General Information

MultiMag 6 cable assembly consisting of

- Break-off plug with magnets
- Number and type of contacts: 6 spring-loaded contacts
- USB 2.0 cable
- USB-A connector
- Color: Black, similar RAL 9005

Available Versions

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>L99-029-XXX</td>
<td>Black, similar RAL 9005</td>
</tr>
<tr>
<td>L99-A0039-XXX</td>
<td>White, similar RAL 9010</td>
</tr>
</tbody>
</table>

“XXX” = coding for length “A” in mm
Technical Data Sheet

MultiMag 6  Cable Assembly  L99-029-XXX

Technical Data break-off plug

All dimensions are in mm; tolerances according to ISO 2768 C

Interface

Mating with  MultiMag 6 Receptacle

Material and Plating break-off plug

<table>
<thead>
<tr>
<th>Connector parts</th>
<th>Material</th>
<th>Plating / Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing bottom and top</td>
<td>PC+ABS</td>
<td>Black, similar RAL 9005</td>
</tr>
<tr>
<td>Magnets</td>
<td>NdFeB</td>
<td>Nickel plated</td>
</tr>
</tbody>
</table>

Spring loaded contacts

<table>
<thead>
<tr>
<th>Material</th>
<th>Plating / Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piston</td>
<td>Brass</td>
</tr>
<tr>
<td>Ferrule</td>
<td>Brass</td>
</tr>
<tr>
<td>Spring</td>
<td>Stainless steel wire</td>
</tr>
</tbody>
</table>

Connectors

<table>
<thead>
<tr>
<th>Connector</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>USB-A</td>
<td>According to USB 2.0 specification</td>
</tr>
</tbody>
</table>
**Technical Data Sheet**

**MultiMag 6**  
**Cable Assembly**  
**L99-029-XXX**

**Cable**

USB 2.0 cable  
According to USB 2.0 specification

**Twisted pair (1, 2)**  
2x Stranded tinned copper wire  
28 AWG, Ø 0.40 mm  
with PE insulation  
Ø 0.80 mm, green and white

**Wire (3, 4)**  
2x Stranded tinned copper wire  
28 AWG, Ø 0.40 mm  
with PVC insulation  
Ø 0.80 mm, black and red

**Drain wire**  
1x Tinned copper  
Ø 0.127 mm

**Foil coverage**  
Al mylar  
Braid shield  
Tinned copper

**Jacket**  
Ø 3.40 mm

**Electrical Data**

Designed for USB 2.0 specification  
5 V DC, 0.5 A

Maximum voltage  
24 V DC

Maximum current  
1 A

Test voltage  
500 V DC

Insulation resistance  
≥ 100 MΩ

Contact resistance  
typically ≤ 50 mΩ
Mechanical Data

Magnetic disengagement force average ~ 8 N
Mating cycles without load min. 5,000
Expected Mating cycles with load:

<table>
<thead>
<tr>
<th>Max. Voltage</th>
<th>Max. Current</th>
<th>Mating cycles</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0 V DC</td>
<td>0.5 A</td>
<td>min. 5,000</td>
</tr>
<tr>
<td>12.6 V DC</td>
<td>1.0 A</td>
<td>min. 2,000</td>
</tr>
<tr>
<td>24.0 V DC</td>
<td>0.5 A</td>
<td>min. 800</td>
</tr>
</tbody>
</table>

Environmental Data

Temperature range -20 °C to +65 °C
Magnets start losing their magnetic properties above 65 °C

Compliance

RoHS compliant

Packing

Standard 1 pc in plastic bag, 100 bags in box
Weight Depending on cable length

Caution!

Magnets can impact the function of pace makers and implantable cardioverter-defibrillators (e.g. actuation of reed switch). Keep a minimum distance of 0.2 m (20 cm) between the magnetic connector and the implanted devices to prevent malfunction and danger to health.

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.