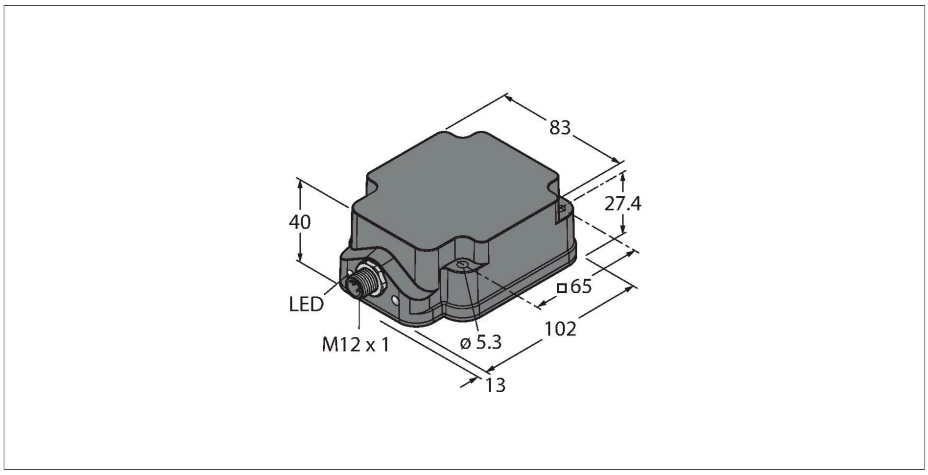
TNSLR-Q80WD-H1147
HF Read/Write Head



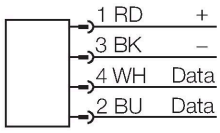
Technical data

Type	**TNSLR-Q80WD-H1147**
ID	7030418
Remark to product	Wash-Down (IP69K), very long range
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	19.2…28.8 VDC
DC rated operational current	≤ 90 mA
inrush current	1200 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.	280 mm
Output function	4-wire, Read/Write
Mechanical data	
Mounting conditions	Non-flush, partially embeddable
Ambient temperature	-25…+70 °C
Design	Rectangular, Q80WD
Dimensions	102 x 83 x 40 mm
Housing material	Plastic, Black
Active area material	Plastic, PPS-GF30, black
Vibration resistance	55 Hz (1 mm)

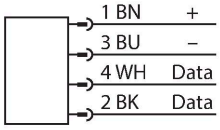
Features

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

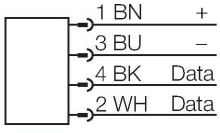
…/S2503 Connectors



…/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

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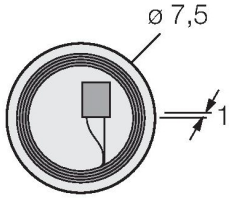
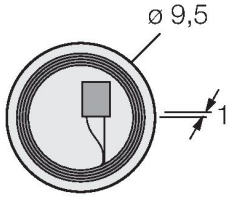
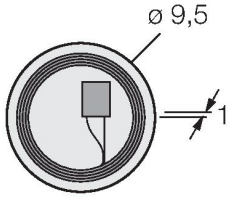
Technical data

Shock resistance	30 g (11 ms)
Protection class	IP68 IP69K
Electrical connection	M12 × 1
Power-on indication	LED, Green
Diagnostic display	Functional description of the orange range-restricted LED: If the read/write head is supplied with voltage, it briefly checks to see whether its resonance frequency is affected by surrounding metal. If this is the case, the resonant circuit off-tunes its frequency to reach again the (optimum) resonance frequency. However, this is only possible within a certain range. If too much metal is in the environment, the read/write head cannot re-tune or the surrounding metal takes too much energy from the field and due to the reduced range the communication between the read/write head and the tag (tag) is cut off (the orange range-restricted-LED lights up). If the LED is off, this does not mean conversely, that no reduction in range occurs. The lit LED is rather an indication of too much metal in the environment and a greatly reduced range (about 50% less).
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!

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]	[mm]
	**TW-R7.5-B128** 7030231	48	95	104	52	450
	**TW-R9.5-B128** 7030252	50	100	106	53	450
	**TW-R9.5-K2** 7030558	48	97	106	53	450

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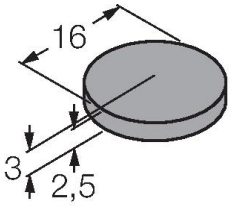
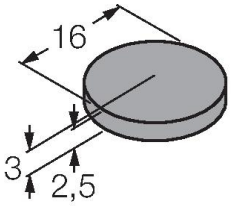
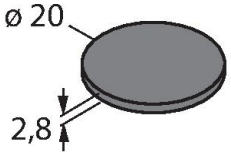
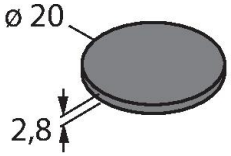
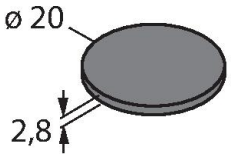
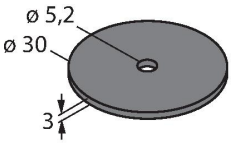
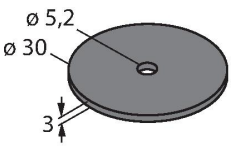
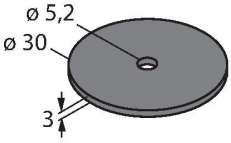
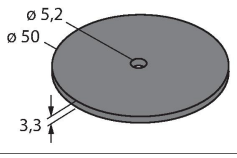
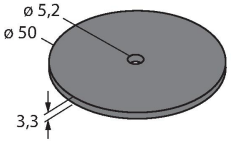
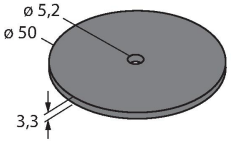
	**TW-R16-B128** 6900501	75	146	144	72	450
	**TW-R16-K2** 7030410	48	97	106	53	450
	**TW-R20-B128** 6900502	74	140	140	70	450
	**TW-R20-B320** 100005244	74	140	140	70	450
	**TW-R20-K2** 6900505	68	130	132	66	450
	**TW-R30-B128** 6900503	110	186	176	88	450
	**TW-R30-B320** 100005245	110	186	176	88	450
	**TW-R30-K2** 6900506	74	138	136	68	450
	**TW-R50-B128** 6900504	134	240	228	114	450
	**TW-R50-B320** 100005246	134	240	228	114	450
	**TW-R50-K2** 6900507	120	218	208	104	450

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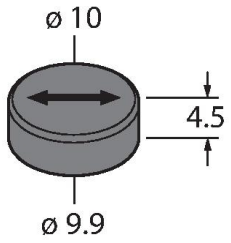
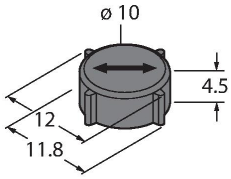
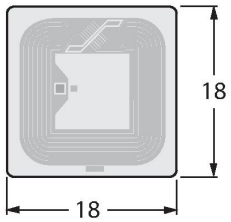
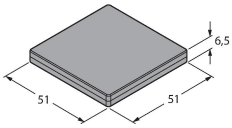
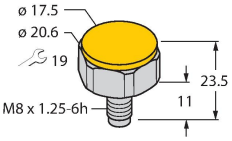
	**TW-R10-M-B146** 7030545	25	52	80	40	450
	**TW-R12-M-B146** 7030500	28	55	86	43	450
	**TW-L18-18-F-B128** 7030634	73	136	132	76	450
	**TW-Q51WH-HT-B128** 7030661	145	260	250	125	450
	**TW-BS8X1.25-19-K9/C55** 100000368	23	56	72	36	450

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