

318-A / BS 6004 Arctic Grade Cable



Application

Arctic grade cables 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.

Standards

BS 6004, EN 60228
Flame Retardant according to IEC/EN 60332-1-2

Characteristics

Voltage Rating Uo/U
300/500V

Temperature Rating
Fixed: -40°C to $+60^{\circ}\text{C}$

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)

Sheath Colour
Blue or Yellow



Dimensions

NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL THICKNESS OF INSULATION mm	NOMINAL THICKNESS OF SHEATH mm	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
2	0.75	0.6	0.8	6.2	55
2	1	0.6	0.8	6.4	61
2	1.5	0.7	0.8	7.4	83
2	2.5	0.8	1	9.2	130
2	4	0.8	1.1	10.4	176
2	6	0.8	1.2	11.3	224
3	1	0.6	0.8	6.8	105
3	1.5	0.7	0.9	8.1	163
3	2.5	0.8	1.1	10	224
3	4	0.8	1.2	11.3	299
3	6.0	0.8	1.2	12.7	299

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 mm ²	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	0.31	3.30

Electrical Characteristics

Current Carrying Capacity

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

Voltage Drop

NOMINAL CROSS SECTIONAL AREA mm ²	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

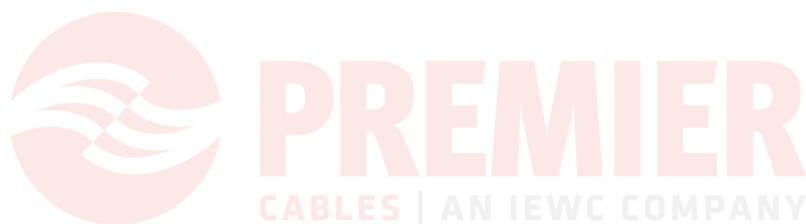
Conductor operating temperature: 60°C

The above table is in accordance with Table 4F3B of the 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 the 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.