



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

**Interface**

According to

MIL-STD-348

**Documents**

Application note

AN001 "Calibration Services"

**Material and plating**

**Connector parts**

Center conductor  
Outer conductor  
Dielectric  
Substrate

**Material**

CuBe  
CuBe  
PS  
Al<sub>2</sub>O<sub>3</sub>

**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	≥ 35 dB, DC to 4 GHz ≥ 25 dB, 4 GHz to 40 GHz
DC Resistance	50 Ω ± 0.25 Ω
Power handling	≤ 0.5 W

**Mechanical data**

Mating cycles	
if mating part is Smooth bore	≥ 1000
if mating part is Limited detent	≥ 500
if mating part is Full detent	≥ 100
Engagement force	
- Smooth bore	9 N
- Limited detent	45 N
- Full detent	68 N
Disengagement force	
- Smooth bore	2.2 N
- Limited detent	9 N
- Full detent	22 N
Gauge	0.00 mm to 0.05 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 Ω
Offset Delay	0.0000 ps
Length (electrical) / Offset Length	0.00 mm
Offset Loss	0.00 GΩ/s
Loss	0.0000 dB/√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 load is fully functional and could be used without damage.

SMP

Calibration Load  
Jack

**19K150-C10D3**

**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 7.4 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
Herbert Babinger	11.10.04	Markus Müller	07.11.16	g00	15-1629	Marion Striegler	07.11.16
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.de						Tel. : +49 8684 18-0 Email : info@rosenberger.de	
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