





- Rectangular, height 40 mm
- Active face on top
- Plastic, PPS-GF30
- Powered and operated only via BL ident interface module
- Male M12 x 1, only for use with BL ident extension cable

Connectors .../S2503



Type code Ident no.	TNSLR-Q80WD-H1147 7030418			
Mounting conditions	non-flush			
Ambient temperature	-25+70 °C			
Operating voltage	19.228.8VDC			
DC rated operational current	≤ 90 mA			
Data transfer	inductive coupling			
Operating frequency	13.56 MHz			
Radio communication and protocol standards	ISO 15693			
Read/write distance max.	280 mm			
Output function	4-wire, read/write			

Connectors	/S2500
------------	--------

	1 BN	+
	3 BU	_
	4 WH	Data
	_,2 BK	Data
	_	

Construction
Dimensions
Housing material
Material active area

rectangular, Q80WD 102x 83x 40mm plastic, black plastic, PPS-GF30, Black

Connectors .../S2501

1 BN	+
_3 BU	_
4 BK	Data
2 WH	Data
J – J	

Connection

Vibration resistance Shock resistance IP Rating Power-on indication Diagnostic display male, M12 x 1 55 Hz (1 mm) 30 g (11 ms) IP68 / IP69K LED green

Functional description of yellow 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 data carrier 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).

Functional principle

The HF read/write heads 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 head and data carrier.

The read/write distances mentioned here only represent standard values measured under laboratory conditions.

The read/write distances of the data carriers 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 read/write on-the-fly!





Packaged quantity
Special features

1

Wash-Down (IP69K), very long range





Data carrier

Dimensions	Type designation	Read-write	Read-write distance		Transfer zone	
	ldent - no.	Recommend- ed (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	[mm]
07,5	TW-R7.5-B128 7030231	48	95	104	52	450
()-/1						
	TW-R9.5-B128	50	100	106	53	450
0 9,5	7030252 TW-R9.5-K2 7030558	48	97	106	53	450
16 🔨	TW-R16-B128 6900501 TW-R16-K2 7030410	75 48	146 97	144	72 53	450 450
3, 2,5	TW-R20-B128	74	140	140	70	450
	6900502	68	130	132	66	450
2.8	TW-R20-K2 6900505		100	102	00	450
	TW-R30-B128 6900503	110	186	176	88	450
o 5,2 o 30	TW-R30-K2 6900506	74	138	136	68	450





Data carrier

Dimensions	Type designation	Read-write	Read-write distance		Transfer zone	
	ldent - no.					
		Recommend- ed (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	[mm]
	TW-R50-B128	134	240	228	114	450
	6900504					
	TW-R50-K2	120	218	208	104	450
95,2 950 3,3	6900507					
	TM DEE 40 ME 1/2	70	140	68	34	450
	TW-R55-10-MF-K2 7030640	,,	110		0.1	100
05,2						
	TW-R10-M-B146	25	52	80	40	450
0 10 − 4.5 ↑	7030545					
	TW-R12-M-B146	28	55	86	43	450
0 10 4,5 11,8	7030500					
	TW-BS10X1.5-19-K2	30	50	68	34	450
© 17.5 © 20.5 \$\mathcal{Z}\$ 19	6901380					



