

# Cat 5E 25 Pair U/UTP PE Duct Grade Cable



Eland Product Group: A8N

## APPLICATION

High performance 25 pair backbone cable suitable for outdoor use (in a duct). It can be installed in 100Base-T, Gigabit Ethernet, 155 Mbps ATM, 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

Solid copper conductor

### Insulation

HDPE (High Density Polyethylene)

### Filler

PE (Polyethylene)

### Separator

Mylar shield

### Sheath

PE (Polyethylene)

### 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
- Pair 13: Black/Green Green/Black
- Pair 14: Black/Brown Brown/Black
- Pair 15: Black/Grey Grey/Black
- Pair 16: Yellow/Blue Blue/Yellow

### Sheath Colour

- Black

## STANDARDS

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



## THE CABLE LAB<sup>®</sup>

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](http://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 2015/853/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab<sup>®</sup>.



- 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 PAIRS | NOMINAL DIAMETER OF CONDUCTOR<br>mm <sup>2</sup> | NOMINAL THICKNESS OF PAIR INSULATION<br>mm | NOMINAL OVERALL DIAMETER<br>mm | NOMINAL WEIGHT<br>kg/305m box |
|----------------|--------------|--|--|--------------------------------|-------------------------------|
| A8NCAT5E25PRDG | 25           | 0.51   | 0.91                                       | 12                             | 154.4                         |

## 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<br>ns |
|------------------|------------------------|------------|---------------|----------|--------------|----------------------|-------------------|
| 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)<br>ohms | MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20°C<br>ohms/km |
|------------------------------|---|
| 100±15                       | 101.2   |

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.