# RFB00035/12.20/6.4

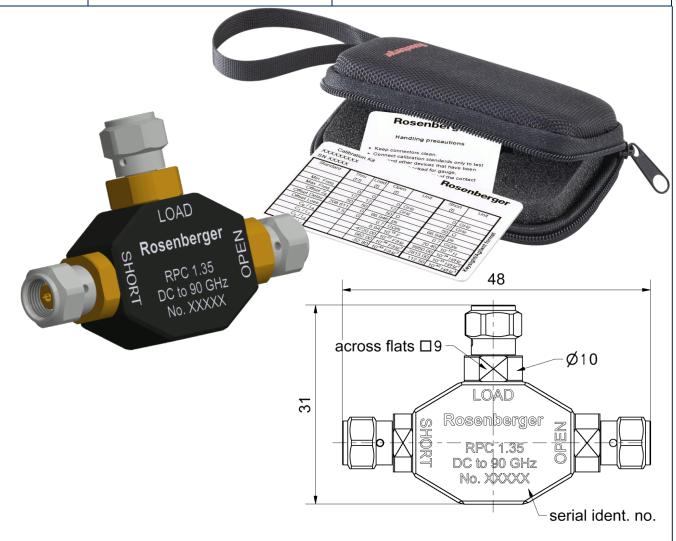
## **Technical Data Sheet**

# Rosenberger

**RPC-1.35** 

Calibration Kit Plug

## P9S30R-MSOD3



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

#### Interface

According to

IEC 61169-65

#### **Contents and Documentation**

This kit is delivered with

USB-Stick

Standard Definitions as data files for Vector Network Anaylzer Families PNA (Keysight/Agilent) and ZVA (Rohde&Schwarz). S1P-files for Open, Short and Load calibration standards. Calibration Certificate as PDF-file.

- Standard Definitions Card
  - Overview of electrical kit components
- Calibration Certificate
  - Details see "Declaration of calibration options"
- User Manual
- Hard Shell Case
- Protection Caps

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## **Technical Data Sheet**

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**RPC-1.35** 

Calibration Kit

P9S30R-MSOD3

#### Material and plating

Connector parts
Center conductor
Outer conductor
Coupling nut
Body
Dielectric
Substrate

# **Material Pla** CuBe Gol

CuBe or equiv. Stainless steel Aluminum PMP Al<sub>2</sub>O<sub>3</sub>

#### **Plating**

Gold, min. 1.27 µm Gold, min. 1.27 µm Passivated black anodized

#### **Electrical specifications**

These electrical specifications are only valid when the specific VNA files or the specific S1P-files are used as standard definitions. They include measurement uncertainties as well as guard bands to cover some tear and wear of the calibration standards.

Residual System Data*	Frequency	Specification (plug and jack)
Directivity	0.01 GHz to ≤ 40 GHz > 40 GHz to ≤ 80 GHz > 80 GHz to ≤ 90 GHz	≥ 33 dB ≥ 29 dB ≥ 26 dB
Source Match	0.01 GHz to ≤ 30 GHz > 30 GHz to ≤ 60 GHz > 60 GHz to ≤ 80 GHz > 80 GHz to ≤ 90 GHz	≥ 32 dB ≥ 27 dB ≥ 24 dB ≥ 21 dB
Reflection Tracking	0.01 GHz to ≤ 20 GHz > 20 GHz to ≤ 40 GHz > 40 GHz to ≤ 60 GHz > 60 GHz to ≤ 80 GHz > 80 GHz to ≤ 90 GHz	≤ 0.20 dB ≤ 0.25 dB ≤ 0.30 dB ≤ 0.45 dB ≤ 0.55 dB

<sup>\*</sup> Residual System Data are also called Effective System Data

### **Load**

Return loss  $\geq$  30 dB, DC to 10 GHz (typical values)  $\geq$  24 dB, 10 GHz to 30 GHz  $\geq$  21 dB, 30 GHz to 40 GHz  $\geq$  18 dB, 40 GHz to 50 GHz  $\geq$  15 dB, 50 GHz to 90 GHz

DC Resistance  $50 \Omega \pm 0.5 \Omega$ 

Power handling (at 25 °C, sea level)  $\leq 0.5$  W, derate by 0.005 W/K

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## **Technical Data Sheet**

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**RPC-1.35** 

Calibration Kit

P9S30R-MSOD3

#### Mechanical data

 $\begin{array}{ll} \text{Mating cycles} & \geq 3000 \\ \text{Maximum torque} & 1.65 \text{ Nm} \\ \text{Recommended torque} & 0.90 \text{ Nm} \\ \end{array}$ 

Gauge 0.003 mm to 0.05 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

#### **Declaration of Calibration options**

**Factory Calibration** 

Standard delivery for this kit includes a Factory Calibration. All calibration standards are reported in a Calibration Certificate with their individual calibration results, traceable to national / international standards. Data based definitions of the calibration standards are reported as data files for Vector Network Anaylzer Families PNA (Keysight/Agilent) and ZVA (Rohde&Schwarz) as well as S1P-files for Open, Short and Load calibration standards.

Accredited Calibration Not available.

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

#### Calibration Interval

Recommendation

12 months

**Packing** 

Standard Weight

1 pce in bag 30.1 g/pce

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.



Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Marcel Panicke	04.11.20	Lars Ramtke	04.04.23	c00	23-0004	David d'Argent	04.04.23

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<sup>&</sup>lt;sup>1</sup> Temperature range over which these specifications are valid.

<sup>&</sup>lt;sup>2</sup> This range is underneath and above the operating temperature range, within the calibration kit is fully functional and could be used without damage