

624Y / BS 6004 Twin and Earth Cable



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.

Standards

BS 6004

EN 60228

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

Characteristics

Voltage Rating U_o/U
300/500V

Temperature Rating
Fixed: -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)

Sheath Colour

Grey



Dimensions

| 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 |
|--------------|-------------------------------------------------|---------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------|
| 2 | 1 | 1 | 1 | 0.6 | 0.9 | 4.35 x 7.95 | 68 |
| 2 | 1.5 | 1 | 1 | 0.7 | 0.9 | 4.85 x 8.9 | 87 |
| 2 | 2.5 | 1 | 1.5 | 0.8 | 1 | 5.65 x 10.65 | 120 |
| 2 | 4 | 2 | 1.5 | 0.8 | 1 | 6.3 x 11.95 | 172 |
| 2 | 6 | 2 | 2.5 | 0.8 | 1.1 | 7.1 x 13.7 | 235 |
| 2 | 10 | 2 | 4* | 1 | 1.2 | 8.7 x 17.25 | 373 |
| 2 | 16 | 2 | 6* | 1 | 1.3 | 9.85 x 20 | 530 |
| 3 | 1 | 1 | 1 | 0.6 | 0.9 | 4.35 x 9.8 | 91 |
| 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

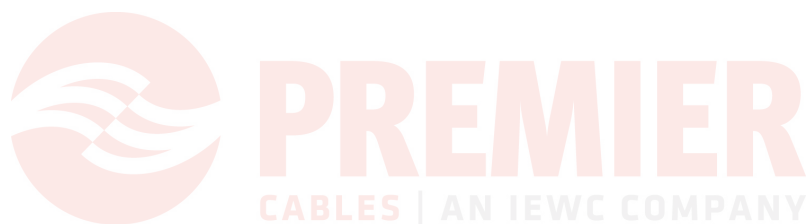
Current Carrying Capacity and Voltage Drop

| 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.



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.