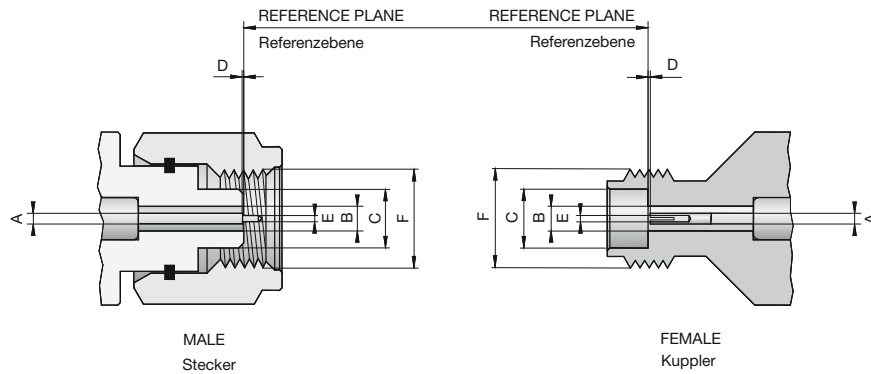


Interface Dimensions Series RPC-1.00 (code 01)



Series RPC-1.00

dimension	Male <i>Stecker</i>		Female <i>Kuppler</i>	
	min.	max.	min.	max.
A	0.4315	0.4365	0.4315	0.4365
B	0.995	1.005	0.995	1.005
C	2.348	2.368	2.380	2.400
D	0.000	0.050	0.000	0.050
E	0.245	0.255	0.270	0.290
F	M4 x 0.7 - 6H		M4 x 0.7 - 6g	

Technical Data Series RPC-1.00

Applicable standards Anwendbare Standards	
Interface according to <i>Interface gemäß</i>	IEC 61169-31
Electrical data Elektrische Daten	
Impedance <i>Wellenwiderstand</i>	50 Ω
Frequency range <i>Frequenzbereich</i>	DC to 110 GHz
Return loss (cable connector straight) <i>Rückflußdämpfung (Kabelsteckverbinder, gerade)</i>	≥ 23 dB, DC to 50 GHz ≥ 19 dB, 50 GHz to 75 GHz ≥ 14 dB, 75 GHz to 110 GHz
Insertion loss (cable connector straight) <i>Dämpfung (Kabelsteckverbinder, gerade)</i>	≤ 0.05 dB x f [GHz]
Insulation resistance <i>Isolationswiderstand</i>	≥ 5 G Ω
Center contact resistance <i>Übergangswiderstand Innenleiter</i>	≤ 4.0 m Ω
Outer contact resistance <i>Übergangswiderstand Außenleiter</i>	≤ 1.0 m Ω
Test voltage <i>Prüfspannung</i>	500 V rms
Working voltage <i>Betriebsspannung</i>	150 V rms
RF-leakage <i>Schirmdämpfung</i>	≥ 90 dB up to 1 GHz
Mechanical data Mechanische Daten	
Mating cycles <i>Steckzyklen</i>	≥ 500
Center contact captivation <i>Innenleiter Haltekraft</i>	≥ 10 N
Coupling torque recommended <i>Anzugsdrehmoment empfohlen</i>	0.3 Nm to 0.41 Nm
Coupling test torque <i>Prüfdrehmoment</i>	0.70 Nm
Environmental data Umweltdaten	
Temperature range <i>Temperaturbereich</i>	-40 °C to +85 °C
Thermal shock <i>Temperaturzyklen</i>	IEC 61169-1, Subclause 9.4.4
Corrosion resistance <i>Korrosionsbeständigkeit</i>	IEC 61169-1, Subclause 9.4.6
Vibration <i>Vibration</i>	IEC 61169-1, Subclause 9.3.3
Shock <i>Schock</i>	IEC 61169-1, Subclause 9.3.14
Moisture resistance <i>Feuchtigkeitsbeständigkeit</i>	IEC 61169-1, Subclause 9.4.3
Max. soldering temperature <i>Maximale Löttemperatur</i>	IEC 61760-1, +260 °C for 10 sec.
Materials Materialien	
Center contact <i>Innenleiter</i>	Beryllium copper, gold-plated
Outer contact <i>Außenleiter</i>	Beryllium copper, gold-plated
Dielectric <i>Dielektrikum</i>	PEEK

Rosenberger-connectors fulfill in principle the indicated data of the Technical Data. Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution. Specific data sheets for particular products can be provided on request from your Rosenberger sales partner.

Rosenberger-Steckverbinder erfüllen grundsätzlich die in den Technischen Daten angegebenen Daten. Je nach Anwendung, Bauart, Kabeltyp, Montageart und -ausführung können einzelne Werte von Steckverbindern hiervon abweichen. Spezifische Datenblätter zu einzelnen Produkten erhalten Sie auf Anfrage von Ihrem Rosenberger-Ansprechpartner.

Cable Connectors Semi-Rigid Cable

Straight Plug, solder

Semi-Rigid

Ordering Number	Return Loss	Cable Group	Assembly Instruction	
01 S 101-270 E3	≥ 23 dB @ DC to 50 GHz ≥ 19 dB @ 50 to 75 GHz ≥ 14 dB @ 75 to 110 GHz	70	01 A1	

Straight Jack, solder

Semi-Rigid

Ordering Number	Return Loss	Cable Group	Assembly Instruction	
01 K 101-270 E3	≥ 23 dB @ DC to 50 GHz ≥ 19 dB @ 50 to 75 GHz ≥ 14 dB @ 75 to 110 GHz	70	01 A1	

Adaptors

Adaptor (In Series)

Ordering Number	Version	Remarks	Return Loss	
01 S 101-S20 D3	straight	RPC-1.00 male - male, calibration adaptor, phase matched	≥ 20 dB @ DC to 20 GHz ≥ 17 dB @ 20 GHz to 50 GHz ≥ 15 dB @ 50 GHz to 75 GHz ≥ 12 dB @ 75 GHz to 110 GHz	
01 S 101-K20 D3	straight	RPC-1.00 male - female, calibration adaptor, phase matched	≥ 20 dB @ DC to 20 GHz ≥ 17 dB @ 20 GHz to 50 GHz ≥ 15 dB @ 50 GHz to 75 GHz ≥ 12 dB @ 75 GHz to 110 GHz	
01 S 101-K01 D3	straight	RPC-1.00 male - female, calibration adaptor, with retractable male nut	≥ 20 dB @ DC to 20 GHz ≥ 17 dB @ 20 GHz to 50 GHz ≥ 15 dB @ 50 GHz to 75 GHz ≥ 12 dB @ 75 GHz to 110 GHz	
01 S 101-K02 D3	straight	RPC-1.00 male - female, calibration adaptor, with retractable female nut	≥ 20 dB @ DC to 20 GHz ≥ 17 dB @ 20 GHz to 50 GHz ≥ 15 dB @ 50 GHz to 75 GHz ≥ 12 dB @ 75 GHz to 110 GHz	
01 K 101-K20 D3	straight	RPC-1.00 female - female, calibration adaptor, phase matched	≥ 20 dB @ DC to 20 GHz ≥ 17 dB @ 20 GHz to 50 GHz ≥ 15 dB @ 50 GHz to 75 GHz ≥ 12 dB @ 75 GHz to 110 GHz	

Adaptor (Inter Series)

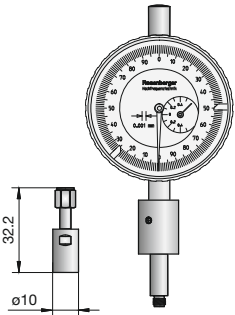
Ordering Number	Version	Remarks	Return Loss	
01 S 108-S00 D3	straight	RPC-1.00 male - RPC-1.85 male	≥ 19 dB @ DC to 20 GHz ≥ 17 dB @ 20 to 50 GHz ≥ 14 dB @ 50 to 65 GHz	
01 S 108-K00 D3	straight	RPC-1.00 male - RPC-1.85 female	≥ 19 dB @ DC to 20 GHz ≥ 17 dB @ 20 to 50 GHz ≥ 14 dB @ 50 to 65 GHz	
01 K 108-S00 D3	straight	RPC-1.00 female - RPC-1.85 male	≥ 19 dB @ DC to 20 GHz ≥ 17 dB @ 20 to 50 GHz ≥ 14 dB @ 50 to 65 GHz	
01 K 108-K00 D3	straight	RPC-1.00 female - RPC-1.85 female	≥ 19 dB @ DC to 20 GHz ≥ 17 dB @ 20 to 50 GHz ≥ 14 dB @ 50 to 65 GHz	

Tools

Torque Wrench

Ordering Number	Remarks	
01 W 021-000	flat 6 mm - 35 Ncm torque for RPC-1.00	

Gauge

Ordering Number	Remarks	
01 W 00S-000	compatible to male connectors for RPC-1.00 incl. gauge block	
01 W 00K-000	compatible to female connectors for RPC-1.00 incl. gauge block	