TYPE E3 Railway Signalling Cable

Applications
The cables are designed for railway signalling systems. The cables are suitable for use in d.c. circuits where the nominal voltage to earth does not exceed 1100 volts and installation in ducts.

Standards
- NR/PS/SIG/00005(formerly RT/E/PS/00005)

Construction
- Conductor: Tinned stranded copper, according to IEC 60228 class 5& BS 6360.
- Insulation: LSZH or EPR Type GP4 to BS 7655.
- Screen: Aluminium tape.
- Drain Wire: 2.5 mm² flexible tinned copper.
- Sheath: LSZH.

Electrical Characteristics at 20°C

<table>
<thead>
<tr>
<th>Property</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Conductor Cross Section</td>
<td>mm²</td>
<td>2.5</td>
</tr>
<tr>
<td>Maximum DC Conductor Resistance</td>
<td>Ω/km</td>
<td>8.21</td>
</tr>
<tr>
<td>Minimum Noise Reduction</td>
<td>dB</td>
<td>60</td>
</tr>
<tr>
<td>Voltage Rating</td>
<td>KV</td>
<td>0.65/1.1</td>
</tr>
<tr>
<td>Nominal Insulation Thickness</td>
<td>mm</td>
<td>1.05</td>
</tr>
</tbody>
</table>

Mechanical and Thermal Properties
- Minimum Bending Radius: 6×OD (static); 15×OD (dynamic)
- Temperature Range: -25°C to +85°C (during operation); -10°C to +85°C (during installation)
## Dimensions and Weight

<table>
<thead>
<tr>
<th>Cable Code</th>
<th>No. of cores &amp; Nominal Conductor Cross Sectional Area No. x mm²</th>
<th>No. &amp; Nominal Diameter of Strands No/mm</th>
<th>Nominal Sheath Thickness mm</th>
<th>Overall Diameter Min/Max mm</th>
<th>Nominal Weight kg/km</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS/E3-3G(ST)H-1P2.5S</td>
<td>1 x 2 x 2.5</td>
<td>50/0.25</td>
<td>3.8</td>
<td>15.0/20.0</td>
<td>410</td>
</tr>
</tbody>
</table>

Routine test voltage: 2.5kV for 5 minutes

- **Impact Resistant**
- **Highly Flexible**
- **Oil Resistant**
- **Weather Resistant**
- **Rated Voltage**
- **Laid In Ducts**
- **Flame Retardant**
  - NF C32-070-2.1(C2)
  - IEC 60332-1/EN 50266-2-1
- **Fire Retardant**
  - NF C32-070-2.2(C1)
  - IEC 60332-3/EN 50266
- **Zero Halogen**
  - IEC 60754-1/NF C20-454
  - EN 50267-2-1
- **Low Smoke Emission**
  - IEC 61034/NF C20-902
  - EN 50268/NF C32-073
- **Low Corrosivity**
  - EN 50267-2-2/NF C32-074
  - IEC 60754-2/NF C20-453
- **Low Toxicity**