

318-Y / H05VV-F BS EN 50525-2-11 Flexible Cable



Eland Product Group: **A6Y**

APPLICATION

Ordinary duty PVC cable for use in domestic appliances, kitchens and offices. For use with light portable appliances such as radios, table lamps and office equipment. Generally unsuitable for outdoor use or industrial applications.

CONSTRUCTION

Conductor

Class 5 flexible copper conductor according to BS EN 60228 (previously BS 6360)

Insulation

PVC (Polyvinyl Chloride) Type T12 according to BS EN 50363

Sheath

PVC (Polyvinyl Chloride) Type TM2 according to BS EN 50363

CABLE STANDARDS

BS EN 50525-2-11 (previously BS 6500), BASEC Approved, BS EN/IEC 60332-1-2



The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.

CHARACTERISTICS

Voltage Rating (U_o/U)

300/500V

Temperature Rating

Flexed: 5°C to 70°C

Minimum Bending Radius

Flexed: 8 x overall diameter

Core Identification

2 core: ● Blue ● Brown

3 core: ● Green/Yellow ● Blue ● Brown

4 core: ● Green/Yellow ● Brown ● Black ● Grey

5 core: ● Green/Yellow ● Brown ● Black ● Grey ● Blue

Sheath Colour

○ White ● Black

DIMENSIONS

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL THICKNESS OF INSULATION mm | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|----------------|--------------|---|---------------------------------------|--------------------------------|-------------------------|
| A6Y020075* | 2 | 0.75 | 0.6 | 6.3 | 57 |
| A6Y02010* | 2 | 1 | 0.6 | 6.6 | 65 |
| A6Y02015* | 2 | 1.5 | 0.7 | 7.4 | 84 |
| A6Y02025* | 2 | 2.5 | 0.8 | 9.1 | 130 |
| A6Y030075* | 3 | 0.75 | 0.6 | 6.7 | 68 |
| A6Y03010* | 3 | 1 | 0.6 | 7 | 78 |
| A6Y03015* | 3 | 1.5 | 0.7 | 8.1 | 108 |
| A6Y03025* | 3 | 2.5 | 0.8 | 9.9 | 163 |
| A6Y03040* | 3 | 4 | 0.8 | 11.3 | 227 |
| A6Y040075* | 4 | 0.75 | 0.6 | 7.3 | 82 |
| A6Y04010* | 4 | 1 | 0.6 | 7.9 | 100 |
| A6Y04015* | 4 | 1.5 | 0.7 | 9 | 134 |
| A6Y04025* | 4 | 2.5 | 0.8 | 10.8 | 201 |
| A6Y050075* | 5 | 0.75 | 0.6 | 8.1 | 102 |
| A6Y05010* | 5 | 1 | 0.6 | 8.6 | 120 |
| A6Y05015* | 5 | 1.5 | 0.7 | 10 | 166 |

Eland Part No. shown above designate the sheath colour (). For each colour either substitute * for a colour code as listed below. e.g. A6Y020075WH = 0.75mm² White

Colour Codes

| COLOUR | Black | White |
|--------|-------|-------|
| CODE | BK | WH |

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 |
|---|--|---|
| | | Plain Wires ohms/km |
| 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 |

The above table is in accordance with BS EN 60228 (previously BS 6360)

ELECTRICAL CHARACTERISTICS

Current Carrying Capacity and Mass Supportable

| NOMINAL CROSS SECTIONAL AREA mm ² | CURRENT CARRYING CAPACITY Amps | | MAXIMUM MASS SUPPORTABLE BY TWIN FLEXIBLE CORD (See Regulations 522.7.2 and 559.6.1.5 of the 17 th Edition of IEE Wiring Regulations) kg |
|---|-----------------------------------|----------------|---|
| | Single-Phase AC | Three-Phase AC | |
| 0.75 | 6 | 6 | 3 |
| 1 | 10 | 10 | 5 |
| 1.5 | 16 | 16 | 5 |
| 2.5 | 25 | 20 | 5 |
| 4 | 32 | 25 | 5 |

The above table is in accordance with Table 4F3A of the 17th Edition of IEE Wiring Regulations.

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 |

Conductor operating temperature: 60°C

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

DE-RATING FACTORS

De-Rating Factor for Ambient Temperature 60°C Thermoplastic or Thermosetting Insulated Cords

| AIR 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 17th Edition of IEE Wiring Regulations.