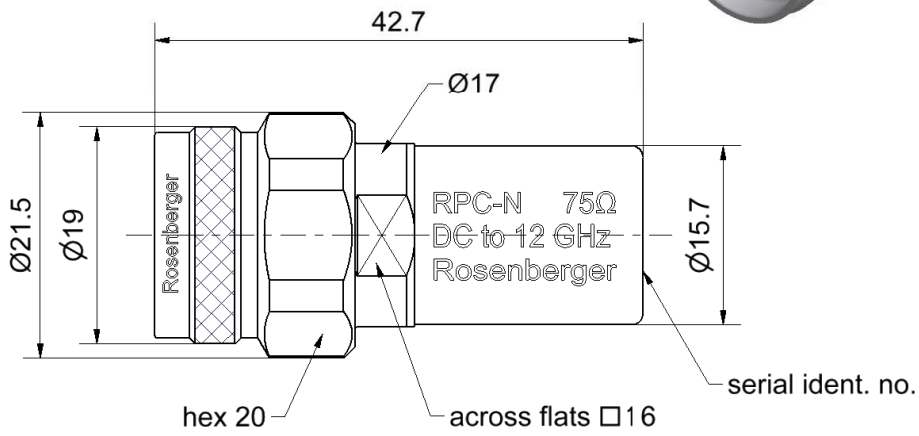
Technical Data Sheet		Rosenberger
RPC-N 75 Ω	Calibration Load Plug	**P5S170-C1AS3**



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

Interface

According to	IEC 61169-16

Documents

Application note	AN001 “Calibration Services”

Material and plating

Connector parts	**Material**	**Plating**
Center conductor	CuBe	Gold, min. 1.27 µm, over nickel
Coupling nut	Stainless steel	Passivated
Outer conductor	Stainless steel	Passivated
Dielectric	PS	
Substrate	Al_2O_3	

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Electrical data

Frequency range	DC to 12 GHz
Return loss	≥ 40 dB, DC to 4 GHz ≥ 32 dB, 4 GHz to 8 GHz ≥ 30 dB, 8 GHz to 12 GHz
DC Resistance	75 Ω ± 0.75 Ω
Power handling	≤ 0.5 W

Mechanical data

Mating cycles	≥ 500
Maximum torque	1.70 Nm
Recommended torque	1.10 Nm
Gauge	5.28 mm to 5.36 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	0.0000 ps
Length (electrical) / Offset Length	0.00 mm
Offset Loss	0.00 GΩ/s
Loss	0.0000 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.*

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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 national / international standards. Model based standard definitions are reported in an Agilent/Keysight, Rohde & Schwarz and Anritsu compatible VNA format.

Accredited Calibration

Optional this calibration standard can be delivered with an Accredited Calibration (DAkkS) having the highest confidence in the traceability. The DAkkS Calibration Certificate issued reports individual calibration results in a complex format, traceable to national / international standards. Model based standard definitions are reported in an Agilent/Keysight, Rohde & Schwarz and Anritsu compatible VNA format as well as in a dense data set needed for data based standard definitions. The uncertainties are smaller than in a Factory Calibration.

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	43.9 g/pce

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