BS 7835 XLPE LSZH 6.35/11 (12) kV Cable

APPLICATION

Medium voltage LSZH power cables for power networks, underground and in cable ducting.

CHARACTERISTICS

Voltage Rating Uo/U (Um)

6.35/11 (12)kV

Temperature Rating

Fixed: 0°C to +90°C

Minimum Bending Radius

Single core - Fixed: 15 x overall diameter

3 core - Fixed: 12 x overall diameter

(Single core 12 x overall diameter and 3 core 10 x overall diameter where bends are positioned adjacent to a joint or termination provided that the bending is carefully controlled by the use of a former)

STANDARDS

IEC 60502-2, EN 60228, BS 7835

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 Copper conductor

Conductor Screen

Semi-conductive

XLPE (Cross-Linked Polyethylene)

Insulation

XLPE (Cross-Linked Polyethylene)

Insulation Screen

Semi-conductive

XLPE (Cross-Linked Polyethylene)

Metallic Screen

Individual or collective overall copper tape screen

Filler

PET (Polyethylene Terephthalate) fibres

Separator

Binding Tape

Bedding

LSZH (Low Smoke Zero Halogen)

Armour

Single core: AWA (Aluminium Wire Armoured)

Multi-core: SWA (Steel Wire Armoured)

Sheath

LSZH (Low Smoke Zero Halogen)

Sheath Colour

● Black

GUOWANG CABLE GROUP

DIMENSION

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm2	CURRENT CARRYING CAPACITY A		CONDUCTOR LOSSES IN THE GROUND kW/km
		In Ground (20 °C)	In air (30 °C)	
1	50	21.7	24.9	28.5
1	70	23	26.20	30.0
1	95	24.7	27.9	31.7
1	120	26.7	29.9	33.9
1	150	27.5	31.5	35.7
1	185	29.3	33.3	37.5
1	240	31.6	35.6	40.0
1	300	34.6	38.6	43.0
1	400	37	41	45.8
1	500	40.5	45.5	50.5
1	630	44.6	49.6	54.8
1	800	48.8	53.8	59.2
1	1000	53.5	58.5	64.3
3	35	41.6	46.6	51.6
3	50	44.4	49.4	54.6
3	70	48.1	53.1	58.5
3	95	52	57	62.6
3	120	55.6	60.6	66.6
3	150	58.6	63.60	69.8
3	185	62.7	67.7	74.1
3	240	68.1	74.4	81.2
3	300	73.5	79.8	87.0
3	400	78.3	84.6	92.2

CONDUCTOR

Class 2 Stranded Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C	MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP. AND 50 HZ	CAPACITANCE	CHARGING CURRENT	DIELECTRIC LOSSES	REACTANCE AT 50HZ	CONDUCTOR S.C.C FOR 1SEC	CURRENT RATING A	
mm2	Ω/km	Ω/km	uF/km	A/Km	W/Km	ohms/km	KA	Laid in ground	Laid in free air
50	19	19	6	6	6	6	0.387	50	19
70	19	19	12	12	12	12	0.268	70	19
95	19	19	15	15	15	15	0.193	95	19
120	37	37	18	15	18	15	0.153	120	37
150	37	37	18	15	18	15	0.124	150	37
185	37	37	30	30	30	30	0.0991	185	37
240	37	37	34	30	34	30	0.0754	240	37
300	61	61	34	30	34	30	0.0601	300	61
400	61	61	53	53	53	53	0.047	400	61
500	61	61	53	53	53	53	0.0366	500	61
630	91	91	53	53	53	53	0.0283	630	91
800	91	91	53	53	-	-	0.0221	800	91
1000	91	91	53	53	-	-	0.0176	1000	91

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm2	CONTINUOUS CURRENT RATING Amps					
		In Ground		In Ducts		In Air	
		Trefoil	Flat	Trefoil	Flat	Trefoil	Flat
1	50	220	230	220	220	250	300
1	70	270	280	260	270.00	310	370
1	95	320	335	305	325	375	460
1	120	360	380	340	370	430	530
1	150	410	430	375	410	490	600
1	185	455	485	410	460	550	690
1	240	520	560	470	540	650	820
1	300	580	640	500	610	740	940
1	400	650	730	530	690	840	1100
1	500	710	830	570	780	930	1280
1	630	760	940	620	890	1040	1480
1	800	810	1060	660	990	1140	1690
1	1000	860	1170	690	1090	1230	1900
3	35	170	170	150	150	175	175
3	50	210	210	180	180	220	220
3	70	250	250	215	215	270	270
3	95	300	300	255	255	330	330
3	120	340	340	290	290	380	380
3	150	380	380	330	330	430	430
3	185	430	430	370	370	490	490
3	240	500	500	430	430	570	570
3	300	540	540	470	470	650	650
3	400	625	625	525	525	755	755

DE-RATING FACTORS

AIR TEMPERATURE ℃	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 ℃	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