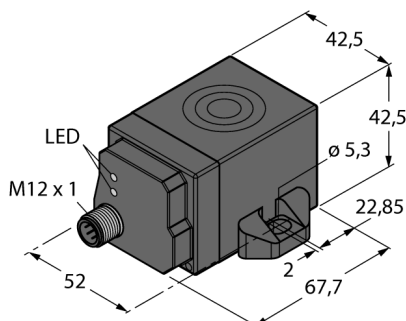
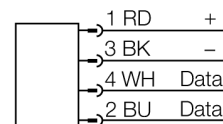
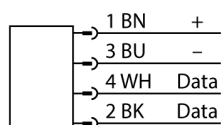




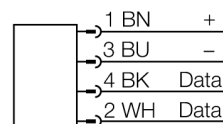
.../S2503 Connectors



Connector .../S2500



Connector .../S2501



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.

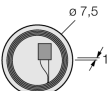
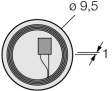
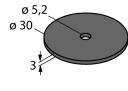
The read/write distances of the data carriers for mounting in metal TW-R**-M(MF) were determined in metal.

Attainable distances may vary by up to 30 % due to component tolerances, mounting conditions, ambient conditions and material qualities (especially when mounted in metal)

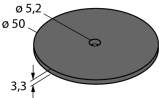
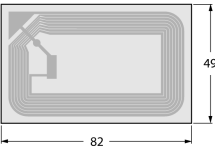
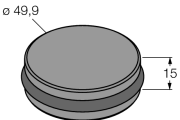
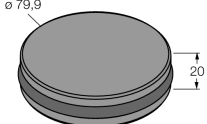
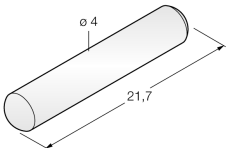
Testing of the application under real operating conditions is therefore essential, especially with read/write on-the-fly!

Type designation	TNSLR-Q42TWD-H1147/C53
Ident-No.	7030733
Remark to product	Wash-Down (IP69K), very long ranges
Electrical data	
Operating voltage	19.2...28.8 VDC
DC rated operational current	≤ 110 mA
inrush current	1200 mA For: 1 ms
Data transfer	Inductive coupling
Technology	HF (13.56 MHz)
Operating frequency	13.56 MHz
Radio communication and protocol standards	ISO 15693
Read/Write distance max.	215 mm
Output function	4-wire, Read/Write
Suitable for bus mode to TBEN-*	Yes
Interface	Connection only via Turck system components
Mechanical data	
Mounting conditions	Non-flush
Ambient temperature	-25...+70 °C
Design	Rectangular, Q42
Dimensions	67.7x 42.5x 42.5mm
Housing material	Plastic, PA12-GF30, Black
Active area material	Plastic, black
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68 / IP69K
Electrical connection	Connector, M12 × 1
MTTF	201 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Packaging unit	1

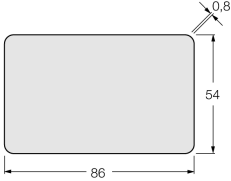
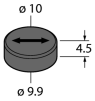
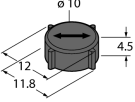
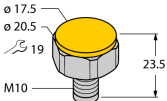
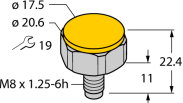
Data carrier

Dimensions	Type designation	Read-write distance		Transfer zone		Minimum distance between two read-write heads
	Ident - no.	Recommend-ed (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	[mm]
	TW-R7.5-B128 7030231	20	41	60	30	240
	TW-R9.5-B128 7030252	22	45	66	33	240
	TW-R9.5-K2 7030558	36	70	74	37	240
	TW-R16-B128 6900501	50	85	90	45	240
	TW-R20-B128 6900502	50	88	92	47	240
	TW-R20-K2 6900505	40	75	84	42	240
	TW-R30-B128 6900503	60	115	116	58	240
	TW-R30-K2 6900506	60	98	104	52	240

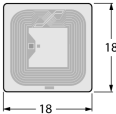
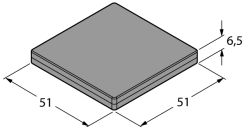
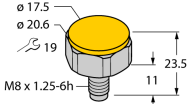
Data carrier

Dimensions	Type designation	Read-write distance		Transfer zone		Minimum distance between two read-write heads
	Ident - no.	Recommend-ed (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	[mm]
	TW-R50-B128 6900504	80	165	168	84	240
	TW-R50-K2 6900507	90	144	150	75	240
	TW-L80-50-P-B128 7030389	76	142	144	72	240
	TW-R50-M-B128 7030209	35	58	64	32	240
	TW-R50-M-K2 7030229	30	58	76	38	240
	TW-R80-M-B128 7030207	50	90	90	45	240
	TW-R80-M-K2 7030205	35	78	80	40	240
	TW-R4-22-B128 7030237	40	73	86	43	240

Data carrier

Dimensions	Type designation	Read-write distance		Transfer zone		Minimum distance between two read-write heads
	Ident - no.	Recommend-ed (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	[mm]
	TW-L86-54-C-B128 6900479	120	215	214	107	240
	TW-R10-M-B146 7030545	20	42	75	37	240
	TW-R12-M-B146 7030500	22	44	77	38	240
	TW-BS10X1.5-19-K2 6901380	20	42	44	22	240
	TW-BS8X1.25-19-K2 7030638	20	42	44	22	240

Data carrier

Dimensions	Type designation	Read-write distance		Transfer zone		Minimum distance between two read-write heads
	Ident - no.	Recommend- ed (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	[mm]
	TW-L18-18-F-B128 7030634	55	103	100	50	240
	TW-Q51WH-HT-B128 7030661	108	194	192	96	240
	TW-BS8X1.25-19-K9/C55 100000368	23	45	46	23	240

Mounting instructions**Width active area B**

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This figure illustrates an example of operating a read/write head in a compact multiprotocol I/O module TBEN-S*-2RFID-* or TBEN-L*-4RFID-* in a line topology

Accessories

Type code	Ident-No.	Description	Dimension drawing
RSE57-TR2/RFID	6934908	Terminating resistor to build an RFID line topology	
VT2-FKM5-FKM5-FSM5	6930573	T-splitter to build an RFID line topology	
VB2-FKM5-FSM5.205-FSM5.305/S2550	6936821	Y-splitter for re-powering a supply voltage for the RFID bus topology	
RK4.5T-2-RS4.5T/S2503	7030331	RFID cable	