**Belden 8105 Multi-Conductor Low Capacitance Cable**

Eland Product Group: **A4B**

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**APPLICATION**
An overall foil and braid screen cable used over extended distances at high data rates for RS232 and RS422 applications.

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**CHARACTERISTICS**

**Voltage Rating**
300V

**Temperature Rating**
-30°C to +80°C

**Minimum Bending Radius**
10 x overall diameter

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**CONSTRUCTION**

**Conductor**
Class 2 stranded tinned copper conductor

**Insulation**
Datalene® FPE (Foam Polyethylene)

**Screen 1**
Beldfoil® (Aluminium foil polyester tape)

**Drain Wire**
Tinned copper

**Screen 2**
TCWB (Tinned Copper Wire Braid)

**Sheath**
PVC (Polyvinyl Chloride)

**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

**Sheath Colour**
Grey

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**STANDARDS**
Generally to Belden 8105, EIA RS 232, RS 422

Vertical tray fire propagation and smoke release test UL 1685

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**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.

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**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>BELDEN REFERENCE</th>
<th>NO. OF PAIRS</th>
<th>AWG (NO. OF STRANDS)</th>
<th>NOMINAL DIAMETER OF STRANDS mm</th>
<th>NOMINAL OVERALL DIAMETER mm</th>
<th>NOMINAL WEIGHT kg/km</th>
</tr>
</thead>
<tbody>
<tr>
<td>A4B8105</td>
<td>8105</td>
<td>5</td>
<td>AWG24(7)</td>
<td>0.032</td>
<td>7.69</td>
<td>63.9</td>
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</tbody>
</table>

### ELECTRICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>AWG (NO. OF STRANDS)</th>
<th>CAPACITANCE pF/m</th>
<th>VELOCITY OF PROPAGATION %</th>
<th>IMPEDANCE ohms</th>
<th>MAXIMUM RESISTANCE OF CONDUCTOR AT 20°C ohms/km</th>
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</thead>
<tbody>
<tr>
<td>AWG24(7)</td>
<td>41.01</td>
<td>72.18</td>
<td>78</td>
<td>100</td>
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</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.