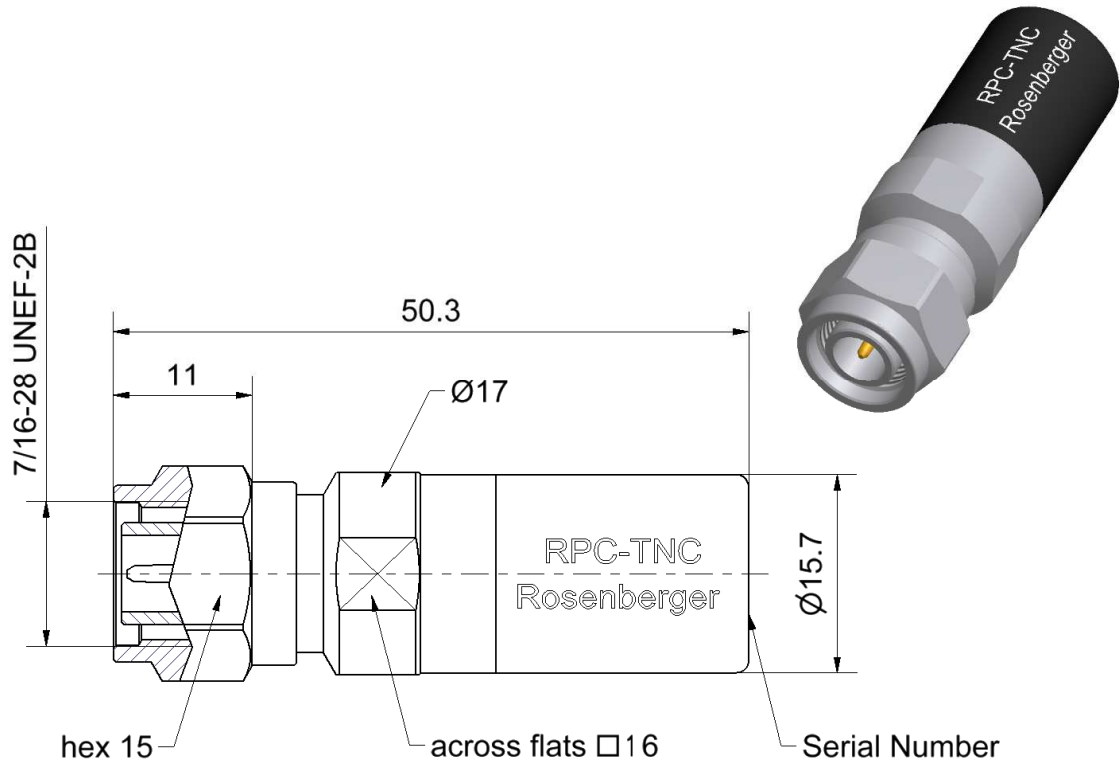




All dimensions are in mm; tolerances according to ISO 2768 m-H

Interface

According to

IEC 61169-26

Documents

Application note

AN001 "Calibration Services"

Material and plating

Connector parts

Center conductor
Outer conductor
Coupling nut
Dielectric

Material

CuBe
Stainless steel
Stainless steel
PTFE

Plating

Gold, min. 1.27 µm, over nickel
Passivated
Passivated

Electrical data

Frequency range	DC to 18 GHz
Return loss	≤ 0.50 dB, DC to 4 GHz ≤ 0.75 dB, 4 GHz to 8 GHz ≤ 1.00 dB, 8 GHz to 18 GHz
Error from nominal phase ¹	$\leq 1.0^\circ$, DC to 4 GHz $\leq 3.5^\circ$, 4 GHz to 8 GHz $\leq 7.0^\circ$, 8 GHz to 18 GHz

¹ The nominal phase is defined by the Offset Delay, the Offset Loss and the Short Inductance.

Mechanical data

Mating cycles	≥ 500
Maximum torque	1.70 Nm
Recommended torque	0.55 Nm
Gauge	5.28 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	50 Ω
Offset Delay	66.713 ps
Length (electrical) / Offset Length	20.00 mm
Offset Loss	1.20 G Ω /s
Loss	0.0139 dB/ $\sqrt{\text{GHz}}$
Short Inductance ²	

² Short Inductances are determined individually for each Short circuit and are documented in a Calibration Certificate.

Environmental data

Operating temperature range ³	+ 20 °C to +26 °C
Rated temperature range of use ⁴	0 °C to +50 °C
Storage temperature range	- 40 °C to +85 °C

RoHS	compliant
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³ Temperature range over which these specification are valid.

⁴ This range is underneath and above the operating temperature range, within the short circuit is fully functional and could be used without damage.

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RF_35/09.14/6.2

Technical Data Sheet				Rosenberger			
RPC-TNC		Short Circuit Plug		06S12S-000S3			
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 individually optimized and reported in an Agilent/Keysight, Rohde & Schwarz and Anritsu compatible VNA format. Accredited Calibration Not available. <i>For further, more detailed information see application note AN001 on the Rosenberger homepage.</i> Calibration interval Recommendation 12 months Packing Standard 1 pce in box Weight 48 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	02.12.04	Markus Müller	22.04.16	c00	16-s067	Marcel Panicke	22.04.16
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