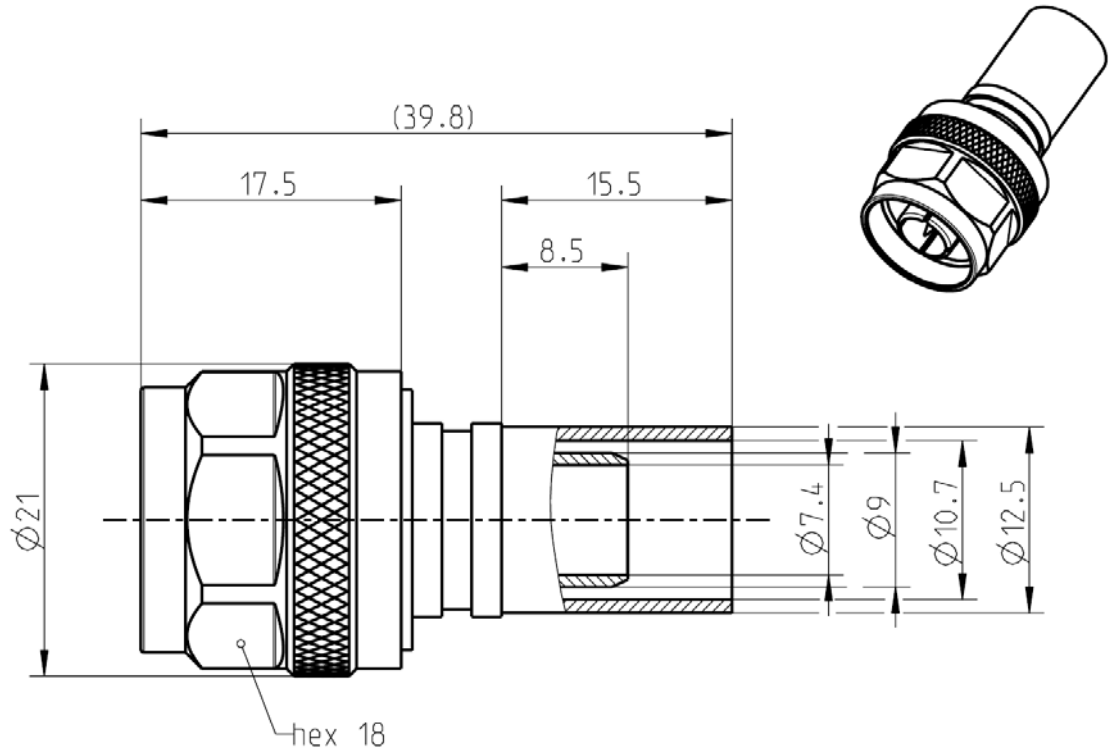
TECHNICAL DATA SHEET	Rosenberger
N 50 Ω STRAIGHT PLUG	**53S101-115N5**



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 O3

Material and plating

Connector parts	**Material**	**Plating**
Center contact	Brass	AuroDur®, gold plated
Outer contact	Brass	Flash white bronze over silver(e.g. Optargen®)
Body	Brass	White bronze(e.g. Optalloy®)
Dielectric	PTFE	
Gasket	Silicone	
Crimping ferrule	Copper	Flash white bronze over silver(e.g. Optargen®)

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

TECHNICAL DATA SHEET	Rosenberger
N 50 Ω STRAIGHT PLUG	**53S101-115N5**

Electrical data

Impedance	50 Ω
Frequency	DC to 11 GHz
Return loss	≥ 30 dB, DC to 2.5 GHz
	≥ 28 dB, 2.5 to 4 GHz
	≥ 20 dB, 4 to 8 GHz
Insertion loss	≤ 0.05 dB, DC to 8 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 213 /U

Weight

Weight	33.4 g/pc

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
Inge Mühlauer	08.06.04	J_Gramsamer	17.04.15

Rev.	Engineering change number	Name	Date
d00	15-0397	J_Krautenb.	17.04.15

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