



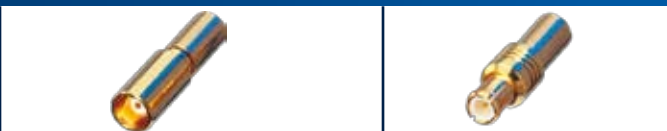
MCX coaxial connectors, provided with a snap-on coupling mechanism, are mainly applied in RF cable connections up to 6 GHz, e.g. in fixed and wireless communication systems. MCX connectors are characterized by high reliability, long service life, as well as easy and fast mounting.

MCX connectors with 75 Ω characteristic impedance are available on request.

MCX-Koaxial-Steckverbinder verfügen über eine Schnappverbindung und sind konzipiert für HF-Verkabelungen im Frequenzbereich bis 6 GHz, u.a. in Anwendungen in den Bereichen Festnetz-Telekommunikation und Mobilfunkanlagen. Vorteile von MCX-Steckverbindern sind hohe Zuverlässigkeit, lange Lebensdauer sowie einfache und schnelle Montierbarkeit.

MCX-Steckverbinder in 75 Ω -Wellenwiderstand sind auf Anfrage erhältlich.

MCX



Features

Interface according to IEC 61169-36, CECC 22220

Frequency range DC to 6 GHz

Return loss (cable connector straight) ≥ 20 dB (typ.)

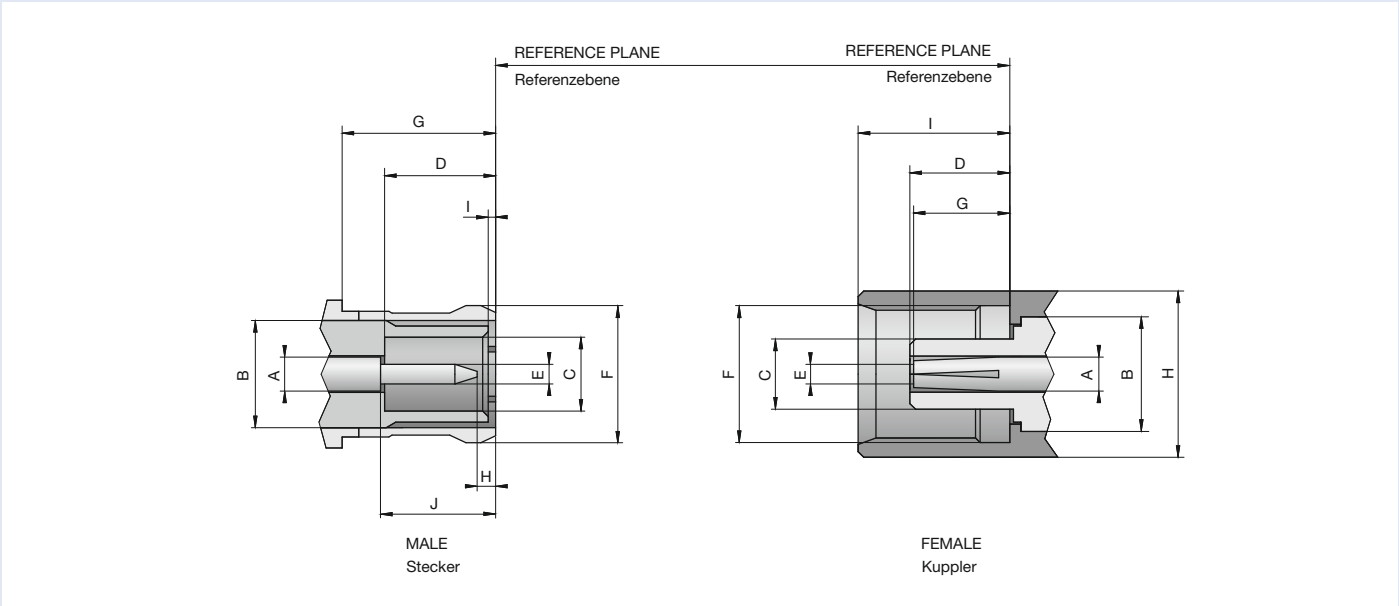
Impedance 50 Ω

30% size reduction compared to SMB connectors

Snap-on coupling

Interface Dimensions MCX, 50 Ω

Code 29



MCX, 50 Ω

	Male Stecker		Female Kuppler	
dimension [mm]	min.	max.	min.	max.
A	1)		1) 2)	
B	3.05 nom. 1)		3.05 nom.	
C	2.00			1.98
D	2.80		2.60	2.80
E	0.48	0.53		
F		3.80 3)	3.60	3.75
G	4.15		2.30	2.80
H	0.15			
I	0.00	0.30	4.00	4.12
J	2.80	3.20		

1) contact diameters refer to 50 Ω
2) resilient, dimension to meet electrical and mechanical requirements
3) when slotted

Features

Interface according to IEC 61169-36, CECC 22220
Frequency range DC to 6 GHz
Return loss (cable connector straight) ≥ 20 dB (typ.)
Impedance 50 Ω
30% size reduction compared to SMB connectors
Snap-on coupling

Product Range

Cable connectors
PCB connectors (solder, press-fit , SMD versions)
Terminations
Adaptors

Further connectors are available on request

Technical Data MCX, 50 Ω

Code 29

Applicable standards Anwendbare Normen	
Interface according to <i>Interface gemäß</i>	IEC 61169-36, CECC 22220
Quality tested according to <i>Qualitätsprüfung gemäß</i>	IEC 60068
Electrical data Elektrische Daten	
Impedance <i>Wellenwiderstand</i>	50 Ω
Frequency range <i>Frequenzbereich</i>	DC to 6 GHz
Return loss (cable connector straight) <i>Rückflussdämpfung (Kabelsteckverbinder gerade)</i>	≥ 20 dB (typ.)
Insertion loss <i>Dämpfung</i>	≤ 0.1 x √f (GHz) dB
Insulation resistance <i>Isolationswiderstand</i>	≥ 1 GΩ
Center contact resistance <i>Übergangswiderstand Innenleiter</i>	≤ 5 mΩ
Outer contact resistance <i>Übergangswiderstand Außenleiter</i>	≤ 2.5 mΩ
Test voltage <i>Prüfspannung</i>	750 V rms
Working voltage <i>Betriebsspannung</i>	335 V rms
Contact current <i>Kontaktstrombelastbarkeit</i>	≤ 1.5 A DC
Mechanical data Mechanische Daten	
Mating cycles <i>Steckzyklen</i>	≥ 500
Center contact captivation <i>Innenleiter Haltekraft</i>	axial: ≥ 10 N
Engagement force <i>Steckkraft</i>	≤ 25 N
Disengagement force <i>Ziehkraft</i>	8 N to 20 N
Environmental data Umweltdaten	
Temperature range <i>Temperaturbereich</i>	-55 °C to +155 °C
Thermal shock <i>Temperaturzyklen</i>	CECC 22220, Chapter 4.6.7
Corrosion resistance <i>Korrosionsbeständigkeit</i>	CECC 22220, Chapter 4.6.10
Moisture resistance <i>Feuchtigkeitsbeständigkeit</i>	CECC 22220, Chapter 4.6.6
Vibration <i>Vibration</i>	CECC 22220, Chapter 4.6.3
Max. soldering temperature (PCB connectors) <i>Max. Löttemperatur (Leiterplattensteckverbinder)</i>	IEC 61760-1, +260 °C for 10 sec.
Materials Materialien	
Spring loaded contact parts <i>Federnde Kontaktteile</i>	CuBe, Au plating
Center contact <i>Innenleiter</i>	CuZn, Au plating
Outer contact <i>Außenleiter</i>	CuZn, Au / white bronze plating
Crimping ferrule <i>Crimphülse</i>	Soft copper, Au / white bronze plating
Dielectric <i>Dielektrikum</i>	PTFE
Gasket <i>Dichtung</i>	Rubber

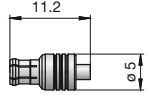
Rosenberger-connectors fulfill in principle the indicated data of the Technical Data. Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution. Specific data sheets for particular products can be provided on request from your Rosenberger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

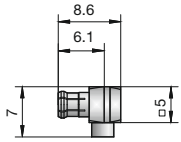
Straight Plug, solder

Semi-Rigid Cables

Ordering Number	Cable Group	Assembly Instruction	Packing Unit	
29 S 111-270 L5	70	29 B	100	
29 S 111-271 L5	71	29 B	100	

Right Angle Plug, solder

Semi-Rigid Cables

Ordering Number	Cable Group	Assembly Instruction	Packing Unit	
29 S 211-270 L5	70	29 D2	100	
29 S 211-271 L5	71	29 D4	100	

Cable Connectors - Flexible Cables

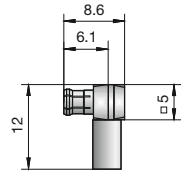
Straight Plug, crimp

Flexible Cables

Ordering Number	Cable Group	Assembly Instruction	Crimp Inserts	Packing Unit	
29 S 111-101 L5	01	29 A	11 W 150-402	100	
29 S 111-102 L5	02	29 A	11 W 150-402	100	
29 S 111-103 L5	03	29 A	11 W 150-402	100	
29 S 111-103 N5	03	29 A	11 W 150-402	100	

Right Angle Plug, solder-crimp

Flexible Cables

Ordering Number	Cable Group	Assembly Instruction	Crimp Inserts	Packing Unit	
29 S 211-301 L5	01	29 C	11 W 150-102	100	
29 S 211-302 L5	02	29 C	11 W 150-102	100	
29 S 211-303 L5	03	29 C	11 W 150-102	100	
29 S 211-303 N5	03	29 C	11 W 150-102	100	

Straight Jack, crimp

Flexible Cables

Ordering Number	Cable Group	Assembly Instruction	Crimp Inserts	Packing Unit	
29 K 101-101 L5	01	29 A	11 W 150-402	1	
29 K 101-102 L5	02	29 A	11 W 150-402	1	
29 K 101-103 L5	03	29 A	11 W 150-402	1	

Panel Jack, crimp, round flange

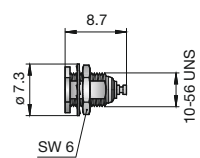
Flexible Cables

Ordering Number	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Crimp Inserts	Packing Unit	
29 K 501-103 N5	03	29 A	B 22	11 W 150-402	1	

Panel Connectors - Coaxial End

Panel Jack, round flange

Coaxial End

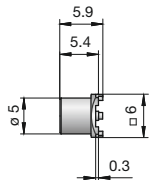
Ordering Number	Panel Piercing / PCB Layout	Packing Unit	
29 K 501-500 L5	B 22	100 blister	

MCX

PCB Connectors - SMD

Straight Jack, PCB

SMD

Ordering Number	Remarks	Panel Piercing / PCB Layout	Packing	Packing Unit	
29 K 101-40M L5	removable plastic cap on suction area	B 30	VG 34.75000	100 blister, 750 tape & reel	

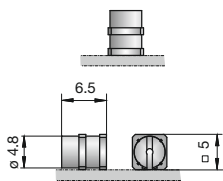
Right Angle Jack, PCB

SMD

Ordering Number	Panel Piercing / PCB Layout	Packing Unit	
29 K 203-40M L5	B 173	100 blister	

Straight/Right Angle Jack, PCB

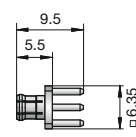
SMD

Ordering Number	Remarks	Panel Piercing / PCB Layout	Packing	Packing Unit	
29 K 10A-40M L5	application as straight type removable plastic cap on suction area	B 205a	VG 04.50000	500 tape & reel	
29 K 201-40M L5	application as right angle type without removable plastic cap on suction area	B 205	VG 12.1M500	100 blister, 1500 tape & reel	

PCB Connectors - Solder Pin

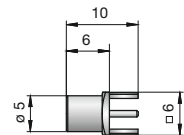
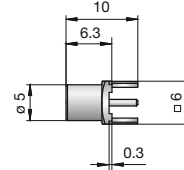
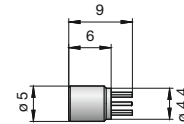
Straight Plug, PCB

Solder Pin

Ordering Number	Remarks	Panel Piercing / PCB Layout	Packing Unit	
29 S 103-400 L5	round pins	B 30	100 blister	

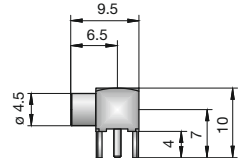
Straight Jack, PCB

Solder Pin

Ordering Number	Remarks	Panel Piercing / PCB Layout	Packing Unit	
29 K 101-400 L5	without stand-off	B 30	300	
29 K 102-400 L5	stand-off version	B 30	300	
29 K 104-400 L5		B 35	100 blister	

Right Angle Jack, PCB

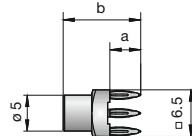
Solder Pin

Ordering Number	Panel Piercing / PCB Layout	Packing Unit	
29 K 203-400 L5	B 30	100 blister	

PCB Connectors - Press-fit

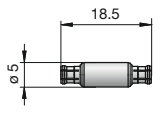
Straight Jack, PCB

Press-fit

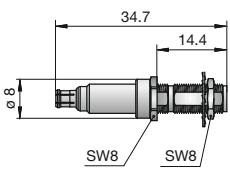
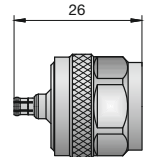
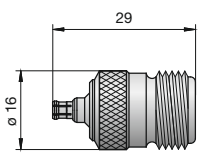
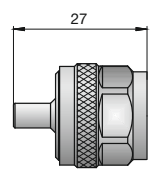
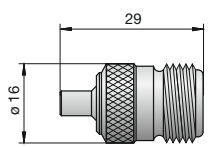
Ordering Number	Remarks	Panel Piercing / PCB Layout	Packing Unit	
29 K 102-40P L5	a = 4.3 mm b = 10.8 mm	B 79	100 blister	
29 K 105-40P L5	a = 2.8 mm; b = 9.3 mm	B 79	100 blister	

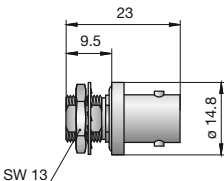
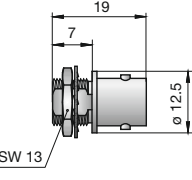
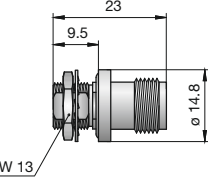
Adaptors

Bullet male-male

Ordering Number	Version	Remarks	Packing Unit	
29 S 101-S00 E3	straight	MCX male - male	1	

Adaptors (Inter Series)

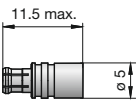
Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
29 S 132-K01 N5	straight panel	MCX male - SMA female	B 56	1	
29 S 153-S00 Z5	straight	MCX male - N male		1	
29 S 153-K00 Z5	straight	MCX male - N female		1	
29 K 153-S00 Z5	straight	MCX female - N male		1	
29 K 153-K00 Z5	straight	MCX female - N female		1	

Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
29 K 551-K00 A5	straight panel	MCX female - BNC 50 Ω female round flange	B 2	1	
29 K 571-K00 N5	straight panel	MCX female - BNC 75 Ω female round flange	B 1	1	
29 K 556-K00 A5	straight panel	MCX female - TNC 50 Ω female round flange	B 2	1	

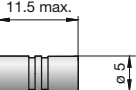
MCX

Terminations

Termination Plug

Ordering Number	Remarks	Return Loss	Packing Unit	
29 S 15R-1.0 E3	1 Watt Frequency: DC to 6 GHz	≥ 23.1 dB @ DC to 4 GHz ≥ 17.7 dB @ 4 GHz to 6 GHz	1	

Termination Jack

Ordering Number	Remarks	Return Loss	Packing Unit	
29 K 15R-1.0 E3	1 Watt Frequency: DC to 6 GHz	≥ 23.1 dB @ DC to 4 GHz ≥ 17.7 dB @ 4 GHz to 6 GHz	1	

MCX connectors in 75 Ω version are available on request.