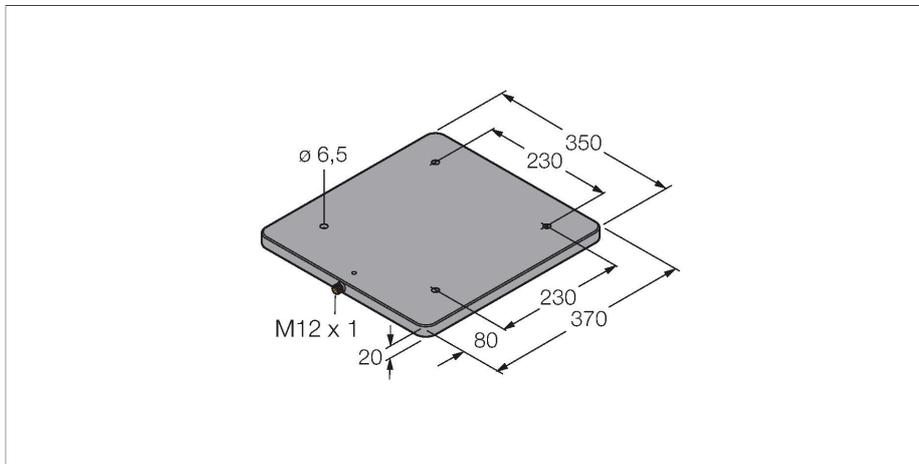


# TNSLR-Q350-H1147

## HF Read/Write Head



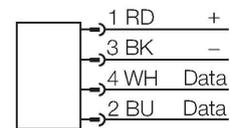
### Technical data

Type	TNSLR-Q350-H1147
ID	7030454
Remark to product	Very long ranges
Approvals	CE UKCA UL
Radio approvals	EU/RED: Europe UK SI 2017/1206: United Kingdom FCC: USA IC: Canada RCM: Australia/New Zealand
<b>Electrical data</b>	
Operating voltage	19.2...28.8 VDC
DC rated operational current	≤ 150 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.	794 mm
Output function	4-wire, Read/Write
<b>Mechanical data</b>	
Mounting conditions	Non-flush, partially embeddable
Ambient temperature	-25...+70 °C
Design	Rectangular, Q350
Dimensions	370 x 350 x 20 mm
Housing material	Plastic, PBT-GF30-V0, Black
Active area material	Plastic, black
Vibration resistance	55 Hz (1 mm)

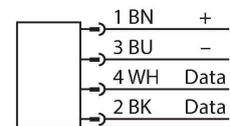
### Features

- Rectangular, 370x350 mm, height 20 mm
- Active face on top
- Plastic, PBT-GF30-V0
- Powered and operated only via connection to BL ident interface module
- M12 × 1 connector, connection only via BL ident extension cable

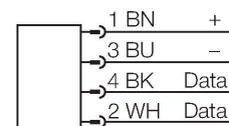
### .../S2503 Connectors



### .../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

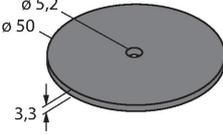
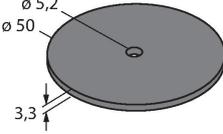
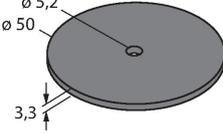
## Technical data

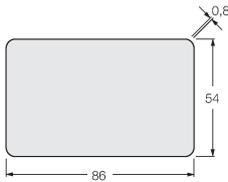
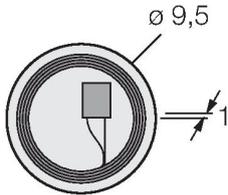
Shock resistance	30 g (11 ms)
Protection class	IP67
Electrical connection	M12 × 1
MTTF	121 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Diagnostic display	Functional description of the orange range-restricted LED: If the read/write head is supplied with voltage, it briefly checks 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!

## Mounting instructions/Description

Width active area 350 mm  
 B

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-R50-B128</b> 6900504	280	560	600	300	1110
	<b>TW-R50-B320</b> 100005246	280	560	600	300	1110
	<b>TW-R50-K2</b> 6900507	210	400	480	240	1110

	<p><b>TW-L86-54-C-B128</b> 6900479</p>	432	794	792	396	1110
	<p><b>TW-R9.5-K2</b> 7030558</p>	35	130	350	175	1110