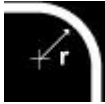


BS6622/BS7835 Single Core Armoured 11 kV XLPE Stranded Aluminium Conductor

CABLE CHARACTERISTICS



Bending radius $r=15D$

CABLE DESCRIPTION

1.CONDUCTOR

Compacted circular stranded Aluminium 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 SHEATH

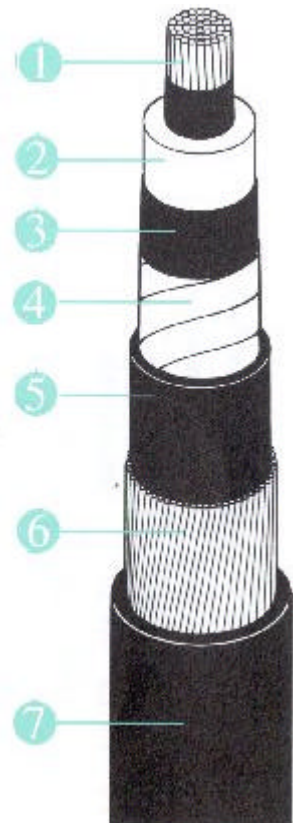
Extruded black polyvinyl chloride (PVC) or Low Smoke Zero Halogen (LSOH) compound is supplied as standard. Alternative materials may be provided if specified.

6.ARMOURING

Single layer of circular aluminium wires

7.OVERSHEATH

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



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Constructional Data

Cross-sectional area mm ²	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	39.5
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	50.0
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 mm ²	Approximate cable weight kg/m	Nominal drum length m	Nominal internal diameter of twin wall ducts mm
70	1.0	1000	100
95	1.2	1000	100
120	1.3	500	100
150	1.5	500	100
185	1.7	500	100
240	2.0	500	100
300	2.2	500	100
400	2.7	300	100
500	3.3	300	100
630	3.9	300	100
800	4.6	300	100
1000	5.6	300	100

Electrical

Cross-sectional area mm ²	Maximum DC resistance of conductor at 20°C µohms/m	Maximum AC resistance of conductor at 90°C µohms/m
70	443	568
95	320	411
120	253	325
150	206	265
185	164	211
240	125	162
300	100	130
400	77.8	102
500	60.5	80
630	46.9	64
800	36.7	52
1000	29.1	43

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Ratings Data

Cross-sectional area mm ²	Current Ratings:			Short circuit ratings:	
	Laid direct in ground A	Drawn into twin wall ducts A	Laid in air A	One second short circuit rating of conductor kA	One second short circuit rating of armour kA
70	205	195	235	6.6	6.9
95	245	230	290	9.0	7.5
120	280	260	330	11.3	7.8
150	315	285	375	14.2	10.6
185	355	320	430	17.5	11.2
240	405	360	510	22.7	12.2
300	455	395	575	28.3	12.8
400	515	440	670	37.8	14.1
500	575	475	765	47.2	19.5
630	635	520	870	58.3	21.6
800	700	565	980	75.6	23.3
1000	755	610	1080	94.5	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.



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