

# 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.

## 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)

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

PVC (Polyvinyl Chloride) Type T11 according to BS EN 50363

### Sheath

PVC (Polyvinyl Chloride) Type 6 according to BS 7655

## CABLE STANDARDS

BS 6004 Table 4



The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed

## CHARACTERISTICS

### Voltage Rating (U<sub>o</sub>/U)

300/500V

### Temperature Rating

-5°C to +70°C  
Short Circuit : +160°C

### Minimum Bending Radius

Fixed: 6 x overall diameter

### Core Identification

● Brown ● Blue

### Sheath Colour

● Grey

## DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	CONDUCTOR CLASS	CROSS SECTIONAL AREA OF CIRCUIT PROTECTIVE CONDUCTOR mm <sup>2</sup>	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIMENSIONS 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
A9A3010GR	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 <sup>2</sup>	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C	
	Plain Wires ohms/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

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MINIMUM NO. OF WIRES IN CONDUCTOR	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C	
		Annealed Copper Conductor	
		Plain Wires ohms/km	
4	Circular 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 mm <sup>2</sup>	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 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.