



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
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®)

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RFB00035/12.20/6.4

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 rd 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
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