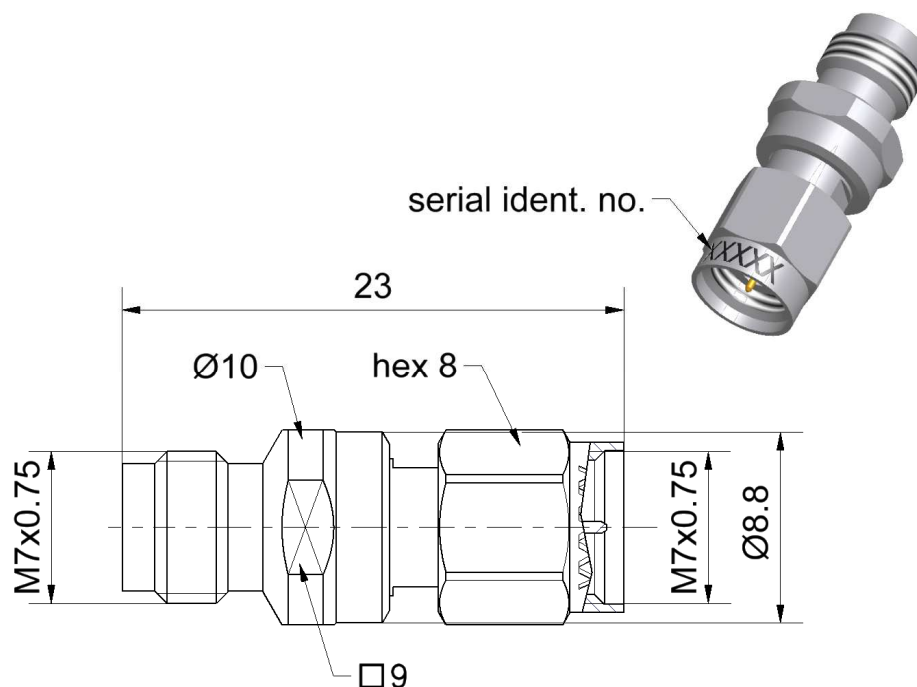




All dimensions are in mm; tolerances according to ISO 2768 m-H

#### Interface

According to  
Mechanically compatible with

IEC 61169-40  
RPC-1.85

#### Documents

Application note

AN001 "Calibration Services"

#### Material and plating

##### Connector parts

Center conductor  
Outer conductor  
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 50 GHz                |
| Return loss     | ≥ 30 dB, DC to 4 GHz        |
|                 | ≥ 24 dB, 4 to 26.5 GHz      |
|                 | ≥ 17 dB, 26.5 GHz to 50 GHz |

## Mechanical data

|                    |                    |
|--------------------|--------------------|
| Mating cycles      | ≥ 500              |
| Maximum torque     | 1.65 Nm            |
| Recommended torque | 0.90 Nm            |
| Gauge              | 0.00 mm to 0.03 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 $Z_o$ / Impedance / $Z_o$    | 50 $\Omega$                    |
| Offset Delay                        | 63.3110 ps                     |
| Length (electrical) / Offset Length | 18.98 mm                       |
| Offset Loss                         | 4.00 G $\Omega$ /s             |
| Loss                                | 0.0220 dB/ $\sqrt{\text{GHz}}$ |

## Environmental data

|                                             |                  |
|---------------------------------------------|------------------|
| Operating temperature range <sup>1</sup>    | +20 °C to +26 °C |
| Rated temperature range of use <sup>2</sup> | 0 °C to +50 °C   |
| Storage temperature range                   | -40 °C to +85 °C |

|      |           |
|------|-----------|
| RoHS | compliant |
|------|-----------|

<sup>1</sup> Temperature range over which these specifications are valid.

<sup>2</sup> This range is underneath and above the operating temperature range, within the calibration adaptor is fully functional and could be used without damage.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                                  |  |                                                     |  |                           |                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------|--|-----------------------------------------------------|--|---------------------------|-------------------|
| Technical Data Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                  |  | Rosenberger                                         |  |                           |                   |
| RPC-2.40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Calibration Adaptor<br>Plug/Jack |  | 09S121-K20S3                                        |  |                           |                   |
| <div>Declaration of calibration options</div> <div><div>Factory Calibration</div><div>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 reported in an Agilent/Keysight, Rohde &amp; Schwarz and Anritsu compatible VNA format.</div></div> <div><div>Accredited Calibration</div><div>Not available.<br/>For further, more detailed information see application note AN001 on the Rosenberger homepage.</div></div> |  |                                  |  |                                                     |  |                           |                   |
| <div>Calibration interval</div> <div><div>Recommendation</div><div>12 months</div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                  |  |                                                     |  |                           |                   |
| <div>Packing</div> <div><div>Standard</div><div>1 pce in box</div><div>Weight</div><div>7 g/pce</div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                  |  |                                                     |  |                           |                   |
| <div>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.</div>                                                                                                                                                                                                                                                             |  |                                  |  |                                                     |  |                           |                   |
| Draft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | Date                             |  | Rev.                                                |  | Engineering change number |                   |
| Approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  | Date                             |  | Name                                                |  | Date                      |                   |
| Herbert Babinger                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | 23.10.06                         |  | Martin Moder                                        |  | 24.03.15                  |                   |
| c00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | 14-1492                          |  | Herbert Babinger                                    |  | 24.03.15                  |                   |
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