
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!

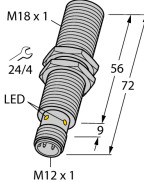
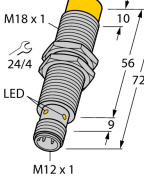
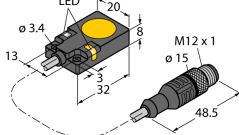
Type designation	TW-R30-M-K2
Ident-No.	7030206
Type	TW-R30-M-K2
Ident. no.	7030206
Data transfer	Inductive coupling
Operating frequency	13.56 MHz
Memory type	FRAM
Chip	Fujitsu MB89R118
Memory	2048 Byte
Memory	Read/Write
Freely usable memory	2000 Byte
Number of read operations	unlimited
Number of write operations	10 ¹⁰
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	0 mm
Temperature of data carrier during read/write access	-25...+85 °C
Temperature of data carrier outside detection range	85
	140, 1x100 h

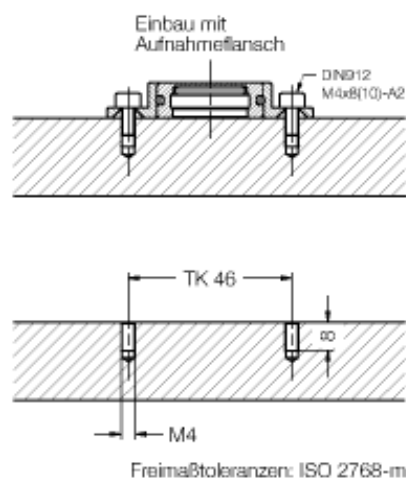
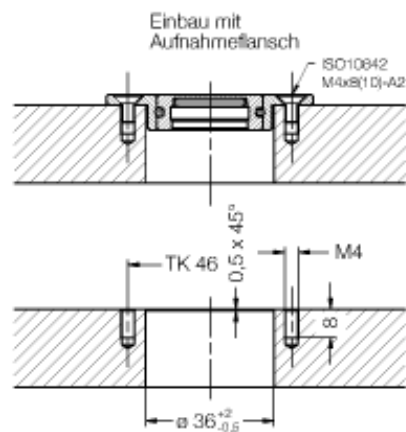
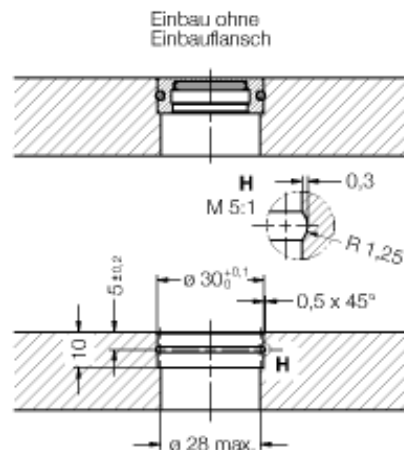
Design	Hard tag, R30
Diameter	30 mm
Housing material	PET
Active area material	Plastic, PET, black
Protection class	IP68

Packaging unit	1
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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	7	10	18	9	54
	TB-EM18WD-H1147 7030224	7	10	18	9	54
	TN-M18-H1147 7030002	6	13	10	5	54
	TN-EM18WD-H1147 7030223	6	13	10	5	54
	TN-M18-H1147/C53 7030728	6	13	10	5	54
	TB-Q08-0.15-RS4.47T 7030553	7	10	18	9	54
	TB-Q08-0.15-RS4.47T/C53 7030778	7	10	18	9	54
	TB-Q08-0.22-RS4.47T 100004092	7	10	18	9	54
	TB-Q08-0.15-RS4.47T/C43 7030675	7	10	18	9	54

Mounting instructions



These data carriers can be mounted in 3 different ways:

1. Directly potted or glued in metal (without O-ring)
2. Installed in metal with O-ring (fixed with 2 screws)
3. Mounted upside down on metal (fixed with 2 screws)

Accessories

Type code	Ident-No.	Description	Dimension drawing
MF-R30	6901150	The flange facilitates mounting of the data carrier TW-R30-M-B128 (-K2) on or in the metal.	