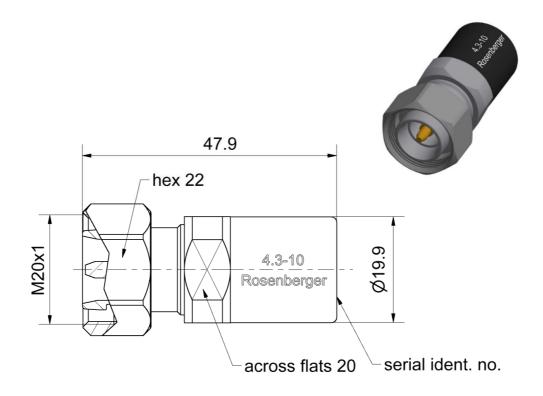
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4.3-10	Short Circuit Plug	64S12S-000S3			



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

Interface	
According to	IEC 61169-54

Documents	
Application note	AN001 "Calibration Services"

Material and plating		
Connector parts	Material	Plating
Center conductor	Brass	Gold, min. 1.27 µm, over nickel
Outer conductor	Stainless steel	Passivated
Coupling nut	Stainless steel	Passivated

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RF 35/09.14/6.2

Technical Data Sheet Rosenberger

4.3-10 Short Circuit

64S12S-000S3

Electrical data

Frequency range DC to 12 GHz

Return loss \leq 0.15 dB, DC to 12 GHz

Error from nominal phase¹ $\leq 2.0^{\circ}$, DC to 4 GHz

≤ 2.5°, 4 GHz to 6 GHz ≤ 3.0°, 6 GHz to 12 GHz

Mechanical data

 $\begin{array}{ll} \text{Mating cycles} & \geq 100 \\ \text{Maximum torque} & 5 \text{ Nm} \\ \text{Recommended torque} & 2 \text{ Nm} \\ \end{array}$

Gauge 2.80 mm to 2.90 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.

 $\begin{array}{lll} \mbox{Offset Z_{\circ} / Impedance / Z_{\circ}} & 50 \ \Omega \\ \mbox{Offset Delay} & 80.055 \ ps \\ \mbox{Length (electrical) / Offset Length} & 24.00 \ mm \\ \mbox{Offset Loss} & 0.70 \ G\Omega/s \\ \mbox{Loss} & 0.0097 \ dB/\sqrt{\mbox{GHz}} \end{array}$

Short Inductance²

Environmental data

Operating temperature range³ +20 °C to +26 °C Rated temperature range of use⁴ 0 °C to +50 °C Storage temperature range -40 °C to +85 °C

RoHS compliant

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

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

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 4.3-10 Short Circuit Plug 64S12S-000S3

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 individually optimized and 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 64.5 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.

Draft	Date	Approved	Date		Rev.	Engineering change number	Name		Date
Marcel Panicke	02.09.16	Markus Müller	02.08.18		c00	18-1361	Marion Striegler		02.08.18
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