



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

**Interface**

According to IEC 61169-54

**Documents**

N/A

**Material and plating**

**Connector parts**

- Center contact jack side
- Center contact plug side
- Outer contact jack side
- Outer contact plug side
- Body
- Dielectric
- Gasket

**Material**

- CuBe
- Brass
- Brass
- Brass
- Brass
- Brass
- PTFE
- Silicone

**Plating**

- Silver, 3-6 µm
- Silver, 3-6 µm
- Silver, 3-6 µm
- Flash white bronze over silver(e.g. Optargen®)
- Flash white bronze over silver(e.g. Optargen®)

**Electrical data**

Impedance	50 Ω
Frequency	DC to 12 GHz
Return loss	≥ 36 dB @ DC to 4 GHz ≥ 32 dB @ 4 GHz to 6 GHz
Insertion loss	≤ 0.03 x √f [GHz] dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 1.0 mΩ
Outer contact resistance	≤ 1.0 mΩ
Test voltage	2500 V rms
Working voltage	500 V rms
RF-leakage	≥ 110 dB @ DC to 6 GHz for tool tightened plugs ≥ 90 dB @ DC to 3 GHz for tool-less plugs ≥ 70 dB @ DC 3 to 6 GHz for tool-less plugs
Power handling (at 90 °C, altitude 3000m)	500 W @ 2.0 GHz
Intermodulation (3 <sup>rd</sup> order)	≥ 160 dBc (2 x 46 dBm) @ 0.4 – 4.0 GHz ≥ 166 dBc (2 x 43 dBm) @ 0.4 – 4.0 GHz

*-RL value only valid for the interface-*

**Mechanical data**

Mating cycles	≥ 100
Center contact captivation: axial	> 30 N
Center contact retention force	1.5 - 20 N
Outer contact retention force	4 - 35 N
Engagement force	typ. 100 N
Disengagement force	typ. 80 N
Recommended torque	5 Nm

**Environmental data**

Temperature range	-55 °C to +90 °C operating temperature
Thermal shock	IEC 61169-1, 9.4.4
Corrosion resistance	ISO 21207 method B
Vibration	IEC 61169-1 9.3.3 and IEC 60068-2-64
Shock	IEC 61169-1 9.3.14
Degree of protection (mated pair)	IEC 60529, IP68 1h / 25m
RoHS	compliant

**Tooling**

N/A

**Suitable cables**

N/A

**Weight**

Weight 131.65 g/pce

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.

For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.



Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
F. Fraunhofer	20.10.14	Chr. Janßen	24.06.21	b00	20-1927	S. Huber-Siegl	24.06.21
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany <a href="http://www.rosenberger.com">www.rosenberger.com</a>					Tel. : +49 8684 18-0 Email : <a href="mailto:info@rosenberger.com">info@rosenberger.com</a>		Page 2 / 2