



SERIES SK, PRECISION SUBMINIATURE CONNECTORS

DESCRIPTION

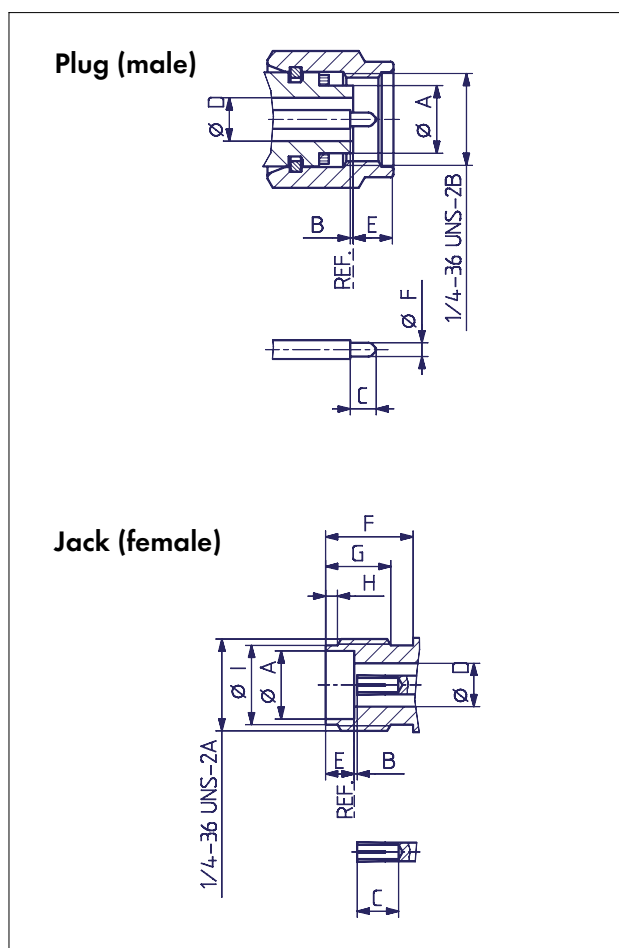
HUBER+SUHNER SK connectors are precision connectors for microwave applications up to 40 GHz. They are **intermateable with series SMA and PC 3.5**. They have a high mechanical stability and an excellent repeatability. The shortened male pin ensures a non-destructive mating process. The glass beads, when used in conjunction with the SK launchers, enable the connectors to be replaced without disturbing the hermetic seal. For a mechanical decoupling between glass bead and internal microwave circuit, stress relief contacts are available.

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INTERFACE DIMENSIONS



INTERFACE DIMENSIONS (MM / INCHES)

	Plug		Jack	
	min.	max.	min.	max.
A	4.53/.178	4.57/.180	4.60/.181	4.64/.183
B	0.00/.000	0.13/.005	0.00/.000	0.13/.005
C	1.55/.061	1.65/.065	2.80/.110	—
D	2.89/.114	2.95/.116	2.89/.114	2.95/.116
E	—	3.28/.129	1.88/.074	1.98/.078
F	0.91/.036	0.94/.037	5.90/.232	—
G	—	—	4.40/.173	—
H	—	—	0.70/.028	0.90/.036
I	—	—	5.30/.208	5.40/.213

IP rating (interface, mated) IP68

TECHNICAL DATA

ELECTRICAL DATA	REQUIREMENTS
Impedance	50 Ω
Frequency range	DC ... 40 GHz
Dielectric withstanding voltage (at sea level)	750 V rms, 50 Hz
Working voltage (at sea level) mated / unmated	≤ 250 V rms, 50 Hz
Insulation resistance	$\geq 5 \cdot 10^3$ M Ω
Contact resistance - centre contact - outer contact	≤ 3 m Ω ≤ 2 m Ω
VSWR (typical values) - cable connectors (cable assembly with 2 connectors) - launchers	≤ 1.37 DC ... 40 GHz ≤ 1.43 DC ... 40 GHz

MECHANICAL DATA	REQUIREMENTS
Coupling nut torque - recommended - proof torque	1.30 Nm / 11.47 in. lbs 1.70 Nm / 15.0 in. lbs
Contact captivation	≥ 22 N / 4.9 lbs
Durability (matings)	≥ 500

ENVIRONMENTAL DATA	TEST CONDITIONS
Temperature range	- 55°C ... + 125°C / - 67°F ... + 257°F
Thermal shock	MIL-STD-202, Method 107, Condition B
Vibration	MIL-STD-202, Method 204, Condition D

MATERIAL DATA		
CONNECTOR PART	MATERIAL	PLATING
Bodies, cable connectors	copper-beryllium alloy / stainless steel	gold
Bodies, receptacles	stainless steel / copper alloy	passivated / gold
Centre contacts	copper-beryllium alloy	gold
Support beads	PPO (polyphenylene oxide)	

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

The products are designed and guaranteed to pass the above mentioned test procedures. Any additional or different requirement arising from specific applications or environmental conditions which is not covered by these test procedures is subject to request.

CABLE CONNECTORS

Straight cable plugs (male)

> for semi-rigid cables

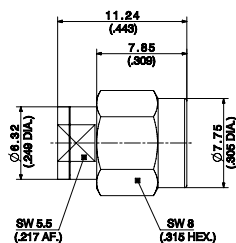


Fig. 1

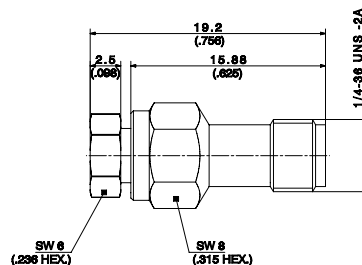


Fig. 2

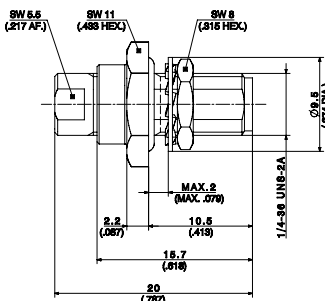


HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Fig.	Notes
11_SK-50-2-56/119_NE	84013230	Y3, Y11 (EZ 86)	single	27445	1	plug
21_SK-50-2-58/199_NE	84019664	Y3, Y11 (EZ 86)	single	0000234990	2	jack

Straight bulkhead cable jacks (female)

> for semi-rigid cables

> with panel seal



HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction/ Mounting hole
24_SK-50-2-55/1_NE	84016419	Y10 (EZ 118-TP)	single	0000229976 / ML 35

LAUNCHERS

“Sparkplug” Launchers

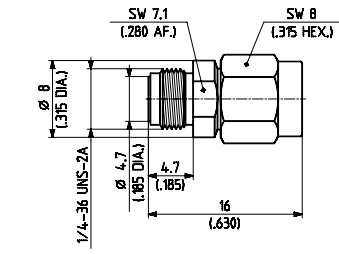


Fig. 1

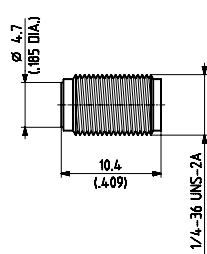


Fig. 2



HUBER+SUHNER type	Item no.	Packaging	Assembly instruction	Mounting hole	Fig.	Notes
12_SK-50-0-51/199_NE	22645974	single	9181	ML 75	1	plug
22_SK-50-0-51/199_NE	22645975	single	9181	ML 75	2	jack

Panel launchers (male)

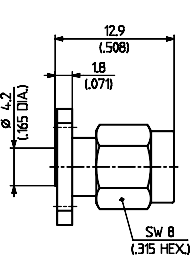


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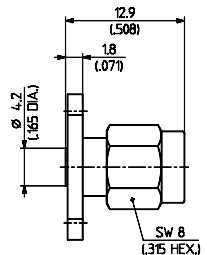


Fig. 2



HUBER+SUHNER type	Item no.	Packaging	Assembly instruction	Mounting hole	Flange type	Fig.	Notes
13_SK-50-0-51/199_NE	22645978	single	9182	ML 77	square	1	
13_SK-50-0-52/199_NE	22645976	single	9182	ML 78	2-hole	2	

Panel launchers (female)

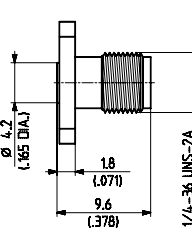


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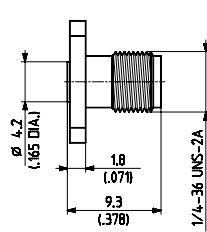


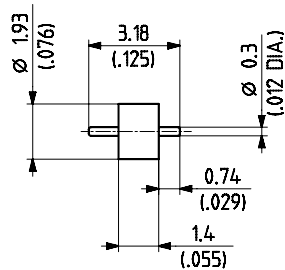
Fig. 2



HUBER+SUHNER type	Item no.	Packaging	Assembly instruction	Mounting hole	Flange type	Fig.	Notes
23_SK-50-0-51/199_NE	22645979	single	9182	ML 77	square	1	
23_SK-50-0-52/199_NE	22645977	single	9182	ML 78	2-hole	2	

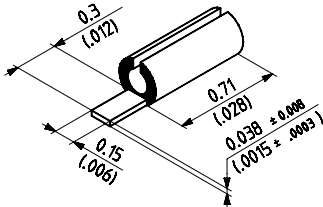
ACCESSORIES

Glass bead for 12 SK, 13 SK, 22 SK, 23 SK launchers (package with 1 piece)



HUBER+SUHNER® TYPE
73_Z-0-0-203/11-_NE
Item no. 22645983

Microstrip stress relief contacts (package with 100 pieces)



HUBER+SUHNER® TYPE
73_Z-0-0-204/1-_NH
Item no. 22645980

SK