

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)

3.6/6 (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

Semi-conductive material

Insulation

XLPE (Cross-Linked Polyethylene)

Outer Semi Conductor

Extruded Outer Semi Conductor

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

LSZH (Low Smoke Zero Halogen)

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	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

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 1SEC KA	CURRENT RATING A	
								Laid in ground	Laid in free air
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

ELECTRICAL CHARACTERISTICS

Multi Core									
NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C ohms/km	MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP. AND 50 HZ ohms/km	CAPACITANCE μF/km	CHARGING CURRENT A/Km	DIELECTRIC LOSSES W/Km	REACTANCE AT 50HZ ohms/km	CONDUCTOR S.C.C FOR 1SEC KA	CURRENT RATING A	
								Laid in ground	Laid in free air
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

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