



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

### Circuit Protection Conductor (Earth)

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

**We supply BASEC approved products**  
Cables are tested and certified by BASEC, The British Approvals Service for Cables

## STANDARDS

BS 6004, EN 60228

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

## THE CABLE LAB<sup>®</sup>

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](http://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 CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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 <sup>2</sup>	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 <sup>2</sup>	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

Table 4D5 - Current Carrying Capacity and Voltage Drop

**CURRENT-CARRYING CAPACITY (amperes) and  
VOLTAGE DROP (per ampere per metre):**

Ambient temperature: 30°C  
 Conductor operating temperature: 70°C

Conductor cross-sectional area	Method 100# (above a plasterboard ceiling covered by thermal insulation not exceeding 100mm in thickness)	Method 101 # (above a plasterboard ceiling covered by thermal insulation exceeding 100mm in thickness)	Method 102# (in a stud wall with thermal insulation with cable touching the inner wall surface)	Method 103# (in a stud wall with thermal insulation with cable not touching the inner wall surface)	Reference Method C* (clipped direct)	Reference Method A* (enclosed in conduit in an insulated wall)	Voltage drop (per ampere per metre)
1	2	3	4	5	6	7	8
(mm <sup>2</sup> )	(A)	(A)	(A)	(A)	(A)	(A)	(mV/A/m)
1	13	10.5	13	8	16	11.5	44
1.5	16	13	16	10	20	14.5	29
2.5	17	21	13.5	13.5	27	20	18
4	22	27	18.5	18.5	37	26	11
6	27	35	23.5	23.5	47	32	7.3
10	36	47	32	32	64	44	4.4
16	46	63	42.5	42.5	85	57	2.8

A\* - For full installation method refer to Table 4A2 Installation Method 2 but for flat twin and earth cable

C\* - For full installation method refer to Table 4A2 Installation Method 20 but for flat twin and earth cable 100# - For full installation method refer to Table 4A2 Installation Method 100

101# - For full installation method refer to Table 4A2 Installation Method 101

102# - For full installation method refer to Table 4A2 Installation Method 102

103# - For full installation method refer to Table 4A2 Installation Method 103

Wherever practicable, a cable is to be fixed in a position such that it will not be covered with thermal insulation. Regulation 523.9, BS 5803-5:

Appendix C: Avoidance of overheating of electric cables.

Building Regulations Approved Document B and Thermal insulation: avoiding risks, BR 262, BRE, 2001 refer.

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.