

# 318-A / BS 6004 Arctic Grade Cable



Eland Product Group: A5A

## APPLICATION

Arctic grade PVC cords manufactured to BS 6004 are designed to withstand severe external temperatures and will remain flexible at temperatures down to -40°C. Making them particularly suitable for outdoor applications and for use where flexibility is required at sub zero temperatures. At normal temperatures the cable is very flexible, offering some of the characteristics usually found in elastomeric cables.

## CHARACTERISTICS

**Voltage Rating** U<sub>o</sub>/U  
300/500V

**Temperature Rating**  
Fixed: -40°C to +60°C

**Minimum Bending Radius**  
Fixed: 6 x overall diameter

## CONSTRUCTION

**Conductor**  
Class 5 flexible copper conductor

**Insulation**  
Arctic grade PVC (Polyvinyl Chloride)

**Sheath**  
Arctic grade PVC (Polyvinyl Chloride)

**Core Identification**  
2 core: ● Blue ● Brown  
3 core: ● Blue ● Brown ● Green/Yellow

**Sheath Colour**  
● Blue ● Yellow

## CABLE THIRD-PARTY ACCREDITATIONS

**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 2015/863/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<br>mm <sup>2</sup> | NOMINAL THICKNESS OF INSULATION<br>mm | NOMINAL THICKNESS OF SHEATH<br>mm | NOMINAL OVERALL DIAMETER<br>mm | NOMINAL WEIGHT<br>kg/km |
|----------------|--------------|---|---------------------------------------|-----------------------------------|--------------------------------|-------------------------|
| A5A2075*1R     | 2            | 0.75  | 0.6                                   | 0.8                               | 6.2                            | 55                      |
| A5A2010*1R     | 2            | 1   | 0.6                                   | 0.8                               | 6.4                            | 61                      |
| A5A2015*1R     | 2            | 1.5   | 0.7                                   | 0.8                               | 7.4                            | 83                      |
| A5A2025*1R     | 2            | 2.5   | 0.8                                   | 1                                 | 9.2                            | 130                     |
| A5A204*1R      | 2            | 4   | 0.8                                   | 1.1                               | 10.4                           | 176                     |
| A5A206*1R      | 2            | 6   | 0.8                                   | 1.2                               | 11.3                           | 73                      |
| A5A3010*1R     | 3            | 1   | 0.6                                   | 0.8                               | 6.8                            | 105                     |
| A5A3015*1R     | 3            | 1.5   | 0.7                                   | 0.9                               | 8.1                            | 163                     |
| A5A3025*1R     | 3            | 2.5   | 0.8                                   | 1.1                               | 10                             | 224                     |
| A5A304*1R      | 3            | 4   | 0.8                                   | 1.2                               | 11.3                           | 299                     |
| A5A306*1R      | 3            | 6.0   | 0.8                                   | 1.2                               | 12.7                           | 299                     |

\* Designates the sheath colour. For each Eland Cables part number replace with the colour code as listed below e.g. A5A2075B1R = 0.75mm<sup>2</sup> Blue

## COLOUR CODES

| COLOUR | Blue | Yellow |
|--------|------|--------|
| CODE   | B    | Y      |

## CONDUCTORS

Class 5 Flexible Copper Conductors for Single Core and Multi-Core Cables

| NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | MAXIMUM DIAMETER OF WIRES IN CONDUCTOR<br>mm | MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C<br>ohms/km |
|---|--|--|
|   |  | Plain Wires  |
| 0.75  | 0.21   | 26   |
| 1   | 0.21   | 19.5   |
| 1.5   | 0.26   | 13.3   |
| 2.5   | 0.26   | 7.98   |
| 4   | 0.31   | 4.95   |
| 6   | 0.31   | 3.30   |

## ELECTRICAL CHARACTERISTICS

Current Carrying Capacity

| NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | CURRENT CARRYING CAPACITY AT 30°C<br>Amps |                |
|---|---|----------------|
|   | Single-Phase AC                           | Three-Phase AC |
| 0.75  | 6   | 6              |
| 1   | 10  | 10             |
| 1.5   | 16  | 16             |
| 2.5   | 25  | 20             |
| 4   | 32  | 25             |
| 6   | 48  | 40             |

## VOLTAGE DROP

| NOMINAL CROSS SECTIONAL AREA<br>mm <sup>2</sup> | DC OR SINGLE-PHASE AC<br>mV/A/m | THREE-PHASE AC<br>mV/A/m |
|---|---------------------------------|--------------------------|
| 0.75  | 62                              | 54                       |
| 1   | 46                              | 40                       |
| 1.5   | 32                              | 27                       |
| 2.5   | 19                              | 16                       |
| 4   | 12                              | 10                       |
| 6   | 8                               | 7                        |

Conductor operating temperature: 60°C

The above table is in accordance with Table 4F3B of the 18th Edition of IEE Wiring Regulations BS7671 and IEC 60364-5-52.

## DE-RATING FACTORS

| AMBIENT TEMPERATURE | 35°C | 40°C | 45°C | 50°C | 55°C |
|---------------------|------|------|------|------|------|
| DE-RATING FACTOR    | 0.91 | 0.82 | 0.71 | 0.58 | 0.41 |

The above table is in accordance with Table 4F3A of the 18th Edition of IEE Wiring Regulations BS7671 and IEC 60364-5-52.

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.