

Series TNC

Coaxial connector (Thread Navy Connector) with screw coupling for reliable connection and disconnection. Due to this mechanism, these connectors are particularly suitable for use in mobile devices with severe vibrations. The selected locking mechanism also achieves a higher safety class.

The TNC connector is available with characteristic impedances $Z = 50 \Omega$ and $Z = 75 \Omega$; both versions can be mated. The maximum frequency for the 50Ω version is 10 GHz, but the optimum working frequency is 0 to 4 GHz. The 75Ω version can be used successfully up to 1 GHz.

Straight and angled connector types are available for cables with diameters from 1.8 mm to 10.8 mm, in a variety of panel types and printed circuit board applications with various connection technologies.

TNC connectors have the same electrical interface dimensions as BNC series connectors.

Design in accordance with: IEC 169-8
MIL C-39012

Quality tested in accordance with: US MIL-Std 202

Cable mounting: clamp and crimp versions

Special versions: improved clamp
captivated center contact
gas-tight connectors

50 Ω and 75 Ω versions can be interconnected without restriction.

Serie TNC

Koaxial-Steckverbinder (Thread Navy Connector) mit Schraubverbindung für zuverlässiges Schließen bzw. Öffnen. Durch diese Schraubfesthaltung ist der TNC-Steckverbinder besonders für den Einsatz in mobilen Geräten, wo mit stärkeren Vibrationen zu rechnen ist, geeignet. Ebenfalls wird durch die gewählte Festhaltungsart ein höherer Schutzgrad erzielt.

Die Steckverbindung wird mit Wellenwiderständen von $Z = 50 \Omega$ oder $Z = 75 \Omega$ geliefert, die beiden Ausführungen sind steckkompatibel. Der Einsatzfrequenzbereich für die 50Ω -Variante reicht bis ca. 10 GHz, wobei optimale Ergebnisse zwischen 0 und 4 GHz erzielt werden können. Die 75Ω - Variante kann mit gutem Erfolg bis ca. 1 GHz eingesetzt werden.

Es existieren Bauformen in gerader und abgewinkelter Ausführung für Kabel mit Durchmessern von ca. 1,8mm bis 10,8mm, für Gehäuseeinbau und für Leiterplatteeinsatz mit verschiedenen Anschlußtechniken.

TNC-Stecker weisen die gleichen elektrischen Interfaceabmessungen wie BNC-Stecker auf.

Anschlußdimensionen nach: IEC 169-8
MIL C-39012

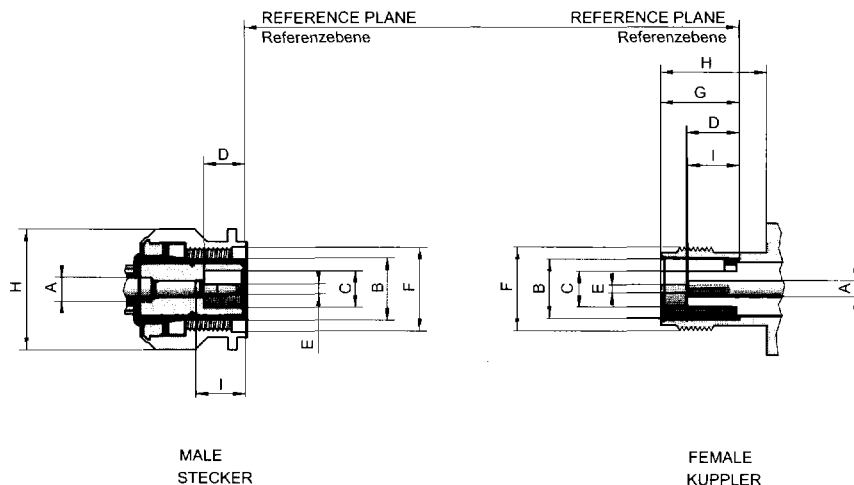
Qualitätsprüfung nach: US MIL-Std 202

Kabelmontage: Schraub- oder Crimpverbindung

Spezialausführungen: verbesserte Klemmung
festgehaltener Innenleiter
druckdichte Ausführung

50 Ω- und 75 Ω- Verbinder sind uneingeschränkt miteinander koppelbar.

Mechanical Characteristics



Anschlußmaße

TNC (50 Ohm) Serie 56					
MALE STECKER			FEMALE KUPPLER		
	min.	max.	min.	max.	
A	2.06	2.21	2.06	2.21 1)	A
B		1)	8.10	8.15	B
C	4.83			4.72	C
D	5.28	5.79	4.78	5.28	D
E	1.32	1.37		1)	E
F	7/16-28-UNEF-2B		7/16-28-UNEF-2A		F
G			8.31	8.51	G
H	16 nom.		10.52		H
I	5.33	5.84	4.55	5.23	I

1) resilient, dim. to meet electrical and mechanical requirements
federnd aufgeweitet bzw. zusammengezogen
(Erfüllung elektr./mech. Forderungen)

Technical Characteristics TNC

Technische Daten TNC

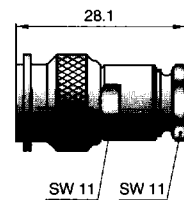
Electrical characteristics		Elektrische Daten
Characteristic impedance	50 Ω / 75 Ω	Wellenwiderstand
Frequency range max.	0...10 GHz / 0...4 GHz	Frequenzbereich max.
opt.	0...4 GHz / 0...1 GHz	opt.
VSWR (straight contacts)	≤ 1.28 typ.	VSWR (gerader Kontakt)
VSWR (right angle connector)	≤ 1.36 typ.	VSWR (rechtwinkliger Stecker)
Insertion loss (dB)	0.1 dB max. /1GHz typ.	Dämpfung (dB)
Insulation resistance	≥ 5000 MΩ	Isolationswiderstand
Center contact resistance	≤ 1.5 mΩ	Übergangswiderstand Innenleiter
Outer contact resistance	≤ 1 mΩ	Übergangswiderstand Außenleiter
Test voltage	1000 V rms	Prüfspannung
Working voltage	400 V rms	Betriebsspannung
Power max.	≤ 80 W (1 GHz) typ.	Leistungsbelastbarkeit
Mechanical characteristics		Mechanische Daten
Coupling torque	0.07 Nm ≤ MK ≤ 0.25 Nm	Anzugdrehmoment
Center contact retention force	≥ 15 N	Innenleiter Haltekraft
Connecting operations	≥ 500	Anzahl Steckzyklen
Environmental		Umgebungseinflüsse
Temperature range	-65°C - +165°C	Temperaturbereich
Vibration	MIL-STD-202 Meth. 204/B	Vibration
Climatical class according IEC	IEC 68 155/55/21	Klimaklasse nach IEC
Corrosion resistance	Salt Spray MIL-STD-202 Meth. 101/B	Korrosionsbeständigkeit
Degree of protection (mated pair)	IP 40	Schutzgrad für gekoppeltes Paar
Materials		Materialien
Housing, outer conductor	Brass	Gehäuse, Außenleiter
Spring loaded center contacts	CuBe	fedemde Innenleiter
Pin Contacts	Brass	Stiftkontakte
Insulator	PTFE	Isolator
Crimping sleeve	Copper Alloy	Krimphülse
Gaskets	Rubber	Dichtungen
Plating outer contact	Ni	Oberfläche Außenleiter
Plating center contact	Au	Oberfläche Innenleiter

10

STRAIGHT PLUG, Clamp

STECKER gerade, klemm

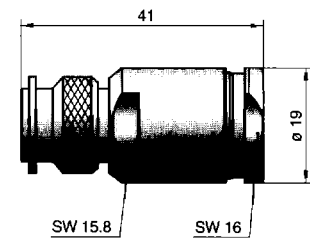
Part Number	Cable Group	Assembly Instruction	Remarks
56 S 106-001 A4	01	51 E	captivated contact
56 S 106-002 A4	02, 03	51 E	captivated contact
56 S 106-006 A4	06, 07, 08	51 E	captivated contact



STRAIGHT PLUG, Clamp

STECKER gerade, klemm

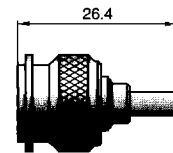
Part Number	Cable Group	Assembly Instruction	Remarks
56 S 105-015 A4	15, 17	51 D	



STRAIGHT PLUG, Crimp

STECKER gerade, crimp

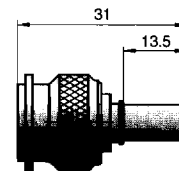
Part Number	Cable Group	Assembly Instruction	Crimp-Inserts	Remarks
56 S 101-801 A4	01	51 T	11 W 150-401	
56 S 101-802 A4	02	51 T	11 W 150-402	
56 S 101-803 A4	03	51 T	11 W 150-403	



STRAIGHT PLUG, Crimp

STECKER gerade, crimp

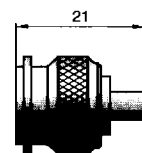
Part Number	Cable Group	Assembly Instruction	Crimp-Inserts	Remarks
56 S 101-106 A4	06	51 P1	11 W 150-206	
56 S 103-106 A4	06	51 P1	11 W 150-206	BeCu outer contact
56 S 101-108 A4	07, 08	51 P1	11 W 150-208	
56 S 101-115 A4	15	51 O	11 W 150-215	total length
56 S 101-117 A4	17	51 O	11 W 150-215	



STRAIGHT PLUG, Solder

STECKER gerade, löt

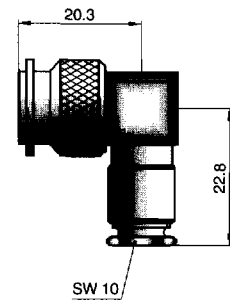
Part Number	Cable Group	Assembly Instruction	Remarks
56 S 101-271 A4	71	51 S1	solder tag silver plated
56 S 101-272 A4	72	51 S2	solder tag silver plated



RIGHT ANGLE PLUG, Clamp

WINKELSTECKER, klemm

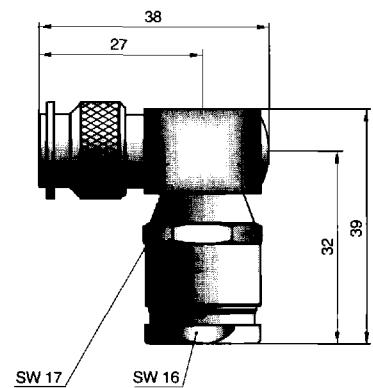
Part Number	Cable Group	Assembly instruction	Remarks
56 S 201-002 A4	02, 03	51 L	
56 S 201-006 A4	06, 07, 08	51 L	



RIGHT ANGLE PLUG, Clamp

WINKELSTECKER, klemm

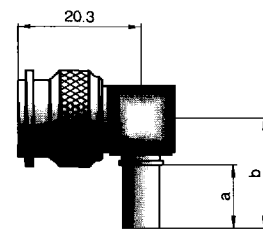
Part Number	Cable Group	Assembly instruction	Remarks
56 S 201-015 A4	15, 17	51 F1	



RIGHT ANGLE PLUG, Solder Crimp

WINKELSTECKER, lötl-crimp

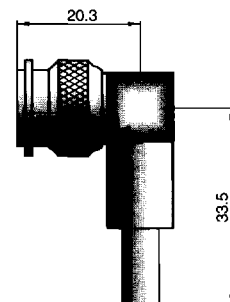
Part Number	Cable Group	Assembly instruction	Crimp-Inserts	Remarks
56 S 201-301 A4	01	51 M1	11 W 150-101	a = 7.8, b = 15.5
56 S 201-302 A4	02	51 M1	11 W 150-102	a = 7.8, b = 15.5
56 S 201-303 A4	03	51 M1	11 W 150-103	a = 7.8, b = 15.5
56 S 201-306 A4	06	51 M	11 W 150-106	a = 13.5, b = 21.2
56 S 201-308 A4	07, 08	51 M	11 W 150-108	a = 13.5, b = 21.2



RIGHT ANGLE PLUG, Crimp

WINKELSTECKER, crimp

Part Number	Cable Group	Assembly instruction	Crimp-Inserts	Remarks
56 S 202-106 A4	06	51 N	11 W 150-206	
56 S 202-108 A4	07, 08	51 N	11 W 150-208	

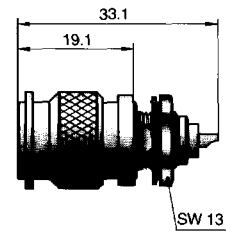


10

BULKHEAD PLUG

GEHÄUSESTECKER

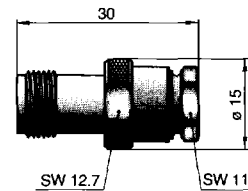
Part Number	Panel Piercing	Remarks
56 S 501-200 A4	B 2	



STRAIGHT JACK, Clamp

KUPPLER gerade, klemm

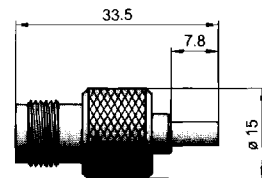
Part Number	Cable Group	Assembly Instruction	Remarks
56 K 106-001 A4	01	51 E	
56 K 106-002 A4	02,03	51 E	
56 K 106-006 A4	06, 07, 08	51 E	



STRAIGHT JACK, Crimp

KUPPLER gerade, crimp

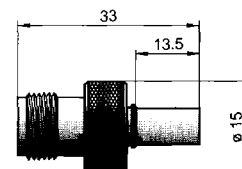
Part Number	Cable Group	Assembly Instruction	Crimp-Inserts	Remarks
56 K 101-801 A4	01	51 T	11 W 150-401	
56 K 101-802 A4	02	51 T	11 W 150-402	
56 K 101-803 A4	03	51 T	11 W 150-403	



STRAIGHT JACK, Crimp

KUPPLER gerade, crimp

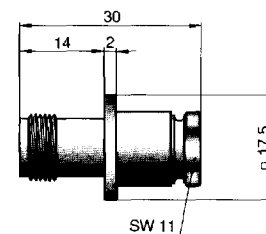
Part Number	Cable Group	Assembly Instruction	Crimp-Inserts	Remarks
56 K 101-106 A4	06	51 P	11 W 150-206	
56 K 101-108 A4	07, 08	51 P	11 W 150-208	



FLANGE JACK, Clamp

FLANSCHKUPPLER, klemm

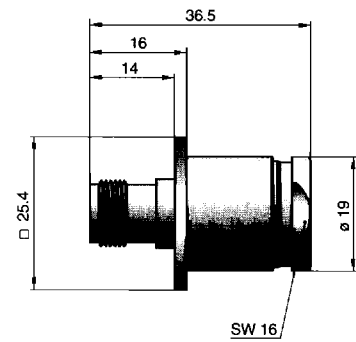
Part Number	Cable Group	Assembly Instruction	Panel Piercing	Remarks
56 K 406-001 A4	01	51 E	B 6	4 x 3-56 UNF
56 K 406-002 A4	02, 03	51 E	B 6	4 x 3-56 UNF
56 K 406-006 A4	06, 07, 08	51 E	B 6	4 x 3-56 UNF



FLANGE JACK, Clamp

FLANSCHKUPPLER, klemm

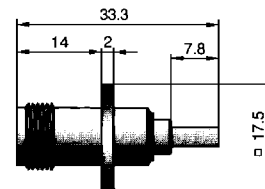
Part Number	Cable Group	Assembly Instruction	Panel Piercing	Remarks
56 K 405-015 A4	15, 17	51 D	B 9	4 x 6-32 UNC



FLANGE JACK, Crimp

FLANSCHKUPPLER, crimp

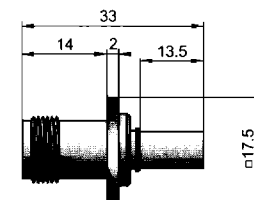
Part Number	Cable Group	Assembly Instruction	Panel Piercing	Crimp-Inserts	Remarks
56 K 401-801 A4	01	51 T	B 6	11 W 150-401	4 x M 2.5
56 K 401-802 A4	02	51 T	B 6	11 W 150-402	4 x M 2.5
56 K 401-803 A4	03	51 T	B 6	11 W 150-403	4 x M 2.5



FLANGE JACK, Crimp

FLANSCHKUPPLER, crimp

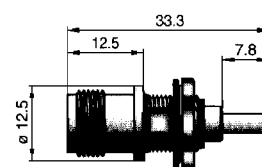
Part Number	Cable Group	Assembly Instruction	Panel Piercing	Crimp-Inserts	Remarks
56 K 401-106 A4	06	51 P	B 6	11 W 150-206	4 x 3-56 UNF
56 K 401-108 A4	07, 08	51 P	B 6	11 W 150-208	4 x 3-56 UNF



BULKHEAD JACK, Crimp, Front Mount

EINBAUKUPPLER, crimp, Einbau von vorne

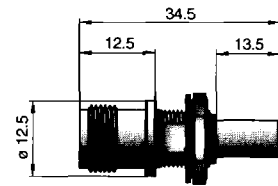
Part Number	Cable Group	Assembly Instruction	Panel Piercing	Crimp-Inserts	Remarks
56 K 504-801 A4	01	51 T	B 2	11 W 150-401	
56 K 504-802 A4	02	51 T	B 2	11 W 150-402	
56 K 504-803 A4	03	51 T	B 2	11 W 150-403	



**BULKHEAD JACK, Crimp,
Front Mount**

**EINBAUKUPPLER, crimp,
Einbau von vorne**

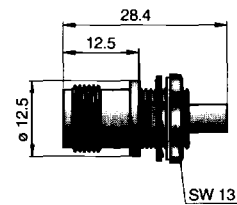
Part Number	Cable Group	Assembly Instruction	Panel Piercing	Crimp-Inserts	Remarks
56 K 504-106 A4	06	51 H	B 2	11 W 150-206	



BULKHEAD JACK, Solder

EINBAUKUPPLER, lötl

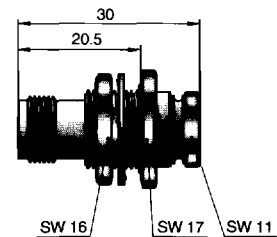
Part Number	Cable Group	Assembly Instruction	Panel Piercing	Remarks
56 K 504-271 A4	71	51 S1	B 2	
56 K 504-272 A4	72	51 S3	B 2	



**BULKHEAD JACK, Clamp,
Rear Mount**

**EINBAUKUPPLER klemm,
Einbau von hinten**

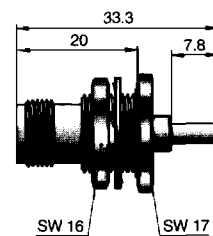
Part Number	Cable Group	Assembly Instruction	Panel Piercing	Remarks
56 K 606-001 A4	01	51 E	B 3	captivated contact
56 K 606-002 A4	02, 03	51 E	B 3	captivated contact
56 K 606-006 A4	06, 07, 08	51 E	B 3	captivated contact



**BULKHEAD JACK, Crimp,
Rear Mount**

**EINBAUKUPPLER crimp,
Einbau von hinten**

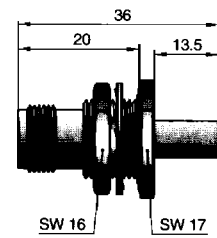
Part Number	Cable Group	Assembly Instruction	Panel Piercing	Crimp-Inserts	Remarks
56 K 601-801 A4	01	51 T	B 3	11 W 150-401	
56 K 601-802 A4	02	51 T	B 3	11 W 150-402	
56 K 601-803 A4	03	51 T	B 3	11 W 150-403	



**BULKHEAD JACK, Crimp,
Rear Mount**

**EINBAUKUPPLER crimp,
Einbau von hinten**

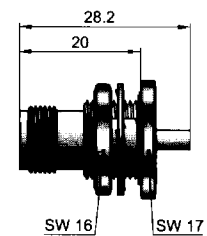
Part Number	Cable Group	Assembly Instruction	Panel Piercing	Crimp-Inserts	Remarks
56 K 611-106 A4	06	51 P1	B 3	11 W 150-206	
56 K 611-108 A4	07, 08	51 P1	B 3	11 W 150-208	



**BULKHEAD JACK, Solder,
Rear Mount**

**EINBAUKUPPLER löt,
Einbau von hinten**

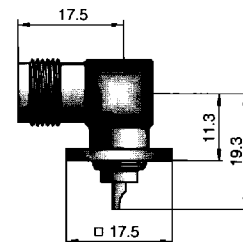
Part Number	Cable Group	Assembly Instruction	Panel Piercing	Remarks
56 K 611-271 A4	71	51 S1	B 3	
56 K 611-272 A4	72	51 S3	B 3	



RIGHT ANGLE FLANGE JACK

FLANSCH-WINKELKUPPLER

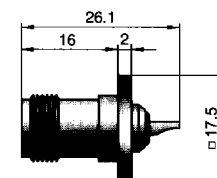
Part Number	Panel Piercing	Remarks
56 K 201-200 A4	B 6	4 x dia. 3.1



FLANGE JACK

FLANSCHKUPPLER

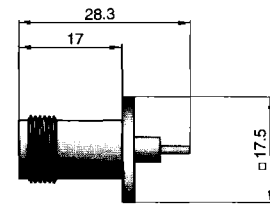
Part Number	Panel Piercing	Remarks
56 K 403-200 A4	B 6	4 x 3-56 UNF, centering collar dia. 11
56 K 404-200 A4	B 6	4 x dia. 3.1, without collar



FLANGE JACK

FLANSCHKUPPLER

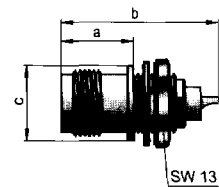
Part Number	Panel Piercing	Remarks
56 K 405-500 A4	B 6	4 x dia. 3.2



BULKHEAD JACK

EINBAUKUPPLER

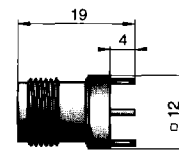
Part Number	Panel Piercing	Remarks
56 K 504-200 A4	B 2	a = 12, b = 26, c = 12.5
56 K 506-200 A4	B 2	a = 12, b = 30, c = 12.5
56 K 508-200 A4	B 1	a = 14, b = 33, c = 15, pressurized



STRAIGHT JACK for PCB

LEITERPLATTENKUPPLER, gerade

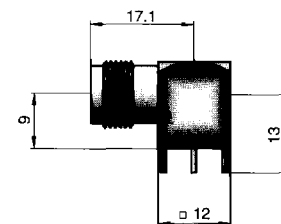
Part Number	Panel Piercing	Remarks
56 K 101-400 A4	B 32	a = 15



RIGHT ANGLE JACK for PCB

LEITERPLATTEN-WINKELKUPPLER

Part Number	Panel Piercing	Remarks
56 K 201-400 A4	B 32	

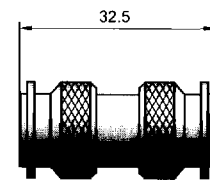


ADAPTOR STRAIGHT

VERBINDER gerade

Part Number	Panel Piercing	Remarks
-------------	----------------	---------

56 S 101-S00 A4

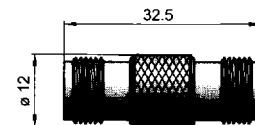


ADAPTOR STRAIGHT

VERBINDER gerade

Part Number	Panel Piercing	Remarks
-------------	----------------	---------

56 K 101-K00 A4

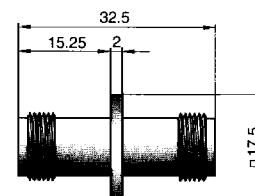


ADAPTOR STRAIGHT

VERBINDER gerade

Part Number	Panel Piercing	Remarks
-------------	----------------	---------

56 K 401-K00 A4 B 6 4 x 3-56 UNF

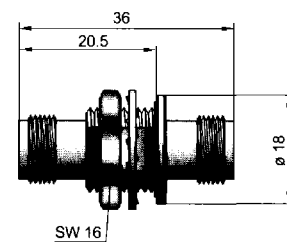


ADAPTOR STRAIGHT

VERBINDER gerade

Part Number	Panel Piercing	Remarks
-------------	----------------	---------

56 K 501-K00 A4 B 3

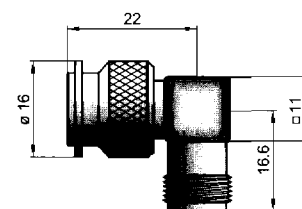


RIGHT ANGLE ADAPTOR

WINKEL-VERBINDER

Part Number	Panel Piercing	Remarks
-------------	----------------	---------

56 S 201-K00 A4



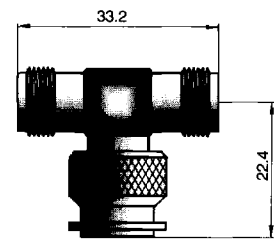
10

T-ADAPTOR

T-VERBINDER

Part Number	Panel Piercing	Remarks
-------------	----------------	---------

56 S 301-K00 A4

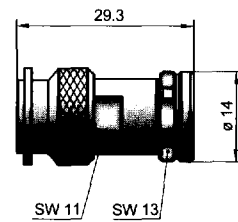


TERMINATION

ABSCHLUSSWIDERSTAND

Part Number	Remarks
-------------	---------

56 S 155-010 A4 0.25 W, max. 2 GHz



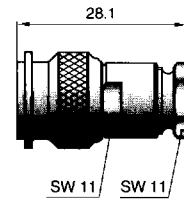
TNC 75 Ω

TNC 75 Ω

STRAIGHT PLUG, Clamp

STECKER gerade, klemm

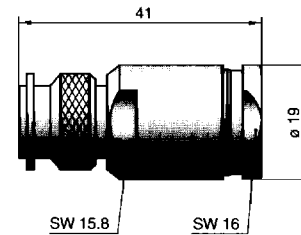
Part Number	Cable Group	Assembly Instruction	Remarks
76 S 106-002 A4	02	51 E	captivated contact
76 S 106-009 A4	09	51 E	captivated contact



STRAIGHT PLUG, Clamp

STECKER gerade, klemm

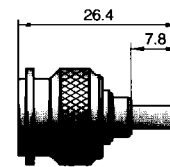
Part Number	Cable Group	Assembly Instruction	Remarks
76 S 105-018 A4	18	51 D	
76 S 105-026 A4	26	51 D	



STRAIGHT PLUG, Crimp

STECKER gerade, crimp

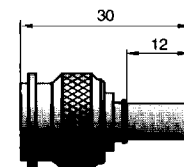
Part Number	Cable Group	Assembly Instruction	Crimp-Inserts	Remarks
76 S 101-802 A4	02	51 T	11 W 150-402	



STRAIGHT PLUG, Crimp

STECKER gerade, crimp

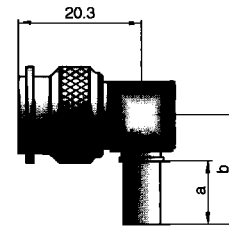
Part Number	Cable Group	Assembly Instruction	Crimp-Inserts	Remarks
76 S 102-109 A4	09	51 P1	11 W 150-209	



RIGHT ANGLE PLUG, Solder Crimp

WINKELSTECKER, löt-crimp

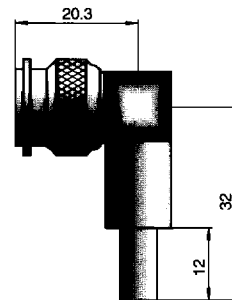
Part Number	Cable Group	Assembly Instruction	Remarks
76 S 201-302 A4	02	51 M1	a = 7.8, b = 15.5
76 S 201-309 A4	09	51 M	a = 12, b = 19.7



RIGHT ANGLE PLUG, Crimp

WINKELSTECKER, crimp

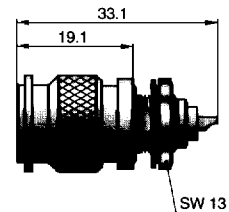
Part Number	Cable Group	Assembly Instruction	Remarks
76 S 202-109 A4	09	51 N	



BULKHEAD PLUG

GEHÄUSESTECKER

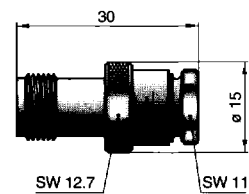
Part Number	Panel Piercing	Remarks
76 S 501-200 A4	B 2	



STRAIGHT JACK, Clamp

KUPPLER gerade, klemm

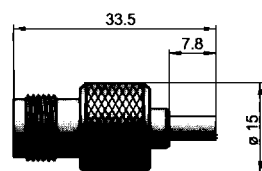
Part Number	Cable Group	Assembly Instruction	Remarks
76 K 106-009 A4	09	51 E	



STRAIGHT JACK, Crimp

KUPPLER gerade, crimp

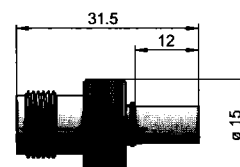
Part Number	Cable Group	Assembly Instruction	Crimp-Inserts	Remarks
76 K 101-802 A4	02	51 T	11 W 150-402	



STRAIGHT JACK, Crimp

KUPPLER gerade, crimp

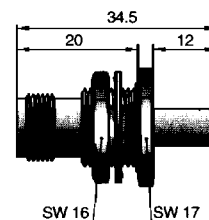
Part Number	Cable Group	Assembly Instruction	Crimp-Inserts	Remarks
76 K 101-109 A4	09	51 P	11 W 150-209	
76 K 101-110 A4	09, 10	51 P	11 W 150-209	
76 K 101-111 A4	11	51 P	11 W 150-211	



BULKHEAD JACK, Crimp, Rear Mount

EINBAUKUPPLER crimp, Einbau von hinten

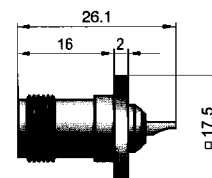
Part Number	Cable Group	Assembly Instruction	Panel Piercing	Crimp-Inserts	Remarks
76 K 611-109 A4	09	51 P	B 3	11 W 150-209	



FLANGE JACK

FLANSCHKUPPLER

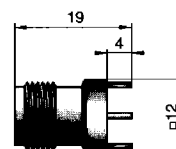
Part Number	Panel Piercing	Remarks
76 K 403-200 A4	B 6	4 x 3-56 UNF, centering collar dia. 11
76 K 404-200 A4	B 6	4 x dia. 3.1, without collar



STRAIGHT JACK for PCB

LEITERPLATTENKUPPLER gerade

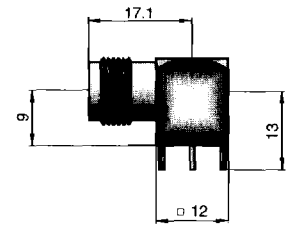
Part Number	Panel Piercing	Remarks
76 K 101-400 A4	B 32	



RIGHT ANGLE JACK for PCB

LEITERPLATTEN-WINKELKUPPLER

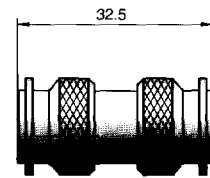
Part Number	Panel Piercing	Remarks
76 K 201-400 A4	B 32	



ADAPTOR STRAIGHT

VERBINDER gerade

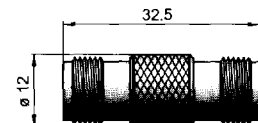
Part Number	Panel Piercing	Remarks
76 S 101-S00 A4		



ADAPTOR STRAIGHT

VERBINDER gerade

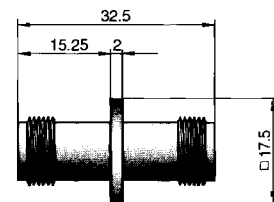
Part Number	Panel Piercing	Remarks
76 K 101-K00 A4		



ADAPTOR STRAIGHT

VERBINDER gerade

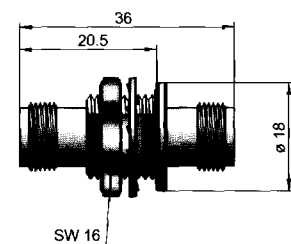
Part Number	Panel Piercing	Remarks
76 K 401-K00 A4	B 6	4 x 3-56 UNF



ADAPTOR STRAIGHT

VERBINDER gerade

Part Number	Panel Piercing	Remarks
76 K 501-K00 A4	B 3	

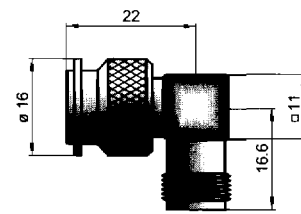


RIGHT ANGLE ADAPTOR

WINKEL-VERBINDER

Part Number	Panel Piercing	Remarks
-------------	----------------	---------

76 S 201-K00 A4



T-ADAPTOR

T-VERBINDER

Part Number	Panel Piercing	Remarks
-------------	----------------	---------

76 S 301-K00 A4

