



SERIES BNC 75 Ω, COAXIAL MINIATURE CONNECTORS

DESCRIPTION

HUBER+SUHRNER BNC Series featuring a two stud bayonet coupling mechanism which is particularly useful for frequently coupled and uncoupled RF connections. At frequencies up to 1 GHz the small impedance deviation is negligible for any application. A typical VSWR of 1.15 at 1 GHz is achieved.

Compatibility

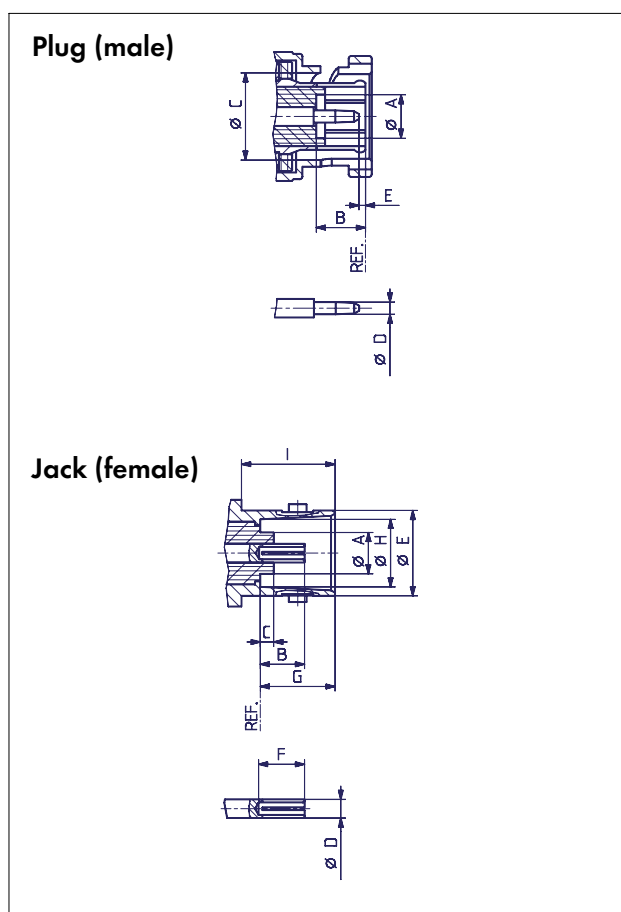
75 Ω BNC connectors and 50 Ω BNC connectors are intermateable without any restrictions.

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Interface dimensions in mm / inches	217
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INTERFACE DIMENSIONS



INTERFACE DIMENSIONS (MM / INCHES)

	Plug		Jack	
	min.	max.	min.	max.
A	4.83/.190	4.97/.196	–	4.72/.186
B	5.28/.208	5.79/.228	4.72/.186	5.23/.206
C	9.78/.385	9.91/.390	1.50/.059 nom.	
D	1.32/.052	1.37/.054	2.10/.827 nom.	
E	0.08/.003	1.02/.040	9.60/.378	9.70/.382
F	–	–	4.95/.195	–
G	–	–	8.35/.328	8.48/.334
H	–	–	8.10/.319	8.15/.321
I	–	–	10.60/.417	–

Interface dimensions conformable to the Standards:

International: **IEC 61169-8**

IP rating (interface, mated) IP64

BNC 75

TECHNICAL DATA

ELECTRICAL DATA	REQUIREMENTS
Impedance	75 Ω
Frequency range	DC ... 1 GHz
Dielectric withstanding voltage (at sea level)	1.5 kV rms, 50 Hz (depending on cable)
Working voltage (at sea level)	500 V rms, 50 Hz (depending on cable)
Insulation resistance	$\geq 5 \cdot 10^3$ M Ω
Contact resistance - centre contact - outer contact	≤ 1.5 m Ω ≤ 1 m Ω
RF-leakage (measured at 1 GHz)	≥ 55 dB

MECHANICAL DATA	REQUIREMENTS
Coupling nut torque	7 Ncm ... 28 Ncm / 0.6 in. lbs ... 2.5 in. lbs
Coupling nut retention force	≥ 450 N / 101.2 lbs
Contact captivation	≥ 27 N / 6.1 lbs
Cable retention force ¹⁾	see pages 28 - 34
Durability (matings)	≥ 500

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

ENVIRONMENTAL DATA	TEST CONDITIONS
Temperature range	- 65°C ... + 165°C / - 85 °F ... + 329 °F
Climatic category	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 G

MATERIAL DATA		
CONNECTOR PARTS	MATERIAL	PLATING
Bodies	brass	SUCOPLATE®
Pin contacts	brass	gold / SUCOPRO
Socket contacts	copper-beryllium alloy	gold / SUCOPRO
Crimp ferrules	copper brass	SUCOPLATE®
Insulators	PTFE or PFA	
Gaskets	silicone rubber	

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

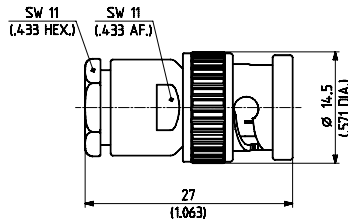
The products are designed and guaranteed to pass the above mentioned test procedures. Any additional or different requirement arising from specific applications or environmental conditions which is not covered by these test procedures is subject to request.

CABLE CONNECTORS

Straight cable plugs (male)

> for flexible cables

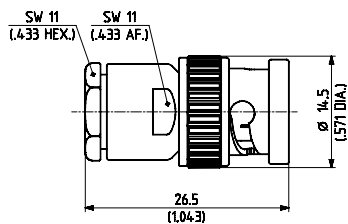
- > cable entry clamp
- > centre contact soldered



HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Notes
11_BNC-75-2-1/133_NE	22543768	U5 (RG 187 A/U)	single	3005	
11_BNC-75-2-12/133_NE	22544277	U6 (G 03133-06)	single	3005	

> for flexible cables

- > cable entry clamp
- > centre contact soldered



HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Notes
11_BNC-75-3-11/133_NE	22540711	U14 (G 03233 D)	single	3005	
11_BNC-75-4-3/133_NE	22540758	U15 (RG 59 B/U)	single	3005	

> for flexible cables

> HUBER+SUHNER® full crimp

> taper sleeves see page 406

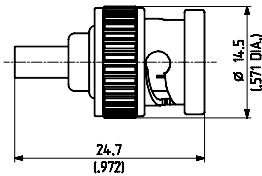


Fig. 1

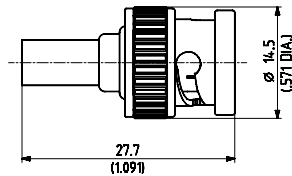


Fig. 2

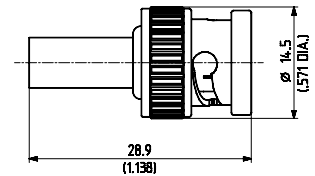


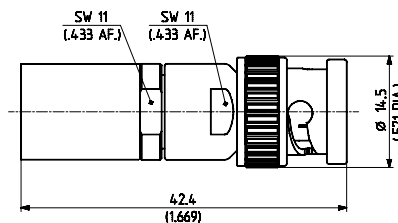
Fig. 3

HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert	Fig.
11_BNC-75-2-15/133_NE	22641685	U5 (RG 187 A/U)	single	9068	1 A	1
11_BNC-75-2-15/133_NH	22644586	U5 (RG 187 A/U)	bulk 100 pcs.	9068	1 A	1
11_BNC-75-2-18/133_NE	22643710	S5 (S 02223-02)	single	9068	1 A	1
11_BNC-75-2-18/133_NH	22644587	S5 (S 02223-02)	bulk 100 pcs.	9068	1 A	1
11_BNC-75-2-21/133_NE	22644358	R6 (G 02133 D-05)	single	27001	1/4.95	2
11_BNC-75-2-21/133_NH	22650676	R6 (G 02133 D-05)	bulk 100 pcs.	27001	1/4.95	2
11_BNC-75-3-8/133_NE	22540707	U12 (G 03233)	single	3015	2 B	3
11_BNC-75-3-9/133_NE	22540709	U14 (G 03233 D)	single	3015	2 B	3
11_BNC-75-4-4/133_NE	22540761	U16 (RG 59 B/U)	single	3015	2 C	3
11_BNC-75-4-4/133_NH	22544846	U16 (RG 59 B/U)	bulk 100 pcs.	3015	2 C	3
11_BNC-75-4-6/133_NE	22540765	U18 (G 04233 D)	single	3015	2 C	3
11_BNC-75-4-6/133_NH	22540766	U18 (G 04233 D)	bulk 100 pcs.	3015	2 C	3
11_BNC-75-4-30/133_NE	22544636	U17 (S 04233)	single	3015	2 C	3
11_BNC-75-5-6/133_NE	22540799	U24 (G 05133 D)	single	3015	76_Z-0-5-21	3

> for flexible cables

> HUBER+SUHNER® full crimp

> taper sleeves see page 406



HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert
11_BNC-75-7-5/133_NE	22540811	U34 (RG 11 A/U)	single	9120	2 D
11_BNC-75-7-6/133_NE	22543960	U36 (RG 216/U)	single	9120	2 D

Right angle cable plugs (male)

- > for flexible cables
- > cable entry crimp
- > centre contact soldered
- > taper sleeves see page 406

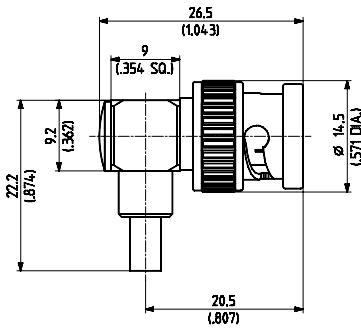


Fig. 1

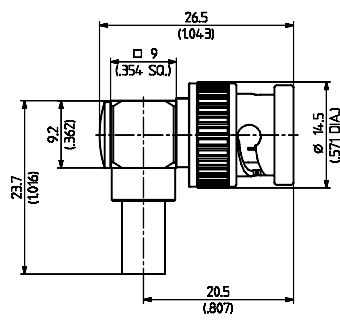
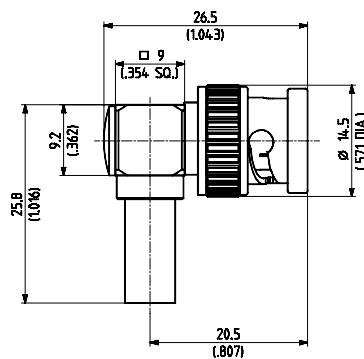


Fig. 2

HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert	Fig.
16_BNC-75-2-3/133_NE	22540820	U5 (RG 187 A/U)	single	3079	A	1
16_BNC-75-2-3/133_NH	22649038	U5 (RG 187 A/U)	bulk 100 pcs.	3079	A	1
16_BNC-75-2-5/133_NE	22642801	R6 (G 02133 D-05)	single	27100	4.95	2

- > for flexible cables
- > cable entry crimp
- > centre contact soldered
- > taper sleeves see page 406



HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert
16_BNC-75-3-4/133_NE	22543781	U14 (G 03233 D)	single	3058	B
16_BNC-75-4-4/133_NE	22540840	U16 (RG 59 B/U)	single	3058	C
16_BNC-75-4-5/133_NE	22540842	U18 (G 04233 D)	single	3058	C

Straight cable jacks (female)

- > for flexible cables
- > HUBER+SUHNER® full crimp
- > taper sleeves see page 406

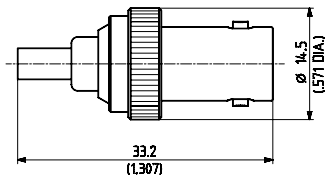


Fig. 1

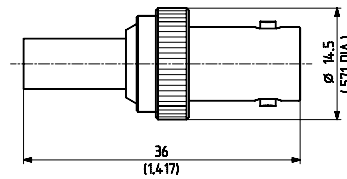
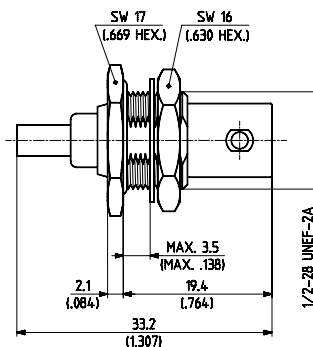


Fig. 2

HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert	Fig.
21_BNC-75-2-5/133_NE	22641780	U5 (RG 187 A/U)	single	9068	1 A	1
21_BNC-75-2-5/133_NH	22645904	U5 (RG 187 A/U)	bulk 100 pcs.	9068	1 A	1
21_BNC-75-2-7/133_NE	22643853	S5 (S 02223-02)	single	9068	1 A	1
21_BNC-75-4-4/133_NE	22540872	U16 (RG 59 B/U)	single	3015	2 C	2
21_BNC-75-4-5/133_NE	22540874	U18 (G 04233 D)	single	3015	2 C	2

Straight bulkhead cable jacks (female)

- > for flexible cables
- > HUBER+SUHNER® full crimp
- > with panel seal
- > insulating washers see page 408
- > taper sleeves see page 406

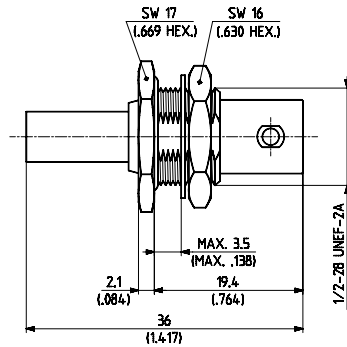


HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert
24_BNC-75-2-6/133_NE	22641786	U5 (RG 187 A/U)	single	9068	1 A
24_BNC-75-2-6/133_NH	22644569	U5 (RG 187 A/U)	bulk 100 pcs.	9068	1 A
24_BNC-75-2-12/133_NE	22643854	S5 (S 02223-02)	single	9068	1 A

mounting hole ML 4

> for flexible cables

- > HUBER+SUHNER® full crimp
- > with panel seal
- > insulating washers see page 408
- > taper sleeves see page 406



HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert
24_BNC-75-2-15/133_NE	22644339	R6 (G 02133 D-05)	single	27001	1 / 4.95
24_BNC-75-2-15/133_NH	22651492	R6 (G 02133 D-05)	bulk 100 pcs.	27001	1 / 4.95
24_BNC-75-3-4/133_NE	22540917	U12 (G 03233)	single	3015	2 B
24_BNC-75-3-5/133_NE	22540920	U14 (G 03233 D)	single	3015	2 B
24_BNC-75-4-3/133_NE	22540930	U16 (RG 59 B/U)	single	3015	2 C
24_BNC-75-4-4/133_NE	22540932	U18 (G 04233 D)	single	3015	2 C
24_BNC-75-4-15/133_NE	22641769	U17 (S 04233)	single	3015	2 C

mounting hole ML 4

Straight panel cable jacks (female)

> for flexible cables

- > HUBER+SUHNER® full crimp
- > fastening screws see page 407
- > taper sleeves see page 406

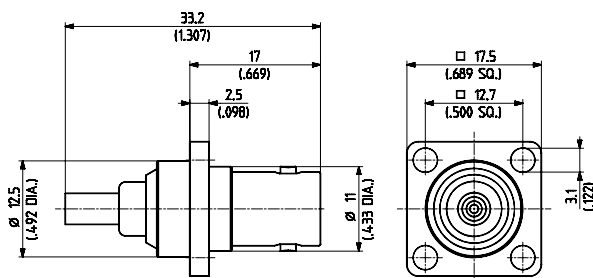


Fig. 1

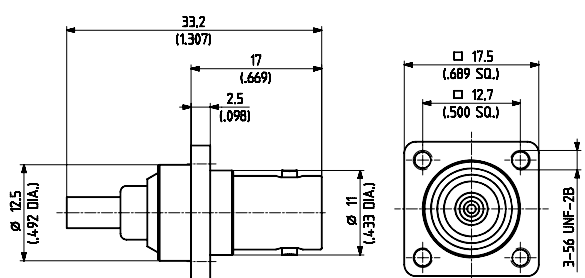


Fig. 2

HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert	Fig.
25_BNC-75-2-7/133_NE	22641790	U5 (RG 187 A/U)	single	9068	1 A	1
25_BNC-75-2-8/133_NE	22641791	U5 (RG 187 A/U)	single	9068	1 A	2*

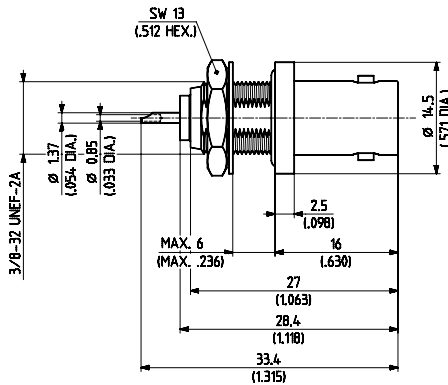
* mounting also possible with screws ISO M 2.5

mounting hole ML 8

RECEPTACLES WITH SOLDER END

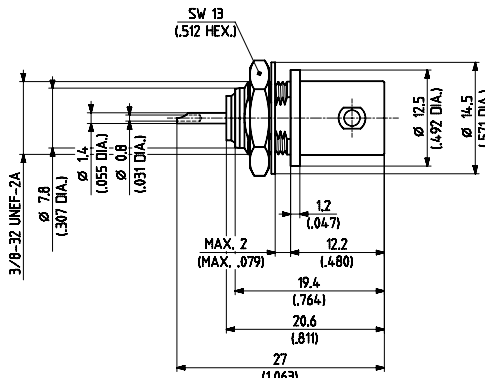
Receptacles, jacks (female)

- > bulkhead mounted
- > with panel seal
- > solder tags see page 409
- > insulating washers see page 408



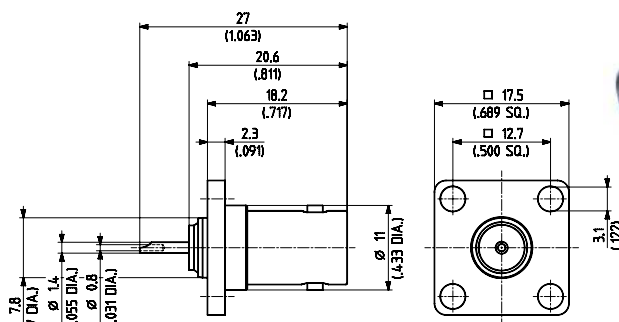
HUBER+SUHNER type	Item no.	Packaging	Mounting hole	Notes
22_BNC-75-0-1/133_NE	22540883	single	ML 1	

- > bulkhead mounted
- > solder tags see page 409
- > insulating washers see page 408



HUBER+SUHNER type	Item no.	Packaging	Mounting hole	Notes
22_BNC-75-0-4/133NE	22540889	single	ML 2	without panel seal

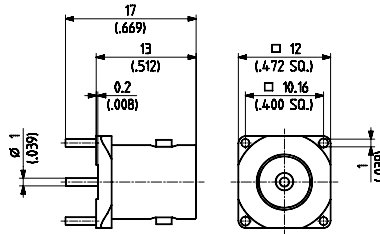
- > panel mounted
- > fastening screws see page 407



HUBER+SUHNER type	Item no.	Packaging	Mounting hole	Notes
23_BNC-75-0-10/133_NE	22540906	single	ML 6	

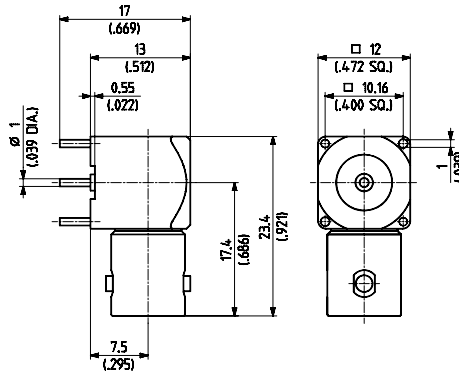
PCB CONNECTORS

Straight PCB jacks (female)



HUBER+SUHNER type	Item no.	Packaging	Mounting hole	Notes
82_BNC-75-0-2/122_NE	22643586	single	ML 49	Plating Body: nickel
82_BNC-75-0-2/122_NH	22646624	bulk 100 pcs.	ML 49	Plating Body: nickel

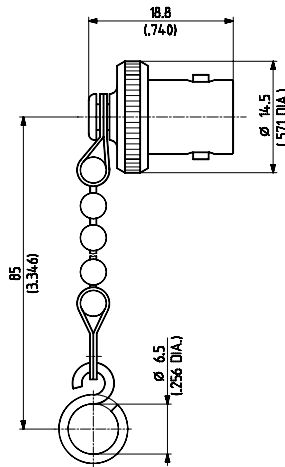
Right angle PCB jacks (female)



HUBER+SUHNER type	Item no.	Packaging	Mounting hole	Notes
85_BNC-75-0-1/133_NE	22641623	single	ML 49	
85_BNC-75-0-1/133_NH	22646488	bulk 100 pcs.	ML 49	

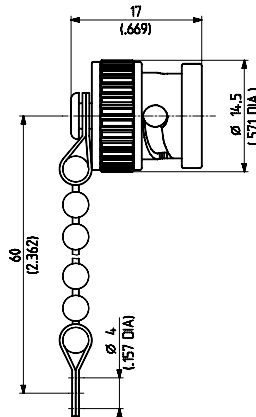
PROTECTIVE CAPS AND SHORTS

> protective cap for plugs (males)



HUBER+SUHNER type	Item no.	Packaging	Notes
61_BNC-0-0-1/-33_E	22540660	single	with chain and loop

> protective cap for jacks (females)



HUBER+SUHNER type	Item no.	Packaging	Notes
62_BNC-0-0-1/-33_E	22540666	single	with chain

> protective caps for jacks (females)

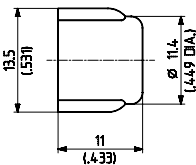


Fig. 1

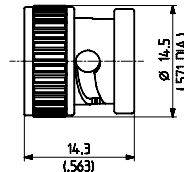


Fig. 2



HUBER+SUHNER type	Item no.	Packaging	Fig.	Notes
62_BNC-0-0-2/-_H	22540667	bulk 100 pcs.	1	made of plastic
62_BNC-0-0-3/-33_E	22540669	single	2	