BS 7870-4.10 Aluminium MDPE 6.35/11 (12)kV Cable

APPLICATION

Medium Voltage cable for power distribution and power supply stations used in Utility and Industrial applications, for the rated voltage of 6.35/11 (12)kV.

CHARACTERISTICS

Voltage Rating Uo/U (Um)
6.35/11 (12)kV

Temperature Rating
Maximum conductor operating temperature: +90ºC
Initial temperature at S.C.C for metallic screen: +80°C
Maximum conductor temperature during S.C: +250ºC
Maximum screen temperature during S.C: +150ºC

Minimum Bending Radius
20 x overall diameter

STANDARDS

BS 7870-4.10, BS EN 60228, HD620 S2 Part 10O / 11O

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 Aluminium

Conductor Screen
Semi-conductive extruded XLPE (Cross-linked Polyethylene) (Bonded)

Insulation
XLPE (Cross-Linked Polyethylene)

Insulation Screen
Semi-conductive extruded XLPE (Cross-linked Polyethylene) (Strippable)

Longitudinal Waterblocking
Semi-conductive swellable tape

Metallic Screen
Copper Wires And Open Helix Copper Tape

Longitudinal Waterblock
Non-conductive waterblocking tape

Outer Sheath
MDPE (Medium Density Polyethylene)

Sheath Colour
● Red

GUOWANG
CABLE GROUP

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA	NOMINAL INSULATION THICKNESS	NOMINAL SCREEN SECTIONAL AREA	NOMINAL INSULATION THICKNESS	NOMINAL OVERALL DIAMTER	NOMINAL WEIGHT
	mm2	mm	mm2	mm	mm	kg/km
1	70	3.4	35	1.34	27.6	917
1	95	3.4	35	1.43	29.3	1020
1	120	3.4	35	1.43	30.7	1122
1	150	3.4	35	1.51	33.1	1260
1	185	3.4	35	1.51	34	1378
1	240	3.4	35	1.6	36.6	1581
1	300	3.4	35	1.68	39.1	1810
1	400	3.4	35	1.77	42	2143
1	500	3.4	35	1.85	45.5	2521
1	630	3.4	35	1.94	49.8	3067
1	800	3.4	35	2.02	54.8	3749

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm^2	MAXIMUM CONDUCTOR DC RESISTANCE AT 20℃ Ω/Km	MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP.AND 50HZ Ω/Km	CAPACITANCE mF/Km	CHARGING CURRENT A/Km	DIELECTRIC LOSSES W/Km	REACTANCE AT50 HZ ohm/km	S.C.C FOR 1SEC KA		CURRENT RATING A	
							Conductor	Screen	Laid in ground	Laid in free air
70	0.443	0.569	0.293	0.584	14.84	0.126	6.559	4.1	225	231
95	0.32	0.411	0.324	0.647	16.42	0.121	8.9015	4.1	278	276
120	0.253	0.325	0.353	0.704	17.89	0.116	11.244	4.1	317	324
150	0.206	0.265	0.398	0.795	20.19	0.110	14.055	4.1	350	365
185	0.164	0.211	0.417	0.832	21.13	0.108	17.3345	4.1	395	426
240	0.125	0.161	0.466	0.931	23.64	0.104	22.488	4.1	455	497
300	0.1	0.129	0.514	1.025	26.04	0.101	28.11	4.1	511	575
400	0.0778	0.101	0.569	1.136	28.85	0.097	37.48	4.1	579	669
500	0.0605	0.079	0.637	1.271	32.28	0.094	46.85	4.1	661	782
630	0.0469	0.062	0.721	1.438	36.54	0.092	59.031	4.1	770	904
800	0.0367	0.049	0.819	1.635	41.52	0.088	74.96	4.1	885	1037

Laying conditions at trefoil formation are as below:

-Soil thermal resistivity 120 ˚C.Cm/Watt

-Burial depth 0.5 m

-Ground temperature 15°C | Air temperature 25°C | Frequency 50 Hz