



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  
Outer contact jack side  
Outer contact plug side  
Body  
Dielectric  
Gasket

**Material**

CuBe  
Brass  
Brass  
Brass  
PTFE  
Silicone

**Plating**

Silver, 3-6 µm  
Silver, 3-6 µm  
White bronze(e.g. Optalloy®)  
White bronze(e.g. Optalloy®)

**Electrical data**

|   |   |
|---|---|
| Impedance                                 | 50 Ω  |
| Frequency                                 | DC to 12 GHz  |
| Return loss                               | ≥ 36 dB @ DC to 4 GHz<br>≥ 32 dB @ 4 GHz to 6 GHz   |
| Insertion loss                            | ≤ 0.05 x √ f [GHz] dB   |
| Insulation resistance                     | ≥ 5 GΩ  |
| Center contact resistance                 | ≤ 1.0 mΩ  |
| Outer contact resistance                  | ≤ 1.0 mΩ  |
| Working voltage                           | 500 V rms   |
| RF-leakage                                | ≥ 110 dB @ DC to 6 GHz for tool tightened plugs<br>≥ 90 dB @ DC to 3 GHz for tool-less plugs<br>≥ 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<br>≥ 166 dBc (2 x 43 dBm) @ 0.4 – 4.0 GHz  |

**Mechanical data**

|                     |            |
|---------------------|------------|
| Mating cycles       | ≥ 100      |
| 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 | 61.4 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  | 19.09.18 | Chr. Janßen | 21.04.21 | b00  | 20-1927                   | S. Huber-Siegl | 21.04.21      |
| Rosenberger Hochfrequenztechnik GmbH & Co. KG<br>P.O.Box 1260 D-84526 Tittmoning Germany<br><a href="http://www.rosenberger.com">www.rosenberger.com</a> |          |             |          | Tel. : +49 8684 18-0<br>Email : <a href="mailto:info@rosenberger.com">info@rosenberger.com</a> |                           |                | Page<br>2 / 2 |