BRUsens temperature 85°C submarine

Robust fiber optic temperature sensing cable with stranded loose tubes, Galfan wires and HDPE outer sheath, good thermal response, for up to 12 fibers

Construction:
- 1) HDPE outer sheath
- 2) Galfan high strength steel wires
- 3) Gel-filled metal loose tube SS 316L
- 4) Bend insensitive optical fibers with dual layer acrylate coating for increased micro bending performance

Description:
- Stranded metal loose tubes with up to 4 fibers, hermetically sealed
- High tensile strength, high crush resistance
- Laterally watertight
- Excellent rodent protection
- Armored compact design, high flexibility, small bending radius
- High chemical resistance
- Halogen-free cable sheath

Standard optical fiber:
- Multimode fiber: ITU-T G.651, 50µm or 62.5 µm
- 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

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, 3 yellow, 4 blue
- 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>Max. no. of fibres</td>
<td></td>
<td>kg/km</td>
<td>installation N</td>
</tr>
<tr>
<td>1C…3C</td>
<td>12</td>
<td>10.0</td>
<td>260</td>
<td>20000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Min. bending radius</th>
<th>Max. crush resistance N/cm</th>
<th>Hydrostatic pressure resistance x 100 kPA (bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1C…3C</td>
<td>200 (20xD)</td>
<td>2500</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>150 (15xD)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Optical fiber data (cabled) at 20°C

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>850 nm</th>
<th>1300 / 1310 nm</th>
<th>1550 nm</th>
<th>850 nm</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>
</tr>
</tbody>
</table>