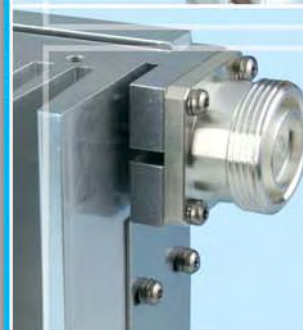




MOBILFUNK KOMPONENTEN UND SYSTEME

MOBILE COMMUNICATION COMPONENTS AND SYSTEMS





SPINNER fertigt seit Jahren qualitativ hochwertige Jumper Kabel für den Mobilfunkbereich.

Durch unsere vollautomatisierten Fertigungsprozesse bieten wir Ihnen attraktive Preise bei kurzer Lieferzeit. Eine Tageskapazität bis zu 5.000 Stück ermöglicht uns die Produktion von mehr als 1 Million Kabeln pro Jahr in höchster Qualität.

Wir garantieren hervorragende IM-Eigenschaften und niedrige VSWR Werte über die komplette Einsatzdauer der Kabel.

Jumper mit Cu-Wellrohrkabel fertigen wir in den Kabelgrößen 1/4", 3/8" und 1/2" mit allen gängigen Mobilfunksteckverbindern. Innen- und Außenleiter werden 360° induktiv verlötet, der Schutzgrad IP68 nach IEC 60529 wird garantiert.

Selbstverständlich erfüllen alle unsere Wellrohr Jumper die RoHS 2002/95 Richtlinien.

Auf Wunsch konfektionieren wir für Sie Jumper Kabel mit speziellen Anforderungen, wie z. B. Phasenabgleich mit sehr engen Toleranzen, Kabel mit Graumantel oder auch Kabel mit zusätzlichem Schutzschlauch.

Spinner has long-standing experience in manufacturing high-quality jumper cables for mobile communication applications. Our fully automated manufacturing processes offer you the benefits of competitive prices and short lead times. Our daily capacity is 5,000 pieces, allowing us to produce more than one million top quality cables assemblies per year.

We guarantee superior IM properties and low VSWR values over the complete service life of the cables.

We manufacture jumpers with Cu corrugated sheath cables in sizes 1/4", 3/8" and 1/2" with all common mobile communication connector types. The inner and outer conductors are 360° induction-brazed, which guarantees an IP68 protection rating under IEC standard 60529. Our corrugated sheath jumpers all meet the RoHS 2002/95 guidelines.

Upon request we also customize jumper cables to meet your specific requirements, such as phase adjustment with extremely narrow tolerances, cables with grey sheath or cables with an additional protection sheath.

Für Ihre Bestellung nennen Sie uns einfach die benötigten Steckverbinder-Kombinationen und Kabellängen.

Innerhalb von 24 Stunden erhalten Sie dann die Auftragsbestätigung von uns.

All you need to do to order a jumper cable assembly is to tell us the required connector combinations and cable lengths.

Within 24 hours you will receive our order confirmation.

JUMPER SUPERFLEXIBLE 1/2"

Wellenwiderstand Impedance	50 Ω				
Intermodulation (IM3) 2 x 20 W $f_1 = 1770$ MHz; $f_2 = 1810$ MHz; $f_{IM3} = 1850$ MHz	≤ -160 dBc; typ. -165 dBc				
VSWR* für Stecksysteme 7-16 und N VSWR* for connector sizes 7-16 and N	≤ 1000 MHz	≤ 2200 MHz	≤ 2700 MHz	≤ 3800 MHz	≤ 5825 MHz
Kabel mit 2 geraden Steckverbindern Cable with 2 straight connectors	≤ 1.03	≤ 1.05	≤ 1.06	≤ 1.08	≤ 1.10
Kabel mit 1 geraden und 1 Winkelstecker Cable with 1 straight and 1 right angle connector	≤ 1.04	≤ 1.06	≤ 1.07	≤ 1.09	≤ 1.11
Kabel mit 2 Winkelsteckverbindern Cable with 2 right angle connectors	≤ 1.05	≤ 1.07	≤ 1.08	≤ 1.10	≤ 1.12

* typische VSWR Werte für Längen ≤ 5 m ; * typical VSWR values for lengths ≤ 5 m

Kabeltyp Cable Type	max. Dämpfung* max. Attenuation*				
	1000 MHz	2200 MHz	2700 MHz	3800 MHz	5825 MHz
SF 1/2"	0.112 dB/m	0.173 dB/m	0.195 dB/m	0.237 dB/m	0.304 dB/m

* VSWR 1,0, Kabeltemperatur 20 °C, Werte ohne Steckverbinder; typische Dämpfung eines Steckverbinders $\leq 0,01$ dB

* VSWR 1.0, cable temperature 20 °C, values without connectors, typical connector attenuation is ≤ 0.01 dB

Kabeltyp Cable Type	max. Anschlussleistung* max. Power Rating*				
	1000 MHz	2200 MHz	2700 MHz	3800 MHz	5825 MHz
SF 1/2"	770 W	498 W	443 W	364 W	283 W

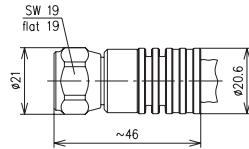
* VSWR 1,0, Umgebungstemperatur 40 °C, Innenleitertemperatur 100 °C, keine Sonneneinstrahlung

* VSWR 1.0, ambient temperature 40 °C, inner conductor temperature 100 °C, no solar loading

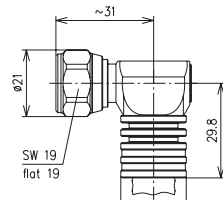
Kabeltyp Cable Type	min. Biegeradius, wiederholte Biegung min. Bending Radius, repeated Bending
SF 1/2"	32 mm

CABLE ASSEMBLIES

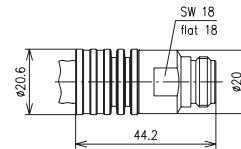
JUMPER SUPERFLEXIBLE 1/2"



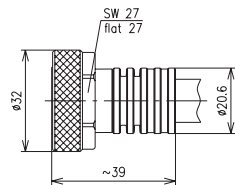
N Stecker
N plug



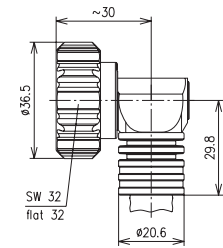
N Winkelstecker
N right angle plug



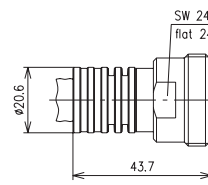
N Kuppler
N socket



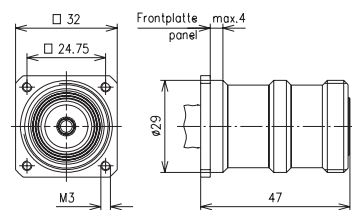
7-16 Stecker
7-16 plug



7-16 Winkelstecker
7-16 right angle plug



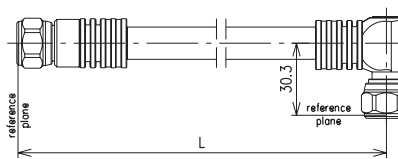
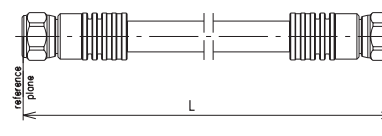
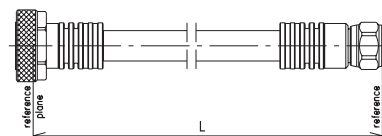
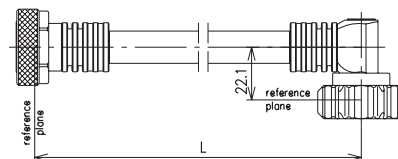
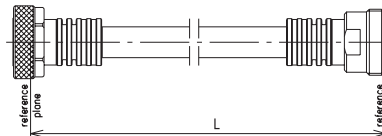
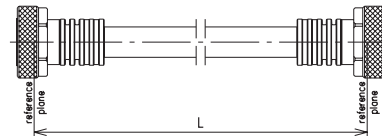
7-16 Kuppler
7-16 socket



7-16 Gehäusekuppler mit Viereckflansch
7-16 fixed socket with four hole mounting flange

JUMPER SUPERFLEXIBLE 1/2"

Länge L Length	Gewicht Weight	Bestell-Nummer Part Number
7-16 Stecker/plug – 7-16 Stecker/plug		
0.5 m	0.24 kg	BN J5 37 97
1.0 m	0.34 kg	BN J5 33 91
1.5 m	0.44 kg	BN J5 37 98
2.0 m	0.54 kg	BN J5 33 88
3.0 m	0.74 kg	BN J5 33 98
4.0 m	0.94 kg	BN J5 33 89
5.0 m	1.14 kg	BN J5 36 38
7-16 Stecker/plug – 7-16 Kuppler/socket		
0.5 m	0.25 kg	BN J5 36 89
1.0 m	0.35 kg	BN J5 39 60
1.5 m	0.45 kg	BN J5 39 61
2.0 m	0.55 kg	BN J5 37 94
3.0 m	0.75 kg	BN J5 37 51
4.0 m	0.95 kg	BN J5 37 41
5.0 m	1.15 kg	BN J5 38 31
7-16 Stecker/plug – 7-16 Winkelstecker/right angle plug		
0.5 m	0.30 kg	BN J5 40 25
1.0 m	0.40 kg	BN J5 38 24
1.5 m	0.50 kg	BN J5 38 25
2.0 m	0.60 kg	BN J5 37 95
3.0 m	0.80 kg	BN J5 37 96
4.0 m	1.00 kg	BN J5 38 26
5.0 m	1.20 kg	BN J5 40 13
7-16 Stecker/plug – N Stecker/plug		
0.5 m	0.22 kg	BN J5 40 58
1.0 m	0.32 kg	BN J5 38 34
1.5 m	0.42 kg	BN J5 38 35
2.0 m	0.52 kg	BN J5 38 38
3.0 m	0.72 kg	BN J5 38 36
4.0 m	0.92 kg	BN J5 40 72
5.0 m	1.12 kg	BN J5 40 66
N Stecker/plug – N Stecker/plug		
0.5 m	0.21 kg	BN J5 42 83
1.0 m	0.31 kg	BN J5 34 51
1.5 m	0.41 kg	BN J5 57 65
2.0 m	0.51 kg	BN J5 34 52
3.0 m	0.71 kg	BN J5 34 53
4.0 m	0.91 kg	BN J5 37 62
5.0 m	1.11 kg	BN J5 51 87
N Stecker/plug – N Winkelstecker/right angle plug		
0.5 m	0.23 kg	BN J5 67 78
1.0 m	0.33 kg	BN J5 40 81
1.5 m	0.43 kg	BN J5 47 85
2.0 m	0.53 kg	BN J5 43 23
3.0 m	0.73 kg	BN J5 42 96
4.0 m	0.93 kg	BN J5 00 56
5.0 m	1.13 kg	BN J5 58 56



CABLE ASSEMBLIES

JUMPER SUPERFLEXIBLE 1/4", 3/8"

Wellenwiderstand Impedance	50 Ω				
Intermodulation (IM3) 2 x 20 W $f_1 = 1770$ MHz; $f_2 = 1810$ MHz; $f_{IM3} = 1850$ MHz	≤ -160 dBc; typ. -165 dBc				
VSWR* für Stecksystem 7-16 und N VSWR* for connector size 7-16 and N	≤ 1000 MHz	≤ 2200 MHz	≤ 2700 MHz	≤ 3800 MHz	≤ 5825 MHz
Kabel mit 2 geraden Steckverbindern Cable with 2 straight connectors	≤ 1.05	≤ 1.07	≤ 1.08	≤ 1.10	≤ 1.12
Kabel mit 1 geraden und 1 Winkelstecker Cable with 1 straight and 1 right angle connector	≤ 1.06	≤ 1.08	≤ 1.09	≤ 1.11	≤ 1.13
Kabel mit 2 Winkelsteckverbindern Cable with 2 right angle connectors	≤ 1.07	≤ 1.09	≤ 1.10	≤ 1.12	≤ 1.14

* typische VSWR Werte für Längen ≤ 5 m ; * typical VSWR values for lengths ≤ 5 m

Kabeltyp Cable Type	max. Dämpfung* max. Attenuation*					min. Biegeradius, wiederholte Biegung min. Bending Radius, repeated Bending
	1000 MHz	2200 MHz	2700 MHz	3800 MHz	5825 MHz	
SF 3/8"	0.141 dB/m	0.217 dB/m	0.243 dB/m	0.295 dB/m	0.378 dB/m	25 mm
SF 1/4"	0.195 dB/m	0.301 dB/m	0.337 dB/m	0.410 dB/m	0.525 dB/m	25 mm

* VSWR 1,0, Kabeltemperatur 20 °C, Werte ohne Steckverbinder, typische Dämpfung eines Steckverbinders $\leq 0,01$ dB

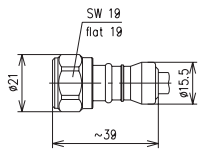
* VSWR 1,0, cable temperature 20 °C, values without connectors, typical connector attenuation is less than ≤ 0.01 dB

Kabeltyp Cable Type	max. Anschlussleistung* max. Power Rating*				
	1000 MHz	2200 MHz	2700 MHz	3800 MHz	5825 MHz
SF 3/8"	560 W	364 W	324 W	267 W	209 W
SF 1/4"	339 W	220 W	196 W	161 W	126 W

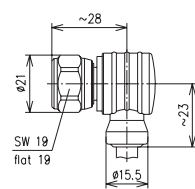
* VSWR 1,0, Umgebungstemperatur 40 °C, Innenleitertemperatur 100 °C, keine Sonneneinstrahlung

* VSWR 1,0, ambient temperature 40 °C, inner conductor temperature 100 °C, no solar loading

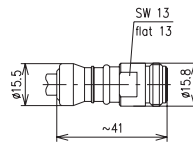
JUMPER SUPERFLEXIBLE 1/4"



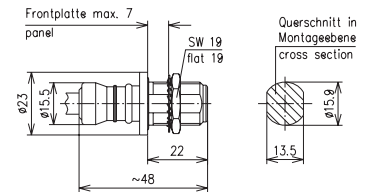
N Stecker
N plug



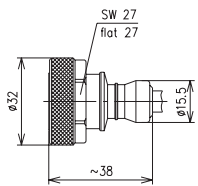
N Winkelstecker
N right angle plug



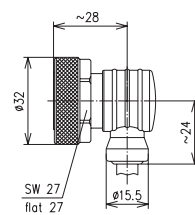
N Kuppler
N socket



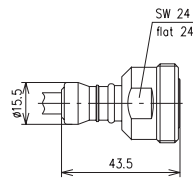
N Gehäusekuppler für Einlochmontage
N fixed socket for single hole mounting



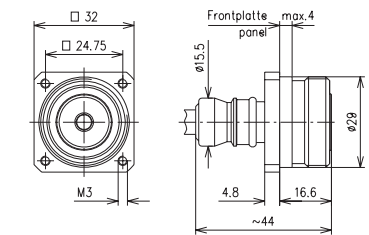
7-16 Stecker
7-16 plug



7-16 Winkelstecker
7-16 right angle plug

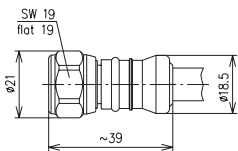


7-16 Kuppler
7-16 socket

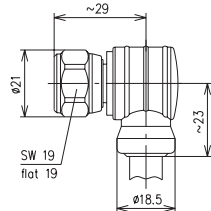


7-16 Gehäusekuppler mit Viereckflansch
7-16 fixed socket with four hole mounting flange

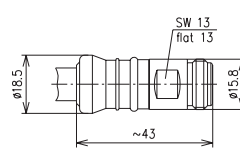
JUMPER SUPERFLEXIBLE 3/8"



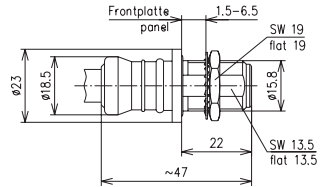
N Stecker
N plug



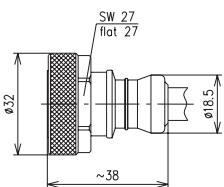
N Winkelstecker
N right angle plug



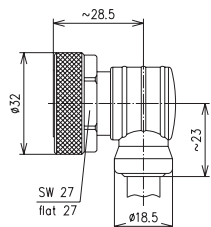
N Kuppler
N socket



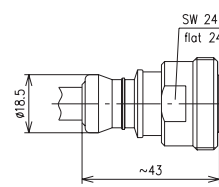
N Gehäusekuppler für Einlochmontage
N fixed socket for single hole mounting



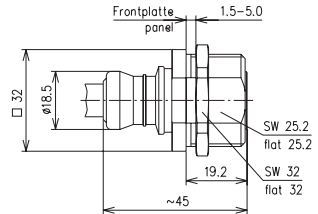
7-16 Stecker
7-16 plug



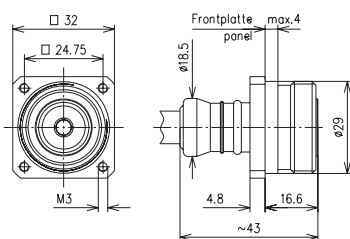
7-16 Winkelstecker
7-16 right angle plug



7-16 Kuppler
7-16 socket



7-16 Gehäusekuppler für Einlochmontage
7-16 fixed socket for single hole mounting



7-16 Gehäusekuppler mit Viereckflansch
7-16 fixed socket with four hole mounting flange

CABLE ASSEMBLIES

JUMPER LOW LOSS FLEXIBLE 1/2"

Wellenwiderstand Impedance	50 Ω				
Intermodulation (IM3) 2 x 20 W $f_1 = 1770$ MHz; $f_2 = 1810$ MHz; $f_{IM3} = 1850$ MHz	≤ -160 dBc; typ. -165 dBc				
VSWR* für Stecksystem 7-16 und N VSWR* for connector size 7-16 and N	≤ 1000 MHz	≤ 2200 MHz	≤ 2700 MHz	≤ 3800 MHz	≤ 5825 MHz
Kabel mit 2 geraden Steckverbindern Cable with 2 straight connectors	≤ 1.05	≤ 1.07	≤ 1.08	≤ 1.10	≤ 1.12
Kabel mit 1 geraden und 1 Winkelstecker Cable with 1 straight and 1 right angle connector	≤ 1.06	≤ 1.08	≤ 1.09	≤ 1.11	≤ 1.13
Kabel mit 2 Winkelsteckverbindern Cable with 2 right angle connectors	≤ 1.07	≤ 1.09	≤ 1.10	≤ 1.12	≤ 1.14

* typische VSWR Werte für Längen ≤ 5 m ; * typical VSWR values for lengths ≤ 5 m

Kabeltyp Cable Type	max. Dämpfung* max. Attenuation*					min. Biegeradius, wiederholte Biegung min. Bending Radius, repeated Bending
	1000 MHz	2200 MHz	2700 MHz	3800 MHz	5825 MHz	
LF 1/2"	0.072 dB/m	0.111 dB/m	0.124 dB/m	0.151 dB/m	0.193 dB/m	125 mm

* VSWR 1,0, Kabeltemperatur 20 °C, Werte ohne Steckverbinder, typische Dämpfung eines Steckverbinders $\leq 0,01$ dB

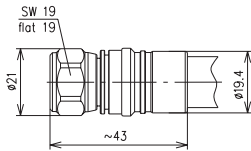
* VSWR 1.0, cable temperature 20 °C, values without connectors, typical connector attenuation is ≤ 0.01 dB

Kabeltyp Cable Type	max. Anschlussleistung* max. Power Rating*				
	1000 MHz	2200 MHz	2700 MHz	3800 MHz	5825 MHz
LF 1/2"	1180 W	767 W	684 W	564 W	441 W

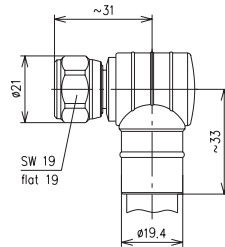
* VSWR 1,0, Umgebungstemperatur 40 °C, Innenleitertemperatur 100 °C, keine Sonneneinstrahlung

* VSWR 1.0, ambient temperature 40 °C, inner conductor temperature 100 °C, no solar loading

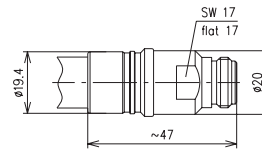
JUMPER LOW LOSS FLEXIBLE 1/2"



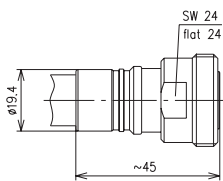
N Stecker
N plug



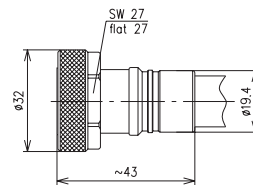
N Winkelstecker
N right angle plug



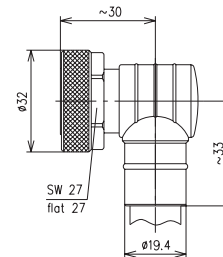
N Kuppler
N socket



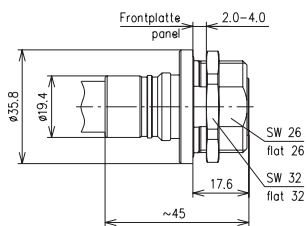
7-16 Kuppler
7-16 socket



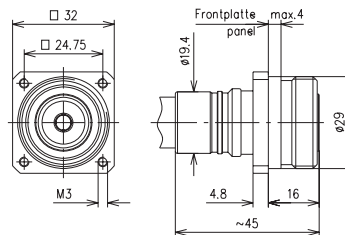
7-16 Stecker
7-16 plug



7-16 Winkelstecker
7-16 right angle plug



7-16 Gehäusekuppler
für Einlochmontage
7-16 fixed socket
for single hole mounting



7-16 Gehäusekuppler
mit Viereckflansch
7-16 fixed socket with
four hole mounting flange

SPINNER SALES OFFICES

SPINNER AUSTRIA GMBH

Triester Str. 190

1230 Wien

AUSTRIA

tel.: +43 1 6627751 / fax: +43 1 662775115

officeaustria@spinner.de

SPINNER Telecommunication Devices Co., Ltd.

351 Lian Yang Road

Songjiang Industrial Zone

Shanghai

201613 P.R. CHINA

tel.: +86 21 57745377 / fax: +86 21 57740962

salescn@spinner.de

SPINNER Nordic AB, Branch Office

Ahventie 4 A214

02170 Espoo

FINLAND

tel.: +358 9 547 60220 / fax: +358 9 512 2144

sales.suomi@spinner.de

SPINNER FRANCE S.A.R.L.

1, Place du Village

Parc des Barbanniers

92632 Gennevilliers Cedex

FRANCE

tel.: +33 1 41479600 / fax: +33 1 41479606

spinner-france@spinner.fr

SPINNER ITALIA S.R.L.

Via De Carolis Nr. 44

40133 Bologna

ITALIA

tel.: +39 051 6194064 / fax: +39 051 6183689

spinner-italia@spinner.de

SPINNER ELEKTROTECHNIK OOO

Kozhevnikeskaja str. 1, bld. 1

Office 420

115114 Moscow

RUSSIAN Federation

tel.: + 7 495 644 0964 / fax: + 7 495 225 9300

f.kotcherguinski@spinner.de

SPINNER ELECTROTÉCNICA S.L.

c/ Perú, 4 – Local nº 15

28230 Las Rozas (MADRID)

SPAIN

tel.: +34 91 6305 842 / fax: +34 91 6305 838

iker.llona@spinner.de

SPINNER Nordic AB

Kråketorpsgatan 20

43153 Mölndal

SWEDEN

tel.: +46 31 7061670 / fax: +46 31 7061679

sales@spinner.se

SPINNER UNITED KINGDOM Ltd.

Suite 8 Phoenix House

Golborne Enterprise Park

Golborne, Warrington

WA3 3DP

UNITED KINGDOM

tel.: +44 1942 275222 / fax: +44 1942 275221

salesuk@spinner.de

SPINNER ATLANTA, Inc.

4355 International Blvd.

Suite 200

Norcross, GA 30093

USA

tel.: +1 770 2636326 / fax: +1 770 2636329

sales@spinneratl.com

www.spinneratl.com

SPINNER GMBH • HEADQUARTERS

Erzgießereistr. 33 • 80335 München • Germany

tel.: +49 (0) 89 12601-0 • fax: +49 (0) 89 12601-1292 • www.spinner.de

Abbildungen unverbindlich • Konstruktionsänderungen vorbehalten

Figures not binding • Designs subject to modification



Zertifiziert nach DIN EN ISO 9001/14001
in Design/Entwicklung,
Produktion, Montage, Wartung
Umweltmanagement