



recommended pin design	
interface	description
pin 6	---
pin 1	+5V
pin 2	Data-
pin 3	Data+
pin 4	GND
pin 5	---

All dimensions are in mm; tolerances according to ISO 2768 m-H

### General Information

Magnetic connector  
Number and type of contacts  
Soldering  
Color

6 rigid pins  
Solder cup for pre-tinned wire with cross section AWG 26  
Black, similar RAL 9005

### Interface

Mating with

MultiMag 6 cable assembly

### Material and Plating

#### Connector Parts

Contacts  
Housing  
Magnets

#### Material

Brass  
PBT GF30  
NdFeB

#### Plating/Color

Gold plated  
Black, similar RAL 9005  
Nickel plated

MultiMag 6

Receptacle  
(Solder Cup Termination)

**M9K701-299L**

**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

**Environmental Data**

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

**Suitable Cables**

Pre-tinned wire with cross section AWG 26

**Compliance**

RoHS      compliant

**Packing**

Standard      100 pcs in blister  
 Weight      ~ 1 g/pc

**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
C. Kainzmaier	27.04.15	T. Scheuerlein	22.01.20	c00	20-0163	S. Kirchhofer	22.01.20