

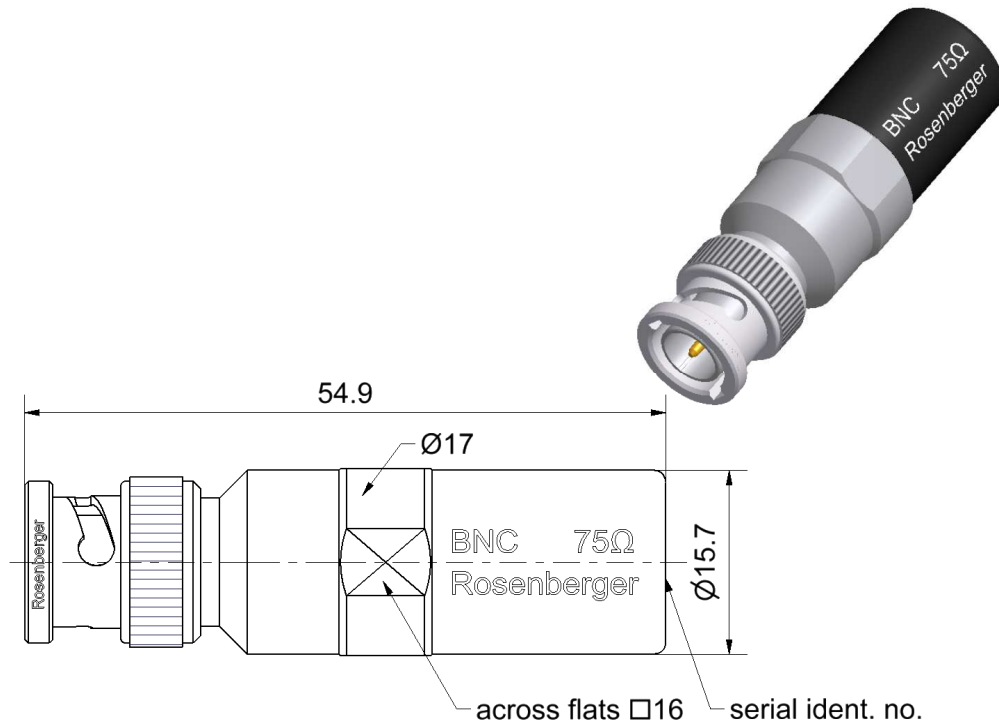
# Technical Data Sheet

# Rosenberger

BNC  
75 Ω

Calibration Load  
Plug

## 71S170-C10S3



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

### Interface

According to

IEC 61169-8, MIL-PRF-39012, CECC 22120

### Documents

Application note

AN001 "Calibration Services"

### Material and plating

#### Connector parts

Center conductor  
Outer conductor  
Dielectric  
Substrate

#### Material

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

#### Plating

Gold, min. 1.27 µm, over nickel  
Passivated

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**71S170-C10S3**

**Electrical data**

Frequency range	DC to 4 GHz
Return loss	≥ 35 dB, DC to 2 GHz
	≥ 30 dB, 2 GHz to 4 GHz
Power handling	≤ 0.5 W

**Mechanical data**

Mating cycles	≥ 500
Gauge	5.31 mm to 5.38 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 / $Z_o$	75 Ω
Offset Delay	0.0000 ps
Length (electrical) / Offset Length	0.000 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 specifications are valid.

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

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### 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 47 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
Kerstin Hobrak	04.09.09	Herbert Babinger	16.09.15	c00	14-1492	Maik Knoll	16.09.15

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