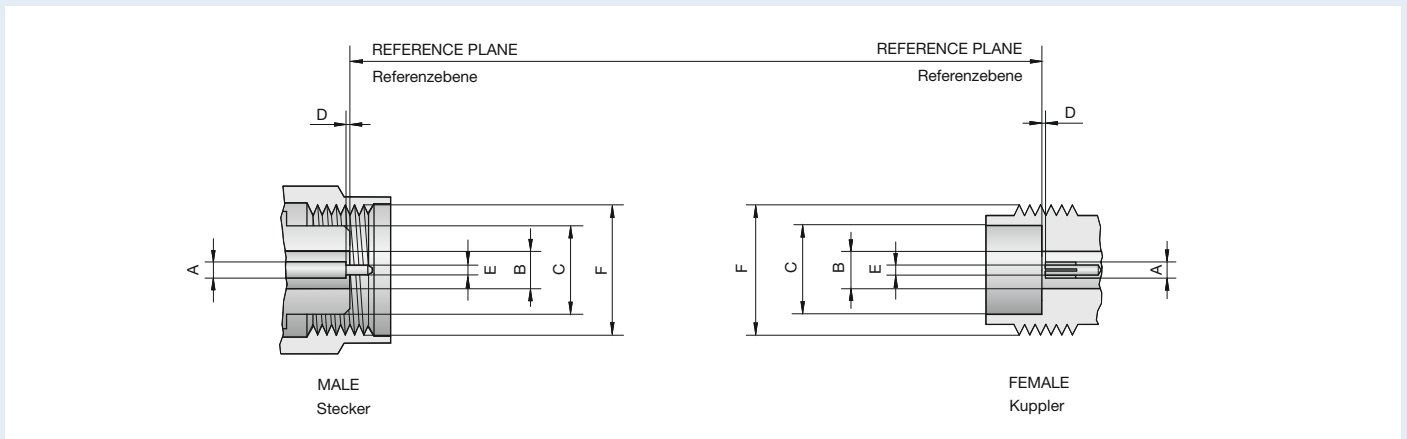


Interface Dimensions Series RPC-2.40 (code 09)



Series RPC-2.40

dimension	Male Stecker		Female Kuppler	
	min.	max.	min.	max.
A	1.03	1.05	1.03	1.05
B	2.39	2.41	2.39	2.41
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-2.40

Applicable standards Anwendbare Standards	
Mechanically compatible with <i>Mechanisch kompatibel mit</i>	RPC-1.85
Electrical data Elektrische Daten	
Impedance <i>Wellenwiderstand</i>	50 Ω
Frequency range <i>Frequenzbereich</i>	DC to 50 GHz
Return loss (cable connector straight) <i>Rückflußdämpfung (Kabelsteckverbinder, gerade)</i>	≥ 23 dB, DC to 50 GHz
Insertion loss (cable connector straight) <i>Dämpfung (Kabelsteckverbinder, gerade)</i>	≤ 0.05 dB x $\sqrt{f[\text{GHz}]}$
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	
09 S 121-271 S3	≥ 23 dB @ DC to 50 GHz	71	02 A3	

Straight Jack, solder

Semi-Rigid

Ordering Number	Return Loss	Cable Group	Assembly Instruction	
09 K 121-271 S3	≥ 23 dB @ DC to 50 GHz	71	02 A3	

Panel Plug, 4-hole flange

Semi-Rigid

Ordering Number	Return Loss	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	
09 S 421-271 S3	≥ 23 dB @ DC to 50 GHz	71	02 A3	MB 55	

Panel Jack, 4-hole flange

Semi-Rigid

Ordering Number	Return Loss	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	
09 K 421-271 S3	≥ 23 dB @ DC to 50 GHz	71	02 A3	MB 55	

PCB Connectors SMD

Right Angle Panel Jack, edge mount

SMD

Ordering Number	Remarks	Return Loss	Panel Piercing / PCB Layout	
09 K 243-40M E3	for various PCB's 0-3 mm	≥ 12 dB @ DC to 50 GHz	MB 208	

Interchangeable Port Connector System

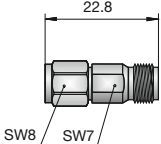
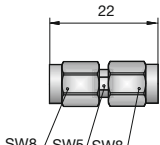
RPC 2.40 - RPC-SL 40 GHz

Ordering Number	Version	Remarks	Return Loss	
09 S 1P4-S00 S3	straight	RPC-2.40 male - RPC-SL 40 GHz male	≥ 21 dB @ DC to 26.5 GHz ≥ 19 dB @ 26.5 GHz to 40 GHz	
09 K 1P4-S00 S3	straight	RPC-2.40 female - RPC-SL 40 GHz male	≥ 21 dB @ DC to 26.5 GHz ≥ 19 dB @ 26.5 GHz to 40 GHz	

see also chapter interchangeable port connector system

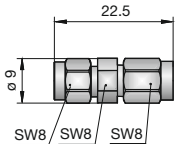
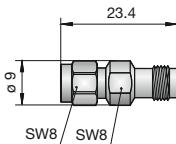
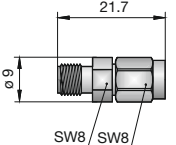
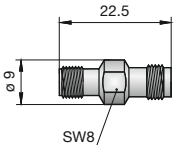
Adaptors

Adaptor (In Series)

Ordering Number	Version	Remarks	Return Loss	
09 K 121-K00 S3	straight	RPC-2,40 female - female	≥ 17 dB @ DC to 50 GHz	
09 K 121-K20 S3	straight	RPC-2,40 female - female, calibration adaptor	≥ 30 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 50 GHz	
09 S 121-K00 S3	straight	RPC-2,40 male - female	≥ 17 dB @ DC to 50 GHz	
09 S 121-K20 S3	straight	RPC-2,40 male - female, calibration adaptor	≥ 30 dB @ DC to 4 GHz, ≥ 17 dB @ 4 GHz to 50 GHz	
09 S 121-S00 S3	straight	RPC-2,40 male - male	≥ 17 dB @ DC to 50 GHz	
09 S 121-S20 S3	straight	RPC-2,40 male - male, calibration adaptor	≥ 30 dB @ DC to 4 GHz ≥ 17 dB @ 4 GHz to 50 GHz	

Adaptors

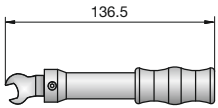
Adaptor (Inter Series)

Ordering Number	straight	Remarks	Return Loss	
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	

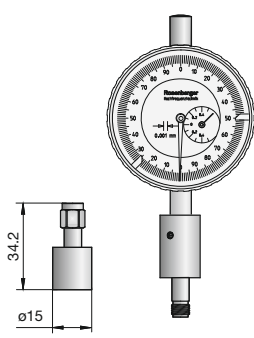
Ordering Number	straight	Remarks	Return Loss	
03 S 109-S00 S3	straight	RPC-3.50 male - RPC 2.40 male	≥ 23 dB @ DC to 26.5 GHz	
03 S 109-K00 S3	straight	RPC-3.50 male - RPC 2.40 female	≥ 23 dB @ DC to 26.5 GHz	
03 K 109-S00 S3	straight	RPC-3.50 female - RPC 2.40 male	≥ 23 dB @ DC to 26.5 GHz	
03 K 109-K00 S3	straight	RPC-3.50 female - RPC 2.40 female	≥ 23 dB @ DC to 26.5 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	