

BS7870 4.10 19/33 (36)kv Copper Single Core Unarmoured Cable



APPLICATION

Medium Voltage cable for power distribution and power supply stations used in Utility and Industrial applications, for the rated voltage of 19/33 (36)kV. Optional conductor waterblocking and longitudinal waterblocking available.

CHARACTERISTICS

Voltage Rating U_0/U (Um)

19/33kV

Temperature Rating

Conductor maximum operating temperature: 90°C

Maximum short-circuit temperature: 250°C

Minimum Bending Radius

10 x overall diameter

STANDARDS

IEC 60502-2, BS 7870-4.10

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 XLPE (Cross-Linked Polyethylene)

Insulation

XLPE (Cross-Linked Polyethylene)

Insulation Screen

Semi-conductive XLPE (Cross-Linked Polyethylene) - Fully bonded

Paper separation tapes

Metallic Screen

Copper wires - number/diameter of wires dependent on required earth fault rating
Optional copper equalising tapes applied helically

Sheath

MDPE (Medium Density Polyethylene)

Sheath Colour

- Black

DIMENSIONS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA	NOMINAL THICKNESS OF SEMI CONDUCTIVE LAYER mm			MAXIMUM PULLING TENSION ON CABLE	NOMINAL WEIGHT
		mm ²	Over Conductor	Over Insulation		
1	70	9.8	27.0	34.1	350	1560
1	95	11.5	28.7	36.1	475	1880
1	120	12.8	30	37.5	600	2160
1	150	14.3	31.5	39.3	750	2480
1	185	15.9	33.1	41.0	925	2860
1	240	18.4	35.6	43.8	1200	3530
1	300	20.5	38.1	46.6	1500	4220
1	400	23.2	41.2	50.2	2000	5150
1	500	26.2	44.2	53.4	2500	6250
1	630	30.3	48.3	58.0	3150	7740
1	800	34.7	52.7	66.0	4000	9630
1	1000	38.0	57.3	71.0	5000	12200

ELECTRICAL CHARACTERISTICS

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	MAXIMUM CONDUCTOR DC RESISTANCE AT 20°C W/km	MAXIMUM CONDUCTOR AC RESISTANCE AT 90°C W/km	CAPACITANCE μF/km	INDUCTANCE AT 50Hz mH/km	CURRENT CARRYING CAPACITY (Laid in trefoil) Amps		
						In air 25°C	Single way ducts	Burried 15°C
1	70	0.2680	0.3420	0.14	0.43	320	270	270
1	95	0.1930	0.2470	0.16	0.41	390	320	320
1	120	0.1530	0.1960	0.17	0.40	445	360	360
1	150	0.1240	0.1590	0.18	0.38	510	405	410
1	185	0.0991	0.1280	0.20	0.37	580	445	460
1	240	0.0754	0.0980	0.22	0.36	680	520	530
1	300	0.0601	0.0790	0.25	0.33	770	570	600
1	400	0.0470	0.0630	0.26	0.33	895	630	690
1	500	0.0366	0.0510	0.29	0.32	1020	700	760
1	630	0.0283	0.0420	0.32	0.31	1160	780	850
1	800	0.0221	0.0350	0.35	0.30	1290	860	930
1	1000	0.0176	0.0300	0.38	0.29	1430	920	1010

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR SHORT-CIRCUIT CURRENT 1SECOND 90°C to 250°C kA	35mm ² COPPER WIRE SCREEN SHORT-CIRCUIT CURRENT 1SECOND 80°C to 250°C kA	50mm ² COPPER WIRE SCREEN SHORT-CIRCUIT CURRENT 1SECOND 80°C to 250°C kA
1	70	9.7	4.8	8.2
1	95	13.5	4.8	8.2
1	120	17.1	4.8	8.2
1	150	21.0	4.8	8.2
1	185	26.3	4.8	8.2
1	240	34.6	4.8	8.2
1	300	43.4	4.8	8.2
1	400	57.7	4.8	8.2
1	500	72.1	4.8	8.2
1	630	90.7	4.8	8.2
1	800	115.1	4.8	8.2
1	1000	143.8	4.8	8.2

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.