



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

Interface

N side according to IEC 61169-16
BNC side according to IEC 61169-8

Documents

N/A

Material and plating

Connector parts

Center conductor - plug
Center conductor - jack
Outer conductor
Coupling nut
Dielectric
Substrate

Material

Brass
Beryllium copper
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®)
White bronze(e.g. Optalloy®)

Technical Data Sheet

Rosenberger

Matching Attenuator
N 50 Ω Plug / BNC 75 Ω 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	5.72 dB (non warrented)	
Power handling (at 25 °C, sea level)	≤ 1 W, derated linearity by 0.01 W/K	

Mechanical data

Mating cycles	N (m) side ≥ 500	BNC (f) side ≥ 500
Coupling nut retention	≥ 450 N	
Center contact captivation	≥ 28 N	≥ 27 N
Coupling test torque	≤ 1.7 Nm	
Recommended torque	0.7 Nm to 1.1 Nm	

Environmental data

Temperature range	-65 °C to +165 °C
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 Herzog	21.04.08	Markus Müller	20.07.18	b00	18-1027	Marion Striegler	20.07.18
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany www.rosenberger.de						Tel. : +49 8684 18-0 Email : info@rosenberger.de	Page 2 / 2