

# Cat 5E 25 Pair U/UTP LSZH Cable



Eland Product Group: A8N

## **APPLICATION**

High performance 25 pair LSZH backbone cable suitable for 100Base-T, Gigabit Ethernet, 155 Mbps A<sup>™</sup>, TP-PMD audio, multimedia and telephone networks.

### **CHARACTERISTICS**

Temperature Rating

Fixed: -20°C to +60°C

**Minimum Bending Radius**Full load: 20 x overall diameter
No load: 15 x overall diameter

## **CONSTRUCTION**

## Conductor

Class 1 solid copper conductor

### Insulation

HDPE (High Density Polyethylene)

### Filler

PE (Polyethylene) filler core

## Separator

Mylar tape

## Sheath

LSZH (Low Smoke Zero Halogen)

# STANDARDS ISO / IEC 1180

ISO / IEC 11801, TIA 568-B.2-1



## ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.





14001 Environmental Management ISO 45001 Occupational Health and Safety Management

OHS 672066

# 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 and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab® as meeting the requirements of the BSI RoHS Trusted Kitemark™.







# Core Identification

Pair 1: White/Blue Blue/White
Pair 2: White/Orange Orange/White
Pair 3: White/Green Green/White
Pair 4: White/Brown Brown/White
Pair 5: White/Grey Grey/White
Pair 6: Red/Blue Blue/Red
Pair 7: Red/Orange Orange/Red
Pair 8: Red/Green Green/Red
Pair 9: Red/Brown Brown/Red
Pair 10: Red/Grey Grey/Red
Pair 11: Black/Blue Blue/Black
Pair 12: Black/Orange Orange/Black

## **Sheath Colour**

Grey

Pair 13: Black/Green Green/Black
Pair 14: Black/Brown Brown/Black
Pair 15: Black/Grey Grey/Black
Pair 16: Yellow/Blue Blue/Yellow
Pair 17: Yellow/Orange Orange/Yellow
Pair 18: Yellow/Green Green/Yellow
Pair 19: Yellow/Brown Brown/Yellow
Pair 20: Yellow/Grey Grey/Yellow
Pair 21: Purple/Blue Blue/Purple
Pair 22: Purple/Orange Orange/Purple
Pair 23: Purple/Green Green/Purple
Pair 24: Purple/Brown Brown/Purple
Pair 25: Purple/Grey Grey/Purple



## **DIMENSIONS**

| ELAND PART NO. | NO. OF<br>PAIRS | NOMINAL DIAMETER OF CONDUCTOR mm <sup>2</sup> | NOMINAL THICKNESS OF PAIR INSULATION mm | NOMINAL OVERALL DIAMETER mm | NOMINAL WEIGHT<br>kg/305m box |
|----------------|-----------------|---|---|-----------------------------|-------------------------------|
| A8NCAT5E25PRLS | 25              | 0.51  | 0.91                                    | 12                          | 194                           |

# PERFORMANCE CHARACTERISTICS

| FREQUENCY<br>MHz | ATTENUATION<br>dB/100m | NEXT<br>dB | PS-NEXT<br>dB | RL<br>dB | ELFEXT<br>dB | PS-ELFEXT<br>dB/100m | PHASE DELAY |
|------------------|------------------------|------------|---------------|----------|--------------|----------------------|-------------|
| 1                | 2                      | 65.3       | 62.3          | 20       | 63.8         | 60.8                 | 570         |
| 4                | 4.1                    | 56.3       | 53.3          | 23       | 51.8         | 48.8                 | 552         |
| 8                | 5.8                    | 51.8       | 48.8          | 24.5     | 45.7         | 42.7                 | 546.73      |
| 10               | 6.5                    | 50.3       | 47.3          | 25       | 43.8         | 40.8                 | 545.38      |
| 16               | 8.2                    | 47.2       | 44.4          | 25       | 39.7         | 36.7                 | 543         |
| 20               | 9.3                    | 45.8       | 42.8          | 25       | 37.8         | 34.8                 | 542.05      |
| 25               | 10.4                   | 44.3       | 41.3          | 24.3     | 35.8         | 32.8                 | 541.2       |
| 31.25            | 11.7                   | 42.9       | 39.9          | 23.6     | 33.9         | 30.9                 | 540.44      |
| 62.5             | 17                     | 38.4       | 35.4          | 21.5     | 27.9         | 24.9                 | 538.55      |
| 100              | 22                     | 35.3       | 32.3          | 20.1     | 23.8         | 20.8                 | 537.6       |

# **ELECTRICAL CHARACTERISTICS**

| IMPEDANCE (1-100MHz) ohms | MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20°C ohms/km |
|---------------------------|--|
| 100±15                    | 101.3  |

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.