Trackside Signalling Aluminium Power Cables to BR880

**Applications**

BR880 solid sector shaped conductors for trackside signalling power supplies.

**Standards**

- BR880
- BS 5467
- BS 6346
- UNE 21123

**Construction**

- Conductors: Sector shaped solid plain aluminium to IEC 60228 class 2 or 5.
- Insulation: XLPE type GP8 to BS 7655 or PVC type TI 1 to BS 7655.
- Core Wrapping: PETP (Polyethylene Terephthalate).
- Sheath: PVC type 9 to BS 7655 (LSZH can be offered as an option).

**Electrical Characteristics at 20°C**

<table>
<thead>
<tr>
<th>Nominal Conductor Cross Section</th>
<th>mm²</th>
<th>16</th>
<th>25</th>
<th>35</th>
<th>50</th>
<th>70</th>
<th>95</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Conductor Resistance</td>
<td>Ω/km</td>
<td>1.91*</td>
<td>1.2*</td>
<td>0.868*</td>
<td>0.641</td>
<td>0.443</td>
<td>0.32**</td>
</tr>
<tr>
<td>Voltage Rating</td>
<td>KV</td>
<td>0.6/1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Aluminium conductors 10mm² to 35mm² circular only.
** For single core cables, four sectoral shaped conductors may be assembled into a single circular conductor. The maximum resistance of the assembled conductor shall be 25% of that of the individual component conductors.

**Mechanical and Thermal Properties**

- Minimum Bending Radius: 10×OD
- Temperature Range: -30°C to +70°C (during operation); -10°C +55°C (during installation)

**Core Identification**

- 2 core: Brown/Blue
- 4 core: Blue/Brown/Black/Grey
## Dimensions and Weight

<table>
<thead>
<tr>
<th>Cable Code</th>
<th>No. of cores &amp; Nominal Conductor Cross Sectional Area No. × mm²</th>
<th>Nominal Thickness of Insulation mm</th>
<th>Nominal Thickness of Sheath mm</th>
<th>Nominal Overall Diameter mm</th>
<th>Nominal Weight kg/km</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF880-RV-K-0.6/1KV-2G16AL</td>
<td>2×16</td>
<td>1.0</td>
<td>1.8</td>
<td>14.3</td>
<td>420</td>
</tr>
<tr>
<td>RF880-RV-K-0.6/1KV-2G25AL</td>
<td>2×25</td>
<td>1.2</td>
<td>1.8</td>
<td>16.6</td>
<td>455</td>
</tr>
<tr>
<td>RF880-RV-K-0.6/1KV-2G35AL</td>
<td>2×35</td>
<td>1.2</td>
<td>1.8</td>
<td>18.0</td>
<td>525</td>
</tr>
<tr>
<td>RF880-RV-K-0.6/1KV-2G50AL</td>
<td>2×50</td>
<td>1.4</td>
<td>1.8</td>
<td>20.4</td>
<td>620</td>
</tr>
<tr>
<td>RF880-RV-K-0.6/1KV-2G70AL</td>
<td>2×70</td>
<td>1.4</td>
<td>1.9</td>
<td>22.8</td>
<td>840</td>
</tr>
<tr>
<td>RF880-RV-K-0.6/1KV-2G95AL</td>
<td>2×95</td>
<td>1.6</td>
<td>2.0</td>
<td>26.2</td>
<td>1020</td>
</tr>
<tr>
<td>RF880-RV-K-0.6/1KV-4G70AL</td>
<td>4×70</td>
<td>1.4</td>
<td>2.0</td>
<td>30.6</td>
<td>1750</td>
</tr>
<tr>
<td>RF880-RV-K-0.6/1KV-4G95AL</td>
<td>4×95</td>
<td>1.6</td>
<td>2.2</td>
<td>35.5</td>
<td>2100</td>
</tr>
</tbody>
</table>

K is changed to U if the stranding class is changed from class 5 to class 2

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**PVC Sheath**

- Flame Retardant: NF C32-070-2.1(C2), IEC 60332-1/EN 50265-2-1

**LSZH Sheath**

- Flame Retardant: NF C32-070-2.1(C2), IEC 60332-1/EN 50265-2-1
- 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/NFC20-902, EN 50268/NF C32-073, EN 50267-2-2/NF C32-074
- Low Corrosivity: IEC 60754-2/NF C20-453
- Low Toxicity: