

# Series 7/16

Very robust, extremely stable coaxial connectors, mostly with waterproof specifications and screw-lock system, for the transmission of medium to high powers, e.g. in transmitter equipment for frequency ranges up to 8 GHz. Special designs are suitable for applications in base stations of mobile radio systems (GSM). They guarantee signal transmission with low attenuation and intermodulation.

Straight and angled connector types are available for flexible and corrugated cables with diameters from approximately 5 mm to 17 mm and in a variety of panel types. Adapters are available for measurement tasks e.g. attenuator elements.

- Design based on specifications: IEC 169-4  
DIN 47223  
CECC 22 190  
VG 95250
- Quality tested according to: US MIL-Std 202
- Cable mounting: crimp-or clamp-cable mount
- Special versions: GSM-components with improved inter-modulation parameters

# Serie 7/16

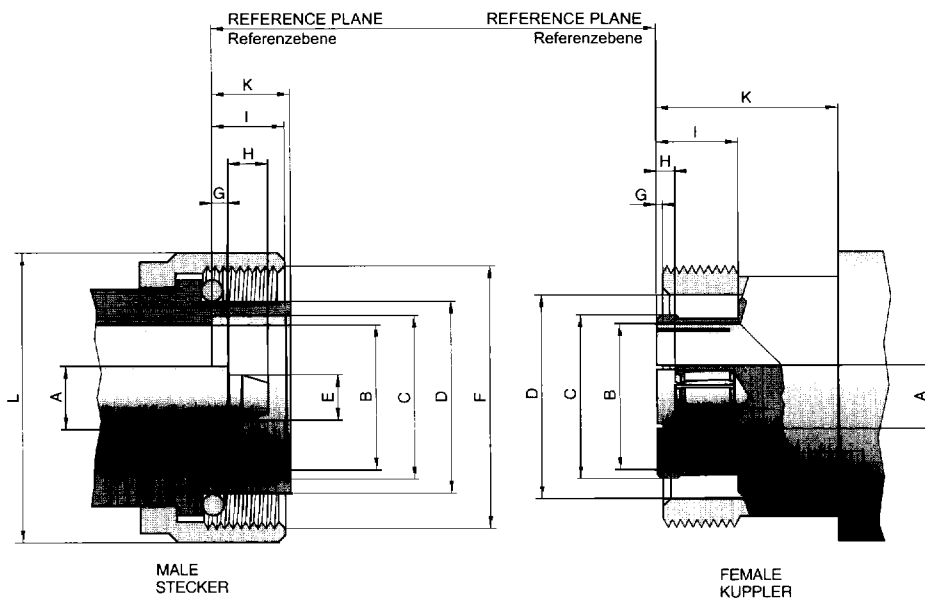
Sehr robuste, außerordentlich stabile koaxiale Steckverbindungen in meist wasserdichter Ausführung mit Schraubfesthaltung für die Übertragung mittlerer bis hoher Leistungen z.B. in Nachrichtensendeanlagen im Bereich bis ca. 8 GHz. Besondere Ausführungen sind für die Anwendung in Basisstationen für Mobilfunkanlagen (GSM) geeignet, sie garantieren die dämpfungs- und intermodulationsarme Übertragung von Nachrichtensignalen.

Es existieren Bauformen in gerader und abgewinkelter Ausführung für flexible Kabel und Wellmantel-Kabel mit Durchmessern von ca. 5 mm bis 17 mm sowie für Gehäuseeinbau, darüber hinaus sind Adapter und Meßtechnik-Komponenten wie z.B. Dämpfungsglieder vorhanden.

- Anschlußdimensionen nach: IEC 169-4  
DIN 47223  
CECC 22190  
VG 95250
- Qualitätsprüfung nach: US MIL-STD 202
- Kabelmontage: Klemmung oder Crimpung
- Spezialausführungen: GSM-Komponenten mit verbesserten Intermodulationseigenschaften

## Mechanical Characteristics

## Anschlußmaße



7/16 (50 Ohm) Serie 60					
MALE		FEMALE			
STECKER		KUPPLER			
	min.	max.	min.	max.	
A	7.00 nom.		7.00 nom.		A
B	15.85	15.85	15.85	16.25	B
C	18.03	18.21		1)	C
D	20.60	21.40	22.10	22.90	D
E	4.96	5.04			E
F	M29x1.5		M29x1.5		F
G	1.47	1.77	0.50	0.70	G
H		4.50	1.77	2.07	H
I	7.00	9.00	8.10		I
K	7.00	8.00	10.00		K
L	32 nom.				L

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

Technical Characteristics 7/16

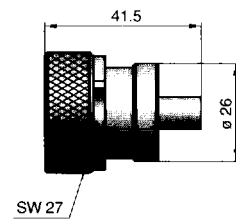
Technische Daten 7/16

Electrical characteristics		Elektrische Daten
Characteristic impedance	50 Ω	Wellenwiderstand
Frequency range	0..8.3 GHz	Frequenzbereich
VSWR up to 0.5GHz	≤ 1.05 typ.	VSWR bis 0.5GHz
up to 4 GHz	≤ 1.18 typ.	bis 4 GHz
up to 8.3 GHz	≤ 1.30 typ.	bis 8.3 GHz
VSWR GSM, straight contacts	≤ 1.02 typ.	VSWR GSM, gerader Kontakt
VSWR GSM, right angle	≤ 1.06 typ.	VSWR GSM, Winkelverbinder
Insulation resistance	≥ 10 <sup>4</sup> MΩ	Isolationswiderstand
Center contact resistance	≤ 0.4 mΩ	Übergangswiderstand Innenleiter
Outer contact resistance	≤ 1.5 mΩ	Übergangswiderstand Außenleiter
Test voltage	≤ 4000 V rms	Prüfspannung
Working voltage	≤ 2700 V rms	Betriebsspannung
Power handling		Leistungsbelastbarkeit
0.1 GHz	5.0 kW	0.1 GHz
1.0 GHz	1.8 kW	1.0 GHz
4.0 GHz	0.9 kW	4.0 GHz
RF leakage (1GHz)	≥ 128 dB	Schirmdämpfung (1GHz)
Intermodulation 3rd order at 2x25W	≥ 155 dBc typ.	Intermodulation 3. Ordnung bei 2x25W
Mechanical characteristics		Mechanische Daten
Coupling torque	30 Nm max. recommended 17-22 Nm	Anzugsdrehmoment
Coupling nut retention	1000 N	Haltekraft, Überwurfmutter
Center contact retention force	200 N	Innenleiter Haltekraft
Connecting operations	≥ 500	Anzahl Steckzyklen
Environmental		Umgebungseinflüsse
Temperature range	-65°C - +85°C	Temperaturbereich
Vibration	MIL-STD-202 Meth. 204/B	Vibration
Shock	MIL-STD-202 Meth. 213/B	Schock
Corrosion resistance	MIL-STD-202 Meth. 101	Korrosionsbeständigkeit
Climatic class according IEC	IEC 6855 / 155 / 21	Klimaklasse nach IEC
Materials		Materialien
Body	Brass	Außenleiter
Spring loaded contacts	CuBe	fedemde Kontaktteile
Insulator	PP (PS, PTFE)	Isolator
Crimping ferrules	Copper Alloy	Krimphülse
Gaskets	Rubber	Dichtungen
Plating body	Ag	Oberfläche Außenleiter
Plating center contact area	Ag	Oberfläche Kontaktzone Innenleiter

**STRAIGHT PLUG, Solder**

**STECKER gerade, löt**

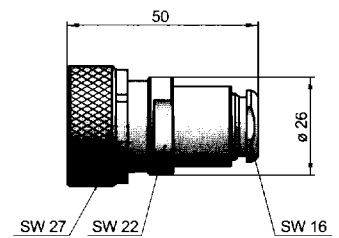
Part Number	Cable Group	Assembly Instruction	Remarks
60 S 151-273 B1	73	60 E2	



**STRAIGHT PLUG, Clamp**

**STECKER gerade, klemm**

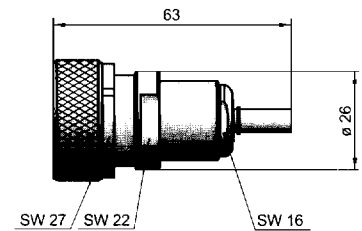
Part Number	Cable Group	Assembly Instruction	Remarks
60 S 151-006 B1	06,07,08	60 A3	
60 S 151-015 B1	15,16,17	60 A4	



**STRAIGHT PLUG, Crimp**

**STECKER gerade, crimp**

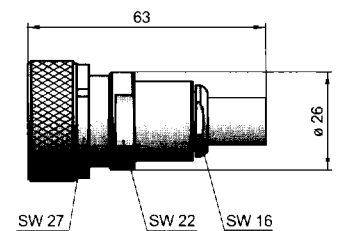
Part Number	Cable Group	Assembly Instruction	Remarks
60 S 151-306 B1	06	60 B3	
60 S 151-308 B1	07,08	60 B3	



**STRAIGHT PLUG, Crimp**

**STECKER gerade, crimp**

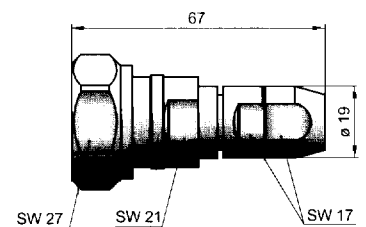
Part Number	Cable Group	Assembly Instruction	Remarks
60 S 151-315 B1	15	60 B4	
60 S 151-317 B1	16,17	60 B4	



**STRAIGHT PLUG for Corrugated Cables**

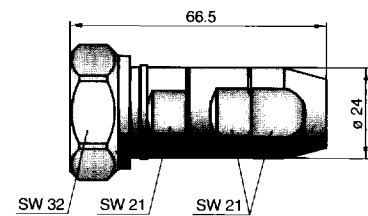
**STECKER gerade, für Wellmantel-Kabel**

Part Number	Cable Group	Assembly Instruction	Remarks
60 S 154-C01 B1	C01	53 A1	



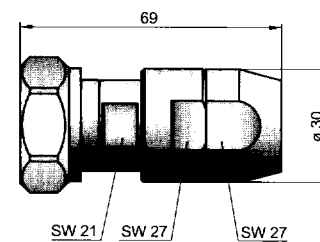
**STRAIGHT PLUG for Corrugated Cables**      **STECKER gerade, für Wellmantel-Kabel**

Part Number	Cable Group	Assembly Instruction	Remarks
60 S 154-C02 B1	C02	60 I4	



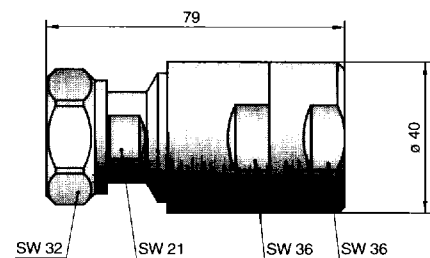
**STRAIGHT PLUG for Corrugated Cables**      **STECKER gerade, für Wellmantel-Kabel**

Part Number	Cable Group	Assembly Instruction	Remarks
60 S 154-C03 B1	C03	60 I2	
60 S 154-C08 B1	C08	60 I4	



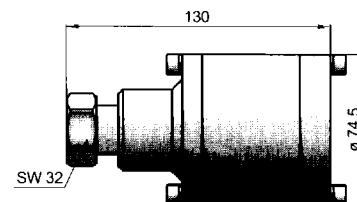
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Part Number	Cable Group	Assembly Instruction	Remarks
60 S 154-C05 B1	C05	60 I5	



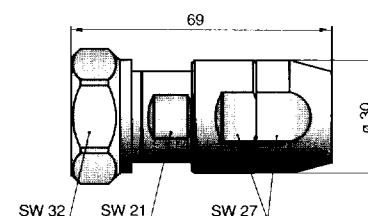
**STRAIGHT PLUG for Corrugated Cables**      **STECKER gerade, für Wellmantel-Kabel**

Part Number	Cable Group	Assembly Instruction	Remarks
60 S 154-C07 B1	C07	60 I9	



**STRAIGHT PLUG for Corrugated Cables**      **STECKER gerade, für Wellmantel-Kabel**

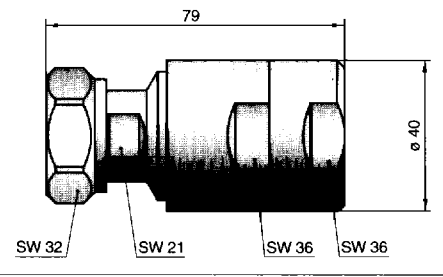
Part Number	Cable Group	Assembly Instruction	Remarks
60 S 154-F10 B1	F10	60 I4	



**STRAIGHT PLUG for Corrugated Cables**

**STECKER gerade, für Wellmantel-Kabel**

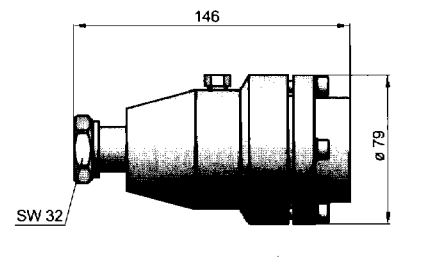
Part Number	Cable Group	Assembly Instruction	Remarks
60 S 154-F05 B1	F05	60 I6	



**STRAIGHT PLUG for Corrugated Cables**

**STECKER gerade, für Wellmantel-Kabel**

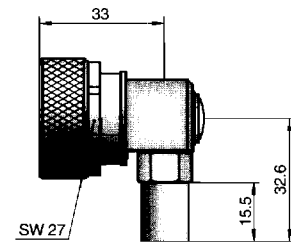
Part Number	Cable Group	Assembly Instruction	Remarks
60 S 154-F07 B1	F07	60 I7	



**RIGHT ANGLE PLUG, Solder-Crimp**

**WINKELSTECKER, löt-crimp**

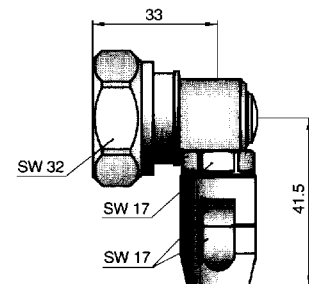
Part Number	Cable Group	Assembly Instruction	Crimp-Inserts	Remarks
60 S 251-315 B1	15	60 H2	11 W 150-115	
60 S 251-317 B1	16,17	60 H2	11 W 150-115	



**RIGHT ANGLE PLUG for Corrugated Cables**

**WINKELSTECKER für Wellmantel-Kabel**

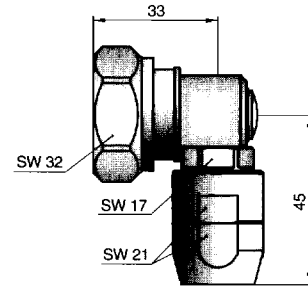
Part Number	Cable Group	Assembly Instruction	Remarks
60 S 254-C01 B1	C01	53 F4	



**RIGHT ANGLE PLUG for  
Corrugated Cables**

**WINKELSTECKER  
für Wellmantel-Kabel**

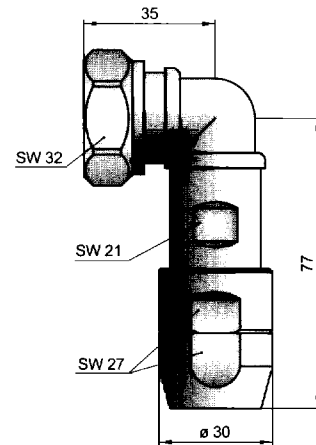
Part Number	Cable Group	Assembly Instruction	Remarks
60 S 254-C02 B1	C02	60 C2	



**RIGHT ANGLE PLUG for  
Corrugated Cables**

**WINKELSTECKER  
für Wellmantel-Kabel**

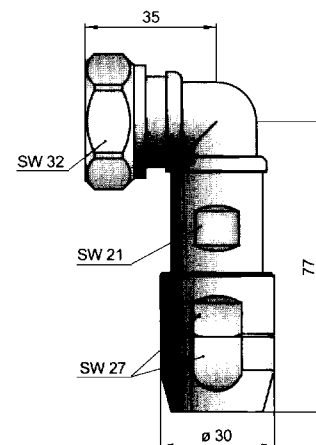
Part Number	Cable Group	Assembly Instruction	Remarks
60 S 254-C03 B1	C03	60 I2	
60 S 254-C08 B1	C08	60 I2	



**RIGHT ANGLE PLUG for  
Corrugated Cables**

**WINKELSTECKER  
für Wellmantel-Kabel**

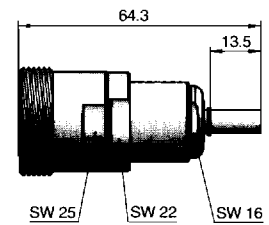
Part Number	Cable Group	Assembly Instruction	Remarks
60 S 254-F10 B1	F10	60 I4	



**STRAIGHT JACK, Crimp**

**KUPPLER gerade, crimp**

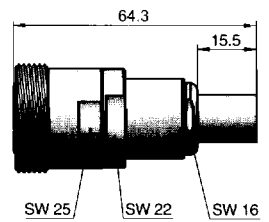
Part Number	Cable Group	Assembly Instruction	Crimp-Inserts	Remarks
60 K 151-306 B1	06	60 B3	11 W 150-106	



**STRAIGHT JACK, Crimp**

**KUPPLER gerade, crimp**

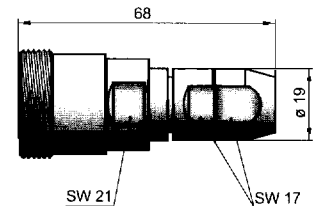
Part Number	Cable Group	Assembly Instruction	Crimp-Inserts	Remarks
60 K 151-315 B1	15	60 B4	11 W 150-115	
60 K 151-317 B1	16,17	60 B4	11 W 150-115	



**STRAIGHT JACK for Corrugated Cables**

**KUPPLER gerade, für Wellmantel-Kabel**

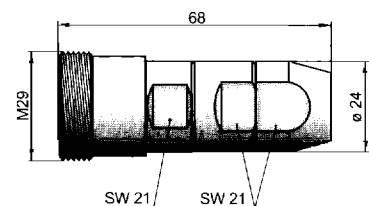
Part Number	Cable Group	Assembly Instruction	Remarks
60 K 154-C01 B1	C01	53 A1	



**STRAIGHT JACK for Corrugated Cables**

**KUPPLER gerade, für Wellmantel-Kabel**

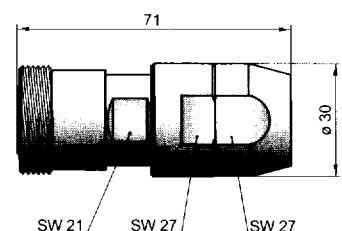
Part Number	Cable Group	Assembly Instruction	Remarks
60 K 154-C02 B1	C02	60 I4	



**STRAIGHT JACK for Corrugated Cables**

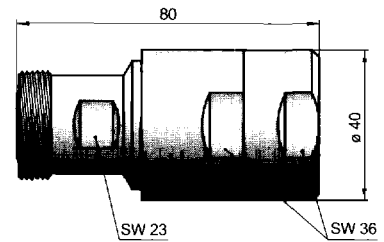
**KUPPLER gerade, für Wellmantel-Kabel**

Part Number	Cable Group	Assembly Instruction	Remarks
60 K 154-C03 B1	C03	60 I2	
60 K 154-C08 B1	C08	60 I4	



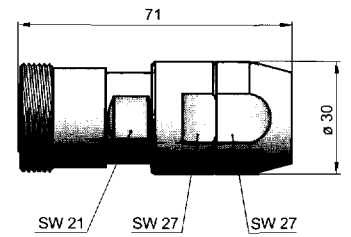
**STRAIGHT JACK for Corrugated Cables**      *KUPPLER gerade, für Wellmantel-Kabel*

Part Number	Cable Group	Assembly Instruction	Remarks
60 K 154-C05 B1	C05	60 15	



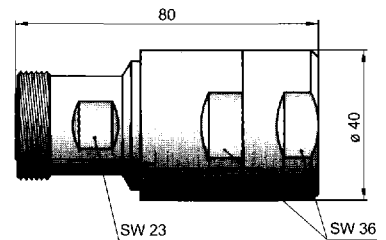
**STRAIGHT JACK for Corrugated Cables**      *KUPPLER gerade, für Wellmantel-Kabel*

Part Number	Cable Group	Assembly Instruction	Remarks
60 K 154-F10 B1	F10	60 14	



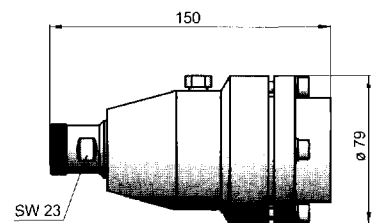
**STRAIGHT JACK for Corrugated Cables**      *KUPPLER gerade, für Wellmantel-Kabel*

Part Number	Cable Group	Assembly Instruction	Remarks
60 K 154-F05 B1	F05	60 16	



**STRAIGHT JACK for Corrugated Cables**      *KUPPLER gerade, für Wellmantel-Kabel*

Part Number	Cable Group	Assembly Instruction	Remarks
60 K 154-F07 B1	F07	60 17	

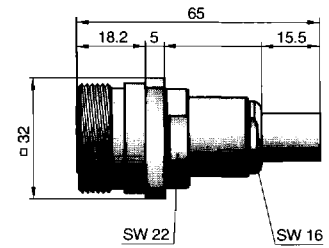




**FLANGE JACK, Crimp**

**FLANSCH-KUPPLER, crimp**

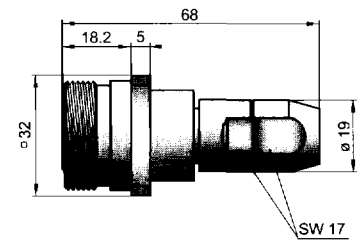
Part Number	Cable Group	Assembly Instruction	Panel Piercing	Crimp-Inserts	Remarks
60 K 451-315 B1	15	60 B4	B 46	11 W 150-115	4 x dia. 3.6
60 K 451-317 B1	17	60 B4	B 46	11 W 150-115	4 x dia. 3.6



**FLANGE JACK for Corrugated Cables**

**FLANSCH-KUPPLER für Wellmantel-Kabel**

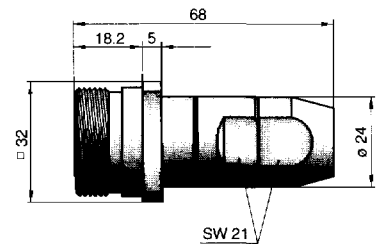
Part Number	Cable Group	Assembly Instruction	Remarks
60 K 454-C01 B1	C01	53 A1	



**FLANGE JACK for Corrugated Cables**

**FLANSCH-KUPPLER für Wellmantel-Kabel**

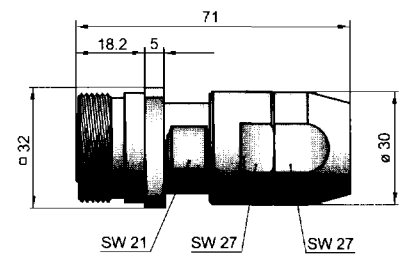
Part Number	Cable Group	Assembly Instruction	Remarks
60 K 454-C02 B1	C02	60 I4	



**FLANGE JACK for Corrugated Cables**

**FLANSCH-KUPPLER für Wellmantel-Kabel**

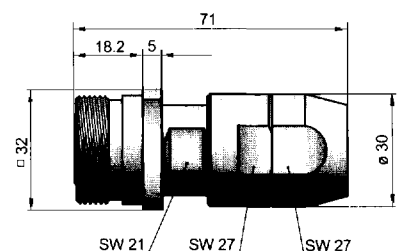
Part Number	Cable Group	Assembly Instruction	Remarks
60 K 454-C03 B1	C03	60 I2	
60 K 454-C08 B1	C08	60 I4	



**FLANGE JACK for Corrugated Cables**

**FLANSCH-KUPPLER für Wellmantel-Kabel**

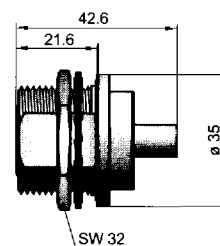
Part Number	Cable Group	Assembly Instruction	Remarks
60 K 454-F10 B1	F10	60 I4	



**BULKHEAD JACK, Solder**

**EINBAUKUPPLER, löt**

Part Number	Cable Group	Assembly Instruction	Panel Piercing	Remarks
60 K 552-273 B1	73	60 E2	B 75	

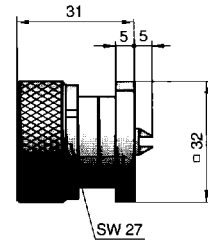


**PANEL AND BULKHEAD CONNECTORS**

**FLANGE PLUG**

**FLANSCH-STECKER**

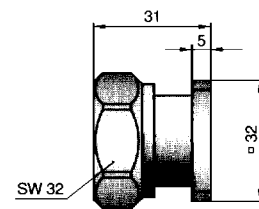
Part Number	Panel Piercing	Remarks
60 S 451-200 B1	B 46	4 x dia. 3.6



**FLANGE PLUG**

**FLANSCH-STECKER**

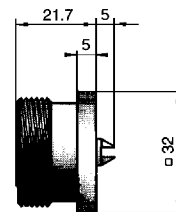
Part Number	Panel Piercing	Remarks
60 S 453-500 B1	B 46	4 x dia. 3.6



**FLANGE JACK**

**FLANSCH-KUPPLER**

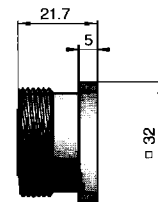
Part Number	Panel Piercing	Remarks
60 K 451-200 B1	B 46	4 x dia. 3.6



**FLANGE JACK**

**FLANSCH-KUPPLER**

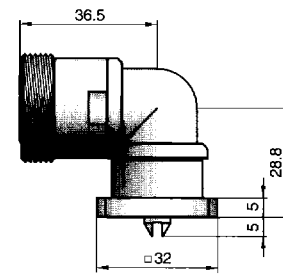
Part Number	Panel Piercing	Remarks
60 K 451-500 B1	B 46	4 x dia. 3.6



**RIGHT ANGLE FLANGE JACK**

**EINBAU-WINKELKUPPLER**

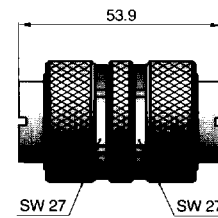
Part Number	Panel Piercing	Remarks
60 K 251-200 B1	B 46	4 x dia. 3.6



**ADAPTOR STRAIGHT**

**VERBINDER gerade**

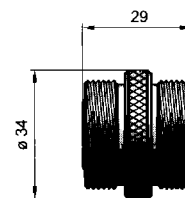
Part Number	Remarks
60 S101-S50 B1	



**ADAPTOR STRAIGHT**

**VERBINDER gerade**

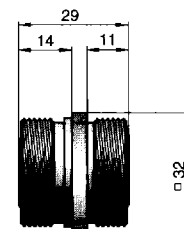
Part Number	Remarks
60 K 101-K50 B1	



**ADAPTOR STRAIGHT**

**VERBINDER gerade**

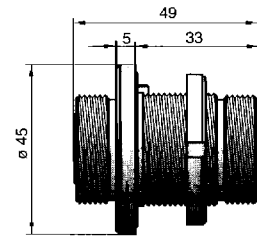
Part Number	Panel Piercing	Remarks
60 K 401-K50 B1	B 46	4 x M 3.6



**ADAPTOR STRAIGHT**

**VERBINDER gerade**

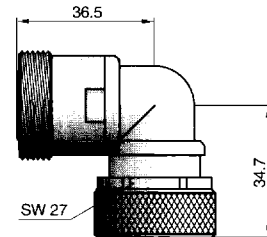
Part Number	Panel Piercing	Remarks
60 K 501-K50 B1	B 84	



**RIGHT ANGLE ADAPTOR**

**WINKEL-VERBINDER**

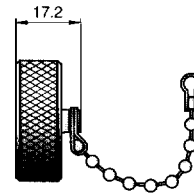
Part Number	Remarks
60 S201-K50 B1	



**PROTECTIVE CAPS**

**SCHUTZKAPPEN**

Part Number	Remarks
60 Z 112-000 B	



**PROTECTIVE CAPS**

**SCHUTZKAPPEN**

Part Number	Remarks
60 Z 115-000 B	

