



SERIES 1.0/2.3 INSERTS ACCORDING TO DIN 41626/2

Description

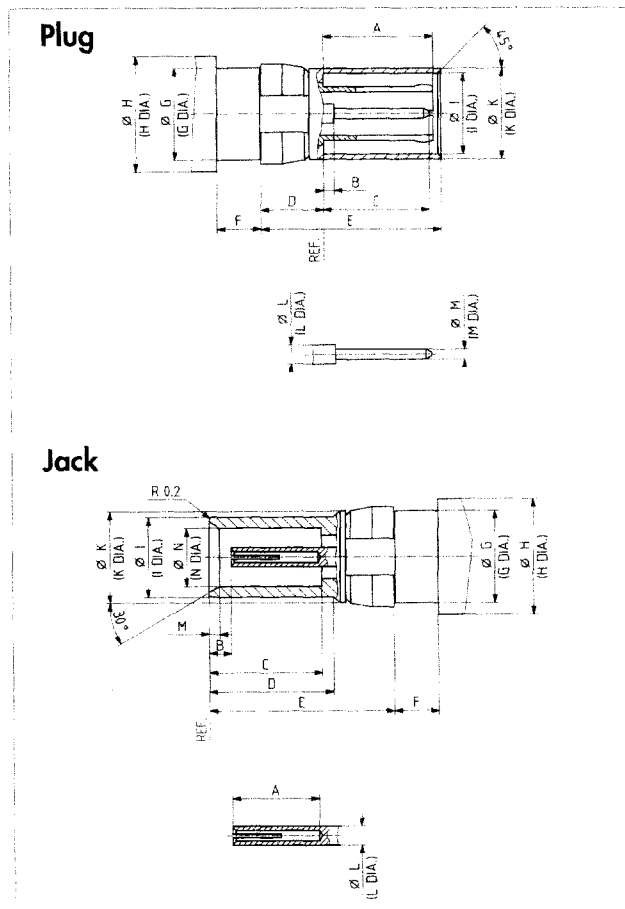
SUHNER Coaxial "Inserts" 1.0/2.3 according to DIN 41626/2 for the insertion of mixed layout connectors DIN 41612 (pattern M). The 1.0/2.3 inserts feature a slide-on coupling mechanism, which ensures a short connect-disconnect time. Impedance accuracy, fast and easy assembly as well as high reproducibility due to the full crimp cable entry are typical characteristics of these SUHNER-connectors. The 1.0/2.3 inserts are suitable for applications up to 4 GHz.

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Interface Dimensions



Interface Dimensions in mm / inches

	Plug		Jack	
	min.	max.	min.	max.
A	5.40/.213	5.70/.224	4.50/.177	—
B	—	1.15/.045	1.15/.045	1.45/.057
C	5.20/.205	5.50/.217	5.80/.228	5.90/.232
D	3.05/.120	3.20/.126	6.40/.252	6.50/.256
E	9.25/.364	9.35/.368	9.50/.374	9.60/.378
F	2.22/.087	2.40/.094	2.22/.087	2.40/.094
G	4.76/.187	4.79/.189	4.76/.187	4.79/.189
H	—	6.00/.236	—	6.00/.236
I	4.20/.165	4.28/.169	4.03/.159	4.15/.163
K	4.66/.183	4.78/.188	4.72/.186	4.75/.187
L	1.00/.039 nom.		1.00/.039 nom.	
M	0.48/.019	0.52/.020	0.50/.020	0.60/.024
N	—	—	3.00/.118	3.06/.120

1.0/2.3

Technical Data

ELECTRICAL DATA	REQUIREMENTS
Impedance	50 Ω
Frequency range	DC ... 4 GHz (see also Appendix page 436)
VSWR	see table below
Dielectric withstanding voltage (at sea level)	750 V eff, 50 Hz
Working voltage (at sea level)	250 V eff, 50 Hz
Insulation resistance	\geq 200 M Ω
Contact resistance	
- centre contact	\leq 10 m Ω
- outer contact	\leq 3 m Ω

TYPICAL VSWR	FREQUENCY RANGE			CABLE GROUP
	1 GHz	2.5 GHz	4 GHz	
CONNECTOR TYPE				
straight connectors	1.08	1.09	1.15	U2, U4
right angle connectors	1.08	1.09	1.20	U2, U4

Other connectors and cables on request

MECHANICAL DATA	REQUIREMENTS
Engagement force	10 N / 2.3 lbs max.
Disengagement force	10 N / 2.3 lbs max.
Contact captivation	\geq 18 N
Cable retention force ¹⁾	see pages 36 - 41
Durability (matings)	\geq 500

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

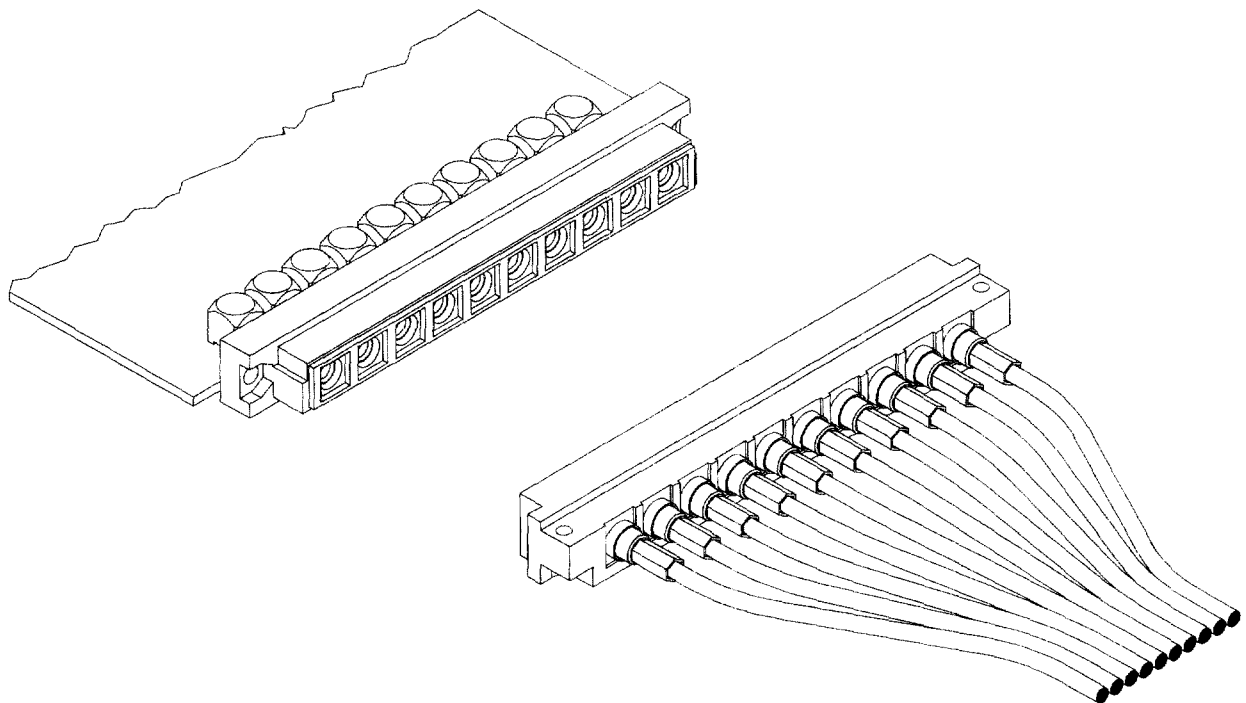
ENVIRONMENTAL DATA	EQUIVALENT MIL TEST CONDITIONS
Temperature range	- 55°C ... + 125°C / -67°F ... + 257°F
Climatic category acc. to IEC	55 / 125 / 56
Moisture resistance	MIL-STD-202, Method 106
Corrosion	Salt spray test acc. to MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition A

MATERIAL DATA		PLATING	
CONNECTOR PART	MATERIAL	Code 111 ¹⁾	Code 113 ²⁾
Bodies	brass	gold	SUCOPLATE®
Outer contacts	beryllium-copper/brass	gold	gold
Contact pins	brass	gold	gold
Socket contact	beryllium-copper	gold	gold
Insulators	PTFE	—	—
Crimp ferrules	copper	gold	nickel
Retaining clips	beryllium-copper	nickel	nickel
Other metallic parts	brass	gold	SUCOPLATE®

1) Cable connectors and printed circuit board connectors

2) Cable connectors only

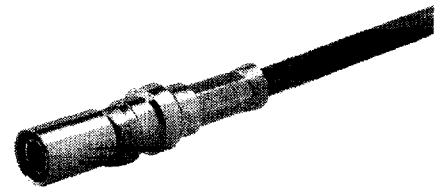
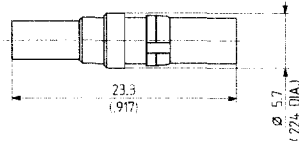
Typical application:



Cable Connectors for Flexible Cables

straight plugs

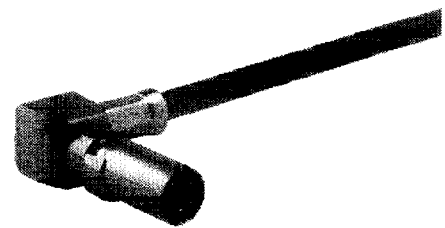
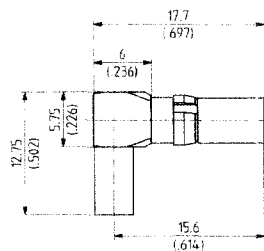
> SUHNER® full crimp



SUHNER TYPE	Ident. no.	Cable group (example)	Plating	Crimp insert	Assembly instruction	Weight
11 1023-C50-2-3/111 ●	648780	U2 (RG 316/U)	gold	1A	9191	1.83 g/.064 oz.
11 1023-C50-2-3/113 ●	649649	U2 (RG 316/U)	SUCOPLATE®	1A	9191	1.83 g/.064 oz.
11 1023-C50-2-2/111 ●	648559	U4 (K 02252 D)	gold	1A	9191	1.83 g/.064 oz.
11 1023-C50-2-2/113 ●	648563	U4 (K 02252 D)	SUCOPLATE®	1A	9191	1.83 g/.064 oz.

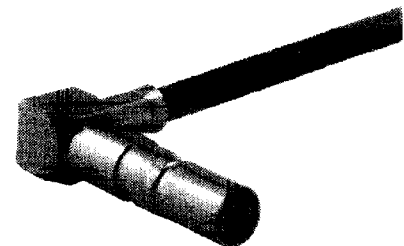
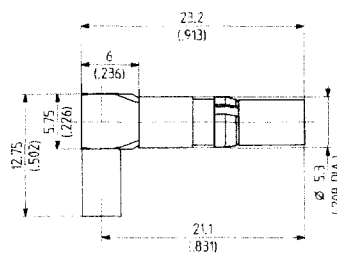
right angle plugs

> cable entry crimp
> centre contact soldered



SUHNER TYPE	Ident. no.	Cable group (example)	Plating	Crimp insert	Assembly instruction	Weight
16 1023-C50-2-1/111 ●	650779	U2 (RG 316/U)	gold	A	9199	2.56 g/.090 oz.
16 1023-C50-2-1/113 ●	648564	U2 (RG 316/U)	SUCOPLATE®	A	9199	2.56 g/.090 oz.
16 1023-C50-2-2/111 ●	651424	U4 (K 02252 D)	gold	A	9199	2.56 g/.090 oz.
16 1023-C50-2-2/113 ●	648565	U4 (K 02252 D)	SUCOPLATE®	A	9199	2.56 g/.090 oz.

> cable entry crimp
> centre contact soldered



SUHNER TYPE	Ident. no.	Cable group (example)	Plating	Crimp insert	Assembly instruction	Weight
16 1023-C50-2-4/111 ●	648788	U2 (RG 316/U)	gold	A	9199	3.33 g/.117 oz.
16 1023-C50-2-4/113 ●	648567	U2 (RG 316/U)	SUCOPLATE®	A	9199	3.33 g/.117 oz.
16 1023-C50-2-3/111 ●	650726	U4 (K 02252 D)	gold	A	9199	3.33 g/.117 oz.
16 1023-C50-2-3/113 ●	648566	U4 (K 02252 D)	SUCOPLATE®	A	9199	3.33 g/.117 oz.

● centre contact captivated

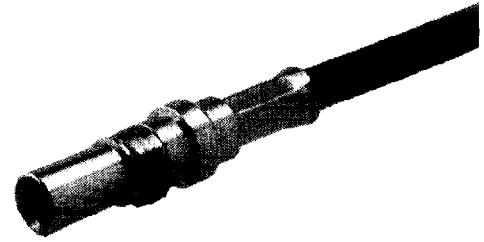
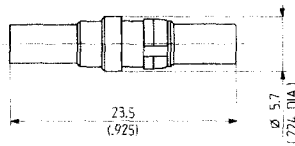
cable groups see page 36

assembly tools see page 403

mounting holes see page 441

straight jacks

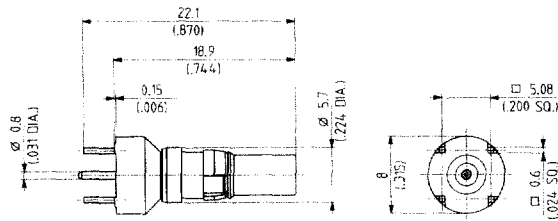
> SUHNER® full crimp



SUHNER TYPE	Ident. no.	Cable group (example)	Plating	Crimp insert	Assembly instruction	Weight
21 1023-C50-2-3/111 ●	648790	U2 (RG 316/U)	gold	1A	9191	1.79 g/.063 oz.
21 1023-C50-2-3/113 ●	649648	U2 (RG 316/U)	SUCOPLATE®	1A	9191	1.79 g/.063 oz.
21 1023-C50-2-2/111 ●	648560	U4 (K 02252 D)	gold	1A	9191	1.79 g/.063 oz.
21 1023-C50-2-2/113 ●	648568	U4 (K 02252 D)	SUCOPLATE®	1A	9191	1.79 g/.063 oz.

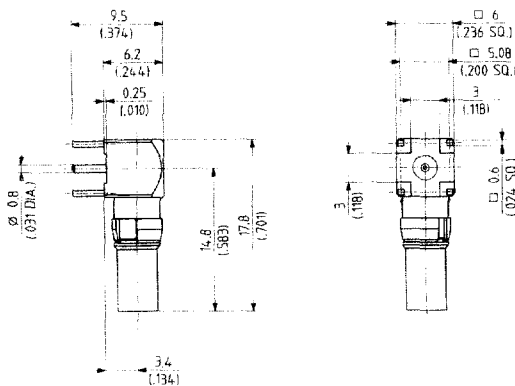
PCB Connectors

straight PCB jack



SUHNER TYPE	Ident. no.	Plating	Mounting hole	Weight
82 1023-C50-0-2 ●	648572	gold	ML 15	2.75 g/.096 oz.

right angle PCB jack



SUHNER TYPE	Ident. no.	Plating	Mounting hole	Weight
85 1023-C50-0-1 ●	648561	gold	ML 15	2.52 g/.088 oz.

● centre contact captivated

cable groups see pages 36

assembly tools see page 403

mounting holes see page 441