

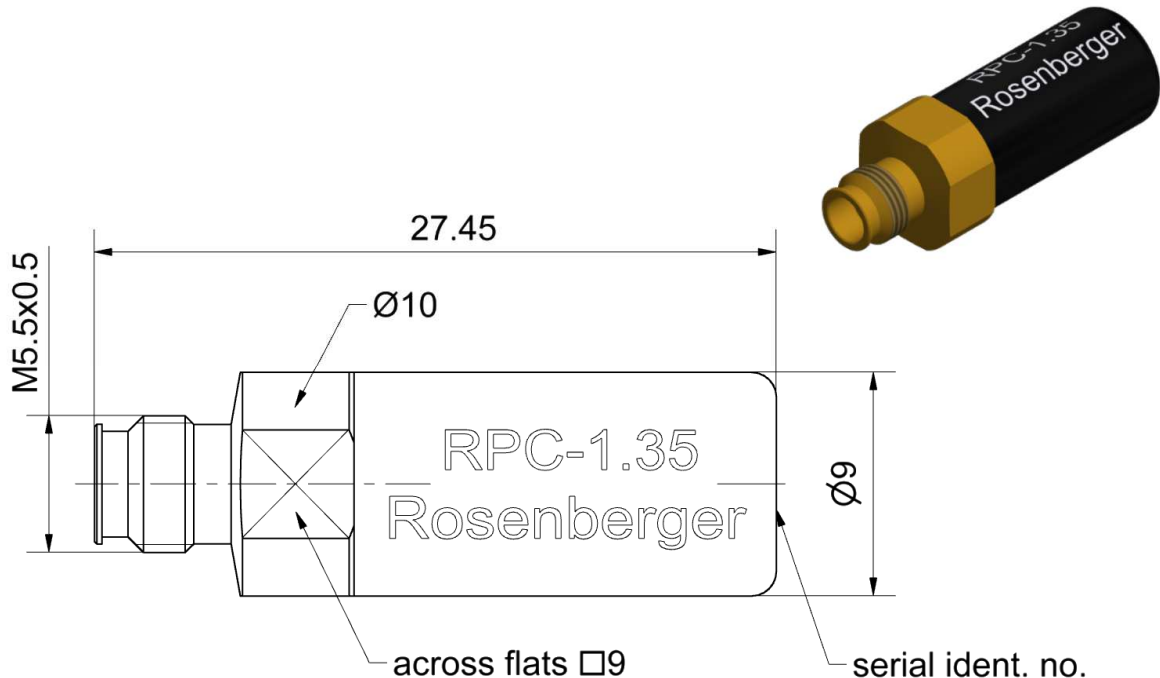
Technical Data Sheet

Rosenberger

RPC-1.35

Short Circuit
Jack

P9K12S-000D3



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

Interface

According to

IEC 61169-65

Documents

Application note

AN001 "Calibration Services"

Material and plating

Connector parts

Center conductor
Outer conductor

Material

CuBe
CuBe or equiv.

Plating

Gold, min. 1.27µm
Gold, min. 1.27µm

Electrical data

Frequency range DC to 90 GHz

Error from nominal phase¹

≤ 2.0°	DC to 18 GHz
≤ 3.0°	18 GHz to 40 GHz
≤ 4.0°	40 GHz to 65 GHz
≤ 5.0°	65 GHz to 90 GHz

¹ The nominal phase is defined by the Offset Delay, the Offset Loss and the Short Inductances.

Mechanical data

Mating cycles	≥ 3000
Maximum torque	1.65 Nm
Recommended torque	0.90 Nm
Gauge	0.003 mm to 0.020 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	16.678 ps
Length (electrical) / Offset Length	5.00 mm
Offset Loss	5.95 G Ω /s
Loss	0.0172 dB/ $\sqrt{\text{GHz}}$
Short Inductance ²	

² Short Inductances are determined individually for each short circuit and are documented in a Calibration Certificate.

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
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³ Temperature range over which these specification are valid.

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

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Technical Data Sheet				Rosenberger									
RPC-1.35		Short Circuit Jack		P9K12S-000D3									
<div>Declaration of calibration options</div> <div>Factory Calibration</div> <p>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 individually optimized and reported in an Agilent/Keysight, Rohde & Schwarz and Anritsu compatible VNA format.</p> <div>Accredited Calibration</div> <p>Not available.</p> <p>For further, more detailed information see application note AN001 on the Rosenberger homepage.</p> <div>Calibration interval</div> <table><tr><td>Recommendation</td><td>12 months</td></tr></table> <div>Packing</div> <table><tr><td>Standard</td><td>1 pce in box</td></tr><tr><td>Weight</td><td>5.6 g/pce</td></tr></table>								Recommendation	12 months	Standard	1 pce in box	Weight	5.6 g/pce
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Draft		Date		Rev.		Engineering change number							
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Marcel Panicke		22.08.17		Las Ramtke		18.11.19							
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