

BS 6622 CU XLPE AWA/SWA PVC 6.35/11 (12)kV Cable



APPLICATION

Power cables for power networks, underground and in cable ducting.

CHARACTERISTICS

Voltage Rating U_0/U (Um)

6.35/11 (12)kV

Temperature Rating

Maximum conductor operating temperature: 90°C
Initial temperature at S.C.C for metallic screen: 80°C
Maximum conductor temperature during S.C: 250°C

Minimum Bending Radius

Single core: 15 x overall diameter
Multi core: 13 x overall diameter

STANDARDS

IEC 60502-2, EN 60228
Low Smoke Zero Halogen to: IEC 60754-1/2, IEC 61034-2
Flame Retardant: IEC 60332-3-24 Cat C, IEC 60332-1-2
UV Resistant: ISO 4892-3
Abrasion and Tear Resistant: EN 60229-4.1
Impact rated to: AG2 EN 60364-5.51

THE CABLE TEST

We have world-class testing facility, and made rigorous testing regime, every meter of cable before leaving the factory must go through strict testing, testing qualified products will be shipped to customers, effectively ensure product quality and meet customer requirements.

SUSTAINABILITY COMMITMENT

Guowang Cable actively implements the "carbon reduction" goal, strives to promote the green's low-carbon transformation, strengthens energy-saving and emission reduction technology innovation, and promotes the company's healthy and sustainable development.

CONSTRUCTION

Conductor

Class 2 Stranded Circular Compacted Copper

Conductor Screen

Extruded Inner Semi Conductor (Bonded Type)

Insulation

XLPE (Cross-Linked Polyethylene)

Outer Semi Conductor

Extruded Outer Semi Conductor (Strippable Type)

Metallic Screen

Copper tape with 10% overlap

Inner Sheath

PVC (Polyvinyl Chloride)

Armour

Single core: AWA (Aluminium Wire Armoured)
Multi-core: SWA (Galvanised Steel Wire Armoured)

Outer Sheath

PVC (Polyvinyl Chloride)

Sheath Colour

● Black

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA	NOMINAL INSULATION THICKNESS	NOMINAL OUTER SHEATH THICKNESS	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT
	mm2	mm	mm	mm	kg/km
1	70	3.4	1.9	28.9	1424
1	95	3.4	1.9	30.2	1707
1	120	3.4	2	32.3	2046
1	150	3.4	2.1	33.9	2363
1	185	3.4	2.1	35.4	2735
1	240	3.4	2.2	38.0	3376
1	300	3.4	2.3	40.6	4012
1	400	3.4	2.4	44.6	5042
1	500	3.4	2.5	48.2	6154
1	630	3.4	2.6	53.3	7718
1	800	3.4	2.8	57.6	9616
3	70	2.28	1.48	54.6	5760
3	95	2.37	2.48	57.6	6732
3	120	2.45	3.48	61	7789
3	150	2.54	4.48	64.6	8916
3	185	2.62	5.48	68.3	10290
3	240	2.79	6.48	75.7	13367
3	300	2.96	7.48	81.5	15736
3	400	3.13	8.48	87.7	18907

ELECTRICAL CHARACTERISTICS

Single Core Cable

NOMINAL CROSS SECTIONAL AREA	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C	MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP. AND 50 HZ	CAPACITANC E	CHARGING CURRENT	DIELECTRIC LOSSES	REACTANCE AT 50HZ	CONDUCTOR S.C.C FOR 1SEC	CURRENT RATING A	
								Laid in ground	Laid in free air
mm2	Ω/km	Ω/km	uF/km	A/Km	W/Km	ohms/km	KA		
70	0.268	0.3421	0.303	0.605	15.35	0.128	10.02	278	301
95	0.193	0.2466	0.332	0.662	16.81	0.123	13.59	330	362
120	0.153	0.1958	0.362	0.723	18.37	0.119	17.17	371	413
150	0.124	0.159	0.397	0.793	20.15	0.114	21.46	413	465
185	0.0991	0.1276	0.43	0.859	21.81	0.111	26.47	452	525
240	0.0754	0.0978	0.483	0.964	24.47	0.106	34.34	510	605
300	0.0601	0.0788	0.535	1.068	27.13	0.103	42.93	561	681
400	0.047	0.0628	0.592	1.181	30.00	0.101	57.23	597	747
500	0.0366	0.0504	0.666	1.329	33.76	0.097	71.54	649	830
630	0.0283	0.0408	0.768	1.533	38.95	0.095	90.14	694	909
800	0.0221	0.0341	0.858	1.711	43.47	0.092	114.47	736	992

Multi Core Cable

NOMINAL CROSS SECTIONAL AREA	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C	MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP. AND 50 HZ	CAPACITANC E	CHARGING CURRENT	DIELECTRIC LOSSES	REACTANCE AT 50HZ	CONDUCTOR S.C.C FOR 1SEC	CURRENT RATING A	
								Laid in ground	Laid in free air
mm2	ohms/km	ohms/km	uF/km	A/Km	W/Km	ohms/km	kA		
70	0.268	0.3423	0.363	0.605	15.35	0.104	10.02	264	271
95	0.193	0.2469	0.398	0.662	16.81	0.100	13.59	313	326
120	0.153	0.1961	0.435	0.723	18.37	0.096	17.17	355	373
150	0.124	0.1595	0.477	0.793	20.15	0.093	21.46	398	426
185	0.0991	0.1282	0.516	0.859	21.81	0.090	26.47	447	480
240	0.0754	0.0986	0.579	0.964	24.47	0.087	34.34	512	561
300	0.0601	0.0799	0.642	1.068	27.13	0.085	42.93	571	635
400	0.047	0.0642	0.71	1.181	30.00	0.082	57.23	636	718

DE-RATING FACTORS

AIR TEMPERATURE °C	25	30	35	40	45	50	55
DE-RATING FACTOR	1.00	0.96	0.92	0.88	0.83	0.78	0.73
GROUND TEMPERATURE °C	10	15	20	25	30	35	40
DE-RATING FACTOR	1.03	1.00	0.97	0.93	0.89	0.86	0.82
GROUND THERMAL RESISTIVITY km/W	0.9	1.0	1.2	1.5	2.0	2.5	3.0
DE-RATING FACTOR	1.06	1.04	1.00	0.92	0.82	0.74	0.68
DEPTH OF LAYING m	0.80	1.00	1.25	1.50	1.75	2.00	2.50
DE-RATING FACTOR	1.00	0.97	0.95	0.94	0.93	0.91	0.90

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.