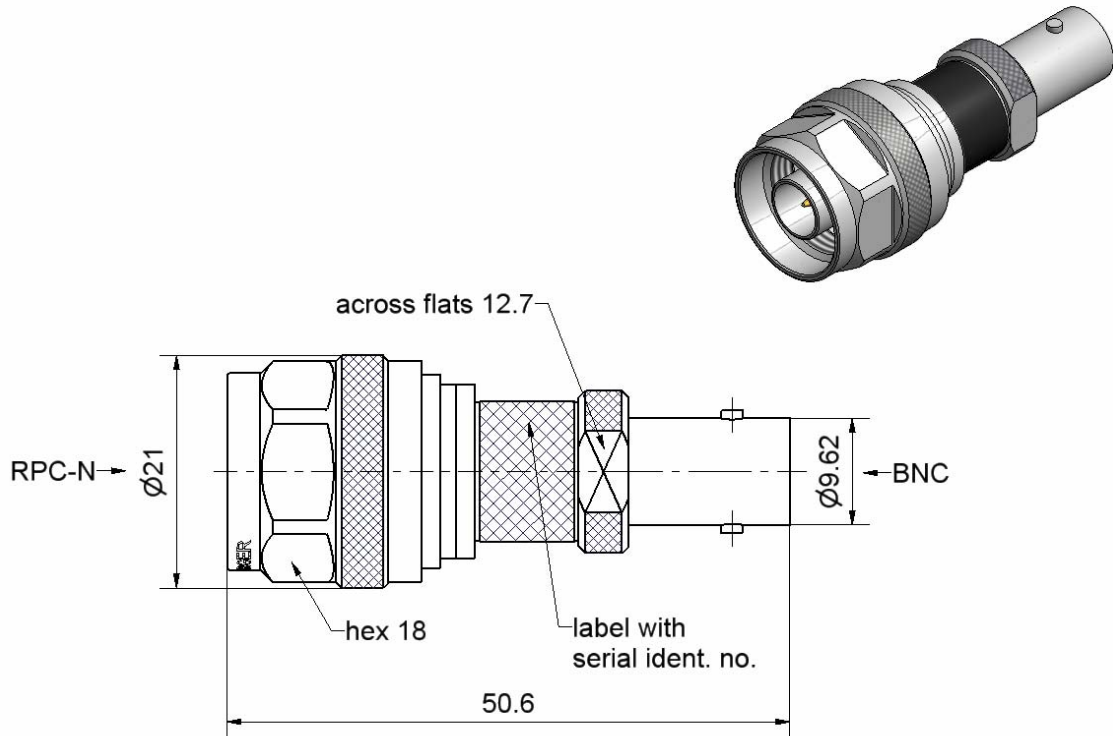




All dimensions are in mm; tolerances according to ISO 2768 m-H

Interface

According to – N side

IEC 60169-16, MIL-PRF-39012, CECC 22210

According to – BNC side

IEC 60169-8, MIL-PRF-39012, CECC 22120

Documents

N/A

Material and plating

Connector parts

Center contact – N side
Center contact – BNC side
Outer contact – N side
Outer contact – BNC side
Coupling nut
Dielectric
Substrate

Material

Brass
Beryllium copper
Brass
Brass
Brass
PTFE
Al₂O₃

Plating

Gold, min. 1.27 µm, over nickel
Gold, min. 0.8 µm, over nickel
Flash white bronze over silver(e.g. Optargen®)
Flash white bronze over silver(e.g. Optargen®)
Flash white bronze over silver(e.g. Optargen®)

TECHNICAL DATA SHEET

Rosenberger®

MATCHING ATTENUATOR N 50Ω PLUG – BNC 75Ω JACK

53S171-K00N3

Electrical data

Impedance	50 Ω; (m) side	75 Ω, (f) side
Frequency	DC to 2 GHz	
Return loss	≥ 46.0 dB, (m) side	DC to 30 MHz ≥ 44.5 dB, (f) side
	≥ 42.0 dB, (m) side	30 MHz to 100 MHz ≥ 40.1 dB, (f) side
	≥ 36.6 dB, (m) side	100 MHz to 300 MHz ≥ 34.1 dB, (f) side
	≥ 28.3 dB, (m) side	300 MHz to 0.5 GHz ≥ 28.3 dB, (f) side
	≥ 26.4 dB, (m) side	0.5 GHz to 1 GHz ≥ 23.1 dB, (f) side
	≥ 23.1 dB, (m) side	1 GHz to 2 GHz ≥ 16.5 dB, (f) side
Attenuation (S21 = S12)	-5.72 dB	
Tolerances of Attenuation	≤ ± 0.02 dB, DC to 3 MHz	
	≤ ± 0.03 dB, 3 MHz to 30 MHz	
	≤ ± 0.04 dB, 30 MHz to 100 MHz	
	≤ ± 0.05 dB, 100 MHz to 300 MHz	
	≤ ± 0.10 dB, 300 MHz to 0.5 GHz	
	≤ ± 0.20 dB, 0.5 GHz to 2 GHz	
Center contact resistance	≤ 1.5 mΩ	
Outer contact resistance	≤ 1 mΩ	
Power handling	1 W to 25°C	
	derated linearity to 0 Watts at 125°C	

Mechanical data

Mating cycles	N (m) side	BNC (f) side
Coupling nut retention	≥ 500	min. 500
Center contact captivation	≥ 450 N	
Coupling test torque	≥ 28 N	≥ 27 N
Recommended torque	1.70 Nm	
	0.70 Nm to 1.10 Nm	

Environmental data

Temperature range	-65°C to +165°C
2002/95/EC (RoHS)	compliant

Tooling

N/A

Suitable cables

N/A

Packing

Standard	1 pce in bag
Weight	42.7 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	21/04/08	Andreas Burkert	30/05/08	a00	08-s164	Kerstin Hobrak	03/06/08

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Page

2 / 2