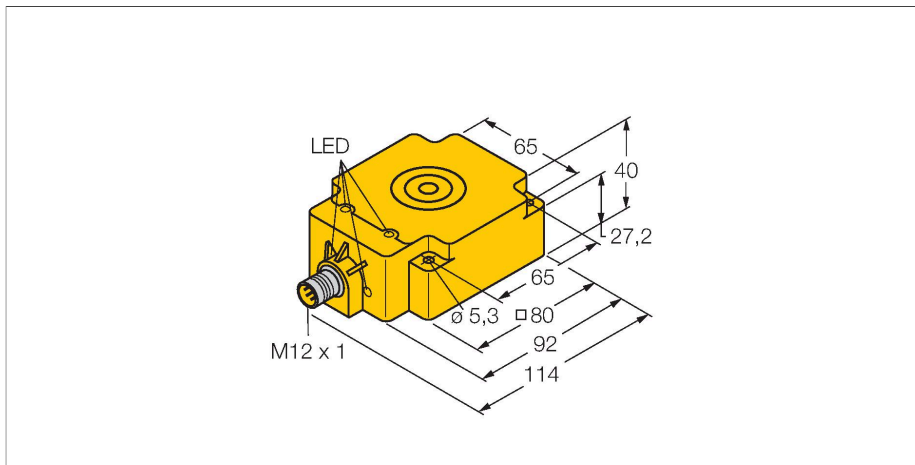


TN-Q80-H1147

HF Read/Write Head



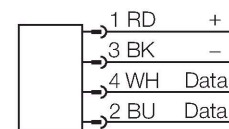
Technical data

Type	TN-Q80-H1147
ID	7030007
Approvals	CE UKCA UL
Radio approvals	EU/RED: Europe UK SI 2017/1206: United Kingdom FCC: USA IC: Canada RCM: Australia/New Zealand
Electrical data	
Operating voltage	10...30 VDC
DC rated operational current	≤ 80 mA
inrush current	1000 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.	146 mm
Output function	4-wire, Read/Write
Mechanical data	
Mounting conditions	Non-flush, partially embeddable
Ambient temperature	-25...+70 °C
Design	Rectangular, Q80
Dimensions	92 x 80 x 40 mm
Housing material	Plastic, PBT-GF30-V0, Yellow
Active area material	Plastic
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)

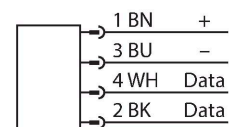
Features

- Rectangular, height 40 mm
- Active face on top
- Plastic, PBT-GF30-V0
- Powered and operated only via connection to BL ident interface module
- M12 x 1 connector, connection only via BL ident extension cable

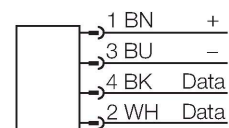
.../S2503 Connectors



.../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

Technical data

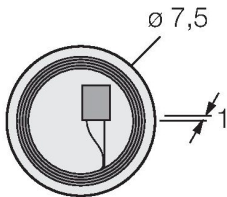
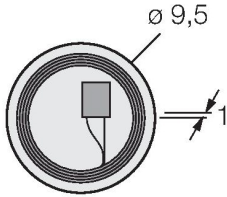
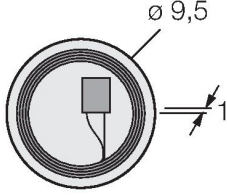
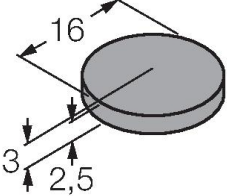
Protection class	IP67
MTTF	248 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Packaging unit	1

depending on the combination of read/write device and tag used.
 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!

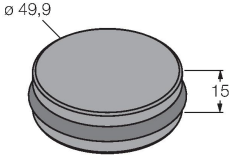
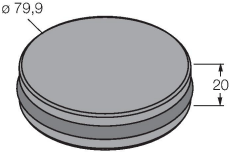
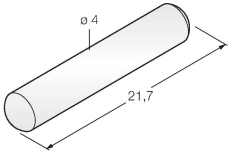
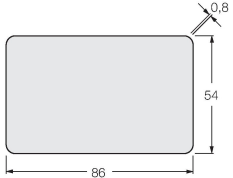
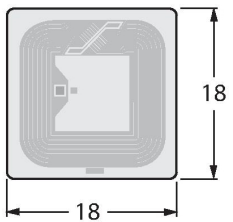
Mounting instructions/Description

Width active area 80 mm
 B

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]	
	TW-R7.5-B128 7030231	10	34	62	31	240
	TW-R9.5-B128 7030252	11	37	68	34	240
	TW-R9.5-K2 7030558	17	46	62	31	240
	TW-R16-B128 6900501	20	52	60	30	240

<p>∅ 20 2,8</p>	<p>TW-R20-B128 6900502</p>	35	65	72	36	240
<p>∅ 20 2,8</p>	<p>TW-R20-B320 100005244</p>	35	65	72		
<p>∅ 20 2,8</p>	<p>TW-R20-K2 6900505</p>	25	52	70	35	240
<p>∅ 5,2 ∅ 30 3</p>	<p>TW-R30-B128 6900503</p>	35	72	80	40	240
<p>∅ 5,2 ∅ 30 3</p>	<p>TW-R30-B320 100005245</p>	35	72	80	40	240
<p>∅ 5,2 ∅ 30 3</p>	<p>TW-R30-K2 6900506</p>	35	67	80	40	240
<p>∅ 5,2 ∅ 50 3,3</p>	<p>TW-R50-B128 6900504</p>	65	118	120	60	240
<p>∅ 5,2 ∅ 50 3,3</p>	<p>TW-R50-B320 100005246</p>	65	118	120	60	240
<p>∅ 5,2 ∅ 50 3,3</p>	<p>TW-R50-K2 6900507</p>	50	100	110	55	240
<p>M18 x 1 0,3 10</p>	<p>TW-SPP18X1-B128 6901062</p>					240
<p>∅ 49,9 15</p>	<p>TW-R50-M-B128 7030209</p>	25	53	66	33	240
<p>∅ 79,9 20</p>	<p>TW-R80-M-B128 7030207</p>	40	76	76	38	240

 <p>Technical drawing of a circular component with a diameter of $\varnothing 49,9$ and a thickness of 15.</p>	<p>TW-R50-M-K2 7030229</p>	15	41	58	38	240
 <p>Technical drawing of a circular component with a diameter of $\varnothing 79,9$ and a thickness of 20.</p>	<p>TW-R80-M-K2 7030205</p>	20	55	64	32	240
 <p>Technical drawing of a cylindrical component with a diameter of $\varnothing 4$ and a length of 21,7.</p>	<p>TW-R4-22-B128 7030237</p>	20	48	68	34	240
 <p>Technical drawing of a rectangular component with a width of 86, a height of 54, and a thickness of 0,8.</p>	<p>TW-L86-54-C-B128 6900479</p>	70	146	158	78	240
 <p>Technical drawing of a square component with a side length of 18.</p>	<p>TW-L18-18-F-B128 7030634</p>	35	71	78	39	240