Fibre Optic Sensing Cables

BRUsens acoustic 6.6 mm AC2

Fiber optic acoustic sensing cable with stainless steel central metal tube with one optical fiber, metal tube as hermetic seal member, galvanized steel armoring and PA outer sheath, good acoustic response

Construction:
1) PA outer sheath
2) Specially embedded steel armoring layer
3) Inner PA layer with coupling system
4) Stainless steel 316 L metal tube
5) Inner interlocking system
6) Multilayer acoustic coupling layer
7) Bend insensitive optical fiber with dual layer acrylate coating for increased micro bending performance

Description:
Extra small central metal tube with one optical fiber, hermetically sealed, laterally watertight
Good acoustic coupling
Excellent mechanical protection with high strength steel armoring
Excellent rodent protection
Compact design, good flexibility, small bending radius
Special abrasion resistant outer PA sheath with acoustic interlocking system
Halogen-free cable sheath

Applications:
Distributed acoustic monitoring
Sensing applications
Sensing technologies Rayleigh scattering, Raman, Brillouin
Harsh environment, outdoors
Deployment subsea, directly in the ground, attached to structures or in conduits

Standard optical fiber:
Single-mode fiber: ITU-T G.657
Other fiber types and fiber quality available upon request

Technical data:

<table>
<thead>
<tr>
<th>Type</th>
<th>Max. no. of fibres units</th>
<th>Cable ø mm</th>
<th>Weight kg/km</th>
<th>Max. tensile strength installation N</th>
<th>operation N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1F</td>
<td>1</td>
<td>6.6</td>
<td>70</td>
<td>3500</td>
<td>2600</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Min. bending radius with tensile mm</th>
<th>Max. crush resistance N/cm</th>
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</thead>
<tbody>
<tr>
<td>1F</td>
<td>132 (20xD)</td>
<td>99 (15xD)</td>
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</table>

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Attenuation, dB/km</th>
<th>Modal Bandwidth, MHz·km</th>
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<tbody>
<tr>
<td>850 nm</td>
<td>1064 nm</td>
<td>1300 / 1310 nm</td>
</tr>
<tr>
<td>SMF</td>
<td>NA</td>
<td>≤0.40</td>
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