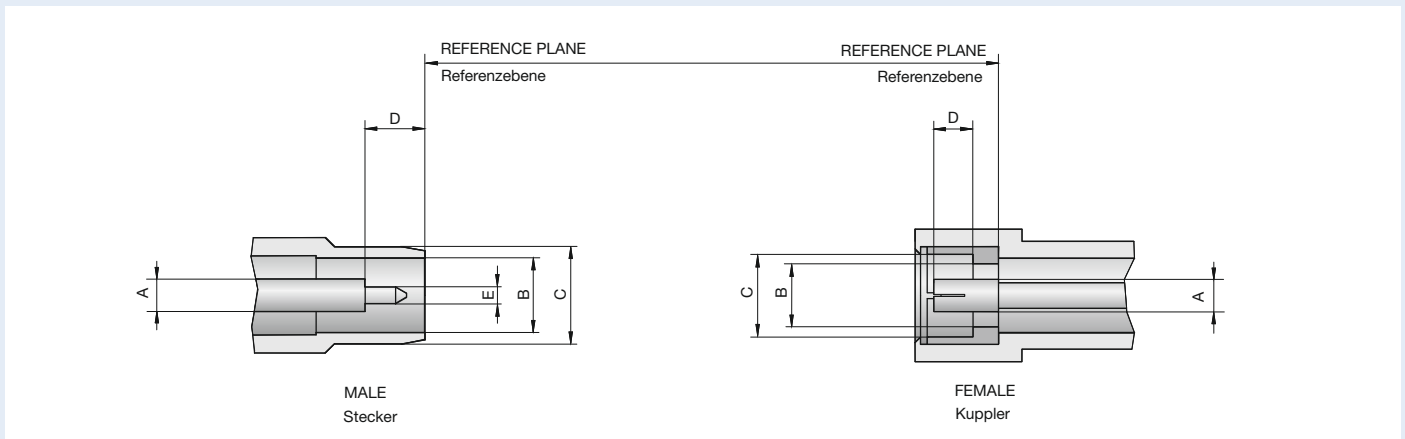


**Interface Dimensions Series RPC-SP (code 10)**



**Series RPC-SP**

dimension	Male   Stecker		Female   Kuppler	
	min.	max.	min.	max.
A	1.77	1.79	1.77	1.79
B	4.09	4.11	4.07	
C	5.30	5.35	5.50	
D	3.25	3.35	3.12	3.22
E	0.90	0.93	1.77	1.79

## Technical Data Series RPC-SP

<b>Applicable standards   Anwendbare Standards</b>	
Interface according to   <i>Interface gemäß</i>	IEC 61169-33; MIL-STD 348A
Mechanically compatible with   <i>Mechanisch kompatibel mit</i>	OSP and BMA
<b>Electrical data   Elektrische Daten</b>	
Impedance   <i>Wellenwiderstand</i>	50 $\Omega$
Frequency range   <i>Frequenzbereich</i>	DC to 22 GHz
Return loss (cable connector)   <i>Rückflußdämpfung (Kabelsteckverbinder)</i>	$\geq 26$ dB, DC to 22 GHz
Insertion loss (cable connector)   <i>Dämpfung (Kabelsteckverbinder)</i>	$\leq 0.03$ dB x $f$ [GHz]
Insulation resistance   <i>Isolationswiderstand</i>	$\geq 5$ G $\Omega$
Center contact resistance   <i>Übergangswiderstand Innenleiter</i>	$\leq 2.0$ m $\Omega$
Outer contact resistance   <i>Übergangswiderstand Außenleiter</i>	$\leq 2.0$ m $\Omega$
Test voltage   <i>Prüfspannung</i>	1000 V rms
Working voltage   <i>Betriebsspannung</i>	400 V rms
RF-leakage   <i>Schirmdämpfung</i>	$\geq 85$ dB up to 1 GHz
<b>Mechanical data   Mechanische Daten</b>	
Mating cycles   <i>Steckzyklen</i>	$\geq 1000$
Center contact captivation   <i>Innenleiter Haltekraft</i>	$\geq 27$ N
Engagement force   <i>Einsteckkraft</i>	$\leq 13.5$ N
Disengagement force   <i>Ausziehkraft</i>	$\geq 2.0$ N
<b>Environmental data   Umweltdaten</b>	
Temperature range   <i>Temperaturbereich</i>	-40 °C to +85 °C
Thermal shock   <i>Temperaturzyklen</i>	MIL-STD 202, Method 107, Condition B
Corrosion resistance   <i>Korrosionsbeständigkeit</i>	MIL-STD 202, Method 101, Condition B
Vibration   <i>Vibration</i>	MIL-STD 202, Method 204, Condition D
Shock   <i>Schock</i>	MIL-STD 202, Method 213, Condition I
Moisture resistance   <i>Feuchtigkeitsbeständigkeit</i>	MIL-STD 202, Method 106
Max. soldering temperature   <i>Maximale Löttemperatur</i>	IEC 61760-1, +260 °C for 10 sec.
<b>Materials   Materialien</b>	
Center contact   <i>Innenleiter</i>	Beryllium copper, gold-plated
Outer contact   <i>Außenleiter</i>	Stainless steel, passivated
Dielectric   <i>Dielektrikum</i>	PS, PTFE

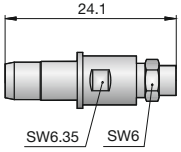
Rosenberger-connectors fulfill in principle the indicated data of the Technical Data. Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution. Specific data sheets for particular products can be provided on request from your Rosenberger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

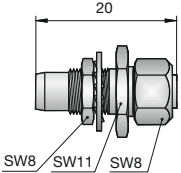
Straight Plug, solder

Semi-Rigid

Ordering Number	Remarks	Return Loss	Cable Group	Assembly Instruction	
10 S 125-271 S3	applicable to MIL C 38 999 shell	$\geq 21$ dB @ DC to 22 GHz	71	02 A3	
10 S 125-272 S3	applicable to MIL C 38 999 shell	$\geq 21$ dB @ DC to 22 GHz	72	03 A	

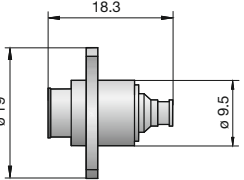
Panel Plug, hexagonal flange

Semi-Rigid

Ordering Number	Return Loss	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	
10 S 641-271 E3	$\geq 23$ dB @ DC to 22 GHz	71	02 A3	MB 92	
10 S 641-272 E3	$\geq 23$ dB @ DC to 22 GHz	72	03 A	MB 92	

Panel Jack, 2-hole flange

Semi-Rigid

Ordering Number	Return Loss	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	
10 K 762-271 N3	$\geq 21$ dB @ DC to 22 GHz	71	10 E	MB 100	
10 K 762-272 N3	$\geq 21$ dB @ DC to 22 GHz	72	10 E	MB 100	

## Panel Connectors Coaxial End

Panel Jack, 4-hole flange

Coaxial End

Ordering Number	Return Loss	Panel Piercing / PCB Layout	
10 S 441-500 N3	$\geq 21$ dB @ DC to 22 GHz	MB 55a	

## PCB Connectors SMD

Straight Plug

SMD

Ordering Number	Remarks	Return Loss	Panel Piercing / PCB Layout	
10 S 101-40M T3	tape & reel, VG 07.50000	$\geq 25$ dB @ DC to 18 GHz $\geq 21$ dB @ 18 GHz to 22 GHz	on request	

## PCB Connectors Solder Pin

Straight Plug

Solder Pin

Ordering Number	Remarks	Return Loss	Panel Piercing / PCB Layout	
10 S 142-400 E3	blister	$\geq 30$ dB @ DC to 3 GHz $\geq 28$ dB @ 3 to 6 GHz	on request	

## Adaptors

Adaptor (Inter Series)

Ordering Number	Version	Remarks	Return Loss	
03 S 110-S01 S3	straight	RPC-3.50 male - RPC-SP male	$\geq 23$ dB @ DC to 22 GHz	
03 S 110-S21 S3	straight	RPC-3.50 male - RPC-SP male, calibration adaptor	$\geq 34$ dB @ DC to 4 GHz $\geq 26$ dB @ 4 GHz to 22 GHz	
03 S 110-K01 S3	straight	RPC-3.50 male - RPC-SP female	$\geq 23$ dB @ DC to 22 GHz	
03 S 110-K21 S3	straight	RPC-3.50 male - RPC-SP female, calibration adaptor	$\geq 34$ dB @ DC to 4 GHz $\geq 26$ dB @ 4 GHz to 22 GHz	
03 K 110-S01 S3	straight	RPC-3.50 female - RPC-SP male	$\geq 23$ dB @ DC to 22 GHz	
03 K 110-S21 S3	straight	RPC-3.50 female - RPC-SP male, calibration adaptor	$\geq 34$ dB @ DC to 4 GHz $\geq 26$ dB @ 4 GHz to 22 GHz	
03 K 110-K01 S3	straight	RPC-3.50 female - RPC-SP female	$\geq 23$ dB @ DC to 22 GHz	
03 K 110-K21 S3	straight	RPC-3.50 female - RPC-SP female, calibration adaptor	$\geq 34$ dB @ DC to 4 GHz $\geq 26$ dB @ 4 GHz to 22 GHz	
07 P 110-S20 S3	straight	RPC-7 - RPC-SP male, calibration adaptor	$\geq 34$ dB @ DC to 4 GHz $\geq 26$ dB @ 4 GHz to 18 GHz	
07 P 110-K20 S3	straight	RPC-7 - RPC-SP female, calibration adaptor	$\geq 34$ dB @ DC to 4 GHz $\geq 26$ dB @ 4 GHz to 18 GHz	

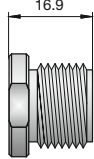
**Tools**

Torque Wrench

Ordering Number	Remarks	
07 W 021-000	flat 19 mm - 136 Ncm torque for RPC 7, RPC-SP	

**Accessories**

Coupling Nut

Ordering Number	Remarks	
10 Z 001-S00 S	male, stainless steel	
10 Z 001-K00 S	female, stainless steel	