

■ FRAM memory 2 kbyte

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 and free from any influences caused by materials.

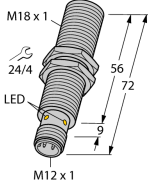
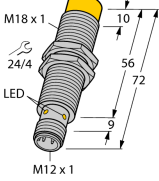
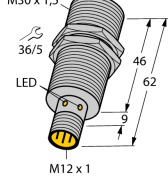
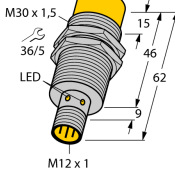
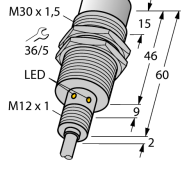
The read/write distances of data carriers suitable for mounting in/on metal were determined in/on metal.

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

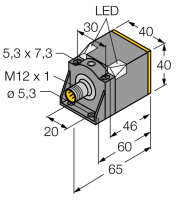
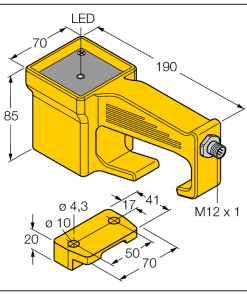
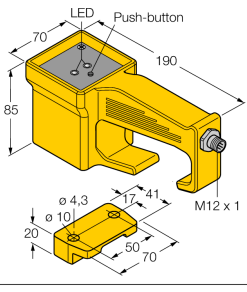
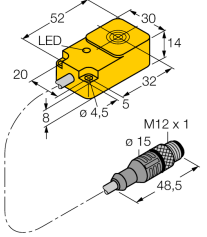
Testing of the application under real operating conditions is therefore essential, especially with read/write on-the-fly!

Type code	TW-BD10X1.5-19-K2
Ident no.	6901381
Data transfer	inductive coupling
Operating frequency	13.56 MHz
Memory type	FRAM
Chip	Fujitsu MB89R118
Memory	2048 byte
Memory	read/write
Freely usable memory	2000 byte
Number of read operations	unlimited
Number of write operations	10 ⁶
Typical read time	0.5 ms/byte
Typical write time	0.5 ms/byte
Radio communication and protocol standards	ISO 15693
Minimum distance to metal	Data carrier can be screwed in metal.
Ambient temperature	-25...+85 °C
Storage temperature	-45...+85 °C
Design	BD10x1.5
Housing material	Plastic, POM
Material active face	Plastic, yellow, POM
Protection class	IP68
Packaged quantity	1
Special features	data carrier, can be screwed in metal

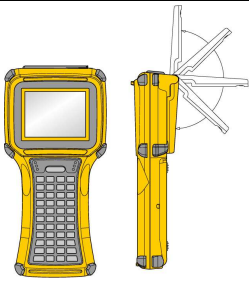
Read/write heads

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]
	TB-M18-H1147 7030001	6	14	16	8	54
	TB-EM18WD-H1147 7030224	6	14	16	8	54
	TN-M18-H1147 7030002	8	17	22	11	54
	TN-EM18WD-H1147 7030223	8	17	22	11	54
	TB-M30-H1147 7030003	10	20	22	11	90
	TB-EM30WD-H1147 7030221	10	20	22	11	90
	TN-M30-H1147 7030004	14	29	30	15	90
	TN-EM30WD-H1147 7030222	14	29	30	15	90
	TN-M30-0.15-RS4.47T 7030444	14	29	30	15	90

Read/write heads

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]
	TN-CK40-H1147 7030006	20	39	44	22	120
	HT-IDENT-H1147 7030236	20	39	44	22	120
	HT-IDENT-H1187 7030238	20	39	44	22	120
	TN-Q14-0.15-RS4.47T 7030235 Q14-R/W-OPEN-PCB/C37 7030445	14 14	29 29	30 30	15 15	90 90

Compatible handhelds

	PD-IDENT 1542331 Handheld for mobile reading and writing on data carriers.
	PDA-IDENT 1542344 The handheld can be used with two different antennas. Internal antenna, PDA-IDENT-IA, 1542345 External antenna, PDA-IDENT-EA, 1542346