# UL3271 Cable


Eland Product Group: B4T

## APPLICATION

Single core insulated hook-up and lead wire suitable for motors, transformer, and panel wiring.

## CHARACTERISTICS

**Voltage Rating**
600V

**Test Voltage**
2.5kV

**Temperature Rating**
+125°C

**Minimum Bending Radius**
8 x overall diameter

## CONSTRUCTION

**Conductor**
Stranded Annealed Copper Conductor

**Insulation**
XLPE (Cross-linked Polyethylene)

**Insulation Colour**

Red ● Black ● Blue ● Light Blue ● Dark Blue ● Yellow
Green/Yellow ● Grey ● Brown ● Orange ○ White ● Violet
Green ● Pink

## STANDARDS

UL Style Number 3271

## 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 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 | CONDUCTOR NO. OF WIRES | APPROXIMATE AWG | NOMINAL THICKNESS OF INSULATION mm | NOMINAL OVERALL DIAMETER mm |
|---|---|---|---|---|---|---|
| B4T*800005 | 1 | 0.5 | 16 | 21 | 0.78 | 2.39 |
| B4T**00075 | 1 | 0.75 | 26 | 19 | 0.78 | 2.61 |
| B4T**0010 | 1 | 1 | 32 | 18 | 0.78 | 2.73 |
| B4T**0015 | 1 | 1.5 | 30 | 16 | 0.78 | 3.03 |
| B4T**0025 | 1 | 2.5 | 48 | 14 | 0.78 | 3.43 |
| B4T**0040 | 1 | 4 | 54 | 12 | 0.78 | 3.94 |
| B4T**0060 | 1 | 6 | 84 | 10 | 0.78 | 4.53 |
| B4T**010 | 1 | 10 | 134 | 8 | 1.16 | 6.07 |
| B4T**016 | 1 | 16 | 114 | 6 | 1.16 | 7.04 |
| B4T**025 | 1 | 25 | 184 | 4 | 1.16 | 8.32 |
| B4T**035 | 1 | 35 | 288 | 2 | 1.16 | 9.82 |
| B4T**050 | 1 | 50 | 370 | 1 | 1.41 | 11.33 |
| B4T**070 | 1 | 70 | 372 | 2/0 | 1.41 | 13.45 |
| B4T**095 | 1 | 95 | 470 | 3/0 | 1.41 | 14.77 |
| B4T**120 | 1 | 120 | 592 | 4/0 | 1.41 | 16.23 |

* Designates the sheath colour. For each Eland Cables part number replace with the colour code as listed below. e.g. B4TWH00075 = 0.75mm² White

## COLOUR CODES

| COLOUR | Black | Green | Blue | Light Blue | Dark Blue | Grey | Green/ Yellow | Orange | Red | Pink | Yellow | Violet | Brown | White |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CODE | BK | GN | BL | LTBL | DKBL | GR | GY | OR | RD | PK | YW | VI | BR | WH |

## CONDUCTORS

Stranded Annealed Copper Conductor

| NOMINAL CROSS SECTIONAL AREA mm² | MAXIMUM DIAMETER OF WIRES IN CONDUCTOR mm | MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km |
|---|---|---|
| | | Plain Wires |
| 0.5 | 0.180 | 43.6 |
| 0.75 | 0.180 | 27.4 |
| 1 | 0.180 | 21.8 |
| 1.5 | 0.234 | 13.7 |
| 2.5 | 0.234 | 8.62 |
| 4 | 0.281 | 5.43 |
| 6 | 0.281 | 3.409 |
| 10 | 0.281 | 2.144 |
| 16 | 0.383 | 1.348 |
| 25 | 0.383 | 0.8481 |
| 35 | 0.383 | 0.5335 |
| 50 | 0.383 | 0.423 |
| 70 | 0.477 | 0.266 |
| 95 | 0.477 | 0.211 |
| 120 | 0.477 | 0.1673 |



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# ELECTRICAL CHARACTERISTICS

## Current Carrying Capacity and Voltage Drop

| NOMINAL CROSS SECTIONAL AREA mm² | CURRENT RATING Amps | SPARK TESTING VOLTAGE (AC) KV | MINIMUM INSULATION RESISTANCE (15.6°C ) MΩ Km |
|---|---|---|---|
| 0.5 | 13.5 | 5.00 | 1000 |
| 0.75 | 17.6 | 5.00 | 1000 |
| 1 | 23.2 | 6.00 | 1000 |
| 1.5 | 30.7 | 6.00 | 1000 |
| 2.5 | 41 | 6.00 | 1000 |
| 4 | 54.8 | 6.00 | 1000 |
| 6 | 74.6 | 6.00 | 1000 |
| 10 | 94 | 7.50 | 1000 |
| 16 | 125 | 7.50 | 1000 |
| 25 | 176 | 7.50 | 1000 |
| 35 | 234 | 7.50 | 1000 |
| 50 | 277 | 7.50 | 1000 |
| 70 | 337 | 7.50 | 1000 |
| 95 | 443 | 7.50 | 1000 |
| 120 | 510 | 7.50 | 1000 |