**SIMH-FR/PF FE 180**

**Silicone Cable**

High temperature operation, twisted pair, fire resistant flexible cable

**Construction:**
- **Conductor:** flexible copper wires, plain.
- **Insulation:** special silicone rubber compound.
- **Lay-up:** cores laid up in layers of optimum pitch.
- **Outer sheath:** special silicone rubber compound.
- **Sheath colour:** RAL 2009, orange.

**Technical data and tests:**
- **Rated voltage Uo/U:** 300 / 500 V.
- **Test voltage (AC 50 Hz):** 2000 V.
- **Insulation resistance:** min. 20 MΩ/km.
- **Temperature at conductor:** + 180° C.
- **Short circuit temperature:** + 200° C.
- **Temperature range:**
  - fixed: - 60° C ~ + 180° C;
  - mobile: - 25° C ~ + 180° C.
- **Min. bending radius:**
  - fixed: 4 x D;
  - mobile: 7,5 x D.

*Fire resistant with mechanical shock: DIN EN 50200; PH 15 (15 minutes); PH 30 (30 minutes); PH 60 (60 minutes); PH 90 (90 minutes). *Upon request.

**Standards:**
- **Cable:** VDE 0250, DIN VDE 0282-15 and HD 22.15 S1 (designed according to).
- **Conductor:** IEC 60228 class 5, DIN EN 60228 class 5.
- **Core identification:** HD 308 S2 & VDE 0293-308.
  - DIN EN 50334 black cores with white numerals with green/yellow after 5 cores.
- **Flame retardance test:** IEC 60332-1 & EN 50265-2-1;
  - IEC 60332-3 & EN 50266-2-4.
- **Insulation integrity:** IEC 60331, VDE 0472-814.

**Applications:**
This twisted pairs (pair form) control and power supply cable is fire proof, and, on the basis of a fixed operating mode, can continue supplying power for a period of 180 minutes under fire conditions (750° C and exposed to flames). Upon request, this cable can satisfy the EN 50200 test which is a fire resistant with mechanical shock test (842° C and mechanical shock) for the classes PH15-PH30-PH60-PH90. Because of its unique features, it can be used in fire alarm systems, in equipment and devices which are connected to fire alarm devices, in environments which have no corrosive gases emitted in the event of fire. This cable is used in schools, airports, hospitals, etc.
SIMH-FR/PF FE 180  
Silicone Cable  
High temperature operation, twisted pair, fire resistant flexible cable  

## DIMENSIONS

<table>
<thead>
<tr>
<th>No. of cores x cross section mm²</th>
<th>Approx. outer diameter mm</th>
<th>Copper weight kg/km</th>
<th>Approx. cable weight kg/km</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x2x0.50</td>
<td>9.1</td>
<td>19</td>
<td>105</td>
</tr>
<tr>
<td>4x2x0.50</td>
<td>11.2</td>
<td>38</td>
<td>155</td>
</tr>
<tr>
<td>6x2x0.50</td>
<td>13.4</td>
<td>57</td>
<td>175</td>
</tr>
<tr>
<td>10x2x0.50</td>
<td>14.0</td>
<td>95</td>
<td>250</td>
</tr>
<tr>
<td>12x2x0.50</td>
<td>15.5</td>
<td>115</td>
<td>305</td>
</tr>
<tr>
<td>16x2x0.50</td>
<td>18.4</td>
<td>153</td>
<td>400</td>
</tr>
<tr>
<td>20x2x0.50</td>
<td>20.1</td>
<td>192</td>
<td>455</td>
</tr>
</tbody>
</table>