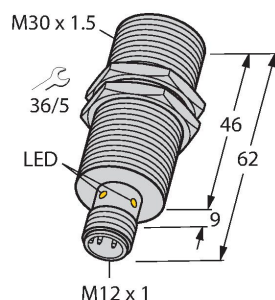


TB-M30-H1147

HF Read/Write Head



Technical data

Type	TB-M30-H1147
ID	7030003
Approvals	CE UKCA UL
Radio approvals	EU/RED: Europe UK SI 2017/1206: United Kingdom FCC: USA IC: Canada MIC: Japan RCM: Australia/New Zealand

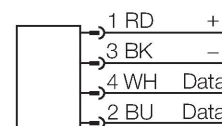
Electrical data	
Operating voltage	10...30 VDC
DC rated operational current	≤ 80 mA
inrush current	700 mA For: 1 ms
Data transfer	Inductive coupling
Technology	HF RFID
Operating frequency	13.56 MHz
Radio communication and protocol standards	ISO 15693 NFC Typ 5
Read/Write distance max.	45 mm
Output function	4-wire, Read/Write

Mechanical data	
Mounting conditions	Flush
Ambient temperature	-25...+70 °C
Design	Threaded barrel, M30 x 1.5
Dimensions	62 mm
Housing diameter	Ø 30 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30
Vibration resistance	55 Hz (1 mm)

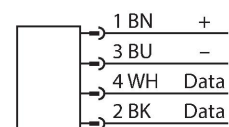
Features

- Threaded barrel, M30 x 1.5
- Chrome-plated brass
- Powered and operated only via connection to BL ident interface module
- M12 × 1 connector, connection only via BL ident extension cable

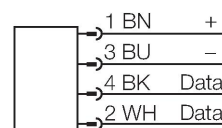
.../S2503 Connectors



.../S2500 Connectors



.../S2501 Connectors



Functional principle

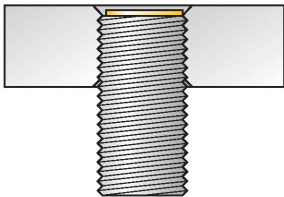
The HF read/write devices operating at a frequency of 13.56 MHz form a transmission zone, the size of which (0...500 mm) varies depending on the combination of read/write device and tag used.

Technical data

Shock resistance	30 g (11 ms)
Protection class	IP67
Electrical connection	M12 × 1
MTTF	391 years acc. to SN 29500 (Ed. 99) 20 °C
Power-on indication	LED, Green
Packaging unit	1

The read/write distances mentioned here only represent standard values measured under laboratory conditions, free from any influences caused by surrounding materials. The read/write distances of the tags for mounting in metal TW-R**-M(MF) were determined in metal. Attainable distances may vary by up to 30 % due to component tolerances, mounting conditions, ambient conditions and material qualities (especially when mounted in metal). Testing of the application under real operating conditions is therefore essential, especially with on-the-fly reading and writing!

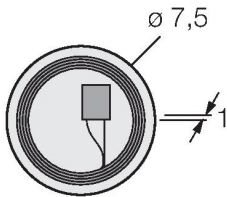
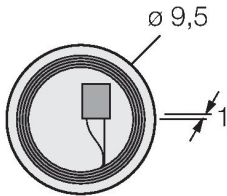
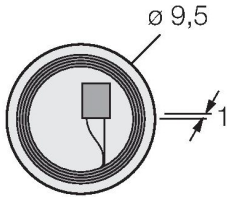
Mounting instructions/Description

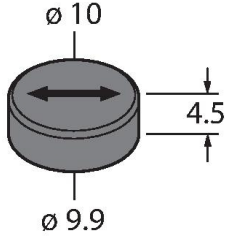
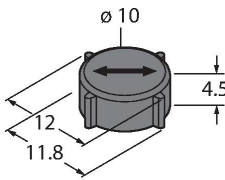
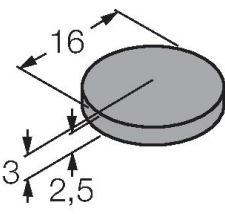
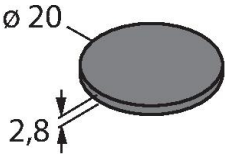
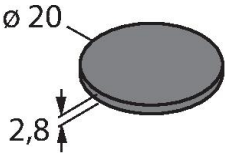
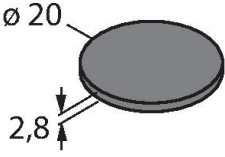
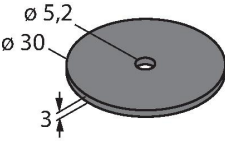
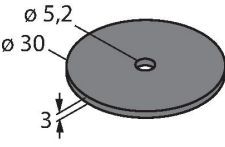
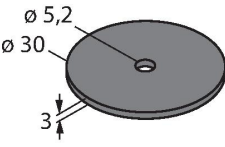
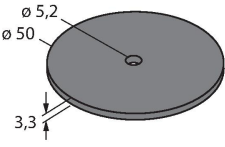


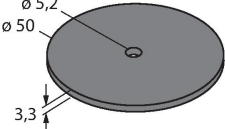
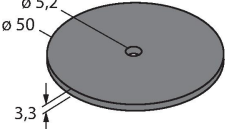
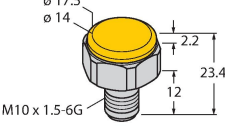
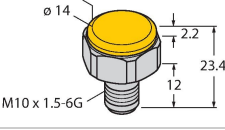
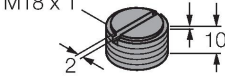
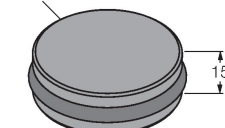
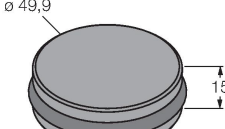
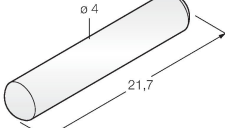
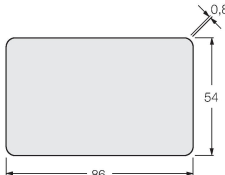
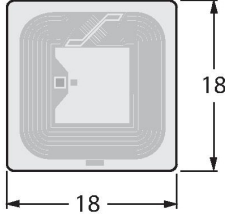
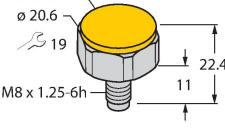
Diameter active Ø 30 mm
area B

flush mounting

LED	Color	Status	Meaning
1	OFF	OFF	Operating voltage switched off
	GREEN	ON	Operating voltage switched on
	GREEN	FLASHING (1 Hz)	HF field switched off
	GREEN	FLASHING (2 Hz)	Tag in detection range

Dimensions	Type designation	Read-write distance		Transfer zone		Minimum distance between two read-write heads
	Ident - no.	Recommended (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	
	TW-R7.5-B128 7030231	8	18	20	10	90
	TW-R9.5-B128 7030252	9	20	22	11	90
	TW-R9.5-K2 7030558	9	20	22	11	90

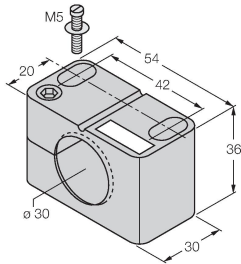
	TW-R10-M-B146 7030545	7	15	18	9	90
	TW-R12-M-B146 7030500	7	17	30	15	90
	TW-R16-B128 6900501	12	23	20	10	90
	TW-R20-B128 6900502	15	27	20	10	90
	TW-R20-B320 100005244	15	27	20	10	90
	TW-R20-K2 6900505	15	22	20	10	90
	TW-R30-B128 6900503	13	30	32	16	90
	TW-R30-B320 100005245	13	30	32	16	90
	TW-R30-K2 6900506	15	27	32	16	90
	TW-R50-B128 6900504	20	43	46	23	90

	TW-R50-B320 100005246	20	43	46	23	90
	TW-R50-K2 6900507	15	33	36	18	90
	TW-BS10X1.5-19-K2 6901380	6	15	21	10	90
	TW-BD10X1.5-19-K2 6901381	10	20	22	11	90
	TW-SPP18X1-B128 6901062	10	17	26	13	90
	TW-R50-M-B128 7030209	15	27	22	11	90
	TW-R50-M-K2 7030229	10	21	26	13	90
	TW-R4-22-B128 7030237	5	16	22	11	90
	TW-L86-54-C-B128 6900479	20	45	80	40	90
	TW-L18-18-F-B128 7030634	16	29	16	8	90
	TW-BS8x1.25-19-K2 7030638	6	15	21	10	90

Accessories

BST-30B

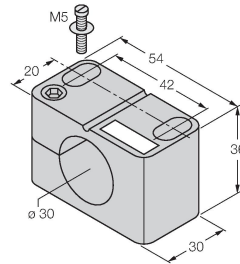
6947216



Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

BST-30N

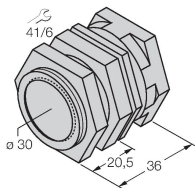
6947217



Mounting clamp for threaded barrel sensors, without dead-stop; material: PA6

QM-30

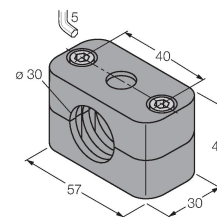
6945103



Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M36 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

BSS-30

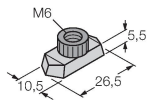
6901319



Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

BSS-TSM 2 pcs

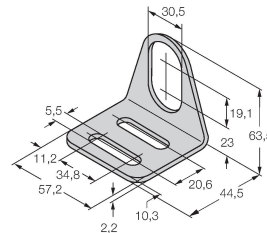
6901323



DIN rail nut for BSS and BSM mounting clips, for mounting on DIN rails

MW-30

6945005



Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)