

# 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. Suitable for direct burial.

#### **CHARACTERISTICS**

Voltage Rating Uo/U (Um) 6.35/11 (12)kV

**Temperature Rating** Fixed: 0°C to +90°C

**Temperature Index** 0°C to +90°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)

# CONSTRUCTION

### Conductor

Class 2 stranded copper conductor

## **Conductor Screen**

Semi-conductive XLPE (Cross-Linked Polyethylene)

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#### Separator

Water blocking tape

#### **Insulation Screen**

Semi-conductive XLPE (Cross-Linked Polyethylene)

#### **Metallic Screen**

Individual copper wire screen

PET (Polyethylene Terephthalate) fibres

#### Separator

Binding tape

### **Bedding**

PVC (Polyvinyl Chloride)

SWA (Steel Wire Armoured)

#### Sheath

MDPE (Medium Density Polyethylene)

### **Sheath Colour**



# BSI KITEMARK™ TESTED



Cables are tested and verified by The Cable Lab® to confirm they meet the quality standards required of the BSI Cable Testing Verification Kitemark™.

#### **STANDARDS**

BS 6622, IEC 60502-2, IEC/EN 60228

### THE CABLE LAB®

#### AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.





# SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability





SCIENCE BUSINESS 1.5°C BUSINESS 1.5°







### REGULATORY COMPLIANCE

This cable meets the requirements of the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab®.









| ELAND PART NO.  | SHEATH<br>COLOUR | PADS<br>NO. | NO. OF<br>CORES | NOMINAL CROSS<br>SECTIONAL AREA | NOMINAL DIAMETER |             |         | NOMINAL<br>WEIGHT |
|-----------------|------------------|-------------|-----------------|---------------------------------|------------------|-------------|---------|-------------------|
|                 |                  |             |                 | mm <sup>2</sup>                 | Under Armour     | Over Armour | Overall | kg/km             |
| 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<br>SECTIONAL AREA |          | MININ | IUM NO. OF WI      | MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km |        |    |                           |  |
|---------------------------------|----------|-------|--------------------|---|--------|----|---------------------------|--|
| mm <sup>2</sup>                 | Circular |       | Circular Compacted |   | Shaped |    | Annealed Copper Conductor |  |
|                                 | Cu       | Al    | Cu                 | Al  | Cu     | Al | Plain Wires               |  |
| 185                             | 37       | 37    | 30                 | 30  | 30     | 30 | 0.0991                    |  |

# **ELECTRICAL CHARACTERISTICS**

Copper Conductor Dimensions and Current Carrying Capacity

|   | NOMINAL CROSS<br>SECTIONAL AREA<br>mm² | CONTINUOUS CURRENT RATING Amps |       |         |       |         |      |  |  |  |
|---|--|--------------------------------|-------|---------|-------|---------|------|--|--|--|
|   |  | In Gr                          | round | In D    | lucts | In Air  |      |  |  |  |
|   |  | Trefoil                        | Flat  | Trefoil | Flat  | Trefoil | Flat |  |  |  |
| 3 | 185                                    | 430                            | 430   | 370     | 370   | 490     | 490  |  |  |  |

# **DE-RATING FACTORS**

| AIR TEMPERATURE °C              | 25   | 30   | 35   | 40   | 45   | 50   | 55   |
|---------------------------------|------|------|------|------|------|------|------|
| DE-RATING FACTOR                | 1.00 | 0.96 | 0.92 | 0.88 | 0.83 | 0.78 | 0.73 |
|                                 |      |      |      |      |      |      |      |
| GROUND TEMPERATURE °C           | 10   | 15   | 20   | 25   | 30   | 35   | 40   |
| DE-RATING FACTOR                | 1.03 | 1.00 | 0.97 | 0.93 | 0.89 | 0.86 | 0.82 |
|                                 |      |      |      |      |      |      |      |
| GROUND THERMAL RESISTIVITY km/W | 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 m               | 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.