

| Kabellänge / cable length                              |                                |                                    |                                      |
|--|--------------------------------|------------------------------------|--------------------------------------|
| Bereich Länge "A" (mm)<br><i>range length "A" (mm)</i> | 50 bis 100<br><i>50 to 100</i> | 101 bis 1000<br><i>101 to 1000</i> | 1001 bis 5000<br><i>1001 to 5000</i> |
| Toleranz für "A" (mm)<br><i>tolerance for "A" (mm)</i> | ±5                             | ±10                                | ±20                                  |

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

**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

**Available Versions**

| Type          | Description             |
|---------------|-------------------------|
| L99-029-XXX   | Black, similar RAL 9005 |
| L99-A0039-XXX | White, similar RAL 9010 |

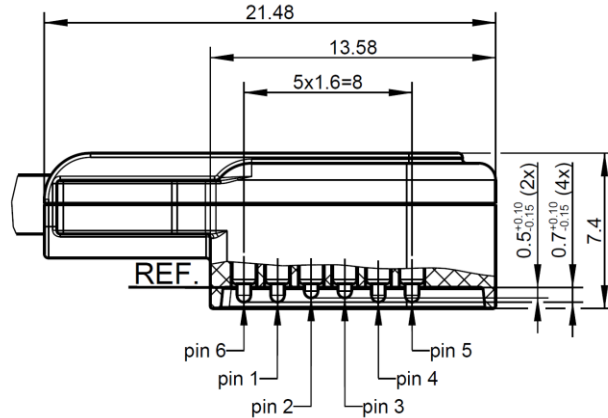
"XXX" is coding for length "A" in mm

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**Technical Data break-off plug**

| Belegungsplan / pin and cable table |                 |   |
|-------------------------------------|-----------------|---|
| USB 2.0 A                           | Kabel / cable   | Magnet-schnittstelle magnetic interface |
| pin 1                               | Rot / red       | pin 1                                   |
| pin 2                               | Weiss / white   | pin 2                                   |
| pin 3                               | Grün / green    | pin 3                                   |
| pin 4                               | Schwarz / black | pin 4                                   |
| pin 5                               | --- / shell     | pin 5                                   |
| pin 6                               | --- / shell     | pin 6                                   |



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

**Interface**

Mating with

MultiMag 6 Receptacle

**Material and Plating break-off plug**

**Connector parts**

Housing bottom and top  
Magnets

**Material**  
PC+ABS  
NdFeB

**Plating / Color**  
Black, similar RAL 9005  
Nickel plated

**Spring loaded contacts**

Piston  
Ferrule  
Spring

**Material**  
Brass  
Brass  
Stainless steel wire

**Plating / Color**  
Gold plated  
Gold plated

**Connectors**

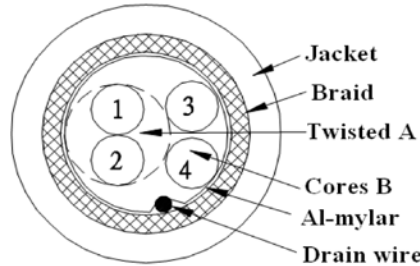
USB-A

According to USB 2.0 specification

**Cable**

USB 2.0 cable

According to USB 2.0 specification



**Twisted pair (1, 2)**

Stranded tinned copper wire with PE insulation

2x  
28 AWG, Ø 0.40 mm  
Ø 0.80 mm, green and white

**Wire (3, 4)**

Stranded tinned copper wire with PVC insulation

2x  
28 AWG, Ø 0.40 mm  
Ø 0.80 mm, black and red

**Drain wire**

Tinned copper

1x  
Ø 0.127 mm

**Foil coverage**

Al mylar

**Braid shield**

Tinned copper

**Jacket**

TPE

Ø 3.40 mm

**Electrical Data**

Electrical data acc. to USB 2.0 specification

Maximum voltage 5 V  
Maximum current 0.5 A  
Contact resistance typically ≤ 50 mΩ

**Mechanical Data**

Mating cycles min. 5.000  
Disengagement force average ~ 8 N

**Environmental Data**

Temperature range -20 °C to +60 °C  
Magnets start losing their magnetic properties above 65 °C  
RoHS compliant

**Packing**

Standard 1 pc in plastic bag  
Weight Depending on cable length

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.

|                   |          |                |          |      |                           |              |          |
|-------------------|----------|----------------|----------|------|---------------------------|--------------|----------|
| Draft             | Date     | Approved       | Date     | Rev. | Engineering change number | Name         | Date     |
| M. Portenkirchner | 23.01.15 | T. Scheuerlein | 23.11.16 | a00  | 16-s361                   | S.Hofmeister | 23.11.16 |

|  |  |  |  |  |  |  |               |
|--|--|--|--|--|--|--|---------------|
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