BRUsens temperature 85°C mobile

Small, lightweight, flexible fiber optic temperature sensing cable with stranded metal loose tubes, aramid strength members and PUR outer sheath, fast thermal response, for up to 2 fibers

Construction:
- 1) PUR outer sheath
- 2) Aramid strain relief
- 3) PA filler with copper core for higher density
- 4) Central FRP rod
- 5) Gel-filled stainless steel 316L metal loose tube
- 6) Bend insensitive optical fibers with dual layer acrylate coating for increased micro bending performance

Description:
- Stranded metal loose tubes with 1 fiber, hermetically sealed
- High tensile strength
- Optimized for repeated cable deployment
- Good rodent protection
- Compact design, high flexibility, small bending radius
- Robust abrasion resistant sheath
- Halogen-free

Applications:
- Temperature monitoring
- Sensing applications
- Sensing technologies: Raman, Brillouin, FBG etc.
- Mobile temperature sensing subsea or terrain
- Harsh environment, outdoors

Standard optical fiber:
- Multimode fiber: ITU-T G.651, 50μm or 62.5μm
- Other fiber types and fiber quality available upon request

Temperature range:
- Operating temperature: -40°C … +85°C
- Storage temperature: -40°C … +85°C
- Installation temperature: -10°C … +50°C
- Short term temperature (3 min): +150°C

Cable sheath color:
- Red, similar RAL 3000
- Other colors upon request

Standards:
- Cable tests complying with IEC 60794-1-2

Remarks:
- Fiber color: 1 red, 2 green
- Other cable designs and temperature ranges available
- Standard cable marking with meter marks, special labeling of outer sheath upon request
- Accessories such as loops, fan-outs, connectors, mounting brackets etc. available
- Deployment training upon request
- For improved UV resistance, black cable sheath available upon request

Technical data:

<table>
<thead>
<tr>
<th>Type</th>
<th>Max. no. of fibres</th>
<th>Cable ø</th>
<th>Weight</th>
<th>Max. tensile strength</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>units</td>
<td>mm</td>
<td>kg/km</td>
<td>installation N</td>
</tr>
<tr>
<td>2C</td>
<td>2</td>
<td>4.6</td>
<td>27</td>
<td>1500</td>
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</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Min. bending radius</th>
<th>Max. crush resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>with tensile mm</td>
<td>without tensile mm</td>
</tr>
<tr>
<td>2C</td>
<td>90 (20xD)</td>
<td>70 (15xD)</td>
</tr>
</tbody>
</table>

Optical fiber data (cabled) at 20°C

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>850 nm Attenuation, dB/km</th>
<th>1300 / 1310 nm</th>
<th>1550 nm</th>
<th>850 nm Modal Bandwidth, MHz-km</th>
<th>1300 nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMF 50/125</td>
<td>≤3.0</td>
<td>≤1.0</td>
<td>NA</td>
<td>700</td>
<td>500</td>
</tr>
<tr>
<td>MMF 62.5/125</td>
<td>≤3.5</td>
<td>≤1.0</td>
<td>NA</td>
<td>200</td>
<td>500</td>
</tr>
<tr>
<td>SMF</td>
<td>NA</td>
<td>≤0.36</td>
<td>≤0.25</td>
<td>NA</td>
<td>NA</td>
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</table>