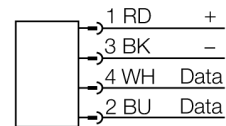
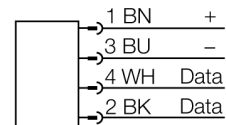


- Threaded barrel, M18 x 1
- Stainless steel 1.4404
- Front cap made of liquid crystal polymer Vectra C130
- High protection class IP69K, for harsh environments
- Special double-lip seal
- Protection against all common acid and alkaline cleaning agents
- For the food industry
- Laser engraved label, permanently legible
- Powered and operated only via BL ident interface module
- Male M12 x 1, only for use with BL ident extension cable

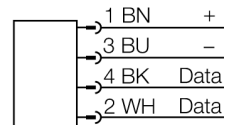
Connectors .../S2503



Connectors .../S2500



Connectors .../S2501



Type code	TB-EM18WD-H1147-Ex
Ident no.	7030381
Mounting conditions	flush
Ambient temperature	-25...+70 °C in the explosion hazardous area see instruction leaflet
Storage temperature	in the explosion hazardous area see instruction leaflet
Device designation	Ⓔ II 3G Ex nA II T4 Gc II 3D Ex t IIIB T135°C Dc TURCK Ex-10005M X
Approval acc. to	
Operating voltage	10...30VDC
DC rated operational current	≤ 80 mA
Data transfer	inductive coupling
Operating frequency	13.56 MHz
Radio communication and protocol standards	ISO 15693
Read/write distance max.	30 mm
Output function	4-wire, read/write
Construction	threaded barrel, M18 x 1
Dimensions	72
Housing diameter	18 mm
Housing material	stainless steel, V4A (1.4404)
Material active area	plastic, LCP
Connection	male, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
IP Rating	IP68 / IP69K
MTTF	391 years acc. to SN 29500 (Ed. 99) 20 °C
Power-on indication	LED green
Packaged quantity	1
Special features	ATEX

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.



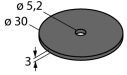
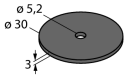
The read/write distances mentioned here only represent standard values measured under laboratory conditions.

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)

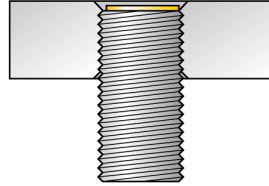
Testing of the application under real operating conditions is therefore essential, especially with read/write on-the-fly!

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-R16-B128-EX 7030241	10	17	14	7	54
	TW-R20-B128-EX 7030242	8	15	12	6	54
	TW-R20-K2-EX 7030245	5	12	16	8	54
	TW-R30-B128-EX 7030243	8	17	22	11	54
	TW-R30-K2-EX 7030246	6	14	18	9	54

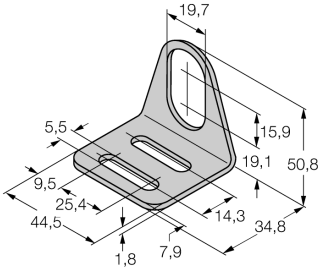
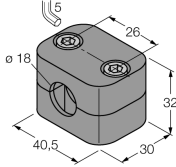
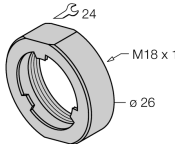
Mounting instructions

Diameter of the active area B	Ø 18
Width of the active face B	18



flush mounting

Accessories

Type code	Ident no.	Description	Design
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	
PN-M18	6905310	Protective nut for M18 x 1 threaded barrels; material: Stainless steel A2 1.4305 (AISI 303)	

Operating manual

Intended use

This device fulfills the directive 94/9/EC and is suited for use in explosion hazardous areas according to EN60079-0, -15 and -31.

For use in explosion hazardous areas conform to classification

II 3 G and II 3 D (Group II, Category 3 G, electrical equipment for gaseous atmospheres and category 3 D, electrical equipment for dust atmospheres).

Marking (see device or technical data sheet)

⊕ II 3G and Ex nA II T4 Gc acc. to EN60079-0:2009 and EN60079-15:2005 and ⊕ II 3D Ex t IIIB T135°C Dc acc. to EN60079-31:2009

Local admissible ambient temperature

-25...+70 °C

Installation / Commissioning

These devices may only be installed, connected and operated by trained and qualified staff. Qualified staff must have knowledge of protection classes, directives and regulations concerning electrical equipment designed for use in explosion hazardous areas and if necessary, of the regulations applicable to safety-related systems.

Please verify that the classification and the marking on the device comply with the actual application conditions.

Installation and mounting instructions

Concerning applications of the category 3D, dust must not be conductive.

Special conditions for safe operation

Special conditions indicated with the X in the approval should be observed to ensure safe operation.

Do not connect or disconnect the plug connection or cable in energized state. When used in dust explosive hazardous areas, the plug connection has to be secured with a safety clip being only removable with a tool.

Please attach a warning label permanently in an appropriate fashion in close proximity to the plug-in connection with the following inscription:

Nicht unter Spannung trennen / Do not separate when energized.

The device must be protected against any kind of mechanical damage.

The read/write head should be protected against ultraviolet light. External measures against temporary interferences have to be undertaken, to protect the supply voltage against an excess of rated voltage by 40%.

service / maintenance

Repairs are not possible. The approval expires if the device is repaired or modified by a person other than the manufacturer. The most important data from the approval are listed.