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

Eland Product Group: A8N

APPLICATION

This performance 25 pair backbone cable is 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
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

Sheath Colour

- Black

STANDARDS

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.

REGULATORY COMPLIANCE

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™.
### DIMENSIONS

<table>
<thead>
<tr>
<th>ELAND PART NO.</th>
<th>NO. OF PAIRS</th>
<th>NOMINAL DIAMETER OF CONDUCTOR mm²</th>
<th>NOMINAL THICKNESS OF PAIR INSULATION mm</th>
<th>NOMINAL OVERALL DIAMETER mm</th>
<th>NOMINAL WEIGHT kg/305m box</th>
</tr>
</thead>
<tbody>
<tr>
<td>A8NCAT5E25PRDG</td>
<td>25</td>
<td>0.51</td>
<td>0.91</td>
<td>12</td>
<td>154.4</td>
</tr>
</tbody>
</table>

### PERFORMANCE CHARACTERISTICS

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

### ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>IMPEDANCE (1-100MHz) ohms</th>
<th>MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20ºC ohms/km</th>
</tr>
</thead>
<tbody>
<tr>
<td>100±15</td>
<td>101.2</td>
</tr>
</tbody>
</table>

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.