



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

**Interface**

RPC-N 75 Ω according to	IEC 61169-16
F 75 Ω according to	IEC 61169-24, EIA-550

**Documents**

Application note	AN001 "Calibration Services"
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**Material and plating**

**Connector parts**

Center contact	<b>Material</b> CuBe	<b>Plating</b> Gold, min. 1.27 μm, over nickel
Outer contact	Stainless steel	Passivated
Coupling nut	Stainless steel	Passivated
Dielectric	PS	

**Electrical data**

Frequency	DC to 6 GHz
Return loss	≥ 32 dB, DC to 3 GHz ≥ 28 dB, 3 GHz to 6 GHz

**Mechanical data**

	RPC-N 75 Ω	F 75 Ω
Mating cycles	≥ 500	≥ 1000
Maximum torque	1.70 Nm	6.78 Nm
Recommended torque	1.10 Nm	2.00 Nm
Gauge	5.28 mm to 5.36 mm	0.00 mm to 0.10 mm
Nominal pin diameter		0.81 mm

**General standard definitions**

For proper operation the vector network analyzer (VNA) needs a model describing the electrical behaviour of this calibration standard. The different models, units, and terms used will depend on the VNA type and they will have to be entered into the VNA. All values are based on typical geometry and plating.

Offset $Z_0$ / Impedance / $Z_0$	75 Ω
Offset Delay	143.099 ps
Length (electrical) / Offset Length	42.90 mm
Offset Loss	3.20 GΩ/s
Loss	0.0265 dB/√GHz
Line Loss @ 1GHz	0.0006 dB/mm

**Environmental data**

Operating temperature range <sup>1</sup>	+20 °C to +26 °C
Rated temperature range of use <sup>2</sup>	0 °C to +50 °C
Storage temperature range	- 40 °C to +85 °C

RoHS compliant

<sup>1</sup> Temperature range over which these specification are valid.

<sup>2</sup> This range is underneath and above the operating temperature range, within the calibration adaptor is fully functional and could be used without damage.