

BS 6622 XLPE MDPE 6.35/11 (12)kV Cable



Eland Product Group: **A9M**

APPLICATION

Power cables for power networks, underground and in cable ducting.

CONSTRUCTION

Conductor

Class 2 stranded copper conductor according to BS EN 60228 (previously BS 6360)

Conductor Screen

Semi-conductive XLPE (Cross-Linked Polyethylene)

Insulation

XLPE (Cross-Linked Polyethylene) Type GP8 according to BS 7655

Insulating Screen

Semi-conducting XLPE (Cross-Linked Polyethylene)

Separator

Water blocking tape

Insulation Screen

Semi-conductive XLPE (Cross-Linked Polyethylene)

Metallic Screen

Individual copper wire screen according to BS 6622

Filler

PET (Polyethylene Terephthalate) fibres

Separator

Binding tape

Bedding

PVC (Polyvinyl Chloride) Type TM1 according to BS 7655

Armour

SWA (Steel Wire Armoured)

Sheath

MDPE (Medium Density Polyethylene) Type TS2 according to BS 7655

CABLE STANDARDS

BS 6622, BS EN/IEC 60228



The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.

CHARACTERISTICS

Voltage Rating (U_o/U)(U_m)
6.35/11 (12)KV

Temperature Rating
0°C to +90°C

Temperature Index
+280°C

Minimum Bending Radius

12 x overall diameter
(10 x overall diameter where bends are positioned adjacent to a joint or terminations provided that the bending is carefully controlled by the use of a former)

Sheath Colour
● Red ● Black

DIMENSIONS

ELAND PART NO.	SHEATH COLOUR	PADS NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL OVERALL DIAMETER			NOMINAL WEIGHT kg/km
					Under Armour mm	Over Armour mm	Overall mm	
A9M11KV03185-BK	Black	006/120036	3	185	64.4	69.4	76	12600
A9M11KV03185-RD	Red	006/120037	3	185	64.4	69.4	76	12600

CONDUCTORS

Class 2 Stranded Conductors for Single Core and Multi-Core Cables

NOMINAL CROSS SECTIONAL AREA mm ²	MINIMUM NO. OF WIRES IN CONDUCTOR						MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C
	Circular		Circular Compacted		Shaped		Annealed Copper Conductor
	Cu	Al	Cu	Al	Cu	Al	Plain Wires ohms/km
185	37	37	30	30	30	30	0.0991

The above table is in accordance with BS EN 60228 (previously BS 6360)

ELECTRICAL CHARACTERISTICS

Copper Conductor Dimensions and Current Carrying Capacity

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	CONTINUOUS CURRENT RATING					
		In Ground Amps		In Ducts Amps		In Air Amps	
		Trefoil	Flat	Trefoil	Flat	Trefoil	Flat
3	185	430	430	370	370	490	490

DE-RATING FACTORS

AIR TEMPERATURE	25°C	30°C	35°C	40°C	45°C	50°C	55°C
DE-RATING FACTOR	1.00	0.96	0.92	0.88	0.83	0.78	0.73
GROUND TEMPERATURE	10°C	15°C	20°C	25°C	30°C	35°C	40°C
DE-RATING FACTOR	1.03	1.00	0.97	0.93	0.89	0.86	0.82
GROUND THERMAL RESISTIVITY	0.9	1.0	1.2	1.5	2.0	2.5	3.0
DE-RATING FACTOR	1.06	1.04	1.00	0.92	0.82	0.74	0.68
DEPTH OF LAYING mtr	0.80	1.00	1.25	1.50	1.75	2.00	2.50
DE-RATING FACTOR	1.00	0.97	0.95	0.94	0.93	0.91	0.90

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.