



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

Interface

According to IEC 169-24 , EIA-550

Documents

Application note AN001 "Calibration Services"

Material and plating

Connector parts

Center conductor
Outer conductor
Dielectric
Coupling nut

Material

CuBe
Stainless steel
PS
Stainless steel

Plating

Gold, min. 1.27 μm, over nickel
Passivated
Passivated

Electrical data

Frequency range	DC to 4 GHz
Return loss	≤ 0.10 dB, DC to 4 GHz
Error from nominal phase ¹	≤ 2.0°, DC to 4 GHz

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

Mechanical data

Mating cycles	≥ 500
Maximum torque	6.78 Nm
Recommended torque	2.00 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.

Offset Z ₀ / Impedance / Z ₀	75 Ω
Offset Delay	53.371 ps
Length (electrical) / Offset Length	16.00 mm
Offset Loss	1.30 GΩ/s
Loss	0.0080 dB/√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

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.

Technical Data Sheet**Rosenberger**F 75 Ω Open Circuit
Plug**74S12L-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 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
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Packing

Standard	1 pce in box
Weight	31.7 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
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