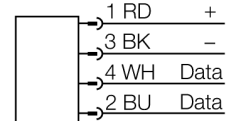
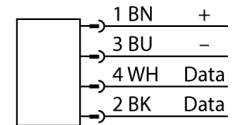


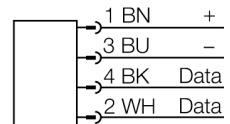
.../S2503 Connectors



Connector .../S2500



Connector .../S2501



Type designation	TN-Q14-0.15-RS4.47T/C53
Ident-No.	7030779
Remark to product	Flat design
Electrical data	
Operating voltage	10...30 VDC
DC rated operational current	≤ 35 mA
inrush current	700 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.	72 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, Q14
Dimensions	56x 30x 14mm
Housing material	Plastic, PBT-GF30-V0, Yellow
Active area material	Plastic, PBT-GF30-V0, yellow
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Electrical connection	Connector, M12 × 1
MTTF	391 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED,Green
Packaging unit	1

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.

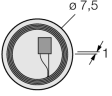
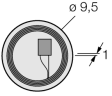


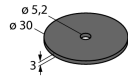
The read/write distances mentioned here only represent standard values measured under laboratory conditions.

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

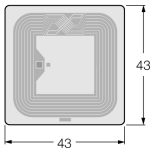
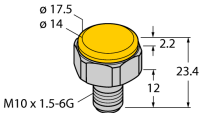
Attainable distances may vary by up to 30 % due to component tolerances, mounting conditions, ambient conditions and material qualities (especially when mounted in metal)

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

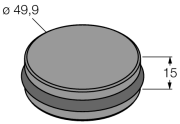
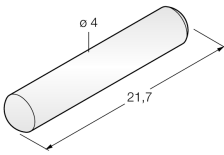
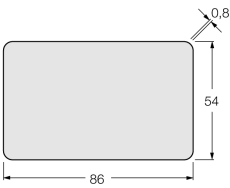
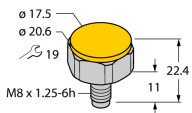
Data carrier

Dimensions	Type designation Ident - no.	Read-write distance		Transfer zone		Minimum distance between two read-write heads [mm]
		Recommend- ed (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	
	TW-R7.5-B128 7030231	10	30	28	14	90
	TW-R9.5-B128 7030252 TW-R9.5-K2 7030558	11	33	31	15	90
	TW-R16-B128 6900501	20	38	44	22	90
	TW-R20-B128 6900502 TW-R20-K2 6900505	22	40	34	17	90
	TW-R30-B128 6900503 TW-R30-K2 6900506	22	43	56	28	90
		23	42	50	25	90

Data carrier

Dimensions	Type designation Ident - no.	Read-write distance		Transfer zone		Minimum distance between two read-write heads [mm]
		Recommend- ed (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	
	TW-R50-B128 6900504 TW-R50-K2 6900507	40 30	72 58	76 76	38 38	90 90
	TW-L49-46-F-B128 7030390	25	54	57	28	90
	TW-L80-50-P-B128 7030389	25	55	71	35	90
	TW-BS10X1.5-19-K2 6901380 TW-BD10X1.5-19-B128 6901381	7 14	18 29	24 30	12 15	90 90
	TW-SPP18X1-B128 6901062	10	24	34	17	90
						

Data carrier

Dimensions	Type designation Ident - no.	Read-write distance		Transfer zone		Minimum distance between two read-write heads [mm]
		Recommend-ed (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	
	TW-R50-M-B128 7030209	20	36	34	17	90
	TW-R50-M-K2 7030229	15	30	32	16	90
	TW-R4-22-B128 7030237	10	28	38	18	90
	TW-L86-54-C-B128 6900479	30	77	92	46	90
	TW-L18-18-F-B128 7030634	19	38	40	20	90
	TW-BS8x1.25-19-K2 7030638	7	18	24	12	90

Mounting instructions**Width active area B** 30

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

