

BS 6004 624-Y Twin and Earth PVC Cable



Eland Product Group: A9A

APPLICATION

Domestic wiring cable. Can be installed in fixed installations in dry or damp premises clipped to surface, on trays or in free air where the risk of mechanical damage would not be an issue. Suitable for laying in conduit or trunking where mechanical protection is required.

CHARACTERISTICS

Voltage Rating Uo/U
300/500V

Temperature Rating
-5°C to +70°C

Minimum Bending Radius
Fixed: 6 x overall diameter

CONSTRUCTION

Conductor

RE: 1mm² to 2.5mm²: Class 1 solid copper

RM: 4mm² to 16mm²: Class 2 stranded copper

Circuit Protection Conductor (Earth)

1mm² to 2.5mm²: Class 1 solid copper

4mm² to 16mm²: Class 2 stranded copper

Insulation

PVC (Polyvinyl Chloride)

Sheath

PVC (Polyvinyl Chloride)

Core Identification

2 core: ● Blue ● Brown

3 core: ● Brown ● Black ● Grey

Sheath Colour

● Grey

CABLE THIRD-PARTY ACCREDITATION



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

STANDARDS

BS 6004, EN 60228

Flame Retardant according to IEC/EN 60332-1-2

ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



8578



F5 672069



EMS 672067



OHS 672066

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 and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.



XM 634267





DIMENSIONS

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL THICKNESS OF INSULATION mm | NOMINAL OVERALL DIAMETER mm | NOMINAL OVERALL DIAMETER mm | NOMINAL OVERALL DIAMETER mm | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|----------------|--------------|---|---------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| A9A2010GR | 2 | 1 | 1 | 1 | 0.6 | 0.9 | 4.35 x 7.95 | 68 |
| A9A2015GR | 2 | 1.5 | 1 | 1 | 0.7 | 0.9 | 4.85 x 8.9 | 87 |
| A9A2025GR | 2 | 2.5 | 1 | 1.5 | 0.8 | 1 | 5.65 x 10.65 | 120 |
| A9A2040GR | 2 | 4 | 2 | 1.5 | 0.8 | 1 | 6.3 x 11.95 | 172 |
| A9A2060GR | 2 | 6 | 2 | 2.5 | 0.8 | 1.1 | 7.1 x 13.7 | 235 |
| A9A210GR | 2 | 10 | 2 | 4* | 1 | 1.2 | 8.7 x 17.25 | 373 |
| A9A216GR | 2 | 16 | 2 | 6* | 1 | 1.3 | 9.85 x 20 | 530 |
| A9A3010GR | 3 | 1 | 1 | 1 | 0.6 | 0.9 | 4.35 x 9.8 | 91 |
| A9A3015GR | 3 | 1.5 | 1 | 1 | 0.7 | 0.9 | 4.85 x 11.2 | 115 |

*Class 2 conductors only

CONDUCTORS

Class 1 Solid Conductors for Single Core and Multi-Core Cables

| NOMINAL CROSS SECTIONAL AREA mm ² | MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km | |
|---|--|--|
| | Plain Wires | |
| 1 | 18.1 | |
| 1.5 | 12.1 | |
| 2.5 | 7.41 | |

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

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 ohms/km | |
|---|-----------------------------------|--|--|
| | | Annealed Copper Conductor | |
| | Circular | Plain Wires | |
| 4 | 7 | 4.61 | |
| 6 | 7 | 3.08 | |
| 10 | 7 | 1.83 | |
| 16 | 7 | 1.15 | |

The above table is in accordance with EN 60228



ELECTRICAL CHARACTERISTICS

Current Carrying Capacity and Voltage Drop

| NOMINAL CROSS SECTIONAL AREA mm ² | REFERENCE METHOD A* (IN CONDUIT IN WALL) Amps | REFERENCE METHOD C* (CLIPPED DIRECT) Amps | VOLTAGE DROP 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.