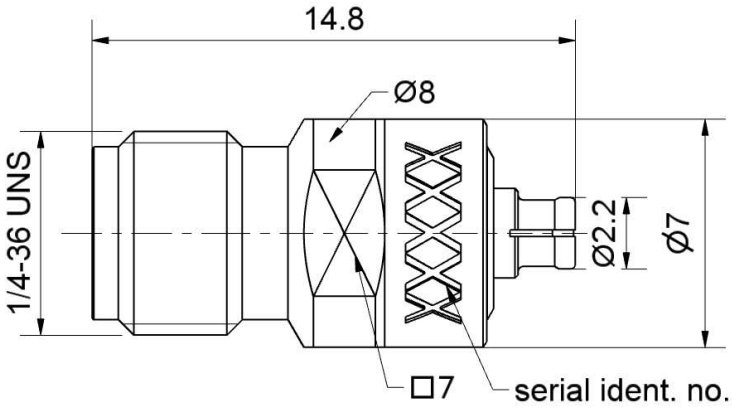
Technical Data Sheet	Rosenberger
Calibration Adaptor RPC-2.92 Jack – Mini-SMP Jack	**02K118-K20D3**



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

Interface

RPC-2.92 side	
According to	IEC 61169-35
Mechanically compatible with	RPC-3.50 and SMA
Mini-SMP side	
According to	MIL-STD-348
Mechanically compatible with	GPPO™ (Gilbert Engineering Co., Inc.) and SSMP™ (Connectors Devices, Inc.)

Documents

Application note	AN001 “Calibration Services”

Material and plating

Connector parts	**Material**	**Plating**
Center conductor	CuBe	Gold, min. 1.27 µm, over nickel
Outer conductor RPC-2.92	Stainless steel	Passivated
Outer conductor Mini-SMP	CuBe	Gold, min. 1.27 µm, over nickel
Dielectric	PS	

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Calibration Adaptor
RPC-2.92 Jack – Mini-SMP Jack

02K118-K20D3

Electrical data

Frequency	DC to 40 GHz
Return loss	≥ 28 dB, DC to 18 GHz ≥ 20 dB, 18 GHz to 40 GHz

Mechanical data

	RPC-2.92	Mini-SMP
Mating cycles	≥ 500	≥ 100 if mating part is full detent ≥ 500 if mating part is smooth bore
Maximum torque	1.70 Nm	
Recommended torque	0.90 Nm	
Engagement force		Full detent 19 N typical Smooth bore 11 N typical
Disengagement force		Full detent 29 N typical Smooth bore 11 N typical
Gauge	0.00 mm to 0.08 mm	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 Ω
Offset Delay	46.1423 ps
Length (electrical) / Offset Length	13.83 mm
Offset Loss	3.70 GΩ/s
Loss	0.0148 dB/$\sqrt{\text{GHz}}$

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 specification are valid.*
[2] *This range is underneath and above the operating temperature range, within the calibration adaptor is fully functional and could be used without damage.*

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