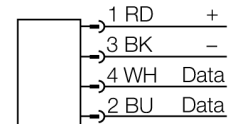
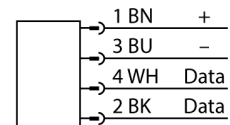


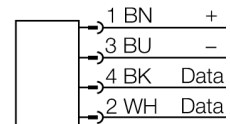
.../S2503 Connectors



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.

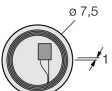
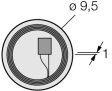
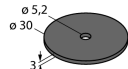
The read/write distances of the data carriers for mounting in metal TW-R**-M(MF) were determined in metal.

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

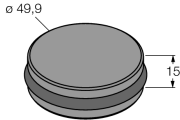
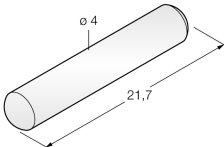
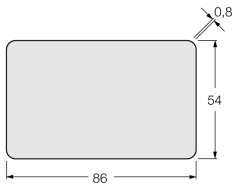
Testing of the application under real operating conditions is therefore essential, especially with read/write on-the-fly!

Type designation	TB-EM18WD-H1147
Ident-No.	7030224
Remark to product	Wash-Down (IP69K)
Electrical data	
Operating voltage	10...30 VDC
DC rated operational current	≤ 80 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.	30 mm
Output function	4-wire, Read/Write
Interface	Connection only via Turck system components
Mechanical data	
Mounting conditions	Flush
Ambient temperature	-25...+70 °C
Design	Threaded barrel, M18 × 1
Dimensions	72 mm
Housing diameter	18 mm
Housing material	Stainless steel, V4A (1.4404)
Active area material	Plastic, LCP
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68 / IP69K
Electrical connection	Connector, M12 × 1
MTTF	391 years acc. to SN 29500 (Ed. 99) 20 °C
Power-on indication	LED, Green
Packaging unit	1

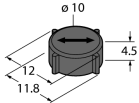
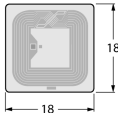
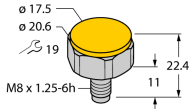
Data carrier

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	8	14	16	8	54
	TW-R9.5-B128 7030252	9	15	18	9	54
	TW-R9.5-K2 7030558	5	13	12	6	54
	TW-R16-B128 6900501	10	17	14	7	54
	TW-R20-B128 6900502	8	15	12	6	54
	TW-R20-B320 100005244	8	15	12	6	54
	TW-R20-K2 6900505	5	12	16	8	54
	TW-R30-B128 6900503	8	17	22	11	54
	TW-R30-B320 100005245	8	17	22	11	54
	TW-R30-K2 6900506	6	14	18	9	54

Data carrier

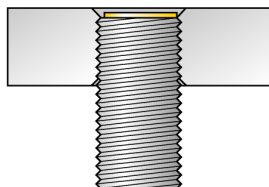
Dimensions	Type designation	Read-write distance		Transfer zone		Minimum distance between two read-write heads
	Ident - no.	Recommend-ed (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	[mm]
	TW-R30-M-B128 7030210	8	12	16	8	54
	TW-R30-M-K2 7030206	7	10	18	9	54
	TW-R50-M-B128 7030209	8	18	22	11	54
	TW-R50-M-K2 7030229	7	15	24	12	54
	TW-R4-22-B128 7030237	3	9	12	6	54
	TW-L86-54-C-B128 6900479	10	21	70	35	54
	TW-R10-M-B146 7030545	5	7	7	3	54
	TW-R10-M-K2 100002368	5	7	7	3	54

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-R12-M-B146 7030500	5	7	7	3	54
	TW-L18-18-F-B128 7030634	8	16	16	8	54
	TW-BS8x1.25-19-K2 7030638	5	10	13	6	54

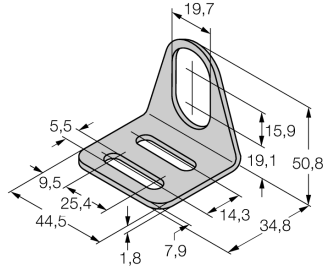
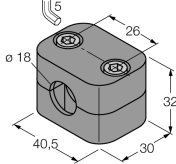
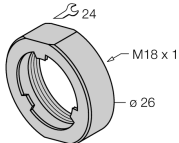
Mounting instructions

Diameter active area B	Ø 18
Width active area B	18



flush mounting

Accessories

Type code	Ident-No.	Description	Dimension drawing
MW-18	6945004	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	 A 3D perspective drawing of a mounting bracket. It has a base plate with a central slot and a vertical support arm. Dimensions are: 19.7 (width of support arm), 15.9 (height of support arm), 50.8 (total height), 19.1 (width of base plate), 34.8 (depth of base plate), 14.3 (width of base plate at bottom), 7.9 (height of base plate at bottom), 1.8 (thickness of base plate), 25.4 (width of central slot), 9.5 (height of central slot), 44.5 (total width of base plate), 5.5 (width of support arm at top), 9.5 (width of support arm at base).
BSS-18	6901320	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	 A 3D perspective drawing of a mounting clamp. It is a rectangular block with a central slot. Dimensions are: 26 (width of top surface), 32 (height), 30 (width of bottom surface), 40.5 (total width), 18 (width of central slot), 5 (height of central slot).
PN-M18	6905310	Protective nut for M18 x 1 threaded barrels; material: Stainless steel A2 1.4305 (AISI 303)	 A 3D perspective drawing of a protective nut. It is a ring-shaped component. Dimensions are: 24 (width), M18 x 1 (thread specification), 26 (outer diameter, labeled as ø 26).