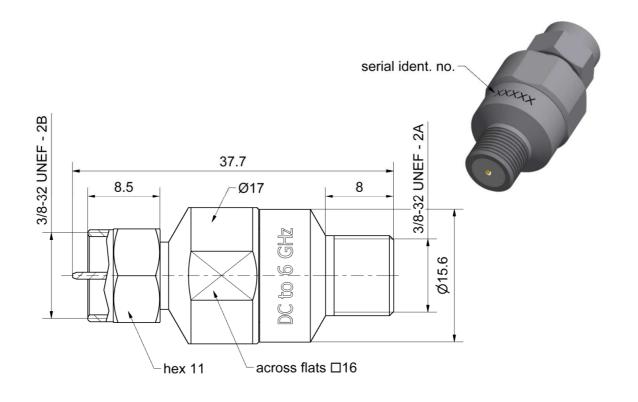
Technical Data Sheet		Rosenberger		
F 75 Ω	Calibration Adaptor Plug/Jack (Full Range)	74S121-K22S3		



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

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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, POM

Plating

Gold, min. 1.27 µm, over nickel **Passivated Passivated**

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Page

1/3

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Technical Data Sheet

Rosenberger

F 75 Ω

Calibration Adaptor Plug/Jack (Full Range)

74S121-K22S3

Electrical data

Frequency DC to 6 GHz

Return loss¹ \geq 30 dB, DC to 3 GHz \geq 27 dB, 3 GHz to 4 GHz

≥ 20 dB, 4 GHz to 6 GHz

¹ Only valid if a F plug with a pin diameter between 0.76mm and 0.86mm is used.

Mechanical data

Mating cycles ≥ 1000 Maximum torque6.78 NmRecommended torque2.00 NmNominal pin diameter0.81 mm

Permitted male contact diameter 0.64 mm to 1.13 mm Gauge male side 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.

 $\begin{array}{lll} \text{Offset Z}_{\text{o}} \ / \ \text{Impedance} \ / \ Z_{\text{o}} & 75 \ \Omega \\ \text{Offset Delay} & 111.744 \ \text{ps} \\ \text{Length (electrical)} \ / \ \text{Offset Length} & 33.50 \ \text{mm} \\ \text{Offset Loss} & 3.90 \ \text{G}\Omega/\text{s} \\ \text{Loss} & 0.0252 \ \text{dB}/\sqrt{\text{GHz}} \\ \text{Line Loss} \ @ \ 1\text{GHz} & 0.0008 \ \text{dB/mm} \end{array}$

Environmental data

Operating temperature range² +20 °C to +26 °C Rated temperature range of use³ 0 °C to +50 °C Storage temperature range -40 °C to +85 °C

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2/3

² Temperature range over which these specification are valid.

³ This range is underneath and above the operating temperature range, within the calibration adaptor is fully functional and could be used without damage.

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Rosenberger **Technical Data Sheet** Calibration Adaptor F 75 Ω 74S121-K22S3 Plug/Jack (Full Range)

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 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 28.0 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	08.08.18	Markus Müller	17.07.19		b00	19-1328	Marion Striegler	17.07.19
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3/3