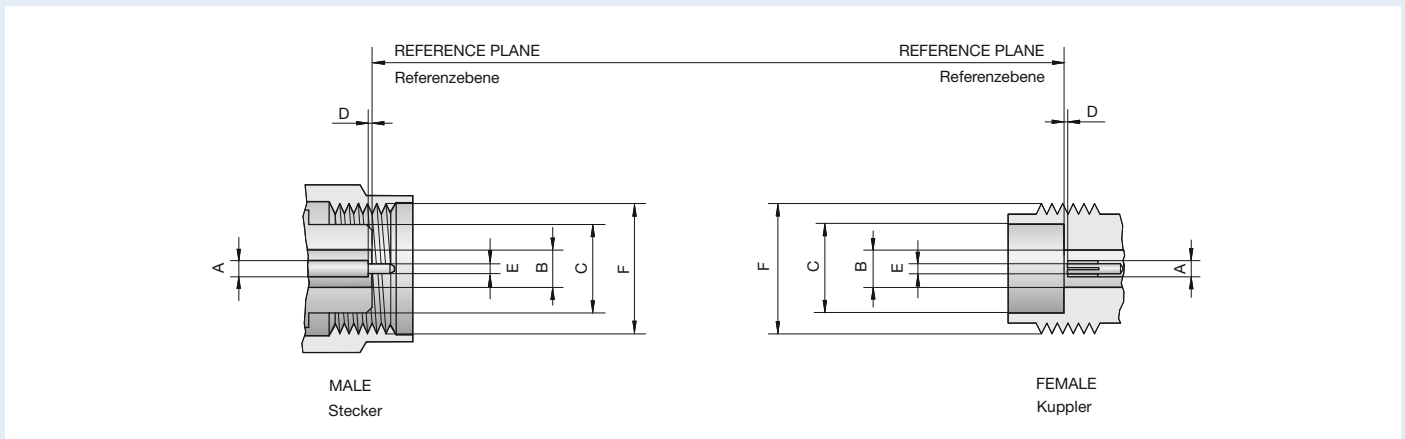


Interface Dimensions Series RPC-1.85 (code 08)



Series RPC-1.85

dimension	Male Stecker		Female Kuppler	
	min.	max.	min.	max.
A	0.799	0.809	0.799	0.809
B	1.84	1.86	1.84	1.86
C	4.725	4.750	4.770	4.795
D	0.00	0.05	0.00	0.05
E	0.505	0.52	0.54	0.56
F	M7 x 0.75 - 6H		M7 x 0.75 - 6g	

Technical Data Series RPC-1.85

Applicable standards Anwendbare Standards	
Interface according to <i>Interface gemäß</i>	IEC 61169-32
Mechanically compatible with <i>Mechanisch kompatibel mit</i>	RPC-2.40
Electrical data Elektrische Daten	
Impedance <i>Wellenwiderstand</i>	50 Ω
Frequency range <i>Frequenzbereich</i>	DC to 65 GHz
Return loss (cable connector straight) <i>Rückflußdämpfung (Kabelsteckverbinder, gerade)</i>	≥ 20 dB, DC to 65 GHz
Insertion loss (cable connector straight) <i>Dämpfung (Kabelsteckverbinder, gerade)</i>	≤ 0.05 dB x \sqrt{f} [GHz]
Insulation resistance <i>Isolationswiderstand</i>	≥ 5 GΩ
Center contact resistance <i>Übergangswiderstand Innenleiter</i>	≤ 4.0 mΩ
Outer contact resistance <i>Übergangswiderstand Außenleiter</i>	≤ 2.5 mΩ
Test voltage <i>Prüfspannung</i>	500 V rms
Working voltage <i>Betriebsspannung</i>	150 V rms
RF-leakage <i>Schirmdämpfung</i>	≥ 100 dB up to 1 GHz
Mechanical data Mechanische Daten	
Mating cycles <i>Steckzyklen</i>	≥ 500
Center contact captivation <i>Innenleiter Haltekraft</i>	≥ 20 N
Coupling torque recommended <i>Anzugsdrehmoment empfohlen</i>	0.80 Nm to 1.10 Nm
Coupling test torque <i>Prüfdrehmoment</i>	1.65 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>	Stainless steel, passivated
Dielectric <i>Dielektrikum</i>	PEEK

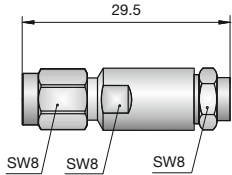
Rosenberger-connectors fulfill in principle the indicated data of the Technical Data. Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution. Specific data sheets for particular products can be provided on request from your Rosenberger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

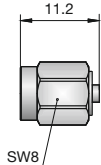
Straight Plug, solder

Semi-Rigid

Ordering Number	Return Loss	Cable Group	Assembly Instruction	
08 S 121-270 S3	≥ 20 dB @ DC to 65 GHz	70	02 A6	
08 S 121-271 S3	≥ 20 dB @ DC to 65 GHz	71	02 A3	
08 S 121-2W7 S3	≥ 20 dB @ DC to 65 GHz	W7	02 A3	

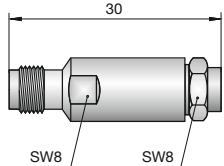
Straight Plug, solder, without pin, without dielectric

Semi-Rigid

Ordering Number	Return Loss	Cable Group	Assembly Instruction	
08 S 101-271 D	≥ 20 dB @ DC to 65 GHz	71	08 A1	

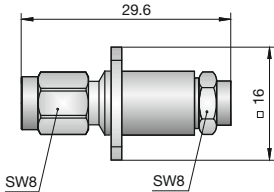
Straight Jack, solder

Semi-Rigid

Ordering Number	Return Loss	Cable Group	Assembly Instruction	
08 K 121-270 S3	≥ 20 dB @ DC to 65 GHz	70	02 A6	
08 K 121-271 S3	≥ 20 dB @ DC to 65 GHz	71	02 A3	
08 K 121-2W7 S3	≥ 20 dB @ DC to 65 GHz	W7	02 A3	

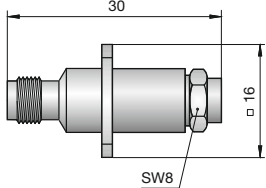
Panel Plug, 4-hole flange

Semi-Rigid

Ordering Number	Return Loss	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	
08 S 421-270 S3	≥ 20 dB @ DC to 65 GHz	70	02 A6	MB 71	
08 S 421-271 S3	≥ 20 dB @ DC to 65 GHz	71	02 A3	MB 71	
08 S 421-2W7 S3	≥ 20 dB @ DC to 65 GHz	W7	02 A3	MB 71	

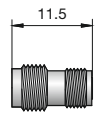
Panel Jack, 4-hole flange

Semi-Rigid

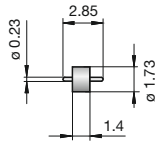
Ordering Number	Return Loss	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	
08 K 421-270 S3	≥ 20 dB @ DC to 65 GHz	70	02 A6	MB 71	
08 K 421-271 S3	≥ 20 dB @ DC to 65 GHz	71	02 A3	MB 71	
08 K 421-2W7 S3	≥ 20 dB @ DC to 65 GHz	W7	02 A3	MB 71	

Panel Connectors

Panel Jack

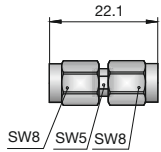
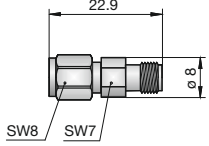
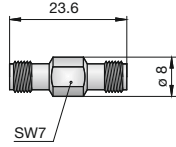
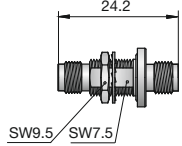
Ordering Number	Remarks	Return Loss	Packing Unit	
08 K 521-800 S3	without glass bead, for hermetic sealed glass bead pin 0,24 mm 08 Z 101-000	≥ 15 dB @ DC to 65 GHz	100	

Glass Bead

Ordering Number	Remarks	Return Loss	
08 Z 101-000	hermetic sealed	≥ 17 dB @ DC to 65 GHz	 extended scale

Adaptors

Adaptor (In Series)

Ordering Number	Version	Remarks	Return Loss	Panel Piercing / PCB Layout	
08 S 121-S00 S3	straight	RPC-1,85 male - male	≥ 17 dB @ DC to 65 GHz		
08 S 121-S20 S3	straight	RPC-1,85 male - male, calibration adaptor	≥ 28 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 65 GHz		
08 S 121-K00 S3	straight	RPC-1,85 male - female	≥ 17 dB @ DC to 65 GHz		
08 S 121-K20 S3	straight	RPC-1,85 male - female, calibration adaptor	≥ 28 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 65 GHz		
08 K 121-K00 S3	straight	RPC-1,85 female - female	≥ 17 dB @ DC to 65 GHz		
08 K 121-K20 S3	straight	RPC-1,85 female - female, calibration adaptor	≥ 28 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 65 GHz		
08 K 641-KH0 S3	straight	RPC-1.85 male - male, panel mount, round flange, hermetic sealed	≥ 12 dB @ DC to 65 GHz	MB 58	

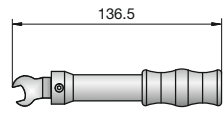
Adaptor (Inter Series)

Ordering Number	Version	Remarks	Return Loss	
08 S 118-S00 S3	straight	RPC-1.85 male - Mini-SMP male	≥ 30 dB @ DC to 12 GHz ≥ 18 dB @ 12 to 50 GHz ≥ 15 dB @ 50 to 65 GHz	
08 S 118-K00 S3	straight	RPC-1.85 male - Mini-SMP female	≥ 30 dB @ DC to 12 GHz ≥ 18 dB @ 12 to 50 GHz ≥ 15 dB @ 50 to 65 GHz	
08 K 118-S00 S3	straight	RPC-1.85 female - Mini-SMP male	≥ 30 dB @ DC to 12 GHz ≥ 18 dB @ 12 to 50 GHz ≥ 15 dB @ 50 to 65 GHz	
08 K 118-K00 S3	straight	RPC-1.85 female - Mini-SMP female	≥ 30 dB @ DC to 12 GHz ≥ 18 dB @ 12 to 50 GHz ≥ 15 dB @ 50 to 65 GHz	
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	

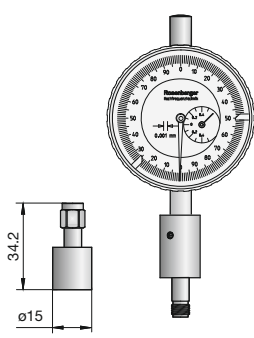
Ordering Number	Version	Remarks	Return Loss	
02 S 108-S00 S3	straight	RPC-2.92 male - RPC-1.85 male	≥ 19 dB @ DC to 40 GHz	
02 S 108-K00 S3	straight	RPC-2.92 male - RPC-1.85 female	≥ 19 dB @ DC to 40 GHz	
02 K 108-S00 S3	straight	RPC-2.92 female - RPC-1.85 male	≥ 19 dB @ DC to 40 GHz	
02 K 108-K00 S3	straight	RPC-2.92 female - RPC-1.85 female	≥ 19 dB @ DC to 40 GHz	

Tools

Torque Wrench

Ordering Number	Remarks	
03 W 021-000	flat 8 mm - 0.9 Nm torque for RPC-3.50 , RPC- 2.92, RPC-2.40, RPC-1.85	

Gauge

Ordering Number	Remarks	
08 W 00S-000	compatible to male connectors for RPC-2.40, RPC-1.85 incl. gauge block	
08 W 00K-000	compatible to female connectors for RPC-2.40, RPC-1.85 incl. gauge block	