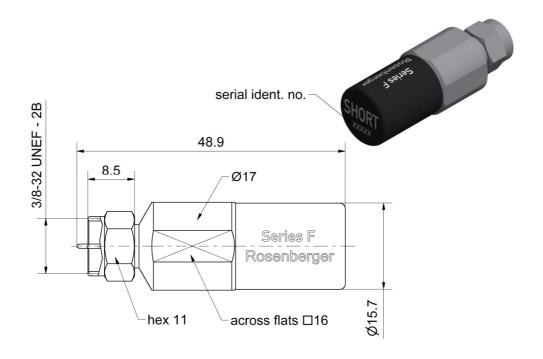
Technical Data Sheet		Rosenberger		
F 75 Ω	Short Circuit Plug	74S12S-000S3		



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

Interface	
According to	IFC 169-24 FIA-550

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
Coupling nut	Stainless steel	Passivated

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RF 35/09.14/6.2

Technical Data Sheet

Rosenberger

F 75 Ω

Short Circuit

74S12S-000S3

Electrical data

Frequency range DC to 4 GHz

Return loss \leq 0.10 dB, DC to 4 GHz Error from nominal phase¹ \leq 2.0°, DC to 4 GHz

Mechanical data

Mating cycles ≥ 500 Maximum torque6.78 NmRecommended torque2.00 Nm

Gauge 0.00 mm to 0.10 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.

 $\begin{array}{lll} \text{Offset Z_{\circ} / Impedance / Z_{\circ}} & 75 \ \Omega \\ \text{Offset Delay} & 53.371 \ \text{ps} \\ \text{Length (electrical) / Offset Length} & 16.00 \ \text{mm} \\ \text{Offset Loss} & 1.30 \ \text{G}\Omega/\text{s} \\ \text{Loss} & 0.0080 \ \text{dB/} \sqrt{\text{GHz}} \end{array}$

Short Inductance²

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

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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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 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 Weight 1 pce in box 40.5 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
Herbert Babinger	14.04.15	Markus Müller	30.05.17		j00	17-0890	Marion Striegler	30.05.17
Bb						D		

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