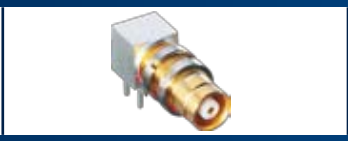






1.6.-5.6 coaxial connectors are characterized by high mechanical and electrical stability, they are mainly used for reliable transmission of high bit-rates. 1.6.-5.6. connectors, IInd and IIIrd generations intermateable, male types (A, B, C, F types) can be connected with all female types.

1.6-5.6-Koaxial-Steckverbinder zeichnen sich durch sehr gute elektrische und mechanische Stabilität aus, Hauptanwendungsgebiet ist die Übertragung hoher Bit-Raten. Steckverbinder der II. und III. Generation sind steckkompatibel, die Stecker-Typen (Typ A, B, C, F) sind mit den Kuppler-Typen koppelbar.

Coupling mechanisms, male types:

Type A: Screw-on coupling
Screwing plug and jack by hand using a coupling nut

Befestigungsarten Stecker:

Typ A: *Steckschraubverbindung*
Von Hand verschraubbare, zugsichere Steckverbindung mittels Überwurfmutter

Type B: Snap-on coupling
Male connector with spring mechanism, snaps into slot on female connector body

Typ B: *Schnapp-Steckrastverbindung*
Stecker mit Einrastfeder, welche beim Steckvorgang in eine Nut im Kupplerkörper einschnappt

Type C: Slide-on coupling with centering sleeve
Conical insertion guide of floating male connector facilitates connection to fixed female connectors. The interconnection is a slide fit.

Typ C: *Einschub mit Zentrierhülse*
Bewegliche (Floatende) Stecker mit konischer Einführhilfe zur Ausführung der Kopplung mit starr eingebauten Kupplern, Verbindung erfolgt gleitend

Type F: Quick-lock coupling mechanism
Quick-lock coupling mechanism for fast, easy and reliable connections in tightest spaces, assembly tools not necessary.

Typ F: *Quick-Lock-Einrastmechanismus - selbstverriegelnd*
Quick-Lock-Einrastmechanismus für schnelle, zuverlässige und einfache Steckverbindungen auf engstem Raum, Werkzeuge nicht erforderlich

1.6-5.6

Features

Interface according to CECC 22240

Frequency range DC to 4 GHz (II. Gen.), DC to 12 GHz (III. Gen.)

Return loss (cable connector straight)

≥ 27 dB @ 1 GHz to 2 GHz

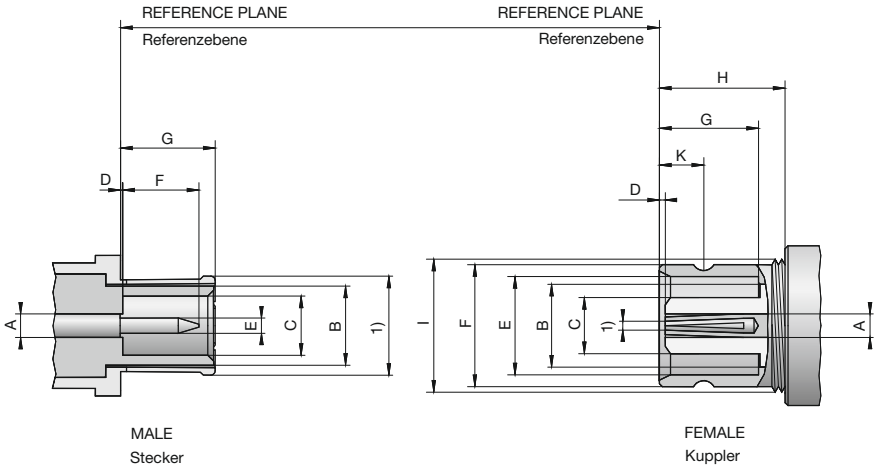
Impedance 75 Ω

Type A: Screw-on coupling

Type C: Slide-on coupling

Type F: Quick-lock coupling

Interface Dimensions 1.6-5.6 *Code 78 / 88*



1.6-5.6

	Male | *Stecker*		Female | *Kuppler*	
dimension [mm]	min.	max.	min.	max.
A	1.60 nom.		1.60 nom.	
B	5.60 nom.		5.60 nom.	
C	4.00			3.80
D		0.15	0.25	0.75
E	0.97	1.03	6.60	6.69
F		5.50	8.10	8.25
G	6.40	6.60	6.70	
H			9.70	
I			M 9 x 0.5	
K			2.90	3.10

1) resilient, dimension to meet electrical and mechanical requirements

Features

Interface according to CECC 22240
Frequency range DC to 4 GHz (II. Gen.), DC to 12 GHz (III. Gen.)
Return loss (cable connector straight) ≥ 27 dB @ 1 GHz to 2 GHz
Impedance 75 Ω
Type A: Screw-on coupling
Type B: Snap-on coupling, available on request
Type C: Slide-on coupling
Type F: Quick-lock coupling

Product Range

Cable connectors
PCB connectors (solder, press-fit versions)
Panel connectors
Adaptors, Balun-Adaptor
Terminations

Further connectors are available on request

Coupling mechanisms, male types

Type A: Screw-on coupling
Screwing plug and jack by hand with a coupling nut.

Type B: Snap-on coupling
Male connector with spring mechanism, snaps into slot on female connector body.

Type C: Slide-on coupling with centering sleeve
Conical insertion guide of floating male connector facilitates connection to fixed female connectors. The interconnection is a slide fit.

Type F: Quick-lock coupling mechanism
Quick-lock coupling mechanism for fast, easy and reliable connections in tightest spaces, assembly tools are not necessary.

Technical Data 1.6 - 5.6 *Code 78 / 88*

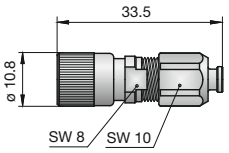
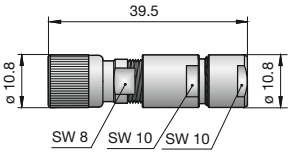
Applicable standards | *Anwendbare Normen*	
Interface according to | *Interface gemäß*	CECC 22240
Quality tested according to | *Qualitätsprüfung gemäß*	IEC 60068
Electrical data | *Elektrische Daten*	
Impedance | *Wellenwiderstand*	75 Ω
Frequency range | *Frequenzbereich*	DC to 4 GHz (II. generation) DC to 12 GHz (III. generation)
Return loss (cable connector straight) | *Rückflussdämpfung (Kabelsteckverbinder gerade)*	≥ 33 dB @ DC to 1 GHz ≥ 27 dB @ 1 GHz to 2 GHz ≥ 20 dB @ 2 GHz to 4 GHz
Insertion loss | *Dämpfung*	≤ 0.1 x $\sqrt{f(GHz)}$ dB
Insulation resistance | *Isolationswiderstand*	≥ 10 GΩ
Center contact resistance | *Übergangswiderstand Innenleiter*	≤ 4 mΩ
Outer contact resistance | *Übergangswiderstand Außenleiter*	≤ 2 mΩ
Test voltage | *Prüfspannung*	1000 V rms
Working voltage | *Betriebsspannung*	330 V rms
RF-leakage | *Schirmdämpfung*	≥ 90 dB @ DC to 1 GHz (Type C) ≥ 100 dB @ DC to 1 GHz (Type A)
Mechanical data | *Mechanische Daten*	
Mating cycles | *Steckzyklen*	≥ 500
Center contact captivation | *Innenleiter Haltekraft*	axial: ≥ 30 N
Engagement force | *Steckkraft*	2.2 N to 12 N (Type A, Type C) 18 N to 50 N (Type F)
Disengagement force | *Ziehkraft*	2.2 N to 12 N (Type A, Type C) 18 N to 50 N (Type F)
Coupling torque recommended | *Drehmoment empfohlen*	≤ 30 N
Environmental data | *Umweltdaten*	
Temperature range | *Temperaturbereich*	-40 °C to +85 °C
Dry heat | *Trockene Wärme*	IEC 60068-2-2
Damp heat | *Feuchte Wärme*	IEC 60068-2-78
Climatic category | *Klimakategorie*	IEC 60068-2-1 40/85/21
Vibration | *Vibration*	IEC 60068-2-6 (10 Hz to 2000 Hz, 100 m/s²)
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
Body | *Gehäuse*	CuZn, Ni plating
Crimping ferrule | *Crimphülse*	Soft copper, white bronze plating
Dielectric | *Dielektrikum*	PTFE (II. generation) LCP or equivalent (III. generation)

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.

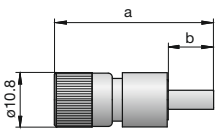
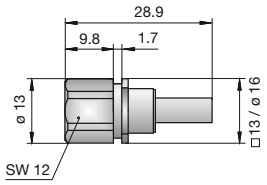
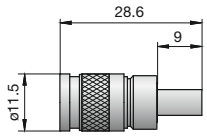
Rosenberger-Steckverbinder erfüllen grundsätzlich die in den Technischen Daten angegebenen Daten. Je nach Anwendung, Bauart, Kabeltyp, Montageart und -ausführung können einzelne Werte von Steckverbindern hiervon abweichen. Spezifische Datenblätter zu einzelnen Produkten erhalten Sie auf Anfrage von Ihrem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

Cable Connectors - Flexible Cables

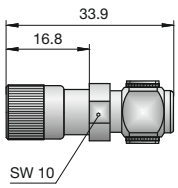
Straight Plug, clamp — Flexible Cables

Ordering Number	Version	Cable Group	Assembly Instruction	Packing Unit	
78 S 101-002 L5	Type A II. Generation	02	78 A	1	
78 S 101-040 L5	Type A II. Generation	40	78 B	1	

Straight Plug, crimp — Flexible Cables

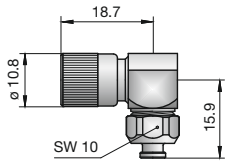
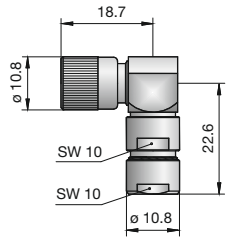
Ordering Number	Version	Remarks	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Crimp Inserts	Packing Unit	
88 S 105-102 L5	Type A III. Generation	a = 29.5 mm; b = 9.0 mm	02	88 O2		11 W 150-502	1	
88 S 105-109 L5	Type A III. Generation	a = 32.5 mm; b = 12.0 mm	09	88 O2		11 W 150-509	1	
88 S 105-140 L5	Type A III. Generation	a = 29.5 mm; b = 9.0 mm	40	88 O2		11 W 150-504	1	
88 S 105-141 L5	Type A III. Generation	a = 29.5 mm; b = 9.0 mm	41	88 O2		11 W 150-506	100	
88 S 105-142 L5	Type A III. Generation	a = 32.5 mm; b = 12.0 mm	42	88 O2		11 W 150-509	1	
88 S 105-148 L5	Type A III. Generation	a = 32.5 mm; b = 12.0 mm	48	88 O2		11 W 150-509	1	
88 S 105-1V2 L5	Type A III. Generation	a = 29.5 mm; b = 9.0 mm	V2	88 O2		11 W 150-550	1	
88 S 105-1V6 L5	Type A III. Generation	a = 29.5 mm; b = 9.0 mm	V6	88 O2		11 W 150-504	100	
88 S 115-141 L5	Type C III. Generation		41	88 O2	B 28	11 W 150-506	100	
88 S 165-1V2 L5	Type F III. Generation		V2	88 O2		11 W 150-550	1	

Straight Plug, Q-Grip — Flexible Cables

Ordering Number	Version	Remarks	Cable Group	Assembly Instruction	Packing Unit	
88 S10K-0S3 L5	Type A III. Generation	cable R1-T2.0Li-75K	S3	88 A7	1	

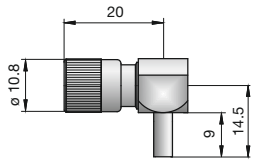
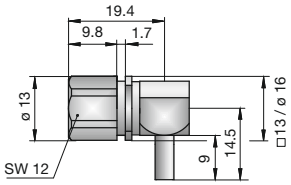
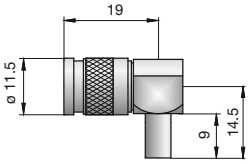
Right Angle Plug, clamp

Flexible Cables

Ordering Number	Version	Cable Group	Assembly Instruction	Packing Unit	
78 S 201-002 L5	Type A II. Generation	02	78 D	1	
78 S 201-040 L5	Type A II. Generation	40	78 E	1	

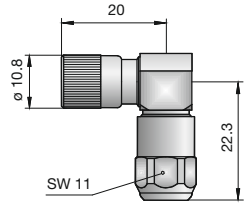
Right Angle Plug, solder crimp

Flexible Cables

Ordering Number	Version	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Crimp Inserts	Packing Unit	
88 S 203-302 L5	Type A III. Generation	02	88 P		11 W 150-102	1	
88 S 203-340 L5	Type A III. Generation	40	88 P		11 W 150-104	1	
88 S 203-341 L5	Type A III. Generation	41	88 P		11 W 150-106	1	
88 S 203-348 L5	Type A III. Generation	48	88 P		11 W 150-109	1	
88 S 203-3V2 L5	Type A III. Generation	V2	88 P		11 W 150-150	1	
88 S 203-3V6 L5	Type A III. Generation	V6	88 P		11 W 150-150	1	
88 S 213-341 L5	Type C III. Generation	41	88 P	B 28	11 W 150-106	1	
88 S 263-3V2 L5	Type F III. Generation	V2	88 P		11 W 150-150	1	

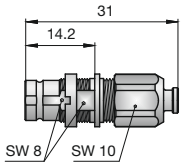
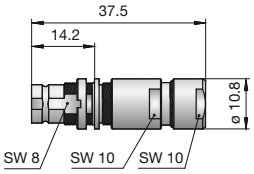
Right Angle Plug, Q-Grip

Flexible Cables

Ordering Number	Version	Remarks	Cable Group	Assembly Instruction	Packing Unit	
88 S 20P-009 L5	Type A III. Generation	cable R1-T3.7Li-75K	09	88 A3	1	

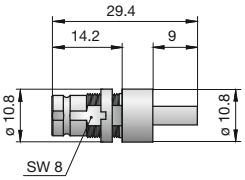
Straight Panel Jack, clamp, round flange

Flexible Cables

Ordering Number	Version	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Packing Unit	
78 K 501-002 L5	rear mount II. Generation	02	78 A	B 27	1	
78 K 501-040 L5	rear mount II. Generation	40	78 B	B 27	1	

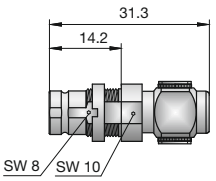
Panel Jack, crimp, round flange

Flexible Cables

Ordering Number	Version	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Crimp Inserts	Packing Unit	
88 K 505-102 L5	rear mount III. Generation	02	88 O2	B 27	11 W 150-502	100	
88 K 505-140 L5	rear mount III. Generation	40	88 O2	B 27	11 W 150-504	1	
88 K 505-1V2 L5	rear mount III. Generation	V2	88 O2	B 27	11 W 150-550	1	
88 K 505-1V4 L5	rear mount III. Generation	V4	88 O2	B 27	11 W 150-550	1	
88 K 505-1V6 L5	rear mount III. Generation	V6	88 O2	B 27	11 W 150-504	1	

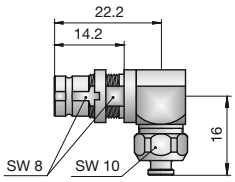
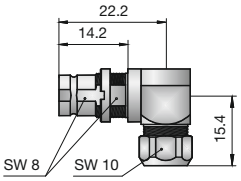
Panel Jack, Q-Grip, round flange

Flexible Cables

Ordering Number	Version	Remarks	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Packing Unit	
88 K 50K-0S3 L5	rear mount III. Generation	cable R1-T2.0Li-75K	S3	88 A7	B 27	1	

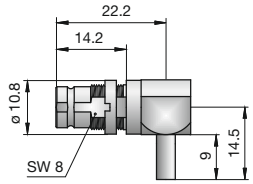
Right Angle Panel Jack, clamp

Flexible Cables

Ordering Number	Version	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Packing Unit	
78 K 201-002 L5	II. Generation	02	78 D	B 27	1	
78 K 201-040 L5	II. Generation	40	78 F	B 27	1	

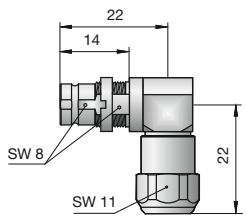
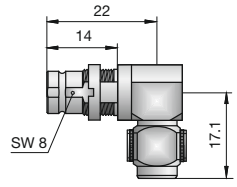
Right Angle Panel Jack, solder crimp
round flange

Flexible Cables

Ordering Number	Version	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Crimp Inserts	Packing Unit	
88 K 203-302 L5	rear mount III. Generation	02	88 P	B 27	11 W 150-102	1	
88 K 203-340 L5	rear mount III. Generation	40	88 P	B 27	11 W 150-104	1	
88 K 203-341 L5	rear mount III. Generation	41	88 P	B 27	11 W 150-106	1	
88 K 203-3V2 L5	rear mount III. Generation	V2	88 P	B 27	11 W 150-150	1	
88 K 203-3V6 L5	rear mount III. Generation	V6	88 P	B 27	11 W 150-104	1	

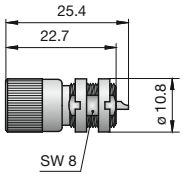
Right Angle Panel Jack, Q-Grip
round flange

Flexible Cables

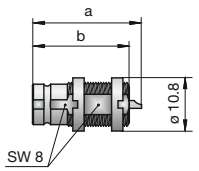
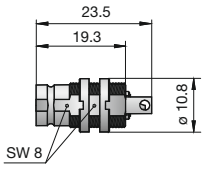
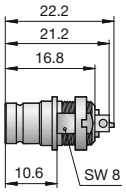
Ordering Number	Version	Remarks	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Packing Unit	
88 K 20P-009 L5	rear mount III. Generation	cable R1-T3.7Li-75K	09	88 A3	B 27	1	
88 K 20K-0S3 L5	rear mount III. Generation	cable R1-T2.0Li-75K	S3	88 A6	B 27	1	

Panel Connectors - Solder End

Panel Plug — Solder End

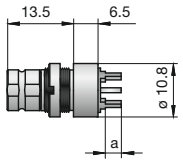
Ordering Number	Version	Panel Piercing / PCB Layout	Packing Unit	
78 S 101-200 L5	Type A II. Generation	B 27	1	

Panel Jack — Solder End

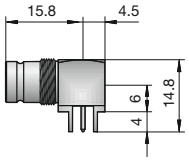
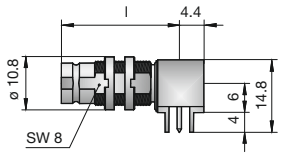
Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
78 K 501-200 L5	II. Generation	a = 22.2 mm; b = 18.1 mm	B 27	1	
78 K 505-200 L5	II. Generation		B 27	1	
78 K 515-200 L5	round flange II. Generation	not for Type A	B 27	1	

PCB Connectors - Solder Pin

Straight Jack, PCB — Solder Pin

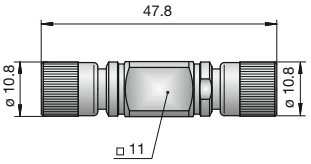
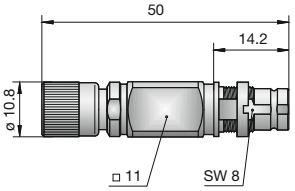
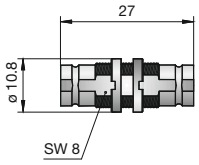
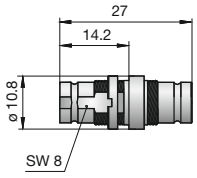
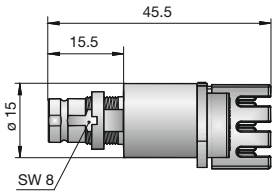
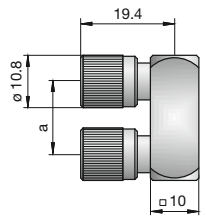
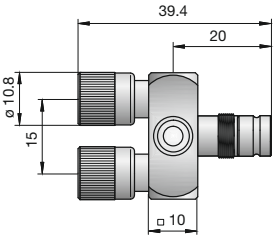
Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
78 K 101-400 L5	II. Generation	a = 3.2 mm	B 53 / 66	50 blister	
78 K 104-400 L5	II. Generation	a = 5.0 mm	B 53 / 66	50 blister	

Right Angle Jack, PCB — Solder Pin

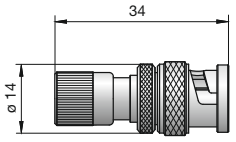
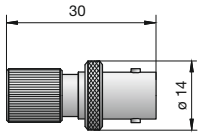
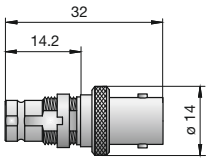
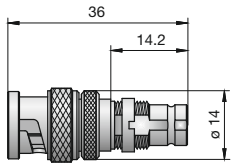
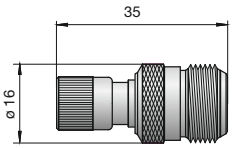
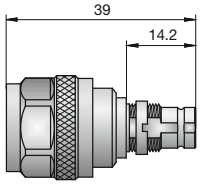
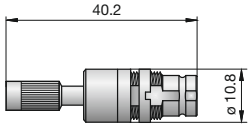
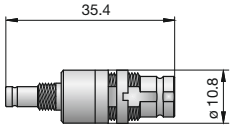
Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
78 K 205-400 L5	II. Generation		B 30	50 blister	
78 K 206-400 L5	II. Generation	l = 24.0 mm	B 27 / 30	50 blister	
78 K 213-400 L5	II. Generation	l = 20.8 mm without flat (SW 8)	B 30 / 83	50 blister	

Adaptors

Adaptors (In Series)

Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
88 S 101-S00 L5	straight, Type A III. Generation	1.6-5.6 male - male		1	
88 S 101-K00 L5	straight, Type A panel III. Generation	1.6-5.6 male - female round flange	B 27	1	
78 K 102-K00 L5	straight panel II. Generation	1.6-5.6 female - female round flange	B 27	1	
78 K 104-K00 L5	straight panel II. Generation	1.6-5.6 female - female round flange	B 27	1	
88 K 501-TW1 L5	straight panel III. Generation	Balun adaptor round flange 120 Ω twisted pair for cable Ø 0.4 mm and Ø 0.5 mm	B 27	1	
78 S 900-S17 L5	U-link, Type A II. Generation	1.6-5.6 male - male; a = 15.0 mm		1	
78 S 901-S17 L5	U-link, Type A II. Generation	1.6-5.6 male - male; a = 30.0 mm		1	
78 S 301-K00 L5	Y-adaptor, Type A II. Generation	1.6-5.6 male - female - male		1	
78 S 301-K40 L5	Y-adaptor, Type A II. Generation	1.6-5.6 male - female - male Attenuation 20 dB		1	

Adaptors (Inter Series)

Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
88 S 171-S00 L5	straight, Type A III. Generation	1.6-5.6 male - BNC 75 Ω male		1	
88 S 171-K00 L5	straight, Type A III. Generation	1.6-5.6 male - BNC 75 Ω female		1	
88 K 171-K00 L5	straight panel III. Generation	1.6-5.6 female - BNC 75 Ω female round flange	B 27	1	
71 S 188-K00 L5	straight panel III. Generation	BNC 75 Ω male - 1.6-5.6 female	B 27	1	
88 S 173-K00 L5	straight, Type A III. Generation	1.6-5.6 male - N 75 Ω female		1	
73 S 188-K00 L5	straight panel III. Generation	N 75 Ω male - 1.6-5.6 female round flange	B 27	1	
34 S 188-K00 L5	straight panel III. Generation	1.0-2.3 DIN 47297 male, Type A - 1.6-5.6 female round flange	B 27	1	
34 K 188-K00 L5	straight panel III. Generation	1.0-2.3 DIN 47297 female - 1.6-5.6 female round flange	B 27	1	

Terminations

Termination Plug

Ordering Number	Version	Remarks	Return Loss	Packing Unit	
88 S 1RR-001 H3	III. Generation	1 Watt Frequency: DC to 2.5 GHz	≥ 23.1 dB @ DC to 2.5 GHz	1