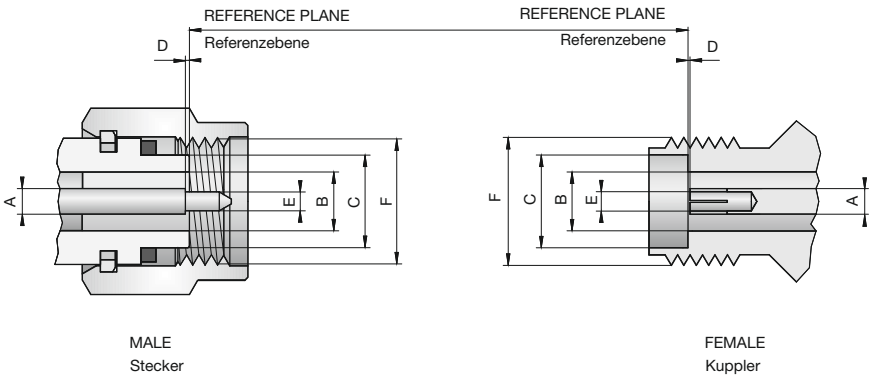
Interface Dimensions Series RPC-2.92 (code 02)



Series RPC-2.92

	Male | *Stecker*		**Female | *Kuppler***	
dimension	min.	max.	min.	max.
A	1.26	1.28	1.26	1.28
B	2.91	2.93	2.91	2.93
C	4.57	4.59	4.62	4.65
D	0.00	0.08	0.00	0.08
E	0.91	0.93	0.96	0.98
F	1/4-36UNS-2B		1/4-36UNS-2A	

Technical Data Series RPC-2.92

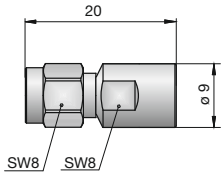
Applicable standards | *Anwendbare Standards*	
Mechanically compatible with | *Mechanisch kompatibel mit*	RPC-3.50 and SMA
Electrical data | *Elektrische Daten*	
Impedance | *Wellenwiderstand*	50 Ω
Frequency range | *Frequenzbereich*	DC to 40 GHz
Return loss (connector head) | *Rückflußdämpfung (Steckerkopf)*	≥ 23 dB, DC to 40 GHz
Insertion loss (connector head) | *Dämpfung (Steckerkopf)*	≤ 0.04 dB x |f[GHz]
Insulation resistance | *Isolationswiderstand*	≥ 5 GΩ
Center contact resistance | *Übergangswiderstand Innenleiter*	≤ 3.0 mΩ
Outer contact resistance | *Übergangswiderstand Außenleiter*	≤ 2.0 mΩ
Test voltage | *Prüfspannung*	750 V rms
Working voltage | *Betriebsspannung*	250 V rms
RF-leakage | *Schirmdämpfung*	≥ 100 dB up to 1 GHz
Mechanical data | *Mechanische Daten*	
Mating cycles | *Steckzyklen*	≥ 500
Center contact captivation | *Innenleiter Haltekraft*	≥ 22 N
Coupling torque recommended | *Anzugsdrehmoment empfohlen*	0.80 Nm to 1.10 Nm
Coupling test torque | *Prüfdrehmoment*	1.70 Nm
Environmental data | *Umweltdaten*	
Temperature range | *Temperaturbereich*	-40 °C to +85 °C
Thermal shock | *Temperaturzyklen*	MIL-STD 202, Method 107, Condition B
Corrosion resistance | *Korrosionsbeständigkeit*	MIL-STD 202, Method 101, Condition B
Vibration | *Vibration*	MIL-STD 202, Method 204, Condition D
Shock | *Schock*	MIL-STD 202, Method 213, Condition I
Moisture resistance | *Feuchtigkeitsbeständigkeit*	MIL-STD 202, Method 106
Max. soldering temperature | *Maximale Löttemperatur*	IEC 61760-1, +260 °C for 10 sec.
Materials | *Materialien*	
Center contact | *Innenleiter*	Beryllium copper, gold-plated
Outer contact | *Außenleiter*	Stainless steel, passivated plating
Dielectric | *Dielektrikum*	PS, PEEK
Gasket | *Dichtung*	Silicone

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.

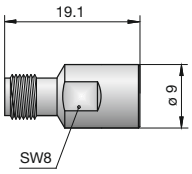
Rosenberger-Steckverbinder erfüllen grundsätzlich die in den Technischen Daten angegebenen Daten. Je nach Anwendung, Bauart, Kabeltyp, Montageart und -ausführung können einzelne Werte von Steckverbindern hiervon abweichen. Spezifische Datenblätter zu einzelnen Produkten erhalten Sie auf Anfrage von Ihrem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

Connector Heads

Straight Plug

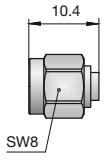
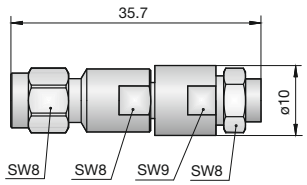
Ordering Number	Remarks	Return Loss	
02 S 121-000 S3	with bead	≥ 23 dB @ DC to 40 GHz	

Straight Jack

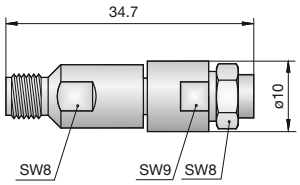
Ordering Number	Remarks	Return Loss	
02 K 121-000 S3	with bead	≥ 23 dB @ DC to 40 GHz	

Cable Connectors Semi-Rigid Cable

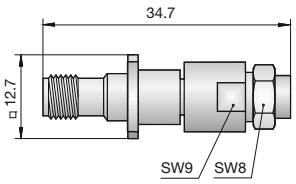
Straight Plug, solder — Semi-Rigid

Ordering Number	Return Loss	Cable Group	Assembly Instruction	
02 S 141-271 E4	≥ 30 dB @ DC to 4 GHz ≥ 22 dB @ 4 GHz to 32 GHz ≥ 20 dB @ 32 GHz to 40 GHz	71	02 A5	
02 S 141-2W9 E4	≥ 30 dB @ DC to 4 GHz ≥ 22 dB @ 4 GHz to 32 GHz ≥ 20 dB @ 32 GHz to 40 GHz	W9	02 A8	
02 S 121-271 S3	≥ 23 dB @ DC to 40 GHz	71	02 A3	

Straight Jack, solder — Semi-Rigid

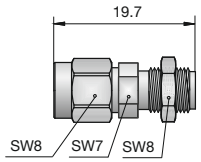
Ordering Number	Return Loss	Cable Group	Assembly Instruction	
02 K 121-271 S3	≥ 23 dB @ DC to 40 GHz	71	02 A3	

Panel Jack, 4-hole flange — Semi-Rigid

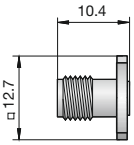
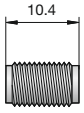
Ordering Number	Return Loss	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	
02 K 421-271 S3	≥ 23 dB @ DC to 40 GHz	71	02 A3	MB 55	

Panel Connectors

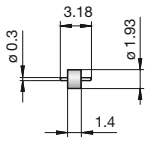
Panel Plug

Ordering Number	Remarks	Return Loss	
02 S 521-800 S3	without glass bead, for hermetic sealed glass bead pin 0.3 mm 02 Z 101-000	≥ 19 dB @ DC to 40 GHz	

Panel Jack

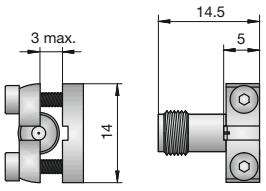
Ordering Number	Remarks	Return Loss	Panel Piercing / PCB Layout	Packing Unit	
02 K 421-800 S3	without glass bead, for hermetic sealed glass bead pin 0.3 mm 02 Z 101-000	≥ 23 dB @ DC to 34 GHz ≥ 19 dB @ 34 to 40 GHz	MB 55	100 blister	
02 K 526-800 S3	without glass bead, for hermetic sealed glass bead pin 0.3 mm 02 Z 101-000	≥ 23 dB @ DC to 34 GHz ≥ 19 dB @ 34 to 40 GHz		100 blister	

Glass Bead

Ordering Number	Remarks	Return Loss	
02 Z 101-000	hermetic sealed	≥ 19 dB @ DC to 40 GHz	 extended scale

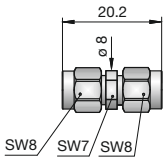
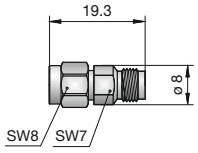
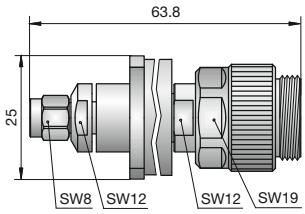
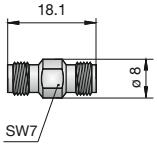
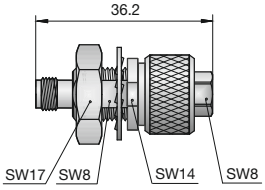
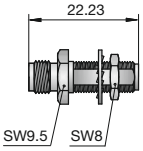
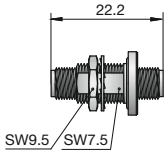
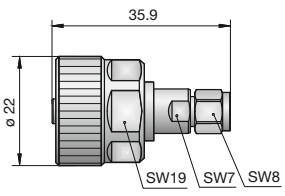
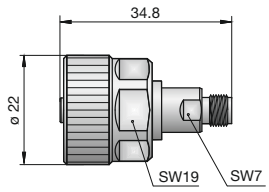
PCB Connectors SMD

Right Angle Panel Jack, edge mount SMD

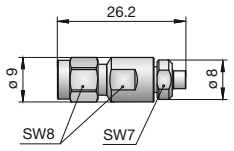
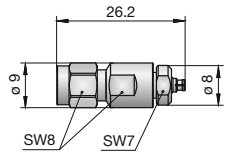
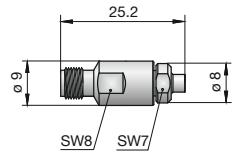
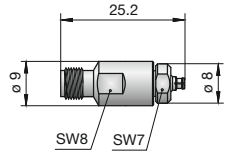
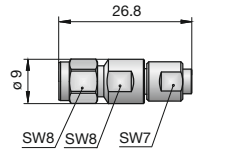
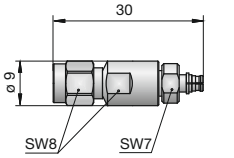
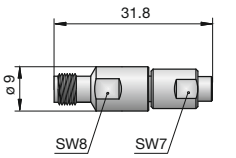
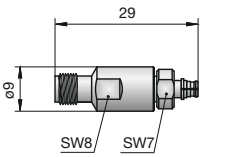
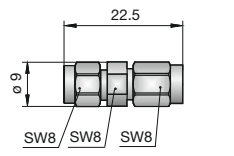
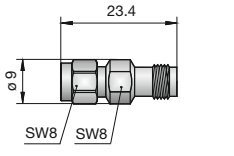
Ordering Number	Remarks	Return Loss	Panel Piercing / PCB Layout	
02 K 243-40M E3	for various PCB´s 0-3 mm	≥ 14 dB @ DC to 40 GHz	MB 208	

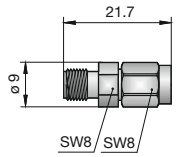
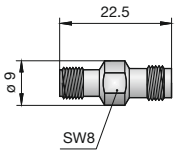
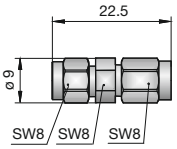
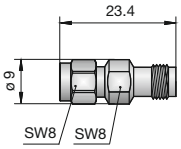
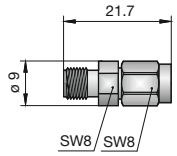
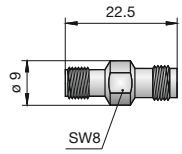
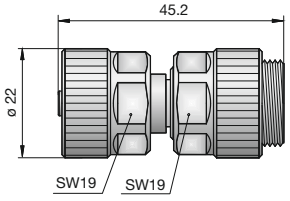
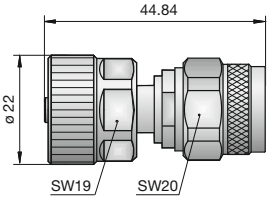
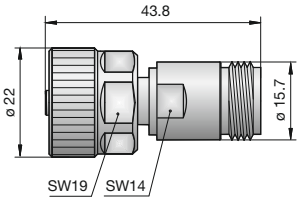
Adaptors

Adaptor (In Series)

Ordering Number	Version	Remarks	Return Loss	Panel Piercing / PCB Layout	
02 S 121-S00 S3	straight	RPC-2.92 male - male	≥ 21 dB @ DC to 40 GHz		
02 S 121-S20 S3	straight	RPC-2.92 male - male, calibration adaptor	≥ 32 dB @ DC to 4 GHz ≥ 25 dB @ 4 GHz to 40 GHz		
02 S 121-K00 S3	straight	RPC-2.92 male - female	≥ 21 dB @ DC to 40 GHz		
02 S 121-K20 S3	straight	RPC-2.92 male - female, calibration adaptor	≥ 32 dB @ DC to 4 GHz, ≥ 25 dB @ 4 to 40 GHz		
02 S 422-S00 S3	straight	RPC-2.92 male-male, ruggedized, 4-hole flange	≥ 23 dB @ DC to 18 GHz ≥ 17 dB @ 18 GHz to 40 GHz		
02 K 121-K00 S3	straight	RPC-2.92 female - female	≥ 21 dB @ DC to 40 GHz		
02 K 121-K20 S3	straight	RPC-2.92 female - female, calibration adaptor	≥ 32 dB @ DC to 4 GHz ≥ 25 dB @ 4 GHz to 40 GHz		
02 K 521-S00 S3	straight	RPC-2.92 female - male, round flange	≥ 19 dB @ DC to 40 GHz	MB 107	
02 K 621-K00 S3	straight	RPC-2.92 female - female, hexagonal flange	≥ 21 dB @ DC to 40 GHz	MB 56	
02 K 641-KH0 S3	straight	RPC-2.92 female - female, round flange, hermetic sealed	≥ 15.5 dB dB @ DC to 40 GHz	MB 58	
02 KR 121-S00 S3	straight	RPC-2.92 female, ruggedized - male	≥ 21 dB @ DC to 40 GHz		
02 KR 121-K00 S3	straight	RPC-2.92 female, ruggedized - female	≥ 21 dB @ DC to 40 GHz		

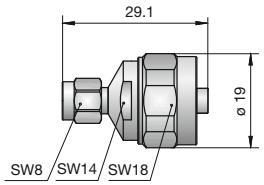
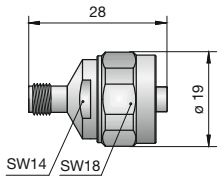
Adaptor (Inter Series)

Ordering Number	Version	Remarks	Return Loss	
02 S 118-S00 S3	straight	RPC-2.92 male - Mini-SMP male	≥ 30 dB @ DC to 12 GHz ≥ 26 dB @ 12 to 20 GHz ≥ 18 dB @ 20 to 40 GHz	
02 S 118-K00 S3	straight	RPC-2.92 male - Mini-SMP female	≥ 30 dB @ DC to 12 GHz ≥ 26 dB @ 12 to 20 GHz ≥ 18 dB @ 20 to 40 GHz	
02 K 118-S00 S3	straight	RPC-2.92 female - Mini-SMP male	≥ 30 dB @ DC to 12 GHz ≥ 26 dB @ 12 to 20 GHz ≥ 18 dB @ 20 to 40 GHz	
02 K 118-K00 S3	straight	RPC-2.92 female - Mini-SMP female	≥ 30 dB @ DC to 12 GHz ≥ 26 dB @ 12 to 20 GHz ≥ 18 dB @ 20 to 40 GHz	
02 S 119-S00 E3	straight	RPC-2.92 male - SMP male	≥ 32 dB @ DC to 12 GHz ≥ 26 dB @ 12 to 26.5 GHz ≥ 21 dB @ 26.5 to 40 GHz	
02 S 119-K00 E3	straight	RPC-2.92 male - SMP female	≥ 32 dB @ DC to 12 GHz ≥ 26 dB @ 12 to 26.5 GHz ≥ 21 dB @ 26.5 to 40 GHz	
02 K 119-S00 E3	straight	RPC-2.92 female - SMP male	≥ 32 dB @ DC to 12 GHz ≥ 26 dB @ 12 to 26.5 GHz ≥ 21 dB @ 26.5 to 40 GHz	
02 K 119-K00 E3	straight	RPC-2.92 female - SMP female	≥ 32 dB @ DC to 12 GHz ≥ 26 dB @ 12 to 26.5 GHz ≥ 21 dB @ 26.5 to 40 GHz	
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	

Ordering Number	Version	Remarks	Return Loss	
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	
02 S 109-S00 S3	straight	RPC-2.92 male - RPC-2.40 male	≥ 19 dB @ DC to 40 GHz	
02 S 109-K00 S3	straight	RPC-2.92 male - RPC-2.40 female	≥ 19 dB @ DC to 40 GHz	
02 K 109-S00 S3	straight	RPC-2.92 female - RPC-2.40 male	≥ 19 dB @ DC to 40 GHz	
02 K 109-K00 S3	straight	RPC-2.92 female - RPC-2.40 female	≥ 19 dB @ DC to 40 GHz	
02 KR 107-P00 S3	straight	RPC-2.92 female, ruggedized - RPC-7	≥ 28 dB @ DC to 18 GHz	
02 KR 105-S00 S3	straight	RPC-2.92 female, ruggedized - RPC-N 50 Ω male	≥ 26 dB @ DC to 18 GHz	
02 KR 105-K00 S3	straight	RPC-2.92 female, ruggedized - RPC-N 50 Ω female	≥ 26 dB @ DC to 18 GHz	

Interchangeable Port Connector System

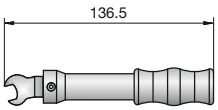
RPC 2.92 - RPC-SL 40 GHz

Ordering Number	Version	Remarks	Return Loss	
02 S 1P4-S00 S3	straight	RPC-2.92 male - RPC-SL 40 GHz male	≥ 21 dB @ DC to 26.5 GHz ≥ 19 dB @ 26.5 to 40 GHz	
02 K 1P4-S00 S3	straight	RPC-2.92 female - RPC-SL 40 GHz male	≥ 21 dB @ DC to 26.5 GHz ≥ 19 dB @ 26.5 to 40 GHz	

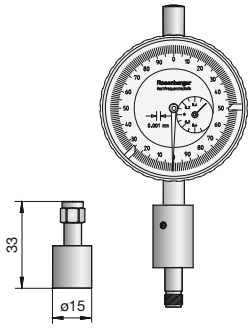
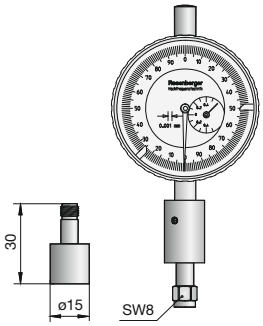
see also chapter interchangeable port connector system

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	
03 W 00S-000	compatible to male connectors for RPC-3.50, RPC-2.92 incl. gauge block	
03 W 00K-000	compatible to female connectors for RPC-3.50, RPC-2.92 incl. gauge block	

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