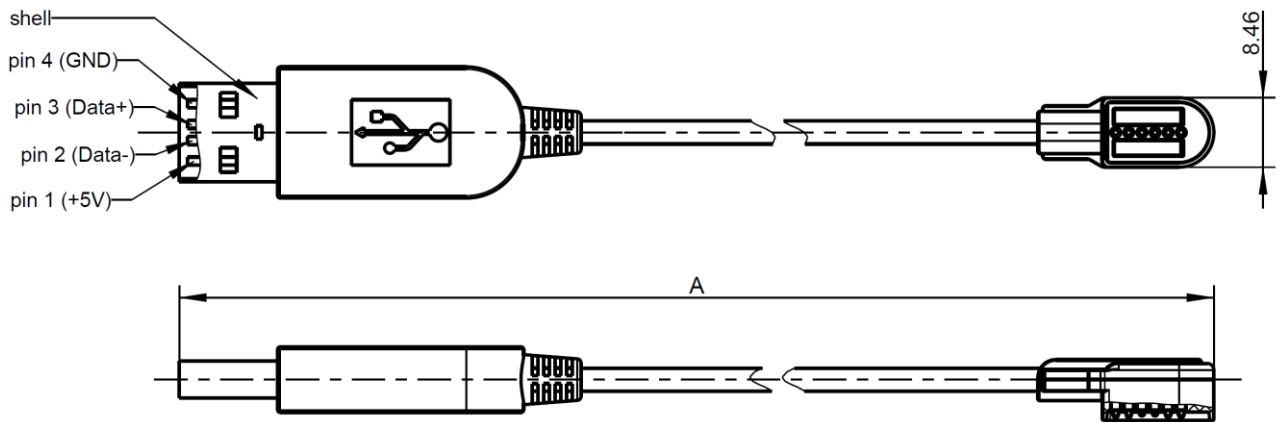


MultiMag 6

Cable Assembly

**L99-A0039-XXX**



cable length [mm]			
Range length "A"	50 to 100	101 to 1000	1001 to 5000
Tolerance for "A"	±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

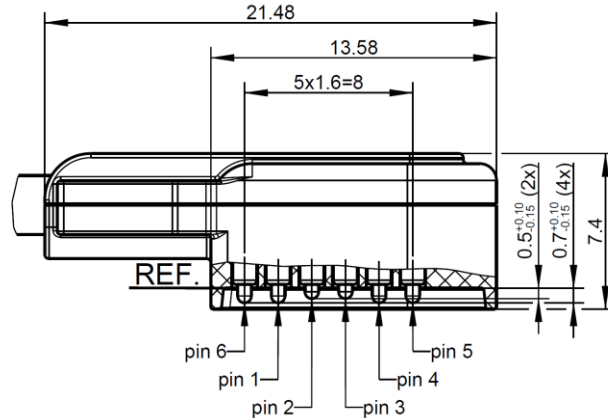
"XXX" = coding for length "A" in mm

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RF\_35/09\_14/6.2

**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**

White, similar RAL 9010  
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

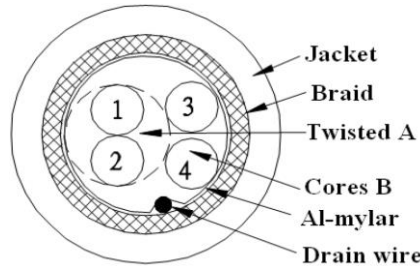
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**Cable**

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**

Designed for USB 2.0 specification

5 V DC, 0.5 A

Maximum voltage

24 V DC

Maximum current

1 A

**Mechanical Data**

Magnetic disengagement force

average ~ 8 N

Mating cycles without load

min. 5.000

Expected Mating cycles with load:

Max. Voltage	Max. Current	Mating cycles
5.0 V DC	0.5 A	min. 5.000
12.6 V DC	1.0 A	min. 2.000
24.0 V DC	0.5 A	min. 800

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MultiMag 6

Cable Assembly

**L99-A0039-XXX**

**Environmental Data**

Temperature range -20 °C to +60 °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.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
M. Portenkirchner	23.01.15	T. Scheuerlein	25.07.17	a02	17-0004	M. Margardt	25.07.17

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