

318-Y Flexible Cable H05VV-F

Eland Product Group **A5Y**



Application

For use in household appliances such as washing machines, spin dryers and refrigerators. Generally unsuitable for outdoor use or industrial applications.

Standards

BS6500 (0.5 - 2.5mm²), BS7919(4.0mm²), Generally to BS7919(6.0mm²), VDE28, CENELEC HD21.5

Technical Data

Conductor

Class 5 flexible plain copper conductors
BS EN 60228:2005 (previously BS6360)

Temperature Rating

0°C to +60°C

Insulation

PVC (Polyvinyl Chloride) to BS7655

Minimum Bending Radius

6 x overall diameter

Sheath

PVC (Polyvinyl Chloride) to BS7655

Core Identification

2 Cores: Blue, Brown
3 Cores: Green/Yellow, Blue, Brown
4 Cores: Green/Yellow, Brown, Black, Grey
5 Cores: Green/Yellow, Brown, Black, Grey, Blue

Sheath Colour

Black or White

Voltage Rating

300/500V

Dimensions

Eland Part Numbers	No. of Cores x Nominal Cross Sectional Area # x mm ²	Nominal Thickness of Insulation mm	Nominal Overall Diameter mm	Nominal Weight kg/Km
A5Y020075*	2 x 0.75	0.6	6.20	54.2
A5Y02010*	2 x 1.00	0.6	6.40	60.5
A5Y02015*	2 x 1.50	0.7	7.40	82.3
A5Y02025*	2 x 2.50	0.8	9.20	129.1
A5Y030075*	3 x 0.75	0.6	6.60	65.0
A5Y03010*	3 x 1.00	0.6	6.80	73.1
A5Y03015*	3 x 1.50	0.7	8.10	104.4
A5Y03025*	3 x 2.50	0.8	10.00	163.0
A5Y03040*	3 x 4.00	0.8	11.30	224.0
A5Y040075*	4 x 0.75	0.6	7.10	77.7
A5Y04010*	4 x 1.00	0.6	7.60	93.0
A5Y04015*	4 x 1.50	0.7	9.00	131.7
A5Y04025*	4 x 2.50	0.8	10.90	199.6
A5Y050075*	5 x 0.75	0.6	8.00	97.3
A5Y05010*	5 x 1.00	0.6	8.30	111.7
A5Y05015*	5 x 1.50	0.7	10.00	163.1

Eland Part Numbers shown above designate the sheath colour (). For each colour either substitute * for BK (black) or WH (white)

Conductors

Class 5 flexible Copper Conductors for Single Core and Multi-Core cables

1	2	3
Nominal Cross Sectional Area mm ²	Maximum Diameter of Wires in Conductor mm	Maximum Resistance of Conductor at 20°C Plain Wires ohms/Km
0.75	0.21	26.0000
1.00	0.21	19.5000
1.50	0.26	13.3000
2.50	0.26	7.9800
4.00	0.31	4.9500

Table in accordance with BS EN 60228:2005 (previously BS6360)

Electrical Characteristics for size 0.5-2.5mm²

Current Carrying Capacity (amperes): and Mass Supportable (kg)

Conductor Cross Sectional Area mm ²	Current Carrying Capacity		Maximum Mass Supportable by Twin Flexible Cord (see Regulations 522.7.2 and 559.6.1.5) kg
	Single Phase AC Amps	Three Phase AC Amps	
1	2	3	4
0.50	3	3	2
0.75	6	6	3
1.00	10	10	5
1.50	16	16	5
2.50	25	20	5

De-Rating factor for ambient temperature

60°C thermoplastic or thermosetting insulated cords:

Ambient Temperature	35°C	40°C	45°C	50°C	55°C
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.

Voltage Drop (per ampere per metre)

Conductor Cross Sectional Area mm ²	DC or Single Phase AC mV/A/m	Three Phase AC mV/A/m
1	2	3
0.50	93	80
0.75	62	54
1.00	46	40
1.50	32	27
2.50	19	16

Conductor operating temperature: 60°C*

The above table is in accordance with Table 4F3B of the 17th Edition of IEE Wiring Regulations.

Electrical Characteristics for size 4.0mm² and above**Current Carrying Capacity (amperes)**

Conductor Cross Sectional Area mm ²	Single Phase AC or DC	Three Phase AC
	1 Two Core Cable with or without protective conductor A	1 Three Core, Four Core or Five Core Cable A
1	2	3
4	30	26
6	39	34

Ambient temperature: 30°C

Conductor operating temperature: 60°C

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; if 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 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.

The above table is in accordance with Table 4F1A of the 17th Edition of IEE Wiring Regulations.

Voltage Drop (per ampere per metre)

Conductor Cross Sectional Area mm ²	Two Core Cable DC mV/A/m	Two Core Cable Single Phase AC mV/A/m	1 Three Core, Four Core or Five Core Cable Three Phase AC mV/A/m
1	2	3	4
4	12.0	12.0	10.0
6	7.8	7.8	6.7

Conductor operating temperature: 60°C

*A larger voltage drop will result if the cables are spaced.

The above table is in accordance with Table 4F1B of the 17th Edition of IEE Wiring Regulations.

The information contained within this datasheet is for guidance only. When selecting accessories such as cleats, glands, etc please note that actual cable dimensions may vary due to manufacturing tolerances.