# 318-B LSZH / H05Z1Z1-F
# EN 50525-3-11 Flexible Cable


Eland Product Group: A5Z

## APPLICATION

Used as an indoor general wiring cable primarily for installations in public areas. Examples include use on pendant lighting drops or as a general supply lead within hospital or airport projects. For installation where fire, smoke emission and toxic fumes create a potential risk to life and equipment.

## CHARACTERISTICS

**Voltage Rating** (Uo/U)
300/500V

**Temperature Rating**
+5°C to +70°C

**Minimum Bending Radius**
5 x overall diameter

## CONSTRUCTION

**Conductor**
Class 5 flexible copper conductor

**Insulation**
LSZH (Low Smoke Zero Halogen) Type TI6

**Sheath**
LSZH (Low Smoke Zero Halogen) Type TM7

**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

## STANDARDS

EN 50525-3-11 (HD21.14), EN 60228

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

## THE CABLE LAB®

### AN ISO/IEC 17025 AND IECEE 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

## 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 mm² | NOMINAL THICKNESS OF INSULATION mm | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT kg/km |
|---|---|---|---|---|---|
| A5Z020075* | 2 | 0.75 | 0.6 | 6.3 | 57 |
| A5Z02010* | 2 | 1 | 0.6 | 6.6 | 65 |
| A5Z02015* | 2 | 1.5 | 0.7 | 7.4 | 84 |
| A5Z02025* | 2 | 2.5 | 0.8 | 9 | 130 |
| A5Z02040* | 2 | 4 | 0.8 | 10.4 | 180 |
| A5Z030075* | 3 | 0.75 | 0.6 | 6.7 | 68 |
| A5Z03010* | 3 | 1 | 0.6 | 7 | 78 |
| A5Z03015* | 3 | 1.5 | 0.7 | 8 | 107 |
| A5Z03025* | 3 | 2.5 | 0.8 | 9.9 | 163 |
| A5Z03040* | 3 | 4 | 0.8 | 11.1 | 212 |
| A5Z040075* | 4 | 0.75 | 0.6 | 7.3 | 83 |
| A5Z04010* | 4 | 1 | 0.6 | 7.9 | 100 |
| A5Z04015* | 4 | 1.5 | 0.7 | 9 | 134 |
| A5Z04025* | 4 | 2.5 | 0.8 | 10.8 | 201 |
| A5Z04040* | 4 | 4 | 0.8 | 12.2 | 290 |
| A5Z050075* | 5 | 0.75 | 0.6 | 8.1 | 103 |
| A5Z05010* | 5 | 1 | 0.6 | 8.3 | 130 |
| A5Z05015* | 5 | 1.5 | 0.7 | 10.4 | 170 |
| A5Z05025* | 5 | 2.5 | 0.8 | 12.1 | 255 |
| A5Z05040* | 5 | 4 | 0.8 | 15 | 360 |

*Eland Part No. shown above designate the sheath colour (*). For each colour substitute * for a colour code as listed below. e.g. A5Z020075WH = 0.75mm² White

## COLOUR CODES

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

## CONDUCTORS

Class 5 Flexible Copper Conductors for Single Core and Multi-Core Cables

| NOMINAL CROSS SECTIONAL AREA mm² | MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm | MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km |
|---|---|---|
| | | Plain Wires |
| 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 |



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## ELECTRICAL CHARACTERISTICS

### Current Carrying Capacity and Mass Supportable

| NOMINAL CROSS SECTIONAL AREA mm² | CURRENT CARRYING CAPACITY Amps | | MAXIMUM MASS SUPPORTABLE BY TWIN FLEXIBLE CORD (See regulations 522.7.2 and 559.6.1.5 of the 17th 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 EN 60228

## VOLTAGE DROP

| NOMINAL CROSS SECTIONAL AREA mm² | 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 tabulated values above are for 60°C thermoplastic or thermosetting insulated flexible cords and for other types of flexible cords they are to be multiplied by the following factors:
90°C thermoplastic or thermoseting insulation : 1.09
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

### 60°C Thermoplastic or Thermosetting Insulated Cords

| AMBIENT 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.