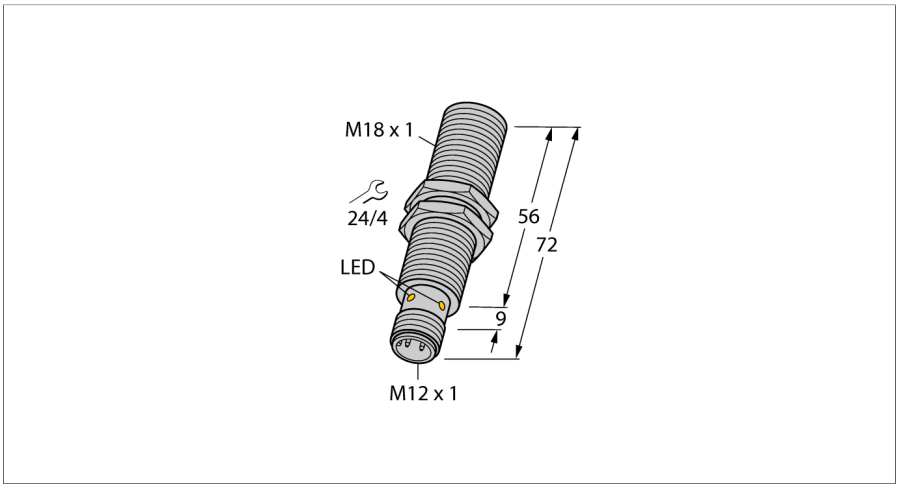
Read/Write Head for Bus Line Topology with TBEN-*
TB-M18-H1147/C53



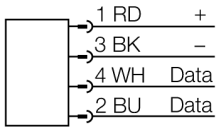
Type designation	TB-M18-H1147/C53
Ident-No.	7030729

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
Suitable for bus mode to TBEN-*.	Yes
Interface	Connection only via Turck system components

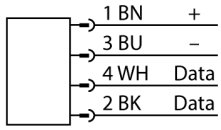
Mechanical data	
Mounting conditions	Flush
Ambient temperature	-25…+70 °C
Design	Threaded barrel, M18 × 1
Dimensions	72 mm
Housing diameter	18 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Electrical connection	Connector, M12 × 1
MTTF	391 years acc. to SN 29500 (Ed. 99) 20 °C
Power-on indication	LED,Green

Packaging unit	1

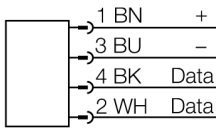
…/S2503 Connectors



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.

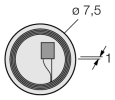
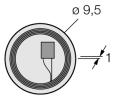
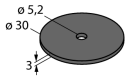
Attainable distances may vary by up to 30 % due to component tolerances, mounting conditions, ambient conditions and material qualities (especially when mounted in metal)

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

Edition • 2020-01-31T05:07:01+01:00

Read/Write Head for Bus Line Topology with TBEN-*
TB-M18-H1147/C53

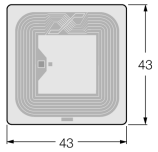
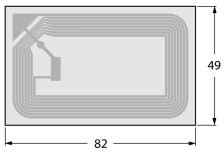
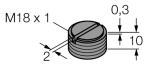
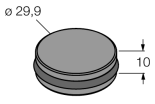
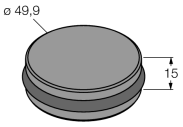
Data carrier

Dimensions	Type designation Ident - no.	Read-write distance Recommend-ed (mm)	 max. [mm]	Transfer zone length max. [mm]	 width offset max. [mm]	Minimum dis-tance between two read-write heads [mm]
	**TW-R7.5-B128** 7030231	8	14	16	8	54
	**TW-R9.5-B128** 7030252	9	15	18	9	54
	**TW-R16-B128** 6900501	10	17	14	7	54
	**TW-R20-B128** 6900502	8	15	12	6	54
	**TW-R30-B128** 6900503	8	17	22	11	54

Edition • 2020-01-31T05:07:01+01:00

Read/Write Head for Bus Line Topology with TBEN-*
TB-M18-H1147/C53

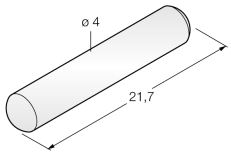
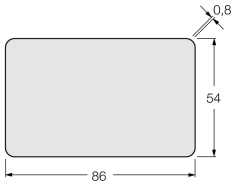
Data carrier

Dimensions	Type designation	Read-write distance		Transfer zone		Minimum distance between two read-write heads
	Ident - no.	Recommended (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	[mm]
	**TW-L49-46-F-B128** 7030390	12	25	29	14	54
	**TW-L80-50-P-B128** 6901345	12	20	54	27	54
	**TW-SPP18x1-B128** 6901062	5	11	14	7	54
	**TW-R30-M-B128** 7030210	8	12	16	8	54
	**TW-R50-M-B128** 7030209	8	18	22	11	54

Edition • 2020-01-31T05:07:01+01:00

Read/Write Head for Bus Line Topology with TBEN-*
TB-M18-H1147/C53

Data carrier

Dimensions	Type designation	Read-write distance		Transfer zone		Minimum distance between two read-write heads
	Ident - no.	Recommended (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	[mm]
	**TW-R4-22-B128** 7030237	3	9	12	6	54
	**TW-L86-54-C-B128** 6900479	10	21	70	35	54

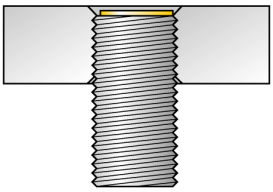
Edition • 2020-01-31T05:07:01+01:00

Read/Write Head for Bus Line Topology with TBEN-*
TB-M18-H1147/C53

Mounting instructions

Diameter active area B	Ø 18
Width active area B	18

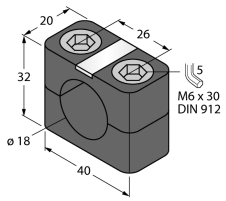
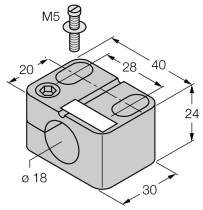
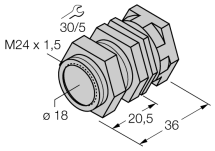
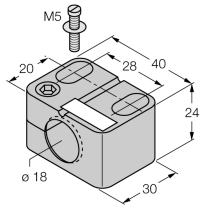
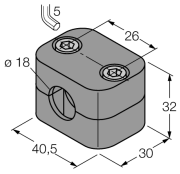
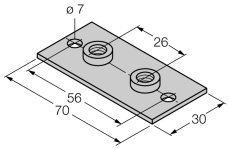
flush mounting



Edition • 2020-01-31T05:07:01+01:00

Read/Write Head for Bus Line Topology with TBEN-*
TB-M18-H1147/C53

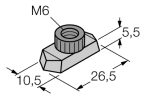
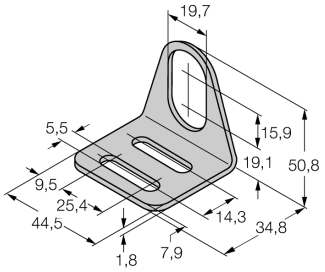
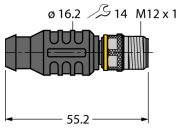
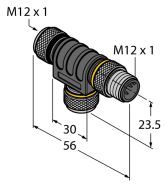
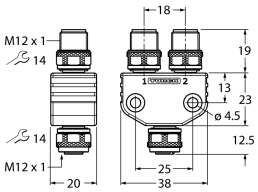
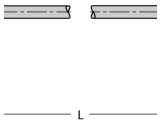
Accessories

Type code	Ident-No.	Description	Dimension drawing
BSN 18	69472	Mounting clamp for threaded barrel sensors; material: PA66-GF	
BST-18N	6947215	Mounting clamp for threaded barrel sensors, without dead-stop; material: PA6	
QM-18	6945102	Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M24 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.	
BST-18B	6947214	Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6	
BSS-18	6901320	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	
BSS-SPV2	6901316	Weld-on plate for BSS mounting brackets	

Edition • 2020-01-31T05:07:01+01:00

Read/Write Head for Bus Line Topology with TBEN-*
TB-M18-H1147/C53

Accessories

Type code	Ident-No.	Description	Dimension drawing
BSS-TSM 2 pcs	6901323	DIN rail nut for BSS mounting clamps, for mounting on DIN rails	
MW-18	6945004	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	
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	

Edition • 2020-01-31T05:07:01+01:00