

## Arctic Flex Cable Overview

Arctic Flex Cable is a type of PVC cable that is resistant to extreme external temperatures (-40°C to +60°C). This makes it particularly useful for outdoor applications such as extension leads on caravan sites, or any other requirement where the cable is required to be flexible at sub-zero temperatures.

## Flex Cable Specifications

- Voltage Rating: 300/500V
- Temperature Rating:
  - Flexed: -40°C to +60°C
- Minimum Bending Radius:
  - Fixed: 6 x overall diameter
- Conductor: Class 5 flexible copper conductor
- Insulation: Arctic Grade PVC (Polyvinyl Chloride)
- Sheath: Arctic Grade PVC
- Core Identification:
  - 2 core: Blue, Brown
  - 3 core: Green/Yellow, Blue, Brown
- Sheath Colour: Blue / Yellow
- Cables are tested and accredited by BASEC, The British Approvals Service for Cables
- British Standards BS 6004, EN 60228 Flame Retardant according to IEC/EN 60332-1-2

## Arctic Flex Cable Dimensions

Number of Cores	Nominal Cross Sectional Area (mm <sup>2</sup> )	Nominal Thickness of Insulation (mm)	Nominal Overall Diameter (mm)	Nominal Weight (Kg per km)
2	0.75	0.6	6.2	55
2	1	0.6	6.4	61
2	1.5	0.7	7.4	83
2	2.5	0.8	9.2	130
2	4	0.8	10.4	176
2	6	0.8	11.3	73
3	1	0.6	6.8	105
3	1.5	0.7	8.1	163
3	2.5	0.8	10	224
3	4	0.8	11.3	299
3	6	0.8	12.7	299

## Conductors

Nominal Cross Sectional Area (mm <sup>2</sup> )	Maximum Diameter of Wires in Conductor (mm)	Maximum Resistance of Conductors at 20°C
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

Nominal Cross Sectional Area (mm <sup>2</sup> )	Current Carrying Capacity (Amps) Single Phase AC	Current Carrying Capacity (Amps) 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 (mm <sup>2</sup> )	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

## De-Rating Factors

Air Temperature	De-rating Factor
35°C	0.91
40°C	0.82
45°C	0.71
50°C	0.58
55°C	0.41