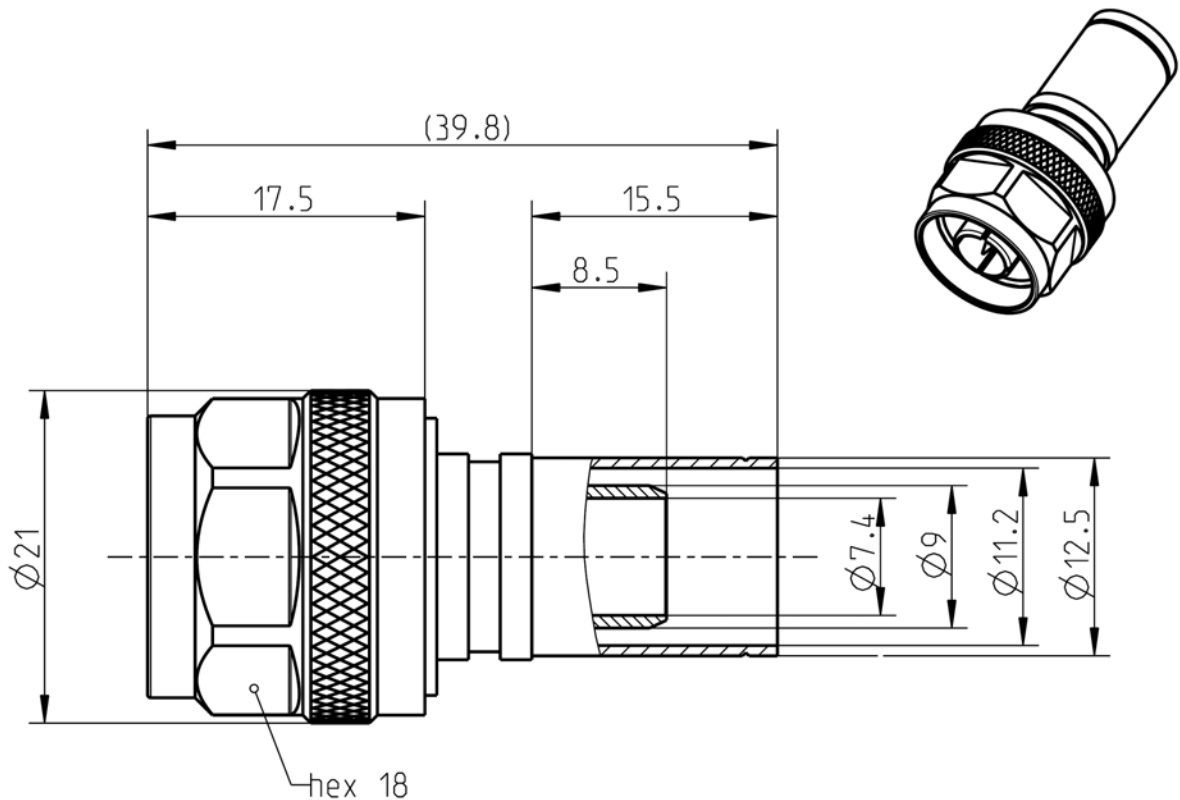




All dimensions are in mm; tolerances according to ISO 2768 m-H

Interface

According to

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

Documents

Assembly instruction

53 03

Material and plating

Connector parts

Center contact
Outer contact
Body
Dielectric
Gasket
Crimping ferrule

Material

Brass
Brass
Brass
PTFE
Silicone
Copper

Plating

AuroDur®, gold plated
Flash white bronze over silver(e.g. Optargen®)
White bronze(e.g. Optalloy®)

Flash white bronze over silver(e.g. Optargen®)

TECHNICAL DATA SHEET

Rosenberger

N 50 Ω STRAIGHT PLUG

53S101-117N5

Electrical data

Impedance	50 Ω
Frequency	DC to 11 GHz
Return loss	≥ 27 dB, DC to 2.5 GHz
	≥ 25 dB, 2.5 to 4 GHz
	≥ 20 dB, 4 to 6 GHz
Insertion loss	≤ 0.05 dB, DC to 6 GHz
Insulation resistance	≥ 5 x10 ³ MΩ
Center contact resistance	≤ 1 mΩ
Outer contact resistance	≤ 0.25 mΩ
Working voltage	500 V rms
Power handling (at 20 °C, sea level, VSWR 1.0)	1000 W @ 1 GHz
	700 W @ 2 GHz
RF-leakage	≥ 128 dB up to 1 GHz

- Limitations are possible due to the used cable type -

Mechanical data

Mating cycles	min. 500
Coupling nut retention	≥ 450 N
Center contact captivation: axial	≥ 28 N
Coupling test torque	max. 1.7 Nm
Recommended torque	0.7 Nm to 1.1 Nm

Environmental data

Temperature range	-55°C to +155°C
Thermal shock	MIL-STD-202, Meth. 107, Cond. B
Corrosion	MIL-STD-202, Meth. 101, Cond. B
Vibration	MIL-STD-202, Meth. 204, Cond. B
Shock	MIL-STD-202, Meth. 213, Cond. I
Moisture resistance	MIL-STD-202, Meth. 106
RoHS	compliant

Tooling

Crimping tool	11W150-000
Crimp insert	11W150-215

Suitable cables

RG 214 /U

Weight

Weight	31.0 g/pc
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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
Inge Mühlauer	08.06.04	J_Gramsamer	17.04.15	d00	15-0397	J_Krautenb.	17.04.15

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