

■ FRAM memory 2 kB

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.

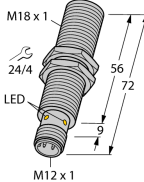
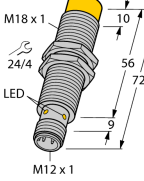
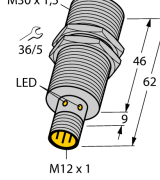
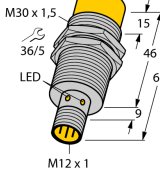
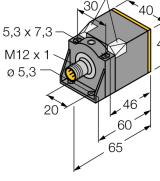
The read/write distances of data carriers suitable for mounting in/on metal were determined in/on metal.

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-R30-K2
Ident no.	6900506
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	10 mm
Ambient temperature	-25...+85 °C
Storage temperature	-45...+85 °C 140 °C, 1x100 h
Construction	R30
Diameter	30 mm +/- 0.5 mm
Internal diameter	5.2 mm +/- 0.3 mm
Housing height	3 mm +/- 0.5 mm
Housing material	plastic, PA
Material active area	plastic, Black, PA
IP Rating	IP69K
Packaged quantity	1

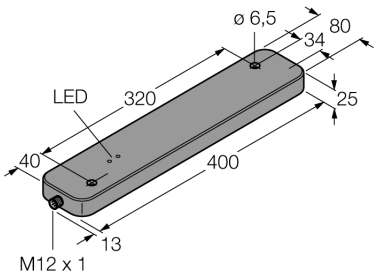
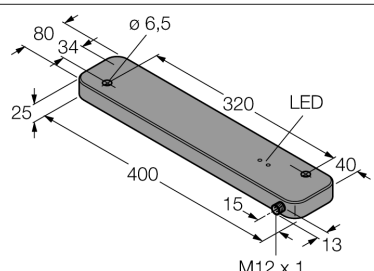
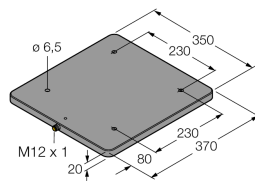
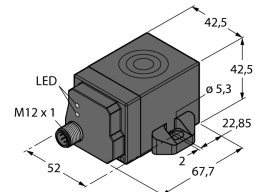
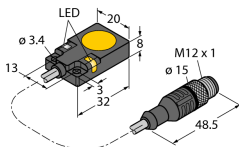
Read/write heads

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	18	9	54
	TB-EM18WD-H1147 7030224	6	14	18	9	54
	TN-M18-H1147 7030002	16	31	32	16	54
	TN-EM18WD-H1147 7030223	16	31	32	16	54
	TB-M30-H1147 7030003	15	27	32	16	90
	TB-EM30WD-H1147 7030221	15	27	32	16	90
	TN-M30-H1147 7030004	23	42	50	25	90
	TN-EM30WD-H1147 7030222	23	42	50	25	90
	TN-CK40-H1147 7030006	30	55	56	28	120

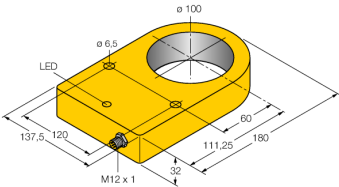
Read/write heads

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]
	HT-IDENT-H1147 7030236	30	55	56	28	120
	HT-IDENT-H1187 7030238	30	55	56	28	120
	TN-Q14-0.15-RS4.47T 7030235	23	42	50	25	90
	TN-Q80-H1147 7030007 TNLR-Q80-H1147 7030230	35 60	67 98	80 104	40 52	240 240
	TNSLR-Q80WD-H1147 7030418	74	138	136	68	450

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]
	TNLR-Q80L400-H1147 7030204Lengthwise	50	122	416	50	240
	TNLR-Q80L400-H1147 7030204	70	122	100	208	240
	TNLR-Q80L400-H1147L 7030234	70	122	100	208	240
	TNLR-Q80L400-H1147L 7030234Lengthwise	50	122	416	50	240
	TNLR-Q350-H1147 7030220	100	250	380	190	1110
	TNSLR-Q42TWD-H1147 7030424	60	98	104	52	240
	TB-Q08-0.15-RS4.47T 7030553	6	14	18	9	54

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-S32XL-H1147 7030008	30	82	132	66	420

Compatible handhelds

	PD-IDENT-HF-RWBTA (7030601) Handheld for mobile reading and writing to data carriers. Equipped with WLAN 802.11a/b/g/n and Bluetooth; incl. docking station with power supply, USB cable, and TURCK RFID Software TA-HF.
	PD-IDENT-HF-S2D-RWBTA (7030602) Handheld for mobile reading and writing to data carriers. Equipped with WLAN 802.11a/b/g/n, Bluetooth and 2 D barcode scanner; incl. pistol grip, docking station with power supply, USB cable, and TURCK RFID software TA-HF.
	PD-IDENT-HF-L1D-RBUP-SMART (7030564) Handheld for mobile reading and writing to data carriers. Keyboard functions (HID) for wireless transmission of data via Bluetooth (also to IOS devices) or USB. Barcode 1 D laser scanner and only three buttons for ease of use.

Accessories

Type code	Ident no.	Description	Design
DS-R30	6900512	Spacer for indirect mounting of data carriers on metal.	