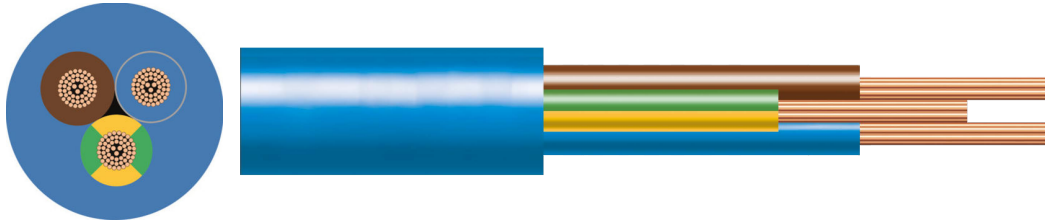


318-AG / ARCTIC GRADE CABLE



Arctic grade cables, such as the 318-AG series manufactured to BS 6004 standards, are designed for indoor or outdoor applications where flexibility in severe temperatures is crucial. These cables remain pliable even in extreme cold, down to -40 degrees Celsius. Known for their high-grade PVC construction, they are suitable for bespoke extension leads, powering portable tools, or temporary traffic lights.

CONDUCTOR	Plain Copper
STRANDING	Class 5
INSULATION	PVC
OUTERSHEATH	PVC
OUTERSHEATH COLOUR	Blue, Orange, Yellow
RATED VOLTAGE	500V
CORE IDENTIFICATION	2 Core: Blue, Brown 3 Core: Blue, Brown, Green/Yellow
MINIMUM BENDING RADIUS	3 x Overall Bending Radius
OPERATING TEMPERATURE	70°C
STANDARDS	BS6004, EN 60228 Flame Retardant according to IEC/EN 60332-1-2

SPECIFICATION DATA

Part No	Cores	Nominal cross sectional area of conductor mm ²	Nominal thickness of insulation mm ²	Nominal thickness of oversheath mm ²	Approx overall diameter mm ²	Weight kg/km
37680	2	1.5			7.5	80
37788	3	0.75			6.7	60
37580	3	1			7	72
37344	3	1.5			8.2	98
37134	3	2.5			10.1	155
37104	3	4			11.4	215
37682	3	6			11.10	-
37683	4	1.5			9	145
37744	4	2.5			10.7	195
37745	4	6			14.5	390
37701	5	1.5			10.2	156

RATING TABLES

TABLE 4F3A - Flexible cables, non-armoured (COPPER CONDUCTORS)

COPPER CONDUCTORS

CURRENT-CARRYING CAPACITY (amperes): and MASS SUPPORTABLE (kg):

Conductor cross-sectional area	Current-carrying capacity		Maximum mass supportable by twin flexible cable (see Regulations 522.7.2 and 559.5.2)
	Single-phase AC	Three-phase AC	
1 (mm ²)	2 (A)	3 (A)	4 (kg)
0.5	3	3	2
0.75	6	6	3
1	10	10	5
1.25	13	-	5
1.5	16	16	5
2.5	25	20	5
4	32	25	5

Where cable is on a reel see the notes to Table 4F1A.

RATING FACTOR FOR AMBIENT TEMPERATURE

60 °C thermoplastic or thermosetting insulated cable:

Ambient temperature	35 °C	40 °C	45 °C	50 °C	55 °C
Rating factor	0.91	0.82	0.71	0.58	0.41

110 °C flexible cable:

Ambient temperature	35 to 80 °C	85 °C	90 °C	95 °C	100 °C	105 °C
Rating factor	1.0	0.96	0.85	0.74	0.60	0.42

90 °C thermoplastic or thermosetting insulated cable:

Ambient temperature	35 to 50 °C	55 °C	60 °C	65 °C	70 °C
Rating factor	1.0	0.96	0.83	0.67	0.47

150 °C flexible cable:

Ambient temperature	35 to 120 °C	125 °C	130 °C	135 °C	140 °C	145 °C
Rating factor	1.0	0.96	0.85	0.74	0.60	0.42

Glass fibre flexible cable:

Ambient temperature	35 to 50 °C	155 °C	160 °C	165 °C	170 °C	175 °C
Rating factor	1.0	0.92	0.82	0.71	0.57	0.40

TABLE 4F3B

VOLTAGE DROP (per ampere per metre): Conductor operating temperature: 60 °C

Conductor cross-sectional area	DC or single-phase AC	Three-phase AC
1	2	3
(mm ²)	(mV/A/m)	(mV/A/m)
0.5	93	80
0.75	62	54
1	46	40
1.25	37	-
1.5	32	27
2.5	19	16
4	12	10

NOTE: * The tabulated values above are for 60 °C thermoplastic or thermosetting insulated flexible cables and for other types of flexible cable they are to be multiplied by the following factors:

For 90 °C thermoplastic or thermosetting insulated	1.09
110 °C	1.17
150 °C	1.31
185 °C glass fibre	1.43

The information in this datasheet is for guidance only and subject to change without liability. Images provided are representations; actual cable dimensions may vary due to manufacturing tolerances.

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