BS6622/BS7835 Single Core Armoured 11kV XLPE Stranded Copper Conductor

CABLE CHARACTERISTICS

Bending radius r=15D

CABLE DESCRIPTION

1.CONDUCTOR
Compact circular stranded copper conductor complying with BS EN 60228 Class 2.

CONDUCTOR SCREEN
Extruded semi-conducting compound bonded to the insulation and applied in the same operation as the insulation.

2.INSULATION
Extruded cross-linked polyethylene (XLPE) suitable for operation at a conductor temperature of 90°C.

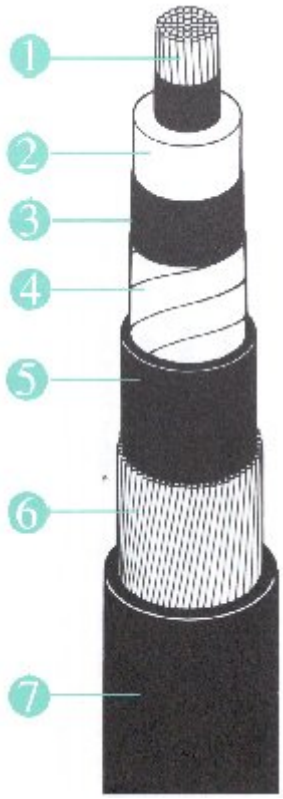
3.INSULATION SCREEN
Extruded semi-conducting compound applied in the same operation as the insulation. Cold strippable screens are supplied as standard but fully bonded screens may be provided if specified.

4.METALLIC SCREEN
Copper tapes applied overlapped to provide an earth fault current path.

5.BEDDING
Extruded black polyvinyl chloride (PVC) or Low Smoke Zero Halogen (LSOH) compound is supplied as standard. Alternative materials may be provided if specified.

6.ARMOURING
Single layer of circular aluminium wires.

7.OVERSHEATH
Extruded black polyvinyl chloride (PVC) or Low Smoke Zero Halogen (LSOH) compound is supplied as standard. Alternative materials may be provided if specified
e.g. medium density polyethylene (MDPE).



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Constructional Data

Cross-sectional area mm²	Minimum average thickness of insulation mm	Nominal thickness of PVC/LSOH bedding mm	Nominal number and diameter of armoured wires no/mm	Nominal thickness of PVC/LSOH oversheath mm	Approx. overall diameter of cable mm
70	3.4	1.2	1.6	1.9	29.0
95	3.4	1.2	1.6	1.9	31.0
120	3.4	1.2	1.6	2.0	32.5
150	3.4	1.2	2.0	2.1	35.0
185	3.4	1.2	2.0	2.1	36.5
240	3.4	1.2	2.0	2.2	39.0
300	3.4	1.2	2.0	2.2	41.0
400	3.4	1.2	2.0	2.4	45.0
500	3.4	1.3	2.5	2.5	49.5
630	3.4	1.4	2.5	2.6	54.0
800	3.4	1.4	2.5	2.7	58.5
1000	3.4	1.5	2.5	2.9	64.5

Installation Data

Cross-sectional area mm²	Appoximate cable weight kg/m	Nominal drum length m	Nominal internal diameter of twin wall ducts mm
70	1.5	1000	100
95	1.8	1000	100
120	2.1	500	100
150	2.4	500	100
185	2.8	500	100
240	3.4	500	100
300	4.1	500	100
400	5.0	300	100
500	6.3	300	100
630	7.8	300	100
800	9.8	300	100
1000	12.1	300	100

Cross-sectional area mm²	Maximum DC resistance of conductor at 20°C µOhms/m	Maximum AC resistance of conductor at 90°C µOhms/m
70	268	342
95	193	248
120	153	196
150	124	159
185	99.1	128
240	75.4	98
300	60.1	79
400	47	63
500	36.6	51
630	28.3	41
800	22.1	35
1000	17.6	30

Ratings Data

Cross-secttional area mm²	Current Ratings			Short Circuit Ratings	
	Laid in ground Amps	Drawn into twin wall ducts Amps	Laid in air Amps	One second short circuit rating of conductor kA	One second short circuit rating of armour kA
70	265	250	305	10.0	6.9
95	315	290	370	13.5	7.5
120	360	325	425	17.1	7.8
150	400	355	480	21.4	10.6
185	450	390	550	26.4	11.2
240	510	430	640	34.3	12.0
300	570	470	725	42.9	12.8
400	635	515	825	57.2	14.1
500	690	545	925	71.5	19.5
630	755	590	1035	90.5	21.2
800	810	630	1140	114.4	23.3
1000	855	665	1230	143.0	25.8

Current Rating Conditions:

Ground Temperature 15°C
Ambient temperature (air) 25°c
Depth of Burial 0.8m
Thermal Resistance of Soil 1.2 °C m/W

Single core cables in trefoil, bonded and earthed at both ends.