

- The high-temperature data carriers must undergo adequate stress tests within the proposed temperature range before deployment. Otherwise, their durability cannot be guaranteed when exposed to temperatures outside the denoted range.
- EEPROM, memory 128 byte

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.

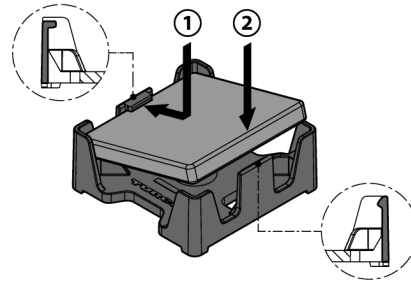
The read/write distances mentioned here only represent standard values measured under laboratory conditions and free from any influences caused by materials.

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-Q51-HT-B128
Ident no.	7030364
Data transfer	inductive coupling
Operating frequency	13.56 MHz
Memory type	EEPROM
Chip	NXP I-Code SLI/SL2
Memory	128 byte
Memory	read/write
Freely usable memory	112 byte
Number of read operations	unlimited
Number of write operations	10 ⁵
Typical read time	2 ms/byte
Typical write time	3 ms/byte
Radio communication and protocol standards	ISO 15693
Minimum distance to metal	10 mm
Ambient temperature	-25...+85 °C
Storage temperature	-55...+210 °C
	200 °C, 60 min.
	220 °C, 45 min.
	240 °C, 30 Minutes
Design	Q51
Housing length	51 mm
Housing width	51 mm
Housing height	6.5 mm
Housing material	Plastic
Material active face	Plastic, Black, PPS
Protection class	IP68
Packaged quantity	1
Special features	High- temperature, for use in autoclaves

Mounting instructions**Mounting the data carrier properly in the retainer**

To avoid damage to the retainer, follow the instructions below.

Carefully push both sides of the data carrier in the retainer until they latch (the latches are designed differently):

1. Insert data carrier
2. Latch data carrier

Accessories

Type code	Ident no.	Description	Dimension drawing
TH-Q51S-HT	7030541	Retainer with spring cotter for Q51 data carrier. Locating pin, 4.5 mm, maintains data carrier in position. For direct mounting on metal. High-temperature resistant. For one-time mounting only By using the mounting bracket, the distance between metal and data carrier is 12 mm	
TH-Q51T-HT	7030540	Retainer with M5 threaded bush to screw on Q51 data carriers. Locating pin, 4.5 mm, maintains data carrier in position. For direct mounting on metal. High-temperature resistant. For one-time mounting only With the mounting bracket, the distance between metal and data carrier is 12 mm	