



N coaxial connectors are reliable screw-on connectors with high degree of protection and excellent intermodulation. Due to their mechanical stability and weather resistance N connectors are suitable for outdoor applications – 50 Ω versions up to max. 11 GHz, 75 Ω versions up to max. 6 GHz. 50 Ω and 75 Ω connectors are not intermateable.

Catalog Test, Measurement & Calibration

The catalog contains RPC-N coaxial connectors for test and measurement applications.

N and RPC-N -50 Ω connectors are fully intermateable, as well as 75 Ω versions.

Catalog RosenbergerSLink™

Rosenberger N connectors for mobilcom applications are also listed in the catalog RosenbergerSLink™: connectors for feeder and jumper cables (1/4" to 1 5/8" in ring or spiral corrugation), lightning protection components, accessories.

The catalog contains the complete product range for mobilcom cabling applications – from the antenna down to the base station.

N-Koaxial-Steckverbinder sind zuverlässige Schraubsteckverbinder mit hohem Reflexionsgrad und ausgezeichneter Intermodulation. Aufgrund hoher mechanischer Stabilität und ausgezeichneter Witterungsbeständigkeit sind sie besonders für Outdoor-Anwendungen geeignet, wobei 50 Ω -Steckverbinder bis max. 11 GHz, 75 Ω -Steckverbinder bis max. 6 GHz eingesetzt werden können. Die 50 Ω - und 75 Ω -Versionen sind nicht steckkompatibel.

Katalog Test, Measurement & Calibration

Der Katalog enthält RPC-N-Koaxial-Steckverbinder für Anwendungen in der industriellen Messtechnik.

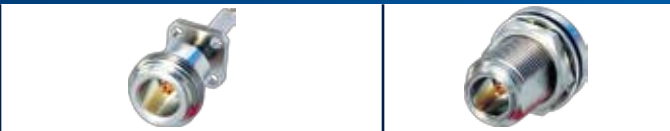
N- und RPC-N-50 Ω -Steckverbinder sind steckkompatibel, ebenso die 75 Ω -Ausführungen.

Katalog RosenbergerSLink™

Rosenberger N-Steckverbinder für Mobilfunk-Anwendungen sind auch im Katalog RosenbergerSLink™ aufgeführt: Steckverbinder für Feeder- und Jumper-Kabel (1/4" bis 1 5/8" in Ring- oder Schraubwellung), Blitzschutz-Komponenten, Zubehör.

Der Katalog enthält das vollständige Produktprogramm zur Verkabelung von Mobilfunkstationen – von der Antenne bis zur Basisstation.

N



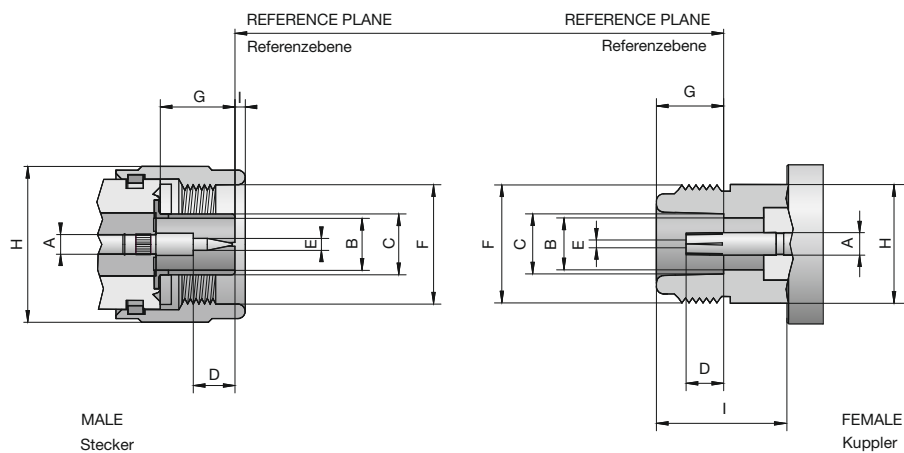
Contents

N 50 Ω

N 75 Ω

Interface Dimensions N, 50 Ω

Code 53



N, 50 Ω

dimension [mm]	Male Stecker		Female Kuppler	
	min.	max.	min.	max.
A	3.04 nom.		3.04 nom.	
B	7.00 nom.		7.00 nom.	
C		8.027	8.03	8.13
D	5.33	5.84	4.75	5.26
E	1.60	1.676		1)
F	5/8-24 UNEF-2B		5/8-24 UNEF-2A	
G	9.25		9.04	9.19
H		21.00		15.93
I	0.41	1.52	10.72	

1) resilient, dimension to meet electrical and mechanical requirements

Features

Interface according to IEC 61169-16, MIL-PRF-39012, CECC 22120

Frequency range DC to 11 GHz

Return loss (cable connector straight) ≥ 26 dB (typ.)

Impedance 50 Ω

Screw-on coupling

N and RPC-N -50 Ω connectors are intermateable

Product Range

Cable connectors

Panel connectors

Power Splitters

Surge Arresters

Adaptors

Terminations

Accessories

Further connectors available on request

Technical Data N, 50 Ω

Code 53

Applicable standards Anwendbare Normen	
Interface according to <i>Interface gemäß</i>	IEC 61169-16, MIL-PRF-39012, CECC 22210
Quality tested according to <i>Qualitätsprüfung gemäß</i>	MIL-STD-202
Electrical data Elektrische Daten	
Impedance <i>Wellenwiderstand</i>	50 Ω
Frequency range <i>Frequenzbereich</i>	DC to 11 GHz
Return loss (cable connector straight) <i>Rückflussdämpfung (Kabelsteckverbinder gerade)</i>	≥ 26 dB (typ.)
Insertion loss <i>Dämpfung</i>	≤ 0.1 x √f(GHz) dB
Insulation resistance <i>Isolationswiderstand</i>	≥ 5 GΩ
Center contact resistance <i>Übergangswiderstand Innenleiter</i>	≤ 1 mΩ
Outer contact resistance <i>Übergangswiderstand Außenleiter</i>	≤ 0.25 mΩ
Test voltage <i>Prüfspannung</i>	2500 V rms
Working voltage <i>Betriebsspannung</i>	1400 V rms
Power handling <i>Leistungsbelastbarkeit</i>	1000 W @ 1 GHz 700 W @ 2 GHz
RF-leakage <i>Schirmdämpfung</i>	≥ 128 dB @ DC to 1 GHz
Intermodulation 3rd order <i>Intermodulation 3. Ordnung</i>	≥ 155 dBc (2 x 43 dBm)
Mechanical data Mechanische Daten	
Mating cycles <i>Steckzyklen</i>	≥ 500
Coupling nut retention <i>Überwurfmutter Haltekraft</i>	≥ 450 N
Center contact captivation <i>Innenleiter Haltekraft</i>	axial: ≥ 28 N radial: ≥ 3 Ncm
Coupling test torque <i>Prüfdrehmoment</i>	≤ 1.7 Nm
Coupling torque recommended <i>Drehmoment empfohlen</i>	0.7 Nm to 1.1 Nm
Environmental data Umweltdaten	
Temperature range <i>Temperaturbereich</i>	-65 °C to +165 °C
Thermal shock <i>Temperaturzyklen</i>	MIL-STD-202, Method 107, Condition B
Climatic category <i>Klimakategorie</i>	IEC 60068 65/165/21
Degree of protection (mated pair) <i>Schutzgrad (gekoppeltes Paar)</i>	IEC 60529, IP 68
Corrosion resistance <i>Korrosionsbeständigkeit</i>	MIL-STD-202, Method 101, Condition B
Moisture resistance <i>Feuchtigkeitsbeständigkeit</i>	MIL-STD-202, Method 106
Vibration <i>Vibration</i>	MIL-STD-202, Method 204, Condition B
Shock <i>Schock</i>	MIL-STD-202, Method 213, Condition I
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 / Ag plating
Outer contact <i>Außenleiter</i>	CuZn, Ag / white bronze plating
Crimping ferrule <i>Crimphülse</i>	Copper alloy, white bronze plating
Dielectric <i>Dielektrikum</i>	PTFE
Gasket <i>Dichtung</i>	Rubber

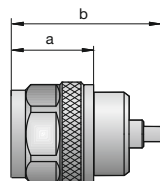
Rosenberger-connectors fulfill in principle the indicated data of the Technical Data. Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution. Specific data sheets for particular products can be provided on request from your Rosenberger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

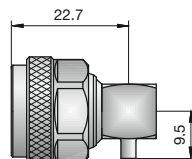
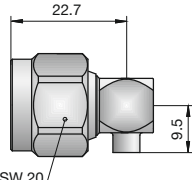
Straight Plug, solder

Semi-Rigid Cables

Ordering Number	Remarks	Cable Group	Assembly Instruction	Packing Unit	
53 S 101-272 N5	a = 17.5 mm; b = 24.3 mm	72	53 T	50	
53 S 101-273 B5	a = 17.5 mm; b = 30.1 mm	73	53 T1	1	

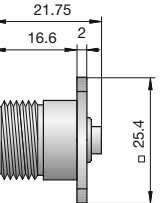
Right Angle Plug, solder

Semi-Rigid Cables

Ordering Number	Cable Group	Assembly Instruction	Packing Unit	
53 S 205-271 N5	71	53 T11	50	
53 S 206-272 N5	72	53 T8	50	

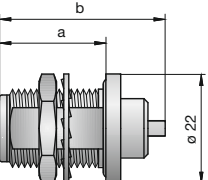
Panel Jack, solder, 4-hole flange

Semi-Rigid Cables

Ordering Number	Remarks	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Packing Unit	
53 K 415-272 N5	4 x Ø 3.4 mm	72	53 T25	B 12	25 blister	

Panel Jack, solder, round flange

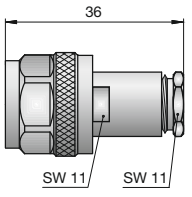
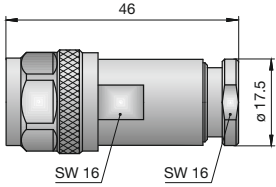
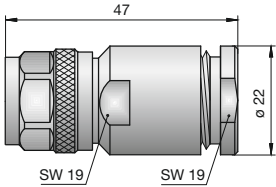
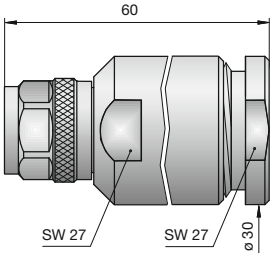
Semi-Rigid Cables

Ordering Number	Version	Remarks	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Packing Unit	
53 K 517-271 N5	rear mount	a = 21.5 mm; b = 28.0 mm	71	53 T26	B 13	1	
53 K 504-272 N5	rear mount	a = 23.0 mm; b = 33.0 mm	72	53 T2	B 13	50	
53 K 504-273 N5	rear mount	a = 23.0 mm; b = 32.3 mm	73	53 T1	B 13	1	

Cable Connectors - Flexible Cables

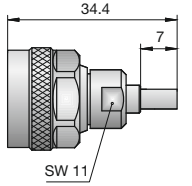
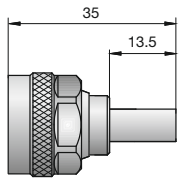
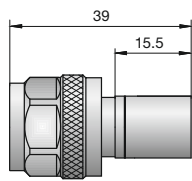
Straight Plug, clamp

Flexible Cables

Ordering Number	Remarks	Cable Group	Assembly Instruction	Packing Unit	
53 S 114-002 N5	captivated center contact	02, 03	53 B1	1	
53 S 114-006 N5		06, 07, 08	53 B1	1	
53 S 102-015 N5	captivated center contact	15, 17	53 B	1	
53 S 108-021 N5		21	53 A	1	
53 S 108-022 N5		22	53 E	1	
53 S 108-022 N5					
53 S 108-022 N5					

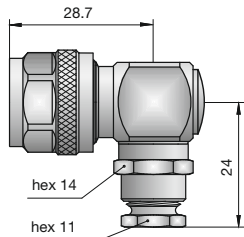
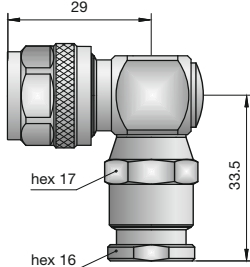
Straight Plug, crimp

Flexible Cables

Ordering Number	Cable Group	Assembly Instruction	Crimp Inserts	Packing Unit	
53 S 107-802 N5	02	51 T	11 W 150-402	1, 100	
53 S 107-803 N5	03	51 T	11 W 150-402	1, 100	
53 S 107-106 N5	06	51 P10	11 W 150-208	1, 100	
53 S 107-108 N5	07, 08	51 P10	11 W 150-208	1, 100	
53 S 101-115 N5	15	53 O3	11 W 150-215	1	
53 S 101-117 N5	17	53 O3	11 W 150-215	1, 50	
53 S 101-1N9 N5	N9	53 W4	11 W 150-115	1	

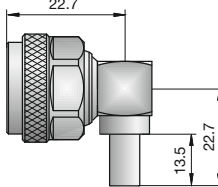
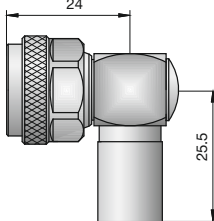
Right Angle Plug, clamp

Flexible Cables

Ordering Number	Cable Group	Assembly Instruction	Packing Unit	
53 S 204-006 N5	06, 07, 08	53 M	1	
53 S 201-015 N5	15, 17	53 F	1	

Right Angle Plug, solder crimp

Flexible Cables

Ordering Number	Cable Group	Assembly Instruction	Crimp Inserts	Packing Unit	
53 S 205-306 N5	06	53 S1	11 W 150-108	50	
53 S 205-308 N5	07, 08	53 S1	11 W 150-108	50	
53 S 205-315 N5	15	53 S5	11 W 150-115	50	
53 S 205-317 N5	17	53 S5	11 W 150-115	50	

Straight Jack, clamp

Flexible Cables

Ordering Number	Cable Group	Assembly Instruction	Packing Unit	
53 K 114-002 N5	02, 03	53 B1	1	
53 K 114-006 N5	06, 07, 08	53 B1	1	
53 K 102-015 N5	15, 17	53 B	1	

Straight Jack, crimp

Flexible Cables

Ordering Number	Cable Group	Assembly Instruction	Crimp Inserts	Packing Unit	
53 K 107-106 N5	06	53 P	11 W 150-208	1	
53 K 107-108 N5	07, 08	53 P	11 W 150-208	1	
53 K 101-115 N5	15	53 O3	11 W 150-215	1	
53 K 101-117 N5	17	53 O3	11 W 150-215	1	

Panel Jack, clamp, 4-hole flange

Flexible Cables

Ordering Number	Remarks	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Packing Unit	
53 K 414-002 N5	4 x Ø 3.4 mm	02, 03	53 B1	B 12	1	
53 K 414-006 N5	4 x Ø 3.4 mm	06, 07, 08	53 B1	B 12	1	
53 K 402-015 N5	4 x Ø 3.4 mm	15, 17	53 B	B 12	1	

Panel Jack, crimp, 4-hole flange

Flexible Cables

Ordering Number	Remarks	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Crimp Inserts	Packing Unit	
53 K 407-106 N5	4 x Ø 3.4 mm	06	53 P	B 12	11 W 150-208	1	
53 K 407-108 N5	4 x Ø 3.4 mm	07, 08	53 P	B 12	11 W 150-208	1	
53 K 401-115 N5	4 x Ø 3.4 mm; a = 10.7 mm	15	53 O3	B 12	11 W 150-215	1	
53 K 401-117 N5	4 x Ø 3.4 mm; a = 11.2 mm	17	53 O3	B 12	11 W 150-215	1	

Panel Jack, crimp, round flange

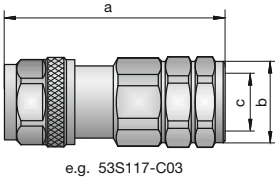
Flexible Cables

Ordering Number	Version	Cable Group	Assembly Instruction	Panel Piercing / PCB Layout	Crimp Inserts	Packing Unit	
53 K 517-802 N5	rear mount	02	51 T	B 13	11 W 150-402	1	
53 K 517-803 N5	rear mount	03	51 T	B 13	11 W 150-402	1	
53 K 507-106 N5	rear mount	06	53 P	B 13	11 W 150-208	1	
53 K 507-108 N5	rear mount	07, 08	53 P1	B 13	11 W 150-208	100	
53 K 501-115 N5	rear mount	15	53 O3	B 13	11 W 150-215	1	
53 K 501-117 N5	rear mount	17	53 O3	B 13	11 W 150-215	1, 50	

Cable Connectors - Corrugated Cables - JacSeal+

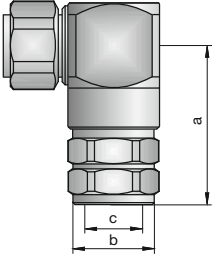
Straight Plug

JacSeal+

Ordering Number	Version	Remarks	Cable Type	Assembly Instruction	Packing Unit	
53 S 117-C03 N1	Ring	a = 54.0 mm; b Ø= 20.0 mm; c Ø= 16.5 mm	1/2" R	60 I37	1	
53 S 117-C08 N1	Spiral	a = 55.0 mm; b Ø= 20.0 mm; c Ø= 14.0 mm	1/2" S	60 I38	1	
53 S 117-C05 N1	Ring	a = 50.0 mm; b Ø= 36.0 mm; c Ø= 28.3 mm	7/8" R	60 I36	1	
53 S 117-C06 N1	Ring	a = 81.3 mm; b Ø= 47.0 mm; c Ø= 39.9 mm	1 1/4" R	60 I41	1	
53 S 117-C07 N1	Ring	a = 92.0 mm; b Ø= 58.0 mm; c Ø= 50.6 mm	1 5/8" R	60 I42	1	

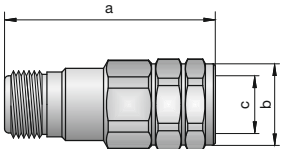
Right Angle Plug

JacSeal+

Ordering Number	Version	Remarks	Cable Type	Assembly Instruction	Packing Unit	
53 S 217-C03 N1	Spiral	a = 33.8 mm; b Ø= 20.0 mm; c Ø= 16.5 mm	1/2" S	60 I37	1	
53 S 217-C08 N1	Spiral	a = 37.2 mm; b Ø= 20.0 mm; c Ø= 14.0 mm	1/2" S	60 I38	1	

Straight Jack

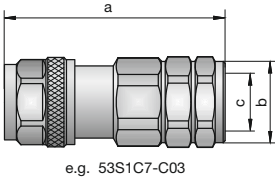
JacSeal+

Ordering Number	Version	Remarks	Cable Type	Assembly Instruction	Packing Unit	
53 K 117-C03 N1	Ring	a = 52.0 mm; b Ø= 20.0 mm; c Ø= 16.5 mm	1/2" R	60 I37	1	
53 K 117-C08 N1	Spiral	a = 53.0 mm; b Ø= 20.0 mm; c Ø= 14.0 mm	1/2" S	60 I38	1	
53 K 117-C05 N1	Ring	a = 43.0 mm; b Ø= 36.0 mm; c Ø= 28.3 mm	7/8" R	60 I36	1	
53 K 117-C06 N1	Ring	a = 75.1 mm; b Ø= 47.0 mm; c Ø= 39.9 mm	1 1/4" R	60 I41	1	
53 K 117-C07 N1	Ring	a = 85.8 mm; b Ø= 58.0 mm; c Ø= 50.6 mm	1 5/8" R	60 I42	1	

Cable Connectors - Corrugated Cables - JacSeal

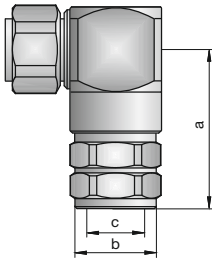
Straight Plug

JacSeal

Ordering Number	Version	Remarks	Cable Type	Assembly Instruction	Packing Unit	
53 S 1C7-C03 N1	Ring	a = 55.3 mm; b Ø= 20.0 mm; c Ø= 16.5 mm	1/2" R	1C7-C03	1	
53 S 1C7-C08 N1	Spiral	a = 55.3 mm; b Ø= 20.0 mm; c Ø= 14.0 mm	1/2" S	1C7-C08	1	
53 S 1C7-C05 N1	Ring	a = 50.0 mm; b Ø= 36.0 mm; c Ø= 28.3 mm	7/8" R	60 I36	1	
53 S 1C7-C06 N1	Ring	a = 75.6 mm; b Ø= 44.3 mm; c Ø= 39.6 mm	1 1/4" R	60 I39	1	
53 S 1C7-C07 N1	Ring	a = 85.1 mm; b Ø= 55.8 mm; c Ø= 50.6 mm	1 5/8" R	60 I40	1	

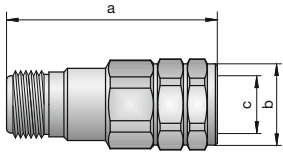
Right Angle Plug

JacSeal

Ordering Number	Version	Remarks	Cable Type	Assembly Instruction	Packing Unit	
53 S 2C7-C03 N1	Ring	a = 37.9 mm; b Ø= 20.0 mm; c Ø= 16.5 mm	1/2" R	1C7-C03	1	
53 S 2C7-C08 N1	Spiral	a = 36.95 mm; b Ø= 20.0 mm; c Ø= 14.0 mm	1/2" S	1C7-C08	1	

Straight Jack

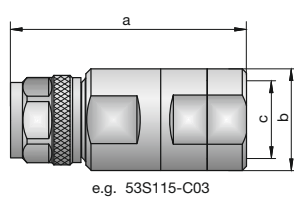
JacSeal

Ordering Number	Version	Remarks	Cable Type	Assembly Instruction	Packing Unit	
53 K 1C7-C03 N1	Ring	a = 52.3 mm; b Ø= 20.0 mm; c Ø= 16.5 mm	1/2" R	1C7-C03	1	
53 K 1C7-C08 N1	Spiral	a = 53.3 mm; b Ø= 20.0 mm; c Ø= 14.0 mm	1/2" S	1C7-C08	1	
53 K 1C7-C05 N1	Ring	a = 43.0 mm; b Ø= 36.0 mm; c Ø= 28.3 mm	7/8" R	60 I36	1	
53 K 1C7-C06 N1	Ring	a = 69.5 mm; b Ø= 44.3 mm; c Ø= 39.6 mm	1 1/4" R	60 I39	1	
53 K 1C7-C07 N1	Ring	a = 79.1 mm; b Ø= 55.8 mm; c Ø= 50.6 mm	1 5/8" R	60 I40	1	

Cable Connectors - Corrugated Cables - CorSeal

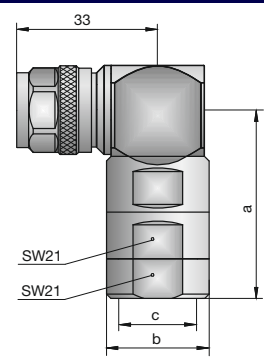
Straight Plug

CorSeal

Ordering Number	Version	Remarks	Cable Group	Assembly Instruction	Packing Unit	
53 S 115-C01 N1	Ring	a = 61.0 mm; b Ø= 24.0 mm; c Ø= 9.3 mm	1/4" R	60 I30	1	 e.g. 53S115-C03
53 S 115-C09 N1	Spiral	a = 52.0 mm; b Ø= 20.0 mm; c Ø= 8.5 mm	1/4" S	60 I23	1	
53 S 115-C02 N1	Spiral	a = 71.2 mm; b Ø= 24.0 mm; c Ø= 11.0 mm	3/8" S	60 I28	1	
53 S 115-C03 N1	Ring	a = 65.0 mm; b Ø= 24.0 mm; c Ø= 16.5 mm	1/2" R	60 I18	1	
53 S 115-C08 N1	Spiral	a = 70.0 mm; b Ø= 24.0 mm; c Ø= 14.2 mm II. Generation	1/2" S	60 I35	1	
53 S 115-C05 N1	Ring	a = 76.4 mm; b Ø= 35.0 mm; c Ø= 28.5 mm	7/8" R	60 I25	1	
53 S 115-C06 N1	Ring	a = 107.0 mm; b Ø= 52.0 mm; c Ø= 40.0 mm	1 1/4" R	60 I26	1	
53 S 115-C07 N1	Ring	a = 116.0 mm; b Ø= 63.0 mm; c Ø= 51.6 mm	1 5/8" R	60 I29	1	

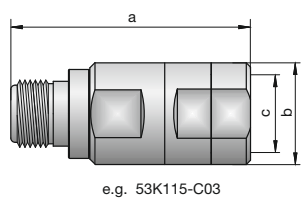
Right Angle Plug

CorSeal

Ordering Number	Version	Remarks	Cable Group	Assembly Instruction	Packing Unit	
53 S 215-C01 N1	Ring	a = 39.5 mm; b Ø= 24.0 mm; c Ø= 9.3 mm	1/4" R	60 I30	1	 e.g. 53S215-C03
53 S 215-C09 N1	Spiral	a = 36.8 mm; b Ø= 20.0 mm; c Ø= 8.5 mm	1/4" S	60 I23	1	
53 S 215-C02 N1	Spiral	a = 50.1 mm; b Ø= 24.0 mm; c Ø= 11.0 mm	3/8" S	60 I28	1	
53 S 215-C03 N1	Ring	a = 44.5 mm; b Ø= 24.0 mm; c Ø= 16.5 mm	1/2" R	60 I18	1	
53 S 215-C08 N1	Spiral	a = 47.0 mm; b Ø= 24.0 mm; c Ø= 14.2 mm II. Generation	1/2" S	60 I35	1	

Straight Jack

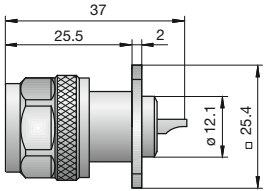
CorSeal

Ordering Number	Version	Remarks	Cable Group	Assembly Instruction	Packing Unit	
53 K 115-C01 N1	Ring	a = 61.0 mm; b Ø= 24.0 mm; c Ø= 9.3 mm	1/4" R	60 I30	1	 e.g. 53K115-C03
53 K 115-C09 N1	Spiral	a = 52.0 mm; b Ø= 20.0 mm; c Ø= 8.5 mm	1/4" S	60 I23	1	
53 K 115-C02 N1	Spiral	a = 71.0 mm; b Ø= 24.0 mm; c Ø= 11.0 mm	3/8" S	60 I28	1	
53 K 115-C03 N1	Ring	a = 64.8 mm; b Ø= 24.0 mm; c Ø= 16.5 mm	1/2" R	60 I18	1	
53 K 115-C08 N1	Spiral	a = 70.4 mm; b Ø= 24.0 mm; c Ø= 14.2 mm II. Generation	1/2" S	60 I35	1	
53 K 115-C05 N1	Ring	a = 74.3 mm; b Ø= 35.0 mm; c Ø= 28.5 mm	7/8" R	60 I25	1	
53 K 115-C06 N1	Ring	a = 106.0 mm; b Ø= 52.0 mm; c Ø= 40.0 mm	1 1/4" R	60 I26	1	
53 K 115-C07 N1	Ring	a = 115.0 mm; b Ø= 63.0 mm; c Ø= 51.6 mm	1 5/8" R	60 I29	1	

Panel Connectors - Solder End

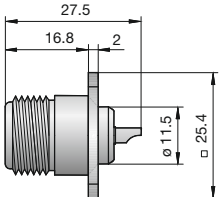
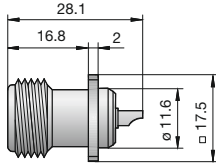
Panel Plug, 4-hole flange

Solder End

Ordering Number	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 S 401-200 N5	4 x Ø 3.4 mm	B 12	25 blister	

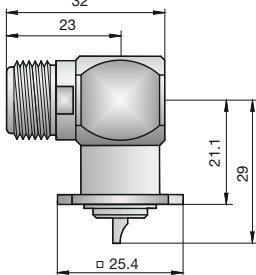
Panel Jack, 4-hole flange

Solder End

Ordering Number	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 K 401-200 N5	4 x Ø 3.4 mm	B 12	100	
53 K 403-200 N5	4 x Ø 3.2 mm	B 101	50	

Right Angle Panel Jack, 4-hole flange

Solder End

Ordering Number	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 K 201-200 N5	4 x Ø 3.4 mm	B 12	1	

Panel Jack, round flange

Solder End

Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 K 501-200 N5	front mount	pressurized	B 13	1	
53 K 505-200 N5	rear mount		B 13	1	

Panel Connectors - Coaxial End

Panel Plug, 4-hole flange

Coaxial End

Ordering Number	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 S 401-500 N5	4 x Ø 2.6 mm	B 55a	1	

Panel Jack, 4-hole flange

Coaxial End

Ordering Number	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 K 409-500 N5	4 x Ø 3.4 mm	B 12	50	
53 K 406-500 N5	4 x Ø 3.4 mm	B 12	50	
53 K 420-500 N5	a = 34.5 mm; b = 16.0 mm; 4 x Ø 3.4 mm	B 12	50	
53 K 453-500 N5	a = 38.5 mm; b = 20.0 mm; 4 x Ø 3.4 mm	B 12	50	
53 K 413-500 N5	a = 38.6 mm; b = 15.0 mm; c = 17.9 mm; 4 x Ø 3.2 mm	B 176	25 blister	
53 K 461-500 N5	a = 34.7 mm; b = 12.0 mm; c = 14.0 mm; 4 x Ø 3.2 mm	B 176	25 blister	
53 K 465-500 N5	a = 30.0 mm; b = 5.0 mm; c = 11.45 mm; 4 x Ø 3.2 mm	B 176	25 blister	

Panel Jack, round flange

Coaxial End

Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 K 102-500 A3	Screw-in			1	
53 K 505-500 N5	Press-in	a = 3.0 mm; b = 1.3 mm; c = 23.8 mm	B 136	50 blister	
53 K 506-500 N5	Press-in	a = 2.5 mm; b = 3.0 mm; c = 24.8 mm	B 136	50 blister	
53 K 532-500 N5	Press-in	a = 13.3 mm	B 135	100	

Panel Connectors - Stripline

Panel Jack, 4-hole flange

Stripline

Ordering Number	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 K 405-600 N5	4 x Ø 3.4 mm	B 12	25 blister	

Panel Connectors - Microstrip

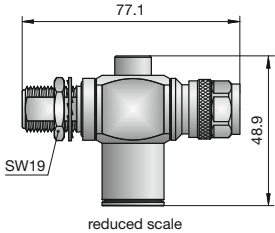
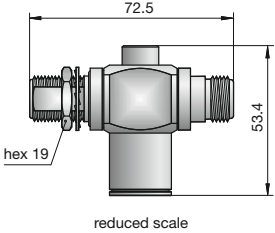
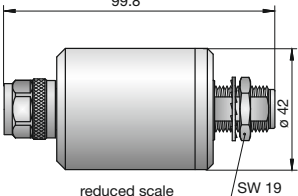
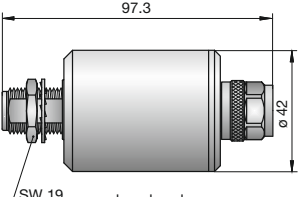
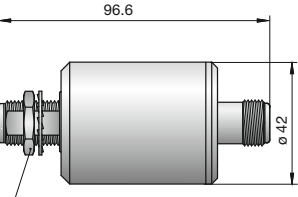
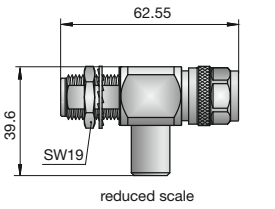
Panel Jack, 4-hole flange

Microstrip

Ordering Number	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 K 410-700 N5	4 x Ø 3.4 mm; slot 0.5 mm	B 12	50	
53 K 401-700 N5	4 x Ø 3.1 mm; slot 0.6 mm	B 6	50	
53 K 401-800 N5	4 x Ø 3.3 mm; accepts SMA-transition pins, Ø 0.91 mm	B 6	100	

Surge Arresters

Wideband Surge Arrester

Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 HK 565-S00 N1	female - male	698 MHz to 2700 MHz	B 13	1	
53 HK 565-K00 N1	female - female	698 MHz to 2700 MHz	B 13	1	
53 HS 501-K00 N1	male - female	800 MHz to 2500 MHz grounded center contact	B 13	1	
53 HK 501-S00 N1	female - male	800 MHz to 2500 MHz grounded center contact	B 13	1	
53 HK 501-K00 N1	female - female	800 MHz to 2500 MHz grounded center contact	B 13	1	
53 HK 502-S00 N1	female - male	2400 MHz to 5800 MHz for WiMAX and WLAN-applications	B 13	1	

Wideband Surge Arrester with GDT

Ordering Number	Version	Remarks	Assembly Instruction	Panel Piercing / PCB Layout	Packing Unit	
53 BK 565-Sxxx N1	female - male	698 MHz to 2700 MHz discharge tube included xxx: please fill in requested GDT		B 13	1	reduced scale
53 BK 565-Kxxx N1	female - female	698 MHz to 2700 MHz discharge tube included xxx: please fill in requested GDT		B 13	1	reduced scale
53 BK 590-Sxxx N1	female - male	DC to 4000 MHz discharge tube included xxx: please fill in requested GDT	53MV-A001	B 10	1	
53 BK 590-Kxxx N1	female - female	DC to 4000 MHz discharge tube included xxx: please fill in requested GDT	53MV-A001	B 10	1	

Gas Discharge Tube

Ordering Number	Remarks	Packing Unit	
53 Z B01-090	Nom. spark-over voltage 90 V	1	
53 Z B01-230	Nom. spark-over voltage 230 V	1	
53 Z B01-350	Nom. spark-over voltage 350 V	1	

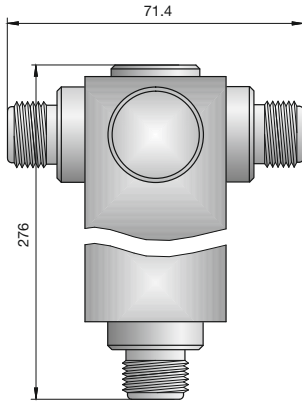
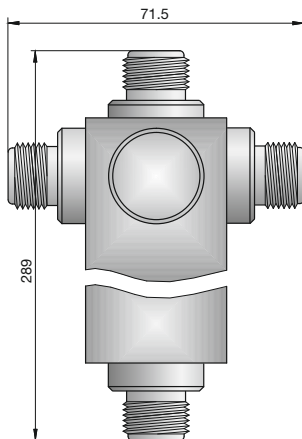
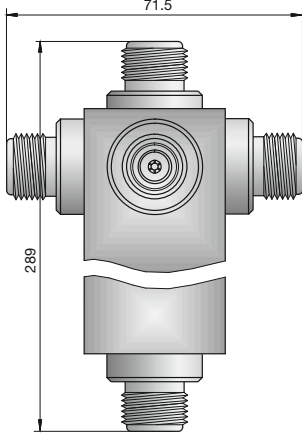
Wideband Surge Arrester with TVS

Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 EK 565-Kxxx N1	female - female	698 MHz to 2500 MHz discharge tube included xxx: please fill in requested GDT	B 13	1	reduced scale

Power Splitter - Wideband

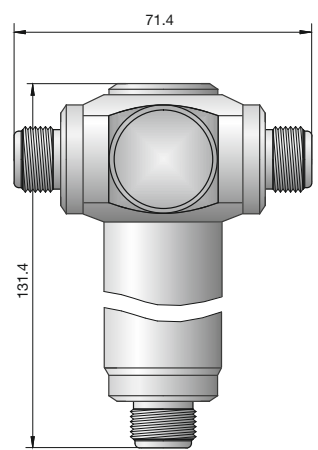
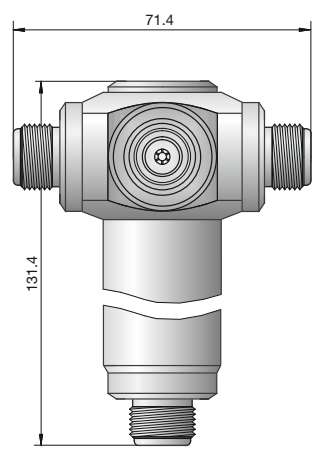
Power Splitter

Wideband

Ordering Number	Version	Remarks	Packing Unit	
53 PK 12B-K00 N1	2-way	Return loss: ≥ 26 dB @ 800 MHz to 2.2 GHz Power max: 800 W	1	
53 PK 13B-K00 N1	3-way	Return loss: ≥ 26 dB @ 800 MHz to 2.2 GHz Power max: 800 W	1	
53 PK 14B-K00 N1	4-way	Return loss: ≥ 26 dB @ 800 MHz to 2.2 GHz Power max: 800 W	1	

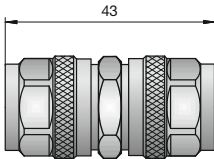
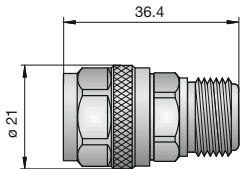
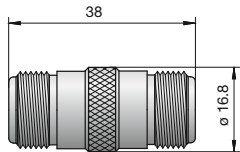
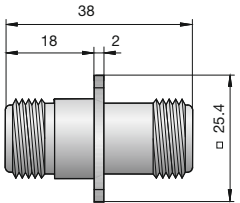
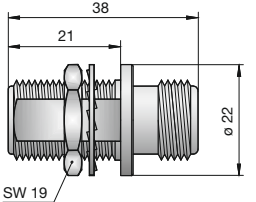
Power Splitter for WLAN

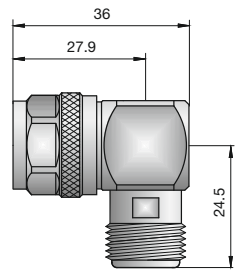
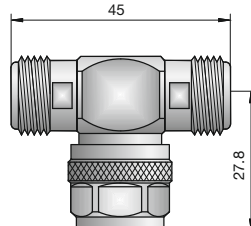
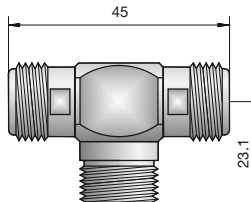
Wideband

Ordering Number	Version	Remarks	Packing Unit	
53 PK 125-K01 N1	2-way for WLAN	Return loss: ≥ 22 dB (≥ 24 dB @ 2.4 GHz and 5.8 GHz) Power max: 250 W	1	
53 PK 135-K00 N1	3-way for WLAN	Return loss: ≥ 21 dB (≥ 23 dB @ 2.4 GHz and 5.8 GHz) Power max: 250 W	1	

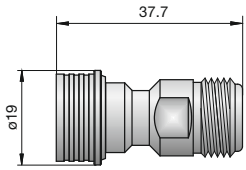
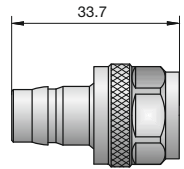
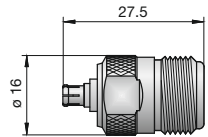
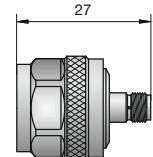
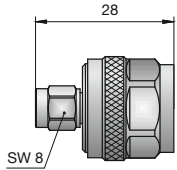
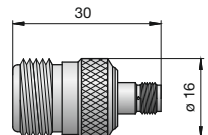
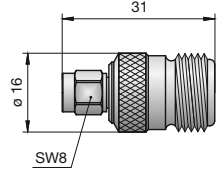
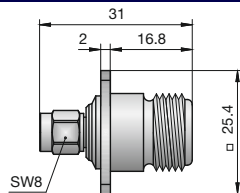
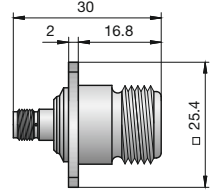
Adaptors

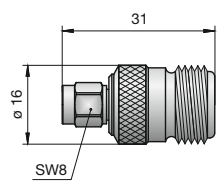
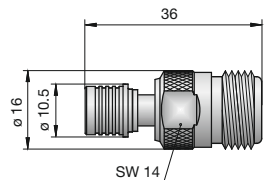
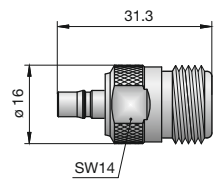
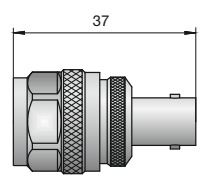
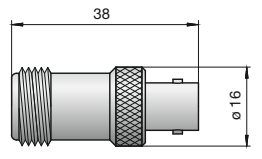
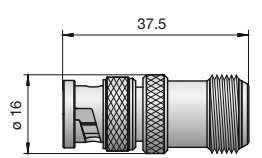
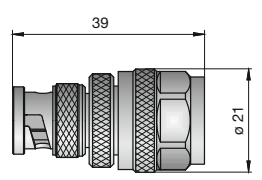
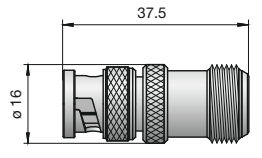
Adaptors (In Series)

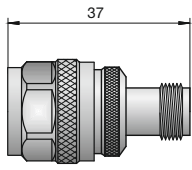
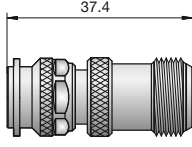
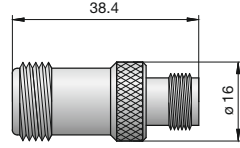
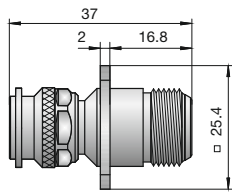
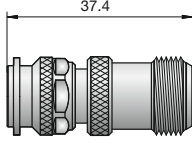
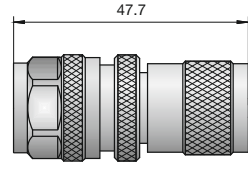
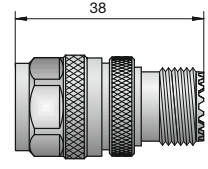
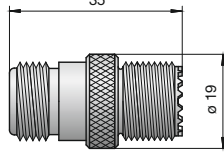
Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 S 101-S00 N5	straight	N male - male		1	
53 S 101-K00 N5	straight	N male - female		1	
53 K 101-K00 N5	straight	N female - female		1	
53 K 401-K00 N5	straight panel	N female - female 4-hole flange 4 x Ø 3.4 mm	B 12	1	
53 K 503-K00 N5	straight panel	N female - female round flange	B 13	1	
53 K 502-K00 N5	straight panel	N female - female round flange pressurized	B 13	1	

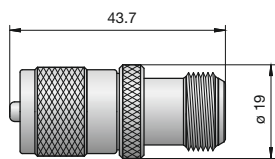
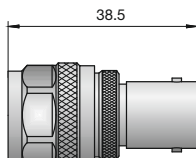
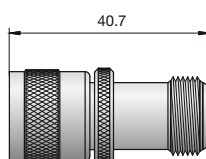
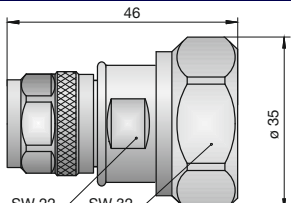
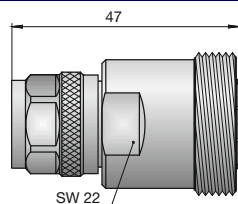
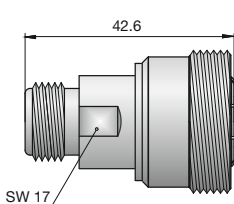
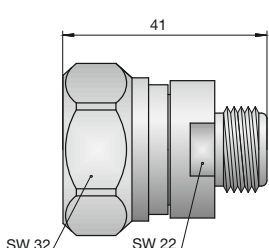
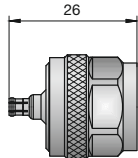
Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 S 201-K00 N5	right angle	N male - female		1	
53 S 301-K00 N5	T-adaptor	N female - male - female		1	
53 K 301-K00 N5	T-adaptor	N female - female - female		1	

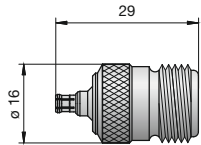
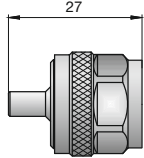
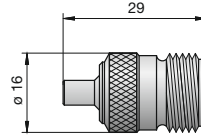
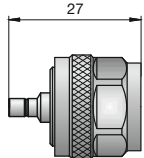
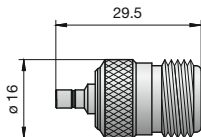
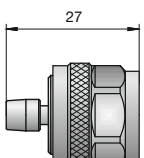
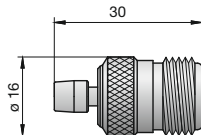
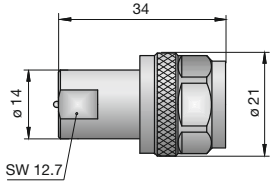
Adaptors (Inter Series)

Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
153 QS 153-K00 N5	straight	QN male - N female		1	
153 QK 153-S00 N5	straight	QN female - N male		1	
119 K 153-K00 L5	straight	P-SMP female - N female		1	
53 S 132-K00 L5	straight	N male - SMA female		1	
32 S 153-S00 L5	straight	SMA male - N male		1	
53 K 132-K00 L5	straight	N female - SMA female		1	
32 S 153-K00 L5	straight	SMA male - N female		1	
32 S 453-K00 L5	straight panel	SMA male - N female 4-hole flange	B 12	1	
32 K 453-K00 L5	straight panel	SMA female - N female 4-hole flange	B 12	1	

Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
32 RS 153-K00 N5	straight	SMA reverse male - N Standard female		1	
28 S 153-K00 N5	straight	QMA male - N 50 Ω female		1	
28 K 153-K00 N5	straight	QMA female - N 50 Ω female		1	
53 S 151-K00 N5	straight	N male - BNC female		1	
53 K 151-K00 N5	straight	N female - BNC female		1	
51 S 153-K00 N5	straight	BNC male - N female		1	
51 S 153-S00 N5	straight	BNC male - N male		1	
51 RS 153-K00 N5	straight	BNC reverse male - N Standard female		1	

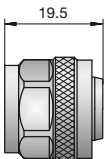
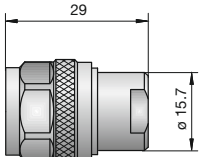
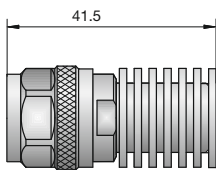
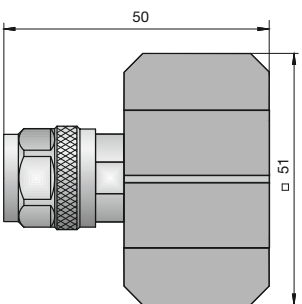
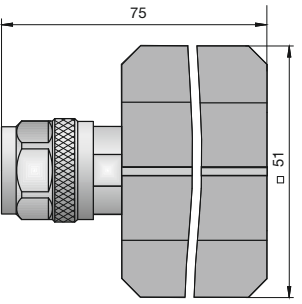
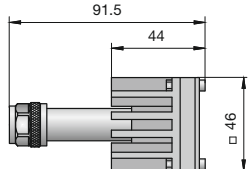
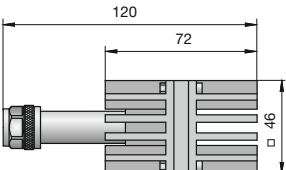
Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
53 S 156-K00 N5	straight	N male - TNC female		1	
56 S 153-K00 N5	straight	TNC male - N female		1	
53 K 156-K00 N5	straight	N female - TNC female		1	
56 S 453-K00 N5	straight panel	TNC male - N female 4-hole flange	B 9	1	
56 RS 153-K00 N5	straight	TNC reverse male - N Standard female		1	
53 S 154-S00 N5	straight	N male - UHF male		1	
53 S 154-K00 N5	straight	N male - UHF female		1	
53 K 154-K00 N5	straight	N female - UHF female		1	

Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
54 S 153-K00 N3	straight	UHF male - N female		1	
53 S 152-K00 N5	straight	N male - C female		1	
52 S 153-K00 N3	straight	C male - N female		1	
53 S 160-S50 N1	straight	N male - 7-16 male		1	
53 S 160-K50 N1	straight	N male - 7-16 female		1	
53 K 160-K50 N1	straight	N female - 7-16 female		1	
60 S 153-K50 N1	straight	7-16 male - N female		1	
29 S 153-S00 Z5	straight	MCX male - N male		1	

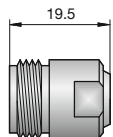
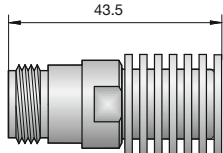
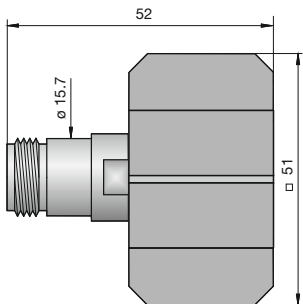
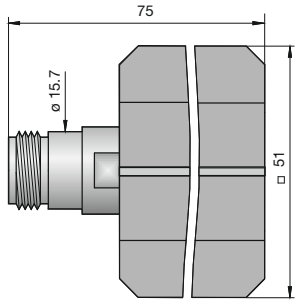
Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
29 S 153-K00 Z5	straight	MCX male - N female		1	
29 K 153-S00 Z5	straight	MCX female - N male		1	
29 K 153-K00 Z5	straight	MCX female - N female		1	
59 S 153-S00 L5	straight	SMB male - N male		1	
59 S 153-K00 L5	straight	SMB male - N female		1	
59 K 153-S00 L5	straight	SMB female - N male		1	
59 K 153-K00 L5	straight	SMB female - N female		1	
26 S 153-S00 A1	straight	FME male - N male		1	

Terminations

Termination Plug

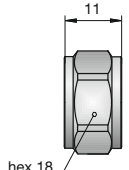
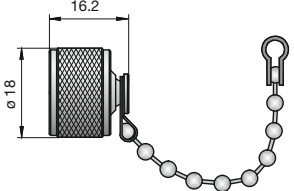
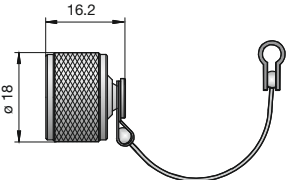
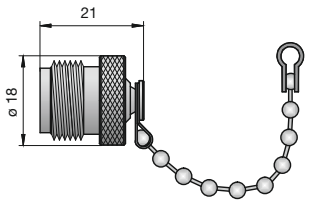
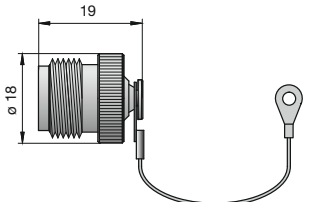
Ordering Number	Remarks	Return Loss	Packing Unit	
53 S 1RR-001 N3	1 Watt Frequency: DC to 4 GHz	≥ 23.1 dB @ DC to 4 GHz	1	
53 S 17R-001 N3	1 Watt Frequency: DC to 12.4 GHz	≥ 32.2 dB @ DC to 1 GHz ≥ 26.4 dB @ 1 GHz to 2 GHz ≥ 20.8 dB @ 2 GHz to 12.4 GHz	1	
53 S 15R-005 N3	5 Watt Frequency: DC to 3 GHz	≥ 20.8 dB @ DC to 3 GHz	1	
53 S 15R-010 N3	10 Watt Frequency: DC to 3 GHz	≥ 20.8 dB @ DC to 3 GHz	1	
53 S 17R-010 N3	10 Watt Frequency: DC to 10 GHz	≥ 26.4 dB @ DC to 2 GHz ≥ 21.2 dB @ 2 GHz to 5 GHz ≥ 14 dB @ 5 GHz to 10 GHz	1	
53 S 15R-020 N3	20 Watt Frequency: DC to 3 GHz	≥ 20.8 dB @ DC to 3 GHz	1	
53 S 17R-020 N3	20 Watt Frequency: DC to 10 GHz	≥ 26.4 dB @ DC to 2 GHz ≥ 21.2 dB @ 2 GHz to 5 GHz ≥ 14 dB @ 5 GHz to 10 GHz	1	
53 S 17R-025 N3	25 Watt Frequency: DC to 5 GHz	≥ 26.4 dB @ DC to 2 GHz ≥ 23.1 dB @ 2 GHz to 5 GHz	1	 reduced scale
53 S 17R-040 N3	40 Watt Frequency: DC to 5 GHz	≥ 40.1 dB @ DC to 0.5 GHz ≥ 34.1 dB @ 0.5 GHz to 1 GHz ≥ 26.4 dB @ 1 GHz to 3 GHz ≥ 23.1 dB @ 3 GHz to 5 GHz	1	 reduced scale

Termination Jack

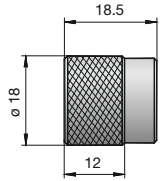
Ordering Number	Remarks	Return Loss	Packing Unit	
53 K 1RR-001 N3	1 Watt Frequency: DC to 4 GHz	≥ 23.1 dB @ DC to 4 GHz	1	
53 K 15R-005 N3	5 Watt Frequency: DC to 3 GHz	≥ 20.8 dB @ DC to 3 GHz	1	
53 K 15R-010 N3	10 Watt Frequency: DC to 3 GHz	≥ 20.8 dB @ DC to 3 GHz	1	
53 K 17R-010 N3	10 Watt Frequency: DC to 10 GHz	≥ 26.4 dB @ DC to 2 GHz ≥ 21.2 dB @ 2 GHz to 5 GHz ≥ 14 dB @ 5 GHz to 10 GHz	1	
53 K 15R-020 N3	20 Watt Frequency: DC to 3 GHz	≥ 20.8 dB @ DC to 3 GHz	1	
53 K 17R-020 N3	20 Watt Frequency: DC to 10 GHz	≥ 26.4 dB @ DC to 2 GHz ≥ 21.2 dB @ 2 GHz to 5 GHz ≥ 14 dB @ 5 GHz to 10 GHz	1	

Accessories

Protective Cap

Ordering Number	Remarks	Packing Unit	
53 Z 117-000 N	male without chain	200	
53 Z 112-000 N	male with chain	1	
53 Z 113-001 N	male with cord	100	
53 Z 115-000 N	female with chain	1	
53 Z 115-004 N	female with cord	100	

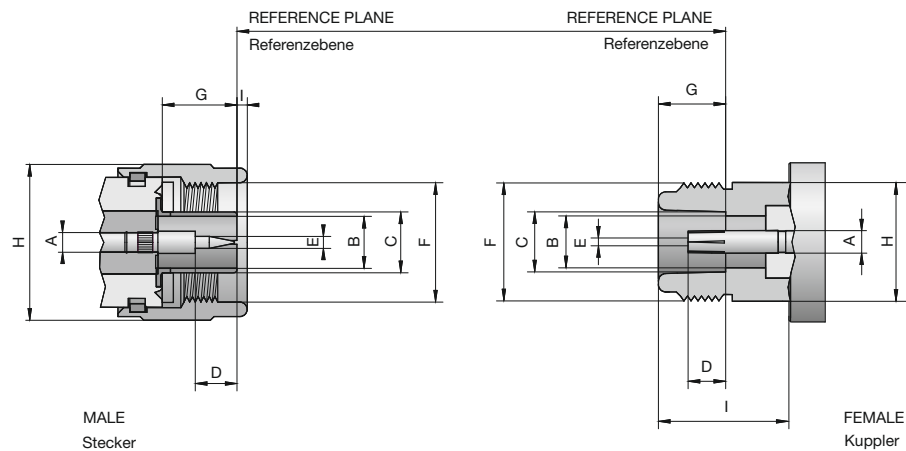
Shorting Cap Plug

Ordering Number	Version	Packing Unit	
53 Z 111-000 N5	male	1	

Special Tools for Series N please see chapter Tools

Interface Dimensions N, 75 Ω

Code 73



N, 75 Ω

dimension [mm]	Male Stecker		Female Kuppler	
	min.	max.	min.	max.
A	2.02 nom.		2.02 nom.	
B	7.00 nom.		7.00 nom.	
C		8.027	8.03	8.13
D	5.33	5.84	4.75	5.26
E	0.84	0.91		1)
F	5/8-24 UNEF-2B		5/8-24 UNEF-2A	
G	9.25		9.04	9.19
H		21.00		15.93
I	0.41	1.52	10.72	

1) resilient, dimension to meet electrical and mechanical requirements

Features

Interface according to IEC 61169-16 (Annex A)
 Frequency range DC to 6 GHz
 Return loss (cable connector straight) ≥ 26 dB (typ.)
 Impedance 75 Ω
 Screw-on coupling
 N and RPC-N -50 Ω connectors are intermateable

Product Range

Cable connectors
 Panel connectors
 Adaptors

Further connectors available on request

Technical Data N, 75 Ω

Code 73

Applicable standards Anwendbare Normen	
Interface according to <i>Interface gemäß</i>	IEC 61169-16 (Annex A)
Quality tested according to <i>Qualitätsprüfung gemäß</i>	MIL-STD-202
Electrical data Elektrische Daten	
Impedance <i>Wellenwiderstand</i>	75 Ω
Frequency range <i>Frequenzbereich</i>	DC to 6 GHz
Return loss (cable connector straight) <i>Rückflussdämpfung (Kabelsteckverbinder gerade)</i>	≥ 26 dB (typ.)
Insertion loss <i>Dämpfung</i>	≤ 0.1 x √f(GHz) dB
Insulation resistance <i>Isolationswiderstand</i>	≥ 5 GΩ
Center contact resistance <i>Übergangswiderstand Innenleiter</i>	≤ 1.5 mΩ
Outer contact resistance <i>Übergangswiderstand Außenleiter</i>	≤ 0.25 mΩ
Test voltage <i>Prüfspannung</i>	2500 V rms
Working voltage <i>Betriebsspannung</i>	1400 V rms
RF-leakage <i>Schirmdämpfung</i>	≥ 128 dB @ DC to 1 GHz
Mechanical data Mechanische Daten	
Mating cycles <i>Steckzyklen</i>	≥ 500
Coupling nut retention <i>Überwurfmutter Haltekraft</i>	≥ 450 N
Center contact captivation <i>Innenleiter Haltekraft</i>	axial: ≥ 28 N radial: ≥ 3 Ncm
Coupling test torque <i>Prüfdrehmoment</i>	≤ 1.7 Nm
Coupling torque recommended <i>Drehmoment empfohlen</i>	0.7 Nm to 1.1 Nm
Environmental data Umweltdaten	
Temperature range <i>Temperaturbereich</i>	-65 °C to +165 °C
Thermal shock <i>Temperaturzyklen</i>	MIL-STD-202, Method 107, Condition B
Climatic category <i>Klimakategorie</i>	IEC 60068 65/165/21
Degree of protection (mated pair) <i>Schutzgrad (gekoppeltes Paar)</i>	IEC 60529, IP 68
Corrosion resistance <i>Korrosionsbeständigkeit</i>	MIL-STD-202, Method 101, Condition B
Moisture resistance <i>Feuchtigkeitsbeständigkeit</i>	MIL-STD-202, Method 106
Vibration <i>Vibration</i>	MIL-STD-202, Method 204, Condition B
Shock <i>Schock</i>	MIL-STD-202, Method 213, Condition I
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, white bronze plating
Crimping ferrule <i>Crimphülse</i>	Copper alloy, white bronze plating
Dielectric <i>Dielektrikum</i>	PTFE
Gasket <i>Dichtung</i>	Rubber

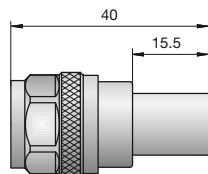
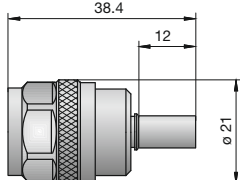
Rosenberger-connectors fulfill in principle the indicated data of the Technical Data. Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution. Specific data sheets for particular products can be provided on request from your Rosenberger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

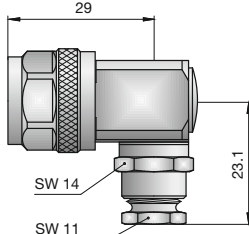
Straight Plug, crimp

Flexible Cables

Ordering Number	Cable Group	Assembly Instruction	Crimp Inserts	Packing Unit	
73 S 101-118 N5	18	53 O	11 W 150-218	1	
73 S 104-109 N5	09	53 P	11 W 150-209	1	

Right Angle Plug, clamp

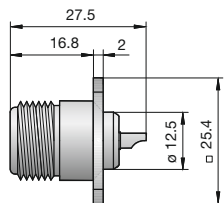
Flexible Cables

Ordering Number	Cable Group	Assembly Instruction	Packing Unit	
73 S 206-009 N5	09	53 M	1	

Panel Connectors - Solder End

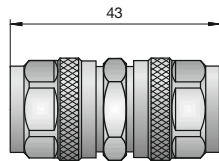
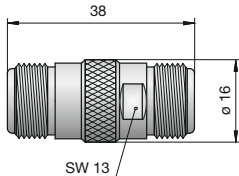
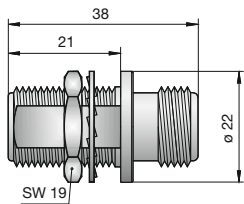
Panel Jack, 4-hole flange

Solder End

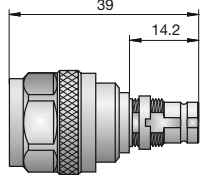
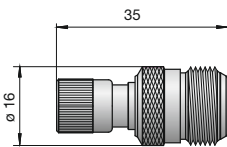
Ordering Number	Remarks	Panel Piercing / PCB Layout	Packing Unit	
73 K 401-200 N5	4 x Ø 3.4 mm	B 12	50	

Adaptors

Adaptors (In Series)

Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
73 S 101-S00 N5	straight	N male - male		1	
73 K 101-K00 N5	straight	N female - female		1	
73 K 501-K00 N5	straight panel	N female - female round flange	B 13	1	

Adaptors (Inter Series)

Ordering Number	Version	Remarks	Panel Piercing / PCB Layout	Packing Unit	
73 S 188-K00 L5	straight panel III. Generation	N 75 Ω male - 1.6-5.6 female round flange	B 27	1	
88 S 173-K00 L5	straight, Type A III. Generation	1.6-5.6 male - N 75 Ω female		1	
71 S 173-K00 N5	straight	BNC 75 Ω male - N 75 Ω female		1	