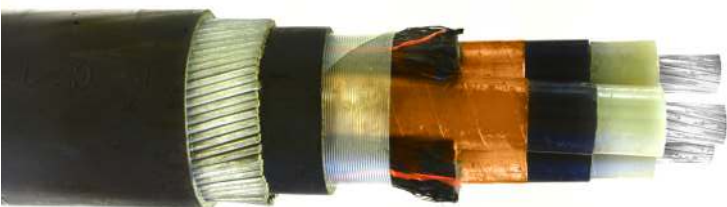


BS6622/BS7835 Three Core Armoured 11kV XLPE Stranded Aluminium Conductor

STANDARD MV POWER CABLES



CABLE DESCRIPTION

Conductor

Compact 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.

Insulation

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

Insulation Screen

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

Metallic Screen

Copper tapes. Complete cover.

Laying up

Three cores laid up with polypropylene string fillers to form a compact circular cable.

Tape Binders

Sheath

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

Armouring

Single layer of galvanised circular steel wires.

Oversheath

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

Constructional Data

Cross-sectional area mm ²	Minimum average thickness of insulation mm	Nominal thickness of PVC/LSOH bedding mm	Nominal diameter of armoured wires mm	Nominal thickness of PVC/LSOH oversheath mm	Approx. overall diameter of cable mm
70	3.4	1.4	2.5	2.7	54.5
95	3.4	1.5	2.5	2.9	59.0
120	3.4	1.6	2.5	3.0	62.0
150	3.4	1.6	2.5	3.1	65.5
185	3.4	1.7	2.5	3.2	69.5
240	3.4	1.8	3.15	3.4	77.0
300	3.4	1.9	3.15	3.6	81.5
400	3.4	2.0	3.15	3.8	89.5

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	4.4	500	100
95	5.0	500	100
120	5.5	500	100
150	6.1	500	125
185	6.8	500	125
240	8.9	500	125
300	10.0	450	125
400	11.6	400	125

Electrical Data

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	410
120	253	324
150	206	264
185	164	210
240	125	161
300	100	129
400	77.8	100

Ratings Data

Cross-sectional area mm ²	Current Ratings:			Short circuit ratings	
	Laid direct 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	195	160	215	6.6	10.8
95	235	190	265	9.0	11.6
120	265	220	300	11.3	12.5
150	300	245	340	14.2	13.1
185	335	280	390	17.5	14.0
240	390	325	460	22.7	18.7
300	435	360	525	28.3	19.7
400	500	415	610	37.8	22.1

Current Ratings Conditions:

Ground temperature	15°C
Ambient temperature(air)	25°C
Depth of burial	0.8m
Thermal resistance of soil	1.2°Cm/W



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