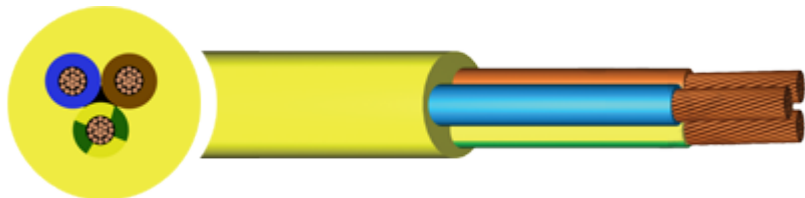


Arctic Grade Flexible Cable - BS6004, BS EN 50265, PVC - 1.5mm to 6mm



Arctic grade cable manufactured to BS6004. The British standard cable will remain flexible to as low as -40 degrees celsius, which makes it ideal for indoor or outdoor use to power portable tools or temporary traffic lights.

For installation at temperatures below 0 degrees celsius it is recommended that the cable be stored above 0 degrees celsius for 24 hours prior to installation.

Key Features



Installation Guidelines

For Installation Temperatures below 0°C it is recommended that the cable be stored above 0°C for 24 hours prior to installation



Voltage Rating

300/500 Volts



Minimum Bending Radius

As Per Manufacturers Datasheet



Temperature Limits

Ambient Temperature (Flexing): -40°C to +70°C

Construction

- **Conductor:** Plain annealed flexible stranded copper conductor
- **Insulation:** Polyvinyl Chloride (PVC)
- **Sheath:** PVC (Polyvinyl Chloride)

Standards

- BS EN 50265, BS 6004

Core Colours

3 Core -

Brown

Blue

Green

Yellow

4 Core -

Brown

Black

Grey

Green

Yellow

Sheath

Blue

Yellow

Arctic Grade Flexible Cable - BS6004, BS EN 50265, PVC - 1.5mm to 6mm - Dimensions

Reference	Conductor Size (mm2)	No Of Cores	Stranding(mm)	Overall Diameter(mm)	Weight(Kg/Km)	Gland Size
3183AG1/5*	1.5	3	30/0.25	8.2	90	20S
3184AG1/5*	1.5	4	30/0.25	9.55	130	20S
3183AG2/5*	2.5	3	50/0.25	10.15	180	20S
3184AG2/5*	2.5	4	50/0.25	11.3	220	20
3183AG4*	4	3	56/0.30	11.4	240	20
3183AG6*	6	3	76/0.30	13.2	315	20

TABLE 4F2A

CURRENT-CARRYING CAPACITY (Amps)

Ambient temperature: 30 °C
Conductor operating temperature: 90 °C

Conductor cross sectional area	Single-phase AC or DC	Three-phase AC	Single-phase AC or DC
	1 x 2 core cable, with or without protective conductor	1 x 3 core, 4 core or 5 core cable	2 single-core cables, touching
(mm ²)	(A)	(A)	(A)
4	42	37	-
6	55	49	-
10	76	66	-
16	103	89	-
25	136	119	-
35	-	146	200
50	-	177	250
70	-	225	310
95	-	273	369
120	-	316	432
150	-	414	497
185	-	487	564
240	-	560	673
300	-	394	773
400	-	-	924
500	-	-	1062
630	-	-	1242

NOTES:

- 1 The current ratings tabulated are for cables in free air but may also be used for cables resting on a surface. If the cable is to be wound on a drum on load the ratings should be reduced in accordance with **NOTE 2** below and for cables which may be covered, **NOTE 3 below**.

2 Flexible cables wound on reeling drums

The current ratings of cables used on reeling drums are to be reduced by the following factors:

a) Radial type drum	b) Ventilated cylindrical type drum
ventilated: 85 %	1 layer of cable: 85 %
unventilated: 75 %	2 layers of cable: 65 %
	3 layers of cable: 45 %
	4 layers of cable: 35 %

A radial type drum is one where spiral layers of cable are accommodated between closely spaced flanges; it fitted with solid flanges the ratings given above should be reduced and the drum is described as non-ventilated. If the flanges have suitable apertures the drum is described as ventilated.

A ventilated cylindrical cable drum is one where layers of cable are accommodated between widely spaced flanges and the drum and end flanges have suitable ventilating apertures.

- 3 Where cable may be covered over or coiled up whilst on load, or the air movement over the cable restricted, the current rating should be reduced.

It is not possible to specify the amount of reduction but the table of rating factors for reeling drums can be used as a guide.

- 4 For 180 °C cables, the rating factors for ambient temperature allow a conductor operating temperature up to 150 °C. Consult the cable manufacturer for further information.

Where it is intended to connect the cables in this table to equipment or accessories designed to operate at a temperature lower than the maximum operating temperature of the cable, the cables should be rated at the maximum operating temperature of the equipment or accessory (see Regulation 512.1.5).

- 6 Where it is intended to group a cable in this table with other cables, the cable should be rated at the lowest of the maximum operating temperatures of any of the cables in the group (see Regulation 512.1.5).

TABLE 4F2B

VOLTAGE DROP (per ampere per metre):

Conductor operating temperature: 90 °C

Conductor cross-sectional area (mm ²)	Two-core cable or 2 x Single core cables DC (mV/Nm)	2 core cable, single-phase AC (mV/Nm)			1 x 3 core, 4 core or 5 core cable, three-phase AC (mV/Nm)			2 single-core cables, touching Single-phase AC* (mV/Nm)		
4	13.20	13.20			11.10			-		
6	8.50	8.50			7.40			-		
10	5.10	5.10			4.40			-		
16	3.20	3.20			2.70			-		
		r	x	z	r	x	z	r	x	z
25	2.03	2.03	0.175	2.04	1.73	0.150	1.73	-	-	-
35	1.420	-	-	-	1.22	0.150	1.23	1.44	0.21	1.46
50	1.000	-	-	-	0.91	0.145	0.93	1.00	0.21	1.02
70	0.710	-	-	-	0.62	0.140	0.64	0.71	0.20	0.73
95	0.540	-	-	-	0.47	0.135	0.49	0.54	0.195	0.57
120	0.420	-	-	-	0.37	0.135	0.39	0.42	0.190	0.46
150	0.340	-	-	-	0.29	0.130	0.32	0.34	0.190	0.39
185	0.270	-	-	-	0.24	0.130	0.27	0.27	0.190	0.33
240	0.210	-	-	-	0.188	0.130	0.23	0.210	0.185	0.28
300	0.167	-	-	-	0.147	0.125	0.195	0.173	0.180	0.25
400	0.127	-	-	-	-	-	-	0.132	0.175	0.22
500	0.100	-	-	-	-	-	-	0.107	0.170	0.20
630	0.074	-	-	-	-	-	-	0.085	0.170	0.190

NOTES:

- 1 The voltage drop figures given above are based on a conductor operating temperature of 90 °C and are therefore not accurate when the operating temperature is in excess of 90 C. In the case of the 180 °C cables with a conductor temperature of 150 °C the above resistive values should be increased by a factor of 1.2.
- 2 *A larger voltage drop will result if the cables are spaced.

THE INFORMATION CONTAINED WITHIN THIS DATASHEET IS FOR GUIDANCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE OR LIABILITY. WE BELIEVE THE INFORMATION IS CORRECT AT THE TIME OF PUBLICATION. PLEASE NOTE WHEN SELECTING CABLE ACCESSORIES THAT ACTUAL CABLE DIMENSIONS MAY VARY DUE TO MANUFACTURING TOLERANCES.

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