DeviceNet LSZH SWB Cable

Eland Product Group: A8P

APPLICATION

A DeviceNet cable with a LSZH (Low Smoke Zero Halogen) sheath and steel wire braid, for additional mechanical protection, with a high level of shielding efficiency it gives excellent transmissive performance. For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.

CONSTRUCTION

Conductor
Pair 1 - Data: Class 2 Stranded tinned copper conductor - 24AWG (0.25mm²)
Pair 2 - Power: Class 2 Stranded tinned copper conductor - 22AWG (0.35mm²)

Insulation
Pair 1 - Data: Foam-skin PE (Polyethylene)
Pair 2 - Power: Solid PE (Polyethylene)

Shield
AL/PET (Aluminium/Polyester Tape)

Drain Wire
Tinned copper - 24AWG

Overall Shield
TCWB (Tinned Copper Wire Braid)

Bedding
FRNC-LSZH (Flame Retardant Non Corrosive - Low Smoke Zero Halogen)

Armour
GSWB (Galvanized Steel Wire Braid)

Sheath
FRNC-LSZH (Flame Retardant Non Corrosive - Low Smoke Zero Halogen)

CABLE STANDARDS

BS EN/IEC 61158, BS EN/IEC 62026-3, BS EN/IEC 60332-1, BS EN/IEC 61034-2, BS EN/IEC 60754-1, BS EN/IEC 6075-2

CHARACTERISTICS

Voltage Rating
125V

Minimum Bending Radius
10 x overall diameter

Temperature Rating
Fixed: -20°C to +80°C
Flexed: -5°C to +50°C

Insulation Colour
Pair 1: ● Blue ○ White
Pair 2: ● Red ● Black

Sheath Colour
● Black

The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.
## DIMENSIONS

<table>
<thead>
<tr>
<th>ELAND PART NO.</th>
<th>NO. OF PAIRS</th>
<th>NOMINAL OVERALL DIAMETER (mm)</th>
<th>NOMINAL WEIGHT (kg/km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A8P-DNLSZHSWB</td>
<td>2</td>
<td>10.3</td>
<td>160</td>
</tr>
</tbody>
</table>

## ELECTRICAL CHARACTERISTICS

### Electrical and Transmission Properties at 20°C

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum DC Resistance of Conductor</td>
<td>77 ohms/km (Data Pair)</td>
</tr>
<tr>
<td></td>
<td>52 ohms/km (Power)</td>
</tr>
<tr>
<td>Capacitance at 800Hz</td>
<td>39 nF/km (Data Pair)</td>
</tr>
<tr>
<td>Propagation Velocity at 10MHz</td>
<td>76% (Data Pair)</td>
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<tr>
<td>Impedance at 1MHz</td>
<td>120 ohms (Data Pair)</td>
</tr>
<tr>
<td>Attenuation at 150kHz</td>
<td>1.0 dB/100m</td>
</tr>
<tr>
<td>Attenuation at 500kHz</td>
<td>1.6 dB/100m</td>
</tr>
<tr>
<td>Attenuation at 1MHz</td>
<td>2.3 dB/100m</td>
</tr>
<tr>
<td>Dielectric Strength (Conductor/Conductor)</td>
<td>0.7 kV/1 min</td>
</tr>
<tr>
<td>Dielectric Strength (Conductor/Shield)</td>
<td>0.7 kV/1 min</td>
</tr>
<tr>
<td>Minimum Insulation Resistance</td>
<td>5.0 Gohms/km</td>
</tr>
<tr>
<td></td>
<td>1 Gohms/km (Power)</td>
</tr>
<tr>
<td>Transfer Impedance at 10MHz</td>
<td>15 mohms/m (Data Pair)</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.