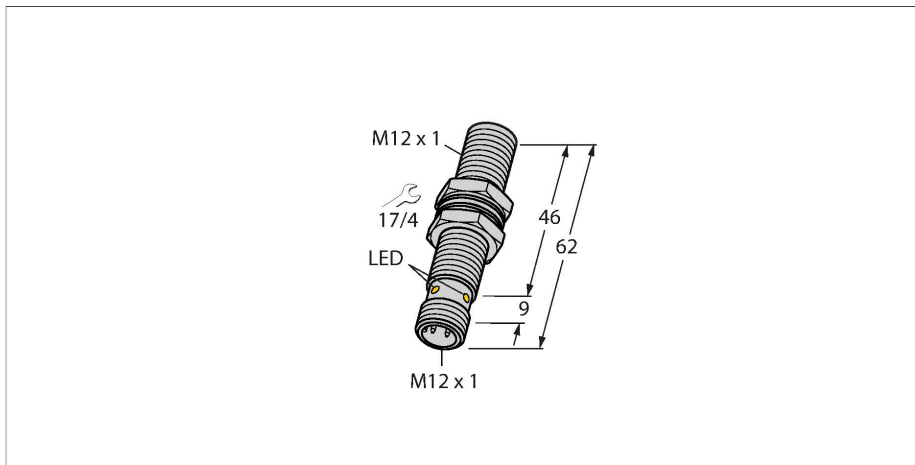


# TB-M12-H1147

## HF Read/Write Head



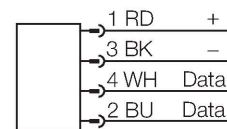
### Technical data

Type	TB-M12-H1147
ID	100003024
Approvals	CE FCC IC MIC UL
<b>Electrical data</b>	
Operating voltage	10...30 VDC
DC rated operational current	≤ 50 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.	17 mm
Output function	4-wire, Read/Write
<b>Mechanical data</b>	
Mounting conditions	Flush
Ambient temperature	-25...+70 °C
Design	Threaded barrel, M12 x 1
Dimensions	62 mm
Housing diameter	Ø 12 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Electrical connection	M12 × 1

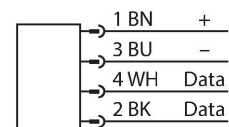
### Features

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

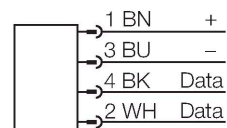
### .../S2503 Connectors



### .../S2500 Connectors



### .../S2501 Connectors



### Functional principle

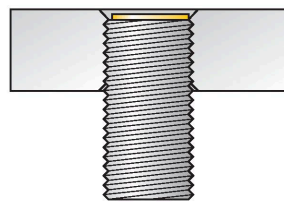
The HF read/write devices operating at a frequency of 13.56 MHz form a transmission zone, the size of which (0...500 mm) varies depending on the combination of read/write device and tag used.

## Technical data

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



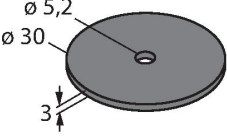
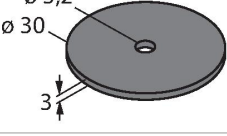
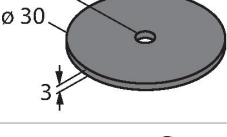
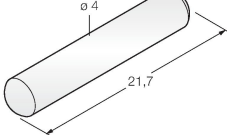
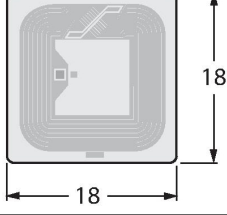
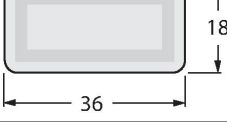
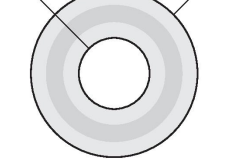
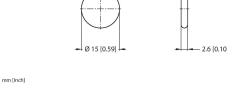
Diameter active area B Ø 12 mm

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 [mm]
		Recommended (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	
	<b>TW-R4-3-M-B320-10PCS</b> 100013771	1	2	4	2	36
	<b>TW-R7.5-B128</b> 7030231	5	10	8	4	36
	<b>TW-R9.5-B128</b> 7030252	5	11	5	2	36
	<b>TW-R9.5-K2</b> 7030558	5	10	10	5	36

	<b>TW-R10-M-B146</b> 7030545	3	6	9	4	36
	<b>TW-R10-M-K2</b> 100002368	3	6	9	4	36
	<b>TW-R12-M-B146</b> 7030500	3	6	9	4	36
	<b>TW-R16-B128</b> 6900501	0	0	0	0	36
	<b>TW-R16-K2</b> 7030410	0	0	0	0	36
	<b>TW-R20-B128</b> 6900502	5	11	16	8	36
	<b>TW-R20-B320</b> 100005244	0	0	0	0	36
	<b>TW-R20-K2</b> 6900505	5	12	16	8	36
	<b>TW-R30-B128</b> 6900503	7	15	22	11	36

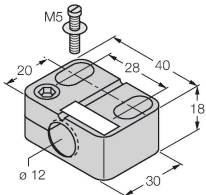
	<b>TW-R30-B320</b> 100005245	7	15	22	11	36
	<b>TW-R30-K2</b> 6900506	6	13	20	10	36
	<b>TW-R30-K9</b> 7030565	5	11	20	10	36
	<b>TW-R4-22-B128</b> 7030237	2	4	11	5	36
	<b>TW-L18-18-F-B128</b> 7030634	6	13	6	3	36
	<b>TW-L36-18-F-B320-100PCS</b> 100025059	6	13	32	16	36
	<b>TW-L40-P-B128-100PCS</b> 7030658	6	17	30	15	36
	<b>TW-R15-B320</b> 10004102	6	13	6	3	36

## Accessories

BST-12B

6947212

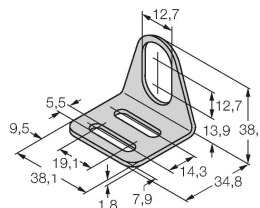
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



MW-12

6945003

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



BSS-12

6901321

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

