

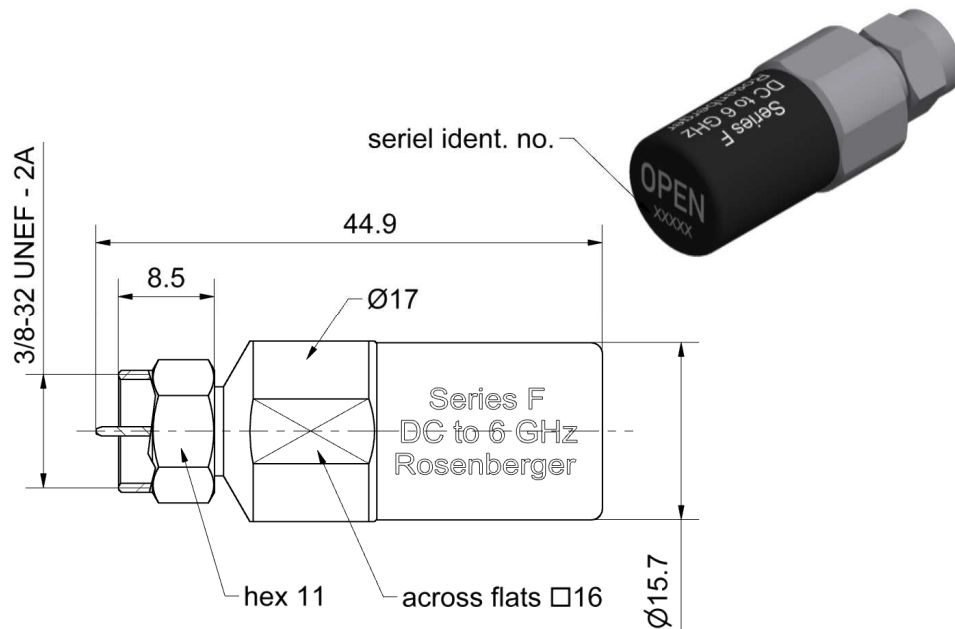
Technical Data Sheet

Rosenberger

F 75 Ω

Open Circuit
Plug

74S12L-001S3



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

Interface

According to

IEC 61169-24, EIA-550

Documents

Application note

AN001 "Calibration Services"

Material and plating

Connector parts

Center contact
Outer contact
Coupling nut
Dielectric

Material

CuBe
Stainless steel
Stainless steel
PS

Plating

Gold, min. 1.27 µm, over nickel
Passivated
Passivated

Electrical data

Frequency range	DC to 6 GHz
Return loss	≤ 0.10 dB, DC to 4 GHz
	≤ 0.15 dB, 4 GHz to 6 GHz
Error from nominal phase ¹	$\leq 1.0^\circ$, DC to 4 GHz
	$\leq 1.5^\circ$, 4 GHz to 6 GHz

¹ The nominal phase is defined by the Offset Delay, the Offset Loss and the Fringing Capacitances.

Mechanical data

Mating cycles	≥ 1000
Maximum torque	6.78 Nm
Recommended torque	2.00 Nm
Nominal pin diameter	0.81 mm
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.

Offset Z_0 / Impedance / Z_0	75 Ω
Offset Delay	53.370 ps
Length (electrical) / Offset Length	16.00 mm
Offset Loss	2.40 G Ω /s
Loss	0.0148 dB/ $\sqrt{\text{GHz}}$
Fringing Capacitances ²	

² Fringing Capacitances are determined individually for each Open 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 open 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 <table><tr><td>Recommendation</td><td>12 months</td></tr></table> Packing <table><tr><td>Standard</td><td>1 pce in box</td></tr><tr><td>Weight</td><td>34.5 g/pce</td></tr></table>			Recommendation	12 months	Standard	1 pce in box	Weight	34.5 g/pce
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Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date	
Marcel Panicke	08.08.18	Marcel Panicke	01.07.19	c00	19-1170	Marion Striegler	01.07.19	
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