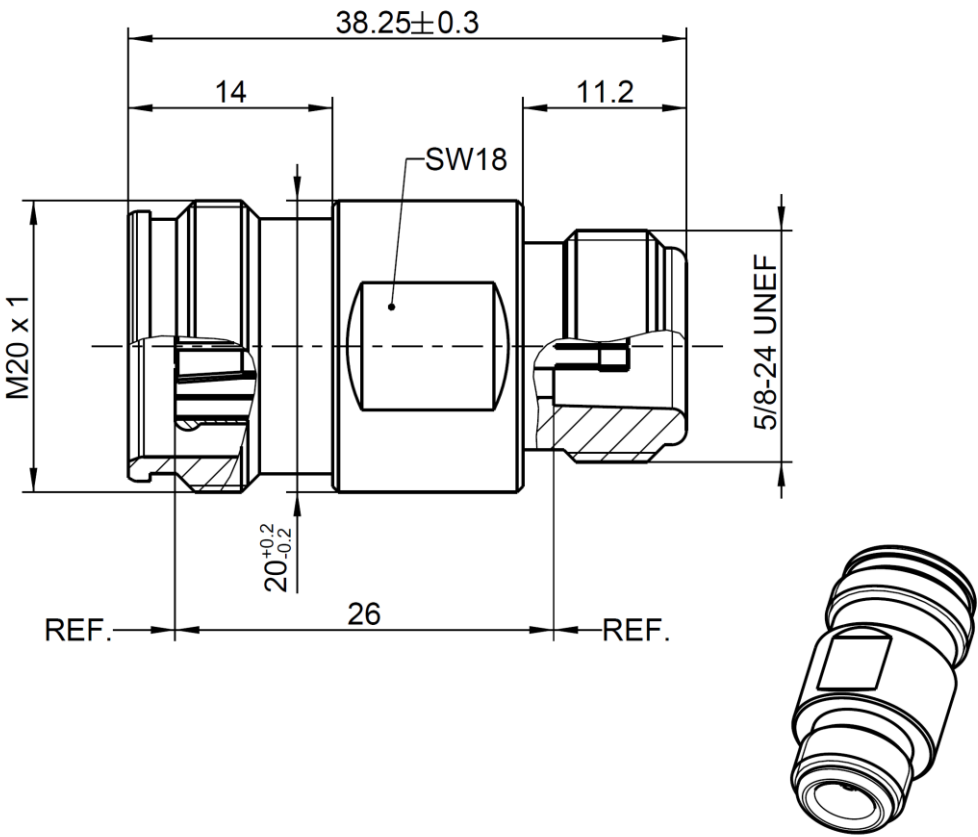


Technical Data Sheet		Rosenberger
N 50 Ω	Adaptor N Jack – 4.3-10 Jack	53K164-K00B1
 Technical drawing of the 53K164-K00B1 adaptor. The drawing shows a cross-section of the device with the following dimensions: overall length 38.25±0.3 mm, distance from left face to center of SW18 14 mm, distance from center of SW18 to right face 11.2 mm, total width 26 mm, distance from left face to start of 5/8-24 UNEF thread 20^{+0.2}/_{-0.2} mm, and distance from center of SW18 to start of 5/8-24 UNEF thread 11.2 mm. The left face is M20 x 1. The right face is 5/8-24 UNEF. A 3D perspective view of the adaptor is shown to the right of the drawing.		
All dimensions are in mm; tolerances according to ISO 2768 m-H		
Interface		
According to	4.3-10 side: N side:	IEC 61169-54 IEC 61169-16, MIL-PRF-39012, CECC 22210
Documents		
		N/A
Material and plating		
Connector parts	Material	Plating
Center contact	CuBe	Silver, 3-6 µm
Outer contact	Brass	Flash white bronze over silver(e.g. Optargen®)
Body	Brass	Flash white bronze over silver(e.g. Optargen®)
Dielectric	PTFE	
Gasket	Silicone	
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.com		Tel. : +49 8684 18-0 Email : info@rosenberger.com
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Technical Data Sheet

Rosenberger

N 50 Ω

Adaptor
N Jack – 4.3-10 Jack

53K164-K00B1

Electrical data

Impedance	50 Ω
Frequency	DC to 12 GHz
Return loss	≥ 36 dB @ DC to 4 GHz ≥ 32 dB @ 4 GHz to 6 GHz
Insertion loss	≤ 0.03 x √ f [GHz] dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 1.0 mΩ, 4.3-10 side ≤ 1.0 mΩ, N side
Outer contact resistance	≤ 1.0 mΩ, 4.3-10 side ≤ 0.25 mΩ, N side
Test voltage	2500 V rms
Working voltage	500 V rms
RF-leakage	≥ 128 dB @ DC to 1 GHz
Power handling (at 20 °C, sea level, VSWR 1.0)	1000 W @ 1 GHz 700 W @ 2 GHz
Intermodulation (3 rd order)	≥ 155 dBc (2 x 43 dBm)

- RL values only valid for the interface -

Mechanical data

	4.3-10 side	N side
Mating cycles	≥ 100	min. 500
Center contact captivation: axial	≥ 30 N	≥ 28 N
radial	> 5 Ncm	≥ 3 Ncm
Center contact retention force	1.5 N – 20 N	
Recommended torque	5 Nm	0.7 to 1.1 Nm

Environmental data

Temperature range	-55 °C to +90 °C operating temperature
Thermal shock	IEC 60169-1, Sub-clause 16.4
Corrosion resistance	ISO 21207 method B
Vibration	IEC 61169-1 9.3.3 and IEC 60068-2-64
Shock	IEC 61169-1 9.3.14
Degree of protection (mated pair)	IEC 60529, IP68 1h / 25m
RoHS	compliant

Tooling

N/A

Suitable cables

N/A

Weight

Weight 52.9 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.

For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.



Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Chr. Link	23.11.16	Chr. Janßen	22.12.20	b00	20-1927	S. Huber-Siegl	22.12.20
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.com				Tel. : +49 8684 18-0 Email : info@rosenberger.com			Page 2 / 2