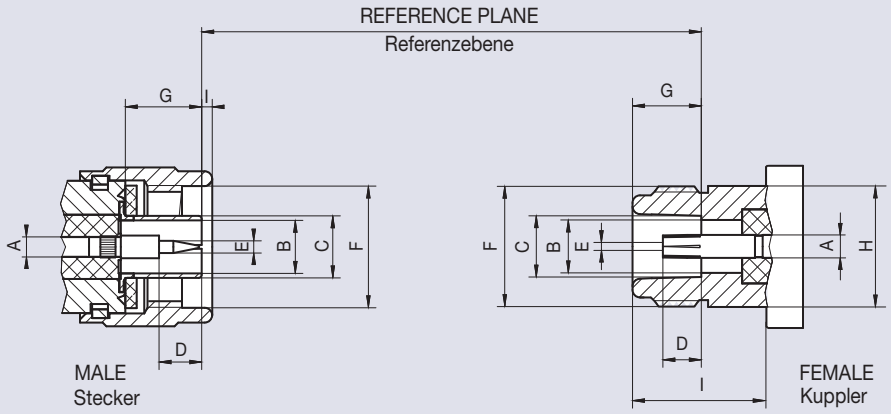
Interface Dimensions N 50 Ω

Code 53



Dimensions in mm

	Male | Stecker		**Female** | Kuppler	
	min.	max.	min.	max.
A	Ø 3.04 nom.		Ø 3.04 nom.	
B	Ø 7.00 nom.		Ø 7.00 nom.	
C	–	Ø 8.027	Ø 8.03	Ø 8.13
D	5.28	–	4.75	5.26
E	Ø 1.60	Ø 1.676	[1]	
F	5/8-24 UNEF-2B		5/8-24 UNEF-2A	
G	9.25	–	9.15	9.19
H	–	–	–	Ø 15.93
I	0.41	1.52	10.72	–

[1] Resilient, dimension to meet electrical and mechanical requirements

N 50 Ω and RPC-N 50 Ω connectors are fully intermateable.

N 50 Ω und RPC-N 50 Ω-Steckverbinder sind steckkompatibel.

Features

- Interface according to IEC 61169-16, MIL-PRF-39012, CECC 22210
- Frequency range DC to 11 GHz
- Return loss (cable connector straight) ≥ 26 dB (typ.)
- Impedance 50 Ω
- Screw-on coupling
- N and RPC-N -50 Ω connectors are intermateable

Product Range

- Cable connectors
- Panel connectors
- Power Splitters
- Surge Arresters
- Adaptors
- Terminations
- Accessories

Technical Data N 50 Ω

Code 53

Applicable standards | Anwendbare Normen	
Interface according to | Interface gemäß	IEC 61169-16, MIL-PRF-39012, CECC 22210
Electrical data | Elektrische Daten	
Impedance | Wellenwiderstand	50 Ω
Frequency range | Frequenzbereich	DC to 11 GHz
Return loss (cable connector straight) | Rückflussdämpfung (Kabelsteckverbinder gerade)	≥ 26 dB (typ.)
Insertion loss | Dämpfung	≤ 0.1 x $\sqrt{f\ (GHz)}$ dB
Insulation resistance | Isolationswiderstand	≥ 5 GΩ
Center contact resistance | Übergangswiderstand Innenleiter	≤ 1 mΩ
Outer contact resistance | Übergangswiderstand Außenleiter	≤ 0.25 mΩ
Working voltage | Betriebsspannung	500 V rms
Power handling | Leistungsbelastbarkeit	1000 W @ 1 GHz 700 W @ 2 GHz
RF leakage - Interface | Schirmdämpfung	≥ 128 dB @ DC to 1 GHz
Intermodulation 3rd order | Intermodulation 3. Ordnung	≤ -155 dBc (2 x 43 dBm)
Mechanical data | Mechanische Daten	
Mating cycles | Steckzyklen	≥ 500
Coupling nut retention | Überwurfmutter Haltekraft	≥ 450 N
Center contact captivation | Innenleiter Haltekraft	axial: ≥ 28 N radial: ≥ 3 Ncm
Coupling test torque | Prüfdrehmoment	≤ 1.7 Nm
Coupling torque recommended | Drehmoment empfohlen	0.7 Nm to 1.1 Nm
Environmental data | Umweltdaten	
Temperature range | Temperaturbereich	-65 °C to +165 °C
Thermal shock | Temperaturzyklen	MIL-STD-202, Method 107, Condition B
Climatic category | Klimakategorie	IEC 60068-2-1 65/165/21
Degree of protection (mated pair) | Schutzgrad (gekuppeltes Paar)	IEC 60529, IP 68
Corrosion resistance | Korrosionsbeständigkeit	MIL-STD-202, Method 101, Condition B
Moisture resistance | Feuchtigkeitsbeständigkeit	MIL-STD-202, Method 106
Vibration | Vibration	MIL-STD-202, Method 204, Condition B
Shock | Schock	MIL-STD-202, Method 213, Condition I
Max. soldering temperature (PCB connectors) | Max. Löttemperatur (Leiterplattensteckverbinder)	IEC 61760-1, +260 °C for 10 sec.
Materials | Materialien	
Spring loaded contact parts | Federnde Kontaktteile	CuBe, Au plating
Center contact | Innenleiter	CuZn, Au / Ag plating
Outer contact | Außenleiter	CuZn, Ag / white bronze plating
Crimping ferrule | Crimphülse	Cu, white bronze plating
Dielectric | Dielektrikum	PTFE
Gasket | Dichtung	Rubber

Rosenberger connectors generally fulfill the indicated technical data. Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and workmanship. Data sheets for particular products can be downloaded on our website or can be provided on request from your Rosenberger sales partner.

Rosenberger-Steckverbinder erfüllen grundsätzlich die hier angegebenen technischen Daten. Je nach Anwendung, Bauart, Kabeltyp, Montageart und -ausführung können einzelne Werte der Steckverbinder hiervon abweichen. Datenblätter zu einzelnen Produkten können Sie von unserer Website herunterladen oder auf Anfrage von Ihrem Rosenberger-Ansprechpartner erhalten.