



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

Interface

RPC-N according to
4.3-10 according to

IEC 61169-16
IEC 61169-54

Documents

Application note

AN001 "Calibration Services"

Material and plating

Connector parts

Center conductor
Outer conductor
Coupling nut
Dielectric

Material

CuBe
Stainless steel
Stainless steel
PPE

Plating

Gold, min. 1.27 µm, over nickel
Passivated
Passivated

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Electrical data

Frequency range	DC to 12 GHz
Return loss	≥ 34 dB, DC to 4 GHz ≥ 30 dB, 4 GHz to 6 GHz ≥ 25 dB, 6 GHz to 12 GHz

Mechanical data

Mating cycles	≥ 500	
	RPC-N	4.3-10
Mating cycles	≥ 500	≥ 100
Maximum torque	1.70 Nm	5 Nm
Recommended torque	1.10 Nm	2 Nm
Gauge	5.28 mm to 5.36 mm	2.80 mm to 2.90 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	50 Ω
Offset Delay	151.4224 ps
Length (electrical) / Offset Length	45.40 mm
Offset Loss	1.80 G Ω /s
Loss	0.0237 dB/ $\sqrt{\text{GHz}}$

Environmental data

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

RoHS compliant

¹ Temperature range over which these specification are valid.

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