



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

**Interface**

According to NEX10®

**Documents**

Assembly instruction 89 B1

**Material and Plating**

**Connector parts**

Center contact	Brass
Outer contact	Spring bronze
Body	Brass
Dielectric	PTFE
Gasket	Silicone

**Plating**

Silver, 3-6  $\mu\text{m}$   
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 White bronze(e.g. Optalloy®)

**Electrical Data**

Impedance	50 Ω
Frequency	DC to 20 GHz
Return loss	≥ 36 dB @ DC to 2 GHz ≥ 30 dB @ 2 to 3 GHz ≥ 26 dB @ 3 to 6 GHz
Insertion loss	≤ 0.05 x √ f [GHz] dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 2.0 mΩ
Outer contact resistance	≤ 1.0 mΩ
Test voltage	500 V rms
RF-leakage	≥ 90 dB @ DC to 3 GHz ≥ 70 dB @ 3 to 6 GHz
Power handling	100 W @ 2.0 GHz and 85°C ambient temperature 50 W @ 2.0 GHz and 105°C ambient temperature
Intermodulation (3 <sup>rd</sup> order)	≥ 160 dBc (2 x 43 dBm) @ 0.4 – 6.0 GHz

- Limitations are possible due to the used cable type

**Mechanical Data**

Mating cycles	≥ 100
Retention force of coupling mechanism	> 150N
Engagement force	typ. 50N
Disengagement force	typ. 40N

**Environmental Data**

Temperature range	-55 °C to +125 °C operating temperature
Thermal shock	IEC 61169-1 9.4.4
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 24h / 1m
RoHS	compliant

**Tooling**

N/A

**Suitable Cables**

UT 085, RG 405 and similar

**Weight**

12.2 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.

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



Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
F. Fraunhofer	16.08.2017	Chr. Janßen	18.02.2021	b00	20-1927	B. Wollitzer	18.02.2021
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