

N-Steckverbinder gibt es in 50 Ω und 75 Ω Ausführungen. Das Stecksystem kann bis 11 GHz eingesetzt werden (Präzisionsausführung bis 18 GHz). Die 50 Ω Version wird vorwiegend in Mobilfunkanwendungen mit hohen mechanischen und elektrischen Anforderungen eingesetzt.

SPINNER liefert aus diesem Grund ausschließlich Steckverbinder mit ungeschlitzter Außenleiterkontakthülse und einer speziellen Profildichtung im Steckerkopf anstelle der nach IEC oder CECC vorgesehenen Flachdichtscheibe, um eine zuverlässige Dichtung sicherzustellen.

Die spezielle SPINNER-Profil Überwurfmutter unserer N-Stecker wird durch Einrollen im Außenleiter fixiert. Hierdurch wird das zulässige Anzugsdrehmoment wesentlich erhöht und der Kontaktdruck deutlich verbessert.

Die 50 Ω und 75 Ω Typen unterscheiden sich im Durchmesser des Innenleiters und dürfen deshalb nicht miteinander verbunden werden.

Zur Unterscheidung werden alle 75 Ω Kuppler von SPINNER mit einem gelben Farbring gekennzeichnet.

N connectors are available as 50 Ω and 75 Ω versions. The connector system can be used at frequencies up to 11 GHz (high-precision type up to 18 GHz).

The 50 Ω version is mainly employed in mobile communication applications with demanding mechanical and electrical requirements.

That is why SPINNER delivers exclusively connectors with non-slotted outer conductor contact and a special sealing profile in the connector head instead of the flat seal disk specified by IEC or CECC. This ensures a reliable sealing function.

The coupling nut on N connectors has the special SPINNER profile and is fastened by flanging in the outer conductor. This leads to a much higher tightening torque and clearly better contact pressure.

The 50 Ω and 75 Ω types have different inner conductor diameters, so they must not be connected with each other. To allow better distinction between them all 75 Ω SPINNER connectors are marked by a yellow colour ring.

Die Steckverbinder der Serie N sind benannt nach Ihrem Erfinder Paul Neill, der diese Norm 1942 entwickelte. Der Name wird allerdings auch häufig aus der Bezeichnung Navy Connector abgeleitet.

The N connectors have been named after their inventor, Paul Neill, who developed this standard in 1942. But frequently the name is also related to Navy Connector.



KOAXIALE STECKVERBINDER SERIE N 50 & 75 Ω

COAXIAL CONNECTORS TYPE N 50 & 75 Ω

Elektrisch / Electrical	IEC 60169-16	IEC	SPINNER	Bemerkung / Remarks
Wellenwiderstand Characteristic impedance	10.2	50 Ω (75 Ω)		
Frequenzbereich Frequency range	10.2	11 GHz (1GHz) 18 GHz		Stufe / Grade 2 Stufe / Grade 0 +1
VSWR	10.2	≤ 1.30		gerader Steckverbinder bei 11 GHz straight connector at 11 GHz
		≤ 1.50		Winkel-Steckverbinder bei 11 GHz right angle connector at 11 GHz
Innenleiter-Kontaktwiderstand Center contact resistance	10.2	≤ 1 mΩ		anfänglich initial
Außenleiter-Kontaktwiderstand Outer contact resistance	10.2	≤ 0.25 mΩ		anfänglich initial
Isolationswiderstand Insulation resistance	10.2	≥ 5 GΩ		anfänglich initial
Spannungsfestigkeit in Meereshöhe Proof voltage at sea level	10.2	2.5 kV		40...65 Hz
Arbeitsspannung in Meereshöhe Working voltage at sea level	10.2	1.0 kV	1.4 kV	40...65 Hz
Wirksamkeit der Abschirmung Screening effectiveness	10.2	≥ 90 dB	≥ 100 dB	

Mechanisch / Mechanical	IEC 60169-16	IEC	SPINNER	Bemerkung / Remarks
Kupplungsdrehmoment Coupling torque	10.2	0.7...1.1 Nm	3.0 Nm	
Prüfdrehmoment Proof torque	10.2	1.7 Nm	4.0 Nm	
Zugfestigkeit des Kupplungsmechanismus Tensile strength of coupling mechanism	10.2	450 N		
Mechanische Lebensdauer Mechanical lifetime	10.2	500	10000	Betätigungen Operations
Fesselung des Innenleiters Center contact captivation				ja yes

Umwelt / Environmental	IEC 60169-16	IEC	SPINNER	Bemerkung / Remarks
Klimaklasse / Climatic category	10.2	55/155/21		
Temperaturbereich / Temperature range	10.2	-55...+155 °C		
Schutzgrad / Degree of protection		IP68		gesteckt / mated

Werkstoffe und Oberflächenbehandlung / Materials and Surface Finish	
Federnde Kontaktteile Resilient contact members	hochfeste Cu-Legierung, versilbert (MIL-Typen Innenleiter vergoldet) high strength copper alloy, silver plated (MIL-types center conductor gold plated)
Isolation Insulation	PTFE/FEP
Innen- und Außenleiterkontaktteile Center and outer conductor parts	Cu-Legierung, versilbert (bei MIL-Typen Innenleiter vergoldet) Copper alloy, silver plated (with MIL-types center conductor gold plated)
Sonstige Metallteile Other metal parts	Cu-Legierung, glanzvernickelt Copper alloy, bright nickel plated
Dichtungen Gaskets	Silikonkautschuk Silicone rubber

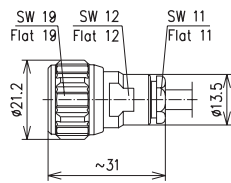
Z

KABELSTECKVERBINDER ■ CABLE CONNECTORS

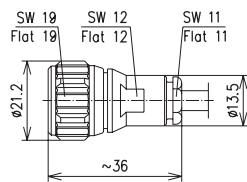
Kabelstecker – Straight cable plugs



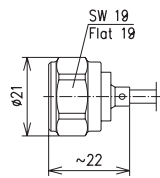
BN 29 66 50



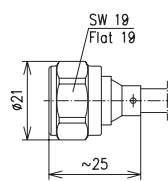
BN 68 92 00



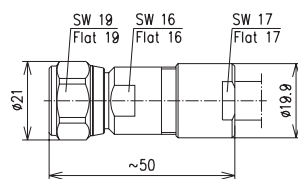
BN 74 08 72



BN 74 08 79



BN 94 50 60



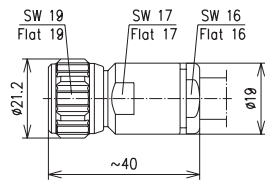
Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
RG 58 C/U RG 142 B/U RG 223/U RG 400/U	50	geklemmt clamped	BN 29 66 50
RG 59 B/U RG 62 A/U EPD 31475A	75	geklemmt clamped	BN 68 92 00
RG 402/U	50	gelötet soldered	BN 74 08 72
RG 401/U	50	gelötet soldered	BN 74 08 79
RG 8 Typen (low loss)	50	geklemmt clamped	BN 94 50 60

KABELSTECKVERBINDER ■ CABLE CONNECTORS

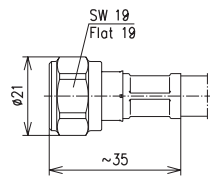
Kabelstecker – Straight cable plugs



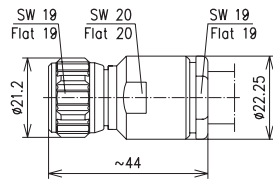
BN 92 24 50



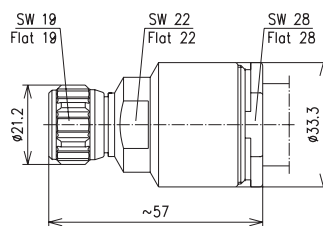
BN 92 24 75



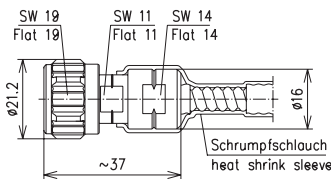
BN 94 50 00



BN 92 27 00



BN 84 47 60



Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
RG 213/U	50	geklemmt	BN 92 24 50
RG 214/U		clamped	
RG 214/U	50	gecrimpt	BN 92 24 75
RG 393/U		crimped	
RG 217/U(RG 14A/U)	50	geklemmt	BN 94 50 00
		clamped	
RG 218/U(RG 17/U)	50	geklemmt	BN 92 27 00
		clamped	
SCF14-50	50	CAF® Schrumpfschlauch CAF® heat shrink sleeve	BN 84 47 60

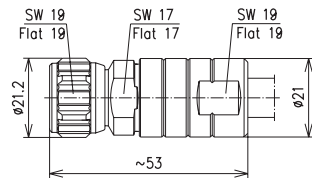
Z

KABELSTECKVERBINDER ■ CABLE CONNECTORS

Kabelstecker – Straight cable plugs



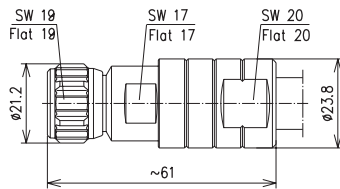
BN 87 01 63



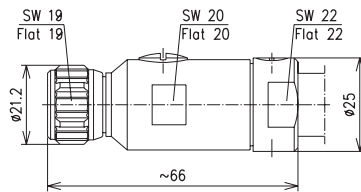
Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
SCF38-50	50	CAF® Profildichtung CAF® profile gasket	BN 87 01 63
SCF/UCF12-50	50	CAF® Profildichtung CAF® profile gasket	BN 87 01 57
HCA38-50	50	CAF® Plast 2000®	BN 97 04 18
HCA58-50	50	CAF® Plast 2000®	BN 92 53 18
HCA78-50	50	CAF® Plast 2000®	BN 49 21 18



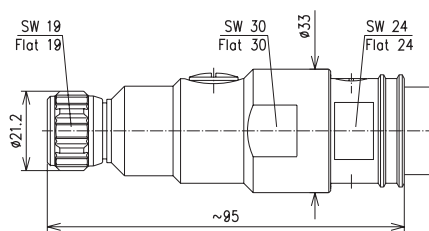
BN 87 01 57



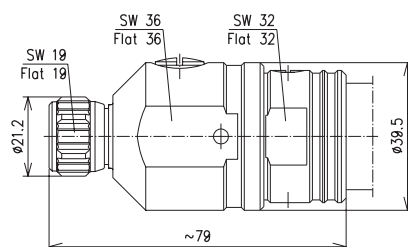
BN 97 04 18



BN 92 53 18



BN 49 21 18

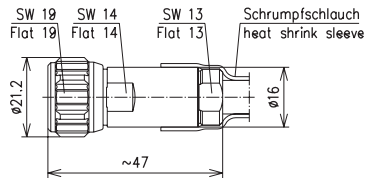


KABELSTECKVERBINDER ■ CABLE CONNECTORS

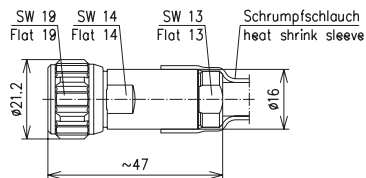
Kabelstecker – Straight cable plugs



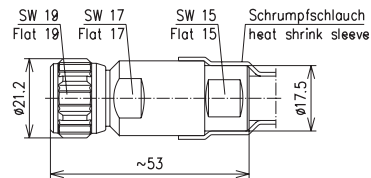
BN 67 16 69



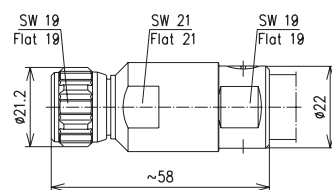
BN 84 47 55



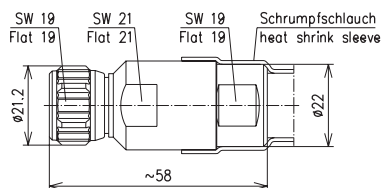
BN 87 01 69



BN 87 01 68



BN 87 01 89



Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
LCF14-75	75	CAF® O-Ring	BN 67 16 69
LCF14-50	50	CAF® O-Ring	BN 84 47 55
LCF38-50	50	CAF® O-Ring	BN 87 01 69
LCF12-50	50	CAF® Plast 2000®	BN 87 01 68
LCF12-50	50	CAF® O-Ring	BN 87 01 89

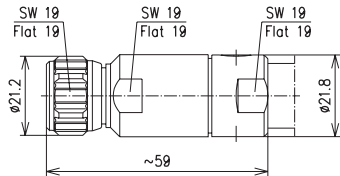
Z

KABELSTECKVERBINDER ■ CABLE CONNECTORS

Kabelstecker – Straight cable plugs



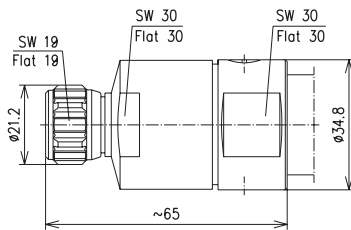
BN 78 97 45



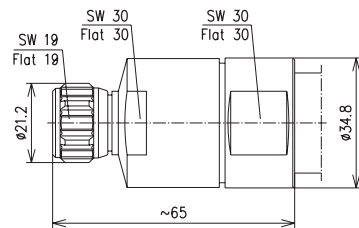
Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
LCF12-75	75	CAF® Plast 2000®	BN 78 97 45
LCF/UCF78-50	50	CAF® Plast 2000®	BN 70 67 40
LCF/UCF78-50	50	CAF® O-Ring	BN 70 67 41
LCF/UCF78-50	50	TOPSPIN® O-Ring	BN 70 67 11



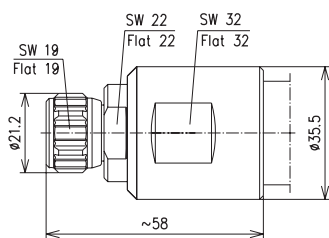
BN 70 67 40



BN 70 67 41



BN 70 67 11

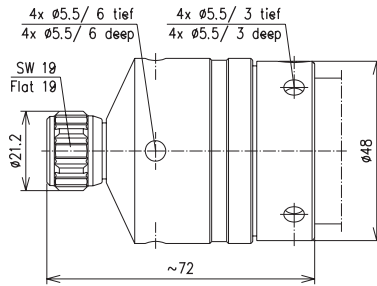


KABELSTECKVERBINDER ■ CABLE CONNECTORS

Kabelstecker – Straight cable plugs



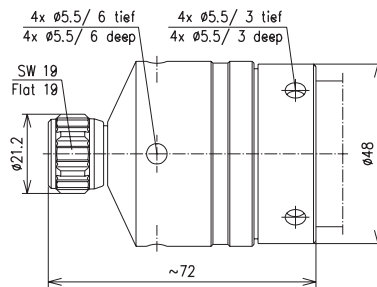
BN 70 67 42



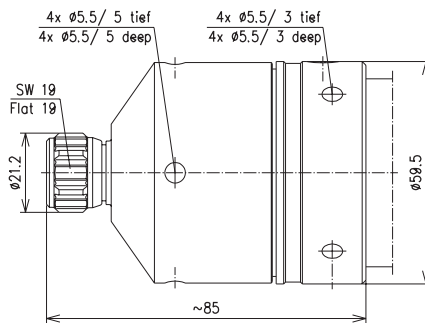
Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
UCF/LCFS114-50	50	CAF® Plast 2000®	BN 70 67 42
UCF/LCFS114-50	50	CAF® O-Ring	BN 70 67 43
LCF158-50	50	CAF® Plast 2000®	BN 70 67 44
LCF158-50	50	CAF® O-Ring	BN 70 67 45



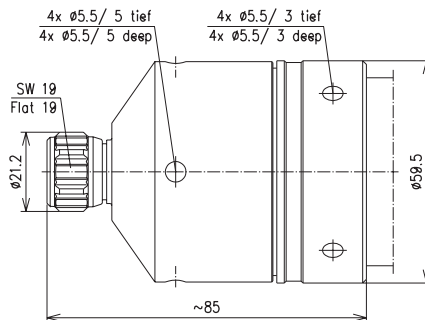
BN 70 67 43



BN 70 67 44



BN 70 67 45



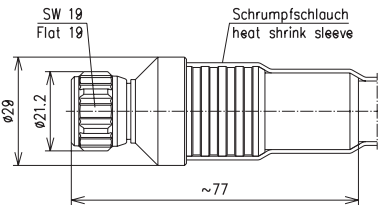
Z

KABELSTECKVERBINDER ■ CABLE CONNECTORS

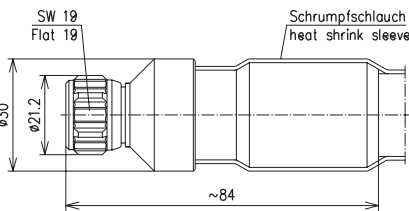
Kabelstecker – Straight cable plugs



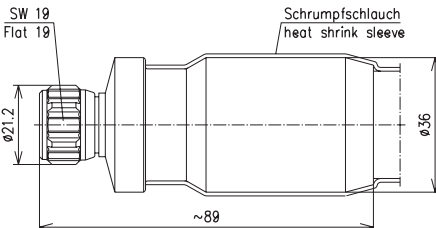
BN 55 71 10



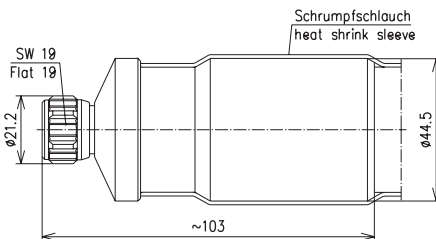
BN 52 71 91



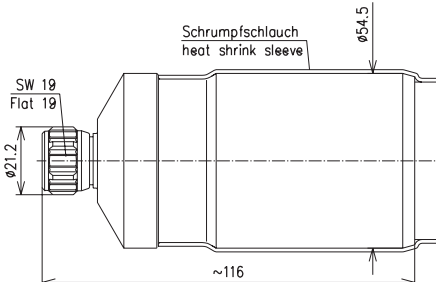
BN 55 71 50



BN 55 71 60



BN 55 71 70



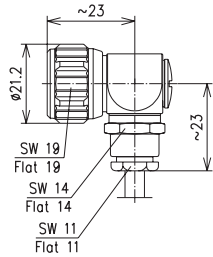
Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
RADIAFLEX® 12-50	50	Schrumpfschlauch Heat shrink sleeve	BN 55 71 10
RADIAFLEX® 58-50	50	Schrumpfschlauch Heat shrink sleeve	BN 52 71 91
RADIAFLEX® 78-50	50	Schrumpfschlauch Heat shrink sleeve	BN 55 71 50
RADIAFLEX® 114-50	50	Schrumpfschlauch Heat shrink sleeve	BN 55 71 60
RADIAFLEX® 158-50	50	Schrumpfschlauch Heat shrink sleeve	BN 55 71 70

KABELSTECKVERBINDER ■ CABLE CONNECTORS

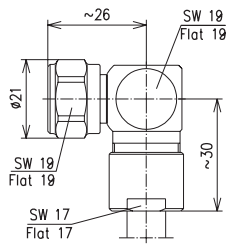
Kabelwinkelstecker – Right angle cable plugs



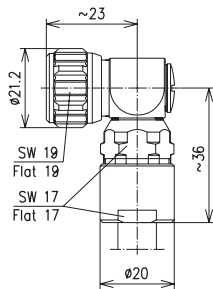
BN 72 12 80



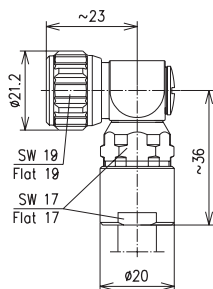
BN 94 50 61



BN 72 12 82



BN 72 12 83



Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
RG 58 C/U RG 142 B/U RG 223/U RG 400/U	50	geklemmt clamped	BN 72 12 80
RG 8 Typen (low loss)	50	geklemmt clamped	BN 94 50 61
RG 213/U	50	geklemmt clamped	BN 72 12 82
RG 214/U RG 393/U	50	geklemmt clamped	BN 72 12 83

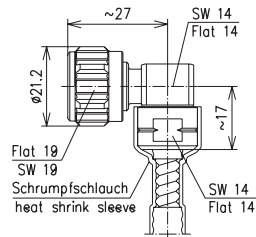
Z

KABELSTECKVERBINDER ■ CABLE CONNECTORS

Kabelwinkelstecker – Right angle cable plugs



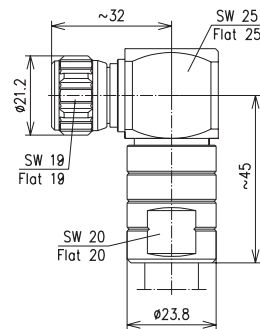
BN 75 78 60



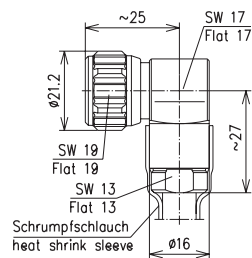
Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
SCF14-50	50	CAF® Schrumpfschlauch CAF® heat shrink sleeve	BN 75 78 60
SCF/UCF12-50	50	CAF® Profildichtung CAF® profile gasket	BN 87 01 56
LCF14-50	50	CAF® O-Ring	BN 75 78 55



BN 87 01 56



BN 75 78 55

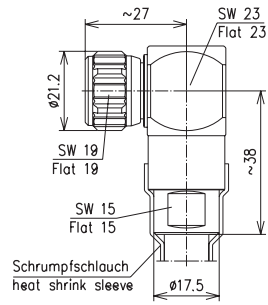


KABELSTECKVERBINDER ■ CABLE CONNECTORS

Kabelwinkelstecker – Right angle cable plugs



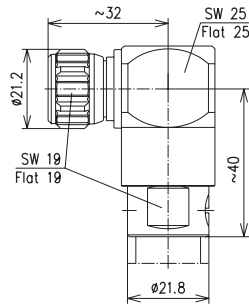
BN 87 01 70



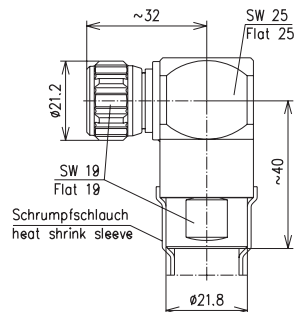
Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
LCF38-50	50	CAF® O-Ring	BN 87 01 70
LCF12-50	50	CAF® Plast 2000®	BN 87 01 67
LCF12-50	50	CAF® O-Ring	BN 87 01 87



BN 87 01 67



BN 87 01 87

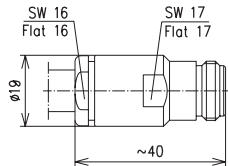


KABELSTECKVERBINDER ■ CABLE CONNECTORS

Kabelkuppler – Straight cable sockets



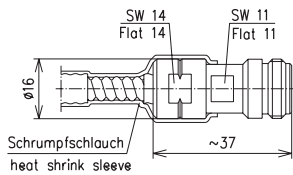
BN 92 25 50



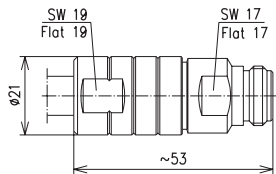
Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
RG 213/U RG 214/U	50	geklemmt clamped	BN 92 25 50
SCF14-50	50	CAF® Schrumpfschlauch CAF® heat shrink sleeve	BN 84 55 60
SCF38-50	50	CAF® Profildichtung CAF® profile gasket	BN 84 60 63
SCF/UCF12-50	50	CAF® Profildichtung CAF® profile gasket	BN 84 60 57
HCA38-50	50	CAF® Plast 2000®	BN 97 05 18



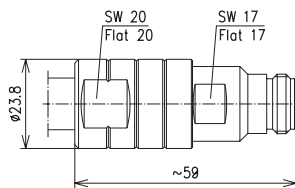
BN 84 55 60



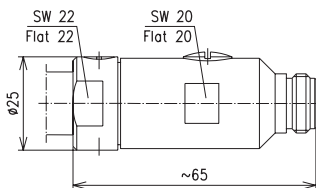
BN 84 60 63



BN 84 60 57



BN 97 05 18

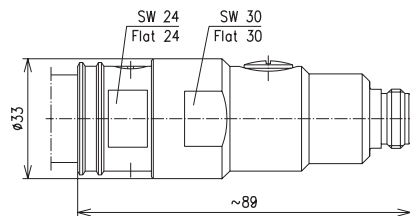


KABELSTECKVERBINDER ■ CABLE CONNECTORS

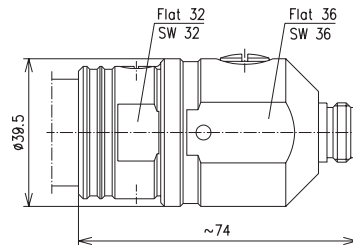
Kabelkuppler – Straight cable sockets



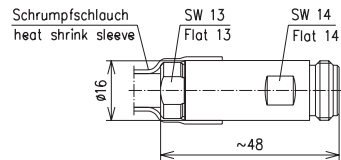
BN 92 54 18



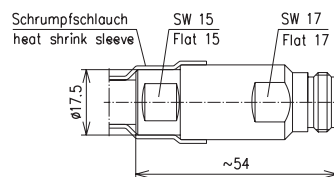
BN 49 17 18



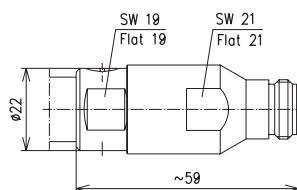
BN 84 55 55



BN 84 60 69



BN 84 60 68



Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
HCA58-50	50	CAF® Plast 2000®	BN 92 54 18
HCA78-50	50	CAF® Plast 2000®	BN 49 17 18
LCF14-50	50	CAF® O-Ring	BN 84 55 55
LCF38-50	50	CAF® O-Ring	BN 84 60 69
LCF12-50	50	CAF® Plast 2000®	BN 84 60 68

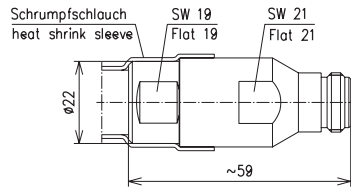
Z

KABELSTECKVERBINDER ■ CABLE CONNECTORS

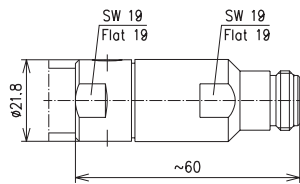
Kabelkuppler – Straight cable sockets



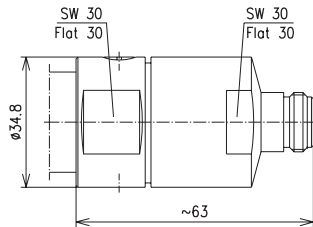
BN 84 60 89



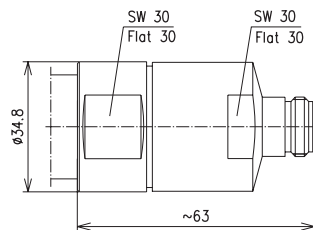
BN 88 54 45



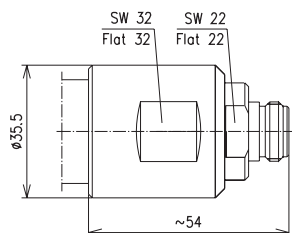
BN 84 63 40



BN 84 63 41



BN 84 63 11



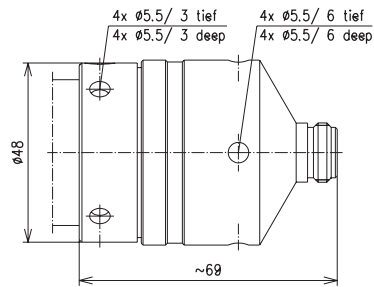
Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
LCF12-50	50	CAF® O-Ring	BN 84 60 89
LCF12-75	75	CAF® Plast 2000®	BN 88 54 45
LCF/UCF78-50	50	CAF® Plast 2000®	BN 84 63 40
LCF/UCF78-50	50	CAF® O-Ring	BN 84 63 41
LCF/UCF78-50	50	TOPSPIN® O-Ring	BN 84 63 11

KABELSTECKVERBINDER ■ CABLE CONNECTORS

Kabelkuppler – Straight cable sockets



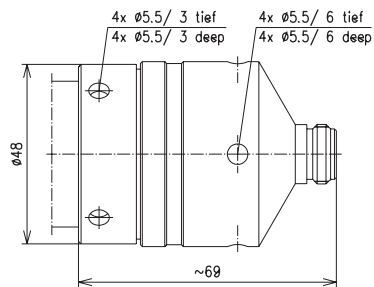
BN 84 63 42



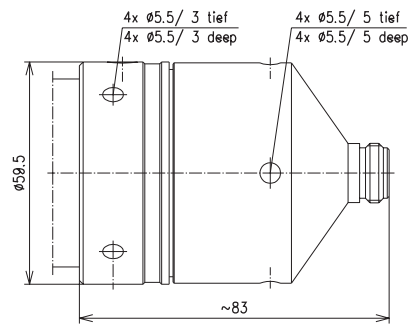
Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
UCF/LCFS/114-50	50	CAF® Plast 2000®	BN 84 63 42
UCF/LCFS/114-50	50	CAF® O-Ring	BN 84 63 43
LCF158-50	50	CAF® Plast 2000®	BN 84 63 44
LCF158-50	50	CAF® O-Ring	BN 84 63 45



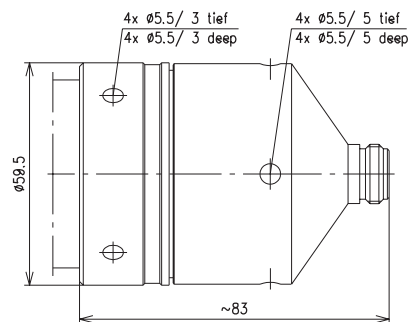
BN 84 63 43



BN 84 63 44



BN 84 63 45



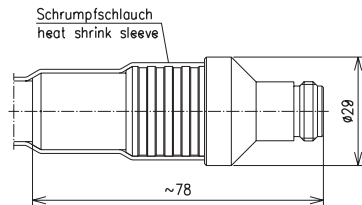
Z

KABELSTECKVERBINDER ■ CABLE CONNECTORS

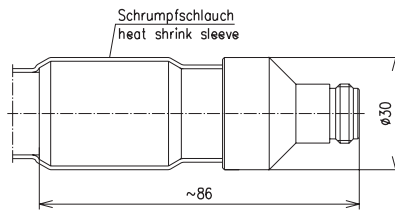
Kabelkuppler – Straight cable sockets



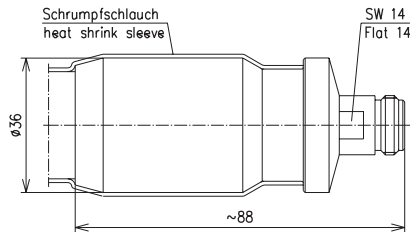
BN 55 71 11



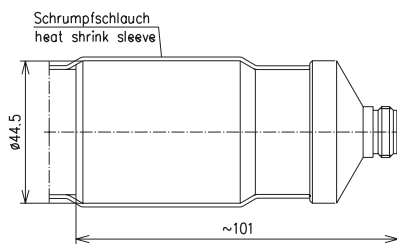
BN 52 71 92



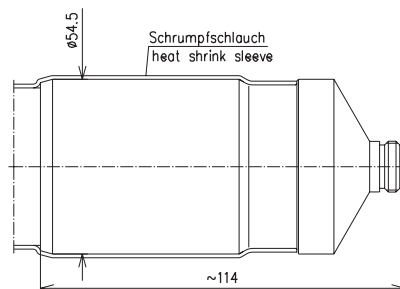
BN 55 71 51



BN 55 71 61



BN 55 71 71



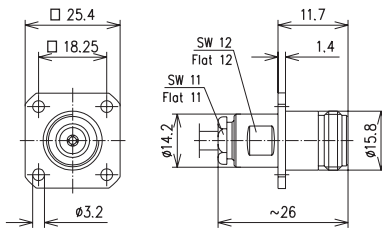
Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
RADIAFLEX® 12-50	50	Schrumpfschlauch Heat shrink sleeve	BN 55 71 11
RADIAFLEX® 58-50	50	Schrumpfschlauch Heat shrink sleeve	BN 52 71 92
RADIAFLEX® 78-50	50	Schrumpfschlauch Heat shrink sleeve	BN 55 71 51
RADIAFLEX® 114-50	50	Schrumpfschlauch Heat shrink sleeve	BN 55 71 61
RADIAFLEX® 158-50	50	Schrumpfschlauch Heat shrink sleeve	BN 55 71 71

KABELSTECKVERBINDER ■ CABLE CONNECTORS

Gehäusekuppler mit Viereckflansch – Fixed sockets with four hole mounting flange



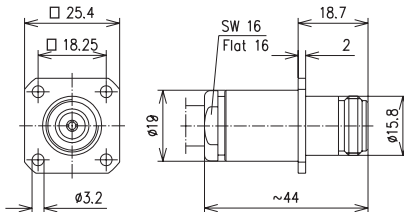
BN 97 98 50



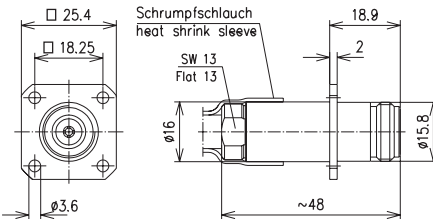
Kabel Typ Cable type	Ω	Ausführung Version	Bestell-Nr. Part-No.
RG 58 C/U	50	geklemmt clamped	BN 97 98 50
RG 142 B/U			
RG 223/U			
RG 400/U	50	geklemmt clamped	BN 92 26 50
RG 213/U			
RG 214/U			
LCF14-50	50	CAF® O-Ring	BN 74 76 45
LCF12-50	50	CAF® Plast 2000®	BN 74 75 44



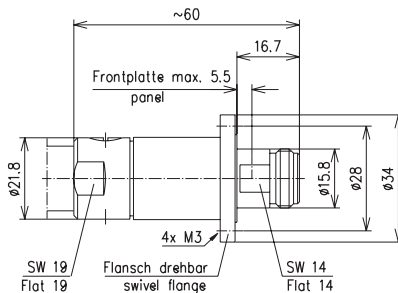
BN 92 26 50



BN 74 76 45



BN 74 75 44

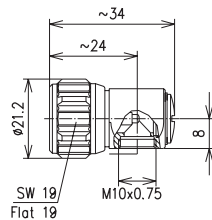


KABELSTECKVERBINDER ■ CABLE CONNECTORS

Steckerkopf – Connector head



BN 45 09 40

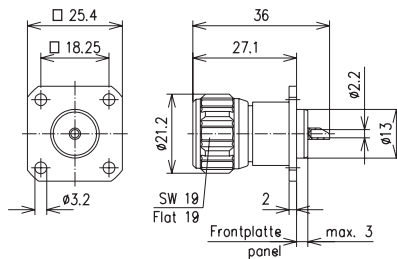


Bestell-Nr.	BN 45 09 40
Part-No.	Kabelabfangungen siehe Seite 77 Cable entries see page 77

GEHÄUSESTECKVERBINDER ● FIXED CONNECTORS



BN 29 82 00

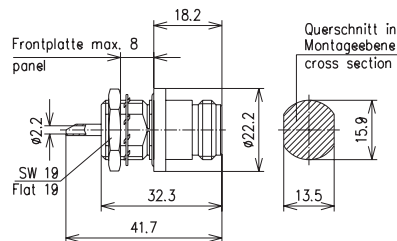


BN 29 82 00

Gehäusestecker mit Viereckflansch
Innenleiter mit Lötanschluß
Fixed plug with four hole mounting flange
inner conductor with soldering connection



BN 93 50 00

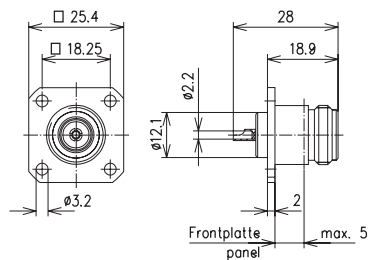


BN 93 50 00

Gehäusekuppler für Einlochbefestigung, einbau- und längsdicht
Innenleiter mit Lötanschluß
Fixed socket for single hole mounting, panel and barrier sealed
inner conductor with soldering connection



BN 29 05 70



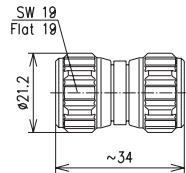
BN 29 05 70

Gehäusekuppler mit Viereckflansch
Innenleiter mit Lötanschluß
Fixed socket with four hole mounting flange
inner conductor with soldering connection

ZWISCHENSTECKVERBINDER ■ WITHIN TYPE ADAPTORS



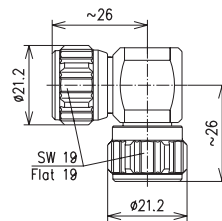
BN 29 36 50



BN 29 36 50
Zwischenstecker
Adaptor, plug-plug



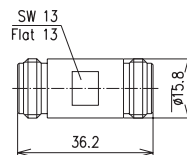
BN 70 82 50



BN 70 82 50
Winkelzwischenstecker
Right angle adaptor, plug-plug



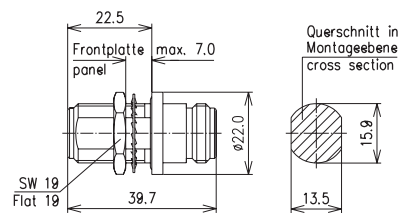
BN 29 37 50



BN 29 37 50
Kupplung
Adaptor, socket-socket



BN 94 49 50

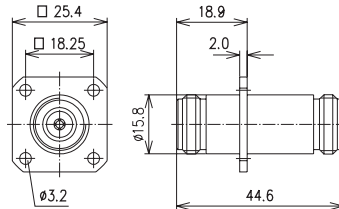


BN 94 49 50
Durchführungskupplung für Einloch-
montage (einbau- und längsdicht)
Fixed adaptor, socket-socket,
for single hole mounting
(panel and barrier sealed)

ZWISCHENSTECKVERBINDER ■ WITHIN TYPE ADAPTORS



BN 94 49 51

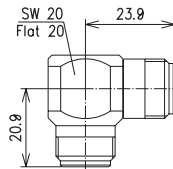


BN 94 49 51

Durchführungskupplung mit Viereckflansch
Fixed adaptor, socket-socket, with four hole mounting flange



BN 75 23 50

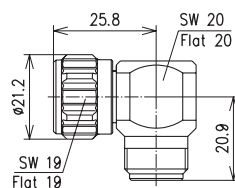


BN 75 23 50

Winkelkupplung
Right angle adaptor, socket-socket



BN 29 97 50

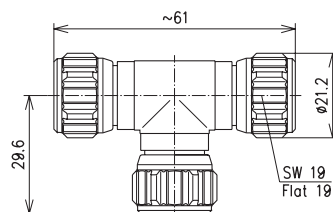


BN 29 97 50

Winkelsteckerkupplung
Right angle adaptor, plug-socket



BN 85 98 00



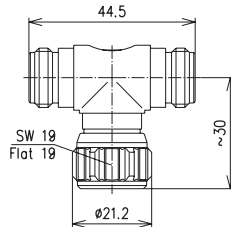
BN 85 98 00

T-Verzweigung,
Stecker-Stecker-Stecker
T-adaptor,
plug-plug-plug

ZWISCHENSTECKVERBINDER ■ WITHIN TYPE ADAPTORS



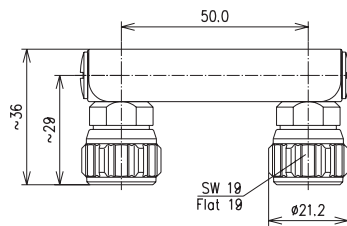
BN 93 60 00



BN 93 60 00
T-Verzweigung,
Kuppler-Stecker-Kuppler
T-adaptor,
socket-plug-socket



BN 74 08 03

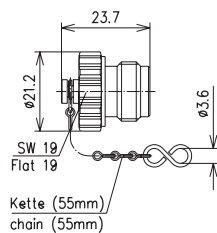


BN 74 08 03
Bügelstecker
U-link, plug-plug

SCHUTZKAPPEN ■ PROTECTIVE CAPS



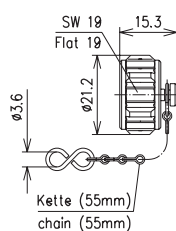
BN 99 88 00



BN 99 88 00
Schutzkappe (Cu-Legierung)
für Stecker, mit Kette
Protective cap (copper alloy)
for plug, with chain



BN 29 63 00



BN 29 63 00
Schutzkappe (Cu-Legierung)
für Kuppler, mit Kette
Protective cap (copper alloy)
for socket, with chain