

# Reverse polarity connectors

## Description

According UL FCC (part 15.203) regulations, wireless radio equipment with removable antenna must not have a standardised interface. This to avoid the connection of antenna equipment which is not WLAN approved.

An established solution are the so called reverse polarity connectors. That means, the male connector is fitted with female centre contact and insulator, whereas the female side is fitted with male centre contact and insulator. For identification of reverse connectors the letter R (for reverse) is used in the type description. Example: 11\_TNC-R50-3-42.

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# Reverse polarity connectors TNC

## Straight cable plugs (reverse)

For flexible cables

- Cable attachment: HUBER+SUHNER full crimp

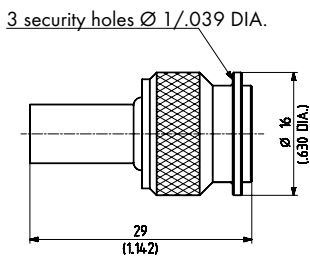


Fig. 1

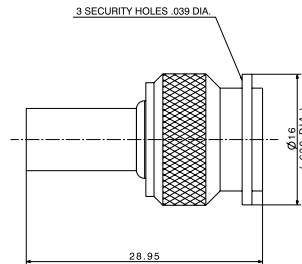


Fig. 2

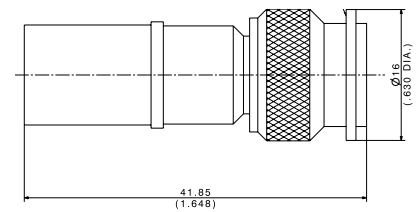


Fig. 3

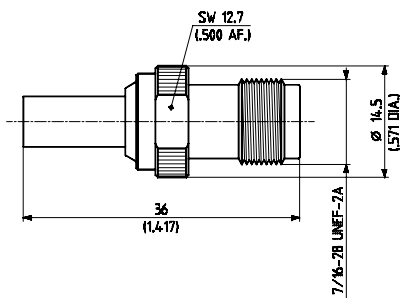


HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert	Fig.
11_TNC-R50-3-42/133_NE	22658965	U7 (RG_58_C/U)	single	3015	2 B	1
11_TNC-R50-3-43/133_NE	22659046	U9, U39 (RG_223_/U)		3015	2 B	1
11_TNC-R50-4-76/133_NE	84031534	LMR 240 <sup>1)</sup>		0000246324	2 C	2
11_TNC-R50-7-13/133_NE	84031806	LMR 400 <sup>1)</sup>		27288	4 D	3

## Straight cable jacks (reverse)

For flexible cables

- Cable attachment: HUBER+SUHNER full crimp



HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert
21_TNC-R50-3-14/133_NE	23003716	U7 (RG_58_C/U)	single	27221	2 B

<sup>1)</sup> LMR® is a registered trade mark of Times Microwave Systems

# Reverse polarity connectors TNC

## Straight bulkhead cable jacks (reverse)

### For flexible cables

- Cable attachment: HUBER+SUHNER full crimp
- With panel seal
- Mounting hole ML 4

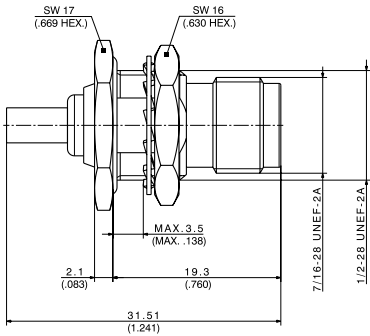


Fig. 1

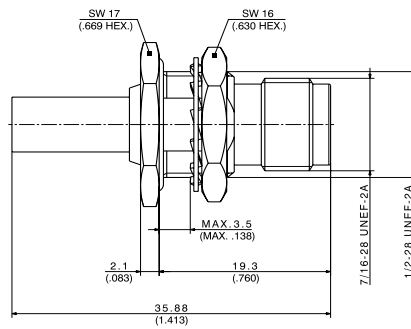


Fig. 2

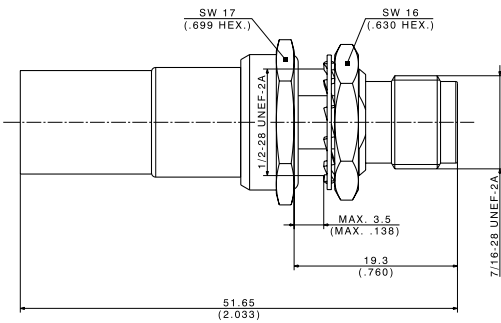


Fig. 3

HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert	Fig.
24_TNC-R50-2-44/133_NE	84064623	U2 (RG_316_/U)	single	0000179123	1 A	1
24_TNC-R50-3-24/133_NE	84031905	U7 (RG_58_C/U)		27221	2 B	2
24_TNC-R50-3-25/133_NE	84031952	U9 (RG_223_U)		27221	2 B	2
24_TNC-R50-4-60/133_NE	84032154	LMR 240 <sup>1)</sup>		0000246324	2 C	2
24_TNC-R50-7-4/133_NE	84032531	LMR 400 <sup>1)</sup>		27288	4 D	3

<sup>1)</sup> LMR® is a registered trade mark of Times Microwave Systems

# Reverse polarity connectors SMA

## Straight cable plugs (reverse)

For flexible cables

- Cable attachment: centre contact soldered/outer contact crimp

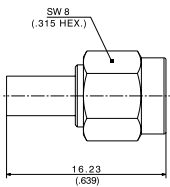


Fig. 1

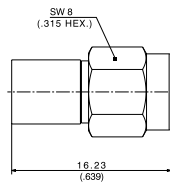


Fig. 2

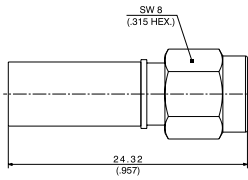


Fig. 3

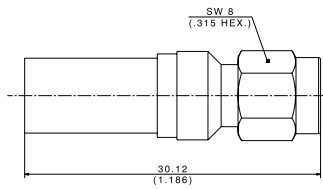


Fig. 4

HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert	Fig.
11_SMA-R50-2-113/133_NE <sup>1)</sup>	84130701	U4 (K_02252_D)	single	0000360393	A	1
11_SMA-R50-3-238/133_NE <sup>1)</sup>	84130704	U9, U11, U41 (RG_223_/U)	single	0000360525	B	2
11_SMA-R50-3-48/133_NE <sup>1)</sup>	22658747	U7 (RG_58_C/U)	single	M27192	B	3
11_SMA-R50-4-97/133_NH <sup>1)</sup>	84027004	S16, X9 (S_04262_D-09)	bulk 100 pcs.	0000241878	C	4

<sup>1)</sup> Use torque wrench 74\_Z0-0-79

# Reverse polarity connectors SMA

## Right angle cable plugs (reverse)

For flexible cables

- Cable attachment: centre contact soldered/outer contact crimp

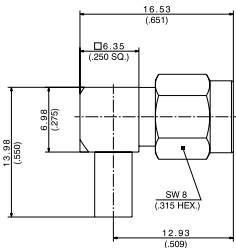


Fig. 1

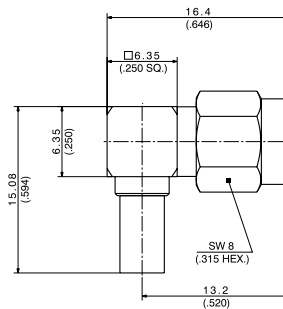


Fig. 2

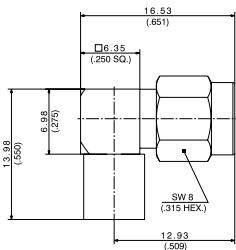


Fig. 3

HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert	Fig.
16_SMA-R50-2-113/133_NE <sup>1)</sup>	84130710	U4 (K_Q2252_D)	single	0000368977	A	1
16_SMA-R50-2-149/133_NH <sup>1)</sup>	23039493	U2 (RG_316_/U)	bulk 100 pcs.	27543	A	2
16_SMA-R50-3-16/133_NE <sup>1)</sup>	84130713	U9, U11, U41 (RG_223_/U)	single	0000368978	B	3

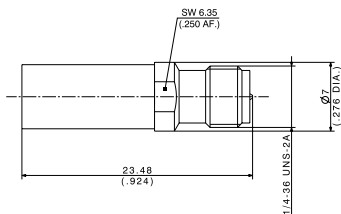
<sup>1)</sup> Use torque wrench 74\_Z0-0-79

# Reverse polarity connectors – series SMA

## Straight cable jacks (reverse)

For flexible cables

- Cable attachment: centre contact soldered/outer contact crimp

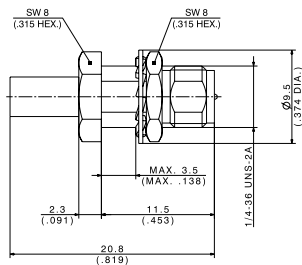


HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Crimp insert
21_SMA-R50-3-51/133_NE	84032514	U7 (RG_58_C/U)	single	0000246751	B

## Straight bulkhead cable jacks (reverse)

For flexible cables

- Cable attachment: centre contact soldered/outer contact crimp
- With panel seal



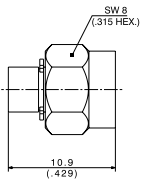
HUBER+SUHNER type	Item no.	Cable group (example)	Packaging	Assembly instruction	Mounting hole	Crimp insert
24_SMA-R50-2-51/133_NE	23011465	U2 (RG_316_/U)	single	0000292354	ML 35	A

Reverse polarity

# Reverse polarity connectors – terminations SMA

50 Ω, plug (reverse)

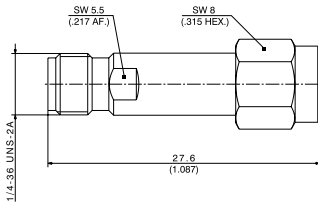
- 1 Watt
- DC to 6 GHz



HUBER+SUHNER type	Item no.	Packaging	VSWR		Power
			DC to 3 GHz	3 to 6 GHz	
65_SMA-R50-0-70/133_NE	84043759	single	1.15	1.2	1 Watt

# Reverse polarity connectors - adaptors

- Straight
- Plug (reverse) to jack (standard)



HUBER+SUHNER type	Item no.	Packaging	Side 1 (male)	Side 2 (female)
33_SMA-R50-0-5/111_NE	23003618	single	SMA reverse	SMA standard

- Angle
- Plug (reverse) to jack (standard)

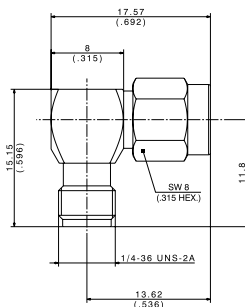
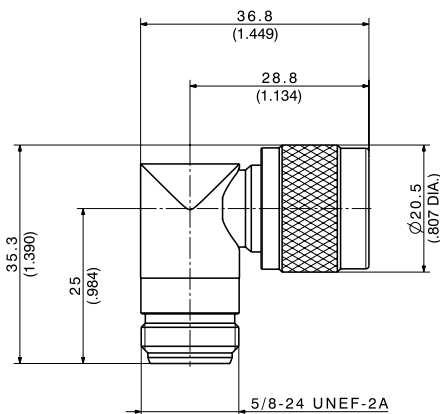


Fig. 1

Fig. 2

HUBER+SUHNER type	Item no.	Packaging	Side 1 (male)	Side 2 (female)	Fig.
53_N-R50-0-7/133_NE	22652057	single	N reverse	N standard	1
53_SMA-R50-0-3/111_NE	23029833		SMA reverse	SMA standard	2