



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

**Interface**

According to 4.3-10 side: IEC 61169-54  
7/16 side: IEC 60169-4, VG 95250, EN 122190, DIN 47223

**Documents**

Assembly instruction N/A

**Material and Plating**

**Connector parts**

		<b>Material</b>	<b>Plating</b>
Center contact	4.3-10 side:	CuBe	Silver, 3-6 µm
Center contact	7/16 side:	Brass	Silver, 3-6 µm
Outer contact		Brass	Silver, 3-6 µm
Body		Brass	Flash white bronze over silver(e.g. Optargen®)
Dielectric		PTFE	
Gasket		Silicone	

**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 ≤ 0.05 x  $\sqrt{f}$  [GHz] dB  
 Insulation resistance ≥ 5 GΩ  
 Center contact resistance ≤ 1.0 mΩ, 4.3-10 side ≤ 0.4 mΩ, 7/16 side  
 Outer contact resistance ≤ 1.0 mΩ, 4.3-10 side ≤ 1.5 mΩ, 7/16 side  
 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 @ 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**

	4.3-10 side	7/16 side
Mating cycles	≥ 100	min. 500
Center contact captivation: axial	≥ 30 N	≥ 200 N
radial	> 5 Ncm	≥ 2 Ncm
Center contact retention force	1.5 - 20 N	
Recommended torque	5 Nm	25 to 30 Nm
Engagement force	typ. 100 N	N/A
Disengagement force	typ. 80 N	N/A

**Environmental Data**

Temperature range -55 °C to +90 °C operating temperature  
 Thermal shock IEC 60169-1, Sub-clause 16.4  
 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 73.0 g/pc

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
F. Fraunhofer	29.07.2013	F. Fraunhofer	01.04.2015	a00	15-s150	B. Wollitzer	01.04.2015

  

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