



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 61169-24¹, EIA-550
¹ Accepts only limited pin diameter, see "Mechanical data".

Documents

Application note AN001 "Calibration Services"

Material and plating

Connector parts

Center contact	Material CuBe	Plating Gold, min. 1.27 μm, over nickel
Outer contact	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	5.18 mm to 5.26 mm	0.00 mm to 0.10 mm
Permitted male pin diameter ²		0.76 mm to 0.86 mm

² Connecting a F plug with larger male pin diameter will damage female contact fingers of this adaptor. Use "full range adaptor" 74S121-K22S3 instead.

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	112.745 ps
Length (electrical) / Offset Length	33.80 mm
Offset Loss	3.20 GΩ/s
Loss	0.0209 dB/√GHz
Line Loss @ 1GHz	0.0006 dB/mm

Environmental data

Operating temperature range ³	+20 °C to +26 °C
Rated temperature range of use ⁴	0 °C to +50 °C
Storage temperature range	- 40 °C to +85 °C

RoHS compliant

³ Temperature range over which these specification are valid.

⁴ This range is underneath and above the operating temperature range, within the calibration adaptor is fully functional and could be used without damage.