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 Uo/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

Cables are tested and accredited by BASEC, The British Approvals Service for Cables

STANDARDS

BS EN 60228, BS 6004

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

ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.

UKAS ISO/IEC 17025 Accredited Testing Laboratory 8578

bsi. ISO 9001 Quality Management FS 672069 | ISO 14001 Environmental Management EMS 672067 | ISO 45001 Occupational Health and Safety Management OHS 672066

REGULATORY COMPLIANCE

This cable is compliant with European Reglation EN 50575, the Construction Products Regulation.

CPR COMPLIANT EN 50575

This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.

bsi. RoHS Trusted KITEMARK™ KM 634267 RoHS CE

DIMENSIONS

ELAND PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT 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 = 0.75mm² 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 mm²	MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm	MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C 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	031	3.30

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity

NOMINAL CROSS SECTIONAL AREA mm²	CURRENT CARRYING CAPACITY AT 30°C 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

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VOLTAGE DROP

NOMINAL CROSS SECTIONAL AREA mm²	DC OR SINGLE-PHASE AC mV/A/m	THREE-PHASE AC 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 17th Edition of IEE Wiring Regulations.

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 17th Edition of IEE Wiring Regulations.