BS 7870-4.10 MDPE 6.35/11 (12)kVCable

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

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: +250°C

Maximum screen temperature during S.C: +150°C

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 Copper

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 waterblocking tape

Metallic Screen

Copper Wires and Open Helix Copper Tape

Longitudinal Waterblock

Non-conductive waterblocking tape

Outer Sheath

MDPE (Medium Density Polyethylene)

Sheath Colour

● Black

DIMENSIONS

NO. OF CORE	NOMINAL CROSS SECTIONAL AREA	NOMINAL INSULATION THICKNESS	NOMINAL SCREEN SECTIONAL AREA	NOMINAL SHEATH THICKNESS	NOMINAL OVERALL DIAMETER	NOMINAL WEIGHT
	mm2	mm	mm2	mm	mm	kg/km
1	70	3.4	35	1.34	27.8	1317
1	95	3.4	35	1.43	29.3	1584
1	120	3.4	35	1.43	30.7	1832
1	150	3.4	35	1.51	32.5	2129
1	185	3.4	35	1.51	34.0	2471
1	240	3.4	35	1.6	36.6	3038
1	300	3.4	35	1.68	39.2	3639
1	400	3.4	35	1.77	42.0	4472
1	500	3.4	35	1.85	45.6	5473
1	630	3.4	35	1.94	50.1	6867
1	800	3.4	35	2.02	54.4	8654

ELECTRICAL CHARACTERISTICS

NOMINAL CROSSSECTIONAL AREA mm2	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C Ω/Km	MAXIMUM CONDUCTOR AC RESISTANCE AT OPERATING TEMP. AND 50 HZ Ω/Km	CAPACITANCE mF/Km	CHARGING CURRENT A/Km	DIELECTRIC LOSSES W/Km	REACTANCE AT 50HZ ohm/km	S.C.C FOR 1SEC kA		CURRENT RATING A	
							Conductor	Screen	Laid in ground	Laid in free air
70	0.268	0.342	0.297	0.593	15.05	0.125	10.01	4.1	292	295
95	0.193	0.247	0.324	0.647	16.42	0.121	13.585	4.1	347	356
120	0.153	0.196	0.353	0.704	17.89	0.116	17.16	4.1	394	412
150	0.124	0.159	0.386	0.77	19.56	0.112	21.45	4.1	441	466
185	0.0991	0.128	0.417	0.832	21.13	0.108	26.455	4.1	498	536
240	0.0754	0.098	0.466	0.931	23.64	0.104	34.32	4.1	575	634
300	0.0601	0.078	0.516	1.029	26.14	0.101	42.9	4.1	646	729
400	0.047	0.062	0.569	1.136	28.85	0.097	57.2	4.1	727	840
500	0.0366	0.049	0.639	1.275	32.38	0.094	71.5	4.1	815	966
630	0.0283	0.039	0.727	1.451	36.85	0.091	90.09	4.1	904	1098
800	0.0221	0.032	0.811	1.618	41.11	0.088	114.4	4.1	988	1234

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