# BS 6004 624-Y Twin and Earth PVC Cable





# RoHS Compliant

## **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

Short Circuit: +160°C

Minimum Bending Radius : Fixed: 6 × overall diameter

Core Identification : Brown, Blue

Sheath Colour : Grey

#### Cable Standards

BS 6004 Table 4

#### Construction

#### Conductor

Copper conductor according to BS EN 60228 (previously BS 6360)

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

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

1mm² to 2.5mm²: Class 1 solid copper conductor 4mm² to 16mm²: Class 2 stranded copper conductor

### Insulation

PVC (Polyvinyl Chloride) Type TI1 according to BS EN 50363

#### Sheath

PVC (Polyvinyl Chloride) Type 6 according to BS 7655

These product range are available on reels of 100m or per metre

### **Dimensions**

Part Number	No. of Cores	Nominal Cross Sectional Area mm²	Conductor Class	Cross Sectional Area of Circuit Protective Conductor mm²	Nominal Thickness of Insulation mm	Nominal Thickness of Sheath mm	Nominal Overall Dimensions mm	Nominal Weight kg/km
PP002163	2	1	1	1	0.6	0.9	4.35 × 7.95	68
PP002164	2	1.5	1	1	0.7	0.9	4.85 × 8.9	87

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Part Number	No. of Cores	Nominal Cross Sectional Area mm²	Conductor Class	Cross Sectional Area of Circuit Protective Conductor mm²	Nominal Thickness of Insulation mm	Nominal Thickness of Sheath mm	Nominal Overall Dimensions mm	Nominal Weight kg/km
PP002165	2	2.5	1	1.5	0.8	1	5.65 × 10.65	120
PP002166	2	4	2	1.5	0.8	1	6.3 × 11.95	172
PP002167	2	6	2	2.5	0.8	1.1	7.1 × 13.7	235
PP002168	2	10	2	4*	1	1.2	8.7 × 17.25	373
PP002169	2	16	2	6*	1	1.3	9.85 × 20	530
PP002176	3	1.5	1	1	0.7	0.9	4.85 × 11.2	115

<sup>\*</sup>Class 2 conductors only

#### **Conductors**

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

Nominal Cross	Maximum Resistance of Conductor at 20°C		
Sectional Area mm <sup>2</sup>	Plain Wires Ω/km		
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

	Minimum No. of Wires in Conductor	Maximum Resistance of Conductor at 20°C  Annealed Copper Conductor  Plain Wires Ω/km	
Nominal Cross Sectional Area			
mm²	Circular		
4	7	4.61	
6	7	3.08	
10	7	1.83	
16	7	1.15	

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

# **Electrical Characteristics**

Current Carrying Capacity and Voltage Drop

Nominal Cross Sectional Area mm² 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	

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Nominal Cross Sectional Area mm²	Reference Method A* (in Conduit in Wall) Amps	Reference Method C* (Clipped Direct) Amps	Voltage Drop mv/A/m
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 17th Edition of IEE Wiring Regulations.

#### Note:

- A\* For full installation method refer to Table 4A2 Installation Method 2 but for flat twin and earth cable of the 17th 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 17th Edition of IEE Wiring Regulations.

#### **Part Number Table**

Description	Cable Length	Part Number
Unscreened BS 6004 624-Y Twin & Earth PVC Cable, 2 Core, 1mm <sup>2</sup> , Grey	100m or per metre	PP002163
Unscreened BS 6004 624-Y Twin & Earth PVC Cable, 2 Core, 1.5mm <sup>2</sup> , Grey		PP002164
Unscreened BS 6004 624-Y Twin & Earth PVC Cable, 2 Core, 2.5mm <sup>2</sup> , Grey		PP002165
Unscreened BS 6004 624-Y Twin & Earth PVC Cable, 2 Core, 4mm <sup>2</sup> , Grey		PP002166
Unscreened BS 6004 624-Y Twin & Earth PVC Cable, 2 Core, 6mm <sup>2</sup> , Grey		PP002167
Unscreened BS 6004 624-Y Twin & Earth PVC Cable, 2 Core, 10mm², Grey		PP002168
Unscreened BS 6004 624-Y Twin & Earth PVC Cable, 2 Core, 16mm <sup>2</sup> , Grey		PP002169
Unscreened BS 6004 624-Y Twin & Earth PVC Cable, 3 Core, 1.5mm <sup>2</sup> , Grey		PP002176

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