

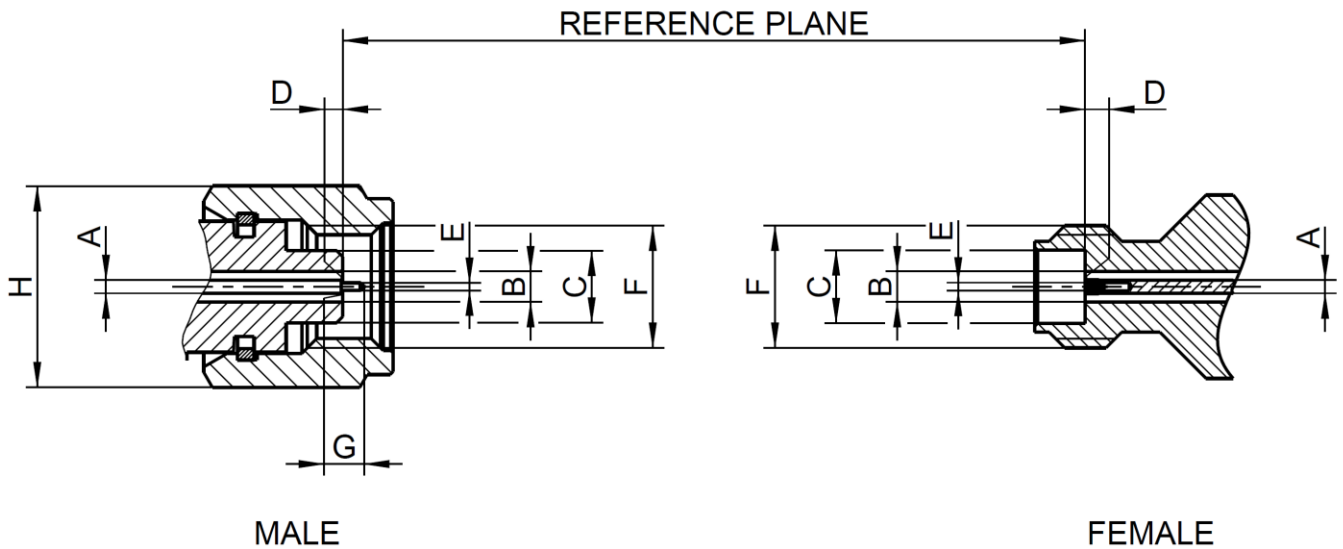
# Technical Data

# Rosenberger

01

RPC-1.00

01-000-000\_TD



All dimensions are in mm

	Plug (male)		Jack (female)	
	min.	max.	min.	max.
A <sup>1)</sup>	0.4315	0.4365	0.4315	0.4365
B <sup>1)</sup>	0.9950	1.0050	0.9950	1.0050
C	2.348	2.368	2.38	2.40
D <sup>1)</sup>	0.005	0.030	0.005	0.030
E	0.245	0.255	see <sup>2)</sup>	
F	M4 x 0.7 – 6H		M4 x 0.7 – 6g	
G	0.71	0.79	---	----
H	hex 6		---	

<sup>1)</sup> could be divergent for metrology components

<sup>2)</sup> Slotted contact; dimensions to meet reflection factor requirements, mating characteristics and connector durability when mated with a 0.250 mm ± 0.005 mm diameter pin.

## Interface

According to

IEC 61169-31

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RFB00035

Draft	Date	Approved	Date	Rev.	Engineering Change Number	Name	Date
F. Reiner	11.10.19	H. Babinger	12.03.20	100	19-1052	N. Topcagic	12.03.20
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### Electrical data

Impedance	50 $\Omega$
Frequency range	DC to 110 GHz
Return loss	see individual product data sheet
Insertion loss	see individual product data sheet
Insulation resistance	$\geq 5 \text{ G}\Omega$
Proof voltage (at sea level)	500 V rms or as limited by used cable
Working voltage (at sea level)	150 V rms or as limited by used cable
RF-leakage	$\geq 90 \text{ dB}$ up to 1 GHz

### Mechanical data

Mating cycles	$\geq 500$
Center contact captivation: axial	$\geq 10 \text{ N}$
Coupling torque recommended	0.30 Nm to 0.41 Nm
Coupling test torque	0.70 Nm

### Environmental data

Temperature range	-40 °C to +85 °C
Thermal shock	IEC 61169-1, Subclause 9.4.4
Corrosion resistance	IEC 61169-1, Subclause 9.4.6
Vibration	IEC 61169-1, Subclause 9.3.3
Shock	IEC 61169-1, Subclause 9.3.14
Moisture resistance	IEC 61169-1, Subclause 9.4.3
RoHS	compliant

### Materials <sup>3)</sup>

#### Connector parts

	Material	Plating
Center contact	CuBe	Gold, min. 1.27 $\mu\text{m}$ , over chem. Nickel
Outer contact	CuBe or equiv.	Gold, min. 1.27 $\mu\text{m}$ , over chem. Nickel
Dielectric	PEEK	

<sup>3)</sup> These are standard materials from which deviations are possible. Please see individual product datasheet for used materials

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