



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

**Interface**

According to

MIL-STD-348

Mateable with GPPO™ (Gilbert Engineering Co., Inc.)  
and SSMP™ (Connectors Devices, Inc.)

**Documents**

Application note

AN001 "Calibration Services"

**Material and plating**

**Connector parts**

Center conductor  
Outer conductor  
Dielectric

**Material**

CuBe  
CuBe  
PEEK

**Plating**

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

**Electrical data**

Frequency range	DC to 40 GHz
Return loss	≥ 24 dB, DC to 18 GHz ≥ 16 dB, 18 GHz to 40 GHz

**Mechanical data**

Mating cycles	
if mating part is Smooth bore	≥ 500
if mating part is Full detent	≥ 100
Engagement force	
- Smooth bore	11 N typical
- Full detent	19 N typical
Disengagement force	
- Smooth bore	11 N typical
- Full detent	29 N typical
Gauge	0.00 mm to 0.08 mm

**General standard definition**

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	50.0346 ps
Length (electrical) / Offset Length	15.00 mm
Offset Loss	4.00 G $\Omega$ /s
Loss	0.0348 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 specification 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.

**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 1 pce in box  
Weight 4.0 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
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