



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

**Interface**

According to IEC 61169-54

**Documents**

Assembly instruction 64 A1

**Material and plating**

**Connector parts**

|                |          |
|----------------|----------|
| Center contact | Brass    |
| Outer contact  | Brass    |
| Body           | Brass    |
| Dielectric     | PTFE     |
| Gasket         | Silicone |

**Plating**

Silver, 3-6  $\mu$ m  
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                               | ≥ 39 dB @ DC to 1 GHz<br>≥ 30 dB @ 1 GHz to 2.2 GHz<br>≥ 28 dB @ 2.2 GHz to 2.7 GHz<br>≥ 22 dB @ 2.7 GHz to 6.0 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                                                                                                            |
| Test voltage                              | 2500 V rms                                                                                                          |
| Working voltage                           | 500 V rms                                                                                                           |
| RF-leakage                                | ≥ 90 dB @ DC to 3 GHz<br>≥ 70 dB @ 3 to 6 GHz                                                                       |
| 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                                    |

- Limitations are possible due to the used cable type -  
- RL values only valid for the interface -

**Mechanical data**

|                                   |            |
|-----------------------------------|------------|
| Mating cycles                     | ≥ 100      |
| Center contact captivation: axial | > 30 N     |
| radial                            | > 5 Ncm    |
| Center contact retention force    | 1.5 - 20 N |
| Outer contact retention force     | 4 - 35 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**

UT 250 or RTK - FS 250

**Weight**

Weight 33.7 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 | 16.10.12 | Chr. Janßen | 21.04.21 | b00  | 20-1927                   | S. Huber-Siegl | 21.04.21 |

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