

BS 6622 CU XLPE AWA/SWA PVC 3.8/6.6kV Cable



APPLICATION

Armoured power distribution cables for external and direct burial applications in power networks.

CHARACTERISTICS

Voltage Rating U_0/U (Um)

3.8/6.6 (7.2)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

BS 6622, IEC/EN 60228

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 (Steel Wire Armoured)

Outer Sheath

PVC (Polyvinyl Chloride)

Sheath Colour

● Black

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL INSULATION THICKNESS mm	NOMINAL OUTER SHEATH THICKNESS mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
1	95	2.5	1.9	30.4	1721
1	120	2.5	1.9	31.8	1996
1	150	2.5	2	33.6	2333
1	185	2.5	2.1	35.6	2752
1	240	2.6	2.1	38.2	3388
1	300	2.8	2.2	41.2	4060
1	400	3	2.3	44.4	4989
1	500	3.2	2.5	49.4	6269
1	630	3.2	2.6	54.3	7822
1	800	3.2	2.7	58.6	9729
3	95	2.5	2.7	57.6	6765
3	120	2.5	2.9	61	7784
3	150	2.5	3	64.9	8989
3	185	2.5	3.1	68.3	10285
3	240	2.6	3.3	74.5	12617
3	300	2.8	3.5	82.8	15947
3	400	3	3.8	90.3	19403

COLOR CODE

Color	Red	Black
Code	RD	BK

ELECTRICAL CHARACTERISTICS

Single Core									
NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/Km	MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP. AND 50 HZ Ω/Km	CAPACITANCE μF/Km	CHARGING CURRENT A/Km	DIELECTRIC LOSSES W/Km	REACTANCE AT 50HZ ohm/km	CONDUCTOR S.C.C For 1 second KA	CURRENT RATING A	
								Laid in ground	Laid in free air
95	0.193	0.2466	0.364	0.435	6.61	0.123	13.59	330	360
120	0.153	0.1958	0.398	0.476	7.23	0.118	17.17	373	411
150	0.124	0.159	0.437	0.522	7.93	0.114	21.46	415	463
185	0.0991	0.1276	0.473	0.565	8.59	0.111	26.47	462	523
240	0.0754	0.0978	0.515	0.616	9.36	0.107	34.34	511	604
300	0.0601	0.0788	0.540	0.645	9.79	0.104	42.93	562	679
400	0.047	0.0628	0.565	0.675	10.26	0.1	57.23	616	762
500	0.0366	0.0503	0.635	0.758	11.52	0.099	71.54	647	830
630	0.0283	0.0407	0.727	0.868	13.2	0.096	90.14	696	911
800	0.0221	0.034	0.811	0.969	14.72	0.093	114.47	738	991

ELECTRICAL CHARACTERISTICS

Multi Core									
NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/Km	MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP. AND 50 HZ Ω/Km	CAPACITANCE μF/Km	CHARGING CURRENT A/Km	DIELECTRIC LOSSES W/Km	REACTANCE AT 50HZ ohm/km	CONDUCTOR S.C.C For 1 second KA	CURRENT RATING A	
								Laid in ground	Laid in free air
95	0.193	0.2469	0.437	0.435	6.61	0.101	13.59	313	324
120	0.153	0.1961	0.478	0.476	7.23	0.097	17.17	355	370
150	0.124	0.1595	0.524	0.522	7.93	0.093	21.46	397	419
185	0.0991	0.1281	0.568	0.565	8.59	0.091	26.47	448	478
240	0.0754	0.0986	0.618	0.616	9.36	0.088	34.34	513	561
300	0.0601	0.0798	0.647	0.645	9.79	0.086	42.93	572	635
400	0.047	0.064	0.678	0.675	10.26	0.084	57.23	636	717

Laying conditions at trefoil formation are as below:

-Soil thermal resistivity 100 ° C.Cm/Watt

-Burial depth 0.8 m

-Ground temperature 20 ° C | Air temperature 30 ° C | Frequency 50 Hz