MD4 Fire Resisting Telecom Cables (CR1-C1 Class)

**Applications**

The cables are telecommunication cables for tunnel application. The cables are halogen free fire resistant, inductive protected and armoured.

**Standards**

- Fire retardant: NBN C 30-004 F2
- Fire resistant: NBN 713-020 Add.3. -RF 1h

**Construction**

- Conductors: Solid copper conductor, 0.5mm² nominal cross section area.
- Insulation: Mica-tape + LSZH insulation.
- Cabling Element: Four conductors are twisted to form a quad.
- Stranding: Quads are helically stranded in concentric layers.
- Core Wrapping: Plastic tape(s) with overlapping.
- Inner Sheath: LSZH sheath.
- Screen: Copper tape screen.
- Intermediate Sheath: LSZH sheath.
- Armour: Two layer of steel tape.
- Outer Sheath: LSZH sheath.

**Electrical Characteristics at 20°C**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Conductor Diameter</td>
<td>mm</td>
</tr>
<tr>
<td>Nominal Cross Section Area</td>
<td>mm²</td>
</tr>
<tr>
<td>Nominal Insulation Thickness</td>
<td>mm</td>
</tr>
<tr>
<td>Maximum Conductor Resistance (DC)</td>
<td>Ω/km</td>
</tr>
<tr>
<td>Minimum Insulation Resistance</td>
<td>MΩ.km</td>
</tr>
<tr>
<td>Maximum Capacitance</td>
<td>nF/km</td>
</tr>
<tr>
<td>Voltage Test 2 mins</td>
<td>KV_ac</td>
</tr>
</tbody>
</table>

**Mechanical and Thermal Properties**

- Minimum Bending Radius: 10×OD
- Temperature Range: -40°C to +60°C (during operation); -10°C +60°C (during installation)
### Dimensions and Weight

<table>
<thead>
<tr>
<th>Cable Code</th>
<th>No. of Quads</th>
<th>Nominal Sheath Thickness mm</th>
<th>Nominal Overall Diameter mm</th>
<th>Nominal Weight kg/km</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8mm Conductor, 1.8mm Insulated Wire</td>
<td>7</td>
<td>Inner 1.0</td>
<td>Interm. 1.0</td>
<td>Outer 1.8</td>
</tr>
</tbody>
</table>

- **RS/MD4-HH(K)HBH-7Q0.8-FR**
- **Anti Induction**
- **Rated Voltage 300/500V**
- **Laid In Ducts**
- **Buried in Ground**
- **Flame Retardant**
  - NF C32-070-2.1(C2) IEC 60332-1/EN 50285-2-1
- **Fire Retardant**
  - NF C32-070-2.2(C1) IEC 60332-3/EN50286
- **Zero Halogen**
  - IEC 60754-1/NF C20-454 EN 50267-2-1
- **Low Smoke Emission**
  - IEC 61034/NF C20-074 EN 50268/NF C32-073
- **Low Corrosivity**
  - EN 50267-2-2/NF C32-074 IEC 60754-2/NF C20-453
- **Low Toxicity**
  - EN 50267-2-2/NF C32-074 IEC 60754-2/NF C20-453
- **Insulation Integrity FE180**
  - NF C20-902 IEC 60754-2/NF C20-453

**Addison Cables**

www.addison-cables.com