



# SERIES N

## COAXIAL CONNECTORS 50 Ω

### Description

SUHNER N connectors are available with 50 Ω and 75 Ω impedance. The frequency range extends to 18 GHz, depending on the connector and cable type. The screw-type coupling mechanism provides a sturdy and reliable connection.

SUHNER N connectors are available for flexible cables, for semi-rigid cables and for corrugated copper tube cables.

Cable entries: clamp, crimp and solder types available, as well as SUHNER QUICK-FIT for corrugated copper tube cables.

### Compatibility

Inner conductors of N 75 Ω connectors have a smaller diameter than those of the 50 Ω version. Therefore 50 Ω and 75 Ω connectors must not be mated with each other.

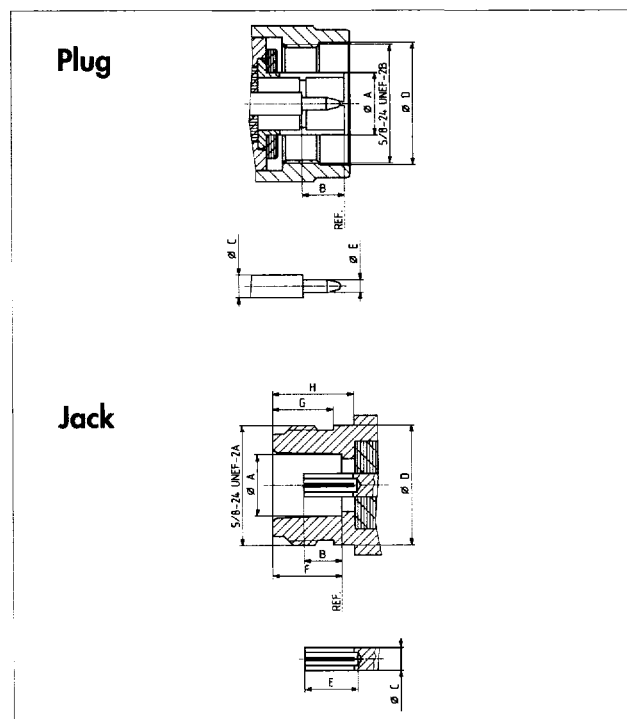
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### Interface Dimensions

### Interface Dimensions in mm / inches



	Plug		Jack	
	min.	max.	min.	max.
A	—	8.38/.330	8.03/.316	8.13/.320
B	5.33/.210	5.84/.230	4.75/.187	5.26/.207
C	—	3.15/.124	—	3.15/.124
D	16.00/.630	—	—	15.93/.627
E	1.60/.063	1.68/.066	5.33/.210	—
F	—	—	9.04/.356	9.19/.362
G	—	—	6.76/.266	—
H	—	—	10.72/.422	—

### Standards

Interface dimensions conform to:  
**IEC 169-16,**  
**CECC 22 210**  
**MIL-STD-348A/304**

Z

## Technical Data

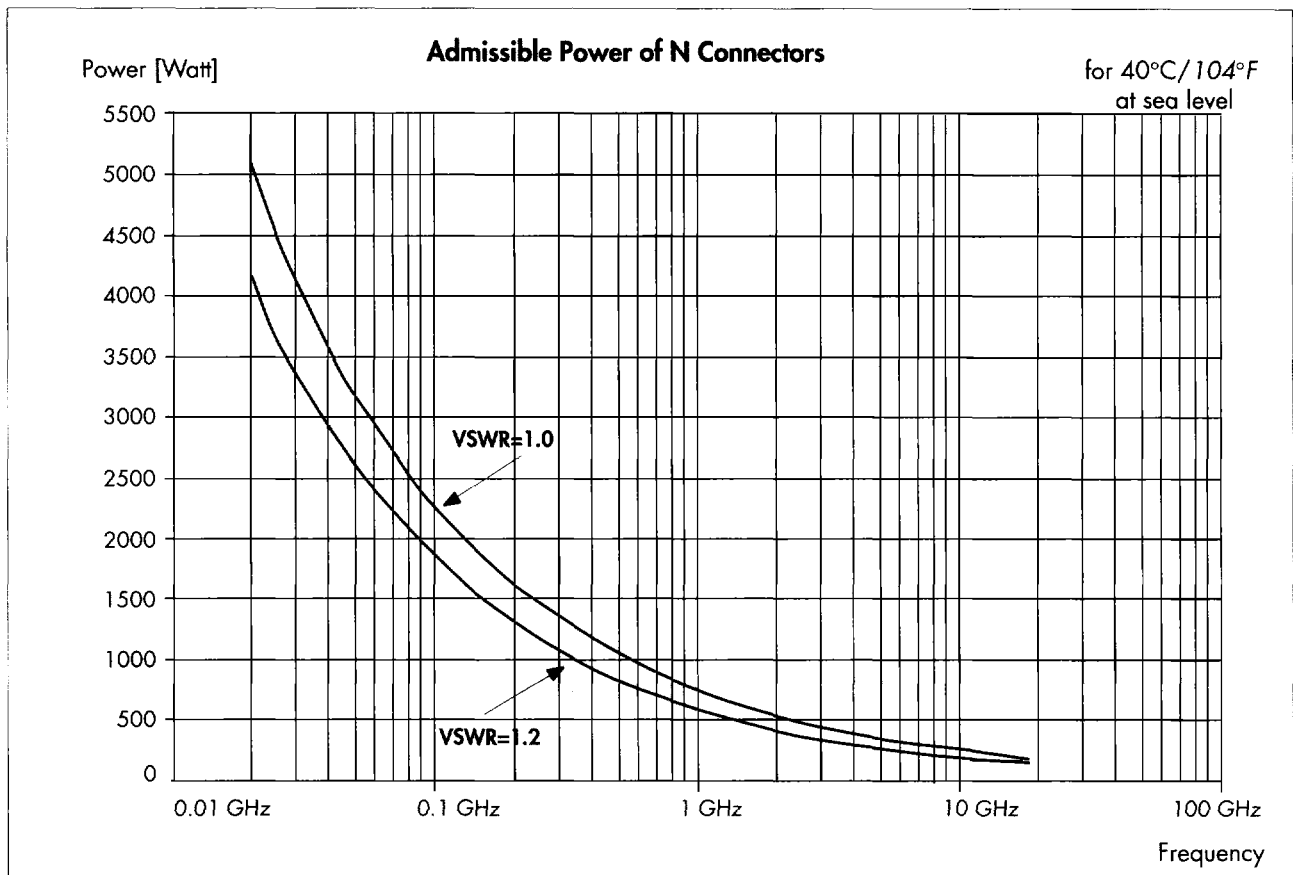
ELECTRICAL DATA	REQUIREMENTS
Impedance	50 $\Omega$
Frequency range – flexible cables – semi-rigid cables	DC ... 11 GHz (see also Appendix page 436) DC ... 18 GHz (see also Appendix page 436)
VSWR	see table below
PIM <sup>1)</sup>	$\geq 155$ dBc for SUHNER QUICK-FIT <sup>®</sup>
Insertion loss	see Appendix page 437
RF-leakage (between 2 ÷ 3 GHz)	$\geq 90$ dB
Dielectric withstanding voltage (at sea level)	2.5 kV rms, 50 Hz
Working voltage (at sea level)	$\leq 1.0$ kV rms, 50 Hz
Insulation resistance	$\geq 5 \cdot 10^3$ M $\Omega$
Contact resistance – centre contact – outer contact	$\leq 1.0$ m $\Omega$ $\leq 1.0$ m $\Omega$

1) Carrier to 3rd order intermodulation product ratio with  $2 \times 25$  W carrier power,  $f \leq 1.88$  GHz

TYPICAL VSWR	FREQUENCY RANGE					CABLE GROUP
	1 GHz	2.5 GHz	5 GHz	12.4 GHz	18 GHz	
straight connectors	1.04	1.05	1.08	1.30		Y3, Y11
	1.04	1.05	1.05	1.12		Y5, Y12
	1.04	1.05	1.05	1.08	1.09	Y5, Y12 #
	1.04	1.05	1.06	1.09	1.12	Y7
	1.04	1.07				M9 – M42
	1.05	1.09	1.17			U7, U9
right angle connectors	1.04	1.05	1.12			U28 – U33
	1.05	1.10	1.22			U7, U9
	1.08	1.10	1.14			U28 – U33

Other connectors and cables on request

# = precision type



For detailed information regarding power measurement, please refer to page 437.

MECHANICAL DATA	REQUIREMENTS
Coupling nut torque – recommended – proof torque	0.68 Nm ... 1.13 Nm / 6.0 ... 10.0 in.-lbs 1.70 Nm / 15.0 in.-lbs
Couling nut retention force	≥ 450 N / 101.2 lbs
Contact captivation	≥ 28 N / 6.3 lbs
Cable retention force <sup>1)</sup>	see pages 36 – 41
Durability (matings)	≥ 500

1) value considers maximum load of the cables without irreversible variations of specifications.

ENVIRONMENTAL DATA	TEST CONDITIONS
Temperature range SUHNER QUICK-FIT®	- 65°C ... + 165°C / - 85°F ... + 329°F - 40°C ... + 85°C / - 40°F ... + 185°F
Climatic category acc. to IEC	55 / 155 / 21
Thermal shock	MIL-STD-202, Method 107, Condition B
Moisture resistance	MIL-STD-202, Method 106
Corrosion	Saltspray test acc. to MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition B
Shock	MIL-STD-202, Method 213, Condition I
SUHNER QUICK-FIT®, degree of protection (humidity)	IP 67 → IEC 529

MATERIAL DATA			
CONNECTOR PART	STANDARDS	MATERIAL	PLATING
Bodies Pin contact	QQ-B-626	brass	SUCOPLATE® gold plated
Outer contact, slotted	DIN 17660	spring bronze	SUCOPLATE®
Female contacts	QQ-C-530	beryllium-copper, hardened	gold plated
Crimp ferrules	SUHNER® specification	copper	SUCOPLATE®
Insulators, standard version	ASTM-D-1457, BS 4271 Grade B	PTFE	
Gaskets	ASTM-E-1418 PS 1	silicone rubber	

Some connectors may have a specification that differs from the above mentioned data.

# Connectors for Semi-Rigid Cables

## straight plugs

- > cable entry soldered
- > centre contact soldered

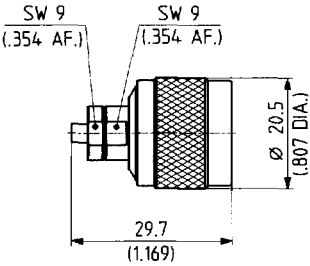


Fig. 1

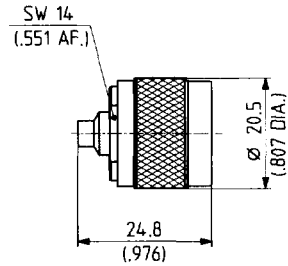
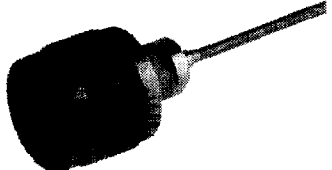


Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Frequency range	Weight	Fig.	Notes
11 N-50-2-14	642513	Y3, Y11 (EZ 86)	9130	DC-18 GHz	30.0 g/1.05 oz.	1	
11 N-50-3-13	542083	Y5, Y11 (EZ 141)	3095	DC-12.4 GHz	29.0 g/1.02 oz.	2	

- > cable entry soldered (fig. 1)
- > cable entry clamp (fig. 2)
- > plug-in centre contact

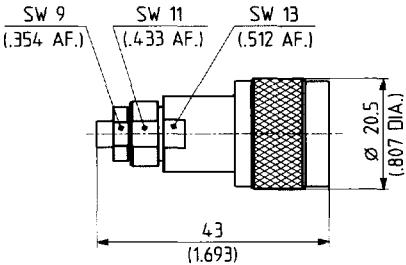


Fig. 1

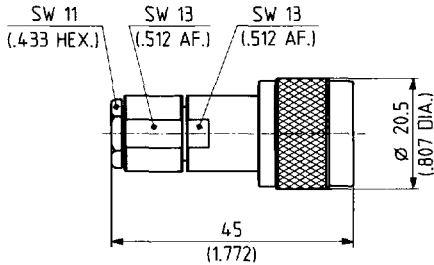
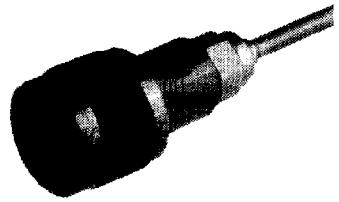


Fig. 2

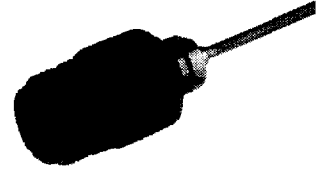
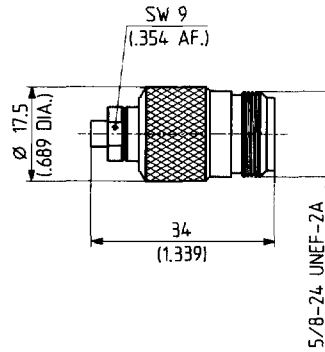


SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Frequency range	Weight	Fig.	Notes
11 N-50-3-51	• 543919	Y5, Y12 (EZ 141)	9006	DC-18 GHz	43.0 g/1.51 oz.	1	stainless steel
11 N-50-5-39	• 642481	Y7 (EZ 250)	9089	DC-18 GHz	51.0 g/1.79 oz.	2	
11 N-50-5-52	• 641530	Y7 (EZ 250)	9089	DC-18 GHz	51.0 g/1.79 oz.	2	stainless steel

- centre contact captivated

## straight jacks

- > cable entry soldered
- > centre contact soldered



SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Frequency range	Weight	Notes
21 N-50-2-14	642666	Y3, Y11 (EZ 86)	9073	DC-18 GHz	38.0 g/1.33 oz.	
21 N-50-3-11	543921	Y5, Y12 (EZ 141)	9005	DC-12.4 GHz	38.0 g/1.33 oz.	

- > cable entry soldered (fig. 1)
- > cable entry clamp (fig. 2)
- > plug-in centre contact

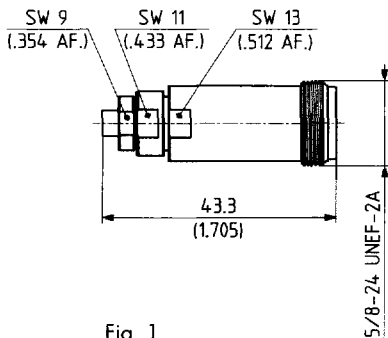


Fig. 1

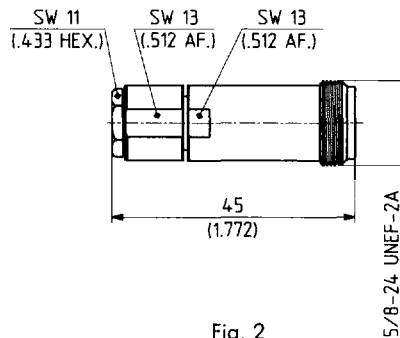
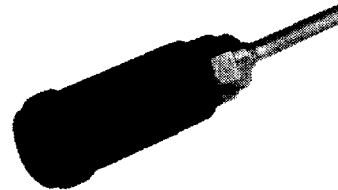


Fig. 2

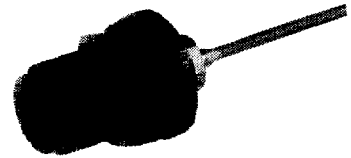
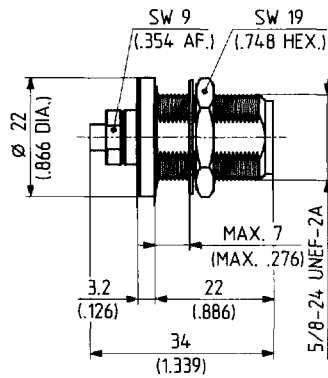


SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Frequency range	Weight	Fig.	Notes
21 N-50-3-51	• 543922	Y5, Y12 (EZ 141)	9006	DC-18 GHz	36.0 g/1.26 oz.	1	stainless steel
21 N-50-5-52	• 641531	Y7 (EZ 250)	9089	DC-18 GHz	39.0 g/1.37 oz.	2	stainless steel

- centre contact captivated

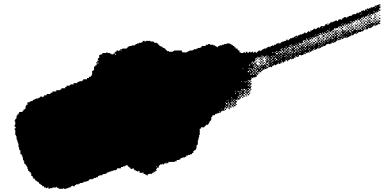
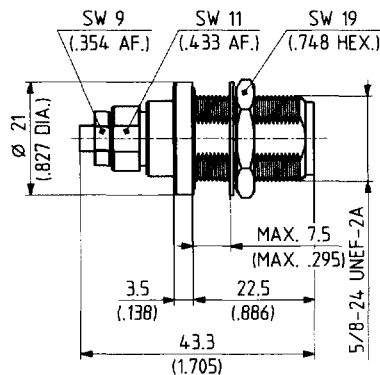
## bulkhead jacks

- > cable entry soldered
- > centre contact soldered
- > with panel seal
- > suitable for insulated mounting
- > insulating washers see page 425



SUHNER TYPE	Ident. no.	Cable group (example)	Mounting hole	Assembly instruction	Frequency range	Weight	Notes
24 N-50-2-14	544637	Y3, Y11 (EZ 86)	ML 12	9073	DC-18GHz	39.0 g/1.37 oz.	
24 N-50-3-14	542300	Y5, Y12 (EZ 141)	ML 12	9005	DC-12.4GHz	39.0 g/1.37 oz.	

- > cable entry soldered
- > with panel seal
- > suitable for insulated mounting
- > insulating washers see page 425

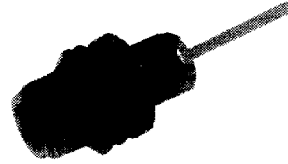
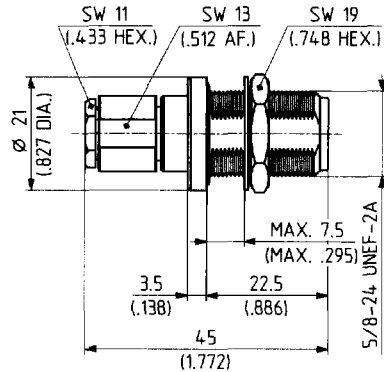


SUHNER TYPE	Ident. no.	Cable group (example)	Mounting hole	Assembly instruction	Frequency range	Weight	Notes
24 N-50-3-51	642344	Y5, Y12 (EZ 141)	ML 12	9006	DC-18GHz	45.0 g/1.58 oz.	

stainless steel

- centre contact captivated

- > cable entry clamp
- > plug-in centre contact
- > with panel seal
- > suitable for insulated mounting
- > insulating washers see page 425



SUHNER TYPE	Ident. no.	Cable group (example)	Mounting hole	Assembly instruction	Frequency range	Weight	Notes
24 N-50-5-39	642505	Y7 (EZ 250)	ML 12	9089	DC-18GHz	53.0 g/1.86 oz.	

## panel jacks

- > cable entry soldered
- > centre contact soldered
- > fastening screws see page 424

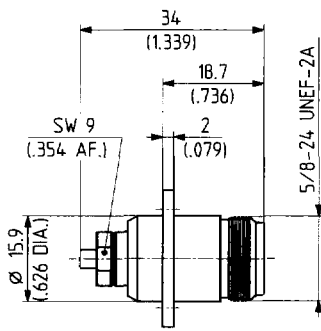
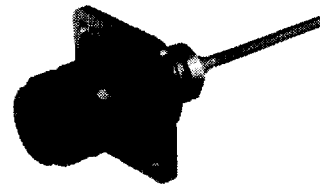


Fig. 1

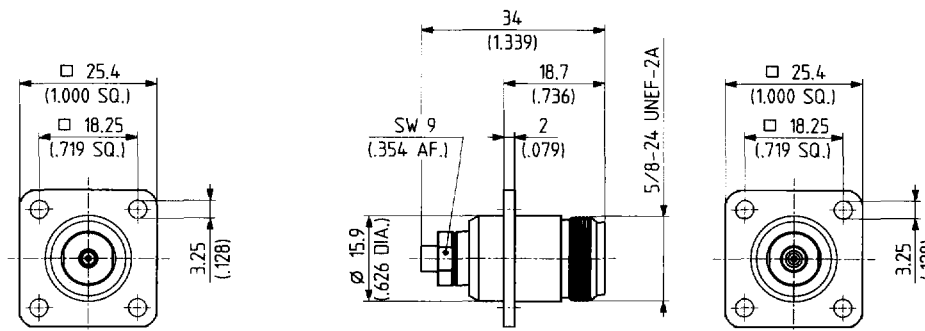


Fig. 2

SUHNER TYPE	Ident. no.	Cable group (example)	Mounting hole	Assembly instruction	Frequency range	Weight	Fig.
25 N-50-2-14	641303	Y3, Y11 (EZ 86)	ML 14	9073	DC-18GHz	42.0 g/1.47 oz.	1
25 N-50-3-9	543952	Y5, Y12 (EZ 141)	ML 14	9005	DC-12.4GHz	42.0 g/1.47 oz.	2

- centre contact captivated



# Connectors for Foam Dielectric Corrugated Copper Tube Cables

SUHNER manufactures a variety of N connectors for use with corrugated copper tube cables of 50 Ω impedance. The cable entries are water and hu-

midity proof, a special sealing compound (plast) is not required.

## straight plugs

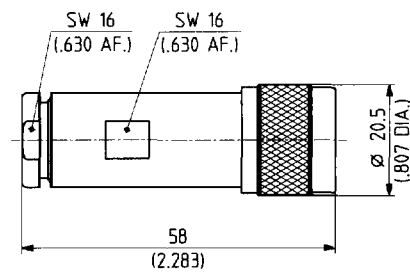


Fig. 1

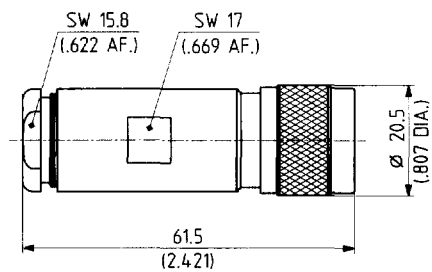
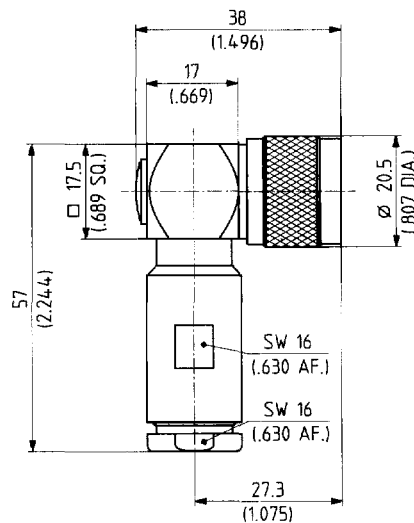


Fig. 2

SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Flaring tool	Face spanner	Weight	Fig.
11 N-50-6-21	• 652102	M6 (CF1/4"CU2Y)	9050	74 Z-0-0-49	74 Z-0-0-48	73.0 g/2.56 oz.	1
11 N-50-8-21	• 652103	M8 (CF3/8"CU2Y)	9049	74 Z-0-0-47	74 Z-0-0-46	76.0 g/2.66 oz.	2

## right angle plug



SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Flaring tool	Face spanner	Weight
16 N-50-6-21	• 652104	M6 (CF1/4"CU2Y)	9052	74 Z-0-0-49	74 Z-0-0-48	106.0 g/3.71 oz.

• centre contact captivated

cable groups see pages 36

assembly tools see page 403

mounting holes see page 441

## straight jacks

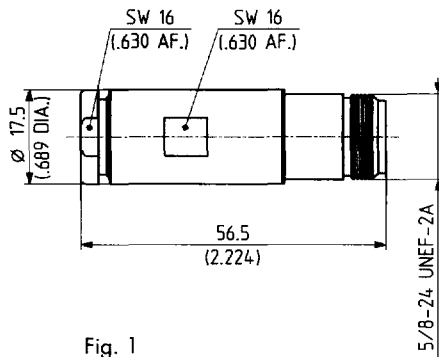


Fig. 1

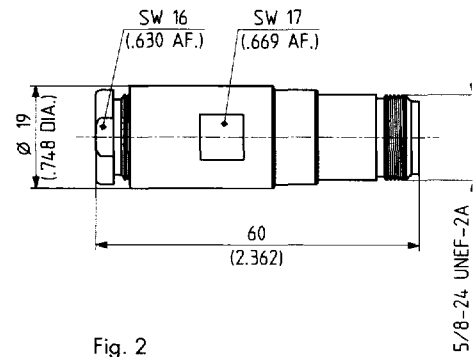
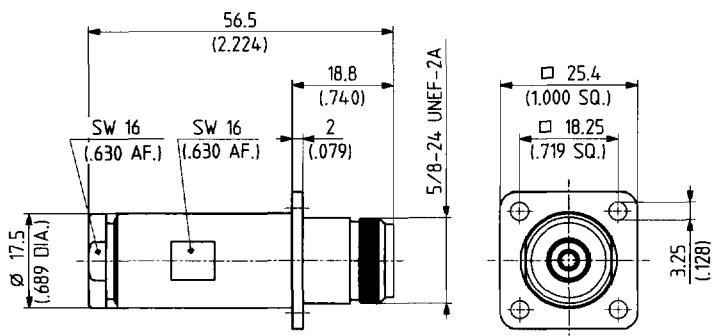


Fig. 2

SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Flaring tool	Face spanner	Weight	Fig.
21 N-50-6-21	• 652105	M6 (CF1/4"CU2Y)	9050	74 Z-0-0-49	74 Z-0-0-48	67.0 g/2.35 oz.	1
21 N-50-8-21	• 652106	M8 (CF3/8"CU2Y)	9049	74 Z-0-0-47	74 Z-0-0-46	70.0 g/2.45 oz.	2

## panel jacks

> fastening screws see page 424

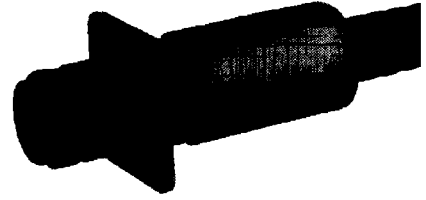
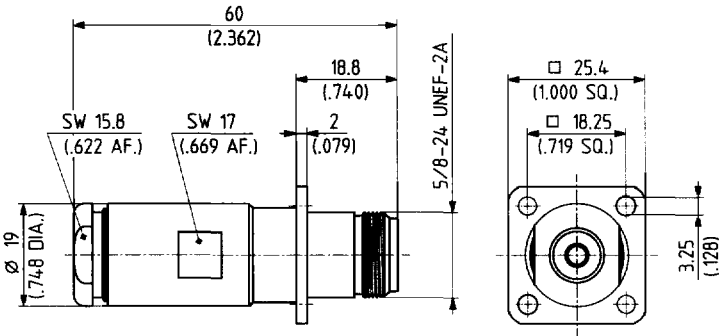


SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Flaring tool	Face spanner	Weight
25 N-50-6-21	• 652107	M6 (CF1/4"CU2Y)	9050	74 Z-0-0-49	74 Z-0-0-48	73.0 g/2.56 oz.

mounting hole ML 11

• centre contact captivated

> fastening screws see page 424



SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Flaring tool	Face spanner	Weight
25 N-50-8-21	652108	M8 (CF3/8"CU2Y)	9049	74 Z-0-0-47	74 Z-0-0-46	76.0 g/2.66 oz.

mounting hole ML 18

## SUHNER QUICK-FIT® Coaxial Connectors

- low passive intermodulation types
- quick and easy assembly
- degree of protection IP 67
- suitable for outdoor applications

### straight plugs

> assembly tools see page 417

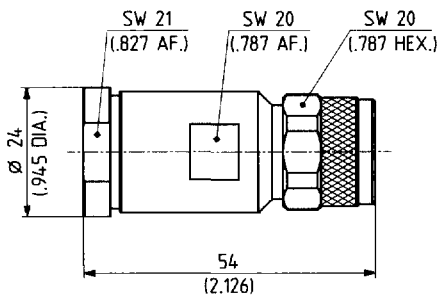


Fig. 1

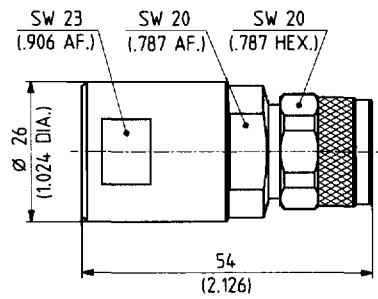


Fig. 2

SUHNER TYPE	Ident. no.	Suitable cables	Assembly instruction	Weight	Fig.
11 N-50-9-8	650043	1/2" Highflex: FSJ4-50B, HCF 1/2" Cu2Y AlCu	9152	100 g/3.50 oz.	1
11 N-50-12-115	651479	1/2": SUCOFEED 1/2", LDF4-50A, LCF 1/2" Cu2Y	9153	100 g/3.50 oz.	2

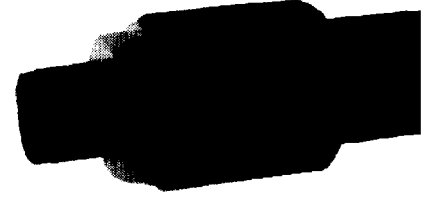
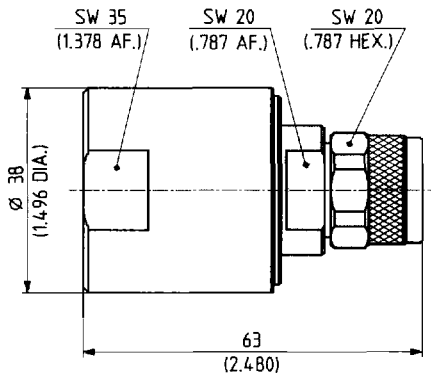
- centre contact captivated

cable groups see pages 36

assembly tools see page 403

mounting holes see page 441

> assembly tools see page 417



SUHNER TYPE	Ident. no.	Suitable cables	Assembly instruction	Weight
11 N-50-23-101	651427	7/8": SUCOFEED 7/8", LDF5-50A, LCF 7/8" Cu2Y	9154	200 g/7.00 oz.

### straight jacks

> assembly tools see page 417

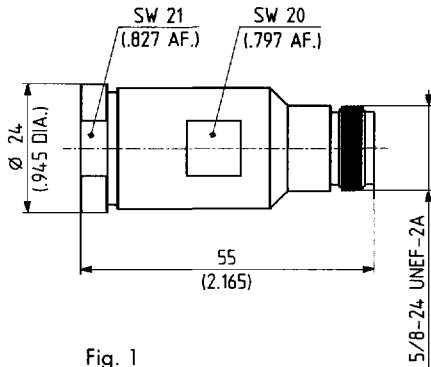


Fig. 1

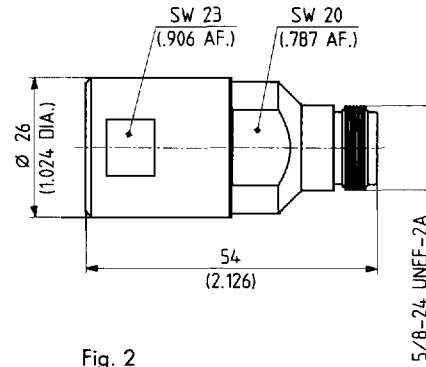
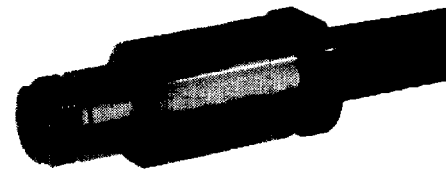
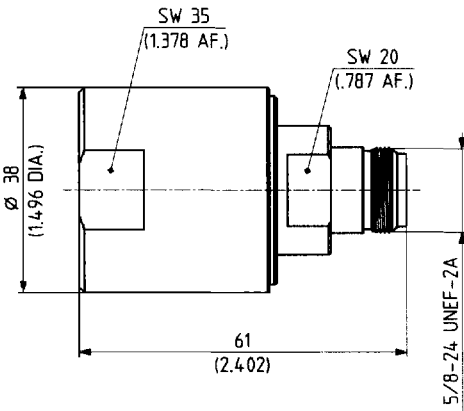


Fig. 2

SUHNER TYPE	Ident. no.	Suitable cables	Assembly instruction	Weight	Fig.
21 N-50-9-2	650044	1/2" Highflex: FSJ4-50B, HCF 1/2" Cu2Y AICu	9152	95 g/3.33 oz.	1
21 N-50-12-101	651480	1/2": SUCOFEED 1/2", LDF4-50A, LCF 1/2" Cu2Y	9153	100 g/.3.50 oz.	2

● centre contact captivated

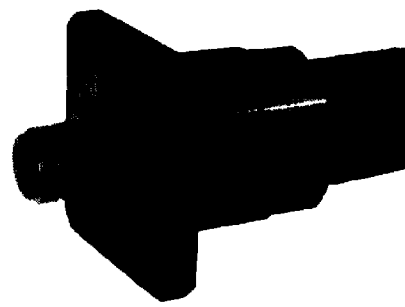
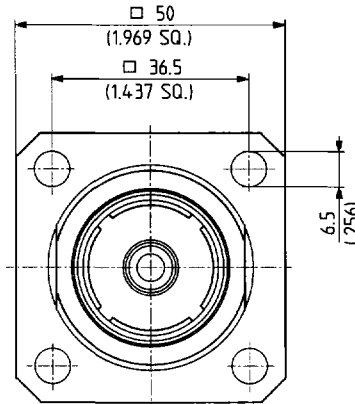
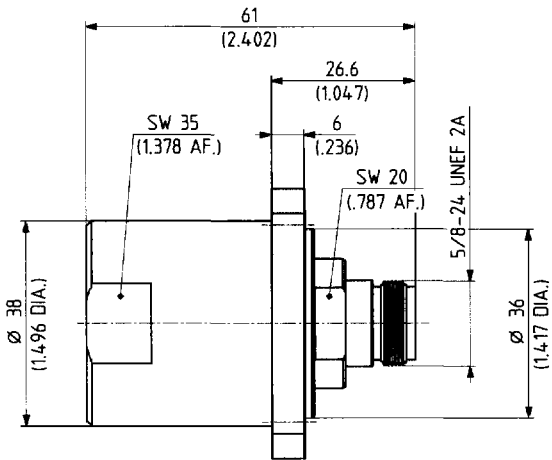
> assembly tools see page 417



SUHNER TYPE	Ident. no.	Suitable cables	Assembly instruction	Weight
21 N-50-23-101	651428	7/8": SUCOFEED 7/8", LDF5-50A, LCF 7/8" Cu2Y	9154	190 g/6.90 oz.

**panel jack**

> assembly tools see page 417



SUHNER TYPE	Ident. no.	Suitable cables	Assembly instruction	Weight
25 N-50-23-101	652109	7/8": SUCOFEED 7/8", LDF5-50A, LCF 7/8" Cu2Y	9154	275 g/9.63 oz.

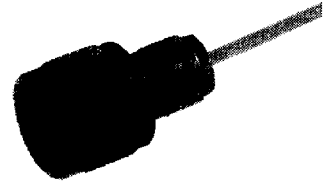
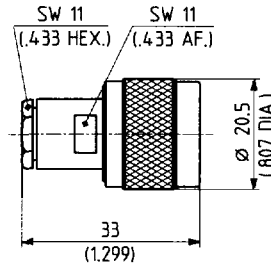
• centre contact captivated

N 50

# Connectors for Flexible Cables

## straight plugs

- > cable entry clamp
- > centre contact soldered



SUHNER TYPE	Ident. no.	Cable group (example)		Assembly instruction	Weight	Notes
11 N-50-2-1	• 544030	U2 (RG 316/U)		3017	38.0 g/1.33 oz.	
11 N-50-2-2	• 643807	U4 (K 02252 D)		3017	38.0 g/1.33 oz.	
11 N-50-2-3	• 542069	U7,10 (RG58C/U)		3016	36.0 g/1.26 oz.	
11 N-50-2-5	• 542073	U7,10 (RG58C/U)		3017	36.0 g/1.26 oz.	

- > cable entry clamp
- > centre contact soldered

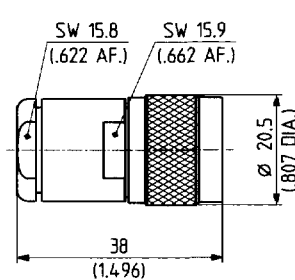


Fig. 1

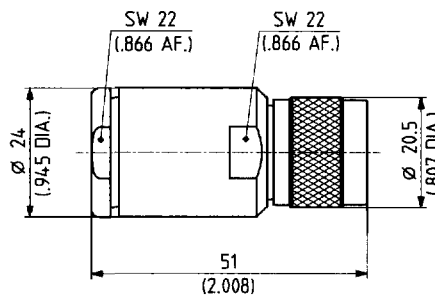
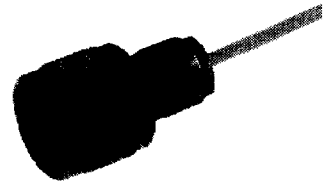


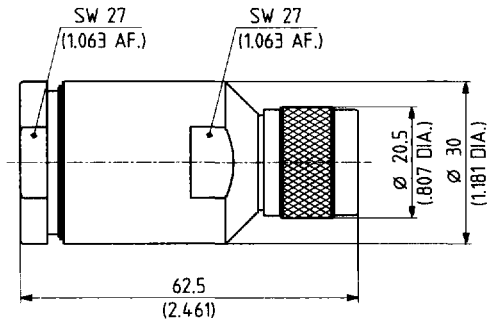
Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)	MIL M 39012/	Assembly instruction	Weight	Fig.	Notes
11 N-50-5-3	• 542100	U20 (RG 222/U)	01-0101	3045	55.0 g/1.93 oz.	1	replaces UG-18/U
11 N-50-7-5	• 542117	U33,28 (RG214/U)		3007	51.0 g/1.79 oz.	1	
11 N-50-7-6	• 542120	U33,28 (RG214/U)	01-0005	3008	51.0 g/1.79 oz.	1	replaces UG-21/U
11 N-50-9-2	• 542156	U38 (RG 217/U)		3019	95.0 g/3.33 oz.	2	

- centre contact captivated

- > cable entry clamp
- > centre contact soldered

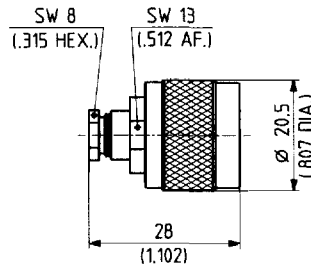


SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Weight	Notes
11 N-50-17-2	• 542165	U44 (RG 218/U)	3022	133 g/4.66 oz.	

## Precision Connectors

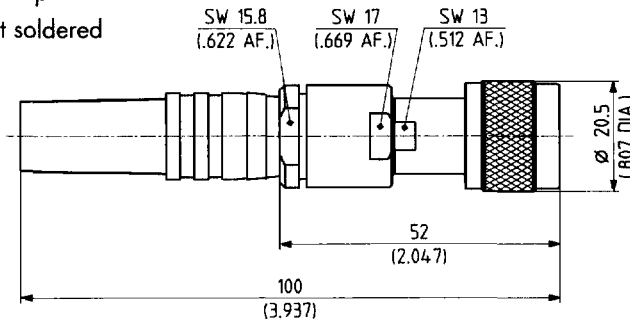
### straight plugs – low VSWR

- > cable entry clamp
- > centre contact soldered



SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	VSWR			Weight
				DC-4 GHz	4-10 GHz	10-12.4 GHz	
11 N-50-3-34	642009	U10 (RG 223/U)	9099	≤ 1.10	≤ 1.20	≤ 1.25	32.0 g/1.12 oz.

- > cable entry clamp
- > centre contact soldered



SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	VSWR		Weight
				DC-2 GHz	2-12.4 GHz	
11 N-50-7-33	641634	U33 (RG 214/U)	9097	≤ 1.05	≤ 1.10	70.0 g/2.45 oz.

- centre contact captivated

cable groups see pages 36

assembly tools see page 403

mounting holes see page 441

## straight plugs

- > SUHNER® full crimp
- > taper sleeves see page 423

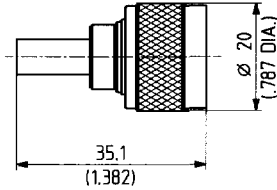


Fig. 1

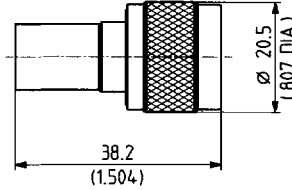


Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)	Crimp insert	Assembly instruction	Weight	Fig.	Notes
11 N-50-3-28	• 642842	U7 (RG 58 C/U)	2B	3015	23.0 g/0.81 oz.	1	
11 N-50-3-29	• 642843	U9 (RG 223/U)	2B	3015	23.0 g/0.81 oz.	1	
11 N-50-3-31	• 648829	U11 (RG 400/U)	2B	3015	28.0 g/0.98 oz.	1	
11 N-50-4-1	• 642488	U25 (S 06132D)	3D	27035	34.0 g/1.19 oz.	2	ethernet cable

- > SUHNER® full crimp
- > taper sleeves see page 423

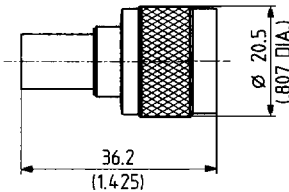


Fig. 1

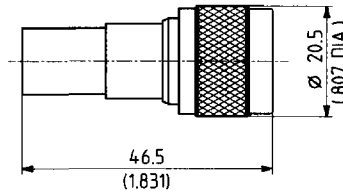
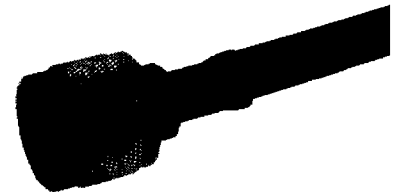


Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)	Crimp insert	Assembly instruction	Weight	Fig.	Notes
11 N-50-6-6	• 648674	U25 (S 06132D)	3/8.65	27082	31.0 g/1.09 oz.	1	
11 N-50-7-33	• 641614	U30 (S 07232)	4D	9067	39.0 g/1.37 oz.	2	
11 N-50-7-37	• 652110	U32 (RG 214/U)	4D	27064	37.0 g/1.30 oz.	2	

- centre contact captivated



- > SUHNER® full crimp
- > taper sleeves see page 423

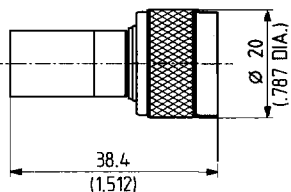


Fig. 1

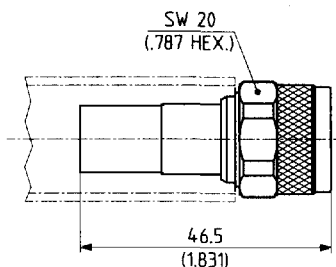
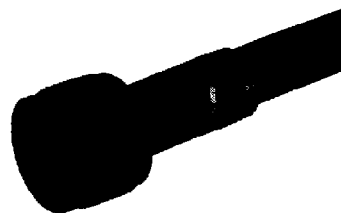
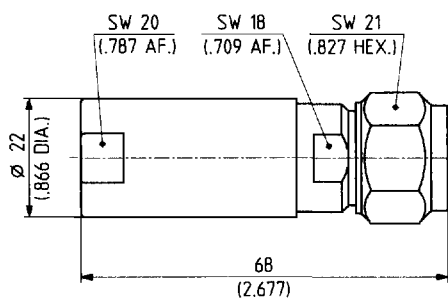


Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)	MIL M 39012/	Crimp insert	Assembly instruction	Weight	Fig.	Notes
11 N-50-7-43	• 642844	U29 (RG 213/U)	01-0007	3D	3061	28.0 g/0.98 oz.	1	
11 N-50-7-44	• 642845	U32 (RG 214/U)	01-0008	3D	3061	28.0 g/0.98 oz.	1	
11 N-50-7-61	• 651793	U33 (RG 393/U)		3D	27070	28.5 g/1.00 oz.	2	
11 N-50-7-49	• 652111	S32 (S 07262 BD)		4D	9067	40.0 g/1.40 oz.	2	

- > pressure sleeve
- > plug-in centre contact



SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Weight	Notes
11 N-50-12-13	• 649372	U40 (S 12272-4)	27063	113 g/.3.96 oz.	up to 8 GHz

- centre contact captivated

## right angle plugs

- > cable entry clamp
- > centre contact soldered

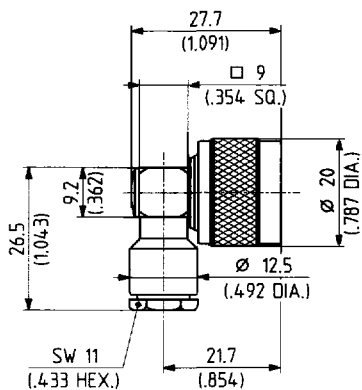


Fig. 1

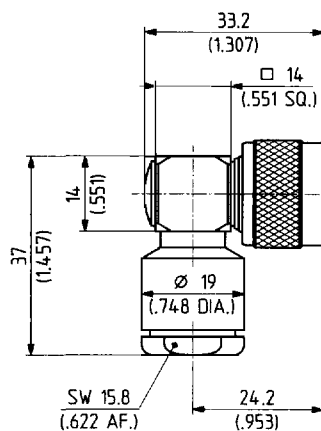


Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Weight	Fig.	Notes
16 N-50-3-103	• 651610	U7,10 (RG58C/U)	27060	37.0 g/1.30 oz.	1	
16 N-50-7-26	• 650825	U28 (RG 213/U)	3003	65.0 g/2.28 oz.	2	

- > cable entry crimp
- > centre contact soldered
- > taper sleeves see page 423

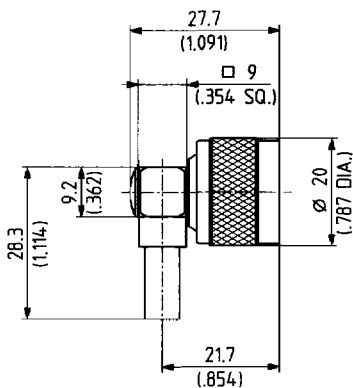


Fig. 1

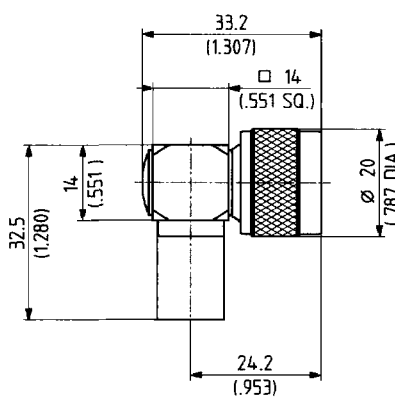


Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)	Crimp insert	Assembly instruction	Weight	Fig.	Notes
16 N-50-3-26	• 642846	U7 (RG 58 C/U)	B	3058	27.0 g/0.95 oz.	1	
16 N-50-3-27	• 642847	U9 (RG 223/U)	B	3058	27.0 g/0.95 oz.	1	
16 N-50-7-30	• 642848	U29 (RG 213/U)	D	3076	42.0 g/1.47 oz.	2	
16 N-50-7-31	• 642849	U32 (RG 214/U)	D	3076	42.0 g/1.47 oz.	2	

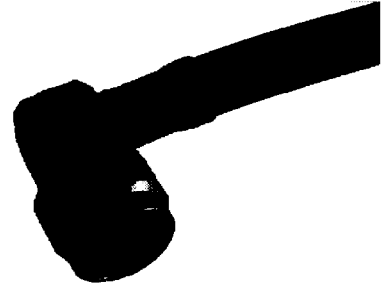
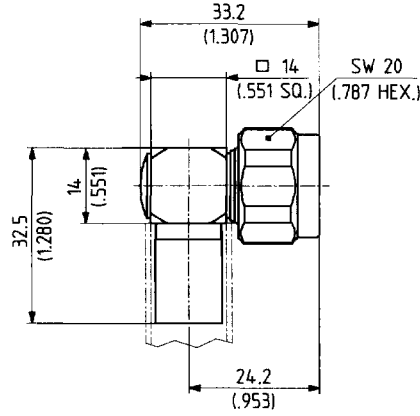
- centre contact captivated

cable groups see page 36

assembly tools see page 403

mounting holes see page 441

- > cable entry crimp
- > centre contact soldered
- > taper sleeves see page 423



SUHNER TYPE	Ident. no.	Cable group (example)	Crimp insert	Assembly instruction	Weight	Notes
16 N-50-7-22	651794	S32 (S 07262 BD)	D	9094	50.0 g/1.75 oz.	

- > SUHNER® full crimp

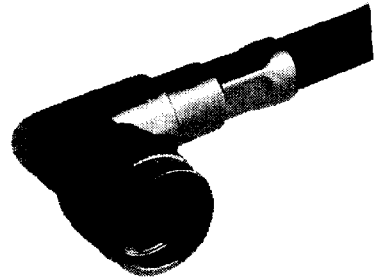
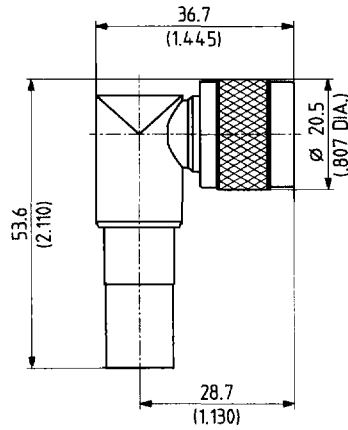
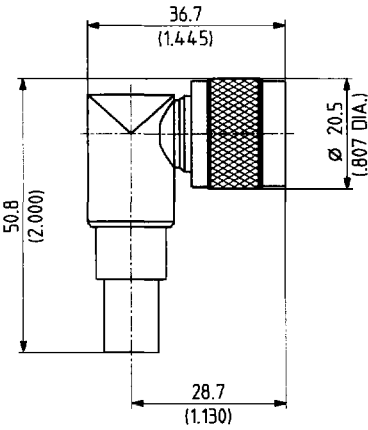


Fig. 1

Fig. 2

SUHNER TYPE	Ident. no.	Cable group (example)	Crimp insert	Assembly instruction	Weight	Fig.	Notes
16 N-50-6-8	651496	U25 (S 06132D)	3/8.65	27082	63.0 g/2.21 oz.	1	
16 N-50-7-29	651494	U29 (RG 213/U)	3D	9009	65.0 g/2.28 oz.	2	
16 N-50-7-36	651495	U32 (RG 214/U)	3D	9009	66.0 g/2.31 oz.	2	
16 N-50-7-24	649638	U33 (RG 393/U)	4D	9067	70.0 g/2.45 oz.	2	

- centre contact captivated

## straight jacks

- > cable entry clamp
- > centre contact soldered

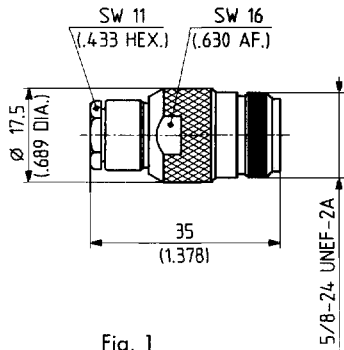


Fig. 1

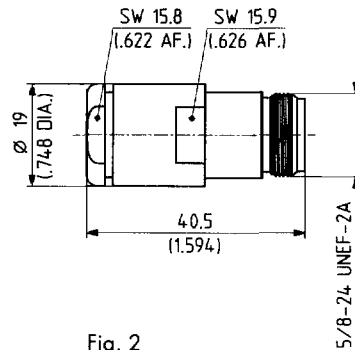
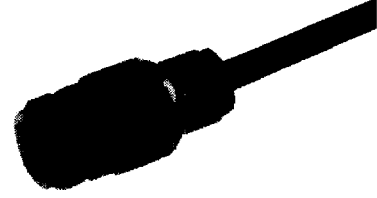


Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)	MIL M 39012/	Assembly instruction	Weight	Fig.	Notes
21 N-50-3-5	• 543504	U7,10 (RG58C/U)		3017	38.0 g/1.33 oz.	1	
21 N-50-7-8	• 542254	U33,28(RG214/U)	02-0003	3008	50.0 g/1.75 oz.	2	

- > SUHNER® full crimp
- > taper sleeves see page 423

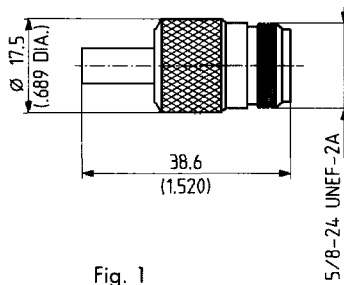


Fig. 1

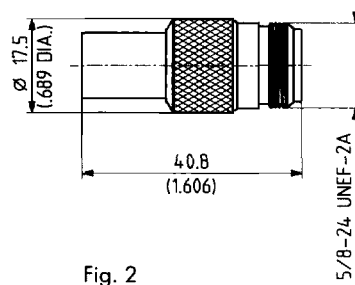


Fig. 2



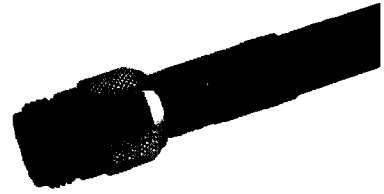
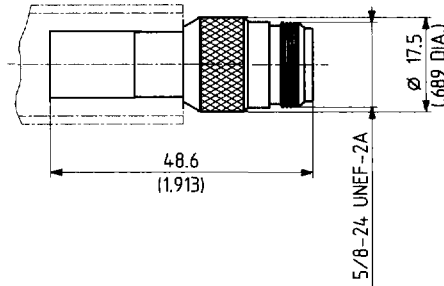
SUHNER TYPE	Ident. no.	Cable group (example)	Crimp insert	Assembly instruction	Weight	Fig.	Notes
21 N-50-3-7	• 542229	U7 (RG 58 C/U)	2B	3063	36.0 g/1.26 oz.	1	
21 N-50-3-8	• 542231	U9 (RG 223/U)	2B	3063	36.0 g/1.26 oz.	1	
21 N-50-3-12	• 651795	U11 (RG 400/U)	2B	3063		1	
21 N-50-7-13	• 542257	U29 (RG 213/U)	3D	3061	38.0 g/1.33 oz.	2	replaces UG-1688/U <sup>1)</sup>
21 N-50-7-14	• 542258	U32 (RG 214/U)	3D	3061	37.0 g/1.30 oz.	2	replaces UG-1689/U <sup>2)</sup>

1) MIL M 39012/02-0008

2) MIL M 39012/02-0009

- centre contact captivated

- > SUHNER® full crimp
- > taper sleeves see page 423

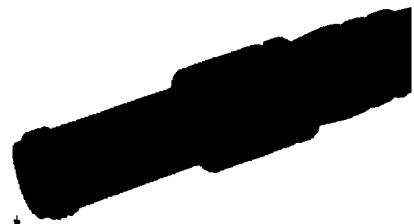
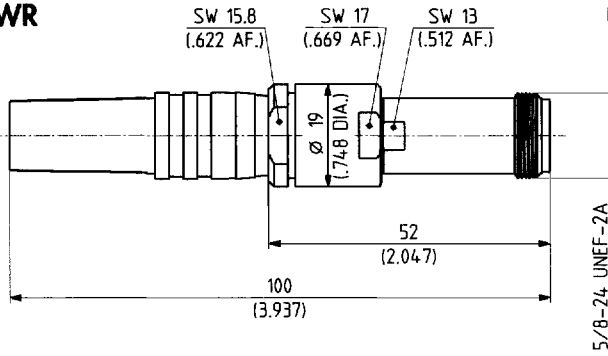


SUHNER TYPE	Ident. no.	Cable group (example)	Crimp insert	Assembly instruction	Weight	Notes
21 N-50-7-20	651796	S32 (S 07262 BD)	4D	9067	37.0 g/1.30 oz.	

## Precision Connector

### straight jack – low VSWR

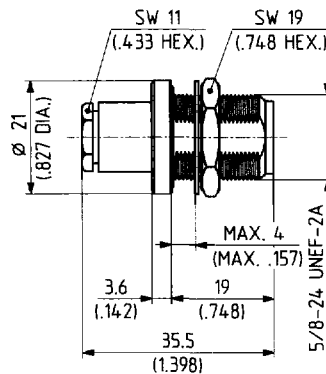
- > cable entry clamp
- > centre contact soldered



SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	VSWR DC-2 GHz	2-12.4 GHz	Weight
21 N-50-7-20	641635	U33 (RG 214/U)	9097	≤ 1.05	≤ 1.10	62.0 g/2.17 oz.

## bulkhead jacks

- > cable entry clamp
- > centre contact soldered
- > with panel seal
- > suitable for insulated mounting
- > insulating washers see page 425



SUHNER TYPE	Ident. no.	Cable group (example)	Assembly instruction	Mounting hole	Weight	Notes
24 N-50-2-1	641239	U2 (RG 316/U)	9150	ML 12	42.0 g/1.47 oz.	

- centre contact captivated

cable groups see pages 36

assembly tools see page 403

mounting holes see page 441

- > cable entry clamp
- > centre contact soldered
- > with panel seal
- > suitable for insulated mounting
- > insulating washers see page 425

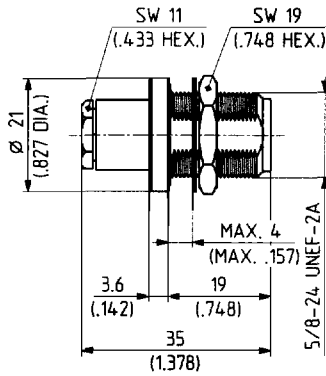


Fig. 1

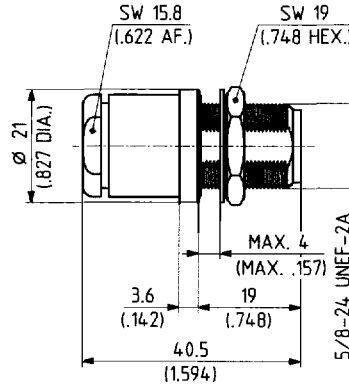
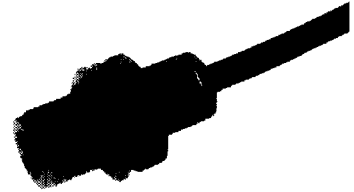
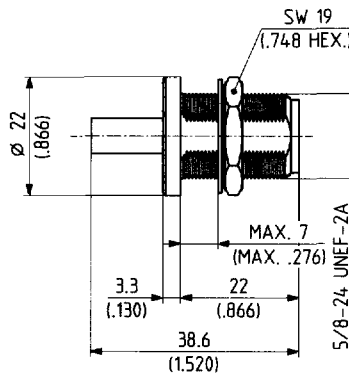


Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)	MIL M 39012/	Assembly instruction	Weight	Fig.	Notes
24 N-50-3-10	• 542295	U7,10 (RG58C/U)		9150	41.0 g/1.44 oz.	1	
24 N-50-5-2	• 542306	U20 (RG 222/U)		3044	57.0 g/2.00 oz.	2	
24 N-50-7-8	• 542323	U33,28(RG214/U)	03-0012	3008	53.0 g/1.86 oz.	2	replaces UG-160F/U mounting hole ML 12

- > SUHNER® full crimp
- > taper sleeves see page 423
- > suitable for insulated mounting
- > insulating washers see page 425



SUHNER TYPE	Ident. no.	Cable group (example)	Crimp insert	Assembly instruction	Weight	Notes
24 N-50-3-11	• 542296	U7 (RG 58 C/U)	2B	3063	38.0 g/1.33 oz.	*
24 N-50-3-12	• 542297	U9 (RG 223/U)	2B	3063	38.0 g/1.33 oz.	*

\* has to be crimped with large crimp tool or table press!

mounting hole ML 12

- centre contact captivated

- > SUHNER® full crimp
- > taper sleeves see page 423
- > with panel seal

- > suitable for insulated mounting
- > insulating washers see page 425

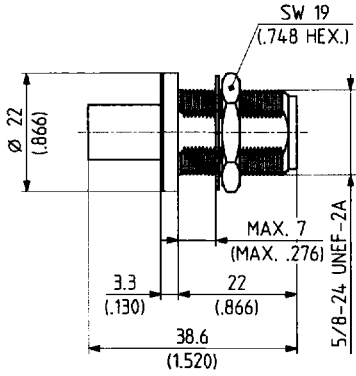


Fig. 1

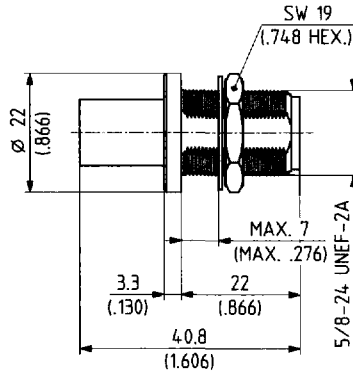


Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)	Crimp insert	Assembly instruction	Weight	Fig.	Notes
24 N-50-6-2	• 648774	U25 (S 06132D)	3/8.65	27082	37.0 g/1.30 oz.	1	
24 N-50-7-14	• 542326	U29 (RG 213/U)	3D	3061	40.0 g/1.40 oz.	2	replaces UG-1700/U MIL M 39012/03-0004
24 N-50-7-15	• 542327	U32 (RG 214/U)	3D	3061	40.0 g/1.40 oz.	2	replaces UG-1701/U MIL M 39012/03-0005

mounting hole ML 12

- > SUHNER® full crimp
- > taper sleeves see page 423

- > suitable for insulated mounting
- > insulating washers see page 425

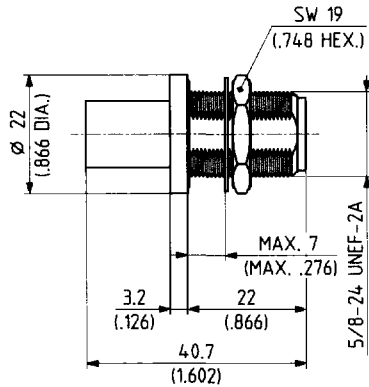


Fig. 1

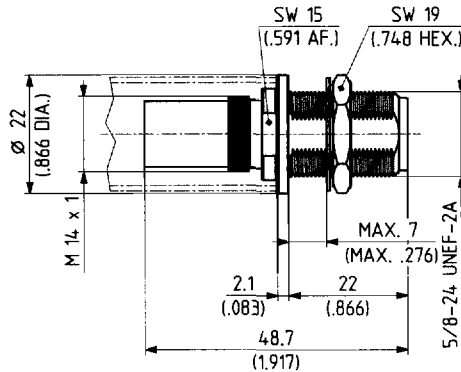
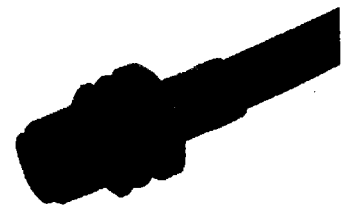


Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)	Crimp insert	Assembly instruction	Weight	Fig.	Notes
24 N-50-7-25	• 651798	U33 (RG 393/U)	3D	27070	37.0 g/1.30 oz.	1	with panel seal
24 N-50-7-22	• 651797	S32 (S 07262 BD)	4D	9079	44.0 g/1.54 oz.	2	without panel seal*

\* types available with additional sealing ferrule (IP66)

mounting hole ML 12

• centre contact captivated

cable groups see pages 36

assembly tools see page 403

mounting holes see page 441

## panel jacks

- > cable entry clamp
- > centre contact soldered
- > fastening screws see page 424

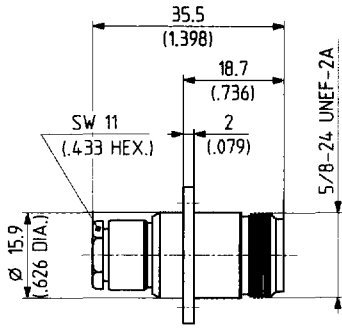
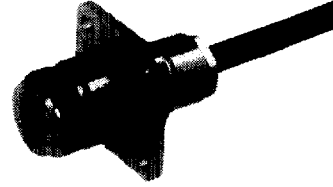


Fig. 1

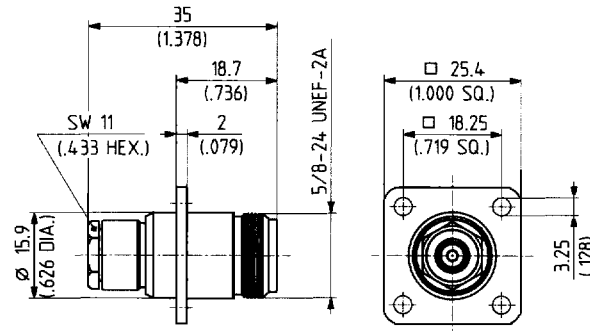
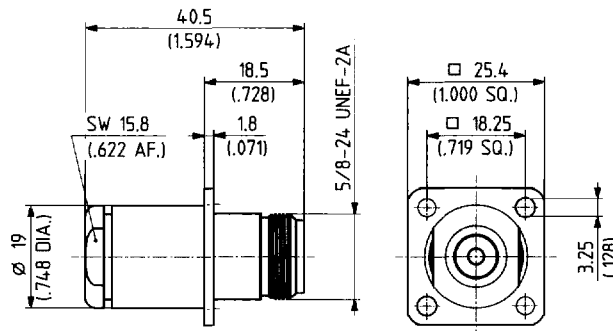
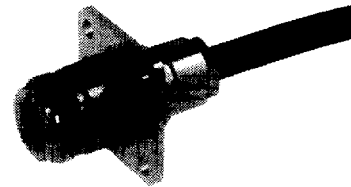


Fig. 2

SUHNER TYPE	Ident. no.	Cable group (example)	Mounting hole	Assembly instruction	Weight	Fig.	Notes
25 N-50-2-2	• 542332	U2 (RG 316/U)	ML 14	3017	45.0 g/1.58 oz.	1	
25 N-50-3-4	• 542342	U7,10 (RG58C/U)	ML 14	3017	44.0 g/1.54 oz.	2	

- > cable entry clamp
- > centre contact soldered
- > fastening screws see page 424



SUHNER TYPE	Ident. no.	Cable group (example)	MIL M 39012/	Mounting hole	Assembly instruction	Weight	Notes
25 N-50-5-2	• 542356	U20 (RG 222/U)	02-0104	ML 18	3045	61.0 g/2.14 oz.	
25 N-50-7-8	• 542366	U33,28 (RG214/U)	02-0006	ML 18	3008	55.0 g/1.93 oz.	

- centre contact captivated



- > SUHNER® full crimp
- > fastening screws see page 424
- > taper sleeves see page 423

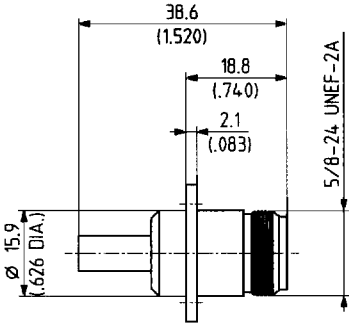
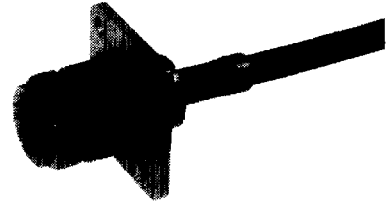


Fig. 1

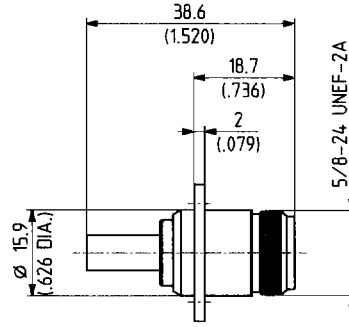
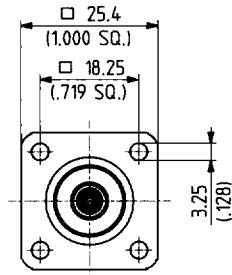
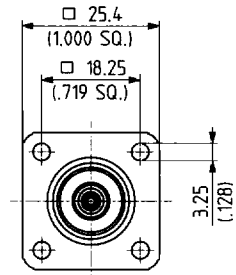


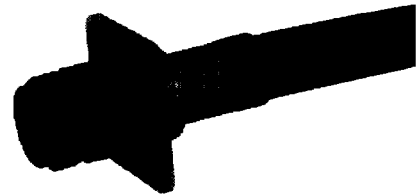
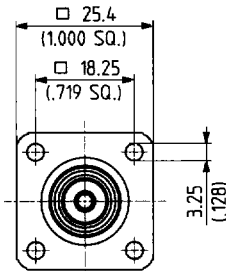
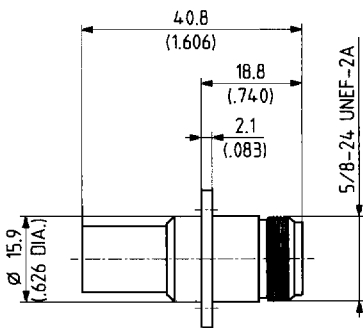
Fig. 2



SUHNER TYPE	Ident. no.	Cable group (example)	Crimp insert	Assembly instruction	Weight	Fig.	Notes
25 N-50-3-6	• 542346	U7 (RG 58 C/U)	2B	3063	39.0 g / 1.37 oz.	1	
25 N-50-3-7	• 542348	U9 (RG 223/U)	2B	3063	39.0 g / 1.37 oz.	1	
25 N-50-3-20	• 649913	U11 (RG 400/U)	2B	3063	37.0 g / 1.30 oz.	2	

mounting hole ML 14

- > SUHNER® full crimp
- > fastening screws see page 424
- > taper sleeves see page 423



SUHNER TYPE	Ident. no.	Cable group (example)	MIL M 39012/	Crimp insert	Assembly instruction	Weight	Notes
25 N-50-7-13	• 542369	U29 (RG 213/U)	3D	02-0016	3061	42.0 g / 1.47 oz.	replaces UG-1697/U
25 N-50-7-14	• 542370	U32 (RG 214/U)	3D	02-0017	3061	42.0 g / 1.47 oz.	replaces UG-1698/U

mounting hole ML 14

• centre contact captivated

cable groups see pages 36

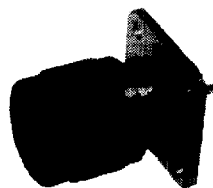
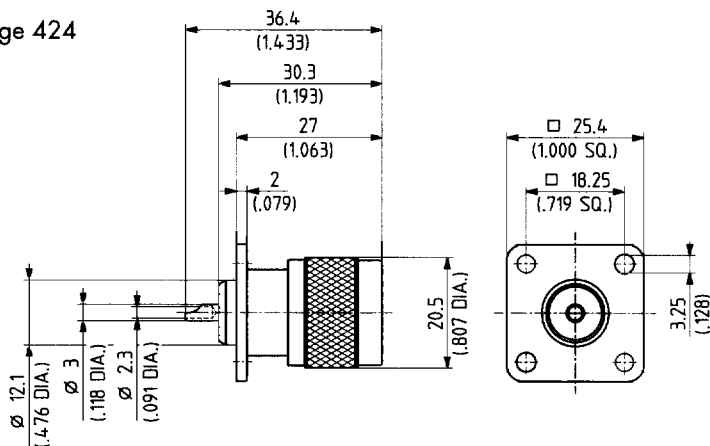
assembly tools see page 403

mounting holes see page 441

# Receptacles with Solder End

## receptacle, male

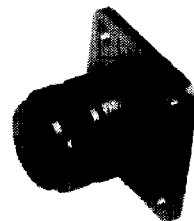
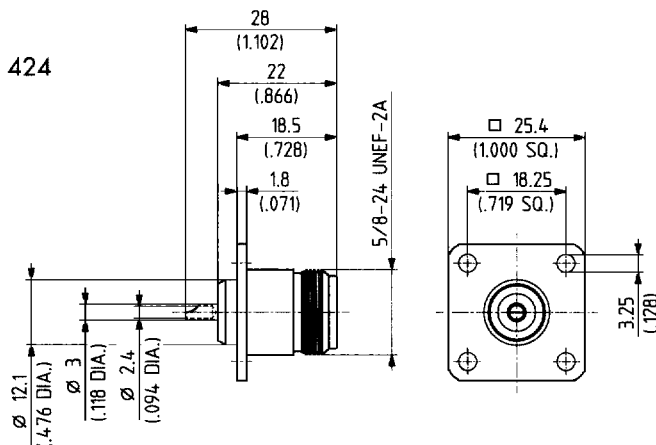
- > panel mounted
- > fastening screws see page 424



SUHNER TYPE	Ident. no.	Mounting hole	Weight	Notes
13 N-50-0-1	• 542173	ML 16	46.0 g / 1.61 oz.	

## receptacles, female

- > panel mounted
- > fastening screws see page 424



SUHNER TYPE	Ident. no.	MIL M	Mounting hole	Weight	Notes
23 N-50-0-1	• 542272	39012/ 04-0002	ML 17	31.0 g / 1.09 oz.	replaces UG-58/U

- centre contact captivated

- > bulkhead mounted
- > solder tags see page 426
- > with panel seal
- > suitable for insulated mounting
- > insulating washers see page 425

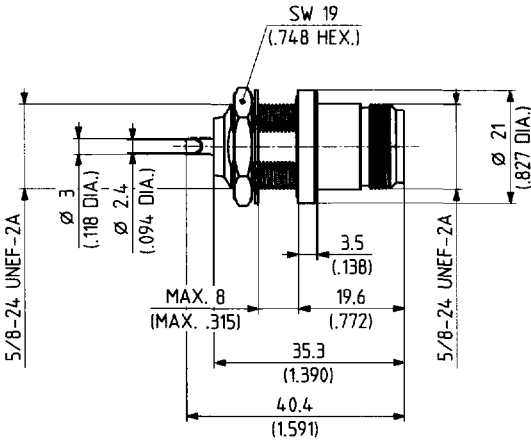


Fig. 1

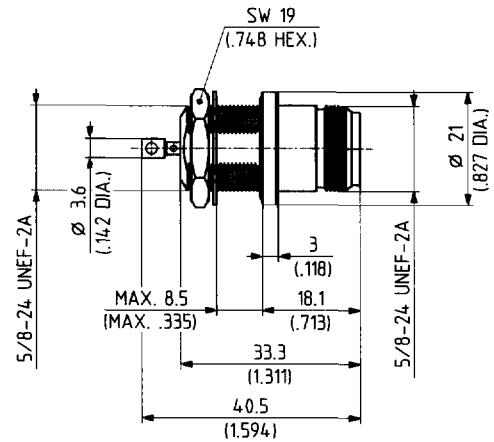


Fig. 2

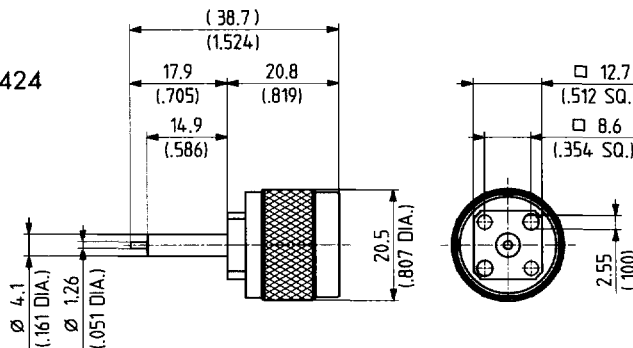
SUHNER TYPE	Ident. no.	MIL M 39012/	Mounting hole	Weight	Fig.	Notes
22 N-50-0-2	• 542265		ML 12	47.0 g/1.65 oz.	1	
22 N-50-0-3	• 644425	04-0001	ML 12	47.0 g/1.65 oz.	2	hermetically sealed*

\* leak rate  $10^{-6}$  Torr l/sec. (atm cc/s) max.

## Receptacles for Microwave Components

### receptacle, male

- > panel mounted
- > extended dielectric
- > fastening screws see page 424

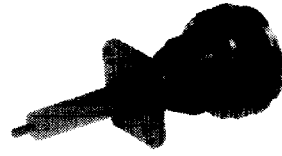
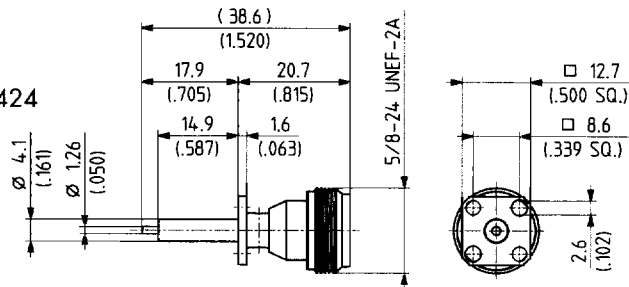


SUHNER TYPE	Ident. no.	Weight	Notes
13 N-50-0-30	• 642831	30.0 g/1.05 oz.	SMA flange size

- centre contact captivated

## receptacle, female

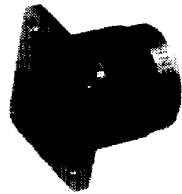
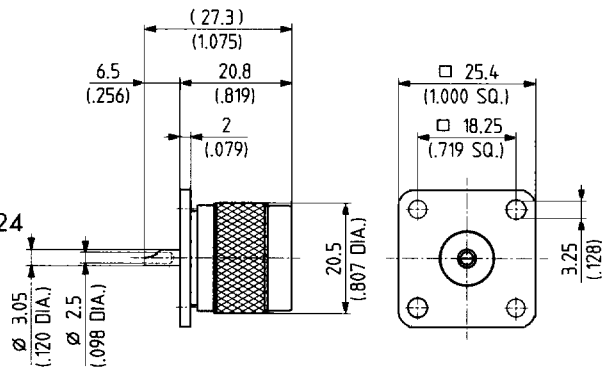
- > panel mounted
- > extended dielectric
- > fastening screws see page 424



SUHNER TYPE	Ident. no.	Weight	Notes
23 N-50-0-30	642835	14.0 g/0.49 oz.	SMA flange size

## receptacle, male

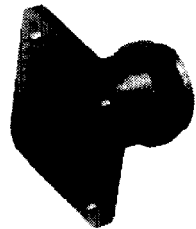
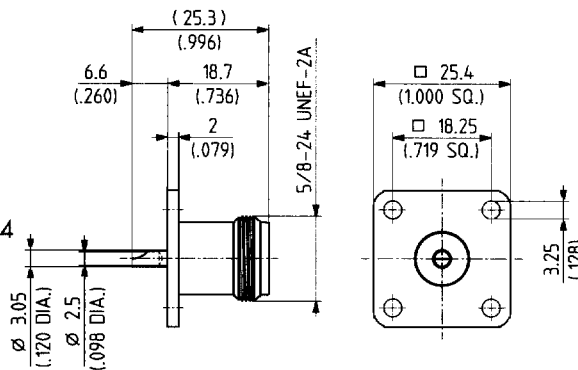
- > panel mounted
- > solder pot terminal
- > flush dielectric
- > fastening screws see page 424



SUHNER TYPE	Ident. no.	Weight	Notes
13 N-50-0-23	650662	35.0 g/1.23 oz.	

## receptacles, female

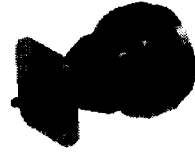
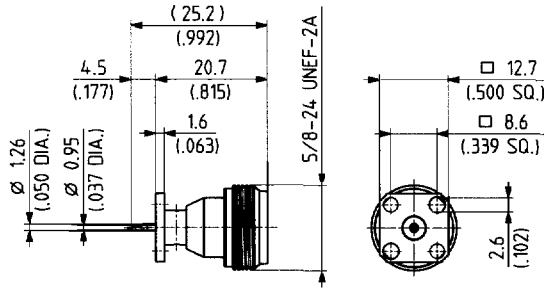
- > panel mounted
- > solder pot terminal
- > flush dielectric
- > fastening screws see page 424



SUHNER TYPE	Ident. no.	Weight	Notes
23 N-50-0-23	544751	24.0 g/0.84 oz.	

- centre contact captivated

- > panel mounted
- > solder pot terminal
- > flush dielectric
- > fastening screws see page 424



SUHNER TYPE	Ident. no.	Weight	Notes
23 N-50-0-31	• 642836	13.6 g/0.48 oz.	SMA flange size

## Stripline Launchers

### receptacles, male

- > panel mounted
- > tab contact
- > flush dielectric
- > fastening screws see page 424

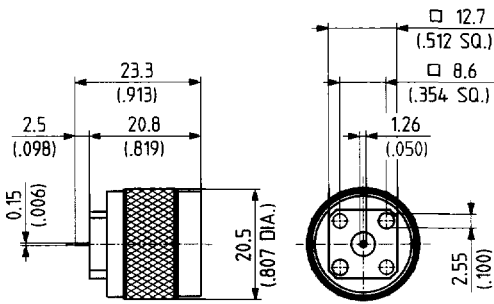
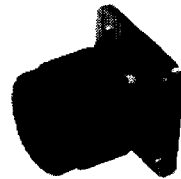
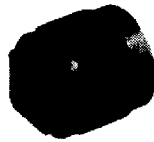


Fig. 1

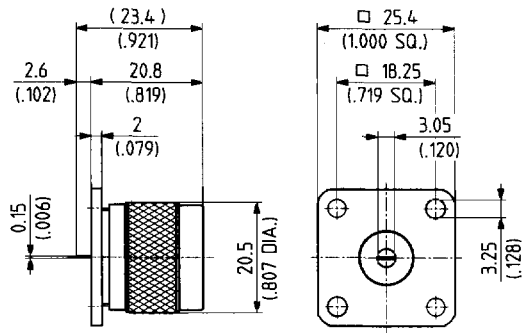


Fig. 2

SUHNER TYPE	Ident. no.	Weight	Fig.	Notes
13 N-50-0-32	• 642833	33.0 g/1.16 oz.	1	SMA flange size
13 N-50-0-33	• 642834	36.0 g/1.26 oz.	2	

- centre contact captivated

## receptacles, female

- > panel mounted
- > tab contact
- > flush dielectric
- > fastening screws see page 424

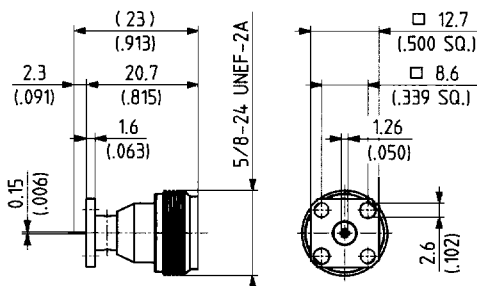


Fig. 1

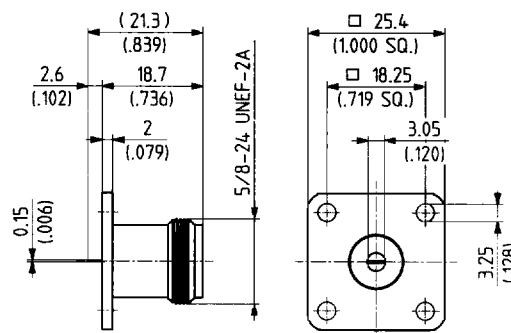


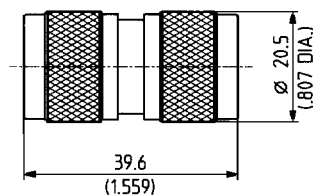
Fig. 2

SUHRER TYPE	Ident. no.	Weight	Fig.	Notes
23 N-50-4-16	641166	13.5 g/0.47 oz.	1	SMA flange size
23 N-50-4-33	642837	24.5 g/0.86 oz.	2	

## Adaptors Within-Series

### straight adaptors

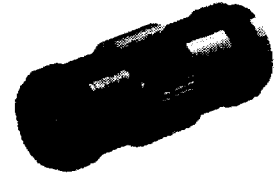
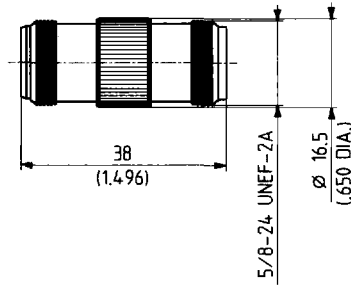
- > plug to plug



SUHRER TYPE	Ident. no.	MIL A 55339/	VSWR DC - 9 GHz	9 - 12 GHz	Weight	Notes
32 N-50-0-1	542398	05-00057	$\leq 1.06 + 0.04 f$	$\leq 1.40$	57.0 g/2.00 oz.	replaces UG-57 B/U

- centre contact captivated

> jack to jack



SUHNER TYPE	Ident. no.	MIL A 55339/	VSWR DC - 12.4 GHz	Weight	Notes
31 N-50-0-2	542382	07-00029	$\leq 1.17 + 0.15 f$	52.0 g/1.82 oz.	replaces UG-29 C/U

## bulkhead adaptors

- > jack to jack
- > with panel seal
- > suitable for insulated mounting
- > insulating washers see page 425

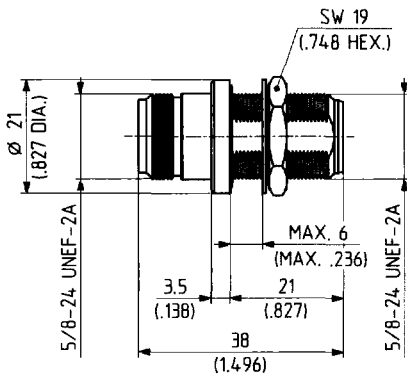


Fig. 1

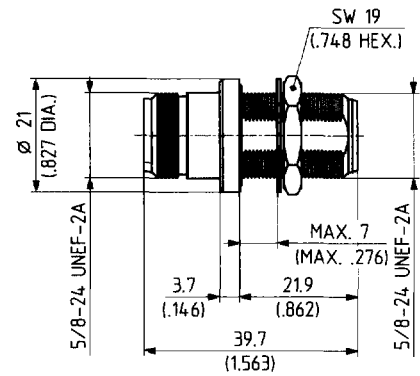


Fig. 2

SUHNER TYPE	Ident. no.	MIL A 55339/	VSWR DC - 2 GHz; 2 - 12.4 GHz	Weight	Fig.	Notes
34 N-50-0-1	542435	04-00001	$\leq 1.06$ $\leq 1.06 + 0.17f$	49.0 g/1.72 oz.	1	
34 N-50-0-3	642946		$\leq 1.06$ $\leq 0.03 + 0.7 f$	52.0 g/1.82 oz.	2	hermetically sealed*

\* leak rate  $10^{-6}$  Torr l/sec. (atm cc/s)

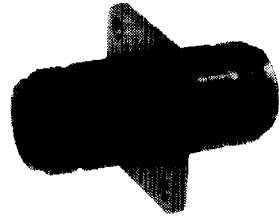
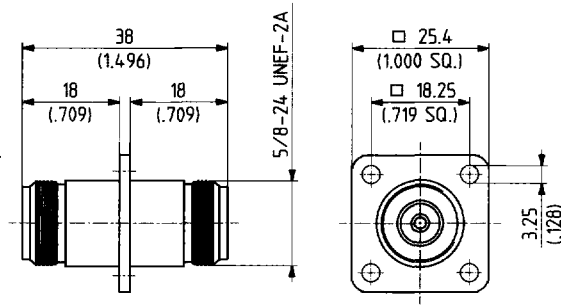
mounting hole ML 12

● centre contact captivated

N 50

### straight panel adaptors

- > jack to jack
- > fastening screws see page 424



SUHNER TYPE	Ident. no.	Mounting hole	VSWR DC – 12.4 GHz	Weight	Notes
37 N-50-0-1	• 542437	ML 14	$\leq 1.195 + 0.065 f$	52.0 g / 1.82 oz.	max. applicable panel thickness 6.5 mm / .256 in.

### straight precision adaptors DC – 18 GHz

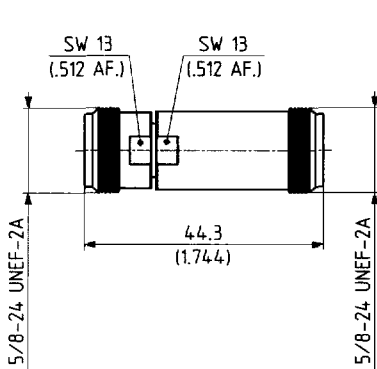


Fig. 1

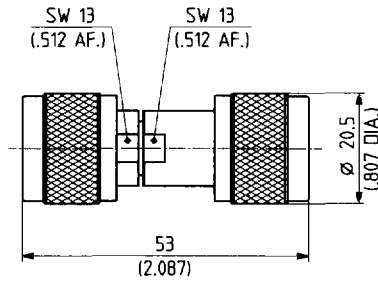


Fig. 2

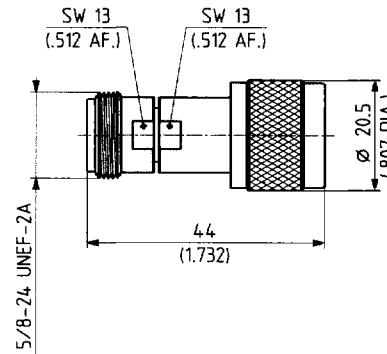


Fig. 3

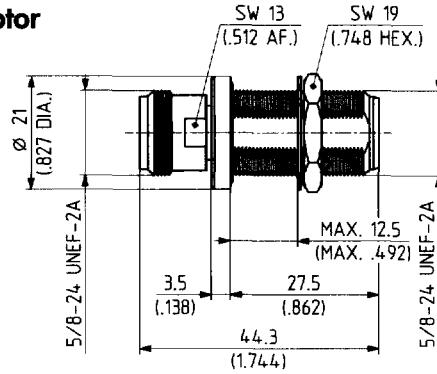
SUHNER TYPE	Ident. no.	VSWR	Weight	Fig.	Notes
31 N-50-0-51	• 652112	$1.03 + 0.01f/\text{GHz}$	39.0 g / 1.37 oz.	1	jack to jack
32 N-50-0-51	• 652113	$1.03 + 0.01f/\text{GHz}$	62.0 g / 2.17 oz.	2	plug to plug
33 N-50-0-51	• 652114	$1.03 + 0.01f/\text{GHz}$	46.0 g / 1.61 oz.	3	plug to jack

- centre contact captivated



## straight bulkhead precision adaptor

- > jack to jack
- > with panel seal

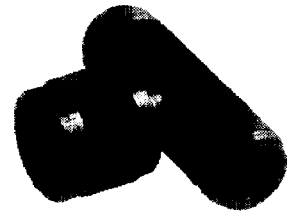
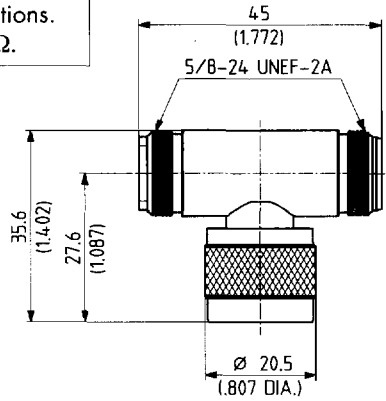


SUHNER TYPE	Ident. no.	VSWR	Mounting hole	Weight	Notes
34 N-50-0-31	• 544593	1.03 + 0.01f/GHz	ML 12	42.0 g/1.47 oz.	

## T-adaptors

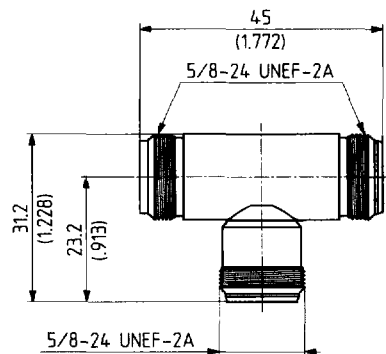
50 Ω nominal impedance. These connectors are non-matched 3 dB dividers for LF applications. VSWR ≥ 2.0 when terminated with 50 Ω.

- > 2 jacks, 1 plug



SUHNER TYPE	Ident. no.	Weight	Notes
43 N-50-0-1	• 542442	81.0 g/2.84 oz.	

- > 3 jacks

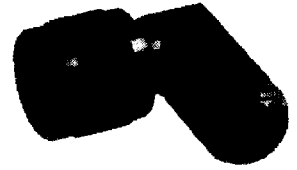
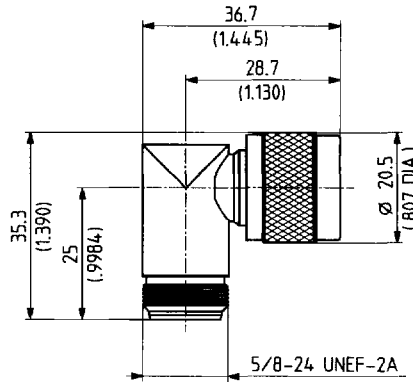


SUHNER TYPE	Ident. no.	MIL A 55339/	Weight	Notes
46 N-50-0-1	• 542445	06-00028	70.0 g/2.45 oz.	replaces UG-28 A/U

- centre contact captivated

## right angle adaptors

> plug to jack



SUHNER TYPE	Ident. no.	VSWR DC - 11 GHz	Weight	Notes
53 N-0-0-4	• 651447	$\leq 1.06 + 0.07 f$	62.0 g/2.17 oz.	

## Protective Caps

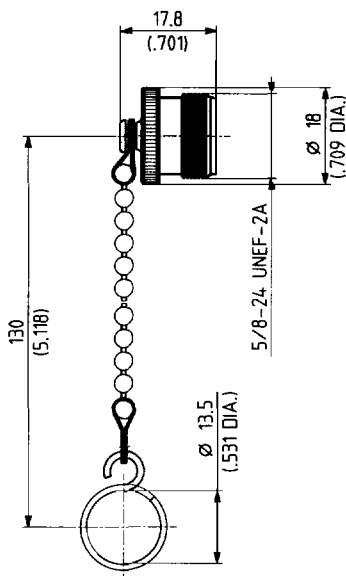


Fig. 1

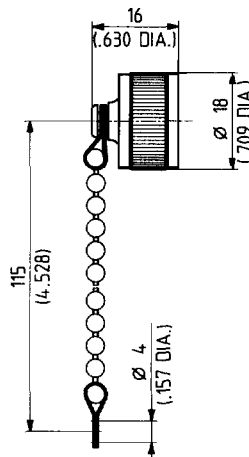


Fig. 2

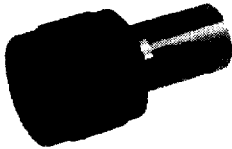
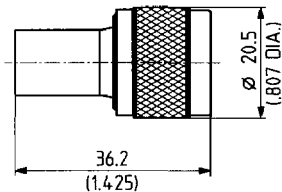


SUHNER TYPE	Ident. no.	Weight	Fig.	Notes
61 N-0-0-1	542452	16.0 g/0.56 oz.	1	for plugs
62 N-0-0-1	543433	15.0 g/0.53 oz.	2	for jacks

• centre contact captivated

# Terminations

## DC – 4 GHz



SUNNER TYPE	Ident. no.	VSWR			Interface	Impedance	Weight
		1 GHz	2 GHz	4 GHz			
65 N-50-0-1	• 550091	≤ 1.05	≤ 1.10	≤ 1.20	plug	50 Ω ± 1 %	36.0 g / 1.26 oz.

Permissible power: 1 W at max. 30°C/86°F ambient temperature, derated linearly to zero watt at 130°C/266°F ambient temperature; 2 kW pulsed power with a duration ≤ 10 ms, rise time ≥ 5 ms

## DC – 6 GHz

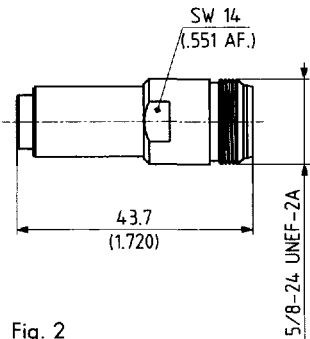
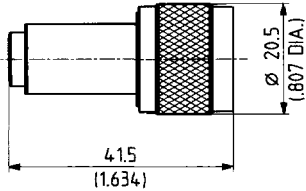


Fig. 1

Fig. 2

SUNNER TYPE	Ident. no.	VSWR			Interface	Impedance	Weight	Fig.
		1 GHz	2 GHz	4 GHz				
65 N-50-0-11	• 550095	≤ 1.05	≤ 1.10	≤ 1.20	plug	50 Ω ± 1 %	45.0 g / 1.58 oz.	1
65 N-50-0-31	• 550207	≤ 1.05	≤ 1.10	≤ 1.20	jack	50 Ω ± 1 %	44.0 g / 1.54 oz.	2

Permissible power: 1 W at max. 30°C/86°F ambient temperature, derated linearly to zero watt at 130°C/266°F ambient temperature; 2 kW pulsed power with a duration ≤ 10 ms, rise time ≥ 5 ms

• centre contact captivated

N 50