Belden 8103 Multi-Conductor Low Capacitance Cable

Eland Product Group: A4B

APPLICATION
An overall foil and braid screened cable used at high data rates for RS 232 and RS 422 applications.

CHARACTERISTICS
Voltage Rating
300V
Temperature Rating
-30°C to +80°C
Minimum Bending Radius
10 x overall diameter

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
Sheath Colour
• Grey

STANDARDS
Belden 8103, EIA RS 232, EIA/RS 422
Vertical tray fire propagation and smoke release test UL 1685

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>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>
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<tbody>
<tr>
<td>A4B8103</td>
<td>8103</td>
<td>3</td>
<td>AWG24(7)</td>
<td>0.032</td>
<td>7.18</td>
<td>58</td>
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### 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 20ºC ohms/km</th>
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</thead>
<tbody>
<tr>
<td>Conductor to Conductor</td>
<td>41.01</td>
<td>72.18</td>
<td>78</td>
<td>100</td>
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<td>Conductor to Shield</td>
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<td></td>
<td>78.74</td>
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</tbody>
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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.