Profibus PA LSZH SWB Cable

Eland Product Group: A8P

APPLICATION
A LSZH (Low Smoke Zero Halogen) fieldbus cable with a SWB (Steel Wire Braid) designed for transmission where additional mechanical protection is required.

CHARACTERISTICS

Voltage Rating
300V (Not for power purposes)

Temperature Rating
Fixed: -30°C to +80°C

Minimum Bending Radius
Fixed: 15 x overall diameter

CONSTRUCTION

Conductor
Class 1 solid copper conductor

Insulation
Solid PE (Polyethylene)

Separation
PET (Polyester Tape)

Filler
HF (Halogen free)

Shield 1
Al/PET (Aluminium/Polyester Tape)

Shield 2
TCWB (Tinned Copper Wire Braid)

Inner Sheath
LSZH (Low Smoke Zero Halogen)

Armour
GSWB (Galvanized Steel Wire Braid)

Sheath
LSZH (Low Smoke Zero Halogen)

Core Identification
● Green ● Red

Outer Sheath Colour
● Black

STANDARDS

BS EN/IEC 61158, UL 1581, BS EN 60754-1/2, BS EN/IEC 61034-2

Flame Retardant according to BS EN/IEC 60332-1-2

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>DIAMETER OF CONDUCTOR mm</th>
<th>NOMINAL OVERALL DIAMETER mm</th>
<th>NOMINAL WEIGHT kg/km</th>
</tr>
</thead>
<tbody>
<tr>
<td>A8P-PALSZHSWB</td>
<td>1</td>
<td>0.85</td>
<td>1</td>
<td>190</td>
</tr>
</tbody>
</table>

## ELECTRICAL CHARACTERISTICS

### Electrical and Transmission Properties at 20°C

<table>
<thead>
<tr>
<th>MAXIMUM DC RESISTANCE OF CONDUCTOR ohms/km</th>
<th>CAPACITANCE AT 800HZ nF/km</th>
<th>IMPEDANCE ohms</th>
<th>NOMINAL ATTENUATION dB/km</th>
<th>INDUCTANCE mH/km</th>
</tr>
</thead>
<tbody>
<tr>
<td>At 1MHz</td>
<td>At 31.25kHz</td>
<td>At 39kHz</td>
<td>3/20MHz</td>
<td>At 1MHz</td>
</tr>
<tr>
<td>22</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MAXIMUM PROPAGATION DELAY CHANGE (7.9/39KHZ) μsec/km</th>
<th>DIELECTRIC STRENGTH kVac/1min</th>
<th>TRANSFER IMPEDANCE mohms/m</th>
<th>MINIMUM INSULATION RESISTANCE Gohms/km</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conductor/Conductor</td>
<td>Conductor/Shield</td>
<td>At 100HZ</td>
<td>At 1MHz</td>
</tr>
<tr>
<td>1.7</td>
<td>2.5</td>
<td>2.5</td>
<td>15</td>
</tr>
</tbody>
</table>