

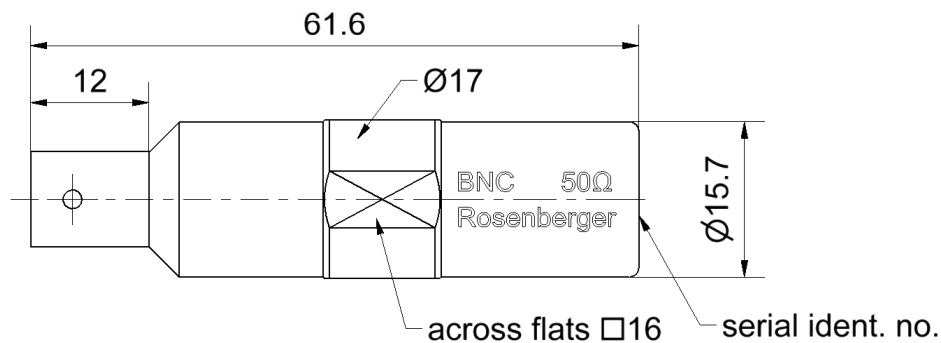
Technical Data Sheet

Rosenberger

BNC
50 Ω

Calibration Load
Jack

51K170-C10S3



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

Interface

According to

IEC 60169-8, 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
PTFE, PPE
Al₂O₃

Plating

Gold, min. 1.27 µm, over nickel
Passivated

BNC
50 Ω

Calibration Load
Jack

51K170-C10S3

Electrical data

Frequency range	DC to 4 GHz
Return loss	≥ 34 dB, DC to 2 GHz
	≥ 30 dB, 2 GHz to 4 GHz
Power handling	≤ 0.5 W

Mechanical data

Mating cycles	≥ 500
Gauge	5.21 mm to 5.28 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 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 ¹	+20 °C to +26 °C
Rated temperature range of use ²	0 °C to +50 °C
Storage temperature range	-40 °C to +85 °C

RoHS compliant

¹ Temperature range over which these specifications are valid.

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