



SERIES C

COAXIAL CONNECTORS

Description

SUHNER C connectors are available with 50 Ω impedance. The useful frequency range extends from DC to 11 GHz.

These connectors are robust and owing to their bayonet coupling mechanism are simple and quick to use.

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Further Information

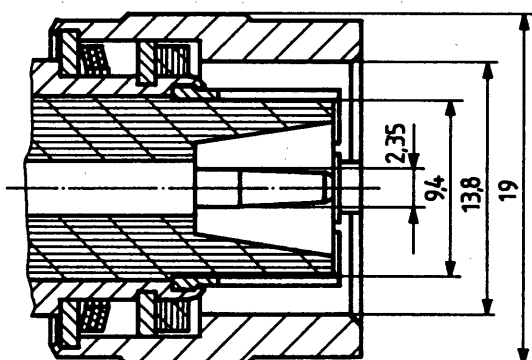
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Standards

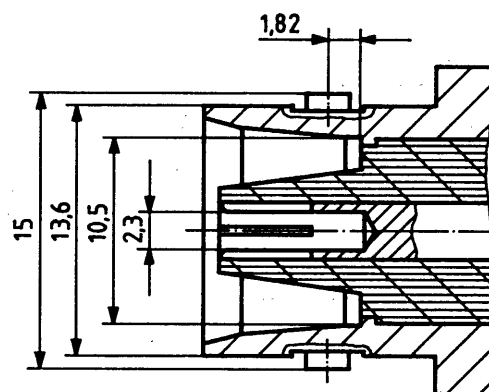
Interface dimensions conform to:
IEC 169-7, MIL-STD-348A/302,
DIN 47222

Interface Dimensions

Plug



Jack



C/UHF

Technical Data

Electrical Data

	Requirements
Impedance	50 Ω
Frequency range	DC ... 11 GHz
RF-leakage	≥ 55 dB
Dielectric withstanding voltage (at sea level)	3.0 kV rms, 50 Hz
Working voltage (at sea level)	≤ 1.0 kV rms, 50 Hz
Insulation resistance	$\geq 5 \cdot 10^3$ M Ω
Contact resistance	
– inner conductor	≤ 1.0 m Ω
– outer conductor	≤ 1.0 m Ω

Mechanical Data

	Requirements
Coupling nut torque	≤ 0.45 Nm
Coupling nut retention force	≥ 450 N
Contact captivation	≥ 27 N
Cable retention force ¹⁾	
– cable group U7	≥ 125 N
– cable groups U9, U10, U11	≥ 250 N
– cable groups U28, U29	≥ 415 N
– cable groups U32, U33	≥ 530 N
Durability (matings)	≥ 500

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

Environmental Data

	Requirements/tests
Temperature range	$-65^\circ\text{C} \dots +165^\circ\text{C}$
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 D
Shock	MIL-STD-202, Method 213, Condition I
Sealing	connectors with clamp type cable entry are moisture proof

Materials

Connector part	Standards	Material	Surface/plating
Bodies, Contact pins	QQ-B-626, ISO CuZn 38 Pb2	brass	Sucoplate [®] gold plated
Outer contacts	CuSn 4 Te	spring bronze	Sucoplate [®]
Contact sockets	QQ-C-530/MIL-H-7199, CuBe2	beryllium-copper, hardened	gold plated
Crimp ferrules	SUHNER specification	copper	nickel plated
Insulators, standard version	ASTM-D-1457, BS 4271 Grade B	PTFE	
Rubber gaskets	ASTM-E-1418 PS 1	silicone rubber 70 shore	

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

Connectors for Flexible Cables

straight plugs

cable entry clamp

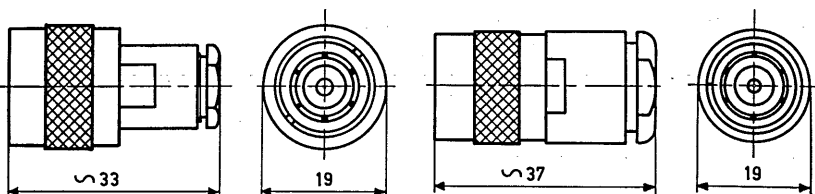
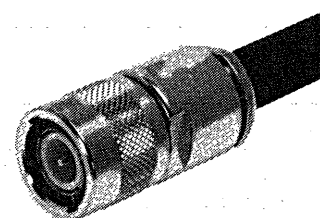


Fig. 1

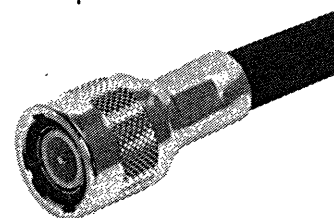
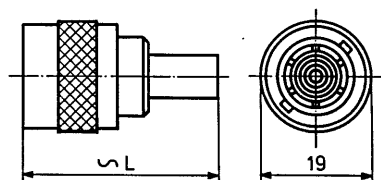
Fig. 2



SUHNER TYPE	Ident. no.	US-MIL M 39012/	Cable group (example)	Fig.	Weight	AI	Notes
11 C-50-3-12	646602		U7, U10 (RG 58 C/U)	1	31.5 g	MAP 256	
11 C-50-7-6c	541137	6-0015	U28, U33 (RG 214/U)	2	45.5 g	3008	

cable entry
SUHNER full crimp

taper sleeves
see page 262



SUHNER TYPE	Ident. no.	US-MIL M 39012/	Cable group (example)	Crimp insert	Weight	AI	Notes
11 C-50-3-7c	541103		U7 (RG 58 C/U)	2B	27.5 g	3063	L = 35.0 mm
11 C-50-3-8c	541104		U9 (RG 223/U)	2B	26.5 g	3063	L = 35.0 mm
11 C-50-7-14c	541142	6-0022	U29 (RG 213/U)	3D	29.5 g	3061	L = 37.0 mm
11 C-50-7-15c	541144	6-0023	U32 (RG 214/U)	3D	29.5 g	3061	L = 37.0 mm

right angle plugs

cable entry clamp

fully PTFE insulated

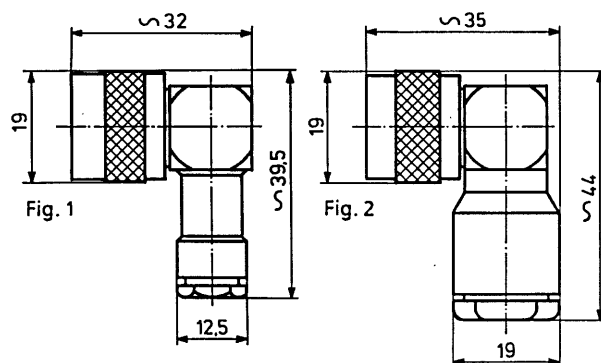
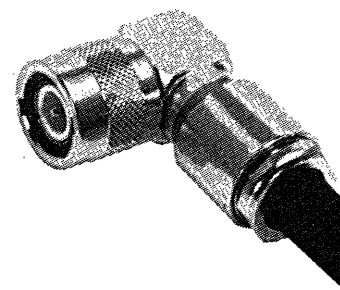


Fig. 1

Fig. 2



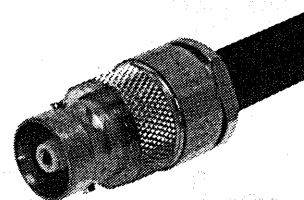
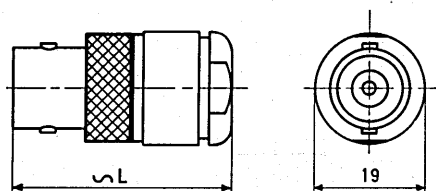
SUHNER TYPE	Ident. no.	US-MIL M 39012/	Cable group (example)	Fig.	Weight	AI	Notes
16 C-50-3-3	642051		U7, U10 (RG 58 C/U)	1	54.5 g	3016	
16 C-50-7-6	541185	10-0001	U28, U33 (RG 214/U)	2	76.5 g	3007	replaces UG-710/U

AI = assembly instruction
cable groups see page 17

mounting holes see page 269
assembly tools see page 251

straight jacks

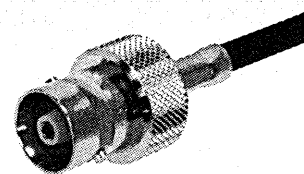
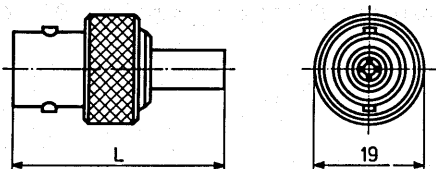
cable entry clamp



SUHNER TYPE	Ident. no.	US-MIL	Cable group (example)	Weight	AI	Notes
21 C-50-3-4	541197		U7, U10 (RG 58 C/U)	29.0 g	3016	L = ~ 31.0 mm
21 C-50-7-3	541214		U28, U33 (RG 214/U)	36.5 g	3007	L = ~ 36.0 mm

cable entry
SUHNER full crimp

taper sleeves
see page 262



SUHNER TYPE	Ident. no.	US-MIL	Cable group (example)	Crimp insert	Weight	AI	Notes
21 C-50-3-6c	543976		U7 (RG 58 C/U)	2B	29.0 g	3015	L = ~ 38.0 mm
21 C-50-3-7c	643033		U9 (RG 223/U)	2B	29.0 g	3015	L = ~ 38.0 mm

bulkhead jacks

cable entry clamp

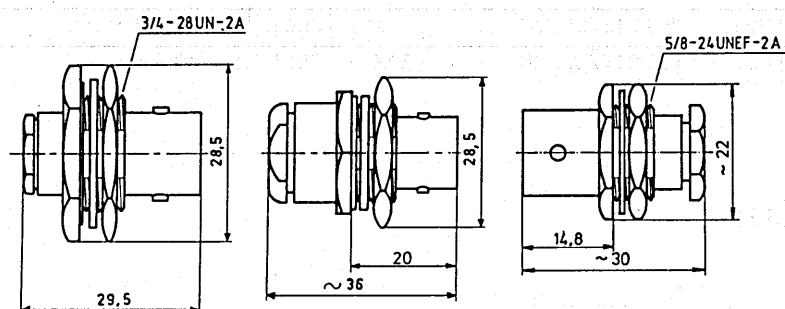
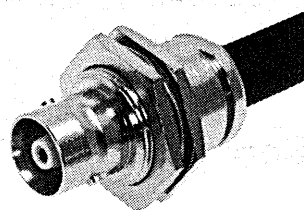


Fig. 1

Fig. 2

Fig. 3



SUHNER TYPE	Ident. no.	Cable group (example)	Mounting hole	Fig.	Weight	AI	Notes
24 C-50-3-2c	644448	U7, U10(RG 58 C/U)	ML 25	1	56.0 g	3017	
24 C-50-3-5c	543622	U7, U10(RG 58 C/U)	ML 24	3	30.0 g	3017	front mounting
24 C-50-7-3	541256	U28,U33 (RG 214/U)	ML 25	2	48.0 g	3007	replaces UG 570 A/U

panel thickness 3.5 mm max.

AI = assembly instruction
cable groups see page 17

mounting holes see page 269
assembly tools see page 251

panel jacks

cable entry clamp

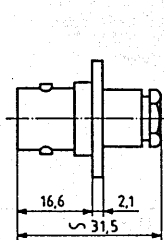


Fig. 1

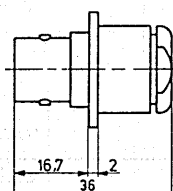
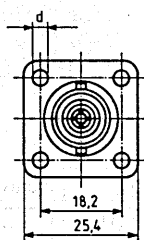
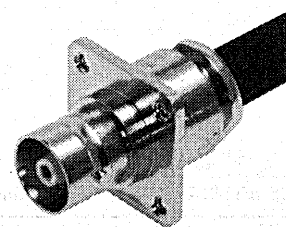
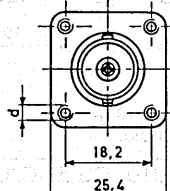


Fig. 2

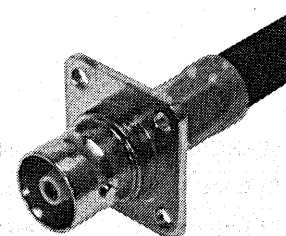
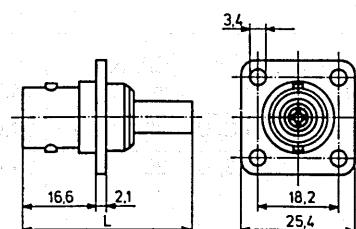


SUHNER TYPE	Ident. no.	Cable group (example)	Mounting hole	Fig.	Weight	Al	Fastening hole d
25 C-50-3-3c	641096	U7, U10(RG 58 C/U)	ML 14	1	29.0 g	3017	6-32 UNC
25 C-50-3-4c	541265	U7, U10(RG 58 C/U)	ML 14	1	29.0 g	3017	3.4 mm dia.
25 C-50-7-3	541277	U28,U33 (RG 214/U)	ML 37	2	40.0 g	3007	6-32 UNC

cable entry

SUHNER full crimp

taper sleeves
see page 262



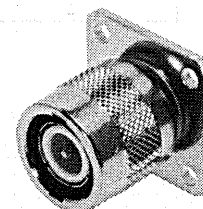
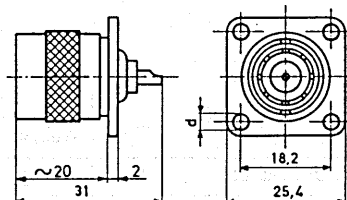
SUHNER TYPE	Ident. no.	US-MIL	Cable group (example)	Crimp insert	Weight	Al	Notes
25 C-50-7-15c	541288		U29 (RG 213/U)	3D	32.0 g	3061	L = 40.0 mm
25 C-50-7-16c	643964		U32 (RG 214/U)	3D	32.0 g	3061	L = 40.0 mm

mounting hole ML 14

Receptacles with Solder End

receptacles, male

panel mounting



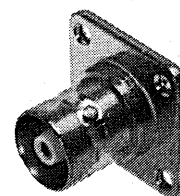
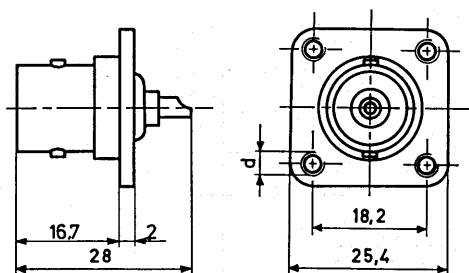
SUHNER TYPE	Ident. no.	US-MIL	Mounting hole	Weight	Fastening hole d
13 C-50-0-2	541163		ML 47	35.0 g	3.4 mm dia.

Al = assembly instruction
cable groups see page 17

mounting holes see page 269
assembly tools see page 251

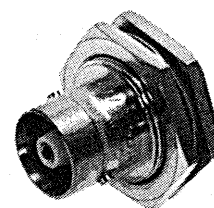
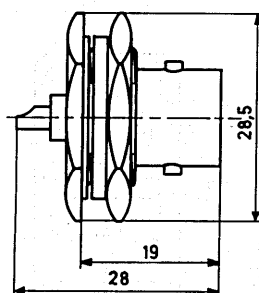
receptacles, female

panel mounted



SUHNER TYPE	Ident. no.	US-MIL M 39012/	d =	Mounting hole	Weight	Notes
23 C-50-0-1	541226	12-0001	6-32 UNC	ML 36	22.5 g	replaces UG-568/U
23 C-50-0-2	541230		3.4 mm dia.	ML 36	22.5 g	

bulkhead mounted

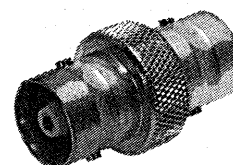
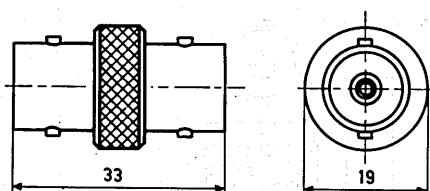


SUHNER TYPE	Ident. no.	Mounting hole	Weight	Panel thickness
22 C-50-0-3	541222	ML 25	33.5 g	2.5 mm max.

Within-Series Adaptors

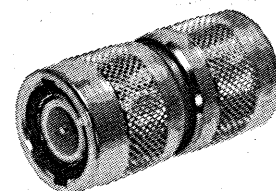
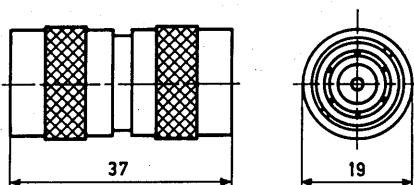
straight adaptors

jack to jack



SUHNER TYPE	Ident. no.	US-MIL 55339/	Weight	Notes
31 C-50-0-1	541292	08-00643	30.0 g	replaces UG-643/U

plug to plug



SUHNER TYPE	Ident. no.	US-MIL 55339/	Weight	Notes
32 C-50-0-1	541301	09-00642	46.5 g	replaces UG-642 A/U

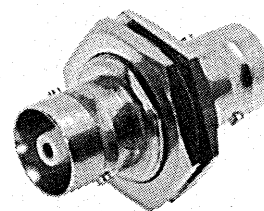
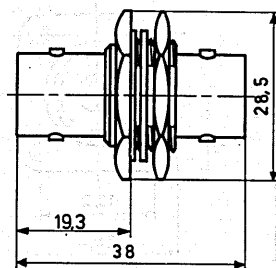
AI = assembly instruction
cable groups see page 17

mounting holes see page 269
assembly tools see page 251

straight adaptors

jack to jack

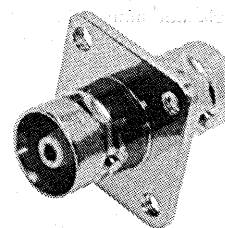
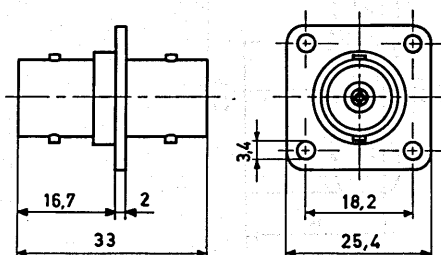
bulkhead mounted



SUHNER TYPE	Ident. no.	US-MIL	Mounting hole	Weight	Panel thickness
34 C-50-0-1	541327		ML 25	45.5 g	2.5 mm max.

jack to jack

panel mounted

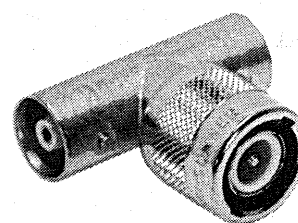
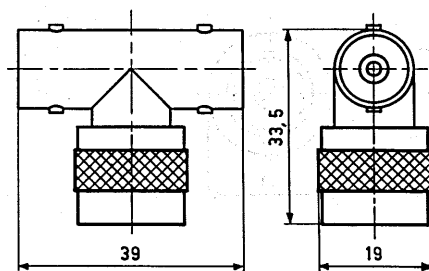


SUHNER TYPE	Ident. no.	US-MIL	Mounting hole	Weight	Panel thickness
37 C-50-0-2	541333		ML 14	31.0 g	3.5 mm max.

T-adaptor

2 jacks

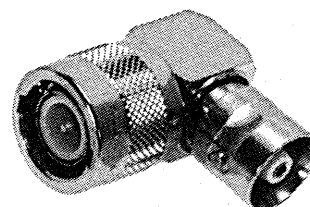
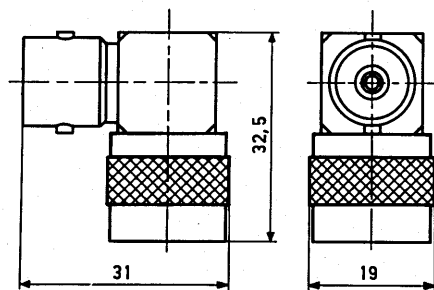
1 plug



SUHNER TYPE	Ident. no.	US-MIL 55339/	Weight	Notes
43 C-50-0-1	541336	11-00566	48.5 g	replaces UG-566 A/U

L-adaptor

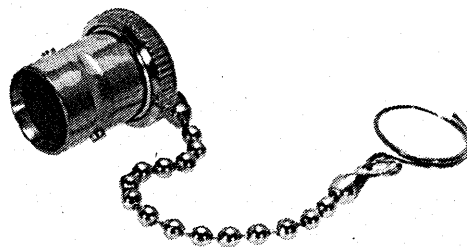
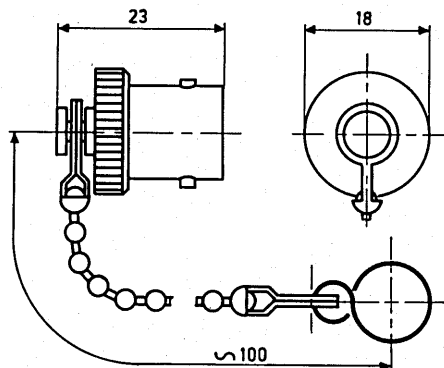
plug to jack



SUHNER TYPE	Ident. no.	US-MIL 55339/	Weight	Notes
53 C-50-0-1	541338	10-00567	50.0 g	replaces UG-567 A/U

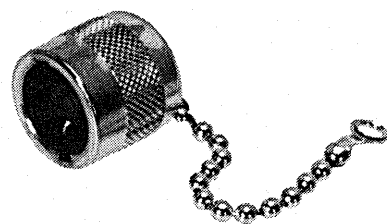
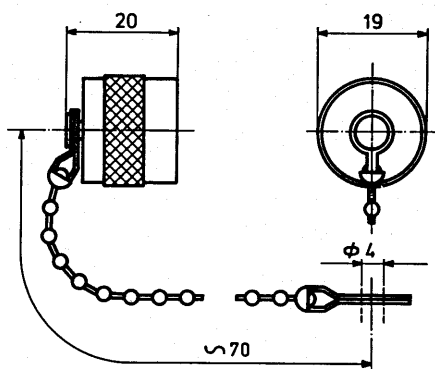
Protective Caps

for plugs



SUHNER TYPE	Ident. no.	US-MIL 55339/	Weight	Notes
61 C-0-0-1	541341	25-0003	17.5 g	replaces MX-1143 A/U

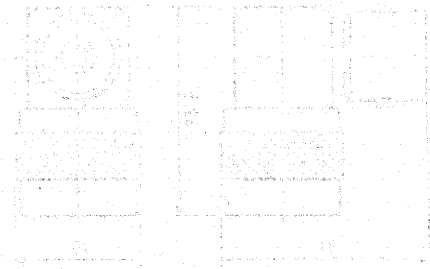
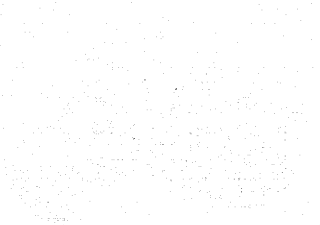
for jacks



SUHNER TYPE	Ident. no.	US-MIL 55339/	Weight	Notes
62 C-0-0-1	541344	25-0001	20.0 g	replaces MX-1142 A/U

AI = assembly instruction
cable groups see page 17

mounting holes see page 269
assembly tools see page 251



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