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RF_35/05.10/6.0

Technical Data Sheet

M4

Charging connector jack
Straight, white

C003-MB-XXX-Y

43^{+0.3}_{-0.3}

24.5^{+0.3}_{-0.3}

60^{+0.3}_{-0.3}

A

M4K1M1-16C003B5-Y

RTK-MI_01

O = Pinbelegung/pinning

1 2 3 4 5 6

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

Gehäusecodierung fuer Steckverbinder
housing code for connector

C003-MB-XXX-Y

Codierung fuer Gesamtlänge "a" (mm)
coding for total length "a" (mm)

cable length [mm]				
Range length "A"	100 to 1000	1001 to 2000	2001 to 5000	> 5000
Tolerance for "A"	± 5	± 10	± 20	± 1%

General Information

RoPD cable assembly with break-off plug consisting of

Break-off plug with magnets
Cable
Second side
Color

Charging connector jack, straight
RTK-MI 01
Open
White, similar RAL 9003

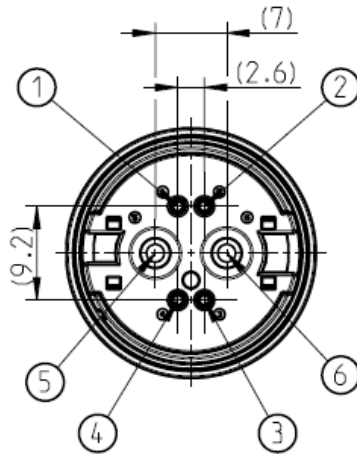
Preliminary

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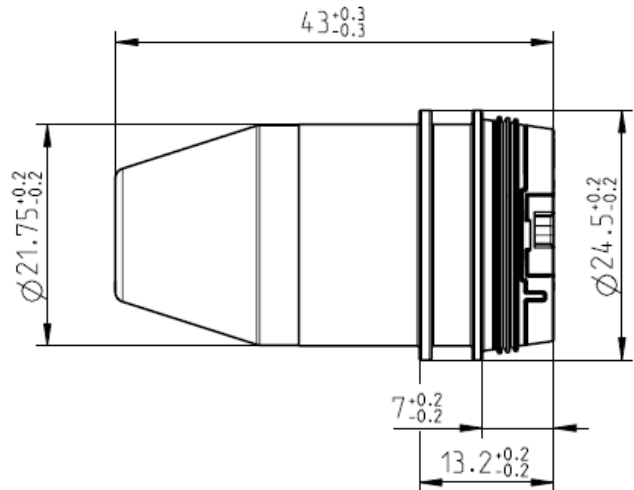
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Technical Data break-off plug



○ = Pinbelegung
○ = pinning



Pin	colour	cable cross section
1	green	0.35 mm ²
2	blue	0.35 mm ²
3	orange	0.35 mm ²
4	brown	0.35 mm ²
5	red	2.5 mm ²
6	black	2.5 mm ²

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

Interface

According to

Rosenberger Standard

Preliminary

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Material and Plating break-off plug

Connector parts

Housing
Dielectric
Sealing
Magnets
Bend protection, overmolded

Material

PBT
PBT
VMQ Silicone
NdFeB
TPU

Plating / Color

White, similar RAL 9003
White, similar RAL 9003
Nickel plated
White, similar RAL 9003

Pins 1-4, spring loaded contacts

Piston
Ferrule
Spring

Material

Brass
Brass
Stainless steel wire

Plating / Color

Gold plated
Gold plated

Pins 5-6

Power Pin
Power Contact

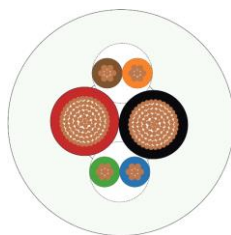
Material

Brass
Beryllium copper

Plating / Color

Silver
Silver

Cable



RTK-MI 01

Flammability rating

Connector parts

Housing
Dielectric
Sealing
Bend protection
Cable

Category

Uncolored raw material acc. to UL94 V-0*
Uncolored raw material acc. to UL94 V-0*
Uncolored raw material acc. to UL94 HB*
Uncolored raw material acc. to UL94 HB*
UL-Style 21328 (80 °C/150 V)

*Please note that a non UL rated color batch is added

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Electrical data

Pins 1-4

Insulation resistance	$\geq 1 \times 100 \text{ M}\Omega$
Contact resistance	$\leq 40 \text{ m}\Omega$ initial
Working voltage	12 V
Max. Current	2 A per pin

Pins 5-6

Insulation resistance	$\geq 1 \times 100 \text{ M}\Omega$
Power current	$\leq 25 \text{ A DC}$
Contact resistance	$\leq 7 \text{ m}\Omega$
Working voltage	$\leq 60 \text{ V DC}$

Warning!

**Customer is responsible for implementing adequate safety measures:
Power supply to Pins 5 & 6 must be deactivated unless they are completely plugged in.
Power to pins 5 & 6 must only be activated upon full insertion of signal pins 1 - 4.
Misuse may damage contact!**

Mechanical data

Mating cycles	min. 2.500
Disengagement force each contact	min. 25 N

Environmental data

Temperature range	-40 °C to +65 °C
Thermal shock	DIN IEC 60068-2-14 Test NA
Temperature and humidity	DIN EN 60068-2-30 (2)
Vibration resistance	3 axes, 6h, 10Hz-180Hz, 12.38m/s ²
Shock resistance	3 axes, 150 shocks, 6ms, 30g
Mechanical Shock	DIN IEC 60068-2-27
High-Temp. Exposure	DIN IEC 60068-2-2
Degree of protection (connected with plug)	DIN 60529 IP64/IP67

Compliance

RoHS	compliant
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Technical Data Sheet				Rosenberger			
M4		Charging connector jack Straight, white		C003-MB-XXX-Y			
Packing According to VK 18.0000 Packaging Instruction for standard packaging of components with magnets. Packing unit depends on cable length, max. 8kg Preliminary							
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
T. Scheuerlein	02.02.17	T. Scheuerlein	14.02.2024	200	24-0004	S. Hofmeister	14.02.2024
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