

# BS 7211 624-B Twin and Earth LSZH Cable



ELAND CAELES ©

Eland Product Group: A9B

# APPLICATION

Installation in walls, on boards and in channels or embedded in plaster. For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.

# CHARACTERISTICS

Voltage Rating Uo/U 300/500V

**Temperature Rating** +5°C to +70°C

Minimum Bending Radius 3 x overall diameter

## CONSTRUCTION

Conductor 1mm<sup>2</sup> to 2.5mm<sup>2</sup>: Class 1 solid conductor 4mm<sup>2</sup> to 10mm<sup>2</sup>: Class 2 stranded conductor

#### **Circuit Protection Conductor (Earth)**

1mm<sup>2</sup> to 2.5mm<sup>2</sup>: Class 1 solid copper conductor 4mm<sup>2</sup> to 16mm<sup>2</sup>: Class 2 stranded copper conductor

Insulation XLPE (Cross-Linked Polyethylene)

Sheath LSZH (Low Smoke Zero Halogen)

Insulation Colour 2 core: ● Blue ● Brown 3 core: ● Brown ● Black ● Grey

Sheath Colour O White

# CABLE THIRD-PARTY ACCREDITATION

We supply BASEC approved products

Cables are tested and certified by BASEC, The British Approvals Service for Cables

#### **STANDARDS**

BS7211, EN 60228

Flame Retardant according to BS EN/IEC 60332-1-2 Low Smoke Halogen Free according to IEC/EN 60754-1/2, IEC/EN 61034-1/2

## 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



## **REGULATORY COMPLIANCE**

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.



This cable meets the requirements of the Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab<sup>®</sup>.



# DIMENSIONS

| ELAND PART NO. | NO. OF<br>CORES | CONDUCTOR<br>CLASS | NOMINAL CROSS<br>SECTIONAL AREA<br>mm <sup>2</sup> | NOMINAL THICKNESS<br>OF INSULATION<br>mm | NOMINAL THICKNESS<br>OF SHEATH<br>mm | NOMINAL OVERALL<br>DIMENSIONS<br>mm |
|----------------|-----------------|--------------------|----------------------------------------------------|------------------------------------------|--------------------------------------|-------------------------------------|
| A9B02010WH     | 2               | 1                  | 1                                                  | 0.6                                      | 0.9                                  | 4.8 × 8.4                           |
| A9B02015WH     | 2               | 1                  | 1.5                                                | 0.7                                      | 0.9                                  | 4.8 × 9.2                           |
| A9B02025WH     | 2               | 1                  | 2.5                                                | 0.8                                      | 1                                    | 5.7 x 10.5                          |
| A9B02040WH     | 2               | 2                  | 4                                                  | 0.8                                      | 1                                    | 6.1 x 11.7                          |
| A9B02060WH     | 2               | 2                  | 6                                                  | 0.8                                      | 1.1                                  | 6.9 x 13.6                          |
| A9B0210WH      | 2               | 2                  | 10                                                 | 1                                        | 1.2                                  | 8.1 x 16.2                          |
| A9B03010WH     | 3               | 1                  | 1                                                  | 0.6                                      | 0.9                                  | 4.7 × 11                            |
| A9B03015WH     | 3               | 1                  | 1.5                                                | 0.7                                      | 0.9                                  | 4.9 x 11.8                          |
| A9B03025WH     | 3               | 1                  | 2.5                                                | 0.8                                      | 1                                    | 5.6 x 13.3                          |
| A9B03040WH     | 3               | 2                  | 4                                                  | 0.8                                      | 1                                    | 6.2 x 15.7                          |

# CONDUCTORS

## Class 1 Copper Conductor for Single and Multi-Core Cables

| NOMINAL CROSS<br>SECTIONAL AREA | MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C<br>ohms/km |  |  |
|---------------------------------|----------------------------------------------------|--|--|
| mm <sup>2</sup>                 | Plain Wires                                        |  |  |
| 1                               | 18.1                                               |  |  |
| 1.5                             | 12.1                                               |  |  |
| 2.5                             | 7.41                                               |  |  |
| 4                               | 4.61                                               |  |  |
| 6                               | 3.08                                               |  |  |
| 10                              | 1.83                                               |  |  |

# ELECTRICAL CHARACTERISTICS

# Current Carrying Capacity

| NOMINAL CROSS<br>SECTIONAL AREA<br>mm <sup>2</sup> | REFERENCE METHOD A*<br>(IN CONDUIT IN WALL)<br>Amps | REFERENCE METHOD C*<br>(CLIPPED DIRECT)<br>Amps | VOLTAGE<br>DROP<br>mv/A/m |
|----------------------------------------------------|-----------------------------------------------------|-------------------------------------------------|---------------------------|
| 1                                                  | 11.5                                                | 16                                              | 44                        |
| 1.5                                                | 14.5                                                | 20                                              | 29                        |
| 2.5                                                | 20                                                  | 27                                              | 18                        |
| 4                                                  | 26                                                  | 37                                              | 11                        |
| 6                                                  | 32                                                  | 47                                              | 7.3                       |
| 10                                                 | 44                                                  | 64                                              | 4.4                       |
| 16                                                 | 57                                                  | 85                                              | 2.8                       |

The above table is in accordance with 4D5 of the 18th Edition of IEE Wiring Regulations BS7671 and IEC 60364-5-52 Note

A\* For full installation method refer to Table 4A2 Installation Method 2 but for flat twin and earth cable of the 18th Edition of IEE Wiring Regulations.

C\* For full installation method refer to Table 4A2 Installation Method 20 but for flat twin and earth cable of the 18th Edition of IEE Wiring Regulations.

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.