

309-Y / H05V2V2-F EN 50525-2-11 Flexible Cable



ELAND CABLES ©

Eland Product Group: A5Y

APPLICATION

For internal wiring or supply cords to electrical apparatus, particularly for use in high temperature zones such as lighting applications.

CHARACTERISTICS

Voltage Rating Uo/U
300/500V

Temperature Rating
Fixed: 0°C to +90°C

Minimum Bending Radius
Fixed: 6 x overall diameter
Flexed: 10 x overall diameter

CONSTRUCTION

Conductor
Class 5 flexible copper conductor

Insulation
PVC (Polyvinyl Chloride)

Sheath
PVC (Polyvinyl Chloride)

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

STANDARDS

EN 50525-2-11, EN 60228

Flame Retardant according to IEC/EN 60332-1-2

THE CABLE LAB®

AN ISO/IEC 17025 AND IECCE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.



SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability

SCIENCE
BASED
TARGETSBUSINESS
AMBITION FOR 1.5°C

REGULATORY COMPLIANCE

This cable is compliant with European Regulation EN 50575, the Construction Products Regulation.



This cable meets the requirements of the Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab®.





DIMENSIONS

| ELAND PART NO. | NO. OF CORES | NOMINAL CROSS SECTIONAL AREA mm ² | NOMINAL THICKNESS OF INSULATION mm | NOMINAL THICKNESS OF SHEATH mm | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|----------------|--------------|---|---------------------------------------|-----------------------------------|--------------------------------|-------------------------|
| A5Y020075HRWH | 2 | 0.75 | 0.6 | 0.8 | 6.3 | 63 |
| A5Y030075HRWH | 3 | 0.75 | 0.6 | 0.8 | 6.7 | 74 |
| A5Y03010HRWH | 3 | 1 | 0.6 | 0.8 | 7 | 86 |
| A5Y03015HRWH | 3 | 1.5 | 0.7 | 0.9 | 8.1 | 115 |
| A5Y03025HRWH | 3 | 2.5 | 0.8 | 1 | 9.7 | 170 |
| A5Y040075HRWH | 4 | 0.75 | 0.6 | 0.8 | 7.3 | 78 |
| A5Y04010HRWH | 4 | 1 | 0.6 | 0.9 | 7.9 | 110 |
| A5Y04015HRWH | 4 | 1.5 | 0.7 | 1 | 9 | 140 |
| A5Y04025HRWH | 4 | 2.5 | 0.8 | 1.1 | 10.8 | 210 |
| A5Y050075HRWH | 5 | 0.75 | 0.6 | 0.9 | 8.1 | 105 |

ELECTRICAL CHARACTERISTICS

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 ohms/km | | MAXIMUM MASS SUPPORTABLE BY TWIN FLEXIBLE CORD (522.7.2 and 559.6.1.518th Edition of IEE Wiring Regulations) kg | CURRENT CARRYING CAPACITY Amps | |
|---|--|--|--------------------|---|-----------------------------------|----------------|
| | | Plain Wires | Metal-Coated Wires | | Single-Phase AC | Three-Phase AC |
| 0.75 | 0.21 | 26 | 26.7 | 3 | 6 | 6 |
| 1 | 0.21 | 19.5 | 20 | 5 | 10 | 10 |
| 1.5 | 0.26 | 13.3 | 13.7 | 5 | 16 | 16 |
| 2.5 | 0.26 | 7.98 | 8.21 | 5 | 25 | 20 |

The above table is in accordance with EN 60228 and Table 4F3A of the 18th Edition of IEE Wiring Regulations BS7671 and IEC 60364-5-52.

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 |

Conductor operating temperature: 60°C*

* The tabulated values above are for 60°C thermoplastic or thermosetting insulated flexible cords. For other types of flexible cords they are to be multiplied by the following factors: for thermoplastic or thermoset insulation at 90°C: 1.09, at 105°C: 1.31

The above table is in accordance with Table 4F3B of the 18th Edition of IEE Wiring Regulations BS7671 and IEC 60364-5-52.

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 18th Edition of IEE Wiring Regulations BS7671 and IEC 60364-5-52.

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.