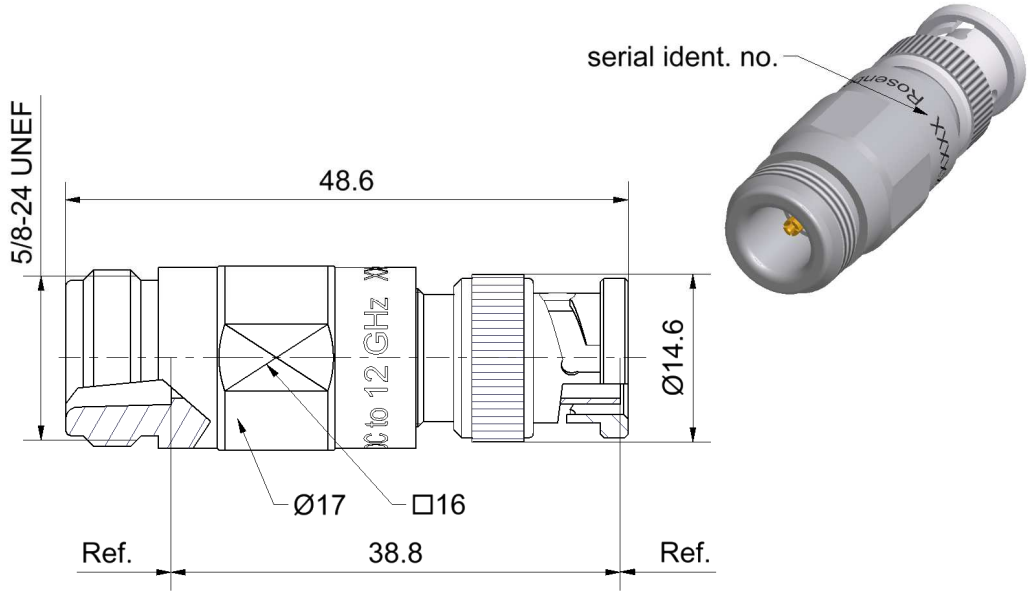
Technical Data Sheet

Rosenberger

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

P5K171-S2AS3



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

Interface

RPC-N 75 Ω according to	IEC 61169-16
BNC 75 Ω according to	IEC 61169-8, MIL-PRF-39012, CECC 22120

Documents

Application note	AN001 “Calibration Services”

Material and plating

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

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Electrical data

Frequency	DC to 12 GHz
Return loss	≥ 30 dB, DC to 4 GHz ≥ 25 dB, 4 GHz to 8 GHz ≥ 15 dB, 8 GHz to 12 GHz

Mechanical data

Mating cycles	≥ 500	
	RPC-N 75 Ω	BNC 75 Ω
Maximum torque	1.70 Nm	
Recommended torque	1.10 Nm	
Gauge	5.18 mm to 5.26 mm	5.31 mm to 5.38 mm

General standard definition

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	135.761 ps
Length (electrical) / Offset Length	40.70 mm
Offset Loss	1.2 GΩ/s
Loss	0.0094 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 specifications are valid.*
[2] *This range is underneath and above the operating temperature range, within the open circuit is fully functional and could be used without damage.*

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Declaration of calibration options

Factory Calibration

Standard delivery for this calibration standard includes a Factory Calibration. The Calibration Certificate issued reports individual calibration results, **traceable to Rosenberger standards**, national / international standards are not available. Model based standard definitions are reported in an Agilent/Keysight, Rohde & Schwarz and Anritsu compatible VNA format.

Accredited Calibration

Not available.

For further, more detailed information see application note AN001 on the Rosenberger homepage.

Calibration interval

Recommendation	12 months

Packing

Standard	1 pce in box
Weight	46 g/pce

Draft	Date	Approved	Date
Marcel Panicke	18.08.14	Martin Moder	24.02.15

Rev.	Engineering change number	Name	Date
b00	14-1492	Herbert Babinger	24.02.15

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