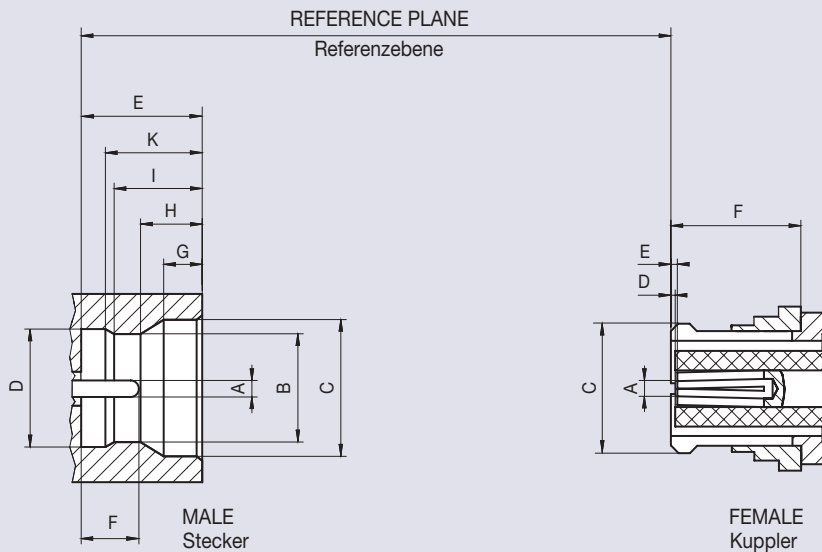


## Interface Dimensions SMP

Code 19



	Male   Stecker						Female   Kuppler	
	Smooth bore		Limited detent		Full detent		min.	max.
	min.	max.	min.	max.	min.	max.		
A	Ø 0.36	Ø 0.41	Ø 0.36	Ø 0.41	Ø 0.36	Ø 0.41	1)	
B	Ø 3.12	Ø 3.23	Ø 3.00	Ø 3.10	Ø 2.90	Ø 3.00	-	-
C	Ø 3.53	Ø 3.68	Ø 3.53	Ø 3.68	Ø 3.53	Ø 3.68	-	Ø 3.43
D	-	-	Ø 3.15	Ø 3.20	Ø 3.15	Ø 3.20	0.00 nom.	
E	2.74	2.84	2.74	2.84	2.74	2.84	0.20 nom.	
F	1.14	1.40	1.14	1.40	1.14	1.40	2.84	-
G	0.84	0.94	0.84	0.94	0.84	0.94	-	-
H	-	-	1.40	1.45	1.40	1.45	-	-
I	-	-	1.98	2.08	1.98	2.08	-	-
K	-	-	2.19	2.29	2.19	2.29	-	-

Dimensions in mm

<sup>1)</sup> Resilient, dimension to meet electrical and mechanical requirements

SMP coaxial connectors are available as smooth bore, catchers mitt, limited detent and full detent versions, they are suitable for a wide range of board-to-board interconnect applications up to 40 GHz - from low up to the highest mechanical loads, e.g. in telecommunication, test & measurement or aerospace applications.

SMP connectors are mateable with GPO™ connectors. PCB connectors are supplied in tape & reel packaging.

SMP-Koaxial-Steckverbinder werden in den Festhaltevarianten Smooth bore, Catchers mitt, Limited detent und Full detent angeboten und eignen sich für vielseitige Board-to-Board-Verbindungen bis 40 GHz von geringer bis zu höchster mechanischer Beanspruchung, z.B. in Telekom- und Messtechnik-Anwendungen bis zu Anwendungen in Luft- und Raumfahrt.

SMP Steckverbinder sind steckkompatibel mit GPO™ Steckverbindern. PCB-Steckverbinder werden in Blistergurt-Verpackungen ausgeliefert.

### Features

- ▶ Interface according to US MIL-STD 348A, Fig. 326
- ▶ Frequency range DC to 40 GHz
- ▶ Return loss (cable connector straight) ≥ 23 dB @ DC to 20 GHz
- ▶ Impedance 50 Ω
- ▶ Minimum board-to-board distance ≥ 9.05 mm
- ▶ Snap-on coupling

### Product Range

- ▶ Cable connectors
- ▶ PCB connectors
- ▶ Panel connectors
- ▶ Adaptors
- ▶ Terminations

## Technical Data SMP

## Code 19

Applicable standards   Anwendbare Normen	
Interface according to   Interface gemäß	MIL-STD-348A, Fig. 326 Mateable with GPO™ (Gilbert Engineering Co., Inc)
Electrical data   Elektrische Daten	
Impedance   Wellenwiderstand	50 Ω
Frequency range   Frequenzbereich	DC to 40 GHz
Return loss (cable connector straight)   Rückflusdämpfung (Kabelsteckverbinder gerade)	≥ 23 dB @ DC to 20 GHz ≥ 14 dB @ 20 GHz to 40 GHz
Insertion loss   Dämpfung	≤ 0.1 × √f (GHz) dB
Insulation resistance   Isolationswiderstand	≥ 5 GΩ
Center contact resistance   Übergangswiderstand Innenleiter	≤ 6 mΩ
Outer contact resistance   Übergangswiderstand Außenleiter	≤ 2 mΩ
Test voltage   Prüfspannung	500 V rms
Working voltage   Betriebsspannung	335 V rms
Power handling   Leistungsbelastbarkeit	65 W @ 2.2 GHz
Contact current   Kontaktstrombelastbarkeit	≤ 1.2 A DC
RF leakage - Interface   Schirmdämpfung	≥ 85 dB @ DC to 4 GHz
Mechanical data   Mechanische Daten	
Mating cycles   Steckzyklen	Full detent: ≥ 100 Limited detent: ≥ 500 Smooth bore, Catchers mitt: ≥ 1000
Center contact captivation   Innenleiter Haltekraft	axial: ≥ 7 N
Engagement force   Steckkraft	Full detent: ≤ 68 N Limited detent: ≤ 45 N Smooth bore, Catchers mitt: ≤ 9 N
Disengagement force   Ziehkraft	Full detent: ≥ 22 N Limited detent: ≥ 9 N Smooth bore, Catchers mitt: ≥ 2.2 N
Axial misalignment   Axialer Toleranzausgleich	± 0.3 mm
Radial misalignment   Radialer Toleranzausgleich	4° (interface)
Board-to-board distance (min.)   Board-to-Board Abstand (min.)	9.05 mm (solder paste thickness not included)
Environmental data   Umweltdaten	
Temperature range   Temperaturbereich	-65 °C to +155 °C
Thermal shock   Temperaturzyklen	MIL-STD-202, Method 107, Condition B
Damp heat   Feuchte Wärme	IEC 60068-2-78 (40 °C, 93% RH, 56d)
Climatic category   Klimakategorie	IEC 61169-1, Sub-clause 9.4.5 (+155 °C, 1000 hours)
Moisture resistance   Feuchtigkeitsbeständigkeit	MIL-STD-202, Method 106
Vibration   Vibration	MIL-STD-202, Method 204, Condition B
Shock   Schock	MIL-STD-202, Method 213, Condition A
Max. soldering temperature (PCB connectors)   Max. Löttemperatur (Leiterplattensteckverbinder)	IEC 61760-1, +260 °C for 10 sec.
Materials   Materialien	
Spring loaded contact parts   Federnde Kontaktteile	CuBe, Au plating
Center contact   Innenleiter	CuZn, Au plating
Outer contact   Außenleiter	CuZn, Au plating
Crimping ferrule   Crimphülse	Cu, Au plating
Dielectric   Dielektrikum	PTFE / PEEK / LCP

Rosenberger connectors generally fulfill the indicated technical data. Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and workmanship. Data sheets for particular products can be downloaded on our website or can be provided on request from your Rosenberger sales partner.

Rosenberger-Steckverbinder erfüllen grundsätzlich die hier angegebenen technischen Daten. Je nach Anwendung, Bauart, Kabeltyp, Montageart und -ausführung können einzelne Werte der Steckverbinder hiervon abweichen. Datenblätter zu einzelnen Produkten können Sie von unserer Website herunterladen oder auf Anfrage von Ihrem Rosenberger-Ansprechpartner erhalten.