37	Black	Purple
13	Green	Red	38	Blue	Purple
14	Brown	Red	39	Green	Purple
15	White	Red	40	Brown	Purple
16	Black	Orange	41	White	Purple
17	Blue	Orange	42	Red	Purple
18	Green	Orange	43	Orange	Purple
19	Brown	Orange	44	Yellow	Purple
20	White	Orange	45	Grey	Purple
21	Red	Orange	46	Black	Turquoise
22	Black	Yellow	47	Blue	Turquoise
23	Blue	Yellow	48	Green	Turquoise
24	Green	Yellow	49	Brown	Turquoise
25	Brown	Yellow	50	White	Turquoise

# Instrumentation cable

## BS6231 Instrumentation Cables



### Application:

These cables are suitable for internal wiring of appliances and switch, control, metering and instrument panels of switchgear, etc

### Manufacturing standards

BS6231, UL Style 1015, 1028, 1283, 1283, 1284; CSA TEW 105 ;

UL VW-1 Vertical Flame

### Electrical Property

Size mm	Max. DC Resistance at 20 °C	Current rating amp	Approximate volt drop constant MV/A/M
0.5	39	11	46
0.75	26	14	31
1	19.5	17	22
1.5	13.3	21	15
2.5	7.98	30	9.1
4	4.95	41	5.7
6	3.3	53	3.8
10	1.91	75	2.2
16	1.21	100	1.4
25	0.78	136	0.89
35	0.554	167	0.64
50	0.386	204	0.45
70	0.272	259	0.32
95	0.206	321	0.24
120	0.161	374	0.19
150	0.129	429	0.15
185	0.106	496	0.13
240	0.0801	595	0.092
300	0.0641	680	0.073
400	0.06	868	@70 0.145

The voltage drop figures are for one cable only. For other circuit arrangements they should be adjusted as follows:

50Hz	2	Single-phase 50Hz AC or 2-wire DC circuit's	x2
	50Hz	Three-phase 50Hz AC circuit's	x1.732

## Instrumentation cable

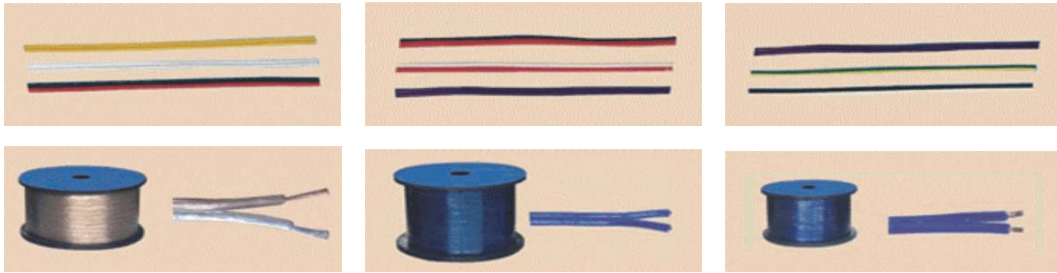
### BS6231 Instrumentation Cables



#### Main parameter

Part No.	Size mm <sup>2</sup>	Stranding mm	Size AWG	UI UL Style number	Nominal insulation mm	Nominal overall diameter mm	Weight kg/km
GH-IC-BS6231-0.50SQ	0.5	16/0.20	22	1015	0.8	2.6	12
GH-IC-BS6231-0.750SQ	0.75	24/0.20	20	1015	0.8	2.8	15
GH-IC-BS6231-1.000SQ	1	32/0.20	18	1015	0.8	3	18
GH-IC-BS6231-1.50SQ	1.5	30/0.25	16	1015	0.9	3.3	23
GH-IC-BS6231-2.50SQ	2.5	50/0.25	14	1015	1.0	3.7	34
GH-IC-BS6231-4.00SQ	4	56/0.30	12	1015	1.0	4.4	50
GH-IC-BS6231-6.00SQ	6	84/0.30	10	1015	1.3	5.1	71
GH-IC-BS6231-10.0SQ	10	80/0.40	8	1028	1.5	6.9	123
GH-IC-BS6231-16.0SQ	16	126/0.40	6	1283	1.5	8.6	209
GH-IC-BS6231-25.0SQ	25	196/0.40	4	1283	1.6	10.5	296
GH-IC-BS6231-35.0SQ	35	276/0.40	2	1283	2.0	11.9	400
GH-IC-BS6231-50.0SQ	50	396/0.40	1	1284	2.0	14.4	582
GH-IC-BS6231-70.0SQ	70	360/0.50	2/0	1284	2.0	16.7	796
GH-IC-BS6231-95.0SQ	95	475/0.50	3/0	1284	2.3	19	1025
GH-IC-BS6231-120SQ	120	608/0.50	4/0	1284	2.4	20.5	1282
GH-IC-BS6231-150SQ	150	756/0.50	MCM300	104	2.4	23.14	1627
GH-IC-BS6231-185SQ	185	925/0.50	MCM350	104	2.4	25.4	1959
GH-IC-BS6231-240SQ	240	1221/0.50	MCM500	104	2.8	28.66	2254
GH-IC-BS6231-300SQ	300	1525/0.50	MCM600	1015	-	31.5	3157
GH-IC-BS6231-400SQ	400	2013/0.50	MCM800	1284	-	36	4051

## PVC Insulated Speaker Wire



### Applicaton

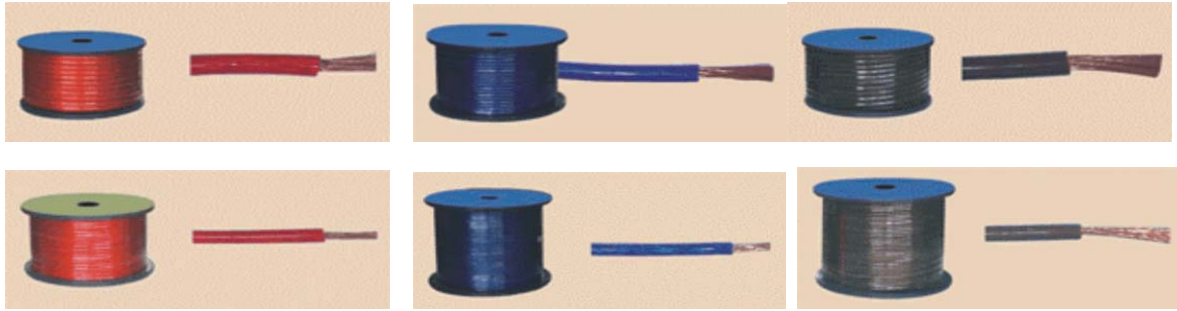
The products are designed for the electrical connection between loudspeakers and audio amplifiers and other electrical appliances

### Specification

Size AWG	No. /mm	Approx. O.D. mm
28	2 7/0.12	1.6 3.2
26	2 7/0.16	1.7 3.4
24	2 11/0.12	1.8 3.6
22	2 16/0.16	2.0 4.0
20	2 26/0.16	2.2 4.4
18	2 17/0.25	2.5 5.0
16	2 26/0.25	3.0 6.0
14	2 41/0.25	3.5 7.0
12	2 65/0.25	4.5 9.0
10	2 105/0.25	5.5 11

Size mm <sup>2</sup>	No. /mm	Approx. O.D. mm
2 0.5	2 25/0.16	2.2 4.4
2 0.75	2 37/0.16	2.4 4.8
2 1.0	2 31/0.20	2.6 5.2
2 1.5	2 46/0.20	3.0 6.0
2 2.0	2 40/0.25	3.3 6.6
2 2.5	2 49/0.25	3.6 7.2
2 4.0	2 80/0.25	5.0 10.0
2 6.0	2 85/0.30	5.5 11.0

## Speaker Power Supply Cable



### Applicaton

The cables are designed to supply power for voice equipments and other professional electrical appliances.

### Specification

Size AWG	No. /mm	Approx. O. D. mm
1	7×7×70×0.12	15.5
2	7×7×50×0.12	14
3	7×7×40×0.12	12.5
4	7×7×34×0.12	10
5	7×7×30×0.12	10
9	7×95×0.12	6.5
10	7×24×0.20	6
11	7×50×0.12	5.5
12	7×15×0.20	5



## Coaxial cable



### 3C-2V

**Purpose: Television, monitoring systems and other.**

Name	3C-2V
Inner Conductor	0,65mm CCS
Dielectric	2,9mm FPE
Shielding foil	AL/PET
( )Outer conductor (Braiding)	32x0,12mm AL
Jacket	4,2mm PVC
Weight	15kg/600m
Inner conductor DC resistance	320 Ω /km
Outer conductor DC resistance	99 Ω /km
Capacitance	55pF/m
Impedance	75 Ω /km
Velocity ratio	0,85

Attenuation	dB/100m
5MHz	6,5
10MHz	10
50MHz	14
100MHz	16
200MHz	19,5
400MHz	24,7
860MHz	31
1000MHz	32,5
* CCS - Copper clad steel	* AL - Aluminium
* FPE - Foamed Polyethylene	* PVC - Polyvinylchlorid
* AL/PET - AL/Polyester foil	



### RG59

**Purpose: CATV Networks, Television, SAT TV and other.**

Name	RG59
Inner Conductor	0,81mm CCS
Dielectric	3,65mm FPE
Shielding foil	AL/PET
( )Outer conductor (Braiding)	32x0,12mm AL
Jacket	6,10mm PVC
Weight	22kg/600m
Inner conductor DC resistance	190 Ω /km
Outer conductor DC resistance	93 Ω /km
Capacitance	52pF/m
Impedance	75 Ω /km
Velocity ratio	0,85

Attenuation	dB/100m
5MHz	4,23
50MHz	6,71
100MHz	9,50
200MHz	11,91
450MHz	17,47
860MHz	24,71
1000MHz	26,72
* CCS - Copper clad steel	* AL - Aluminium
* FPE - Foamed Polyethylene	* PVC - Polyvinylchlorid
* AL/PET - AL/Polyester foil	

## Coaxial cable



### RG6

Purpose: CATV Networks, Television, SAT TV and other

Name	RG6
Inner Conductor	1,02mm CCS
Dielectric	4,57mm FPE
Shielding foil	AL/PET
Outer conductor (Braiding)	32x0,12mm AL
Jacket	6,80mm PVC
Weight	24,5kg/600m
Inner conductor DC resistance	125 Ω /km
Outer conductor DC resistance	78 Ω /km
Capacitance	52pF/m
Impedance	75 Ω /km
Velocity ratio	0,85

Attenuation	dB/100m
5MHz	2,2
50MHz	4,74
100MHz	6,81
200MHz	9,63
450MHz	13,95
860MHz	19,91
1000MHz	21,62
* CCS - Copper clad steel	* AL - Aluminium
* FPE - Foamed Polyethylene	* PVC - Polyvinylchlorid
* AL/PET - AL/Polyester foil	



### RG11

Purpose: CATV Networks, Television, SAT TV and other

Name	RG11
Inner Conductor	1,63mm CCS
Dielectric	7,11mm FPE
Shielding foil	AL/PET
Outer conductor (Braiding)	32x0,12mm AL
Jacket	10,03mm PVC
Weight	75kg/km
Inner conductor DC resistance	39,7 Ω /km
Outer conductor DC resistance	24,3 Ω /km
Capacitance	52pF/m
Impedance	75 Ω /km
Velocity ratio	0,85

Attenuation	dB/100m
5MHz	1,19
50MHz	3,1
100MHz	4,5
200MHz	5,9
450MHz	8,76
860MHz	12,8
1000MHz	13,79
* CCS - Copper clad steel	* AL - Aluminium
* FPE - Foamed Polyethylene	* PVC - Polyvinylchlorid
* AL/PET - AL/Polyester foil	

# Alarm Cable

## Applicaton

**Purpose:** Wiring of fire alarms, fire protective circuits, burglar alarms, smoke alarms, and voice communications.

**Conductor Material:** Solid bare copper

**Insulation Material:** PVC

**Laying-up:** Units

**Drain Wire:** Solid bare copper

**Shield:** Overall Al/Polyester foil 100% coverage

**Nylon Rip Cord:** 150D

**Sheath Material:** PVC/PE/LSF

**Sheath Color:** Upon requests

**Shape:** Round

**Voltage Rating:** 300/500V

**Temperature Rating:** 75°C

## Main technical parameter

Part No.	No. of Conds.	AWG	Stranding	Nominal Insulation Thickness	Nominal Jacket Thickness	Nominal O. D.
GH-AC-24/4	4	24	Solid	0.21mm	0.7mm	3.9mm
GH-AC-24/6	6	24	Solid	0.21mm	0.7mm	4.2mm
GH-AC-24/8	8	24	Solid	0.21mm	0.84mm	5.0mm
GH-AC-24/12	12	24	Solid	0.21mm	1.00mm	6.0mm
GH-AC-22/4	4	22	Solid	0.30mm	0.88mm	5.1mm
GH-AC-18/2	2	18	Solid	0.38mm	0.76mm	5.3mm
GH-AC-18/4	4	18	Solid	0.38mm	0.76mm	6.09mm
GH-AC-18/6	6	18	Solid	0.38mm	0.76mm	6.9mm
GH-AC-16/2	2	16	Solid	0.38mm	0.76mm	5.9mm
GH-AC-16/4	4	16	Solid	0.38mm	0.76mm	6.7mm
GH-AC-14/2	2	14	Solid	0.38mm	0.76mm	6.65mm
GH-AC-14/4	4	14	Solid	0.38mm	0.76mm	8.68mm

## Security Cable

### Applicaton

**Purpose:** Power limited circuit, remote control, signaling, security systems, communications, intercom/P.A. Systems, sound/audio, and nurse call.

**Conductor Material:** Bare copper strands

**Insulation Material:** PE/PVC

**Laying-up:** Units

**Drain Wire:** Solid bare copper

**Shield:** Overall Al/Polyester foil shield 100% coverage

**Nylon Rip Cord:** 150D

**Sheath Material:** PVC/LSF/PE

**Sheath Color:** Upon requests

**Shape:** Round

**Voltage Rating:** 300/500V

**Temperature Rating:** 75°C

### Main technical parameter

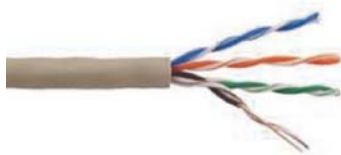
Part No.	No.of Conds.	AWG	Cross section of conds	Stranding	Nominal Insulation Thickness	Nominal Jacket Thickness	Nominal O.D.
GH-SRC-22/2	2	22	0.34mm <sup>2</sup>	7/0.25mm	0.21mm	0.7mm	3.5mm
GH-SRC-22/4	4	22	0.34mm <sup>2</sup>	7/0.25mm	0.21mm	0.7mm	4.2mm
GH-SRC-22/6	6	22	0.34mm <sup>2</sup>	7/0.25mm	0.21mm	0.7mm	4.8mm
GH-SRC-22/8	8	22	0.34mm <sup>2</sup>	7/0.25mm	0.21mm	0.7mm	5.5mm
GH-SRC-22/10	10	22	0.34mm <sup>2</sup>	7/0.25mm	0.30mm	0.76mm	6.2mm
GH-SRC-22/12	12	22	0.34mm <sup>2</sup>	7/0.25mm	0.30mm	0.76mm	7.0mm
GH-SRC-18/2	2	18	0.82mm <sup>2</sup>	16/0.25mm	0.30mm	0.76mm	4.7mm
GH-SRC-18/4	4	18	0.82mm <sup>2</sup>	16/0.25mm	0.30mm	0.76mm	5.6mm
GH-SRC-18/6	6	18	0.82mm <sup>2</sup>	16/0.25mm	0.30mm	0.76mm	6.3mm
GH-SRC-18/8	8	18	0.82mm <sup>2</sup>	16/0.25mm	0.38mm	0.76mm	7.1mm
GH-SRC-16/2	2	16	1.31mm <sup>2</sup>	42/0.2mm	0.38mm	0.8mm	6.0mm
GH-SRC-16/3	3	16	1.31mm <sup>2</sup>	42/0.2mm	0.38mm	0.8mm	6.5mm
GH-SRC-16/4	4	16	1.31mm <sup>2</sup>	42/0.2mm	0.38mm	0.8mm	6.9mm
GH-SRC-14/2	2	14	2.08mm <sup>2</sup>	19/0.36mm	0.38mm	0.8mm	6.3mm
GH-SRC-14/3	3	14	2.08mm <sup>2</sup>	19/0.36mm	0.38mm	0.8mm	6.7mm
GH-SRC-14/4	4	14	2.08mm <sup>2</sup>	19/0.36mm	0.38mm	0.8mm	7.2mm
GH-SRC-12/2	2	12	3.31mm <sup>2</sup>	19/0.45mm	0.38mm	0.8mm	7.1mm

## Network Cable

### CAT5E/UTP(Solid)

Type	CAT5E/UTP
Packing	305m
Wire size	4x2x0,50mm (24AWG)
Insulation O. D.	PE0.95mm
Jacket O. D.	PVC5.1mm
Weight	23kg/610m
Wire DC resistance	17 Ω /100m
Capacitance	44pF/m
Impedance	100 ± 10 Ω
Velocity of propagation	0,72
Delay skew	<40ns/100m

Frequency	Attenuation	NEXT	PS-NEXT	ELFEXT	PS-ELFEXT	Return Loss
1 MHz	1,9 dB/100m	66 dB	63 dB	64 dB	61 dB	20dB
10 MHz	6,3 dB/100m	51 dB	48 dB	47 dB	44 dB	23dB
16 MHz	8,0 dB/100m	48 dB	45 dB	44 dB	41 dB	25dB
20 MHz	9,9 dB/100m	46 dB	43 dB	42 dB	39 dB	25dB
40 MHz	12,8 dB/100m	44 dB	41 dB	34 dB	31 dB	23dB
60 MHz	16,0 dB/100m	42 dB	39 dB	28 dB	25 dB	22dB
100 Mhz	21,0 dB/100m	36 dB	33 dB	25 dB	22 dB	21dB



### CAT5E/UTP(Stranded)

Type	CAT5E/UTP
Packing	305m
Wire size	4x2x(7x0,2mm) (24AWG)
Insulation O. D.	PE0.95mm
Jacket O. D.	PVC5.1mm
Weight	23kg/610m
Wire DC resistance	17 Ω /100m
Capacitance	44pF/m
Impedance	100 ± 10 Ω
Velocity of propagation	0,72
Delay skew	<40ns/100m

## Network Cable

### CAT5E/FTP(Stranded)

Type	CAT5E/UTP
Packing	305m
Wire size	4x2x (7x0, 2mm) (24AWG)
Insulation O. D.	PE0. 95mm
Jacket O. D.	PVC5. 1mm
Weight	23kg/610m
Wire DC resistance	17 $\Omega$ /100m
Capacitance	44pF/m
Impedance	100 $\pm$ 10 $\Omega$
Velocity of propagation	0, 72
Delay skew	<40ns/100m

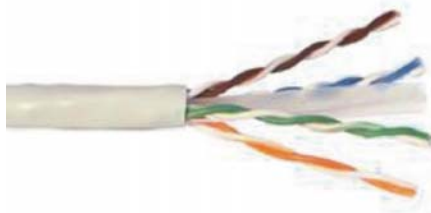


## Network Cable

### CAT6/UTP

Type		CAT6/UTP
Packing		305m
Wire size		4x2x0,57mm (23AWG)
Insulation O. D.		PE1.05mm
Jacket O. D.		PVC6.1mm
Wire DC resistance		14 Ω /100m
Capacitance		44pF/m
Impedance		100±10 Ω
Velocity of propagation		0,69
Delay skew		<40ns/100m
Weight	N. W	14 kg
	G. W	15 kg
Operating temperature		-20°C- +60°C

Frequency	Attenuation	NEXT	PS-NEXT	ELFEXT	PS-ELFEXT	Return Loss
1MHz	1,9 dB/100m	72 dB	69 dB	68 dB	65 dB	20 dB
10MHz	5,9 dB/100m	65 dB	62 dB	53 dB	50 dB	23 dB
16MHz	7,5 dB/100m	61 dB	58 dB	48 dB	45 dB	26 dB
25MHz	9,3 dB/100m	55 dB	52 dB	45 dB	42 dB	25 dB
40MHz	12,1 dB/100m	53 dB	50 dB	42 dB	39 dB	23 dB
60MHz	14,8 dB/100m	52 dB	49 dB	35 dB	32 dB	22 dB
100MHz	19,3 dB/100m	50 dB	47 dB	31 dB	28 dB	22 dB
150MHz	23,6 dB/100m	43 dB	40 dB	28 dB	25 dB	19 dB
200MHz	27,5 dB/100m	40 dB	37 dB	24 dB	21 dB	18 dB
250MHz	30,6 dB/100m	38 dB	35 dB	21 dB	18 dB	18 dB



## Network Cable

### CAT6/FTP

Type		CAT6/FTP
Packing		305m
Wire size		4x2x0,57mm (23AWG)
Insulation O.D.		PE1.17mm
Shield		AL/PET foil
Jacket O.D.		PVC6.1mm
Wire DC resistance		14 Ω /100m
Capacitance		44pF/m
Impedance		100 ± 10 Ω
Velocity of propagation		0,69
Delay skew		<40ns/100m
Weight	N. W	17 kg
	G. W	18 kg
Operating temperature		-20°C - +60 °C

Frequency	Attenuation	NEXT	PS-NEXT	ELFEXT	PS-ELFEXT	Return Loss
1MHz	1,9 dB/100m	72 dB	69 dB	68 dB	65 dB	20 dB
10MHz	5,9 dB/100m	65 dB	62 dB	53 dB	50 dB	23 dB
16MHz	7,5 dB/100m	61 dB	58 dB	48 dB	45 dB	26 dB
25MHz	9,3 dB/100m	55 dB	52 dB	45 dB	42 dB	25 dB
40MHz	12,1 dB/100m	53 dB	50 dB	42 dB	39 dB	23 dB
60MHz	14,8 dB/100m	52 dB	49 dB	35 dB	32 dB	22 dB
100MHz	19,3 dB/100m	50 dB	47 dB	31 dB	28 dB	22 dB
150MHz	23,6 dB/100m	43 dB	40 dB	28 dB	25 dB	19 dB
200MHz	27,5 dB/100m	40 dB	37 dB	24 dB	21 dB	





# XLPE Insulated Power Cable

Extruded XLPE insulation with rated voltage from 0.6/1KV to 8.7/15KV

## Manufacturing standards

ASTM ICEA BS DIN IEC GB AS/NZS etc.

## Operating features

### Operating temperature

Max. Permissible continuous operating temperature of Conductors shall not exceed 90°C

### Conductor Short circuit temperature

Not exceeding 250°C . (Max. Duration 5 seconds)

### Bending radius:

Bending radius of single core cable: 20D

Bending radius of multi-core cable: 15D

D=Actual overall diameter of cable (mm)

### Installation temperature:

The lowest temperature of installation is 0 °C.

Laying conditions and basic parameters for calculating current ratings:

Method of laying                      Ambient temperature

In air    40°C

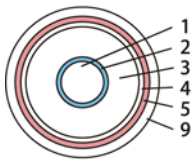
Direct burial                                      25°C

Soil thermal resistivity 1.0°C • m/W

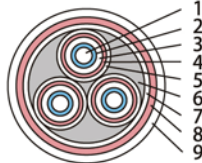
Layout of single core cables: In parallel

(Spacing side by side: 1D D=overall diameter)

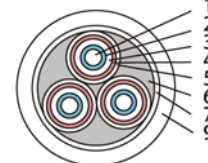
## Sketches of product construction



Single-core non-armoured cable



Three-core steel tape armoured cable



Three-core non-armoured cable

- 1、 Conductor                                      4、 Insulation screen                      7、 Separator(Inner Cover)
- 2、 Conductor Screen                      5、 Metallic Screen                      8、 Armour
- 3、 XLPE Insulation                      6、 Filler                                      9、 Outer Sheath

Note: No conductor screen and insulation screen is applied for cables with rated voltage 3.6/6KV and below.

## Scope of cables

Table

Type	No . of cores	Rated voltage(KV)				
		0.6/1	1.8/3	3.6/6	6/6 6/10	8.7/10 8.7/15
Nominal area of conductor (mm <sup>2</sup> )						
YJV YJLV						
YJV22 YJLV22	1 2 3 3+1 3+2 4+1 5	1.5-630	10-400	25-400	25-400	25-400
YJV32 YJLV32						

## XLPE Insulated Power Cable

**Type, description and main applications**

**Table 2**

Type	Description	Main application
YJV YJLV	Cu or AL conductor XLPE insulated PVC Sheath Power cable	For laying indoor and outdoor, unable to bear certain external mechanical force but the tractive force during laying. Laying Single core cable in magnetic duct is not permissible
YJV22 YJLV22	Cu or AL conductor XLPE insulated steel tape armored PVC sheathed power cable	For laying underground, bear external mechanical force, but unable to bear large pulling force
YJV32 YJLV32	Cu or AL conductor XLPE insulated thin steel wire armored PVC sheathed power cable	For laying under ground, vertical well, or underwater, able to bear certain pulling force.

## Single-core XLPE Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section on mm <sup>2</sup>	Nom. insulation thickness mm	Nom. sheath thickness mm	Approx OD of cable mm	Approx weight of cable kg/km		Max. DC Resistance of Conductor at 20°C/km		Current Rating(A)			
					YJV	YJLV	Cu	Al	Direct in ground		Run in air	
									Cu	Al	Cu	Al
0.6/1kv	1.5	0.7	1.4	6	46	37	12.1	-	45	-	32	-
	2.5	0.7	1.4	7	58	43	7.41	12.1	59	46	42	33
	4	0.7	1.4	7	75	50	4.61	7.41	77	61	56	44
	6	0.7	1.4	8	97	60	3.08	4.61	97	79	70	57
	10	0.7	1.4	9	144	82	1.83	3.08	130	100	97	75
	16	0.7	1.4	10	205	106	1.15	1.91	170	135	125	99
	25	0.9	1.4	12	303	148	0.727	1.20	220	170	165	125
	35	0.9	1.4	13	402	185	0.524	0.868	265	205	200	155
	50	1.0	1.4	14	553	243	0.387	0.641	320	245	245	190
	70	1.1	1.4	16	750	316	0.268	0.443	395	305	305	240
	95	1.1	1.5	18	997	409	0.193	0.320	475	370	375	290
	120	1.2	1.5	20	1242	499	0.153	0.253	545	420	435	340
	150	1.4	1.6	22	1548	620	0.124	0.206	610	475	500	390
	185	1.6	1.7	24	1894	750	0.0991	0.164	695	540	580	450
	240	1.7	1.8	27	2432	948	0.0754	0.125	810	630	685	535
300	1.8	1.8	30	3019	1162	0.0601	0.100	910	710	795	615	
400	2.0	2.0	33	3937	1523	0.0470	0.0778	1050	820	930	730	
1.8/3kv	10	2.0	1.4	16	296	234	1.83	3.08	130	100	97	75
	16	2.0	1.4	17	370	271	1.15	1.91	170	135	125	99
	25	2.0	1.5	18	485	330	0.727	1.20	220	170	165	125
	35	2.0	1.5	19	600	382	0.524	0.868	265	205	200	155
	50	2.0	1.6	21	753	454	0.387	0.641	320	245	245	190
	70	2.0	1.6	23	972	548	0.268	0.443	395	305	305	240
	95	2.0	1.7	24	1237	668	0.193	0.320	475	370	375	290
	120	2.0	1.7	26	1507	768	0.153	0.253	545	420	435	340
	150	2.0	1.8	27	1806	890	0.124	0.206	610	475	500	390
	185	2.0	1.8	29	2169	1030	0.0991	0.164	695	540	580	450
	240	2.0	1.9	32	2735	1249	0.0754	0.125	810	630	685	535
	300	2.0	2.0	34	3337	1480	0.0601	0.100	910	710	795	615
400	2.0	2.1	37	4228	1814	0.047	0.0778	1050	820	930	730	

## Single-core XLPE Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section $\text{mm}^2$	Nom. Insulation thickness $\text{mm}$	Nom. Sheath thickness $\text{mm}$	Approx OD of cable $\text{mm}$	Approx weight of cable $\text{kg/km}$		Max. DC Resistance of Conductor at 20°C/ $\text{km}$		Current Rating (A)			
					YJV	YJLV	Cu	Al	Direct in ground		Run in air	
									Cu	Al	Cu	Al
3.6/6kv	25	2.5	1.5	20	515	360	0.727	1.20	160	120	165	130
	35	2.5	1.5	21	629	412	0.524	0.868	190	145	205	155
	50	2.5	1.6	22	802	492	0.387	0.641	225	175	245	190
	70	2.5	1.7	24	1020	587	0.268	0.443	275	215	305	235
	95	2.5	1.7	26	1293	705	0.193	0.320	330	255	370	290
	120	2.5	1.8	27	1551	808	0.153	0.253	375	290	430	335
	150	2.5	1.8	29	1866	937	0.124	0.206	425	330	490	380
	185	2.5	1.8	31	2219	1074	0.0991	0.164	480	370	560	435
	240	2.6	1.9	33	2789	1303	0.0754	0.125	555	435	665	515
	300	2.8	2.0	36	3421	1564	0.0601	0.100	630	490	765	595
6/6kv 6/10kv	25	3.4	1.6	22	578	423	0.727	1.200	160	120	165	130
	35	3.4	1.6	23	702	485	0.524	0.868	190	145	205	155
	50	3.4	1.7	24	871	561	0.387	0.641	225	175	245	190
	70	3.4	1.7	26	1105	672	0.268	0.443	275	215	305	235
	95	3.4	1.8	28	1372	784	0.193	0.320	330	255	370	290
	120	3.4	1.8	29	1645	902	0.153	0.253	375	290	430	335
	150	3.4	1.8	31	1955	1026	0.124	0.206	425	330	490	380
	185	3.4	1.9	33	2325	1180	0.0991	0.164	480	370	560	435
	240	3.4	2.0	35	2900	1414	0.0754	0.125	555	435	665	515
	300	3.4	2.0	37	3493	1636	0.0601	0.100	630	490	765	595
8.7/10kv 8.7/15kv	25	4.5	1.6	24	671	516	0.727	1.200	160	120	165	130
	35	4.5	1.7	25	801	584	0.524	0.868	190	145	205	155
	50	4.5	1.7	26	975	666	0.387	0.641	225	175	245	190
	70	4.5	1.8	28	1204	771	0.268	0.443	275	215	305	235
	95	4.5	1.8	30	1489	901	0.193	0.32	330	255	370	290
	120	4.5	1.9	32	1769	1026	0.153	0.253	375	290	430	335
	150	4.5	1.9	33	2085	1157	0.124	0.206	425	330	490	380
	185	4.5	2.0	35	2461	1316	0.0991	0.164	480	370	560	435
	240	4.5	2.0	37	3022	1536	0.0754	0.125	555	435	665	515
	300	4.5	2.1	40	3649	1792	0.0601	0.100	630	490	765	595
400	4.5	2.2	43	4632	2218	0.0470	0.0778	725	565	890	695	

## Two-core XLPE Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section $\text{mm}^2$	Nom. insulation thickness $\text{mm}$	Steel tape thickness $\text{mm}$	Nom. sheath thickness $\text{mm}$		Approx OD of cable $\text{mm}$		Approx weight of cable $\text{kg/km}$				Max. DC Resistance of Conductor at 20°C/ $\text{km}$		Current Rating (A)			
				YJV	YJLV	YJV22	YJLV22	YJV	YJLV	YJV22	YJLV22	Cu	Al	Direct in ground		Run in air	
														Cu	Al	Cu	Al
0.6/1kv	1.5	0.7	-	1.8	-	11	-	133	144	-	-	12.1	20.16	30	-	25	-
	2.5	0.7	-	1.8	-	13	-	142	122	-	-	7.41	12.1	40	32	30	25
	4	0.7	0.2	1.8	1.8	14	17	183	133	342	292	4.61	7.41	55	45	42	32
	6	0.7	0.2	1.8	1.8	15	18	233	160	406	333	3.08	4.61	65	50	53	42
	10	0.7	0.2	1.8	1.8	17	20	339	214	538	414	1.83	3.08	90	70	70	55
	16	0.7	0.2	1.8	1.8	19	22	477	279	702	504	1.15	1.91	110	90	92	75
	25	0.9	0.2	1.8	1.8	23	26	702	392	969	659	0.727	1.20	140	120	128	100
	35	0.9	0.2	1.8	1.8	25	28	919	485	1412	778	0.524	0.868	180	140	160	130
	50	1.0	0.2	1.8	1.8	28	31	1255	635	1586	965	0.387	0.641	210	160	190	150
	70	1.1	0.5	1.8	2.0	32	36	1700	832	2452	1584	0.268	0.443	250	200	250	190
	95	1.1	0.5	2.0	2.1	35	40	2254	1076	3074	1896	0.193	0.320	285	230	300	240
	120	1.2	0.5	2.1	2.2	39	44	2810	1322	3710	2221	0.153	0.253	330	260	350	20
	150	1.4	0.5	2.2	2.4	43	48	3507	1646	4562	2701	0.124	0.206	375	300	400	330
	185	1.6	0.5	2.3	2.6	48	53	4302	2007	5488	3193	0.0991	0.164	420	340	460	370
	240	1.7	0.5	2.5	2.7	54	59	5512	2535	7055	3877	0.0754	0.125	500	400	550	440
	300	1.8	0.5	2.7	2.8	59	64	6842	3121	8298	4576	0.0601	0.100	580	510	600	560

## Three-core XLPE Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section $\text{mm}^2$	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm		Approx OD of cable mm		Approx weight of cable kg/km				Max. DC Resistance of Conductor at 20°C $\Omega/\text{km}$		Current Rating (A)			
				YJV	YJLV	YJV	YJLV	YJV	YJLV	YJV	YJLV	Cu	Al	Direct in ground		Run in air	
														YJV22	YJLV22	Cu	Al
0.6/1kv	1.5	0.7	-	1.8	-	11	-	150	112	-	-	12.1	20.16	27	-	20	-
	2.5	0.7	-	1.8	-	14	-	173	127	-	-	7.41	12.1	35	27	26	20
	4	0.7	0.2	1.8	1.8	14	18	227	152	394	319	4.61	7.41	45	36	34	27
	6	0.7	0.2	1.8	1.8	15	19	296	186	477	367	3.08	4.61	57	46	43	35
	10	0.7	0.2	1.8	1.8	18	21	440	254	649	464	1.83	3.08	77	59	60	47
	16	0.7	0.2	1.8	1.8	20	23	633	336	870	573	1.15	1.91	105	80	83	64
	25	0.9	0.2	1.8	1.8	24	27	944	479	1226	762	0.727	1.20	125	100	105	82
	35	0.9	0.2	1.8	1.8	26	29	1254	602	1559	907	0.524	0.868	155	120	125	100
	50	1.0	0.2	1.8	1.9	29	33	1649	718	2091	1160	0.387	0.641	185	145	160	125
	70	1.1	0.5	1.9	2.1	34	38	2370	1067	3171	1867	0.268	0.443	225	175	200	155
	95	1.1	0.5	2.0	2.2	38	42	3135	1366	4026	2257	0.193	0.320	270	210	245	200
	120	1.2	0.5	2.1	2.3	41	46	3927	1692	4928	2693	0.153	0.253	310	240	285	220
	150	1.4	0.5	2.3	2.4	46	51	4710	1917	6017	3224	0.124	0.206	345	270	325	250
	185	1.6	0.5	2.4	2.7	51	56	6065	2612	7351	3906	0.0991	0.164	390	305	375	295
	240	1.7	0.5	2.6	2.8	57	63	7744	3275	9178	4709	0.0754	0.125	450	355	440	345
300	1.8	0.5	2.8	3.0	63	68	9602	4016	11209	5623	0.0601	0.100	515	400	505	395	
1.8/3kv	10	2.0	0.5	1.8	2.0	26	29	650	444	1300	1093	1.83	3.08	77	59	60	47
	16	2.0	0.5	1.9	2.1	28	31	1100	802	1607	1308	1.15	1.91	105	80	83	64
	25	2.0	0.5	2.0	2.1	31	34	1446	980	1990	1525	0.727	1.20	125	100	105	82
	35	2.0	0.5	2.1	2.2	33	36	1849	1198	2440	1789	0.524	0.868	155	120	125	100
	50	2.0	0.5	2.2	2.3	37	39	2367	1469	3013	2115	0.387	0.641	185	145	160	125
	70	2.0	0.5	2.3	2.4	41	43	3107	1832	3827	2551	0.268	0.443	225	175	200	155
	95	2.0	0.5	2.4	2.6	45	47	3991	2227	4807	3043	0.193	0.320	270	210	245	200
	120	2.0	0.5	2.5	2.7	48	51	4867	2642	5747	3522	0.153	0.253	310	240	285	220
	150	2.0	0.5	2.6	2.8	52	55	5794	3038	6745	3989	0.124	0.206	345	270	325	250
	185	2.0	0.5	2.7	2.9	57	59	7000	3591	8035	4626	0.0991	0.164	390	305	375	295
3.6/6kv	25	2.5	0.5	2.1	2.2	38	42	1786	4386	2745	2380	0.727	1.20	125	100	120	90
	35	2.5	0.5	2.1	2.3	40	45	2041	1389	3023	2371	0.524	0.868	155	120	140	110
	50	2.5	0.5	2.2	2.4	43	48	2554	1623	3608	2677	0.387	0.641	180	140	165	130
	70	2.5	0.5	2.3	2.5	47	52	3282	1978	4452	3148	0.268	0.443	220	170	210	165
	95	2.5	0.5	2.5	2.6	51	56	4180	2411	5421	3652	0.193	0.320	265	210	255	200
	120	2.5	0.5	2.6	2.8	54	59	5041	2806	6410	4176	0.153	0.253	300	235	290	225
	150	2.5	0.5	2.7	2.9	58	63	6035	3242	7523	4730	0.124	0.206	340	260	330	255
	185	2.5	0.5	2.8	3.0	62	67	7149	3704	8758	5313	0.0991	0.164	380	300	375	295
	240	2.5	0.5	3.0	3.2	68	74	8993	4542	10749	6280	0.0754	0.125	435	345	435	345
	300	2.5	0.5	3.1	3.3	74	80	11055	5469	13009	7423	0.0601	0.100	485	395	495	390
6/6kv 6/10kv	25	3.4	0.5	2.2	2.4	42	48	1886	1421	2900	2444	0.727	1.20	125	100	120	90
	35	3.4	0.5	2.3	2.4	44	49	2307	1652	3377	2726	0.524	0.868	155	120	140	110
	50	3.4	0.5	2.4	2.5	47	52	2889	1958	4059	3127	0.387	0.641	180	140	165	130
	70	3.4	0.5	2.5	2.7	51	57	3647	2344	4959	3654	0.268	0.443	220	170	210	165
	95	3.4	0.5	2.6	2.8	55	61	5119	3351	6522	4753	0.193	0.320	265	210	255	200
	120	3.4	0.5	2.7	2.9	58	64	5412	3178	6923	4689	0.153	0.253	300	235	290	225
	150	3.4	0.5	2.8	3.0	62	68	6402	3609	7106	4313	0.124	0.206	340	260	330	255
	185	3.4	0.5	2.9	3.1	66	72	7563	4118	9321	5876	0.0991	0.164	380	300	375	295
	240	3.4	0.5	3.1	3.3	72	78	9348	4879	12444	6776	0.0754	0.125	435	345	435	345
	300	3.4	0.5	3.3	3.0	77	83	11426	5840	13504	7917	0.0601	0.100	485	390	495	390
8.7/10kv 8.7/15kv	25	4.5	0.5	2.5	2.6	47	52	2537	2072	3400	2965	0.727	1.20	125	100	120	90
	35	4.5	0.5	2.5	2.6	50	55	2652	2001	3871	3219	0.524	0.868	155	120	140	110
	50	4.5	0.5	2.6	2.7	53	58	3263	2332	4580	3649	0.387	0.641	180	140	165	130
	70	4.5	0.5	2.7	2.8	57	62	4024	2721	5466	4163	0.268	0.443	220	170	210	165
	95	4.5	0.5	2.8	3.0	60	66	4950	3181	6535	4766	0.193	0.320	265	210	255	200
	120	4.5	0.5	2.9	3.1	64	69	5867	3632	7565	5331	0.153	0.253	300	235	290	225
	150	4.5	0.5	3.0	3.2	67	73	6970	4178	8379	5946	0.124	0.206	340	260	330	255
	185	4.5	0.5	3.1	3.3	71	78	8131	4686	10027	6582	0.0991	0.164	380	300	375	295
	240	4.5	0.5	3.3	3.5	77	83	9993	5524	12061	7592	0.0754	0.125	435	345	435	345
	300	4.5	0.8	3.4	3.7	82	90	11980	6394	15180	9594	0.0601	0.100	485	390	495	390

## Four-core same Cross-Section XLPE Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm		ApproxOD of cable mm		Approx weight of cable kg/km				Max. DC Resistance of Conductor at 20°C Ω/km		Current Rating (A)					
				YJV	YJLV	YJV	YJLV	YJV	YJLV	YJV22	YJLV22	YJV	YJLV	YJV22	YJLV22	Direct in ground		Run in air	
				YJV	YJLV	YJV22	YJLV22	YJV	YJLV	YJV22	YJLV22	YJV	YJLV	YJV22	YJLV22	Cu	Al	Cu	Al
0.6/1kv	1.5	0.7	-	1.8	-	13	-	177	140	-	-	12.1	20.16	27	-	20	-		
	2.5	0.7	-	1.8	-	14	-	209	147	-	-	7.41	12.1	35	27	26	20		
	4	0.7	0.2	1.8	1.8	15	19	279	179	459	359	4.61	7.41	45	36	34	27		
	6	0.7	0.2	1.8	1.8	17	20	369	222	564	417	3.08	4.61	57	46	43	35		
	10	0.7	0.2	1.8	1.8	20	23	556	308	783	535	1.83	3.08	77	59	60	47		
	16	0.7	0.2	1.8	1.8	22	25	808	400	1066	669	1.15	1.91	105	80	83	64		
	25	0.9	0.2	1.8	1.8	26	29	1214	539	1523	902	0.727	1.20	125	100	105	82		
	35	0.9	0.2	1.8	1.9	29	32	1619	750	1972	1103	0.524	0.868	155	120	125	100		
	50	1.0	0.5	1.9	2.0	32	37	2256	1014	3005	1764	0.387	0.641	185	145	160	125		
	70	1.1	0.5	2.0	2.1	37	42	2945	1210	3963	2225	0.268	0.443	225	175	200	155		
	95	1.1	0.5	2.1	2.3	42	47	3915	1560	5110	2751	0.193	0.320	270	210	245	200		
	120	1.2	0.5	2.3	2.4	46	51	4953	1961	6261	3282	0.153	0.253	310	240	285	220		
	150	1.4	0.5	2.4	2.6	51	56	6142	2425	7702	3978	0.124	0.206	345	270	325	250		
	185	1.6	0.5	2.6	2.8	57	63	7572	2987	9359	4765	0.0991	0.164	390	305	375	295		
	240	1.7	0.5	2.8	3.0	64	69	9717	3769	11800	5801	0.0754	0.125	450	355	440	345		
300	1.8	0.5	3.0	3.2	70	76	11643	5147	14472	7023	0.0601	0.100	515	400	505	395			

## (3+1)-core XLPE Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm		ApproxOD of cable mm		Approx weight of cable kg/km				Max. DC Resistance of Conductor at 20°C Ω/km		Current Rating (A)					
				YJV	YJLV	YJV	YJLV	YJV	YJLV	YJV22	YJLV22	YJV	YJLV	YJV22	YJLV22	Direct in ground		Run in air	
				YJV	YJLV	YJV22	YJLV22	YJV	YJLV	YJV22	YJLV22	YJV	YJLV	YJV22	YJLV22	Cu	Al	Cu	Al
0.6/1kv	3×2.5+1×1.5	0.7 0.7	-	1.8	-	13	-	197	162	-	-	7.41 12.1	12.1 20.16	35	27	26	20		
	3×4+1×2.5	0.7 0.7	-	1.8	1.8	15	18	262	172	438	348	4.61 7.41	7.41 12.1	45	36	34	27		
	3×6+1×4	0.7 0.7	0.2	1.8	1.8	16	20	347	212	539	404	3.08 4.61	4.61 7.41	57	46	43	35		
	3×10+1×6	0.7 0.7	0.2	1.8	1.8	19	22	508	286	728	506	1.83 3.08	3.08 4.61	77	59	60	47		
	3×16+1×10	0.7 0.7	0.2	1.8	1.8	21	25	744	473	819	548	1.15 1.83	1.91 3.08	105	80	83	64		
	3×25+1×16	0.9 0.7	0.2	1.8	1.8	25	28	1111	547	1408	844	0.727 1.15	1.20 1.91	125	100	105	82		
	3×35+1×16	0.9 0.7	0.2	1.8	1.8	27	30	1260	639	1862	1241	0.524 1.15	0.868 1.91	155	120	125	100		
	3×50+1×25	1.0 0.9	0.5	1.8	2.0	31	36	1982	898	2710	1626	0.387 0.727	0.641 1.20	185	145	160	125		
	3×70+1×35	1.1 0.9	0.5	1.9	2.1	35	40	2712	1194	3543	2025	0.268 0.524	0.443 0.868	225	175	200	155		
	3×95+1×50	1.1 1.0	0.5	2.1	2.2	40	44	3642	1567	4554	2479	0.193 0.387	0.320 0.641	270	210	245	200		
	3×120+1×70	1.2 1.1	0.5	2.2	2.4	44	49	4635	1970	5706	3041	0.153 0.268	0.253 0.443	310	240	285	220		
	3×150+1×70	1.4 1.1	0.5	2.4	2.5	48	53	5588	2366	6780	3180	0.124 0.268	0.206 0.443	345	270	325	250		
	3×185+1×95	1.6 1.1	0.5	2.5	2.7	54	59	6691	2664	8035	4008	0.0991 0.193	0.164 0.320	390	305	375	295		
	3×240+1×120	1.7 1.2	0.5	2.7	2.9	60	65	8907	3702	10425	5220	0.0754 0.153	0.125 0.253	450	355	440	345		
	3×300+1×150	1.8 1.4	0.5	2.9	3.0	66	72	11080	4572	12772	6266	0.0601 0.124	0.100 0.205	515	400	505	395		

## 4+1 -core XLPE Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm		Approx OD of cable mm		Approx weight of cable kg/km				Max. DC Resistance of Conductor at 20°C Ω/km		Current Rating (A)			
				YJV YJLV	YJV22 YJLV22	YJV YJLV	YJV22 YJLV22	YJV	YJLV	YJV22	YJLV22	Cu	Al	Direct in ground		Run in air	
															Cu	Al	Cu
0.6/1kv	4×4+1×2.5	0.7 0.7	-	1.8	1.8	16	19	361	235	539	424	4.61 7.41	7.41 12.1	45	36	36	27
	4×6+1×4	0.7 0.7	0.2	1.8	1.8	17	21	465	293	671	499	3.08 4.61	4.61 7.41	57	46	43	35
	4×10+1×6	0.7 0.7	0.2	1.8	1.8	21	24	706	421	951	666	1.83 3.08	3.084.61	77	59	60	47
	4×16+1×10	0.7 0.7	0.2	1.8	1.8	23	26	1038	578	1320	860	1.15 1.83	1.91 3.08	105	80	83	64
	4×25+1×16	0.9 0.7	0.2	1.8	1.8	27	31	1554	834	1888	1167	0.727 1.15	1.20 1.91	125	100	105	82
	4×35+1×16	0.9 0.7	0.2	1.8	1.9	30	33	1999	1030	2378	1409	0.524 1.15	0.868 1.91	155	120	125	100
	4×50+1×25	1.0 0.9	0.5	1.9	2.1	34	39	2735	1381	3558	2204	0.387 0.727	0.641 1.20	185	145	160	125
	4×70+1×35	1.1 0.9	0.5	2.1	2.2	39	44	3805	1886	4737	2818	0.268 0.524	0.443 0.868	225	175	200	155
	4×95+1×50	1.1 1.0	0.5	2.2	2.4	44	49	5114	2461	6219	3566	0.193 0.387	0.320 0.641	270	210	245	200
	4×120+1×70	1.2 1.1	0.5	2.4	2.5	49	54	6481	3088	7709	4315	0.153 0.268	0.253 0.443	310	240	285	220
	4×150+1×70	1.4 1.1	0.5	2.5	2.7	54	59	7794	3693	9184	5082	0.124 0.264	0.206 0.443	345	270	325	250
	4×185+1×90	1.6 1.1	0.5	2.7	2.9	60	66	9773	4614	11350	6191	0.0991 0.193	0.164 0.320	390	305	375	295
	4×240+1×120	1.7 1.2	0.5	2.9	3.1	67	73	12552	5201	13649	6990	0.0754 0.153	0.125 0.253	450	355	440	345
	4×300+1×150	1.8 1.4	0.5	3.1	3.3	74	80	15537	7166	17540	9170	0.0601 0.124	0.100 0.206	515	400	505	395

## 3+2 -core XLPE Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm		Approx OD of cable mm		Approx weight of cable kg/km				Max. DC Resistance of Conductor at 20°C Ω/km		Current Rating (A)			
				YJV YJLV	YJV22 YJLV22	YJV YJLV	YJV22 YJLV22	YJV	YJLV	YJV22	YJLV22	Cu	Al	Direct in ground		Run in air	
															Cu	Al	Cu
0.6/1kv	3×4+2×2.5	0.7 0.7	0.2	1.8	1.8	16	19	331	225	516	410	4.61 7.41	7.41 12.1	45	36	34	27
	3×6+2×4	0.7 0.7	0.2	1.8	1.8	17	21	442	281	644	484	3.08 4.61	4.61 7.41	57	46	43	35
	4×10+2×6	0.7 0.7	0.2	1.8	1.8	20	23	654	394	591	631	1.83 3.08	3.08 4.61	77	59	60	47
	3×16+2×10	0.7 0.7	0.2	1.8	1.8	23	26	969	546	1244	821	1.15 1.83	1.91 3.08	105	80	83	64
	3×25+2×16	0.9 0.7	0.2	1.8	1.8	27	30	1450	785	1744	1109	0.727 1.15	1.20 1.91	125	100	105	82
	3×35+2×16	0.9 0.7	0.2	1.8	1.9	29	32	1781	930	2143	1292	0.524 1.15	0.868 1.91	155	120	125	100
	3×50+2×25	1.0 0.9	0.5	1.9	2.1	33	38	2481	1272	3274	2064	0.387 0.727	0.641 1.20	185	145	160	125
	4×70+2×35	1.1 0.9	0.5	2.1	2.2	38	42	3428	1552	4219	1444	0.268 0.524	0.443 0.868	225	175	200	155
	3×95+2×50	1.1 1.0	0.5	2.2	2.4	43	48	4407	2042	5468	3103	0.193 0.387	0.320 0.641	270	210	245	200
	3×120+2×70	1.2 1.1	0.5	2.4	2.5	48	53	5934	2862	7120	4048	0.153 0.268	0.253 0.443	310	240	285	220
	3×150+2×70	1.4 1.1	0.5	2.5	2.7	52	57	6951	3343	8279	4672	0.124 0.268	0.206 0.443	345	270	325	250
	3×185+2×95	1.6 1.1	0.5	2.7	2.9	58	63	8800	4195	10306	5702	0.0991 0.193	0.164 0.320	390	305	375	295
	3×240+2×120	1.7 1.2	0.5	2.9	3.1	64	70	11228	5272	12930	6974	0.0754 0.153	0.125 0.253	450	355	440	345
	3×300+2×150	1.8 1.4	0.5	3.1	3.3	70	76	13930	6499	15840	8412	0.0601 0.124	0.100 0.206	515	400	505	395

## Five-core same Cross-Section XLPE Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm		Approx OD of cable mm		Approx weight of cable kg/km				Max. DC Resistance of Conductor at 20°C Ω/km		Current Rating (A)			
				YJV YJLV	YJV22 YJLV22	YJV YJLV	YJV22 YJLV22	YJV	YJLV	YJV22	YJLV22	Cu	Al	Direct in ground		Run in air	
														Cu	Al	Cu	Al
0.6/1kv	1.5	0.7	0.2	1.8	-	13	-	177	140	-	-	12.1	20.16	27	-	20	-
	2.5	0.7	0.2	1.8	-	14	-	209	147	-	-	7.41	12.1	35	27	26	20
	4	0.7	0.2	1.8	1.8	15	19	279	179	459	359	4.61	7.41	45	36	34	27
	6	0.7	0.2	1.8	1.8	17	20	369	222	564	417	3.08	4.61	57	46	43	35
	10	0.7	0.2	1.8	1.8	20	23	556	308	783	535	1.83	3.08	77	59	60	47
	16	0.7	0.2	1.8	1.8	22	25	808	411	1066	669	1.15	1.91	105	80	83	64
	25	0.9	0.2	1.8	1.8	26	29	1214	539	1523	902	0.727	1.20	125	100	105	82
	35	0.9	0.5	1.8	1.9	29	32	1619	750	1972	1103	0.524	0.868	155	120	125	100
	50	1.0	0.5	1.9	2.0	32	37	2256	1014	3005	1764	0.387	0.641	185	145	160	125
	70	1.1	0.5	2.0	2.1	37	42	2945	1210	3963	2225	0.268	0.443	225	175	200	155
	95	1.1	0.5	2.1	2.3	42	47	3915	1560	5110	2751	0.193	0.320	270	210	245	200
	120	1.2	0.5	2.3	2.4	46	51	4953	1961	6261	3282	0.153	0.253	310	240	285	220
	150	1.4	0.5	2.4	2.6	51	56	6142	2425	7702	3978	0.124	0.206	345	270	325	250
	185	1.6	0.5	2.6	2.8	57	63	7572	2987	9359	4765	0.0991	0.164	390	305	375	295
	240	1.7	0.5	2.8	3.0	64	69	9717	3769	11800	5801	0.0754	0.125	450	355	440	345
300	1.8	0.5	3.0	3.2	70	76	11643	5147	14472	7023	0.0601	0.100	515	400	505	395	

## Two-core XLPE Insulated PVC Sheathed Power Cable with Thin Steel Wire Armor

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm	Approx OD of cable mm	Approx weight of cable kg/km		Max. DC Resistance of Conductor at 20°C Ω/km		Current Rating (A)			
						YJV <sub>32</sub>	YJV <sub>32</sub>	Cu	Al	Direct in ground		Run in air	
										Cu	Al	Cu	Al
0.6/1kv	2.5	0.7	0.8	1.8	15	381	350	7.41	12.1	40	32	30	25
	4	0.7	0.8	1.8	16	442	392	4.61	7.41	55	45	42	32
	6	0.7	0.8	1.8	17	514	441	3.08	4.61	65	50	53	42
	10	0.7	0.8	1.8	20	649	525	1.83	3.08	90	70	70	55
	16	0.7	0.8	1.8	22	841	643	1.15	1.91	110	90	92	75
	25	0.9	1.6	1.8	26	1483	1173	0.727	1.20	140	120	128	100
	35	0.9	1.6	1.8	28	1760	1326	0.524	0.868	180	140	160	130
	50	1.0	1.6	1.9	32	2225	1604	0.387	0.641	210	160	190	150
	70	1.1	2.0	2.1	37	3099	2231	0.268	0.443	250	200	250	190
	95	1.1	2.0	2.2	40	3766	2586	0.193	0.320	285	230	300	240
	120	1.2	2.0	2.3	41	4451	2962	0.153	0.253	330	260	350	290
	150	1.4	2.5	2.5	50	5872	4011	0.124	0.206	375	300	400	330
	185	1.6	2.5	2.6	54	6920	4625	0.0991	0.164	420	340	460	370
	240	1.7	2.5	2.8	59	8438	5460	0.0754	0.125	500	400	550	440
	300	1.8	2.5	2.9	65	10030	6308	0.0601	0.100	580	510	600	560

## Single-core XLPE Insulated PVC Sheathed Power Cable with Thin Steel Wire Armor

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm	Approx OD of cable mm	Approx weight of cable kg/km		Max. DC Resistance of Conductor at 20°C Ω/km		Current Rating(A)			
						YJV <sub>32</sub>	YJV <sub>32</sub>	Cu	Al	Direct in ground		Run in air	
										Cu	Al	Cu	Al
0.6/1kv	10	0.7	1.6	1.8	15	544	482	1.83	3.08	95	75	75	60
	16	0.7	1.6	1.8	16	628	529	1.15	1.91	125	100	100	80
	25	0.9	1.6	1.8	18	788	634	0.727	1.20	160	130	140	115
	35	0.9	1.6	1.8	19	927	711	0.524	0.868	190	150	175	140
	50	1.0	1.6	1.8	20	1121	811	0.387	0.641	225	180	210	170
	70	1.1	1.6	1.8	22	1398	965	0.268	0.443	280	225	270	215
	95	1.1	1.6	1.8	24	1697	1109	0.193	0.320	335	270	340	275
	120	1.2	1.6	1.8	25	2001	1258	0.153	0.253	380	305	400	320
	150	1.4	2.0	1.8	28	2555	1626	0.124	0.206	425	340	460	370
	185	1.6	2.0	1.9	30	3005	1860	0.0991	0.164	480	375	530	415
240	1.7	2.0	2.0	33	3665	2179	0.0754	0.125	555	435	625	490	
3.6/6kv	300	1.8	2.0	2.0	35	4359	2502	0.0601	0.100	615	496	685	550
	25	2.5	2.0	1.8	25	1226	1071	0.727	1.20	210	165	190	145
	35	2.5	2.0	1.8	26	1387	1161	0.524	0.868	250	195	230	180
	50	2.5	2.0	1.8	27	1600	1291	0.387	0.641	300	235	275	215
	70	2.5	2.0	1.8	29	1878	1256	0.268	0.443	370	290	340	266
	95	2.5	2.0	1.9	31	2212	1624	0.193	0.320	450	350	420	325
	120	2.5	2.0	2.0	32	2540	1797	0.153	0.253	515	400	480	375
	150	2.5	2.0	2.0	34	3130	2201	0.124	0.206	580	450	550	405
	185	2.5	2.5	2.1	37	3559	2414	0.0991	0.164	660	510	635	490
	240	2.6	2.5	2.2	39	4233	2747	0.0754	0.125	770	595	745	580
300	2.8	2.5	2.3	42	5005	3148	0.0601	0.100	875	680	860	665	
6/6kv 6/10kv	25	3.4	2.0	1.8	27	1367	1212	0.727	1.20	210	160	190	145
	35	3.4	2.0	1.8	28	1522	1305	0.524	0.868	250	195	230	180
	50	3.4	2.0	1.8	29	1731	1422	0.387	0.641	300	230	275	215
	70	3.4	2.0	1.9	31	2027	1594	0.268	0.443	370	285	345	266
	95	3.4	2.0	1.9	33	2353	1765	0.193	0.320	445	345	415	325
	120	3.4	2.0	2.0	34	2912	2170	0.153	0.253	505	395	480	375
	150	3.4	2.5	2.1	37	3225	2396	0.124	0.206	575	445	550	405
	185	3.4	2.5	2.1	39	3743	2597	0.0991	0.164	650	500	630	490
	240	3.4	2.5	2.2	42	4470	2983	0.0754	0.125	760	590	745	580
	300	3.4	2.5	2.3	43	5140	3282	0.0601	0.100	870	670	860	665
8.7/10kv 8.7/15kv	25	2.5	2.0	1.8	29	1531	1376	0.727	1.20	210	160	190	145
	35	2.5	2.0	1.8	30	1703	1486	0.524	0.868	250	195	230	180
	50	2.5	2.0	1.8	32	1934	1624	0.387	0.641	300	230	275	215
	70	2.5	2.0	1.8	33	2222	1789	0.268	0.443	370	285	345	266
	95	2.5	2.0	1.9	36	2813	2225	0.193	0.320	445	345	415	325
	120	2.5	2.0	2.0	38	3155	2413	0.153	0.253	505	395	480	375
	150	2.5	2.0	2.0	39	3532	2603	0.124	0.206	575	445	550	405
	185	2.5	2.5	2.1	41	3998	2852	0.0991	0.164	650	500	630	490
	240	2.6	2.5	2.2	43	4668	3185	0.0754	0.125	760	590	745	580
	300	2.8	2.5	2.3	45	5395	3538	0.0601	0.100	870	670	860	665



## Three-core XLPE Insulated PVC Sheathed Power Cable with Thin Steel Wire Armor

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Nom. Inner cover thickness mm	Steel tape thickness mm	Nom. sheath thickness mm	Approx OD of cable mm	Approx weight of cable kg/km		Max. DC Resistance of Conductor at 20°C Ω/km		Current Rating (A)			
							YJV <sub>32</sub>	YJV <sub>32</sub>	Cu	Al	Direct in ground		Run in air	
											Cu	Al	Cu	Al
0.6/1kv	4	0.7	-	0.8	1.8	17	497	423	4.61	7.41	40	30	50	40
	6	0.7	-	0.8	1.8	18	589	479	3.08	4.61	50	40	60	45
	10	0.7	-	0.8	1.8	20	1049	864	1.83	3.08	65	50	80	60
	16	0.7	-	1.6	1.8	24	1320	1022	1.15	0.91	85	65	100	80
	25	0.9	-	1.6	1.8	28	1764	1300	0.727	0.20	115	90	130	100
	35	0.9	-	1.6	1.9	30	2161	1509	0.524	0.868	145	110	155	120
	50	1.0	-	1.6	2.0	33	2768	1873	0.387	0.641	175	130	185	140
	70	1.1	-	2.0	2.1	39	3818	2514	0.268	0.443	220	170	225	175
	95	1.1	-	2.5	2.2	42	4761	2992	0.193	0.320	270	205	270	210
	120	1.2	-	2.5	2.4	47	6154	3920	0.153	0.253	315	240	305	235
	150	1.4	-	2.5	2.6	52	7420	4627	0.124	0.206	360	275	345	265
185	1.6	-	2.5	2.8	57	8847	5402	0.0991	0.164	420	320	390	301	
3.6/6kv	240	1.7	-	2.5	2.9	63	10863	6394	0.0754	0.125	500	385	455	355
	25	2.5	1.2	2.0	2.4	43	4000	3381	0.727	1.20	140	110	140	110
	35	2.5	1.3	2.5	2.4	47	4244	3572	0.524	0.868	170	125	155	130
	50	2.5	1.3	2.5	2.5	50	4899	3968	0.387	0.641	200	145	187	150
	70	2.5	1.4	2.5	2.6	54	5835	4531	0.268	0.443	245	180	235	190
	95	2.5	1.4	2.5	2.8	58	6965	5196	0.193	0.320	298	215	307	220
	120	2.5	1.5	2.5	2.9	61	7994	5760	0.153	0.253	337	245	353	250
	150	2.5	1.6	2.5	3.0	65	9269	6476	0.124	0.206	376	270	403	285
	185	2.5	1.6	2.5	3.1	69	10576	7132	0.0991	0.164	421	300	460	315
	240	2.6	1.7	3.15	3.3	76	13718	9249	0.0754	0.125	481	355	541	370
300	2.8	1.8	3.15	3.5	82	16154	10568	0.0601	0.100	515	415	545	430	
6/6kv 6/10kv	25	3.4	1.3	2.5	2.4	48	4200	3700	0.727	1.20	140	110	140	110
	35	3.4	1.3	2.5	2.5	51	4721	4069	0.524	0.868	171	125	161	130
	60	3.4	1.4	2.5	2.6	55	5469	4538	0.387	0.641	201	150	192	155
	70	3.4	1.5	2.5	2.8	59	6500	5197	0.268	0.443	250	180	256	190
	95	3.4	1.5	2.5	2.9	62	8163	6394	0.193	0.320	298	210	313	225
	120	3.4	1.6	2.5	3.0	66	8694	6459	0.153	0.253	337	250	361	255
	150	3.4	1.6	2.5	3.1	70	9876	7083	0.124	0.206	375	280	409	295
	185	3.4	1.7	3.15	3.3	75	12143	8698	0.0991	0.164	420	320	465	340
	240	3.4	1.8	3.15	3.5	80	14300	9831	0.0754	0.125	480	375	544	395
300	3.4	1.9	3.15	3.6	86	16750	11164	0.0601	0.100	545	440	580	455	
8.7/10kv 8.7/15kv	25	4.5	1.4	2.5	2.6	53	4800	4256	0.727	1.20	140	110	140	110
	35	4.5	1.4	2.5	2.7	57	5368	4716	0.524	0.868	175	125	177	130
	60	4.5	1.5	2.5	2.8	60	6143	5212	0.387	0.641	206	150	212	155
	70	4.5	1.6	2.5	2.9	64	7159	5856	0.268	0.443	251	180	264	190
	95	4.5	1.6	2.5	3.1	68	8329	6560	0.193	0.320	298	210	320	225
	120	4.5	1.7	2.5	3.2	71	10269	8035	0.153	0.253	336	250	365	255
	150	4.5	1.7	3.15	3.3	76	11572	8779	0.124	0.206	375	280	415	295
	185	4.5	1.8	3.15	3.5	80	13083	9638	0.0991	0.164	419	320	470	340
	240	4.5	1.9	3.15	3.6	86	15250	10781	0.0754	0.100	479	375	549	395

## Four-core same Cross-Section XLPE Insulated PVC Sheathed Power Cable with Thin Steel Wire Armor

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel Wire thickness mm	Nom. sheath thickness mm	Approx OD of cable mm	Approx weight of cable kg/km		Max. DC Resistance of Conductor at 20°C Ω/km		Current Rating(A)			
						YJV <sub>32</sub>	YJV <sub>32</sub>	Cu	Al	Direct in ground		Run in air	
										Cu	Al	Cu	Al
0.6/1kv	2.5	0.7	0.8	1.8	17	474	412	7.41	12.1	30	25	40	30
	4	0.7	0.8	1.8	18	571	471	4.61	7.41	40	30	50	40
	6	0.7	0.8	1.8	19	725	578	3.08	4.61	50	40	60	45
	10	0.7	1.6	1.8	23	1222	974	1.83	3.08	65	50	80	60
	16	0.7	1.6	1.8	26	1602	205	1.15	1.91	85	65	100	80
	25	0.9	1.6	1.9	30	2125	504	0.727	1.20	115	90	130	100
	35	0.9	1.6	1.9	32	2609	740	0.524	0.868	145	110	155	120
	50	1.0	2.0	2.1	37	3643	2402	0.387	0.641	175	130	185	140
	70	1.1	2.0	2.2	39	4364	2630	0.268	0.443	220	170	225	175
	95	1.1	2.0	2.4	43	5526	3173	0.193	0.320	270	205	270	210
	120	1.2	2.5	2.5	48	7147	4913	0.153	0.253	315	240	305	235
	150	1.4	2.5	2.7	53	8630	4913	0.124	0.206	360	275	345	265
	185	1.6	2.5	2.9	58	9654	5069	0.0991	0.164	420	320	390	305
	240	1.7	2.5	3.1	63	12773	6825	0.0754	0.125	500	385	455	355
300	1.8	2.5	3.3	69	14500	8667	0.0601	0.100	585	450	525	400	

## (3+1)-core XLPE Insulated PVC Sheathed Power Cable with Thin Steel Wire Armor

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel Wire thickness mm	Nom. sheath thickness mm	Approx OD of cable mm	Approx weight of cable kg/km		Max. DC Resistance of Conductor at 20°C Ω/km		Current Rating(A)			
						YJV <sub>32</sub>	YJV <sub>32</sub>	Cu	Al	Direct in ground		Run in air	
										Cu	Al	Cu	Al
0.6/1kv	3×2.5+1×1.5	0.7 0.7	0.8	1.8	17	457	-	7.41 12.1	-	35	-	30	-
	3×4+1×2.5	0.7 0.7	0.8	1.8	18	549	459	4.61 7.41	7.41 12.1	50	40	40	30
	3×6+1×4	0.7 0.7	0.8	1.8	19	657	522	3.08 4.61	4.61 7.41	60	45	50	40
	3×10+1×6	0.7 0.7	0.8	1.8	21	862	640	1.83 3.08	3.08 4.61	80	60	65	50
	3×16+1×10	0.7 0.7	1.6	1.8	25	1381	1110	1.15 1.83	1.91 3.08	100	80	85	65
	3×25+1×16	0.9 0.7	1.6	1.8	29	1971	1407	0.727 1.15	1.20 1.91	130	100	115	90
	3×35+1×16	0.9 0.7	1.6	1.9	31	2226	1605	0.524 1.15	0.868 1.91	155	120	145	110
	3×50+1×25	1.0 0.9	2.0	2.0	36	3534	2450	0.387 0.727	0.641 1.20	185	140	175	130
	3×70+1×35	1.1 0.9	2.0	2.2	40	4237	2719	0.268 0.524	0.443 0.868	225	175	220	170
	3×95+1×50	1.1 1.0	2.0	2.3	44	5332	3257	0.193 0.387	0.320 0.641	270	210	270	205
	3×120+1×70	1.2 1.1	2.5	2.5	50	7007	4341	0.153 0.268	0.253 0.443	305	235	315	240
	3×150+1×70	1.4 1.1	2.5	2.6	54	8207	4607	0.124 0.268	0.206 0.443	345	265	360	275
	3×185+1×95	1.6 1.1	2.5	2.8	60	9567	5540	0.0991 0.193	0.164 0.320	390	301	420	320
	3×240+1×120	1.7 1.2	2.5	3.0	65	12150	6945	0.0754 0.153	0.125 0.253	455	355	500	385
	3×300+1×150	1.8 1.4	3.15	3.2	74	15566	9060	0.0604 0.124	0.100 0.206	410	410	600	450

## XLPE insulated power cable

Extruded XLPE insulation with rated voltage from 12/20KV to 26/35KV

### Manufacturing standards

ASTM ICEA BS DIN IEC GB AS/NZS etc.

### Operating features

Maximum rated operation temperature of conductor:90°C

Maximum short circuit temperature of conductor(duration 5sec.):250°C

It should be pre-warmed before installation when the ambient temperature is below 0°C

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

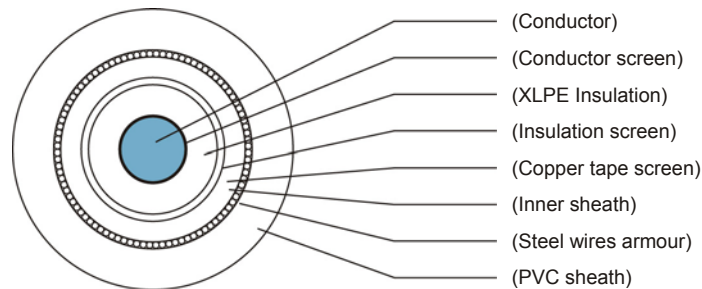
For non-armoured single core cable:20D

For non-armoured multi-core cable:15D

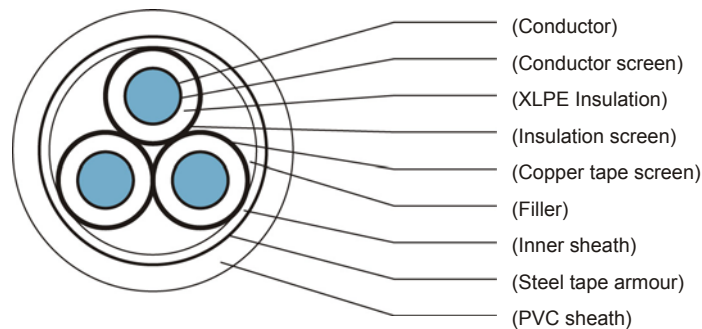
For armoured single core cable:15D

For armoured multi-core cable:12D

### Sketches of product construction



single core XLPE insulated steel wire armoured power cable



three-core XLPE insulated steel tape armoured power cable

## XLPE insulated power cable

### Type Description and Installation location

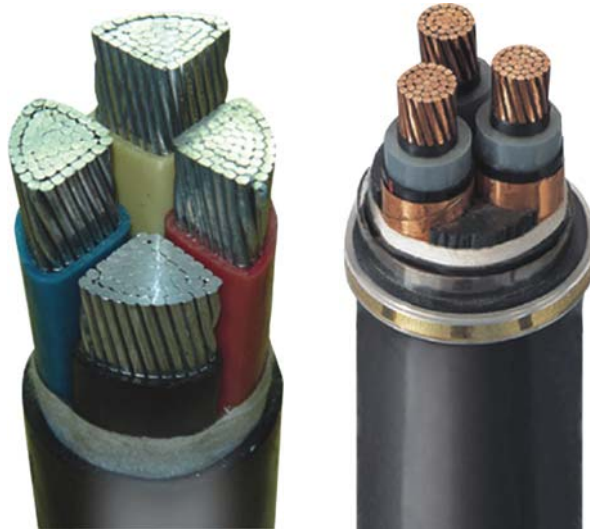
Rated voltage 12/20 26/35kV XLPE insulated power cable

Type		Description	Installation location
Copper core	Aluminium core		
YJV	YJLV	XLPE insulated PVC sheathed power cable	Aerial indoor tunnel trench and conduit
YJY	YJLY	XLPE insulated PE sheathed power cable	
YJV22	YJLV22	XLPE insulated steel tape armoured and PVC sheathed power cable	Indoor tunnel trench and conduit
YJV23	YJLV23	XLPE insulated steel tape armoured and PE sheathed power cable	
YJV32	YJLV32	XLPE insulated fine steel-wire armoured and PVC sheathed power cable	Large difference shaft well and underwater
YJV33	YJLV33	XLPE insulated fine steel-wire armoured and PE sheathed power cable	
YJV42	YJLV42	XLPE insulated thick steel-wire armoured and PVC sheathed power cable	The shaft for bearing large pulling force and seabed
YJV43	YJLV43	XLPE insulated thick steel-wire armoured and PE sheathed power cable	

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

Type		No. of Cores	Rated Voltage (kV)	
			12/20	18/30-26/35
			Nominal cross sectional area(mm <sup>2</sup> )	
YJV	YJLV	1	25~1200	35~1200
YJY	YJLY		25~1200	35~1200
YJV32	YJLV32		25~1200	35~1200
YJV33	YJLV33		25~1200	35~1200
YJV42	YJLV42		25~1200	35~1200
YJV43	YJLV43		25~1200	35~1200
YJV	YJLV		3	25~500
YJY	YJLY	25~500		35~500
YJV22	YJLV22	25~500		35~500
YJV23	YJLV23	25~500		35~500
YJV32	YJLV32	25~500		35~500
YJV33	YJLV33	25~500		35~500
YJV42	YJLV42	25~500		35~500
YJLV43	YJLV43	25~500		35~500

## XLPE insulated power cable



### Single Core XLPE Insulated Power Cable

12/20kV

Nominal cross sectional area mm <sup>2</sup>	Reference conductor diameter mm	Nominal insulation thickness mm	Approx overall diameter of cable mm	Approx weight of cable kg/km		Approx overall diameter of cable mm	Approx weight of cable kg/km		Approx overall diameter of cable mm	Approx weight of cable kg/km	
				YJV YJY	YJLV YJLY		YJV32 YJY33	YJLV32 YJLY33		YJV42 YJY43	YJLV42 YJLY43
35	7.1	5.5	25	879	651	31	1869	1641	36	3312	3084
50	8.4	5.5	26	1032	734	33	2292	1995	38	3407	3109
70	10.0	5.5	28	1281	849	35	2632	2200	39	3974	3542
95	11.7	5.5	30	1616	996	37	3025	2407	41	4447	3829
120	13.1	5.5	32	1954	1148	39	3462	2656	43	4940	4134
150	14.6	5.5	34	2267	1291	41	3850	2874	45	5394	4417
185	16.2	5.5	35	2602	1431	42	4258	3087	47	5911	4739
240	18.4	5.5	38	3205	1678	46	5394	3867	49	6907	5380
300	20.6	5.5	40	3614	1970	48	5928	4284	51	7292	5648
400	23.8	5.5	44	4817	2335	52	6120	4841	55	7587	6308
500	26.6	5.5	47	5868	2783	56	8589	5504	59	10160	7074
630	30.0	5.5	51	7179	3289	60	10137	6246	63	11822	7931
800	34.0	5.5	56	8707	4027	65	11977	7296	68	13813	9133
1000	38.2	5.5	63	11058	4866	73	15580	9387	75	16754	10561

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

### Three-Core XLPE Insulated Power Cable

12/20kV

Nominal cross sectional area mm <sup>2</sup>	Reference conductor diameter mm	Nominal insulation thickness mm	Approx overall diameter of cable mm	Approx weight of cable kg/km		Approx overall diameter of cable mm	Approx weight of cable kg/km		Approx overall diameter of cable mm	Approx weight of cable kg/km		Approx overall diameter of cable mm	Approx weight of cable kg/km	
				YJV YJY	YJLV YJLY		YJV22 YJY23	YJLV22 YJLY23		YJV32 YJY33	YJLV32 YJLY33		YJV42 YJY43	YJLV42 YJLY43
35	7.1	5.5	53	3168	2482	58	4465	3779	61	6048	5362	61	7783	7097
50	8.4	5.5	56	3676	2782	61	5072	4178	64	6702	5808	64	8522	7628
70	10	5.5	60	4514	3215	65	6005	4705	69	7804	6504	69	9742	8442
95	11.7	5.5	63	5572	3711	69	7210	5349	75	10114	8254	75	11282	9422
120	13.1	5.5	68	6695	4239	74	8547	6121	79	11510	9084	79	12776	10350
150	14.6	5.5	71	7764	4826	77	10426	7488	83	12805	9867	83	14133	11196
185	16.2	5.5	75	8914	5389	81	11716	8191	87	14249	10724	87	15605	12080
240	18.4	5.5	80	10879	6284	88	14117	9521	92	16574	11978	92	18052	13456
300	20.6	5.5	85	13328	7361	93	16762	10795	97	19321	13354	97	20884	14917

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

### Single Core XLPE Insulated Power Cable

26/35kV

Nominal cross sectional area mm <sup>2</sup>	Reference conductor diameter mm	Nominal insulation thickness mm	Approx overall diameter of cable mm	Approx weight of cable kg/km		Approx overall diameter of cable mm	Approx weight of cable kg/km		Approx overall diameter of cable mm	Approx weight of cable kg/km	
				YJV YJY	YJLV YJLY		YJV32 YJY33	YJLV32 YJLY33		YJV42 YJY43	YJLV42 YJLY43
50	8.4	10.5	38	1635	1356	46	3831	3501	50	5157	4887
70	10.0	10.5	40	1948	1516	48	4251	3819	51	5609	5117
95	11.7	10.5	41	2294	1676	50	4706	4088	53	6115	5495
120	13.1	10.5	43	2665	1849	51	5056	4350	55	6614	5808
150	14.6	10.5	44	2975	1999	54	5594	4617	56	7097	6121
185	16.2	10.5	46	3362	2191	56	6046	4874	58	7597	6426
240	18.4	10.5	49	4006	2479	58	6848	5320	61	8472	6945
300	20.6	10.5	51	4852	2868	60	7841	5858	63	9532	7549
400	23.8	10.5	55	5700	3218	63	8886	6404	67	10680	8198
500	26.6	10.5	60	6857	3771	69	10349	7262	72	12289	9201
630	30.0	10.5	62	8214	4323	71	11845	7954	74	13258	9366
800	34.0	10.5	66	9710	5030	77	14546	9866	79	15658	11008
1000	38.2	10.5	71	12059	5866	82	17210	11017	84	16523	12331

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

### Three-Core XLPE Insulated Power Cable

26/35kV

Nominal cross sectional area mm <sup>2</sup>	Reference conductor diameter mm	Nominal insulation thickness mm	Approx overall diameter of cable mm	Approx weight of cable kg/km		Approx overall diameter of cable mm	Approx weight of cable kg/km		Approx overall diameter of cable mm	Approx weight of cable kg/km				
				YJV YJY	YJLV YJLY		YJV22 YJY23	YJLV22 YJLY23		YJV32 YJY33	YJLV32 YJLY33	YJV42 YJY43	YJLV42 YJLY43	
3×50	8.4	10.5	81	5510	4780	91	10300	9680	92	11780	10860	98	17060	17060
3×70	10.0	10.5	86	7830	6520	95	11480	10200	96	13010	11720	102	18260	18260
3×95	11.7	10.5	91	8910	7300	99	12750	11010	100	14380	12630	106	19830	19830
3×120	13.1	10.5	94	9960	7700	102	13930	11730	103	15600	13400	109	21320	21320
3×150	14.6	10.5	98	11230	8410	106	15360	12590	107	16960	14200	112	22940	22940
3×185	16.2	10.5	101	12610	9140	110	16930	13500	111	18670	15210	117	24800	24800

### Three-Core XLPE Insulated Power Cable

26/35kV

Nominal cross sectional area mm <sup>2</sup>	Reference conductor diameter mm	Nominal insulation thickness mm	Approx overall diameter of cable mm	Approx weight of cable kg/km		Approx overall diameter of cable mm	Approx weight of cable kg/km		Approx overall diameter of cable mm	Approx weight of cable kg/km		Approx overall diameter of cable mm	Approx weight of cable kg/km	
				YJV YJY	YJLV YJLY		YJV22 YJY23	YJLV22 YJLY23		YJV32 YJY33	YJLV32 YJLY33		YJV42 YJY43	YJLV42 YJLY43
3×240	18.4	10.5	106	14600	10170	115	19250	14800	116	21010	16530	16530	27340	22860
3×300	20.6	10.5	111	16940	10320	120	21790	16230	121	23420	17820	17820	29950	24350
3×400	23.8	10.5	118	20190	11690	125	24530	17065	127	26380	18910	18910	33440	25980
3×500	27.2	10.5	122	22990	12500	131	27300	17900	134	29630	20300	20300	36550	27230

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

## XLPE insulated power cable

### Main technical properties

No	Technical properties	U <sub>0</sub> /U (kV) Rated voltage						
		3.6/6	6/6 6/10	8.7/10 8.7/15	12/20	18/30	21/35	26/35
1	Conductor DC resistance (/km)	See next table						
2	Routine partial discharge test at 2U <sub>0</sub>	Discharge magnitude shall not exceed 5pC						
3	Routine A.C. voltage test For cable of U <sub>0</sub> 18kV, test voltage of 3.5U <sub>0</sub> shall be applied for 5 min-utes and no breakdown of insulation shall occur; For cable of U <sub>0</sub> 18kV, test voltage of 3.5U <sub>0</sub> shall be applied for 5 min-utes or 2.5U <sub>0</sub> shall be applied for 30 minutes, no breakdown of insulation shall occur;	12.6/5	21/5	30.5/5	42/5	63/5	73.5/5 (or) 52.5/30	91/5 (or) 65/30
4	Power frequency AC voltage test for 4 hours (kV)	14.4	24	34.8	48	72	84	104
5	Hot set test ±200 15min, 20N/cm Max. elongation at loading (%) Max. permanent elongation after cooling (%)	130 15						
6	Hot impact test (kV) (Heating till 5 higher than continuous operating temperature positive & negative pole each 10 times )	60	75	95	125	170	200	250

### Conductor DC resistance

table

Nominal cross sectional area (mm <sup>2</sup> )	Max. DC. Resistance at 20°C (Ω/km)							
	25	35	50	70	95	120	150	185
Cu	0.727	0.524	0.387	0.268	0.193	0.153	0.124	0.0991
Al	1.20	0.868	0.641	0.443	0.320	0.253	0.206	0.164

table continued

Nominal cross sectional area (mm <sup>2</sup> )	Max. DC. Resistance at 20°C (Ω/km)						
	240	300	400	500	630	800	1000
Cu	0.0754	0.0601	0.0470	0.0366	0.0283	0.0221	0.0176
Al	0.125	0.100	0.0778	0.0605	0.0469	0.0367	0.0291



**Continuous current capacity of single core XLPE insulated power cable with rated voltage 18/30kV to 26/35kV**

Type	YJV YJLY YJY YJLY							
Arrange type	Delta(connect each other)				Flat(the space between adjacent cores is the overall diameter of cable)			
Nominal cross section area(mm <sup>2</sup> )	In air		Direct buired		In air		Direct buired	
	Cu	Al	Cu	Al	Cu	Al	Cu	Al
50	215	170	260	200	250	190	225	175
70	270	210	320	250	305	240	275	215
95	330	255	390	300	375	290	335	260
120	380	295	445	345	435	335	380	295
150	430	330	500	395	490	380	425	330
185	490	380	570	440	565	435	485	375
240	575	450	665	515	665	520	565	435
300	660	515	750	585	760	590	635	495
400	765	600	867	680	890	695	730	570
500	875	695	980	775	1030	810	830	655
630	1010	810	1110	895	1200	950	950	755
800	1150	940	1250	1020	1380	1110	1080	865
1000	1260	1050	1360	1130	1540	1250	1190	960
Ambient temperature	40 °C		25 °C		40 °C		25 °C	
Operating temperature	90 °C							

1)Reference continuous current capacity of steel wire armoured single-core cable is 65% of that of non-armoured single-core cable.

2)The moisture in soil is not considered.The soil thermal resistivity  $\rho_w=1.0^{\circ}\text{C m/W}$ .See following table for correction coefficient of reference current carrying capacity.

3)One end of metal screen shall be earthed.

**Continuous current capacity of three-core XLPE insulated power cable with rated voltage 18/30kV to 26/35kV**

Type	YJV YJLY YJY YJLY				YJV22 YJLV22 YJV32 YJLV32 YJV42 YJLV42 YJY22 YJLY22 YJY32 YJY32 YJLY42 YJLY42			
Nominal cross section area(mm <sup>2</sup> )	In air		Direct buired		In air		Direct buired	
	Cu	Al	Cu	Al	Cu	Al	Cu	Al
335	150	115	160	125	150	115	160	125
350	180	140	190	145	180	140	190	145
370	220	170	230	180	220	170	230	180
395	265	205	275	215	265	205	275	215
3 120	305	235	315	245	310	240	315	245
3 150	345	270	355	275	350	270	355	275
3 185	390	305	400	310	400	310	400	310
3 240	455	355	460	360	465	360	460	360
3 300	525	410	520	410	535	420	520	410
3 400	600	470	590	465	615	485	590	465
Ambient temperature	40 °C		25 °C		40 °C		25 °C	
Operating temperature	90 °C							

1)The moisture in soil is not considered.The soil thermal resistivity  $\rho_w=1.0^{\circ}\text{C m/W}$ .See following table for correction coefficient of reference current carrying capacity.

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

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

Type	YJV YJLY YJY YJLY							
Arrange type	Delta(connect each other)				Flat(the space between adjacent cores is the overall diameter of cable)			
Nominal cross section area(mm <sup>2</sup> )	In air		Direct buired		In air		Direct buired	
	Cu	Al	Cu	Al	Cu	Al	Cu	Al
25	145	110	185	145	170	130	160	125
35	175	135	225	175	205	160	190	150
50	210	160	270	210	245	190	230	175
70	260	200	330	255	310	240	280	215
95	320	245	400	310	380	295	335	260
120	370	285	460	345	440	340	385	295
150	420	325	520	400	500	385	430	335
185	460	375	585	455	570	445	490	380
240	565	440	680	530	675	525	565	440
300	650	510	775	605	780	610	640	500
400	755	595	885	700	910	710	735	575
500	865	690	1000	795	1050	825	835	660
630	1000	810	1140	920	1230	970	960	760
800	1140	940	1270	1040	1420	1140	1080	865
1000	1250	1050	1370	1150	1580	1290	1180	970
Ambient temperature	40 °C		25 °C		40 °C		25 °C	
Operating temperature	90°C							

1) Reference continuous current capacity of steel wire armoured single-core cable is 65% of that of non-armoured single-core cable.

2) The moisture in soil is not considered. The soil thermal resistivity  $\rho_w = 1.0^\circ\text{C m/W}$ . See following table for correction coefficient of reference current carrying capacity.

3) One end of metal screen shall be earthed.

**Continuous current capacity of three-core XLPE insulated power cable with rated voltage 18/30kV to 26/35kV**

Type	YJV YJLY YJY YJLY				YJV22 YJLV22 YJV32 YJLV32 YJV42 YJLV42 YJY22 YJLY22 YJY32 YJY32 YJLY42 YJLY42			
Nominal cross section area(mm <sup>2</sup> )	In air		Direct buired		In air		Direct buired	
	Cu	Al	Cu	Al	Cu	Al	Cu	Al
325	120	96	135	105	120	90	135	105
335	150	115	160	125	145	110	160	125
350	175	135	190	150	170	130	190	150
370	220	170	235	185	210	165	235	185
395	265	205	285	220	265	200	285	220
3 120	305	235	320	250	300	235	320	250
3 150	350	270	365	285	340	265	365	285
3 185	395	310	410	320	390	305	410	320
3 240	465	365	475	370	455	355	475	370
3 300	530	415	535	420	520	410	535	420
3 400	615	485	605	480	600	475	605	480
Ambient temperature	40 °C		25 °C		40 °C		25 °C	
Operating temperature	90°C							

**Correction coefficient of current-carrying capacity under different ambient temperature.(in air)**

Operating temperature of conductor (°C)	Ambient temperature(in air) (°C)								
	10	15	20	25	30	35	40	45	50
60	1.58	1.50	1.41	1.32	1.22	1.11	1.00	0.86	0.73
65	1.48	1.41	1.34	1.26	1.18	1.09	1.00	0.89	0.77
70	1.41	1.35	1.29	1.22	1.15	1.08	1.00	0.91	0.81
80	1.32	1.27	1.22	1.17	1.11	1.06	1.00	0.93	0.86
90	1.26	1.22	1.18	1.14	1.09	1.04	1.00	0.94	0.89
105	1.22	1.19	1.15	1.11	1.08	1.04	1.00	0.95	0.91



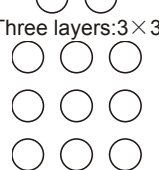
**Correction coefficient of current-carrying capacity under different ambient temperature.(in soil)**

Operating temperature of conductor (°C)	Ambient temperature(in Soil) (°C)					
	10	15	20	25	30	35
60	1.20	1.13	1.07	1.00	0.93	0.85
65	1.17	1.12	1.06	1.00	0.94	0.87
70	1.15	1.11	1.05	1.00	0.94	0.88
80	1.13	1.09	1.04	1.00	0.95	0.90
90	1.11	1.07	1.04	1.00	0.96	0.92

**Correction coefficient of current-carrying capacity for different thermal resistivity.**

Voltage (kV)	Sectional area (mm <sup>2</sup> )	$\rho t$ (°C.m/w) Thermal resistivity				
		0.8	1.0	1.2	1.5	2.0
3.6/6~6/6	≤35	1.06	1.00	0.95	0.88	0.80
	50~150	1.08	1.00	0.94	0.87	0.77
	≥185	1.09	1.00	0.93	0.85	0.76
6/10~12/15	≤35	1.05	1.00	0.95	0.89	0.80
	50~150	1.06	1.00	0.94	0.88	0.79
	≥185	1.07	1.00	0.93	0.86	0.77
12/20~26/35	≤95	1.05	1.00	0.95	0.90	0.82
	≥120	1.06	1.00	0.94	0.83	0.80

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

Array	Layer no .	Layer × Pcs	Gap between cables/cables Dia. D/De		Correction factor of current rating	Note		
			Level	Vertical				
Array of multi-cable		1×2	-	<5	0.89	D=Gap between cables; De=Outer Dia.of cables Array legend one layer:1×3  Two layers:2×2  Three layers:3×3 		
		1×3	-	<0.75	0.84			
	Two	2×1	<0.5		1.9~1.5		0.99	
					1.4~1.0		0.97	
					<0.5		0.90	
		2×2	<0.5		2~1.5		0.99	
					1.49~1.5		0.97	
					0.9~0.5		0.90	
	Three	3×1	-		4~3		0.99	
					2.9~2.0		0.97	
					1.9~1.0		0.94	
					<0.5		.85	
					<0.5		0.85	
		3×2 3×3	<0.5 <0.75				4~3	0.99
							2.9~2.0	0.97
							1.9~1.0	0.94
							<0.5	0.85
							<0.5	0.85

**Max.calculated permissible short-circuit current of conductor.**

Nominal cross-sectional area of conductor mm <sup>2</sup>	Maximum permissible short-circuit current f conductor(1 second)	
	KA	
	Copper conductor	Aluminum conductor
10	1.51	0.988
16	2.39	1.56
25	3.69	2.42
35	5.15	3.37
50	7.31	4.79
70	10.2	6.68
95	13.8	9.03
120	17.4	11.4
150	21.7	14.2
185	26.7	17.5
240	34.6	22.6
300	43.1	28.2
400	57.4	37.6
500	71.7	47.0
630	88.8	58.0

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

#### Single-core cable

Nominal cross-section of conductor mm <sup>2</sup>	Rated voltages of cable (kV)			
	12/20	18/30	21/35	26/35
	Short-circuit current A			
35	-	-	-	-
50	1096	-	-	-
70	1095	1284	1286	1288
95	1091	1281	1285	1286
120	1272	1280	1284	1283
150	1271	1279	1280	1282
185	1270	1278	1279	1282
240	1267	1275	1279	1279
300	1266	1274	1276	1278
400	1265	1271	1275	1277
500	1260	1270	1272	1274
630	1257	1266	1272	1273
35	1253	1265	1270	1270

#### Capacitance of cable(reference value)

Nominal cross-section of conductor mm <sup>2</sup>	Rated voltages of cable (kV)			
	12/20	18/30	21/35	26/35
	Capacitance for each phase μF/km			
25	0.1378	0.1163	0.1064	0.0992
35	0.1502	0.1251	0.1140	0.1061
50	0.1661	0.1363	0.1239	0.1150
70	0.1868	0.1508	0.1365	0.1263
95	0.2060	0.1643	0.1483	0.1368
120	0.2228	0.1760	0.1584	0.1460
150	0.2418	0.1893	0.1700	0.1563
185	0.2656	0.2060	0.1815	0.1665
240	0.2916	0.2207	0.1972	0.1805
300	0.3175	0.2387	0.2128	0.1745
400	0.3551	0.2648	0.2354	0.2146
500	0.3880	0.2876	0.2551	0.2321
630	0.4278	0.3151	0.2789	0.2533

### Inductance for single-core cable.(reference value)

Nominal cross-section of conductor mm <sup>2</sup>	Rated voltages of cable (kV)			
	12/20	18/30	21/35	26/35
	Inductance $\mu$ H/km			
25	0.6621	0.7006	0.7168	0.7273
35	0.6390	0.6762	0.6942	0.7021
50	0.6145	0.6501	0.6675	0.6751
70	0.5919	0.5252	0.6394	0.6467
95	0.5726	0.6043	0.6180	0.6279
120	0.5586	0.5891	0.6051	0.6118
150	0.5449	0.5740	0.5895	0.5959
185	0.5351	0.5640	0.5760	0.5839
240	0.5216	0.5487	0.5615	0.5677
300	0.5102	0.5376	0.5484	0.5540
400	0.4991	0.5219	0.5343	0.5395
500	0.4907	0.5128	0.5224	0.5272
630	0.4827	0.5012	0.5101	0.5161

### Inductance for three-core cable(reference value)

Nominal cross-section of conductor mm <sup>2</sup>	Rated voltages of cable (kV)		
	12/20	18/30	26/35
	Inductance $\mu$ H/km		
25	-	-	-
35	0.4064	-	-
50	0.3845	0.4396	0.4679
70	0.3620	0.4145	0.4427
95	0.3454	0.3956	0.4208
120	0.3392	0.3799	0.4019
150	0.3217	0.3642	0.3862
185	0.3145	0.3485	0.3737
240	0.3030	0.3360	0.3611
300	0.2935	0.3266	0.3485
400	0.2822	0.3041	0.3266
500	0.2742	-	-
630	-	-	-

# PVC Insulated Power Cable

Extruded XLPE insulation with rated voltage from 0.6/1KV to 1.8/3KV

## Manufacturing standards

ASTM ICEA BS DIN IEC GB AS/NZS etc.

## Operating features

### Operating temperature

Max. Permissible continuous operating temperature of Conductors shall not exceed 70°C

### Conductor Short circuit temperature

Not exceeding 160°C .( Max. duration 5 seconds)

### Bending radius:

Bending radius of single core cable: 20D

Bending radius multi-core cable: 15D

D=Actual overall diameter of cable (mm)

### Installation temperature:

The lowest temperature of installation is 0°C .

Laying conditions and basic parameters for calculating current ratings:

Method of laying      Ambient temperature

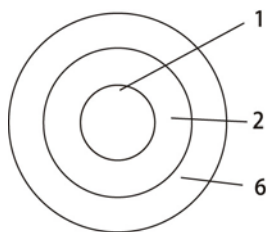
In air                      40°C

Direct burial              25°C

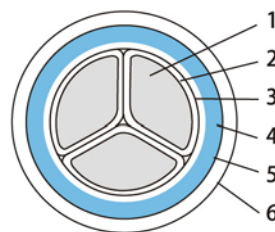
Soil thermal resistivity 1.0°C • m/W

Layout of single core cables: In triangle (Touch each other)

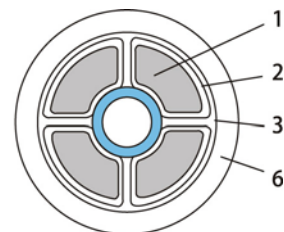
## Sketches of product construction



Single-core non-armoured cable



Three-core armoured cable



“4+1” core non-armoured cable

1、 Conductor 2、 PVC Insulation 3、 Filler 4、 Inner Cover 5、 Armour 6、 Outer sheath

## Scope of cables

No .of cores	Nominal area of condutor (mm <sup>2</sup> )		
	V V 、 VLV	V V <sub>22</sub> . VLV <sub>22</sub>	V V <sub>32</sub> . VLV <sub>32</sub>
1*	1.5-400	10-300	10-300
2	1.5-240	4-300	25-185
3	1.5-240	4-300	4-240
3+1	4-240	4-300	25-185
4	4-240	4-240	25-185
3+2	4-300	4-300	
4+1	4-240	4-240	
5	4-95	4-95	

\* Non-magnetic materials shall be applied for the armor of single core cable.

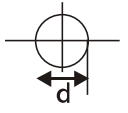
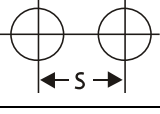

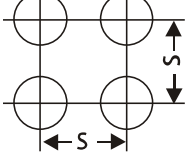
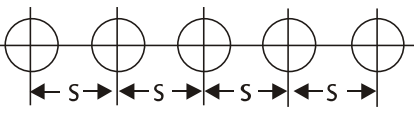
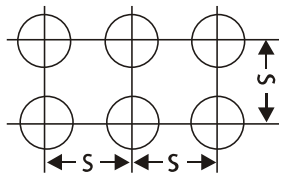
## Type,description and main applications

Table 1

Type	Description	Main application
VV VLV	Cu or Al conductor PVC insulated PVC sheathed power cable	For laying indoor and outdoor, unable to bear external mechanical force but the tractive force during laying. Laying Single core cable in magnetic duct is not permissible.
V V 22 VLV22	Cu or Al conductor insulated steel tape armoured PVC sheathed power cable	For laying underground, able to bear external mechanical force, but unable to bear large pulling force.
V V32 VLV32	Cu or Al conductor XLPE insulated fine steel wire armoured PVC sheathed power cable	For laying underground, vertical well, or underwater, able to bear certain pulling force.

Note: ZR is added in the front of the type of common power cable to form flame resistant power cable type. e.g. ZR-VV,ZR-VLV22,ZR-VV32 and so on.

## Rating factors of current parallel installation of multi cables in air

Nos installed	Arrangement	S=d	S=2d	S=3d
1		1.00	1.00	1.00
2		0.85	0.95	1.00
3		0.80	0.90	1.00
4		0.70	0.90	0.95
5		0.70	0.90	0.95
6		0.60	0.90	0.95

Note:d =O.D of cable,S=The distance between the two adjacent cable center.



## Single-core PVC Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Nom. sheath thickness mm	Approx OD of cable mm	Apporx weight of cable kg/km		Max. DC Resistance of Conductor at 20 °C Ω/km		Current Rating (A)				
									Direct in ground		Run in air		
									VV	VLV	Cu	Al	Cu
0.6/1kv	1.5	0.8	1.4	6	51	42	12.1	-	-	-	-	-	-
	2.5	0.8	1.4	7	64	49	7.41	12.1	36	27	25	19	
	4	1.0	1.4	8	90	65	4.61	7.41	47	35	33	26	
	6	1.0	1.4	8	113	76	3.08	4.61	58	46	41	34	
	10	1.0	1.4	9	158	98	1.83	3.08	78	58	57	44	
	16	1.0	1.4	10	221	125	1.15	0.91	100	76	76	59	
	25	1.2	1.4	12	321	171	0.727	1.20	130	98	98	76	
	35	1.2	1.4	13	420	210	0.524	0.868	155	115	115	90	
	50	1.4	1.4	15	579	279	0.387	0.641	185	140	145	110	
	70	1.4	1.5	17	778	358	0.268	0.443	225	170	180	140	
	95	1.6	1.5	19	1032	462	0.193	0.320	270	205	225	175	
	120	1.6	1.6	20	1276	556	0.153	0.253	310	235	260	200	
	150	1.8	1.7	22	1585	684	0.124	0.206	350	265	300	230	
	185	2.0	1.7	24	1933	822	0.0991	0.164	395	300	345	270	
	240	2.2	1.8	27	2477	1036	0.0754	0.125	455	350	410	320	
300	2.4	1.9	30	3074	1273	0.0601	0.100	515	395	475	370		

## Two-core PVC Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm		Approx OD of cable mm		Apporx weight of cable kg/km				Max. DC Resistance of Conductor at 20 °C Ω/km		Current Rating (A)			
														Direct in ground		Run in air	
														VV	VLV	V V22	VLV22
0.6/1kv	1.5	0.8	0.2	1.8	-	11	-	124	105	-	-	12.1	20.16	26	-	17	-
	2.5	0.8	0.2	1.8	-	12	-	151	120	-	-	7.41	12.1	34	26	23	18
	4	1.0	0.2	1.8	1.8	14	16	213	164	361	312	4.61	7.41	44	35	31	24
	6	1.0	0.2	1.8	1.8	15	17	271	197	430	356	3.08	4.61	556	45	38	32
	10	1.0	0.2	1.8	1.8	17	19	364	244	548	428	1.83	3.08	76	59	53	42
	16	1.0	0.2	1.8	1.8	19	21	494	302	702	509	1.15	1.91	100	77	71	55
	25	1.2	0.2	1.8	1.8	22	24	702	402	946	646	0.727	1.20	125	100	90	70
	35	1.2	0.2	1.8	1.8	24	25	902	482	1170	749	0.524	0.868	155	120	110	86
	50	1.4	0.2	1.8	1.8	23	26	1182	580	1418	829	0.387	0.641	185	145	135	105
	70	1.4	0.2	1.9	1.9	25	28	15779	737	1849	1016	0.268	0.443	230	175	165	130
	95	1.6	0.5	2.0	2.1	29	33	2111	969	2478	1606	0.193	0.320	275	210	210	165
	120	1.6	0.5	2.1	2.2	31	35	2598	1156	3218	1839	0.153	0.253	310	245	245	190
	150	1.8	0.5	2.2	2.3	34	38	3232	1429	3958	2172	0.124	0.206	350	275	280	215
	185	2.0	0.5	2.4	2.4	38	42	3974	1749	4787	2562	0.0991	0.164	395	310	320	250
	240	2.2	0.5	2.6	2.6	42	46	5092	2206	5948	3093	0.0754	0.125	455	350	375	295

### Three-core PVC Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm		Approx OD of cable mm		Apporx weight of cable kg/km				Max. DC Resistance of Conductor at 20 °C Ω/km		Current Rating (A)			
				VV VLV	V V22 VLV22	VV VLV	V V22 VLV22	VV	VLV	V V22	VLV22	Cu	Al	Direct in ground		Run in air	
															Cu	Al	Cu
0.6/1kv	1.5	0.8	-	1.8	-	11	-	147	119	-	-	12.1	18.9	22	-	15	-
	2.5	0.8	-	1.8	-	12	-	186	139	-	-	7.41	12.1	29	23	19	15
	4	1.0	0.2	1.8	1.8	14	17	261	187	417	343	4.61	7.41	38	30	26	20
	6	1.0	0.2	1.8	1.8	15	18	332	220	500	389	3.08	4.61	47	39	32	26
	10	1.0	0.2	1.8	1.8	18	20	464	283	658	478	1.83	3.08	65	50	46	35
	16	1.0	0.2	1.8	1.8	20	22	658	369	878	589	1.15	1.91	84	65	60	47
	25	1.2	0.2	1.8	1.8	23	26	958	508	1218	767	0.727	1.20	110	84	77	60
	35	1.2	0.2	1.8	1.8	25	28	1253	621	1538	906	0.524	0.868	130	100	95	74
	50	1.4	0.2	1.8	1.9	26	28	1718	817	1991	1108	0.387	0.641	155	120	115	90
	70	1.4	0.2	1.9	2.0	28	32	2298	1036	2894	1645	0.268	0.443	195	150	145	115
	95	1.6	0.5	2.1	2.2	32	36	3101	1388	2808	2095	0.193	0.320	230	185	185	140
	120	1.6	0.5	2.2	2.3	35	39	3822	1658	4585	2420	0.153	0.253	260	205	210	165
	150	1.8	0.5	2.4	2.4	39	43	4762	2057	5548	2871	0.124	0.206	300	230	245	190
	185	2.0	0.5	2.5	2.6	43	47	5836	2500	6764	3429	0.0991	0.164	335	260	280	215
	240	2.2	0.5	2.7	2.7	48	52	7489	3162	8438	4155	0.0754	0.125	390	300	335	260

### (3+1)-core PVC Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm		Approx OD of cable mm		Apporx weight of cable kg/km				Max. DC Resistance of Conductor at 20 °C Ω/km		Current Rating (A)			
				VV VLV	V V22 VLV22	VV VLV	V V22 VLV22	VV	VLV	V V22	VLV22	Cu	Al	Direct in ground		Run in air	
															Cu	Al	Cu
0.6/1kv	3×4+1×2.5	1.0 0.8	0.2	1.8	1.8	15	17	304	215	481	391	4.61 7.41	7.41 12.1	38	30	26	20
	3×6+1×4	1.0 1.0	0.2	1.8	1.8	16	19	398	261	593	457	3.08 4.61	4.61 7.41	47	39	32	26
	3×10+1×6	1.0 1.0	0.2	1.8	1.8	17	21	546	328	778	560	1.83 3.08	3.08 4.61	65	50	46	35
	3×16+1×10	1.0 1.0	0.2	1.8	1.8	21	24	790	441	1045	696	1.15 1.83	1.91 3.08	84	65	60	47
	3×25+1×16	1.2 1.0	0.2	1.8	1.8	25	27	1148	601	1499	902	0.727 1.15	1.20 1.91	110	84	77	60
	3×25+1×16	1.2 1.0	0.2	1.8	1.8	26	29	1439	712	1763	1036	0.524 1.15	0.868 1.91	130	100	95	74
	3×50+1×25	1.4 1.2	0.5	1.9	1.9	27	30	2008	955	2617	1564	0.387 0.727	0.641 1.20	155	120	115	90
	3×70+1×35	1.4 1.2	0.5	2.0	2.0	30	34	2718	1245	3372	1924	0.268 0.524	0.443 0.868	195	150	145	115
	3×95+1×50	1.6 1.4	0.5	2.2	2.2	35	38	3657	1644	4415	2425	0.193 0.387	0.320 0.641	230	185	185	140
	3×120+1×70	1.6 1.4	0.5	2.3	2.3	38	41	4568	1983	5423	2843	0.153 0.268	0.253 0.443	260	205	210	165
	3×150+1×70	1.8 1.4	0.5	2.4	2.4	42	45	5499	1373	6452	3330	0.124 0.268	0.206 0.443	300	230	245	190
	3×185+1×95	2.0 1.6	0.5	2.6	2.6	46	50	6844	2936	7862	3989	0.0981 0.193	0.164 0.320	335	260	280	215
	3×240+1×120	2.2 1.6	0.5	2.8	2.8	52	56	8737	3687	9938	4888	0.0754 0.153	0.125 0.253	390	300	335	260

## Four-core Same Cross Section PVC Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm		Approx OD of cable mm		Apporx weight of cable kg/km				Max. DC Resistance of Conductor at 20 °C Ω/km		Current Rating (A)			
				VV	V V22	VV	V V22	VV	VLV	V V22	VLV22	Cu	Al	Direct in ground		Run in air	
				VLV	VLV22	VLV	VLV22	VLV	VLV	V V22	VLV22			Cu	Al	Cu	Al
0.6/1kv	4	1.0	0.2	1.8	1.8	15	18	328	229	497	398	4.61	7.41	38	30	26	20
	6	1.0	0.2	1.8	1.8	17	19	420	272	604	456	3.08	4.61	47	39	32	26
	10	1.0	0.2	1.8	1.8	19	22	598	357	813	570	1.83	3.08	65	50	45	35
	16	1.0	0.2	1.8	1.8	22	24	852	467	1096	709	1.15	1.91	84	65	60	47
	25	1.2	0.2	1.8	1.8	25	28	1247	645	1538	933	0.727	1.20	110	84	77	60
	35	1.2	0.5	1.8	1.8	28	31	1635	793	2245	1397	0.524	0.868	130	100	95	74
	50	1.4	0.5	1.9	2.0	29	33	2256	1053	2862	1676	0.387	0.641	155	120	115	90
	70	1.4	0.5	2.1	2.1	32	36	3044	1360	3726	2047	0.268	0.443	195	150	145	115
	95	1.6	0.5	2.2	2.3	36	41	4073	1789	4898	2597	0.193	0.320	230	185	185	140
	120	1.6	0.5	2.3	2.4	40	44	5032	2147	5926	3021	0.153	0.253	260	205	210	165
	150	1.8	0.5	2.5	2.6	44	48	6293	2687	7236	3641	0.124	0.206	300	230	245	190
	185	2.0	0.5	2.7	2.7	49	53	7733	3284	8832	4352	0.0991	0.164	335	260	280	215
	240	2.2	0.5	2.8	2.9	55	59	9933	4162	11059	5307	0.0754	0.125	390	300	335	260

## (4+1) -core PVC Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm		Approx OD of cable mm		Apporx weight of cable kg/km				Max. DC Resistance of Conductor at 20 °C Ω/km		Current Rating (A)			
				VV	V V22	VV	V V22	VV	VLV	V V22	VLV22	Cu	Al	Direct in ground		Run in air	
				VLV	VLV22	VLV	VLV22	VLV	VLV	V V22	VLV22			Cu	Al	Cu	Al
0.6/1kv	4×4+1×2.5	1.0 0.8	0.2	1.8	-	16	-	369	-	255	-	4.61 7.41	7.41 12.1	38	30	26	20
	4×6+1×4	1.0 1.0	0.2	1.8	-	18	-	483	-	310	-	3.08 4.61	4.61 7.41	47	39	32	26
	4×10+1×6	1.0 1.0	0.2	1.8	1.8	20	23	677	956	399	671	1.83 3.08	3.08 4.61	65	50	46	35
	4×16+1×10	1.0 1.0	0.2	1.8	1.8	23	26	968	1290	523	832	1.15 1.83	1.91 3.08	84	65	60	47
	4×25+1×16	1.2 1.0	0.2	1.8	1.8	27	29	1432	1742	734	1024	0.727 1.15	1.20 1.91	110	84	77	60
	4×35+1×16	1.2 1.0	0.2	1.8	2.0	28	32	1819	2552	881	1586	0.524 1.15	0.868 1.91	130	100	95	74
	4×50+1×25	1.4 1.2	0.5	1.9	2.0	29	34	2520	3173	1167	1780	0.387 0.727	0.641 1.20	155	120	115	90
	4×70+1×35	1.4 1.2	0.5	2.0	2.1	31	35	3388	4118	1494	2168	0.268 0.524	0.443 0.868	15	150	145	115
	4×95+1×50	1.6 1.4	0.5	2.1	2.2	37	40	4567	5430	1982	2768	0.193 0.387	0.320 0.641	230	185	185	140
	4×120+1×70	1.6 1.4	0.5	2.2	2.3	39	42	5694	6590	2388	3186	0.153 0.268	0.253 0.443	260	205	210	165
	4×150+1×70	1.8 1.4	0.5	2.4	2.4	42	46	6928	8150	2900	4003	0.124 0.268	0.206 0.443	300	230	245	190
	4×185+1×95	2.0 1.6	0.5	2.7	2.7	49	52	8673	9940	3654	4771	0.0991 0.093	0.164 0.320	335	260	280	215
	4×240+1×120	2.2 1.6	0.5	2.8	2.8	54	58	11060	13022	4568		0.075 40.153	0.125 0.253	390	300	335	260

### (3+2) -core PVC Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm		Approx OD of cable mm		Apporx weight of cable kg/km				Max. DC Resistance of Conductor at 20 °C Ω/km		Current Rating (A)					
				VV	V V22	VV	V V22	VV	VLV	V V22	VLV22	Cu	Al	Direct in ground		Run in air			
				VLV	VLV22	VLV	VLV22	VLV	VLV	V V22	VLV22			Cu	Al	Cu	Al		
0.6/1kv	3×4+2×2.5	1.0 0.8	0.2	1.8	1.8	16	18	336	231	533	427	4.61	7.41	7.41	12.1	38	30	26	20
	3×6+2×4	1.0 1.0	0.2	1.8	1.8	17	20	444	284	671	510	3.08 4.61	4.61 7.41	47	39	32	26		
	4×10+2×6	1.0 1.0	0.2	1.8	1.8	20	22	616	361	875	620	1.83 3.08	3.08 4.61	65	50	46	35		
	3×16+2×10	1.0 1.0	0.2	1.8	1.8	23	25	883	474	1181	772	1.15 1.83	1.91 3.08	84	65	60	47		
	3×25+2×16	1.2 1.0	0.2	1.8	1.8	26	29	1305	662	1670	1026	0.727 1.15	1.20 1.91	110	84	77	60		
	3×35+2×16	1.2 1.0	0.2	1.8	1.9	28	32	1606	782	2286	1462	0.524 1.15	0.868 1.91	130	100	95	74		
	3×50+2×25	1.4 1.2	0.5	1.9	2.0	33	36	2293	1090	3095	1892	0.387 0.727	0.641 1.20	155	120	115	90		
	4×70+2×35	1.4 1.2	0.5	2.1	2.1	36	40	3051	1367	3903	2245	0.268 0.524	0.443 0.868	195	150	145	115		
	3×95+2×50	1.6 1.4	0.5	2.2	2.3	42	46	4138	1824	5132	2847	0.193 0.387	0.320 0.641	230	185	185	140		
	3×120+2×70	1.6 1.4	0.5	2.4	2.4	45	49	5244	2238	6362	3365	0.153 0.268	0.253 0.443	260	205	210	165		
	3×150+2×70	1.8 1.4	0.5	2.5	2.6	50	54	6209	2662	7446	3907	0.124 0.268	0.206 0.443	300	230	245	190		
	3 185+2 95	2.0 1.6	0.5	2.7	2.7	55	59	7783	3304	9156	4712	0.0991 0.093	0.164 0.320	335	260	280	215		
3 240+2 120	2.2 1.6	0.5	2.9	3.0	62	66	9943	4172	11518	5474	0.0754 0.153	0.125 0.253	390	300	335	260			

### Five-core same Cross-Section PVC Insulated PVC Sheathed Power Cable

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Nom. sheath thickness mm		Approx OD of cable mm		Apporx weight of cable kg/km				Max. DC Resistance of Conductor at 20 °C Ω/km		Current Rating (A)			
				VV	V V22	VV	V V22	VV	VLV	V V22	VLV22	Cu	Al	Direct in ground		Run in air	
				VLV	VLV22	VLV	VLV22	VLV	VLV	V V22	VLV22			Cu	Al	Cu	Al
0.6/1kv	5×4	1.0	0.2	1.8	1.8	17	19	465	620	265	457	4.61	7.41	38	30	26	20
	5×6	1.0	0.2	1.8	1.8	18	21	617	780	317	530	3.08	4.61	47	39	32	26
	5×10	1.0	0.2	1.8	1.8	21	23	815	1030	446	722	1.83	3.08	65	50	45	35
	5×16	1.0	0.2	1.8	1.8	24	36	1167	1475	608	906	1.15	1.91	84	65	60	47
	5×25	1.2	0.5	1.8	2.0	28	32	1753	2310	696	1601	0.727	1.20	110	84	77	60
	5×35	1.2	0.5	1.9	2.1	31	35	2277	2996	1138	1937	0.524	0.868	130	100	95	74
	5×50	1.4	0.5	2.1	2.2	36	40	2918	3699	1423	2312	0.387	0.641	155	120	115	90
	5×70	1.4	0.5	2.2	2.4	41	46	3982	4970	1859	2891	0.268	0.443	195	150	145	115
	5×95	1.6	0.5	2.4	2.6	47	52	5438	6229	2503	3715	0.193	0.320	230	185	185	140

## Single-core PVC Insulated PVC Sheathed Power Cable with Steel Tape Armour (or Thin Steel Wire Armour)

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Steel tape thickness mm	Dia. of steel wire mm	Nom. sheath thickness mm		Approx OD of cable mm		Apporx weight of cable kg/km				Max. DC Resistance of Conductor at 20 °C Ω/km		Current Rating (A)			
					V V22 VLV22	V V32 VLV32	V V22 VLV22	V V32 VLV32	Vv22	VLV22	VV32	VLV32	Cu	Al	Direct in ground		Run in air	
																Cu	Al	Cu
0.6/1kv	10	1.0	0.2	1.25	1.4	-	12	-	305	243	-	-	1.83	3.08	78	58	57	44
	16	1.0	0.2	1.6	1.4	-	14	-	338	249	-	-	1.15	1.91	100	76	76	59
	25	1.2	0.2	2.0	1.4	-	15	-	457	308	-	-	0.727	1.30	130	98	98	76
	35	1.2	0.2	2.5	1.5	-	16	-	620	410	-	-	0.524	0.868	155	11	11	96
	50	1.4	0.5	2.5	1.5	1.6	17	22	740	443	932	635	0.387	0.641	185	14	14	11
	70	1.4	0.5	3.15	1.6	1.6	20	25	1160	727	1484	1055	0.268	0.443	225	17	18	14
	95	1.6	0.5	3.15	1.6	1.7	22	28	1238	740	1848	1254	0.193	0.320	270	20	22	17
	120	1.6	0.5	3.15	1.7	1.8	24	30	1532	821	2154	1402	0.153	0.253	310	23	26	20
	150	1.8	0.5	3.15	1.8	1.9	26	32	1865	976	2569	1600	0.124	0.206	350	26	30	23
	185	2.0	0.5	3.15	1.8	1.9	28	34	2275	1130	2996	1837	0.099	0.164	395	30	34	27
	240	2.2	0.5	3.15	1.9	2.1	31	39	2820	1399	3963	2441	0.075	0.125	455	35	41	32
	300	2.4	0.5	3.15	2.0	2.2	35	42	3792	2019	4730	2822	0.060	0.100	515	39	47	37

## Two-core PVC Insulated PVC Sheathed Power Cable with Thin Steel Wire Armour

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Dia. of steel wire mm	Nom. sheath thickness mm	Approx OD of cable mm	Apporx weight of cable kg/km		Max. DC Resistance of Conductor at 20 °C Ω/km		Current Rating (A)			
						VV <sub>32</sub>	VLV <sub>32</sub>	Cu	Al	Direct in ground		Run in air	
										Cu	Al	Cu	Al
0.6/1kv	2.5	0.8	-	-	-	-	-	-	-	-	-	-	-
	4	1.0	-	-	-	-	-	-	-	-	-	-	-
	6	1.0	-	-	-	-	-	-	-	-	-	-	-
	10	1.0	-	-	-	-	-	-	-	-	-	-	-
	16	1.0	-	-	-	-	-	-	-	-	-	-	-
	25	1.2	1.6	1.8	26	1345	1035	0.727	1.20	125	100	90	70
	35	1.2	1.6	1.8	28	1607	1174	0.524	0.868	155	120	110	86
	50	1.4	1.6	1.9	32	2234	1615	0.387	0.641	185	145	135	105
	70	1.4	2.0	1.9	35	2773	1905	0.268	0.443	230	175	165	130
	95	1.6	2.0	2.1	39	3465	2288	0.193	0.320	275	210	210	165
	120	1.6	2.0	2.2	42	4094	2607	0.153	0.253	310	245	245	190
	150	1.8	2.5	2.3	47	5329	3471	0.124	0.206	350	275	280	215
185	2.0	2.5	2.4	55	6426	4134	0.0991	0.164	395	310	320	250	

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Dia. of steel wire mm	Nom. sheath thickness mm	Approx OD of cable mm	Apporx weight of cable kg/km		Max. DC Resistance of Conductor at 20 °C Ω/km		Current Rating (A)			
						VV <sub>32</sub>	VLV <sub>32</sub>	Cu	Al	Direct in ground		Run in air	
										Cu	Al	Cu	Al
0.6/1kv	4	1.0	0.8	1.8	19	554	480	4.61	7.41	38	30	26	20
	6	1.0	0.8	1.8	21	654	543	3.08	4.61	47	39	32	26
	10	1.0	0.8	1.8	24	880	691	1.83	3.08	65	50	45	35
	16	1.0	1.6	1.8	28	1472	1173	1.15	1.91	84	65	60	47
	25	1.2	1.6	1.8	32	1958	1485	0.727	1.20	110	84	77	60
	35	1.2	1.6	1.9	35	2363	1707	0.524	0.868	130	100	95	74
	50	1.4	1.6	2.0	36	2873	2044	0.387	0.641	155	120	115	90
	70	1.4	2.0	2.1	39	3703	2402	0.268	0.443	195	150	145	115
	95	1.6	2.5	2.3	44	4702	2936	0.193	0.320	230	185	185	140
	120	1.6	2.5	2.4	49	6013	3783	0.153	0.253	260	205	210	165
	150	1.8	2.5	2.6	54	7299	4512	0.124	0.206	300	230	245	190
	185	2.0	2.5	2.7	60	8690	5253	0.0991	0.164	335	260	280	215
240	2.2	2.5	2.9	68	10927	6467	0.0754	0.125	390	300	33	260	

### (3+2) PVC Insulated PVC Sheathed Power Cable with Thin Steel Wire Armour

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Dia. of steel wire mm	Nom. sheath thickness mm	Approx OD of cable mm	Apporx weight of cable kg/km		Max. DC Resistance of Conductor at 20 °C Ω/km		Current Rating (A)			
						VV <sub>32</sub>	VLV <sub>32</sub>	Cu	Al	Direct in ground		Run in air	
										Cu	Al	Cu	Al
0.6/1kv	3×25+1×16	1.2 1.0	1.6	1.9	34	2201	1627	0.727 1.15	1.20 1.91	110	84	77	60
	3×35+1×16	1.2 1.0	1.6	2.0	36	2599	1844	0.524 1.15	0.868 1.91	130	100	95	74
	4×10+2×6	1.4 1.2	2.0	2.1	38	3378	2291	0.387 0.727	0.641 1.20	155	120	115	90
	3×16+2×10	1.4 1.2	2.0	2.2	42	4163	2705	0.268 0.524	0.443 0.868	195	150	145	115
	3×25+2×16	1.6 1.4	2.0	2.4	49	5864	3802	0.193 0.387	0.320 0.641	230	185	185	140
	3×35+2×16	1.6 1.4	2.5	2.5	54	7037	4378	0.153 0.268	0.253 0.443	260	205	210	165
	3×50+2×25	1.8 1.4	2.5	2.7	59	8339	5123	0.124 0.268	0.206 0.443	300	230	245	190
	4×70+2×35	2.0 1.6	2.5	2.9	64	9996	5964	0.0991 0.193	0.164 0.320	335	260	280	215

### Four-core Same Cross-Section PVC Insulated PVC Sheathed Power Cable with Thin Steel Wire Armour

AC Rated Voltage	Nom. Cross-section mm <sup>2</sup>	Nom. insulation thickness mm	Dia. of steel wire mm	Nom. sheath thickness mm	Approx OD of cable mm	Apporx weight of cable kg/km		Max. DC Resistance of Conductor at 20 °C Ω/km		Current Rating (A)			
						VV <sub>32</sub>	VLV <sub>32</sub>	Cu	Al	Direct in ground		Run in air	
										Cu	Al	Cu	Al
0.6/1kv	25	1.2	1.6	1.9	35	2320	1689	0.727	1.20	110	84	77	60
	35	1.2	1.6	2.0	38	2854	1979	0.524	0.868	130	100	95	74
	50	1.4	2.0	2.1	39	3600	2361	0.387	0.641	155	120	115	90
	70	1.4	2.0	2.2	42	4568	2833	0.268	0.443	195	150	145	115
	95	1.6	2.0	2.4	49	6288	3934	0.193	0.320	230	185	185	140
	120	1.6	2.5	2.5	54	7478	4505	0.153	0.253	260	205	210	165
	150	1.8	2.5	2.7	59	9056	4310	0.124	0.206	300	230	245	190
	185	2.0	2.5	2.9	64	10797	6213	0.0991	0.164	335	260	280	215

### Rating factors of current rating for ambient temperature

Operation temperature (°C)	Air temperatue (°C)										Soil temperatue (°C)					
	10	15	20	25	30	35	40	45	50	10	15	20	25	30	35	
70	1.41	1.35	1.29	1.22	1.15	1.08	1.00	0.91	0.81	1.15	1.11	1.05	1.00	0.94	0.88	

### Rating factors of current rating for different soil thermal resistivity

Rated Voltage	Scope of cross-sections			Soil thermal resistivity Pw(°Cm/W)		
	mm <sup>2</sup>	0.8	1.0	1.2	1.5	2.0
0.6/1kv	≤35	1.06	1.00	0.95	0.88	0.80
	50-150	1.08	1.00	0.94	0.87	0.77
	≥185	1.09	1.00	0.93	0.85	0.76

# Fire-Retarding Power Cable

## Application

The cables are designed for fixed installation of power transmission and distribution equipments and power equipments where fire retardation is requested with rated voltage 0.6/1KV and below.

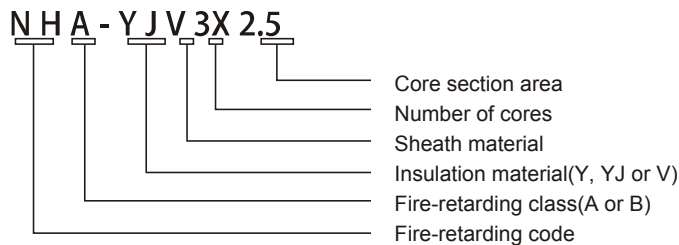
## Manufacturing standards

ASTM ICEA BS DIN IEC GB AS/NZS etc.

## Operating features

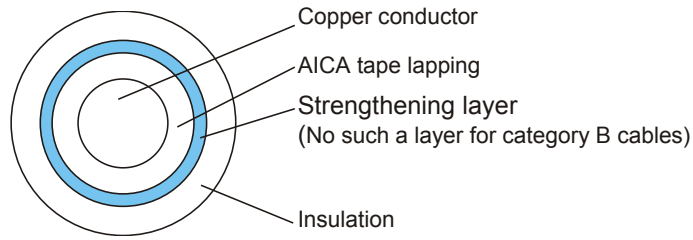
- AC Rated voltage  $U_0/U$  0.6/1KV.
- Testing flame temperature: Category A is 950°C-1000°C  
Category B is 750°C-800°C
- Permissible continuous conductor working temperature of PVC, PE insulated cable is not more than 70°C ,  
permissible
- continuous conductor working temperature XLPE is not more than 90°C .
- The lowest ambient temperature of cable installation is 0°C  
Min.bending radius of cable installation is:  
Non-armoured cable 10D mm;  
Armoured cable 12D mm.  
In the formula: D-actual overall diameter of cable, mm.

## Descriptive method of cable and sketches of product construction

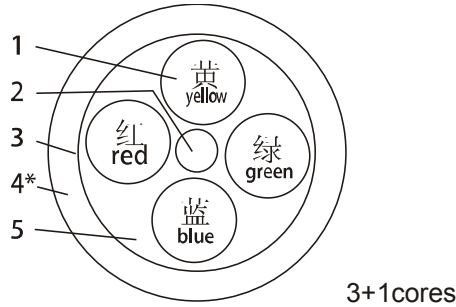


Note: Y, YJ and V mean PE, XLPE and PVC respectively. We can manufacture category A or B cable upon requests.

1. Construction of insulated core



2. Diagram of cable construction



- 1 Insulated core
- 2 Flame resistance PVC filler
- 3 Lapping layer
- 4 Outer sheath (Outer sheath without armouring is flame resistance PVC sheath, outer sheath with armouring include flame resistance PVC inner layer, steel tape armour and flame resistance PVC sheath)
- 5 Flame resistance PP tape filler

**Type and description**

TYPE	Description	Application
NHA(B)-VV	Copper core PVC insulated and sheathed fire-retarding power cable	For fixed installation laying indoors, in trenches and ducts.
NHA(B)-VV22	Copper core PVC insulated and sheathed fire-retarding power cable with steel tape armour	For fixed installation laying indoors, in trenches and ducts where heavier mechanical force is withstood
NHA(B)-YJV	Copper core XLPE insulated and PVC sheathed fire-retarding power cable	For fixed installation laying indoors, in trenches and ducts.
NHA(B)-YJV22	Copper core XLPE insulated and PVC sheathed fire-retarding power cable with steel armour	For fixed installation laying indoors, in trenches and ducts where heavier mechanical force is withstood
NHA(B)-YV	Copper core PE insulated and PVC sheathed fire-retarding power cable	For fixed installation laying indoors, in trenches and ducts.
NHA(B)-YV22	Copper core PE insulated and PVC sheathed fire-retarding power cable with steel tape armour	For fixed installation laying indoors, in trenches and ducts where heavier mechanical force is withstood



## Fire-Retarding Power Cable

### Specification of cable

Type	Core number	Nom. Cross section mm <sup>2</sup>
NHA (B) –VV NHA (B) –VV22	1	2.5~300
NHA (B) –YJV NHA (B) –YJV22	2、3	2.5~185
NHA (B) –YV NHA (B) –YV22	3+1、4、3+2.5	4~185

### Construction and main technical parameter

Nom. Cross-section of conductor mm <sup>2</sup>	Max. DC Resistance at 20℃ Ω/km	Nom. Thickness of insulation mm		
		PVC insulation	PE insulation	XLPE insulation
2.5	7.41	0.8	0.7	0.7
4	4.61	1.0	0.7	0.7
6	3.08	1.0	0.7	0.7
10	1.83	1.0	0.7	0.7
16	1.15	1.0	0.7	0.7
25	0.727	1.2	0.9	0.9
35	0.524	1.2	0.9	0.9
50	0.387	1.4	1.0	1.0
70	0.268	1.4	1.1	1.1
95	0.193	1.6	1.1	1.1
120	0.153	1.6	1.2	1.2
150	0.124	1.8	1.4	1.4
185	0.0991	2.0	1.6	1.6
240	0.0754	2.2	1.7	1.7
300	0.0601	2.4	1.8	1.8

### Nom. sheath thickness, approx. overall diameter and approx. weight

No. of cores × section area mm <sup>2</sup>	NHA (B) –YJV			NHA (B) –VV			NHA (B) –VV22		
	Sheath thickness mm	Approx. O. D. mm	Approx. weight kg/km	Sheath thickness mm	Approx. O. D. mm	Approx. weight kg/km	Sheath thickness mm	Approx. O. D. mm	Approx. weight kg/km
1 2.5	1.4	7.1	72	1.4	7.3	79	-	-	-
14	1.4	7.5	89	1.4	8.2	105	-	-	-
16	1.4	8.1	114	1.4	8.8	131	-	-	-
110	1.4	9.5	162	1.4	10.2	184	-	-	-
116	1.4	10.5	226	1.4	11.2	250	-	-	-
125	1.4	12.1	325	1.4	12.7	355	-	-	-
135	1.4	13.0	423	1.4	13.8	457	-	-	-
150	1.4	14.8	568	1.4	15.7	612	-	-	-
170	1.5	16.8	776	1.5	17.4	820	-	-	-
195	1.5	18.5	1020	1.6	19.5	1093	-	-	-
1 120	1.6	20.0	1267	1.7	21.2	1343	-	-	-
1 150	1.7	22.8	1567	1.8	23.7	1655	-	-	-
1 185	1.7	24.9	1923	1.9	25.9	2035	-	-	-
1 240	1.8	27.9	2436	2.0	29.1	2579	-	-	-
1 300	1.9	30.5	3007	2.0	31.7	3168	-	-	-
2 2.5	1.8	12.7	188	1.8	13.1	202	1.8	16.3	368
24	1.8	13.5	233	1.8	14.9	271	1.8	18.1	459
26	1.8	14.7	291	1.8	16.1	333	1.8	19.3	536
210	1.8	17.5	416	1.8	18.9	468	1.8	22.1	705
216	1.8	19.5	563	1.8	20.9	621	1.8	24.1	882
225	1.8	22.7	805	1.8	24.1	877	1.8	27.3	1176
235	1.8	24.7	1031	1.8	26.1	1109	1.9	29.5	1446

## Fire-Retarding Power Cable

No. of cores section area mm	NHA (B) -YJV			NHA (B) -VV			NHA (B) -VV22		
	Sheath thickness mm	Approx. O.D. mm	Approx. weight kg/km	Sheath thickness mm	Approx. O.D. mm	Approx. weight kg/km	heath thickness mm	Approx. O.D. mm	Approx. weight kg/km
2×50	1.9	28.5	1391	1.9	30.1	1495	2.1	34.9	2216
2×70	2.0	32.3	1868	2.0	33.5	1970	2.2	38.3	2767
2×95	2.1	35.7	2443	2.2	37.9	2617	2.3	42.7	3514
2×120	2.2	38.7	3051	2.3	40.9	3232	2.4	45.7	4196
2×150	2.4	44.3	3784	2.4	45.9	3967	2.6	51.1	5093
2×185	2.5	48.5	4644	2.6	50.3	4878	2.8	55.7	6124
2×240	2.7	54.5	5884	2.8	56.7	6186	-	-	-
3×2.5	1.8	13.4	227	1.8	13.8	246	1.8	17.0	421
3×4	1.8	14.2	285	1.8	15.7	335	1.8	18.9	533
3×6	1.8	15.5	365	1.8	17.0	420	1.8	20.2	634
3×10	1.8	18.5	528	1.8	20.0	597	1.8	23.2	847
3×16	1.8	20.7	734	1.8	22.2	811	1.8	25.4	1088
3×25	1.8	24.1	1059	1.8	25.7	1156	1.9	29.1	1488
3×35	1.8	26.3	1375	1.8	27.8	1485	2.0	32.6	2151
3×50	1.9	30.5	1864	2.0	32.4	2020	2.1	37.0	2775
3×70	2.1	34.8	2543	2.1	36.1	2683	2.3	40.9	3539
3×95	2.2	38.4	3345	2.3	40.8	3576	2.4	45.6	4539
3×120	2.3	41.6	4165	2.4	44.0	4403	2.5	49.0	5461
3×150	2.5	47.6	5187	2.6	49.6	5460	2.7	54.8	6673
3×185	2.6	52.1	6344	2.7	54.1	6660	2.9	59.7	8034
3×240	2.9	58.8	8070	2.9	60.9	8454	-	-	-
4×2.5	1.8	14.5	285	1.8	15.0	310	1.8	18.2	499
4×4	1.8	15.5	357	1.8	17.1	427	1.8	20.3	641
4×6	1.8	16.9	463	1.8	18.6	537	1.8	21.8	770
4×10	1.8	20.3	679	1.8	22.0	772	1.8	25.2	1046
4×16	1.8	22.7	949	1.8	24.4	1054	1.8	27.6	1631
4×25	1.8	26.6	1387	1.9	28.5	1530	2.0	33.1	2212
4×35	1.9	29.2	1825	1.9	30.9	1963	2.1	35.7	2717
4×50	2.0	33.6	2476	2.1	35.8	2675	2.3	40.6	3539
4×70	2.2	38.4	3383	2.2	39.8	3566	2.4	44.8	4562
4×95	2.3	42.5	4464	2.4	45.1	4761	2.6	50.3	5907
4×120	2.4	46.0	5511	2.5	48.6	5817	2.7	54.0	7075
4×150	2.7	52.9	6878	2.7	54.8	7210	2.9	60.4	8649
4×185	2.9	58.1	8480	2.9	60.1	8864	3.1	65.9	10467
4×240	3.1	65.3	10743	3.2	67.9	11242	-	-	-
3×4+1×2.5	1.8	15.2	324	1.8	16.8	383	1.8	20.0	594
3×6+1×4	1.8	16.6	424	1.8	18.2	493	1.8	21.4	721
3×10+1×6	1.8	19.9	617	1.8	21.5	693	1.8	24.7	960
3×16+1×10	1.8	22.0	858	1.8	23.6	951	1.8	26.8	1244
3×25+1×16	1.8	25.7	1241	1.8	27.3	1357	2.0	32.1	2015
3×35+1×16	1.9	28.2	1585	1.9	29.8	1711	2.1	34.6	2425
3×50+1×25	2.0	32.6	2173	2.1	34.6	2347	2.2	39.2	3146
3×70+1×35	2.1	36.9	2972	2.2	38.5	3125	2.4	43.5	4053
3×95+1×50	2.3	40.9	3920	2.4	43.4	4167	2.5	48.4	6391
3×120+1×70	2.4	44.0	4880	2.5	46.4	5161	2.6	51.4	6280
3×150+1×70	2.6	50.3	5979	2.6	52.1	6255	2.8	57.5	7555
3×185+1×95	2.7	55.0	7429	2.8	57.1	7803	3.0	62.7	9251
3×240+1×120	2.9	61.1	9359	3.0	63.6	9767	-	-	-
3×4+2×2.5	1.8	16.4	401	1.8	17.8	468	1.8	21.0	691
3×6+2×4	1.8	17.8	514	1.8	19.7	617	1.8	22.9	863
3×10+2×6	1.8	20.8	729	1.8	22.7	746	1.8	25.9	1129
3×16+2×10	1.8	23.9	1056	1.8	25.7	1191	1.9	29.1	1523
3×25+2×16	1.8	27.6	1529	1.9	29.7	1699	2.1	34.5	2411
3×35+2×16	1.9	29.6	1872	2.0	31.6	2045	2.1	36.2	2782
3×50+2×25	2.1	34.4	2595	2.1	36.5	2815	2.3	41.3	3671
3×70+2×35	2.2	39.3	3531	2.3	41.1	3755	2.4	45.9	4719
3×95+2×50	2.4	43.7	4678	2.4	46.2	4982	2.6	51.4	6134
3×120+2×70	2.5	48.0	5948	2.6	50.5	6278	2.8	55.9	7550
3×150+2×70	2.7	53.0	6966	2.7	55.0	7309	2.9	60.6	8706
3×185+2×95	2.8	58.2	8708	2.9	60.7	9148	3.0	66.5	10715
3×240+2×120	3.1	65.0	10979	3.2	67.9	11486	-	-	-

## Fire-Retarding Power Cable

Continue Table

No. of cores section area mm	NHA(B)-YJV			NHA(B)-VV			NHA(B)-VV22		
	Sheath thickness mm	Approx. O.D. mm	Approx. weigh kg/km t	Sheath thickness mm	Approx. O.D. mm	Approx. weight kg/km	heath thickness mm	Approx. O.D. mm	Approx. weight kg/km
5×2.5	-	-	-	-	-	-	1.8	19.6	562
5×4	-	-	-	-	-	-	1.8	22.1	729
5×6	-	-	-	-	-	-	1.8	23.7	882
5×10	-	-	-	-	-	-	1.8	27.5	1203
5×16	-	-	-	-	-	-	2.0	31.8	1865
5×25	-	-	-	-	-	-	2.1	36.3	2528
5×35	-	-	-	-	-	-	2.2	39.2	3111
5×50	-	-	-	-	-	-	2.4	44.6	4095
5×70	-	-	-	-	-	-	2.6	49.6	5284
5×95	-	-	-	-	-	-	2.8	55.6	6867
5×120	-	-	-	-	-	-	2.9	59.7	8257
5×150	-	-	-	-	-	-	3.1	66.8	10096
5×185	-	-	-	-	-	-	3.3	72.8	12243

# Low Smoke Zero Halogen Flame Resistance Power Cable

## Application

The cables are designed for high building, subway, computer center, broadcasting and television center, offshore oil platform, ship, nuclear power station and other places where higher limit requirements of halogen gases and smoke density released by combustion of cables is requested.

## Type and description

Type	Description
WDZA-YJY	Copper core XLPE insulated and low smoke zero halogen PO sheathed category A low smoke zero halogen flame resistance power cable
WDZB-YJY	Copper core XLPE insulated and low smoke zero halogen PO sheathed category B low smoke zero halogen flame resistance power cable
WDZC-YJY	Copper core XLPE insulated and low smoke zero halogen PO sheathed category C low smoke zero halogen flame resistance power cable
WDZA-YJY23	Copper core XLPE insulated and low smoke zero halogen PO sheathed category A low smoke zero halogen flame resistance power cable with steel tape armour
WDZB-YJY23	Copper core XLPE insulated and low smoke zero halogen PO sheathed category B low smoke zero halogen flame resistance power cable with steel tape armour
WDZC-YJY23	Copper core XLPE insulated and low smoke zero halogen PO sheathed category C low smoke zero halogen flame resistance power cable with steel tape armour

## Specification

Rated voltage	Type	No. of cores	Nom. Cross section mm <sup>2</sup>
Nom. Cross section	WDZA-YJY, WDZB-YJY, WDZC-YJY	1	1.5-400
	WDZA-YJY, WDZB-YJY, WDZC-YJY	2	1.5-185
	WDZA-YJY23, WDZB-YJY23, WDZC-YJY23	2	4-185
	WDZA-YJY, WDZB-YJY, WDZC-YJY	3	1.5-300
	WDZA-YJY23, WDZB-YJY23, WDZC-YJY23	3	4-300
	WDZA-YJY, WDZB-YJY, WDZC-YJY	3+1	4-300
	WDZA-YJY23, WDZB-YJY23, WDZC-YJY23	3+1	4-300
	WDZA-YJY, WDZB-YJY, WDZC-YJY	4	4-185
	WDZA-YJY23, WDZB-YJY23, WDZC-YJY23	4	4-185
	WDZA-YJY, WDZB-YJY, WDZC-YJY	4+1	4-185
	WDZA-YJY23, WDZB-YJY23, WDZC-YJY23	4+1	4-185
	WDZA-YJY, WDZB-YJY, WDZC-YJY	3+2	4-185
	WDZA-YJY23, WDZB-YJY23, WDZC-YJY23	3+2	4-185
	WDZA-YJY, WDZB-YJY, WDZC-YJY	5	4-185
	WDZA-YJY23, WDZB-YJY23, WDZC-YJY23	5	4-185

## Operating features

- 4.1 Rated voltage  $U_0/U$  is 0.6/1kV.
- 4.2 Permissible continuous working temperature of conductor is 90°C
- 4.3 The lowest installation temperature of cable is 0°C. Min. Permissible bending radius is
  - Single core conductor:  $20(D+d)$  mm;
  - Multi-core conductor:  $15(D+d)$  mm.
 in the formula  
 D-actual diameter of cable, mm;  
 d-actual diameter of conductor, mm.
- 4.4 Conductor short circuit temperature (Max. duration 5 seconds) should not exceed 250°C.

# Water Proof Type XLPE Insulated Rat and Termite-proof Power Cable

## Application

The product is suitable for power transmission under complex environment with AC rated voltage 10KV and below.

## Type and description

Type		Description
cu	Al	
FYSS <sub>i</sub> -YJV	FYSS <sub>i</sub> -YJLV	Water proof type XLPE Insulated, rat and termite-proof PVC sheathed power cable
FYSS <sub>i</sub> -YTY	FYSS <sub>i</sub> -YTLY	Water proof type XLPE Insulated, rat and termite-proof PE sheathed power cable

## Specification

Rated voltage	Type	NO. of cores	Nominal section area mm <sup>2</sup>
0.6/1kv	FYSS <sub>i</sub> -YJV FYSS <sub>i</sub> -YJY <sub>i</sub> FYSS <sub>i</sub> -YJLV <sub>i</sub> FYSS <sub>i</sub> -YJLY	1, 2, 3, 4, 5, 3+1, 3+2, 4+1	1.5~240
1.8/3kv		1, 2, 3, 4, 5, 3+1, 3+2, 4+1	1.5~240
3.6/6kv		3	1.5~240
6/6kv		3	1.5~240
6/10kv		3	1.5~240
8.7/10kv		3	1.5~240

## Operating features

- AC rated voltage U<sub>0</sub>/U is 10kV and below.
- Permissible continuous working temperature of conductor:90℃ .
- The lowest ambient temperature of cable installation is 0℃ .
- Minimum bending radius is:  
Single core conductor:20D,multi-core conductor:15D  
In the formula:D-The actual diameter of cable.
- The conductor short circuit temperature(Max. duration 5 seconds)Should not exceed 250℃ .

## Main technical property

The product can prevent termite rat and water from invasion, specially prevent the water coming into the cable.

## PVC Insulated and sheathed Control cable

### Application

The cables are designed for connection wires of power distribution equip-ments for controlling, monitoring, protecting circuits with A .C. rated voltage 450/750V and below.

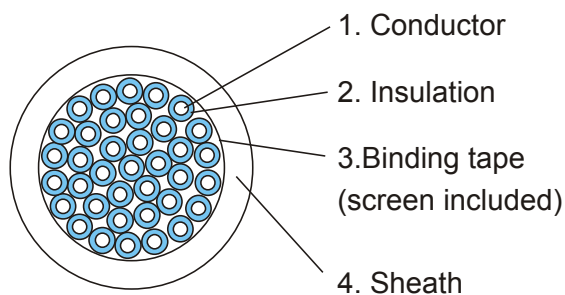
### Manufacturing standards

ASTM ICEA BS DIN IEC GB AS/NZS etc.

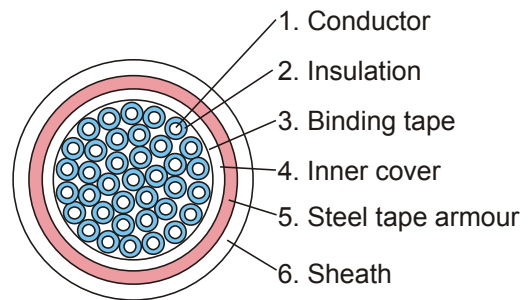
### Operating features

- 2.1 The maximum permissible continuous operating temperature is 70°C
- 2.2 The lowest installation temperature of the cable is 0°C .
- 2.3 Permissible Min. Bending radius not less than 6 times of the completed cable diameter for unarmoured cable; not less than 12 times of the completed cable diameter for armoured or copper tape screened cable; not less than 6 times of the completed cable diameter for screened flexible cable.

### Sketches of product construction



KVV、KVVP、KVVRP、KVVR、KVVP2



KVV22

## PVC Insulated and Sheathed Control Cable

### Type,description and main application

Table1

Type	Description	Main Application
KVV	Copper conductor PVC insulated and sheathed control cable	For fixed installation, laying indoors, in trenches and ducts
KVVP	Copper conductor PVC insulated and sheathed control cable with copper cape screen	For fixed installation, laying indoors, in trenches and ducts, directly in ground where screen is required
KVVP2	Copper conductor PVC insulated and sheathed control cable with steel tape screen	Ditto
KVV22	Copper conductor PVC insulated and sheathed control cable with braid armour	For fixed installation, laying indoors, in trenches and ducts, directly in ground where heavier mechanical withstood
KVVR	Copper conductor PVC insulated and sheathed flexible control cable	For laying indoors, movable places where flexibility is requested
KVVRP	Copper conductor PVC insulated and sheathed flexible control cable with braid screen	For laying indoors, movable places where flexibility and shield is requested

Note:For flame resistance PVC insulated and sheathed cable ,add "ZR" in the front of above types. e.g. ZR-KVV.

### Scope of cables

Table2

Type	Rated voltage V	Nom.area of conductor (mm <sup>2</sup> )							
		0.5	0.75	1.0	1.5	2.5	4	6	10
		No .of cores							
KVV	450/750	-	2~61	2~61	2~61	2~61	2~14	2~14	2~10
KVVP	450/750	-	2~61	4~61	4~61	2~61	2~14	2~14	2~10
KVVP2	450/750	-	4~61	7~61	7~61	4~61	4~14	4~14	4~14
KVV22	450/750	-	7~61	4~61	4~61	4~61	4~14	4~14	4~14
KVVR	450/750	4~61	4~61	4~61	4~61	4~61	-	-	-
KVVRP	450/750	4~61	4~61	2~61	2~61	4~48	-	-	-

### Construction table of conductor

Table3

Nom. Cross-section mm <sup>2</sup>	Conductor construction		DC resistance at 20°C Ω/km( ≤)
	Category	No ./Nom. Dia of strand mm	
0.5	3	16/0.20	39.0
0.75	1	1/0.97	24.5
0.75	2	7/0.37	24.5
0.75	3	24/0.20	26.0
1.0	1	1/1.13	18.1
1.0	2	7/0.43	18.1
1.0	3	32/0.20	19.5
1.5	1	1/1.38	12.1
1.5	2	7/0.52	12.1
1.5	3	30/0.25	13.3
2.5	1	1/1.78	7.41
2.5	2	7/0.68	7.41
2.5	3	50/0.25	7.98
4	1	1/2.25	4.61
4	2	7/0.85	4.61
6	1	1/2.76	3.08
6	2	7/1.04	3.08
10	2	7/1.35	1.83

## XLPE Insulated Control Cable

### Application

The cables are designed for connection wires of power distribution equip-ments for controlling, monitoring, protecting circuits with A .C. rated voltage 450/750V and below.

### Manufacturing standards

ASTM ICEA BS DIN IEC GB AS/NZS etc.

### Operating features

2.1 Rated voltage  $U_0/U$  is 450/750V.

2.2 Allowed continuous working temperature of conductor is 90°C

2.3 Installation temperature of cables should be no less than 0°C . Bending radius should be not less than 12 times O.D. of cable.

2.4 Max. Temperature of conductor (Max. 5sec. duration) should be not more than 250°C .

### Type,description and main application

Table 1

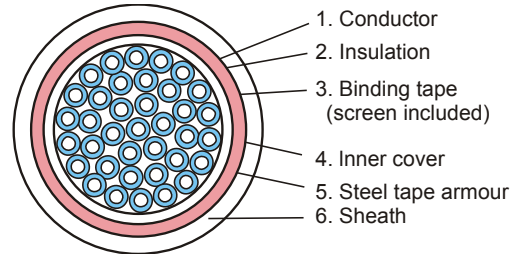
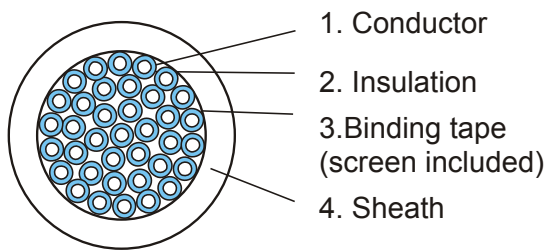
Type	Description	Main Application
KYJV	Copper conductor XLPE insulated and PVC sheathed control cable	Laying indoors,in trenches,in ducts and directly in ground
KYJVR	Copper conductor XLPE insulated and PVC sheathed flexible control cable	
KYJVP	Copper conductor XLPE insulated and PVC sheathed control cable with copper tape lapping screen	Laying indoors,in trenches,in ducts directly in ground and other places that interference-resistance is requested.
KYJVP2	Copper conductor XLPE insulated and PVC sheathed flexible control cable with braiding screen	
KYJVPR	Copper conductor XLPE insulated and PVC sheathed control cable with copper tape longitudinal screen	
KYJVPR2	Copper conductor XLPE insulated and PVC sheathed flexible control cable with copper tape lapping screen	
KYJVPT	Copper conductor XLPE insulated and PVC sheathed control cable with copper tape longitudinal screen	
KYJVPL	Copper conductor XLPE insulated and PVC sheathed control cable with aluminum tape longitudinal lapping screen	
KYJV22	Copper conductor XLPE insulated and PVC sheathed control cable with steel tape armour	
KYJVP2-22(A)	Copper conductor XLPE insulated and PVC sheathed steel tape armored control cable with copper tape lapping screen	For fixed installation,laying indoors,in trenches and ducts,directly in ground where heavier mechanical force and interference resistance withstood
KYJVPT-22(A)	Copper conductor XLPE insulated and PVC sheathed steel tape armored control cable with copper tape longitudinal screen	
KYJVPL-22(A)	Copper conductor XLPE insulated and PVC sheathed steel tape armored control cable with aluminum tape longitudinal screen	

Note:For flame resistance XLPE insulated and PVC sheathed cable ,add ZR in the front of above types. e.g. ZR-KYJV.



# XLPE Insulated Control Cable

## Sketches of product construction



KYJV, KYJVP2, KYVP, KYJVRP2, KYJVRP  
KYJVPT, KYJVR, KYJVPL

KYJV22, KYJVP2-22,  
KYJVPT-22, KYJVPL-22

## Specification

Table2

Type	Rated voltage V	Nom.area of conductor (mm <sup>2</sup> )						
		0.75	1.0	1.5	2.5	4	6	10
		No .of cores						
KYJV	450/750	2~61	2~61	2~61	2~14	2~14	2~14	2~10
KYJVR	450/750	2~61	2~61	2~61	2~14	2~14	2~14	2~10
KYJVRP	450/750	2~61	2~61	2~61	2~14	2~14	2~14	2~10
KYJVP	450/750	2~61	2~61	2~61	2~14	2~14	2~14	2~10
KYJVP2	450/750	2~61	2~61	2~61	2~14	2~14	2~14	2~10
KYJVRP	450/750	2~61	2~61	2~61	2~14	2~14	2~14	2~10
KYJVRP2	450/750	2~61	2~61	2~61	2~14	2~14	2~14	2~10
KYJVPT	450/750	2~61	2~61	2~61	4~14	4~14	4~14	4~10
KYJVPL	450/750	7~61	7~61	4~61	4~14	4~14	4~14	4~10
KYJVP2-22(A)	450/750	4~61	4~61	4~61	4~14	4~14	4~14	4~10
KYJVPT-22(A)	450/750	4~61	4~61	4~61	4~14	4~14	4~14	4~10
KYJVPL-22(A)	450/750	4~61	4~61	4~61	4~14	4~14	4~14	4~10

## Main technical requirements

### 5.1 Conductor

Conductor construction and D.C.Resistance should be in accordance with table 3

### 5.2 Insulation

Insulated core can be identified with different colors and different numbers. The nominal thickness of insulation is 0.7mm. The thinnest point of insulation should be not less than.

90%-0.1mm of nominal value. The Min. resistance of insulation should be in accordance

5.3 Finished cable should withstand voltage withstanding test with AC 50Hz,3000V,5 minutes.

5.4 Sheath thickness, approximate overall diameter, approximate weight of finished cable refer to table 4 and table 5.

## XLPE Insulated Control Cable

### Construction of conductor

Table3

Nom. Cross Sectional mm <sup>2</sup>	Construction of conductor		DC Resistance of conductor at 20°C (Max.) Ω/km		Min Insulation resistance at 90°C MΩ • km
	Category	No. /Nom. Dia of strand mm	Not tinned	Tinned	
0.75	1	1/0.97	24.5	24.8	1.2
0.75	2	7/0.37	24.5	24.8	1.2
0.75	3	24/0.20	26.0	26.7	1.2
1.0	1	1/1.13	18.1	18.2	1.1
1.0	2	7/0.43	18.1	18.2	1.1
1.0	3	32/0.20	19.5	20.0	1.1
1.5	1	1/1.38	12.1	12.2	0.96
1.5	2	7/0.52	12.1	12.2	0.96
1.5	3	30/0.25	13.3	13.7	0.96
2.5	1	1/1.78	7.41	7.56	0.78
2.5	2	7/0.68	7.41	7.56	0.78
2.5	3	50/0.25	7.98	8.21	0.78
4	1	1/2.25	4.61	4.70	0.67
4	2	7/0.85	4.61	4.70	0.67
6	1	1/2.76	3.08	3.11	0.56
6	2	7/1.04	3.08	3.11	0.56
10	2	7/1.35	1.83	1.84	0.52

Note: KYJVP should adopt category 2 conductor, KYJVR, KYJVRP should adopt category 3 conductor, other types should adopt category 1 conductor

### KYJV 450/750V copper core XLPE insulated and PVC sheathed control cable

Table 4

Cores × Nom. Cross-sect ion mm <sup>2</sup>	Conductor category	Nom. thickness of sheath mm	Approx. OD mm	Approx. weight kg/km	Cores × Nom. Cross-se ction mm <sup>2</sup>	Conductor category	Nom. thickness of sheath mm	Approx. OD mm	Approx. weight kg/km
2×0.75	1	1.2	7.7	63.4	8×1.5	1	1.5	12.9	228.9
2×1.0	1	1.5	8.1	71.9	8×2.5	1	1.5	14.3	314.8
2×1.5	1	1.5	8.6	85.8	8×4.0	1	1.7	15.8	442.8
2×2.5	1	1.5	9.4	111.4	8×6.0	1	1.7	17.5	606.3
2×4.0	1	1.5	10.3	148.1	10×0.75	1	1.5	13.3	193.3
2×6.0	1	1.5	12.0	210.9	10×1.0	1	1.5	13.9	223.7
3×0.75	1	1.5	8.1	75.5	10×1.5	1	1.5	14.9	280.5
3×1.0	1	1.5	8.5	86.4	10×2.5	1	1.7	16.6	387.9
3×1.5	1	1.5	9.0	104.8	10×4.0	1	1.7	18.8	563.3
3×2.5	1	1.5	9.9	139.8	10×6.0	1	1.7	21.0	771.3
3×4.0	1	1.5	11.5	205.9	12×0.75	1	1.5	13.7	214.4
3×6.0	1	1.5	12.6	272.5	12×1.0	1	1.5	14.3	249.7
4×0.75	1	1.5	8.8	91.1	12×1.5	1	1.7	15.4	316.5
4×1.0	1	1.5	9.1	103.4	12×2.5	1	1.7	17.1	440.4
4×1.5	1	1.5	9.8	128.7	12×4.0	1	1.7	19.4	645.3
4×2.5	1	1.5	11.4	188.1	12×6.0	1	1.7	21.6	887.1
4×4.0	1	1.5	12.5	256.5	14×0.75	1	1.5	14.4	240.8
4×6.0	1	1.5	13.7	342.6	14×1.0	1	1.7	15.0	281.6
5×0.75	1	1.5	9.5	103.0	14×1.5	1	1.7	16.2	358.8
5×1.0	1	1.5	9.9	118.6	14×2.5	1	1.7	18.0	501.8
5×1.5	1	1.5	11.2	161.8	14×4.0	1	1.7	18.8	563.3
5×2.5	1	1.5	12.3	217.1	14×6.0	1	1.7	22.7	1017.8
5×4.0	1	1.5	13.6	299.7	16×0.75	1	1.7	15.0	268.7
5×6.0	1	1.5	14.9	404.5	16×1.0	1	1.7	15.8	316.4
6×0.75	1	1.5	10.2	120.1	16×1.5	1	1.7	17.0	404.1
6×1.0	1	1.5	11.3	153.4	16×2.5	1	1.7	19.3	584.0
6×1.5	1	1.5	12.0	188.6	19×0.75	1	1.7	15.7	304.1
6×2.5	1	1.5	13.3	255.3	19×1.0	1	1.7	16.6	359.6
6×4.0	1	1.5	14.7	355.3	19×1.5	1	1.7	17.8	461.4
6×6.0	1	1.7	16.2	480.7	19×2.5	1	1.7	20.2	669.9
7×0.75	1	1.5	10.2	126.4	24×0.75	1	1.7	18.6	391.5
7×1.0	1	1.5	11.3	161.7	24×1.0	1	1.7	19.6	461.8
7×1.5	1	1.5	12.0	201.1	24×1.5	1	1.7	21.1	591.7
7×2.5	1	1.5	13.3	275.1	24×2.5	1	1.7	23.5	834.7
7×4.0	1	1.5	14.7	387.1	27×0.75	1	1.7	19.0	426.9
7×6.0	1	1.7	16.2	528.2	27×1.0	1	1.7	20.0	505.1
8×0.75	1	1.5	11.6	159.2	27×1.5	1	1.7	21.6	650.5
8×1.0	1	1.5	12.1	183.5	27×2.5	1	1.7	24.0	921.4

# XLPE Insulated Control Cable

KYJV 450/750V copper core XLPE insulated and PVC sheathed control cable

Continue Table

Cores× Nom. Cross-sec tion mm <sup>2</sup>	Conductor category	Nom. thickness of sheath mm	Approx. OD mm	Approx. weight kg/km
30×0.75	1	1.7	19.6	464.0
30×1.0	1	1.7	20.7	550.6
30×1.5	1	1.7	22.4	711.6
30×2.5	1	1.7	24.9	1011.4

Cores× Nom. Cross-sec tion mm <sup>2</sup>	Conductor category	Nom. thickness of sheath mm	Approx. OD mm	Approx. weight kg/km
37×0.75	1	1.7	21.1	551.2
37×1.0	1	1.7	22.1	655.2
37×1.5	1	1.7	24.0	852.2
37×2.5	1	2.0	26.8	1219.7

KYJVP2 450/750V copper core XLPE insulated and PVC sheathed control cable

Table 5

Cores× Nom. Cross-sec tion mm <sup>2</sup>	Conductor category	Nom. thickness of sheath mm	Approx. OD mm	Approx. weight kg/km
4×1.5	1	1.5	10.1	149.1
4×2.5	1	1.5	11.9	212.7
4×4.0	1	1.5	13.0	283.5
4×6.0	1	1.5	14.2	372.2
5×1.5	1	1.5	11.7	188.1
5×2.5	1	1.5	12.8	246.3
5×4.0	1	1.5	14.1	334.9
5×6.0	1	1.7	15.4	442.4
6×1.5	1	1.5	12.5	217.0
6×2.5	1	1.5	13.8	287.5
6×4.0	1	1.5	14.9	389.6
6×6.0	1	1.7	16.7	521.9
7×1.5	1	1.5	12.5	226.7
7×2.5	1	1.5	13.8	303.9
7×4.0	1	1.5	14.9	416.9
7×6.0	1	1.7	16.7	563.6
8×1.5	1	1.5	13.4	256.3
8×2.5	1	1.7	15.0	346.9
8×4.0	1	1.7	16.3	476.4
8×6.0	1	1.7	18.0	643.2
10×1.5	1	1.7	15.4	319.4
10×2.5	1	1.7	17.1	432.4

Cores× Nom. Cross-sec tion mm <sup>2</sup>	Conductor category	Nom. thickness of sheath mm	Approx. OD mm	Approx. weight kg/km
10×4.0	1	1.7	19.3	615.1
10×6.0	1	1.7	21.5	831.4
12×1.5	1	1.7	15.9	350.1
12×2.5	1	1.7	17.6	477.5
12×4.0	1	1.7	19.9	687.2
12×6.0	1	1.7	22.1	933.7
14×1.5	1	1.7	16.7	394.1
14×2.5	1	1.7	18.9	557.3
14×4.0	1	1.7	20.9	781.9
14×6.0	1	1.7	23.2	1067
16×1.5	1	1.7	17.5	443.2
16×2.5	1	1.7	19.8	628.7
19×1.5	1	1.7	18.7	516.4
19×2.5	1	1.7	20.7	713.8
24×1.5	1	1.7	21.6	637.6
24×2.5	1	1.7	24.2	885.8
27×1.5	1	1.7	22.1	697.4
27×2.5	1	1.7	24.5	973.5
30×1.5	1	1.7	22.9	760.3
30×2.5	1	2.0	25.4	1065.4
37×1.5	1	1.7	24.5	904.4
37×2.5	1	2.0	27.9	1314.1

## Flame Resistance Plastic Insulated Control Cable

### Application

The cables are designed for connection wires of power distribution equip-ments for controlling, monitoring, protecting circuits with A .C. rated voltage 450/750V and below.

### Manufacturing standards

ASTM ICEA BS DIN IEC GB AS/NZS etc.

### Operating features

- 2.1 Rated voltage  $U_0/U$  is 450/750V.
- 2.2 Allowed continuous working temperature of conductor is 70°C .
- 2.3 Installation temperature of cables should be no less than 0°C . Bending radius should be not less than 10 times O.D. of cable.

### Type,description and main application

Table 1

Type	Description	Main Application
KVV-C	Copper conductor PVC insulated and PVC sheathed control cable	For fixed installation,laying indoors, in trenches, in ducts
ZR-KVV-C	Copper conductor PVC insulated and sheathed flame resistance control cable	
KVVP-C	Copper conductor PVC insulated and sheathed control cable with braiding screen	Laying indoors, in trenches in ducts where screen requested
ZR-KVVP-C	Copper conductor PVC insulated and sheathed flame resistance control cable with braiding screen	
KVVR-C	Copper conductor PVC insulated and PVC sheathed flexible control cable	For fixed installation, laying indoors, in trenches, in ducts where flexibility requested
ZR-KVVR-C	Copper conductor PVC insulated and sheathed flame resistance flexible control cable	
KVVRP-C	Copper conductor PVC insulated and sheathed flexible control cable with braiding screen	Laying indoors, in trenches in ducts where flexibility, screen requested
ZR-KVVRP-C	Copper conductor PVC insulated and sheathed flame resistance flexible control cable with braiding screen	

### Specification

Table2

Type	Rated voltage V	Nom.area of conductor (mm <sup>2</sup> )								
		0.75	1.0	1.5	2.5	4	6	10	16	
		No .of cores								
450/750	KVV-C	2~61						2~10		2~4
	ZR-KVV-C									
	KVVP-C									
	ZR-KVVP-C									
	KVVR-C									
	ZR-KVVR-C									
	VVRP-C									
	KVVRP-C									

## Flame Resistance Plastic Insulated Control Cable

### Main technical requirements

5.1 Conductor Conductor construction and D.C.Resistance should be in accordance with Table 3

5.2 Insulation

Insulated core should be identified with different colors or different number.Nominal wall thickness of insulation should be in accordance with table 3, and the thinnest point should be not less than 90%-0.1mm of Nom. value.Min. Insulation resistance at 70 should be in accordance with the stipulations of table 4.

5.3 Finished cable should withstand voltage withstanding test with AC 50Hz,3000V,5 minutes.

### Construction of conductor

Table3

Nom. Cross Sectional mm <sup>2</sup>	Construction of conductor		DC Resistance of conductor at 20°C (Max.) Ω/km	Nom. wall thickness of insulation mm	Min Insulation resistance at 70°C MΩ · km
	Category	No. /Nom. Dia of strand mm			
0.75	1	1/0.97	24.5	0.8	40
0.75	2	7/0.37	24.5	0.8	40
1.0	1	1/1.13	18.1	0.8	40
1.0	2	7/0.43	18.1	0.8	40
1.5	1	1/1.38	12.1	0.8	40
1.5	2	7/0.52	12.1	0.8	40
2.5	1	1/1.78	7.41	0.8	20
2.5	2	7/0.68	7.41	0.8	20
4	1	1/2.25	4.61	0.8	20
4	2	7/0.85	4.61	0.8	20
6	1	1/2.76	3.08	1.0	20
6	2	7/1.04	3.08	1.0	20
10	2	7/1.35	1.83	1.0	20
10	2	19/0.82	1.83	1.0	20
16	2	7/1.68	1.15	1.0	20
16	2	49/0.64	1.15	1.0	20

Note:KVV-C ZR-KVV-C adopts category “1” conductor, while other types adopt category “2” conductor

# Fire-Retarding Control Cable

## Application

The cables are designed for connection wires of power distribution equip-ments for controlling, monitoring, protecting circuits with A .C. rated voltage 450/750V and below where fire retardation is requested.

## Operating features

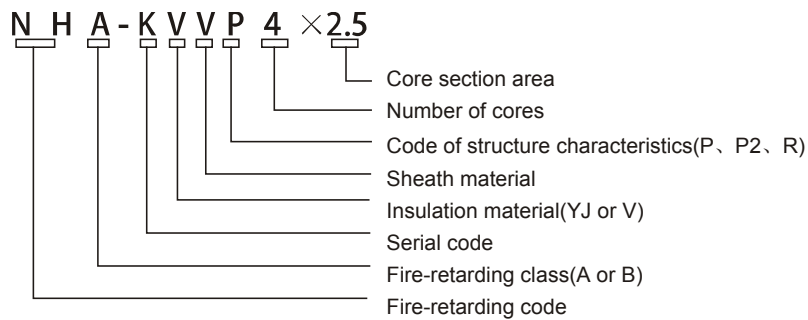
- AC Rated voltage  $U_0/U$  450/750V.
- Testing flame temperature: Category A is 950°C -1000°C  
Category B is 750°C -800°C
- Permissive continuous conductor working temperature of PVC, PE insulated cable is not more than 70°C ,  
permissive continuous conductor working temperature XLPE is not more than 90°C .
- The lowest ambient temperature of cable installation is 0°C
- Min.bending radius of cable installation is:

Non-armoured cable 6D mm;

Armoured cable 12D mm.

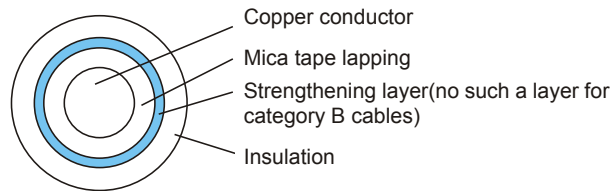
In the formula: D-actual overall diameter of cable, mm.

## Descriptive method of cable and sketches of product construction

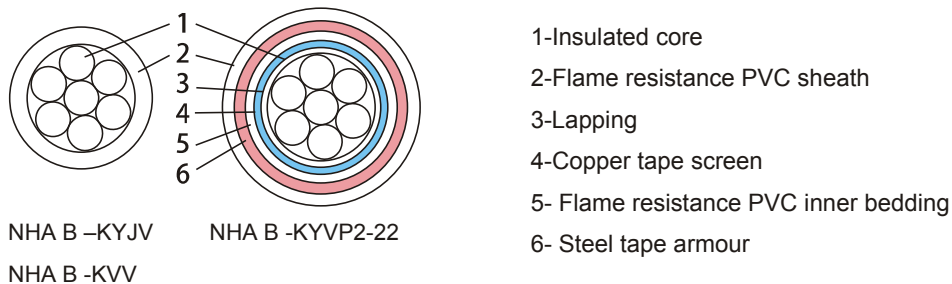


Note:P,P2 and R mean braiding screen, copper tape screen and flexible structure respectively. YJ and V mean XLPE and PVC,The company can produce category A or B fire-retarding cables upon requests

### 1 ) Construction of insulated core



### 2 ) Diagram of cable construction



## Fire-Retarding Control Cable

### Specification

Rated voltage V	Type NH-A NH-B	Nom.cross-area of conductor (mm <sup>2</sup> )					
		1.0	1.5	2.5	4	6	10
		No .of cores					
PVC PE Insulation 450/750V	KVV	2 <sup>~</sup> 61	2 <sup>~</sup> 61	2 <sup>~</sup> 61	2 <sup>~</sup> 14	2 <sup>~</sup> 14	2~10
	KVVP	2 <sup>~</sup> 61	2 <sup>~</sup> 61	2 <sup>~</sup> 61	2 <sup>~</sup> 14	2 <sup>~</sup> 14	2~10
	KVVP2	4 <sup>~</sup> 61	4 <sup>~</sup> 61	4 <sup>~</sup> 61	4 <sup>~</sup> 14	4 <sup>~</sup> 14	4~10
	KVV22	7 <sup>~</sup> 61	7 <sup>~</sup> 61	4 <sup>~</sup> 61	4 <sup>~</sup> 14	4 <sup>~</sup> 14	4~10
	KVVP	4 <sup>~</sup> 61	4 <sup>~</sup> 61	4 <sup>~</sup> 61	-	-	-
	KVVRP	4 <sup>~</sup> 61	4 <sup>~</sup> 48	4 <sup>~</sup> 48	-	-	-
XLPE Insulation 450/750V	KYJV	2 <sup>~</sup> 61	2 <sup>~</sup> 61	2 <sup>~</sup> 61	2 <sup>~</sup> 14	2 <sup>~</sup> 14	2~10
	KYJVP	2 <sup>~</sup> 61	2 <sup>~</sup> 61	2 <sup>~</sup> 14	2 <sup>~</sup> 14	2 <sup>~</sup> 10	2~10
	KYJVP2	4 <sup>~</sup> 61	4 <sup>~</sup> 61	4 <sup>~</sup> 14	4 <sup>~</sup> 14	4 <sup>~</sup> 10	4~10
	KYJV22	7 <sup>~</sup> 61	7 <sup>~</sup> 61	4 <sup>~</sup> 61	4 <sup>~</sup> 14	4 <sup>~</sup> 14	4~10
	KYJVP	4 <sup>~</sup> 61	4 <sup>~</sup> 61	4 <sup>~</sup> 61	-	-	-
	KYJVRP	4 <sup>~</sup> 61	4 <sup>~</sup> 48	4 <sup>~</sup> 48	-	-	-
	KYJVP2-22	4 <sup>~</sup> 61	4 <sup>~</sup> 61	4 <sup>~</sup> 61	4 <sup>~</sup> 14	4 <sup>~</sup> 14	4~10

### Construction and main technical parameter

Nom. Cross section mm <sup>2</sup>	Construction of conductor		DC resistance of conductor at 20°C (Max.) Ω/km	Nom. wall thickness of insulaion mm			Min. Insulation resistance at 70°C MΩ • km
	Category	No./Nom.Dia of strand mm		PVC	PE	XLPE	
1.0	1	1/1.13	18.1	0.6	0.7	0.7	0.011
1.0	2	7/0.43	18.1	0.6	0.7	0.7	0.013
1.0	5	32/0.2	19.5	0.6	0.7	0.7	0.010
1.5	1	1/1.38	12.1	0.7	0.7	0.7	0.011
1.5	2	7/0.52	12.1	0.7	0.7	0.7	0.010
1.5	5	30/0.25	13.3	0.7	0.7	0.7	0.010
2.5	1	1/1.78	7.41	0.8	0.7	0.7	0.010
2.5	2	7/0.68	7.41	0.8	0.7	0.7	0.009
2.5	5	50/0.25	7.98	0.8	0.7	0.7	0.009
4	1	1/2.25	4.61	0.8	0.7	0.7	0.0085
4	2	7/0.85	4.61	0.8	0.7	0.7	0.0077
6	1	1/2.76	3.08	0.8	0.7	0.7	0.0070
6	2	7/1.04	3.08	0.8	0.7	0.7	0.0065
10	2	7/1.35	1.83	1.0	0.7	0.7	0.0065

### Nom. Sheath thickness, approx. Diameter and approx. weight

Construction		NHA(B)-KYJV			NHA(B)-KVV			NHA(B)-KVVP2-22		
No. of cores mm <sup>2</sup>	Nom. cross section mm <sup>2</sup>	Sheath thickness mm	Approx O.D. mm	Approx O.D. mm	Sheath thickness mm	Approx O.D. mm	Approx. weight kg/km	Sheath thickness mm	Approx O.D. mm	Approx. weight kg/km
2	1.0	1.2	10.4	142	1.2	10.0	136	1.5	14.4	318
3	1.0	1.5	11.6	171	1.2	10.6	154	-	-	-
4	1.0	1.5	12.6	199	1.5	12.1	197	1.5	15.8	385
5	1.0	1.5	13.6	217	1.5	13.1	219	1.5	16.8	422
7	1.0	1.5	14.7	243	1.5	14.1	249	1.5	17.9	468
8	1.0	1.5	15.8	274	1.5	15.2	282	1.7	19.3	531
10	1.0	1.7	18.8	383	1.5	17.6	358	1.7	21.8	645
12	1.0	1.7	19.4	395	1.5	18.2	391	1.7	22.3	685
14	1.0	1.7	20.4	445	1.7	19.5	459	1.7	23.2	750
16	1.0	1.7	21.4	518	1.7	20.5	526	1.7	24.2	831
19	1.0	1.7	22.6	566	1.7	21.6	587	1.7	25.3	908
24	1.0	1.7	26.6	707	1.7	25.4	734	2.0	29.4	1150
27	1.0	1.7	27.2	774	1.7	26.0	805	2.0	31.1	1509
30	1.0	1.7	28.2	844	1.7	26.9	879	2.0	32.0	1607
37	1.0	2.0	30.9	1046	2.0	29.5	1090	2.0	34.1	1835
2	1.5	1.5	11.6	176	1.5	11.6	183	1.5	15.3	364
3	1.5	1.5	12.2	201	1.5	12.2	208	-	-	-
4	1.5	1.5	13.3	234	1.5	13.3	247	1.5	16.9	451
5	1.5	1.5	14.4	257	1.5	14.4	274	1.5	18.0	493
7	1.5	1.5	15.6	291	1.5	15.6	315	1.7	19.6	568
8	1.5	1.5	16.8	330	1.5	16.8	358	1.7	20.8	629
10	1.5	1.7	20.0	466	1.7	20.0	482	1.7	23.8	782
12	1.5	1.7	20.6	477	1.7	20.6	518	1.7	24.4	827
14	1.5	1.7	21.7	539	1.7	21.7	588	1.7	25.4	910
16	1.5	1.7	22.8	629	1.7	22.8	678	1.7	26.6	1018
19	1.5	1.7	24.4	698	1.7	24.4	763	1.7	27.8	1126
24	1.5	1.7	28.4	865	1.7	28.4	949	2.0	32.4	1708
27	1.5	2.0	29.7	989	2.0	29.7	1093	2.2	34.6	1860
30	1.5	2.0	30.7	1079	2.0	30.7	1184	2.2	35.6	1987
37	1.5	2.0	33.0	1288	2.0	33.0	1416	2.2	38.0	2282

## Low Smoke Zero Halogen Flame Resistance Control Cable

### Application

The cables are designed for high building,subway, computer center, broadcasting and television center , offshore oil platform,ship,nuclear power station and other places where higher limit requirements of halogen gases and smoke density released by combustion of cables is requested.

### Type and description

Type	Description	Main Application
WDZA-KYJY	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category A low smoke zero halogen flame resistance control cable	For fixed installation laying indoors in trenches, in ducts
WDZB-KYJY	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category B low smoke zero halogen flame resistance control cable	
WDZC-KYJY	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category C low smoke zero halogen flame resistance control cable	
WDZA-KYJYP	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category A low smoke zero halogen flame resistance control cable with braiding screen	For fixed installation laying indoors,in trenches, in ducts where screen is requested
WDZB-KYJYP	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category B low smoke zero halogen flame resistance control cable with braiding screen	
WDZC-KYJYP	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category C low smoke zero halogen flame resistance control cable with braiding screen	
WDZA-KYJYP2	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category A low smoke zero halogen flame resistance control cable with copper tape screen	For fixed installation laying indoors,in trenches, in ducts where screen is requested
WDZB-KYJYP2	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category B low smoke zero halogen flame resistance control cable with copper tape screen	
WDZC-KYJYP2	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category C low smoke zero halogen flame resistance control cable with copper tape screen	
WDZA-KYJY23	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category A low smoke zero halogen flame resistance control cable with steel tape armor	For fixed installation laying indoors, in trenches,in ducts where heavier mechanical force is withstood
WDZB-KYJY23	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category B low smoke zero halogen flame resistance control cable with steel tape armor	
WDZC-KYJY23	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category C low smoke zero halogen flame resistance control cable with steel tape armor	
WDZA-KYJYR	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category A low smoke zero halogen flame resistance flexible control cable	Laying indoors, movable where flexibility is requested
WDZB-KYJYR	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category B low smoke zero halogen flame resistance flexible control cable	
WDZC-KYJYR	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category C low smoke zero halogen flame resistance flexible control cable	
WDZA-KYJYRP	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category A low smoke zero halogen flame resistance flexible control cable with braiding screen	Laying indoors, movable where flexibility, screen is requested
WDZB-KYJYRP	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category B low smoke zero halogen flame resistance flexible control cable with braiding screen	
WDZC-KYJYRP	Copper core XLPE Insulated and low smoke zero halogen PO sheathed category C low smoke zero halogen flame resistance flexible control cable with braiding screen	



# Low Smoke Zero Halogen Flame Resistance Control Cable

## Specification

Rated voltage V	Type	Nom. cross-area of conductor (mm <sup>2</sup> )							
		0.5	0.75	1.0	1.5	2.5	4	6	10
		No. of cores							
450/750	WDZA-KYJY	-	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 14	2 <sup>^</sup> 14	2 <sup>^</sup> 10
	WDZB-KYJY	-	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 14	2 <sup>^</sup> 14	2 <sup>^</sup> 10
	WDZC-KYJY	-	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 14	2 <sup>^</sup> 14	2 <sup>^</sup> 10
	WDZA-KYJYP	-	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 14	2 <sup>^</sup> 14	-
	WDZB-KYJYP	-	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 14	2 <sup>^</sup> 14	-
	WDZC-KYJYP	-	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 61	2 <sup>^</sup> 14	2 <sup>^</sup> 14	-
	WDZA-KYJYP2	-	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 14	4 <sup>^</sup> 14	4 <sup>^</sup> 10
	WDZB-KYJYP2	-	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 14	4 <sup>^</sup> 14	4 <sup>^</sup> 10
	WDZC-KYJYP2	-	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 14	4 <sup>^</sup> 14	4 <sup>^</sup> 10
	WDZA-KYJYP23	-	7 <sup>^</sup> 61	7 <sup>^</sup> 61	7 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 14	4 <sup>^</sup> 14	4 <sup>^</sup> 10
	WDZB-KYJYP23	-	7 <sup>^</sup> 61	7 <sup>^</sup> 61	7 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 14	4 <sup>^</sup> 14	4 <sup>^</sup> 10
	WDZC-KYJYP23	-	7 <sup>^</sup> 61	7 <sup>^</sup> 61	7 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 14	4 <sup>^</sup> 14	4 <sup>^</sup> 10
	WDZA-KYJYR	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	-	-	-
	WDZB-KYJYR	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	-	-	-
	WDZC-KYJYR	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	-	-	-
	WDZA-KYJYRP	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 48	4 <sup>^</sup> 48	-	-	-
	WDZB-KYJYRP	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 48	4 <sup>^</sup> 48	-	-	-
	WDZC-KYJYRP	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 61	4 <sup>^</sup> 48	4 <sup>^</sup> 48	-	-	-

## Operating features

4.1 Rated voltage U<sub>0</sub>/U is 450/750V.

4.2 Permissive continuous working temperature of conductor is 90°C.

4.3 The lowest installation temperature of cable is 0°C .Min. Permissive bending radius is

For cables without armor,it should be not less than 6 times of overall diameter of cable.

For cables with armor or copper tape screen,it should be not less than 12 times of overall diameter of cable.

For flexible cables with screen,it should be not less than 6 times of overall diameter of cable.

## Main technical requirements

5.1 D.C.resistance of conductor at 20°C is in accordance with table 1.

5.2 Insulation resistance of cable is in accordance with table 1.

### Construction of conductor

Table1

Nom. Cross section mm <sup>2</sup>	Construction of conductor		DC resistance of conductor at 20°C (Max.) Ω/km		Min. Insulation resistance at 90c MΩ·km
	Category	No./Nom. Dia of strand mm	Not tinned	Tinned	
0.5	3	16/0.20	39.0	40.1	1.4
0.75	1	1/0.97	24.5	24.8	1.2
0.75	2	7/0.37	24.5	24.8	1.2
0.75	3	24/0.20	26.0	26.7	1.2
1.0	1	1/1.13	18.1	18.2	1.1
1.0	2	7/0.43	18.1	18.2	1.1
1.0	3	32/0.20	19.5	20.0	1.1
1.5	1	1/1.38	12.1	12.2	0.96
1.5	2	7/0.52	12.1	12.2	0.96
1.5	3	30/0.25	13.3	13.7	0.96
2.5	1	1/1.78	7.41	7.56	0.78
2.5	2	7/0.68	7.41	7.56	0.78
2.5	5	50/0.25	7.98	8.21	0.78
4	1	1/2.25	4.61	4.70	0.67
4	2	7/0.85	4.61	4.70	0.67
6	1	1/2.76	3.08	3.11	0.56
6	2	7/1.04	3.08	3.11	0.56
10	2	7/1.35	1.83	1.84	0.52

## Screened Control Cable for Computer

### Application

The cables are designed for connection wires of computer control network and electrical apparatus instruments and equipments and testing equipments where interference resistance is highly requested with A.C. rated voltage 300/500V and below.

### Operating features

2.1 Rated Voltage  $U_0/U$  is 300/500V.

2.2 Allowed Continuous working temperature of conductor is:

PVC insulated cable is :70°C

PE insulated cable is :70°C

XLPE insulated cable is :90°C

Installation temperature of cable should be not less than 0°C . and working ambient temperature is -40°C +50°C.

2.3 Allowed bending radius is: Cables with copper tape screen should be not less than 12 times of overall diameter of cable,while other cables should be not less than 6 times of overall diameter of cable.

### Type and description

Table 1

Type	Description	Main Application
DJVVP	Twisted PVC insulated and sheathed control cable with copper wire braiding screen for computer	For fixed installation, laying indoors,in trenches,in ducts
DJYVP	Twisted PE insulated and PVC sheathed control cable with copper wire braiding screen for computer	
DJYJVP	Twisted XLPE insulated and PVC sheathed control cable with copper wire braiding screen for computer	
DJVVP2	Twisted PVC insulated and sheathed control cable with copper tape lapping screen for computer	
DJYVP2	Twisted PE insulated and PVC sheathed control cable with copper tape lapping screen for computer	
DJYJVP2	Twisted XLPE insulated and PVC sheathed control cable with copper tape lapping screen for computer	
DJVVP3	Twisted PVC insulated and sheathed control cable with aluminum-polyester tape lapping screen for computer	
DJYVP3	Twisted PE insulated and PVC sheathed control cable with aluminum-polyester tape lapping screen for computer	

## Screened Control Cable for Computer

Continue Table

Type	Description	Main Application
DJYJVP3	Twisted XLPE insulated and PVC sheathed control cable with aluminumpolyester tape lapping screen for computer	For fixed installation, laying indoors,in trenches,in ducts
DJVPVP	Twisted PVC insulated and sheathed control cable with copper wire braiding individul screen and collective screen for computer	
DJYPVP	Twisted PE insulated and PVC sheathed control cable with copper wire braiding individul screen, and collective screen for computer	
DJYJPVP	Twisted XLPE insulated and PVC sheathed control cable with copper wire braiding individul screen, and collective screen for computer	
DJVP2VP2	Twisted PVC insulated and sheathed control cable with copper tape individul screen, collective screen for computer	
DJYP2VP2	Twisted PE insulated and PVC sheathed control cable with copper tape lapping individul screen and collective screen for computer	
DJYJP2VP2	Twisted XLPE insulated and PVC sheathed control cable with copper tape lapping braiding screen and collective screen for computer	
DJVP3VP3	Twisted PVC insulated and sheathed control cable with aluminum-polyester tape lapping individul screen and collective screen for computer	
DJYP3VP3	Twisted PE insulated and PVC sheathed control cable with aluminum-polyester tape lapping individul screen and collective screen for computer	
DJYJP3VP3	Twisted XLPE insulated and sheathed control cable with aluminum- polyester tape lapping individul screen, and collective screen for computer	For laying indoors, moveable
DJVVRP	Twisted PVC insulated and sheathed flexible control cable with copper wire braiding screen for computer	
DJYVRP	Twisted PE insulated and PVC sheathed flexible control cable with copper wire braiding screen for computer	
DJYJVRP	Twisted XLPE insulated and PVC sheathed flexible control cable with copper wire braiding screen for computer	
DJVVRP3	Twisted PVC insulated and sheathed flexible control cable with aluminum-polyester tape lapping screen for computer	
DJYVRP3	Twisted PE insulated and PVC sheathed flexible control cable with aluminumpolyester tape lapping screen for computer	
DJYJVRP3	Twisted XLPE insulated and PVC sheathed flexible control cable with aluminum-polyester tape lapping screen for computer	
DJYPVRP	Twisted PVC insulated and sheathed flexible control cable with copper wire braiding individul screen and collective screen for computer	
DJYPVRP	Twisted PE insulated and PVC sheathed flexible control cable with copper wire braiding individul screen and collective screen for computer	

## Screened Control Cable for Computer

Continue Table

Type	Description	Main Application
DJYJPVRP	Twisted XLPE insulated and PVC sheathed flexible control cable with copper wire braiding individual screen and collective screen for computer	For laying indoors, moveable
DJVP3VRP3	Twisted PVC insulated and sheathed flexible control cable with aluminum-polyester tape lapping individual screen and collective screen for computer	
DJYP3VRP3	Twisted PE insulated and sheathed flexible control cable with aluminum-polyester tape lapping individual screen and collective screen for computer	
DJYJP3VRP3	Twisted XLPE insulated and PVC sheathed flexible control cable with aluminum-polyester tape lapping individual screen and collective screen for computer	

Note: We can produce flame resistance type for above products.

### Specification

Table 2

Type	Rated voltage V	Nom. Cross section area of conductor mm <sup>2</sup>				
		0.5	0.6	0.75	1.0	1.5
		No. of pairs				
DJVVP, DJVVP2	300/500	1~61				
DJYVP, DJYVP2						
DJYJVP, DJYJVP2						
DJVVP3, DJVPVP						
DJYVP3, DJYVPVP						
DJYJVP3, DJYJPVP						
DJVP2VP2, DJVP3VP3						
DJYP2VP2, DJYP3VP3						
DJYJP2VP2, DJYJP3VP3						
DJVVRP, DJVVRP3						
DJYVRP, DJYVRP3						
DJYJVRP, DJYJVRP3						
DJVPVRP, DJVP3VRP3						
DJYVPVRP, DJYVP3VRP3						
DJYJPVRP, DJYJP3VRP3						

### Construction of conductor

Table 3

Nom. cross section mm <sup>2</sup>	Construction of conductor		DC resistance of conductor at 20°C (Max.) Ω/km		Nom. wall thickness of insulation mm		
	Category	No./Dia of strand mm	Not tinned	Tinned	PVC insulation	PE insulation	XLPE insulation
0.5	3	16/0.20	39.0	40.1	0.6	0.6	0.6
0.6	1	1/0.90	28.5	29.0	0.6	0.6	0.6
0.75	1	1/0.97	24.5	24.8	0.6	0.7	0.7
0.75	3	7/0.37	24.5	24.8	0.6	0.7	0.7
0.75	3	24/0.20	26.0	26.7	0.6	0.7	0.7
0.8	1	1/1.01	22.6	23.0	0.6	0.7	0.7
1.0	1	1/1.13	18.1	18.2	0.6	0.7	0.7
1.0	2	7/0.43	18.1	18.2	0.6	0.7	0.7
1.0	3	32/0.20	19.5	20.2	0.6	0.7	0.7
1.5	1	1/1.38	12.1	12.2	0.7	0.7	0.7
1.5	2	7/0.52	12.1	12.2	0.7	0.7	0.7
1.5	3	30/0.25	13.3	13.3	0.7	0.7	0.7

## VDE Standard Control Cable

### YY PVC/PVC Number Coded Control Cable



**Application:** designed to offer a flexible solution for signalling, measuring and control applications. This range of cables are not only flexible but offer heat and oil protection.

**Standards:** Generally to BS6500 and VDE0250

**Conductor:** Flexible class 5 copper conductors to BS6360/VDE0295

**Insulation:** PVC

**Sheath:** PVC

**Voltage Rating:** 300/500V

**Temperature rating:** Flexing -15 to +70°C

Static -35 to +70°C

**Minimum bending radius:** 6 x overall diameter

**Core identification:** Black with White numbers. (3 core and above to include Green/Yellow) Coloured cores available on request

#### Current Carrying Capacity (amperes)

Nominal Cross Sectional Area	Single Phase AC or DC	Three Phase AC
mm <sup>2</sup>	Amps	Amps
0.75	6	6
1.0	10	10
1.5	16	16
2.5	25	20
4.0	32	25
6.0	51	43
10.0	70	60
16.0	94	80

For ambient air temperatures other than 30°C the following rating factors should be applied:

Ratings for cables up to and including 4mm<sup>2</sup> are based on 60°C conductor operating temperature with 6mm<sup>2</sup> and above based on 70°C operating temperature.

#### Correction Factors:

Cables Up To and Including 4mm<sup>2</sup>, Assuming 60°C Conductor Temperature.

Ambient Temperature	35°C	40°C	45°C	50°C	55°C
Correction Factor	0.91	0.82	0.71	0.58	0.41

## VDE Standard Control Cable

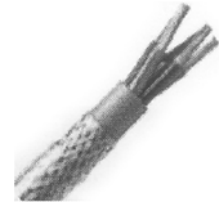
### YY PVC/PVC Number Coded Control Cable

Cables 6mm<sup>2</sup> and above, Assuming 70°C Conductor Temperature

<b>Ambient Temperature</b>	35°C	40°C	45°C	50°C	55°C	60°C
<b>Correction Factor</b>	0.91	0.82	0.71	0.58	0.41	0.50

Part NO .	Number of Cores	Nominal Cross Sectional Area mm <sup>2</sup>	No . /Nominal Diameter of Strands mm	Nominal Overall Diameter mm	Nominal Weight kg/km
GH-CT-YY-3C0.75SQ	3	0.75	24/0.20	5.9	55
GH-CT-YY-3C1.00SQ	3	1	32/0.20	6.4	67
GH-CT-YY-3C1.50SQ	3	1.5	30/0.25	7.4	92
GH-CT-YY-3C2.50SQ	3	2.5	50/0.25	9.5	153
GH-CT-YY-3C4.00SQ	3	4	56/0.30	12	235
GH-CT-YY-3C6.00SQ	3	6	84/0.30	12.8	305
GH-CT-YY-3C10.0SQ	3	10	80/0.40	15.8	590
GH-CT-YY-3C16.0SQ	3	16	126/0.40	18.4	800
GH-CT-YY-4C0.75SQ	4	0.75	24/0.20	6.8	76
GH-CT-YY-4C1.00SQ	4	1	32/0.20	7.4	89
GH-CT-YY-4C1.50SQ	4	1.5	30/0.25	8.5	122
GH-CT-YY-4C2.50SQ	4	2.5	50/0.25	10.4	191
GH-CT-YY-4C4.00SQ	4	4	56/0.30	13.5	330
GH-CT-YY-4C6.00SQ	4	6	84/0.30	16	480
GH-CT-YY-4C10.0SQ	4	10	80/0.40	20.8	743
GH-CT-YY-4C16.0SQ	4	16	126/0.40	24.1	1104
GH-CT-YY-5C0.75SQ	5	0.75	24/0.20	7.4	88
GH-CT-YY-5C1.00SQ	5	1	32/0.20	8.1	108
GH-CT-YY-5C1.50SQ	5	1.5	30/0.25	9.3	148
GH-CT-YY-5C2.50SQ	5	2.5	50/0.25	11.7	241
GH-CT-YY-5C4.00SQ	5	4	56/0.30	14.7	404
GH-CT-YY-5C6.00SQ	5	6	84/0.30	17.2	592
GH-CT-YY-5C10.0SQ	5	10	80/0.40	22.9	920
GH-CT-YY-5C16.0SQ	5	16	126/0.40	28.4	1370
GH-CT-YY-7C0.75SQ	7	0.75	24/0.20	8	113
GH-CT-YY-7C1.00SQ	7	1	32/0.20	8.8	140
GH-CT-YY-7C1.50SQ	7	1.5	30/0.25	10.1	193
GH-CT-YY-7C2.50SQ	7	2.5	50/0.25	12.9	311

# VDE Standard Control Cable



## SY PVC/PVC/GSWB/PVC Control Cable

**Application:** For use as a measuring, control and signal cable for the machine tool industry, plant construction, heating and air conditioning, and as a flexible cable between fixed and mobile equipment. The cable is well protected against mechanical damage by the narrow weave steel-wire braid.

- Note: should not be used in any installations where the cable is subjected to repetitive flexing.

**Standards:** Generally BS6500 VDE0250

**Conductor:** Class 5 annealed copper conductors to BS6360/VDE0295

**Current Carrying Capacity (amperes)**

**Insulation:** PVC

**Bedding:** PVC

**Braiding:** Galvanized Steel Wire Braid (GSWB)

**Sheath:** PVC (Type TM2 to BS7655)

**Voltage Rating:** 300/500V

**Temperature rating:** Flexing -15 to +70°C , Staic -35 to +70°C

**Minimum bending radius:** 6 x overall diameter

**Core identification:** Black with White numbers. (3 core and above to include Green/Yellow) Coloured cores available on request

Nominal Cross Sectional Area	Single Phase AC or DC	Three Phase AC
mm <sup>2</sup>	Amps	Amps
0.5	3	3
0.8	6	6
1.0	10	10
1.5	16	16
2.5	25	20
4.0	32	25
6.0	51	43
10.0	70	60
16.0	94	80

For ambient air temperatures other than 30°C the following rating factors should be applied:

Ratings for cables up to and including 4mm<sup>2</sup> are based on 60°C conductor operating temperature with 6mm<sup>2</sup> and above based on 70°C operating temperature.

### Correction Factors:

Cables Up To and Including 4mm<sup>2</sup> , Assuming 60 Conductor Temperature.

Ambient Temperature	35°C	40°C	45°C	50°C	55°C
Correction Factor	0.91	0.82	0.71	0.58	0.41

## VDE Standard Control Cable

### SY PVC/PVC/GSWB/PVC Control Cable

Cables 6mm<sup>2</sup> and above, Assuming 70°C Conductor Temperature

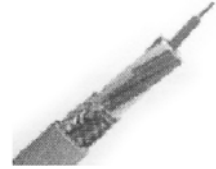
<b>Ambient Temperature</b>	35°C	40°C	45°C	50°C	55°C	60°C
<b>Correction Factor</b>	0.91	0.82	0.71	0.58	0.41	0.50

Part NO .	Number of Cores	Nominal Cross Sectional Area mm <sup>2</sup>	No . /Nominal Diameter of Strands mm	Nominal Overall Diameter mm	Nominal Weight kg/km
GH-CT-SY-3C1.00SQ	3	1	32/0.20	9	142
GH-CT-SY-3C1.50SQ	3	1.5	30/0.25	10.2	186
GH-CT-SY-3C2.50SQ	3	2.5	50/0.25	11.9	246
GH-CT-SY-3C4.00SQ	3	4	56/0.30	15.1	330
GH-CT-SY-3C6.00SQ	3	6	84/0.30	16.2	407
GH-CT-SY-3C10.0SQ	3	10	80/0.40	20.1	621
GH-CT-SY-3C16.0SQ	3	16	126/0.40	23.8	857
GH-CT-SY-4C1.00SQ	4	1	32/0.20	9.8	165
GH-CT-SY-4C1.50SQ	4	1.5	30/0.25	10.9	212
GH-CT-SY-4C2.50SQ	4	2.5	50/0.25	13.4	315
GH-CT-SY-4C4.00SQ	4	4	56/0.30	16.4	457
GH-CT-SY-4C6.00SQ	4	6	84/0.30	19.5	687
GH-CT-SY-4C10.0SQ	4	10	80/0.40	24.2	1009
GH-CT-SY-4C16.0SQ	4	16	126/0.40	27.1	1384
GH-CT-SY-5C1.00SQ	5	1	32/0.20	10.5	197
GH-CT-SY-5C1.50SQ	5	1.5	30/0.25	11.7	241
GH-CT-SY-5C2.50SQ	5	2.5	50/0.25	14.5	365
GH-CT-SY-5C4.00SQ	5	4	56/0.30	17.7	545
GH-CT-SY-5C6.00SQ	5	6	84/0.30	21.1	798
GH-CT-SY-5C10.0SQ	5	10	80/0.40	26.2	1197
GH-CT-SY-5C16.0SQ	5	16	126/0.40	30.6	1740
GH-CT-SY-7C1.00SQ	7	1	32/0.20	11.2	231
GH-CT-SY-7C1.50SQ	7	1.5	30/0.25	13.1	310
GH-CT-SY-7C2.50SQ	7	2.5	50/0.25	15.5	458



# VDE Standard Control Cable

## CY PVC/PVC/TCWB/PVC Control Cable



**Application:** For use as a measuring, control and signal cable for the machine tool industry, plant construction, heating and air conditioning, and as a flexible cable between fixed and mobile equipment. The cable is well protected against mechanical damage by the narrow weave copper wire braid.

- Note: should not be used in any installations where the cable is subjected to repetitive flexing.

**Standards:** Generally Bs6500 VDE0250

**Conductor:** Class 5 annealed copper conductors to BS6360/VDE0295

**Insulation:** PVC

**Bedding:** PVC

**Braiding:** Tinned Copper Wire Braid (TCWB)

**Sheath:** PVC (Type TM2 to BS7655)

**Voltage Rating:** 300/500V

**Temperature rating:** Flexing -15 to +70°C

Staic -35 to +70°C

**Minimum bending radius:** 6 x overall diameter

**Core identification:** Black with White numbers. (3 core and above to include Green/Yellow)

Coloured cores available on request

### Current Carrying Capacity (amperes)

Nominal Cross Sectional Area	Single Phase AC or DC	Three Phase AC
mm <sup>2</sup>	Amps	Amps
0.5	3	3
0.8	6	6
1.0	10	10
1.5	16	16
2.5	25	20
4.0	32	25
6.0	51	43
10.0	70	60
16.0	94	80

For ambient air temperatures other than 30°C the following rating factors should be applied:

Ratings for cables up to and including 4mm<sup>2</sup> are based on 60°C conductor operating temperature with 6mm<sup>2</sup> and above based on 70°C operating temperature.

### Correction Factors:

Cables Up To and Including 4mm<sup>2</sup>, Assuming 60°C Conductor Temperature.

Ambient Temperature	35°C	40°C	45°C	50°C	55°C
Correction Factor	0.91	0.82	0.71	0.58	0.41

## VDE Standard Control Cable

### CY PVC/PVC/TCWB/PVC Control Cable

Cables 6mm<sup>2</sup> and above, Assuming 70°C Conductor Temperature

<b>Ambient Temperature</b>	35°C	40°C	45°C	50°C	55°C	60°C
<b>Correction Factor</b>	0.91	0.82	0.71	0.58	0.41	0.50

Part NO .	Cores & size mm <sup>2</sup>	O.D. mm	Weight kg/km	Part NO.	Cores & size mm <sup>2</sup>	O.D. mm	Weight kg/km
GH-CT-CY-2C0. 50SQ	2×0.5	5.5	46	GH-CT-CY-34C1. 00SQ	34×1.0	20	650
GH-CT-CY-3C0. 50SQ	3×0.5	5.8	55	GH-CT-CY-42C1. 00SQ	42×1.0	21.5	740
GH-CT-CY-4C0. 50SQ	4×0.5	6.4	66	GH-CT-CY-2C1. 50SQ	2×1.5	7.5	85
GH-CT-CY-5C0. 50SQ	5×0.5	7.2	78	GH-CT-CY-3C1. 50SQ	3×1.5	8.3	115
GH-CT-CY-7C0. 50SQ	7×0.5	8.2	95	GH-CT-CY-4C1. 50SQ	4×1.5	8.7	150
GH-CT-CY-12C0. 50SQ	12×0.5	10	155	GH-CT-CY-5C1. 50SQ	5×1.5	9.5	168
GH-CT-CY-18C0. 50SQ	18×0.5	11.7	230	GH-CT-CY-7C1. 50SQ	7×1.5	10.8	210
GH-CT-CY-25C0. 50SQ	25×0.5	13.8	320	GH-CT-CY-12C1. 50SQ	12×1.5	13.5	365
GH-CT-CY-2C0. 75SQ	2×0.75	6.3	55	GH-CT-CY-18C1. 50SQ	18×1.5	16.5	525
GH-CT-CY-3C0. 75SQ	3×0.75	7	67	GH-CT-CY-25C1. 50SQ	25×1.5	19.8	765
GH-CT-CY-4C0. 75SQ	4×0.75	7.2	80	GH-CT-CY-34C1. 50SQ	34×1.5	22	940
GH-CT-CY-5C0. 75SQ	5×0.75	8	100	GH-CT-CY-42C1. 50SQ	42×1.5	23.8	1050
GH-CT-CY-7C0. 75SQ	7×0.75	9	130	GH-CT-CY-2C2. 50SQ	2×2.5	9.5	130
GH-CT-CY-12C0. 75SQ	12×0.75	11.5	210	GH-CT-CY-3C2. 50SQ	3×2.5	10.5	170
GH-CT-CY-18C0. 75SQ	18×0.75	13	260	GH-CT-CY-4C2. 50SQ	4×2.5	11.4	210
GH-CT-CY-25C0. 75SQ	25×0.75	16	430	GH-CT-CY-5C2. 50SQ	5×2.5	12.5	260
GH-CT-CY-34C0. 75SQ	34×0.75	17.5	515	GH-CT-CY-7C2. 50SQ	7×2.5	14	345
GH-CT-CY-42C0. 75SQ	42×0.75	19	600	GH-CT-CY-3C4. 00SQ	3×4.0	10.6	265
GH-CT-CY-2C1. 00SQ	2×1.0	7	66	GH-CT-CY-4C4. 00SQ	4×4.0	11.5	350
GH-CT-CY-3C1. 00SQ	3×1.0	7.3	80	GH-CT-CY-5C4. 00SQ	5×4.0	12.7	480
GH-CT-CY-4C1. 00SQ	4×1.0	8	100	GH-CT-CY-7C4. 00SQ	7×4.0	14	650
GH-CT-CY-5C1. 00SQ	5×1.0	8.5	125	GH-CT-CY-4C6. 00SQ	4×6.0	15.5	550
GH-CT-CY-7C1. 00SQ	7×1.0	9.2	160	GH-CT-CY-5C6. 00SQ	5×6.0	15.7	800
GH-CT-CY-12C1. 00SQ	12×1.0	12.5	260	GH-CT-CY-7C6. 00SQ	7×6.0	16.6	1200
GH-CT-CY-18C1. 00SQ	18×1.0	14.5	375				

## VDE Standard Control Cable

### LIYCY PVC/TCWB/PVC Control Cable

**Application:** Indoor installation for electronic control and regulating gear office machinery. These cables have Feature for screening which defect external electrical influences and ensures precise flues transmission.

**Standards:** Generally to BS6500 and VDE0250

**Conductor:** Fine Wire Strands of Plain Annealed Copper strands to BS6360.

**Insulation:** PVC

**Laying UP:** Cores twisted together

**Wrapping:** Polyester tape

**Screen:** Tinned Copper Wire Braid

**Sheath:** Grey PVC

**Voltage Rating:** Working Test

0.14-0.34mm:250V 1000V

0.5-1.5mm:300V 2000V

2.5-6mm:500V 2000V

**Temperature rating:**Flexing -5°C to +70°C

Staic -20°C to +80°C

**Minimum bending radius:**Fixed: 6 x Cable

**Diameter, Flexing:**15 x Cable Diameter

**Core identification:**Number Coded, Black Cores with White numbers +Green/Yellow

**Mutual capacitance:**C/C approx 120 nF / km; C/S approx 160 nF / km

**Inductance:**Approx. 0.65 mH/km

Part NO .	Cores & size mm <sup>2</sup>	Weight kg/km	O. D. mm	Part NO.	Cores & size mm <sup>2</sup>	Weight kg/km	O. D. mm
GH-CT-LiYCY-1C0. 14SQ	1×0. 14	16	3. 6	GH-CT-LiYCY-8C0. 34SQ	8×0. 34	84	7. 4
GH-CT-LiYCY-2C0. 14SQ	2×0. 14	20	3. 8	GH-CT-LiYCY-10C0. 34SQ	10×0. 34	106	8. 5
GH-CT-LiYCY-3C0. 14SQ	3×0. 14	25	4	GH-CT-LiYCY-12C0. 34SQ	12×0. 34	119	8. 7
GH-CT-LiYCY-4C0. 14SQ	4×0. 14	30	4. 3	GH-CT-LiYCY-14C0. 34SQ	14×0. 34	132	9. 1
GH-CT-LiYCY-5C0. 14SQ	5×0. 14	36	4. 6	GH-CT-LiYCY-16C0. 34SQ	16×0. 34	146	9. 6
GH-CT-LiYCY-6C0. 14SQ	6×0. 14	40	5	GH-CT-LiYCY-18C0. 34SQ	18×0. 34	188	10. 1
GH-CT-LiYCY-7C0. 14SQ	7×0. 14	41	5. 2	GH-CT-LiYCY-21C0. 34SQ	21×0. 34	193	10. 9
GH-CT-LiYCY-8C0. 14SQ	8×0. 14	44	5. 6	GH-CT-LiYCY-24C0. 34SQ	24×0. 34	213	12
GH-CT-LiYCY-10C0. 14SQ	10×0. 14	56	6. 3	GH-CT-LiYCY-27C0. 34SQ	27×0. 34	232	12. 3
GH-CT-LiYCY-12C0. 14SQ	12×0. 14	60	6. 4	GH-CT-LiYCY-30C0. 34SQ	30×0. 34	253	12. 7
GH-CT-LiYCY-14C0. 14SQ	14×0. 14	65	6. 7	GH-CT-LiYCY-36C0. 34SQ	36×0. 34	292	13. 6
GH-CT-LiYCY-16C0. 14SQ	16×0. 14	81	7. 2	GH-CT-LiYCY-40C0. 34SQ	40×0. 34	318	14
GH-CT-LiYCY-18C0. 14SQ	18×0. 14	93	7. 6	GH-CT-LiYCY-52C0. 34SQ	52×0. 34	400	15. 8
GH-CT-LiYCY-21C0. 14SQ	21×0. 14	103	8. 3	GH-CT-LiYCY-61C0. 34SQ	61×0. 34	454	16. 6
GH-CT-LiYCY-24C0. 14SQ	24×0. 14	117	9	GH-CT-LiYCY-2C0. 50SQ	2×0. 5	42	5. 4
GH-CT-LiYCY-25C0. 14SQ	25×0. 14	120	9	GH-CT-LiYCY-3C0. 50SQ	3×0. 5	51	5. 8
GH-CT-LiYCY-27C0. 14SQ	27×0. 14	124	9. 1	GH-CT-LiYCY-4C0. 50SQ	4×0. 5	61	6. 5
GH-CT-LiYCY-30C0. 14SQ	30×0. 14	136	9. 4	GH-CT-LiYCY-7C0. 50SQ	7×0. 5	98	7. 8
GH-CT-LiYCY-36C0. 14SQ	36×0. 14	160	10	GH-CT-LiYCY-12C0. 50SQ	12×0. 5	156	10. 1
GH-CT-LiYCY-40C0. 14SQ	40×0. 14	170	10. 3	GH-CT-LiYCY-18C0. 50SQ	18×0. 5	215	11. 8
GH-CT-LiYCY-44C0. 14SQ	44×0. 14	186	11. 1	GH-CT-LiYCY-25C0. 50SQ	25×0. 5	314	14. 4
GH-CT-LiYCY-52C0. 14SQ	52×0. 14	200	11. 5	GH-CT-LiYCY-2C1. 50SQ	2×1. 5	97	8. 1
GH-CT-LiYCY-61C0. 14SQ	61×0. 14	250	12. 1	GH-CT-LiYCY-3C1. 50SQ	3×1. 5	125	8. 9

## VDE Standard Control Cable

### LIYCY PVC/TCWB/PVC Control Cable

Continue Table

Part NO .	Cores & size mm <sup>2</sup>	Weight kg/km	O. D. mm	Part NO.	Cores & size mm <sup>2</sup>	Weight kg/km	O. D. mm
GH-CT-LiYCY-1C0. 25SQ	1×0. 25	17	3. 1	GH-CT-LiYCY-4C1. 50SQ	4×1. 5	165	9. 7
GH-CT-LiYCY-2C0. 25SQ	2×0. 25	30	4. 5	GH-CT-LiYCY-5C1. 50SQ	5×1. 5	193	10. 5
GH-CT-LiYCY-3C0. 25SQ	3×0. 25	37	5. 1	GH-CT-LiYCY-7C1. 50SQ	7×1. 5	245	11. 3
GH-CT-LiYCY-4C0. 25SQ	4×0. 25	44	5. 2	GH-CT-LiYCY-12C1. 50SQ	12×1. 5	365	14. 5
GH-CT-LiYCY-5C0. 25SQ	5×0. 25	51	5. 7	GH-CT-LiYCY-18C1. 50SQ	18×1. 5	553	16. 9
GH-CT-LiYCY-6C0. 25SQ	6×0. 25	55	6. 1	GH-CT-LiYCY-25C1. 50SQ	25×1. 5	720	20. 1
GH-CT-LiYCY-7C0. 25SQ	7×0. 25	60	6. 4	GH-CT-LiYCY-30C1. 50SQ	30×1. 5	776	20. 7
GH-CT-LiYCY-8C0. 25SQ	8×0. 25	77	7. 1	GH-CT-LiYCY-42C1. 50SQ	42×1. 5	1140	25. 5
GH-CT-LiYCY-10C0. 25SQ	10×0. 25	93	8. 1	GH-CT-LiYCY-2C2. 50SQ	2×2. 5	148	10. 1
GH-CT-LiYCY-12C0. 25SQ	12×0. 25	104	8. 4	GH-CT-LiYCY-3C2. 50SQ	3×2. 5	188	10. 6
GH-CT-LiYCY-14C0. 25SQ	14×0. 25	115	8. 7	GH-CT-LiYCY-4C2. 50SQ	4×2. 5	236	11. 6
GH-CT-LiYCY-16C0. 25SQ	16×0. 25	132	8. 9	GH-CT-LiYCY-5C2. 50SQ	5×2. 5	270	12. 6
GH-CT-LiYCY-18C0. 25SQ	18×0. 25	137	9. 4	GH-CT-LiYCY-7C2. 50SQ	7×2. 5	340	13. 7
GH-CT-LiYCY-21C0. 25SQ	21×0. 25	173	10. 4	GH-CT-LiYCY-12C2. 50SQ	12×2. 5	585	18. 5
GH-CT-LiYCY-24C0. 25SQ	24×0. 25	184	11. 4	GH-CT-LiYCY-18C2. 50SQ	18×2. 5	725	19. 7
GH-CT-LiYCY-25C0. 25SQ	25×0. 25	190	11. 5	GH-CT-LiYCY-3C4. 00SQ	3×4	250	12. 4
GH-CT-LiYCY-27C0. 25SQ	27×0. 25	198	11. 6	GH-CT-LiYCY-4C4. 00SQ	4×4	302	13. 5
GH-CT-LiYCY-30C0. 25SQ	30×0. 25	212	11. 9	GH-CT-LiYCY-5C4. 00SQ	5×4	370	14. 8
GH-CT-LiYCY-36C0. 25SQ	36×0. 25	238	12. 7	GH-CT-LiYCY-7C4. 00SQ	7×4	473	16. 1
GH-CT-LiYCY-40C0. 25SQ	40×0. 25	260	13. 1	GH-CT-LiYCY-3C6. 00SQ	3×6	285	13. 9
GH-CT-LiYCY-44C0. 25SQ	44×0. 25	290	14. 3	GH-CT-LiYCY-4C6. 00SQ	4×6	412	15. 2
GH-CT-LiYCY-52C0. 25SQ	52×0. 25	333	14. 9	GH-CT-LiYCY-5C6. 00SQ	5×6	505	16. 7
GH-CT-LiYCY-61C0. 25SQ	61×0. 25	382	15. 8	GH-CT-LiYCY-4C10. 00SQ	4×10	620	20. 8
GH-CT-LiYCY-2C0. 25SQ	2×0. 34	33	5	GH-CT-LiYCY-5C10. 00SQ	5×10	796	22. 9
GH-CT-LiYCY-3C0. 25SQ	3×0. 34	42	5. 4	GH-CT-LiYCY-4C16. 00SQ	4×16	1090	23. 2
GH-CT-LiYCY-4C0. 25SQ	4×0. 34	49	5. 8	GH-CT-LiYCY-5C16. 00SQ	5×16	2070	25. 6
GH-CT-LiYCY-5C0. 25SQ	5×0. 34	59	6. 1	GH-CT-LiYCY-4C25. 00SQ	4×25	1787	28. 2
GH-CT-LiYCY-6C0. 25SQ	6×0. 34	64	6. 6	GH-CT-LiYCY-5C25. 00SQ	5×25	2047	31. 1
GH-CT-LiYCY-7C0. 25SQ	7×0. 34	69	6. 7	GH-CT-LiYCY-4C35. 00SQ	4×35	2142	31. 5

## VDE Standard Control Cable

### LIYCY(TP) Control Cable

**Application:** data transmission cables used in control and signal lines and in electronics for computer systems, electronic control and regulation, office machinery where cables of robust construction and relatively small outer diameter are required.

The overall screening protects against external electrical influences and ensures precise transmission.

**Standards:** VDE 0812 and VDE 0814-SEV approved PVC control cables.

**Conductor:** Flexible in stranded bare copper according to VDE 0295/CL.5 and IEC 288/CL.5.

**Insulation:** PVC Y12 acc.to DIN VDE 0207 part 4

**Laying UP:** Cores twisted into pairs - pairs twisted into layers.

**Screen:** Tinned copper wire braid - with tinned copper stranded draining wire (if requested).

**Sheath:** PVC Grey according to RAL 7001 or RAL 7032 on other colors

**Minimum Bend Radius:** 6 x cable diameter

**Temperature range:** -30°C to +70°C

**Nominal Voltage:** 250V

**Test Voltage:** 6 AWG: 1200V, >26 AWG: 1500V

**Inductance:** Nominal 0.65 mH/km

**Mutual Capacitance:** Cond/cond: 120 nF/km, Cond/shield: 160 nF/km

**Conductor Stranding:** Fine Wire

**Color Code:** DIN 47100.

## VDE Standard Control Cable

### LIYCY(TP) Control Cable

	Part NO .	Number of Pairs	Nominal Overall Diameter		Approx Weight	
			Inches	mm	lbs/mft	kg/km
18 AWG (32/32) 1.0 mm <sup>2</sup> LiYCY (TP)	GH-CT-LiYCY(TP)-2P0.00SQ	2	0.406	10.3	95	142
	GH-CT-LiYCY(TP)-3P0.50SQ	3	0.409	10.4	116	173
	GH-CT-LiYCY(TP)-4P0.50SQ	4	0.445	11.3	142	212
	GH-CT-LiYCY(TP)-5P0.50SQ	5	0.465	11.8	179	266
21 AWG (16/32) 0.50 mm <sup>2</sup> LiYCY (TP)	GH-CT-LiYCY(TP)-2P0.50SQ	2	0.339	8.6	62	93
	GH-CT-LiYCY(TP)-3P0.50SQ	3	0.343	8.7	87	129
	GH-CT-LiYCY(TP)-4P0.50SQ	4	0.37	9.4	98	146
	GH-CT-LiYCY(TP)-6P0.50SQ	6	0.437	11.1	133	198
	GH-CT-LiYCY(TP)-8P0.50SQ	8	0.516	13.1	174	259
	GH-CT-LiYCY(TP)-12P0.50SQ	12	0.587	14.9	238	354
24 AWG (14/34) 0.25 mm <sup>2</sup> LiYCY (TP)	GH-CT-LiYCY(TP)-16P0.50SQ	16	0.65	16.5	308	459
	GH-CT-LiYCY(TP)-2P0.25SQ	2	0.276	7	36	54
	GH-CT-LiYCY(TP)-3P0.25SQ	3	0.28	7.1	44	66
	GH-CT-LiYCY(TP)-4P0.25SQ	4	0.299	7.6	54	81
	GH-CT-LiYCY(TP)-6P0.25SQ	6	0.335	8.5	77	115
	GH-CT-LiYCY(TP)-8P0.25SQ	8	0.406	10.3	87	130
	GH-CT-LiYCY(TP)-10P0.25SQ	10	0.433	11	106	158
	GH-CT-LiYCY(TP)-12P0.25SQ	12	0.445	11.3	128	190
26 AWG (18/38) 0.14 mm <sup>2</sup> LiYCY (TP)	GH-CT-LiYCY(TP)-16P0.25SQ	16	0.492	12.5	160	238
	GH-CT-LiYCY(TP)-25P0.25SQ	25	0.634	16.1	231	344
	GH-CT-LiYCY(TP)-2P0.14SQ	2	0.224	5.7	26	39
	GH-CT-LiYCY(TP)-3P0.14SQ	3	0.228	5.8	32	48
	GH-CT-LiYCY(TP)-4P0.14SQ	4	0.244	6.2	36	54
	GH-CT-LiYCY(TP)-6P0.14SQ	6	0.28	7.1	57	85
	GH-CT-LiYCY(TP)-8P0.14SQ	8	0.323	8.2	65	97
	GH-CT-LiYCY(TP)-10P0.14SQ	10	0.343	8.7	74	110
	GH-CT-LiYCY(TP)-12P0.14SQ	12	0.35	8.9	95	142
	GH-CT-LiYCY(TP)-16P0.14SQ	16	0.402	10.2	103	154
	GH-CT-LiYCY(TP)-20P0.14SQ	20	0.445	11.3	124	184
GH-CT-LiYCY(TP)-25P0.14SQ	25	0.492	12.5	160	238	
GH-CT-LiYCY(TP)-30P0.14SQ	30	0.516	13.1	181	270	

## VDE Standard Control Cable



### PVC Flat Form Control Cable

**Application:** Designed to be used in conveying and hoisting equipment, floor conveyor systems and as electrical supply to moving machine components. These Cables are highly flexible and designed to be subjected to heavy and frequent bending.

**Standards:** BS6977, IEC227 Part 6 & CENELEC HD 359 S2

**Conductor:** Flexible class 5 copper conductors

**Insulation:** PVC

**Sheath:** PVC

**Colour:**Black

**Voltage Rating:**300/500V

**Test Voltage:**2kV (rms)/15 minutes

**Temperature rating:**-5 to +70

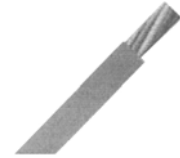
**Minimum bending radius:** 10 x thickness of cable

**Core identification:** Black Cores with White numbers Green/Yellow earth conductor

Part NO .	Cores & size	Nominal Diameter Over Conductor	Nominal Thickness of Insulation	Cable Dimensions (Thickness x Width)	Nominal Weight
	mm <sup>2</sup>	mm	mm	mm	kg/km
GH-CT-Flat-6C0.75SQ	6×0.75	1.3	0.6	4×19	142
GH-CT-Flat-12C0.75SQ	12×0.75	1.3	0.6	4×34	258
GH-CT-Flat-18C0.75SQ	18×0.75	1.3	0.6	4×49	380
GH-CT-Flat-20C0.75SQ	20×0.75	1.3	0.6	4×55	425
GH-CT-Flat-24C0.75SQ	24×0.75	1.3	0.6	4×66	509
GH-CT-Flat-6C1.00SQ	6×1.00	1.4	0.6	4.5×19	161
GH-CT-Flat-12C1.00SQ	12×1.00	1.4	0.6	4.5×35	292
GH-CT-Flat-18C1.00SQ	18×1.00	1.4	0.6	4.5×51	432
GH-CT-Flat-20C1.00SQ	20×1.00	1.4	0.6	4.5×57	483
GH-CT-Flat-24C1.00SQ	24×1.00	1.4	0.6	4.5×68	578

## VDE Standard Control Cable

### PUR-JZ Control Cable



**Conductor material:** stranded bare copper, stranding as per VDE 0295, class 5

**Insulation material:** PVC

**Core identification:** number coded black cores with white numbers +green/yellow.

**Sheath:** PUR grey RAL 7001 or other colour.

**Voltage:**300/500V

**Test voltage:**3000V

**Operating temperatur range:**fixed-50 to +80 ; flexing-40 to +90

**Minimum bending radius:**12-15 x cable diameter.

Part NO .	No. of Cores	Cross Section mm <sup>2</sup>	Outer Diameter mm	Copper Weight kg/100m	Cable weight
					Kg/100m
GH-CT-PURJZ-2C0. 50SQ	2	0.5	5	0.96	3.7
GH-CT-PURJZ-3C0. 50SQ	3	0.5	5.3	1.44	4.5
GH-CT-PURJZ-4C0. 50SQ	4	0.5	5.7	1.92	5.3
GH-CT-PURJZ-5C0. 50SQ	5	0.5	6.5	2.4	6.3
GH-CT-PURJZ-7C0. 50SQ	7	0.5	7	3.4	7.9
GH-CT-PURJZ-10C0. 50SQ	10	0.5	9	4.8	11.5
GH-CT-PURJZ-12C0. 50SQ	12	0.5	9.5	5.76	12.9
GH-CT-PURJZ-18C0. 50SQ	18	0.5	11.2	8.7	18.8
GH-CT-PURJZ-25C0. 50SQ	25	0.5	13.5	12	25.5
GH-CT-PURJZ-34C0. 50SQ	34	0.5	15.2	16.4	35.3
GH-CT-PURJZ-41C0. 50SQ	41	0.5	16.6	19.7	40.9
GH-CT-PURJZ-2C0. 75SQ	2	0.75	5.9	1.44	5.5
GH-CT-PURJZ-3C0. 75SQ	3	0.75	6.2	2.16	7.2
GH-CT-PURJZ-4C0. 75SQ	4	0.75	7.2	2.88	7.5
GH-CT-PURJZ-5C0. 75SQ	5	0.75	7.8	3.6	11.9
GH-CT-PURJZ-7C0. 75SQ	7	0.75	8.5	5	12.1
GH-CT-PURJZ-9C0. 75SQ	9	0.75	11.1	6.5	17
GH-CT-PURJZ-12C0. 75SQ	12	0.75	11.2	9.64	18.2
GH-CT-PURJZ-18C0. 75SQ	18	0.75	13.2	12.96	27.5
GH-CT-PURJZ-25C0. 75SQ	25	0.75	16	18	38.2
GH-CT-PURJZ-34C0. 75SQ	34	0.75	16.8	24.48	46.4
GH-CT-PURJZ-41C0. 75SQ	41	0.75	18.3	29.52	57
GH-CT-PURJZ-2C1. 00SQ	2	1	5.8	1.92	5.2
GH-CT-PURJZ-3C1. 00SQ	3	1	7.5	2.88	8.3
GH-CT-PURJZ-4C1. 00SQ	4	1	8.1	3.84	11.3
GH-CT-PURJZ-5C1. 00SQ	5	1	9.3	4.8	13.7



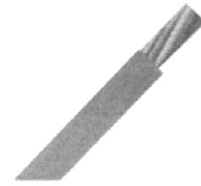
## VDE Standard Control Cable

### PUR-JZ Control Cable

Continue Table

Part NO .	No. of Cores	Cross Section mm <sup>2</sup>	Outer Diameter mm	Copper Weight kg/100m	Cable weight
					Kg/100m
GH-CT-PURJZ-7C1.00SQ	7	1	10.1	6.7	19.2
GH-CT-PURJZ-12C1.00SQ	12	1	12.9	11.5	29.4
GH-CT-PURJZ-18C1.00SQ	18	1	15.3	17.3	42
GH-CT-PURJZ-25C1.00SQ	25	1	18.4	24	45.6
GH-CT-PURJZ-34C1.00SQ	34	1	19	32.64	56.5
GH-CT-PURJZ-41C1.00SQ	41	1	20.1	39.36	69.8
GH-CT-PURJZ-3C1.50SQ	3	1.5	7.9	4.3	11.7
GH-CT-PURJZ-4C1.50SQ	4	1.5	8.8	5.8	14.8
GH-CT-PURJZ-5C1.50SQ	5	1.5	9.9	7.2	18.1
GH-CT-PURJZ-7C1.50SQ	7	1.5	10.7	10.1	27.3
GH-CT-PURJZ-12C1.50SQ	12	1.5	13.6	17.3	39.1
GH-CT-PURJZ-18C1.50SQ	18	1.5	16.3	25.95	58.9
GH-CT-PURJZ-25C1.50SQ	25	1.5	20	36	80.1
GH-CT-PURJZ-34C1.50SQ	34	1.5	22.2	48.96	85
GH-CT-PURJZ-41C1.50SQ	41	1.5	24.1	59	104
GH-CT-PURJZ-3C2.50SQ	3	2.5	10	7.2	15.6
GH-CT-PURJZ-4C2.50SQ	4	2.5	11.1	9.6	20
GH-CT-PURJZ-5C2.50SQ	5	2.5	12.2	12	26.9
GH-CT-PURJZ-7C2.50SQ	7	2.5	13.7	16.8	35.8
GH-CT-PURJZ-12C2.50SQ	12	2.5	17.6	28.8	53.2
GH-CT-PURJZ-4C4.00SQ	4	4	12.4	15.4	28.9
GH-CT-PURJZ-5C4.00SQ	5	4	13.8	19.2	35.2
GH-CT-PURJZ-4C6.00SQ	4	6	14.1	23	46.7
GH-CT-PURJZ-5C6.00SQ	5	6	15.8	28.8	56.8
GH-CT-PURJZ-4C10.0SQ	4	10	17.8	38.4	71.1
GH-CT-PURJZ-5C10.0SQ	5	10	19.9	48	98.1
GH-CT-PURJZ-4C16.0SQ	4	16	20.6	61.44	105.2
GH-CT-PURJZ-5C16.0SQ	5	16	23.6	76.8	140
GH-CT-PURJZ-4C25.0SQ	4	25	29.4	96	159
GH-CT-PURJZ-4C35.0SQ	4	35	32.8	134.4	220
GH-CT-PURJZ-4C50.0SQ	4	50	38.9	192	240
GH-CT-PURJZ-4C70.0SQ	4	70	44.7	268.8	440
GH-CT-PURJZ-4C95.0SQ	4	95	59.6	364.8	600

## VDE Standard Control Cable



### PUR-CY Control Cable

**Conductor material:** stranded bare copper

**Insulation material:** PVC

**Core identification:** Colours according to DIN47100

**Laying up:** multiple cores twisted in layers

**Wrapping:** fleece wrapping on total (optional).

**Screen:** tinned copper braid with tinned copper stranded draining wire (only if requested).

**Sheath:** PUR, grey or other colour.

**Minimum bending radius:** flexing: 15 x cable diameter static: 6 x cable diameter

**Temperature range:** -30°C up to +80°C

**Working voltage:** peak:(not for purposes of power/high voltage current) 250V

**Conductor stranding:** strands, fine wire

**Colour code:** DIN 47100, without colour repetition

Part NO .	No. of Cores	Cross Section mm <sup>2</sup>	Outer Diameter mm	Copper Weight kg/100m	Cable weight
					Kg/100m
GH-CT-PURCY-1CO. 25SQ	1	0.25	4.9	1.4	2.8
GH-CT-PURCY-21CO. 25SQ	2	0.25	7	3.2	6.3
GH-CT-PURCY-3CO. 25SQ	3	0.25	7.6	3.84	7.4
GH-CT-PURCY-4CO. 25SQ	4	0.25	8.3	4.32	8.7
GH-CT-PURCY-5CO. 25SQ	5	0.25	9.3	5.15	10.6
GH-CT-PURCY-6CO. 25SQ	6	0.25	10.1	7.18	13.4
GH-CT-PURCY-8CO. 25SQ	8	0.25	11.4	7.44	15.1
GH-CT-PURCY-10CO. 25SQ	10	0.25	12.5	9	18.8
GH-CT-PURCY-14CO. 25SQ	14	0.25	13.7	11.12	21.7
GH-CT-PURCY-1CO. 50SQ	1	0.5	6.5	2.2	4.9
GH-CT-PURCY-2CO. 50SQ	2	0.5	9.5	5	10.2
GH-CT-PURCY-3CO. 50SQ	3	0.5	10.4	7.18	13.4
GH-CT-PURCY-4CO. 50SQ	4	0.5	11.5	7.44	15.2
GH-CT-PURCY-5CO. 50SQ	5	0.5	11.8	8.45	16.5
GH-CT-PURCY-6CO. 50SQ	6	0.5	12.9	9.96	19.7
GH-CT-PURCY-8CO. 50SQ	8	0.5	15.9	14.43	28.9
GH-CT-PURCY-10CO. 50SQ	10	0.5	17.7	17.6	34.9
GH-CT-PURCY-14CO. 50SQ	14	0.5	18.3	21.54	40.4
GH-CT-PURCY-1CO. 75SQ	1	0.75	7.1	3.4	6.4
GH-CT-PURCY-2CO. 75SQ	2	0.75	9.8	6	11.8
GH-CT-PURCY-3CO. 75SQ	3	0.75	11.1	8.57	15.3
GH-CT-PURCY-4CO. 75SQ	4	0.75	11.6	9.36	17.8
GH-CT-PURCY-5CO. 75SQ	5	0.75	12.8	11.3	20.3
GH-CT-PURCY-6CO. 75SQ	6	0.75	13.7	13.04	23.5
GH-CT-PURCY-8CO. 75SQ	8	0.75	16.7	19.22	34.7
GH-CT-PURCY-10CO. 75SQ	10	0.75	19.3	25.8	46.8
GH-CT-PURCY-14CO. 75SQ	14	0.75	20.3	31.66	54.7
GH-CT-PURCY-1CO. 75SQ	1	1	7.5	4.2	7.4
GH-CT-PURCY-2CO. 75SQ	2	1	10.6	7.3	12.8
GH-CT-PURCY-3CO. 75SQ	3	1	11.4	9.36	16.7
GH-CT-PURCY-4CO. 75SQ	4	1	12.3	11.78	20.9
GH-CT-PURCY-5CO. 75SQ	5	1	13.7	13.9	24.1

# Copper Core, Polyolefin Insulated Aluminum-Plastic Composite Sheathed, Local Communication Cable

## Applications

The product is designed for local communication.

## Operating features

The product is used to transmit voice up to 150kHz analog signal and up to 2048kbit/s digital signal, In some circumstance, it also can transmit above 2048kbit/s digital signal. The cable can be aerially installed or laid in ducts. The operating ambient temperature of calbe is 30°C • 60°C.

## Types and description

Type	Description	Main application
HYA	Copper core, solid polyolefin insulated, aluminum-plastic composite binding sheath, local communication cable	Ducts
HYAC	Copper core, solid polyolefin insulated, aluminum-plastic composite binding sheath, self-supporting local communication cable	Aerial installation
HYAT	Copper core, solid polyolefin insulated, filled, aluminum-plastic composite binding sheath, local communication cable	Ducts
HYA <sub>53</sub>	Copper core, solid polyolefin insulated, aluminum-plastic binding composite sheath, single layer corrugated steel tape longitudinal armour, PE sheath, local communication cable	Direct burial
HYA <sub>23</sub>	Copper core, solid polyolefin insulated, aluminum-plastic binding composite sheath, double layer steel tape lapping armour, PE sheath, local communication cable	Direct burial

Note: HYA, HYAT cables with small capacity can be hung aerially



## Specification

Type	Nom. dia of conductor mm	Nominal pairs											
HYA	0.4	-	10	20	30	50	100	200	300	400	500	600	800
	0.5	5	10	20	30	50	100	200	300	400	500	600	800
	0.6	5	10	20	30	50	100	200	300	400	-	-	-
	0.8	-	10	20	30	50	100	200	-	-	-	-	-
HYAC	0.4	-	10	20	30	50	100	200	-	-	-	-	-
	0.5	-	10	20	30	50	100	200	-	-	-	-	-
HYAT	0.4	-	10	20	30	50	100	200	300	400	-	-	800
	0.5	-	10	20	30	50	100	200	300	400	500	-	-
	0.6		10	20	30	50	100	200	300	-	-	-	-
	0.8	-	10	20	30	50	100	-	-	-	-	-	-
HYA <sub>53</sub>	0.4	-	10	20	30	50	100	200	-	-	-	-	-
	0.5	-	10	20	30	50	100	-	-	-	-	-	-
HYA <sub>23</sub>	0.4	-	10	20	30	50	-	-	-	-	-	-	-
	0.5	-	10	20	30	50	-	-	-	-	-	-	-

Note: With preparatory pairs for 100 pairs and above cables, the number of preparatory pairs can not be over 1% of Nom.

pairs and not be over 6 pairs at most . Preparatory pairs laid separately. The qualified pairs of cables should be not less than Nom. pairs.

## Copper Core, Polyolefin Insulated Aluminum-Plastic Composite Sheathed, Local Communication Cable

### Arrangement of cable construction

Nominal pairsNumber	Nominal pairs
5	concentric or fork-stranded
10	concentric or fork-stranded
20	concentric or fork-stranded
30	(8+9+8)+5; (12+13)+ 5; 25+5
50	2× (12+13 )
100	4×25

Nominal pairsNumber	Nominal pairs
200	1×50+6×25; (2+6) ×25; 4×50
300	(1+5) ×50
400	4×100; 1×100+6×50
500	(1+4) ×100
600	(1+5) ×100
800	4×50+6×100; (2+6) ×100

### Approx. overall diameter and weight

Type	Cond. Dia. mm	No. of Pairs	Sheath thickness mm	Approx. OD mm	Approx. Weight kg/km	Type	Cond. Dia. mm	No. of Pairs	Sheath thickness mm	Approx. OD mm	Approx. Weight kg/km	Type	Cond. Dia. mm	No. of Pairs	Sheath thickness mm	Approx. OD mm	Approx. Weight kg/km
HYA	0.4	10	1.5	8.7	79	HYA	0.8	20	1.5	16.5	333	HYAT	0.5	400	2.0	46.3	2812
	0.4	20	1.5	10.7	121		0.8	30	1.5	19.5	468		0.5	500	2.3	50.5	3422
	0.4	30	1.5	12.1	160		0.8	50	1.5	23.4	727		0.6	10	1.5	12.2	161
	0.4	50	1.5	14.1	231		0.8	100	1.8	31.8	1406		0.6	20	1.5	15.7	273
	0.4	100	1.5	18.0	405		0.8	200	2.0	43.7	2678		0.6	30	1.5	18.2	380
	0.4	200	1.8	25.0	771		0.4	10	1.5	8.7	195		0.6	50	1.5	22.2	582
	0.4	300	1.8	28.8	1099		0.4	20	1.5	10.7	236		0.6	100	1.8	30.0	1098
	0.4	400	1.8	32.5	1417		0.4	30	1.5	12.1	276		0.6	200	2.0	40.7	2081
	0.4	500	2.0	36.1	1748		0.4	40	1.5	14.1	346		0.6	300	2.0	48.6	3035
	0.4	600	2.0	38.4	2059		0.4	100	1.5	18	518		0.8	10	1.5	15.6	265
	0.4	800	2.0	43.2	2673		0.4	200	1.7	25	933		0.8	20	1.5	20.4	465
	0.5	5	1.5	8.4	71		0.5	10	1.5	9.7	218		0.8	30	1.5	24.0	662
	0.5	10	1.5	9.7	102		0.5	20	1.5	11.9	277		0.8	50	1.8	30.1	1062
	0.5	20	1.5	11.9	162		0.5	30	1.5	13.6	334		0.8	100	2.0	41.5	2044
	0.5	30	1.5	13.6	219		0.5	50	1.5	16.4	444		0.4	10	1.8	8.7	226
	0.5	50	1.5	16.4	328		0.5	100	1.5	21.4	700		0.4	20	1.8	10.7	289
	0.5	100	1.5	21.4	588		0.5	200	1.8	29.5	1287		0.4	30	1.8	12.1	346
	0.5	200	1.8	29.5	1130		0.4	10	1.5	9.6	94		0.4	50	1.8	14.2	438
	0.5	300	1.8	35.1	1634		0.4	20	1.5	11.7	149		0.4	100	1.8	18.0	660
	0.5	400	2.0	40.0	2144		0.4	30	1.5	13.3	199		0.4	200	1.8	25.0	1120
	0.5	500	2.1	44.8	2664		0.4	50	1.5	15.9	293		0.5	10	1.8	9.7	258
	0.5	600	2.3	48.4	3147		0.4	100	1.5	21.0	531		0.5	20	1.8	11.9	347
	0.5	800	2.3	54.2	4093		0.4	200	1.5	28.0	981		0.5	30	1.8	13.6	423
	0.6	5	1.5	9.4	88		0.4	300	1.8	33.4	1417		0.5	50	1.8	16.4	565
	0.6	10	1.5	11.1	132		0.4	400	2.0	38.2	1867		0.5	100	1.8	21.4	888
	0.6	20	1.5	13.9	213		0.4	800	2.3	51.8	3540		0.4	10	1.8	13.2	145
	0.6	30	1.5	16.0	295		0.5	10	1.5	10.9	125		0.4	20	1.8	15.2	197
	0.6	50	1.5	18.9	444		0.5	20	1.5	13.6	206		0.4	30	1.8	16.7	245
	0.6	100	1.8	25.7	845		0.5	30	1.5	15.4	276		0.4	50	1.8	18.5	330
	0.6	200	1.8	34.8	1566		0.5	50	1.5	19.1	428		0.5	10	1.8	14.1	171
	0.6	300	2.0	41.2	2294		0.5	100	1.5	25.4	783		0.5	20	1.8	16.3	246
	0.6	400	2.0	46.8	2986		0.5	200	1.8	33.9	1466		0.5	30	1.8	18.0	315
	0.8	10	1.5	12.8	195		0.5	300	2.0	40.8	2156		0.5	50	1.8	20.7	443

### Electrical property

No .	Item	Unit	Index	Relationship between different units(L indicates the length of measured cable, unit is km)
1	DC resistance of single wire at 20℃	℃ /km	mm 0.32 0.40 0.50 0.60 0.80 Nom. Dia of wire Max. 236.0 148.0 95.0 65.8 36.6	Actual value /L
2	DC resistance imbalance between pairs at 20℃	%	mm Nom. Dia of wire (Max.) 0.32 0.40 0.50 0.60 0.80 average value (Max.) 2.5 1.5 1.5 1.5 1.5 (Max.) 6.0 5.0 5.0 5.0 4.0	

## Copper Core, Polyolefin Insulated Aluminum-Plastic Composite Sheathed, Local Communication Cable

Continue Table

No .	Item	Unit	Index	Relationship between different units(L indicates the length of measured cable, unit is km)																																																																																				
3	Insulation resistance between insulated wires and earthed one, screened one at 20℃	MΩ · km	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Unfilled cable</td> <td style="text-align: center;">Filled cable</td> </tr> <tr> <td style="text-align: center;">Min. 10×10<sup>3</sup></td> <td style="text-align: center;">3×10<sup>3</sup></td> </tr> </table>	Unfilled cable	Filled cable	Min. 10×10 <sup>3</sup>	3×10 <sup>3</sup>	Actual value/L																																																																																
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4	DC Electrical strength of insulation Withstanding voltage time Between wires Between wire and screen(isolated cable)	kV	<table style="width: 100%; border: none;"> <tr> <td colspan="2" style="text-align: center;">Nom.Dia.of cond.:0.32mm,0.40mm,0.50mm,0.60mm,0.80mm</td> </tr> <tr> <td colspan="2" style="text-align: center;">Solid PO insulated cable      Foam,foam skin PO insulated cable</td> </tr> <tr> <td style="text-align: center;">3S</td> <td style="text-align: center;">lmin</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">2.5</td> </tr> </table>	Nom.Dia.of cond.:0.32mm,0.40mm,0.50mm,0.60mm,0.80mm		Solid PO insulated cable      Foam,foam skin PO insulated cable		3S	lmin	2	1	2	1	6	3	5	2.5	-																																																																						
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5	2.5																																																																																							
5	Capacitance 0.8kHz or 1kHz	nF/km	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Nom.pairs of cable</td> <td style="text-align: center;">10</td> <td style="text-align: center;">&gt; 10</td> </tr> <tr> <td style="text-align: center;">Max.value</td> <td style="text-align: center;">58.0</td> <td style="text-align: center;">57.0</td> </tr> <tr> <td style="text-align: center;">Average value</td> <td style="text-align: center;">52.0 ±4.0</td> <td style="text-align: center;">52.0 ±2.0</td> </tr> </table>	Nom.pairs of cable	10	> 10	Max.value	58.0	57.0	Average value	52.0 ±4.0	52.0 ±2.0	Actual value/L																																																																											
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6	Capacitance(filled cable with 100 pairs and above) 0.8kHz or 1kHz	%	Max.value	-																																																																																				
7	Imbalance of capacitance 0.8kHz or 1kHz Capacitance imbalance between pairs Capacitance imbalance between pairs and ground	PF/km	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Nom.pairs of cable</td> <td style="text-align: center;">10</td> <td style="text-align: center;">&gt; 10</td> </tr> <tr> <td style="text-align: center;">Max.value</td> <td style="text-align: center;">2500(200)<sup>1)</sup></td> <td style="text-align: center;">2500(200)<sup>1)</sup></td> </tr> <tr> <td style="text-align: center;">Max.</td> <td style="text-align: center;">2630</td> <td style="text-align: center;">2630</td> </tr> <tr> <td style="text-align: center;">Average value(Max.)</td> <td style="text-align: center;"></td> <td style="text-align: center;">570(490)<sup>2)</sup></td> </tr> </table>	Nom.pairs of cable	10	> 10	Max.value	2500(200) <sup>1)</sup>	2500(200) <sup>1)</sup>	Max.	2630	2630	Average value(Max.)		570(490) <sup>2)</sup>	Actual value $[0.5(L + \sqrt{L})]$																																																																								
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8	Natural attenuation +20℃ Cable with 10 pairs and above 150kHz、1024kHz  Natural attenuation +20℃ Cable with 10 pairs and above 150kHz、1024kHz  Cable with 10 pairs 150kHz、1024kHz	dB/km	<table style="width: 100%; border: none;"> <tr> <td colspan="6" style="text-align: center;">Nom.Dia of wire(Max.) mm 0.32 0.40 0.50 0.60 0.80</td> </tr> <tr> <td colspan="6" style="text-align: center;">Solid PO insulated cable</td> </tr> <tr> <td colspan="6" style="text-align: center;">Average value(Max.) 16.8 12.1 9.0 7.2 5.7</td> </tr> <tr> <td colspan="6" style="text-align: center;">Average value(Max.) 33.5 27.3 22.5 18.5 13.7</td> </tr> <tr> <td colspan="6" style="text-align: center;">Solid PO insulated filling cable</td> </tr> <tr> <td colspan="6" style="text-align: center;">Average value(Max.) 16.0 11.7 8.2 6.7 4.7</td> </tr> <tr> <td colspan="6" style="text-align: center;">Nom.Dia of wire(Max.) 0.32 0.40 0.50 0.60 0.80 mm</td> </tr> <tr> <td colspan="6" style="text-align: center;">Foaming PO insulated cable</td> </tr> <tr> <td colspan="6" style="text-align: center;">Average value(Max.) 17.3 12.6 9.3 7.4 5.8</td> </tr> <tr> <td colspan="6" style="text-align: center;">Average value(Max.) 36.0 29.3 24.1 19.8 14.6</td> </tr> <tr> <td colspan="6" style="text-align: center;">Filling-type of foming PO insulated cable</td> </tr> <tr> <td colspan="6" style="text-align: center;">Average value(Max.) 17.0 12.1 6.0 7.2 5.7</td> </tr> <tr> <td colspan="6" style="text-align: center;">Average value(Max.) 32.9 26.5 21.8 18.0 13.3</td> </tr> <tr> <td colspan="6" style="text-align: center;">Average value should not exceed 110% of same type for over 10 pairs cable</td> </tr> </table>	Nom.Dia of wire(Max.) mm 0.32 0.40 0.50 0.60 0.80						Solid PO insulated cable						Average value(Max.) 16.8 12.1 9.0 7.2 5.7						Average value(Max.) 33.5 27.3 22.5 18.5 13.7						Solid PO insulated filling cable						Average value(Max.) 16.0 11.7 8.2 6.7 4.7						Nom.Dia of wire(Max.) 0.32 0.40 0.50 0.60 0.80 mm						Foaming PO insulated cable						Average value(Max.) 17.3 12.6 9.3 7.4 5.8						Average value(Max.) 36.0 29.3 24.1 19.8 14.6						Filling-type of foming PO insulated cable						Average value(Max.) 17.0 12.1 6.0 7.2 5.7						Average value(Max.) 32.9 26.5 21.8 18.0 13.3						Average value should not exceed 110% of same type for over 10 pairs cable						Actual value/L
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9	Near end cross talk attenuation 1024kHz length ≥0.3km  Non.isolated cable All combinations between 10-pair cable  All combinations between 12,13-pair cable  All combinations between 20,30-pair or basic unit  All combinations between contiguous 12-pair,13-sub-unit  All combinations between contiguous unit	dB	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">(M-S) Min.</td> <td style="text-align: center;">53</td> </tr> <tr> <td style="text-align: center;">(M-S) Min.</td> <td style="text-align: center;">54</td> </tr> <tr> <td style="text-align: center;">(M-S) Min.</td> <td style="text-align: center;">58</td> </tr> <tr> <td style="text-align: center;">(M-S) Min.</td> <td style="text-align: center;">63</td> </tr> <tr> <td style="text-align: center;">(M-S) Min.</td> <td style="text-align: center;">64</td> </tr> </table>	(M-S) Min.	53	(M-S) Min.	54	(M-S) Min.	58	(M-S) Min.	63	(M-S) Min.	64	<p>When the length of measuring cable is less than 0.3km, caculation is in accordance with the following formula: Actual value+</p> $101g \frac{[1 - 10^{(-\alpha L/5)}]}{[1 - 10^{(-\alpha \times 0.3/5)}]}$ <p>In the formula:d-pair attenuation, dB/km</p>																																																																										
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## Copper Core, Polyolefin Insulated Aluminum-Plastic Composite Sheathed, Local Communication Cable

Continue Table

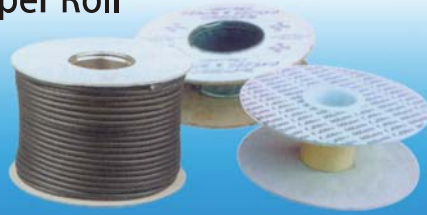
No .	Item	Unit	Index	Relationship between different units(L indicates the length of measured cable, unit is km)									
9	All combinations between two units or between sub-unit	DB	(M-S) Min. 70	When the length of measuring cable is less than 0.3km, caculation is in accordance with the following formula: Acual value+ $10 \lg \frac{[1 - 10^{(-\alpha \cdot L/5)}]}{[1 - 10^{(-\alpha \cdot 0.3/5)}]}$ In the formula:d-pair attenuation, dB/km									
	All combinations between units or sub-unit		(M-S) Min. 79										
	isolating cable		(M-S) Min. 70										
	Combinations of pairs along 10-pair high-frequency isolating tape		(M-S) Min. 77										
	Combinations of pairs along 20-pair high-frequency isolating tape		(M-S) Min. 80										
	Combinations of pairs along 30-pair high-frequency isolating tape		(M-S) Min. 84										
10	Near end cross talk	dB/km	<table style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">Non.isolated cable (150kHz)</td> <td style="text-align: center;">isolating cable (1024kHz)</td> </tr> <tr> <td>Average of power(Min.)</td> <td style="text-align: center;">58</td> <td style="text-align: center;">41</td> </tr> <tr> <td></td> <td style="text-align: center;">69</td> <td style="text-align: center;">52</td> </tr> </table>		Non.isolated cable (150kHz)	isolating cable (1024kHz)	Average of power(Min.)	58	41		69	52	Actual/L
			Non.isolated cable (150kHz)	isolating cable (1024kHz)									
Average of power(Min.)	58	41											
	69	52											
All combinations between u12-pair,sub-unit or between pairs of 10-pair,20-pair cable	Average of power(Min.)	68	51										
11	Continuity of shield aluminum tape and high-frequency isloating tape		Continuity										
12	Core break mix	-	No break or mix										

- 1) Index in bracket is applicable to cable with 0.60mm, 0.80mm, Nom.diameter of conductor.
- 2) Index in bracket is applicable to cable with 0.60mm, 0.80mm solid PO insulation

Common Packing



Paper Roll



Iron Spool



Wooden Spool



Plastic Spool



Gift Box



Pull-out Box



Spools



Wooden Drums



Pallets



# GANGHONG LTD

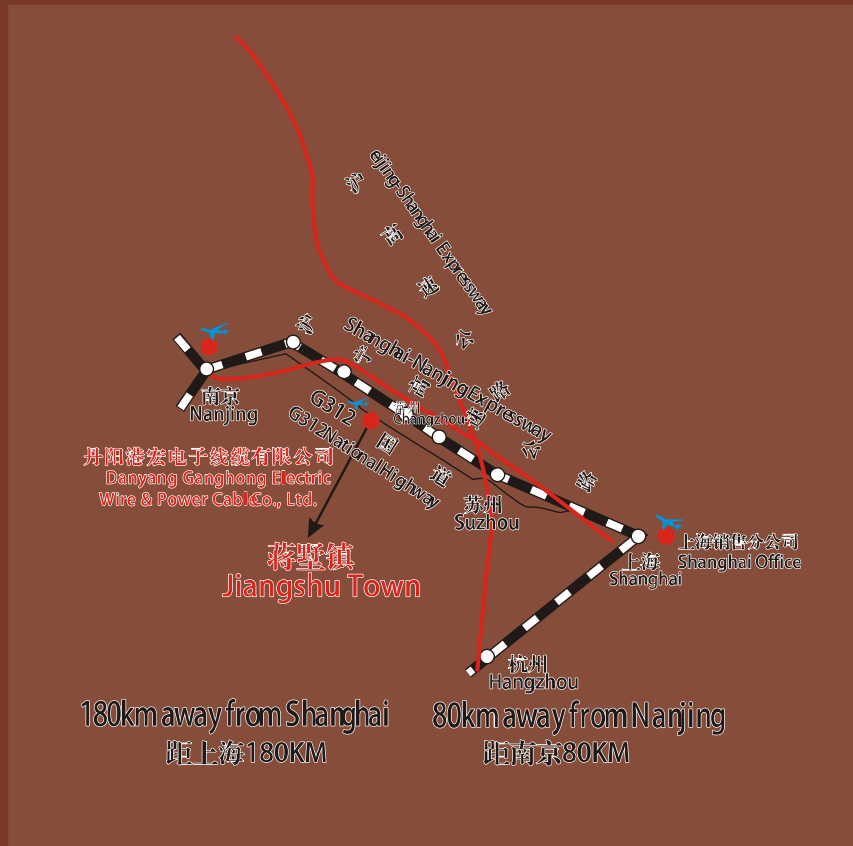


Danyang Ganghong Electric Wire & Power Cable Co., Ltd.





GHCABLE



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