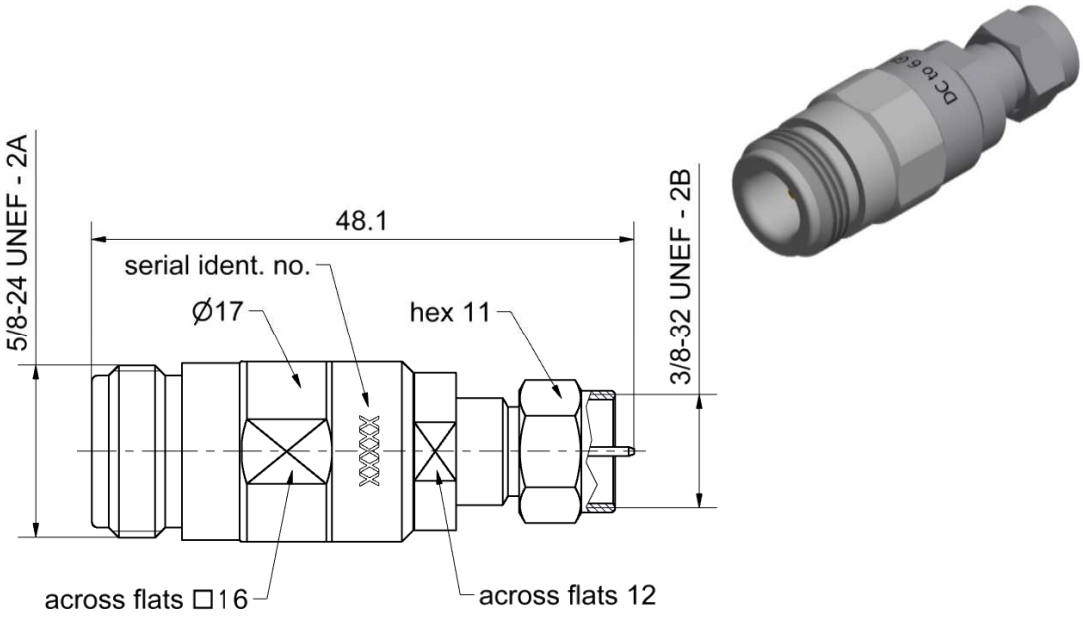
Technical Data Sheet	Rosenberger
Calibration Adaptor RPC-N 75 Ω Jack – F 75 Ω Plug	**P5K174-S21S3**



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”

Material and plating

Connector parts	**Material**	**Plating**
Center contact	CuBe	Gold, min. 1.27 µm, over nickel
Outer contact	Stainless steel	Passivated
Coupling nut	Stainless steel	Passivated
Dielectric	PS	

Rosenberger Hochfrequenztechnik GmbH & Co. KG
P.O.Box 1260 D-84526 Tittmoning Germany
www.rosenberger.de

Tel. : +49 8684 18-0
Email : info@rosenberger.de

Calibration Adaptor
RPC-N 75 Ω Jack – F 75 Ω Plug

P5K174-S21S3

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
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_o / Impedance / Z_o	75 Ω
Offset Delay	112.745 ps
Length (electrical) / Offset Length	33.80 mm
Offset Loss	3.20 GΩ/s
Loss	0.0209 dB/$\sqrt{\text{GHz}}$
Line Loss @ 1GHz	0.0006 dB/mm

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.*

Rosenberger Hochfrequenztechnik GmbH & Co. KG
P.O.Box 1260 D-84526 Tittmoning Germany
www.rosenberger.de

Tel. : +49 8684 18-0
Email : info@rosenberger.de