

■ **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)

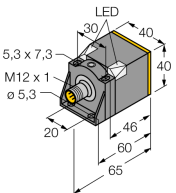
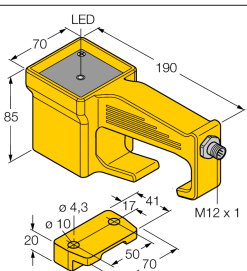
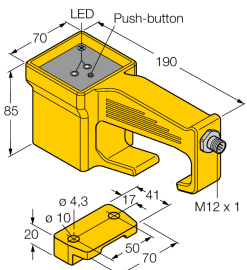
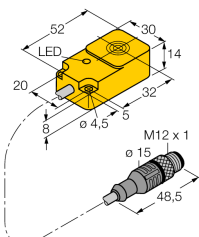
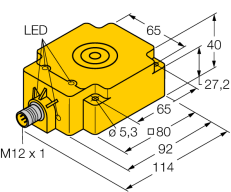
Testing of the application under real operating conditions is therefore essential, especially with read/write on-the-fly!

<b>Type code</b>	TW-R16-B128
Ident no.	6900501
<b>Data transfer</b>	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 <sup>5</sup>
Typical read time	2 ms/byte
Typical write time	3 ms/byte
Radio communication and protocol standards	ISO 15693
<b>Minimum distance to metal</b>	10 mm
Ambient temperature	-25...+85 °C
Storage temperature	-25...+120 °C
	160 °C, 1x35 h
	220 °C, 1x30 s
<b>Design</b>	R16
Diameter	16 mm
Housing material	Plastic, PA
Material active face	Plastic, Black, PA
Protection class	IP69K
<b>Packaged quantity</b>	1
Special features	extended storage temperature range

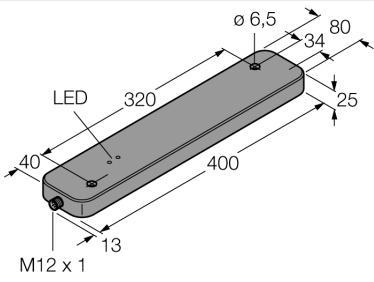
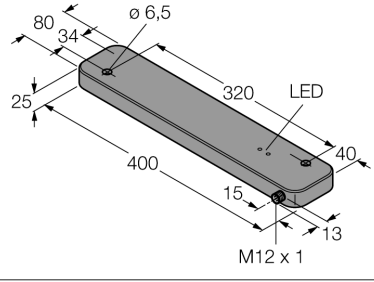
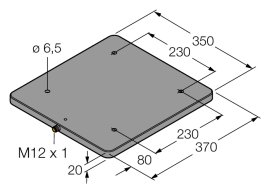
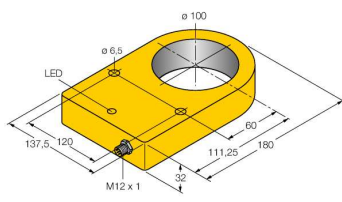
Read/write heads

Dimensions	Type designation	Read-write distance		Transfer zone		Minimum distance between two read-write heads [mm]
		Ident - no.	Recommend- ed (mm)	max. [mm]	length max. [mm]	
	<b>TB-M18-H1147</b> 7030001	10	17	14	7	54
	<b>TB-EM18WD-H1147</b> 7030224	10	17	14	7	54
	<b>TB-M18-H1147/S1126</b> 7030212	10	17	14	7	54
	<b>TB-EM18WD-H1147/S1126</b> 7030228	10	17	14	7	54
	<b>TN-M18-H1147</b> 7030002	12	23	26	13	54
	<b>TN-EM18WD-H1147</b> 7030223	12	23	26	13	54
	<b>TN-M18-H1147/S1126</b> 7030213	12	23	26	13	54
	<b>TN-EM18WD-H1147/S1126</b> 7030227	12	23	26	13	54
	<b>TB-M30-H1147</b> 7030003	12	23	20	10	90
	<b>TB-EM30WD-H1147</b> 7030221	12	23	20	10	90
	<b>TB-M30-H1147/S1126</b> 7030214	12	23	20	10	90
	<b>TB-EM30WD-H1147/S1126</b> 7030225	12	23	20	10	90
	<b>TN-M30-H1147</b> 7030004	20	38	44	22	90
	<b>TN-EM30WD-H1147</b> 7030222	20	38	44	22	90
	<b>TN-M30-H1147/S1126</b> 7030215	20	38	44	22	90
	<b>TN-EM30WD-H1147/S1126</b> 7030226	20	38	44	22	90
	<b>TN-M30-0.15-RS4.47T</b> 7030444	20	38	44	22	90

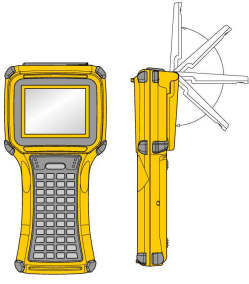

Read/write heads

Dimensions	Type designation	Read-write distance		Transfer zone		Minimum distance between two read-write heads [mm]
		Ident - no.	Recommend- ed (mm)	max. [mm]	length max. [mm]	
	<b>TN-CK40-H1147</b> 7030006	28	50	54	27	120
	<b>TN-CK40-H1147/S1126</b> 7030216	28	50	54	27	120
	<b>HT-IDENT-H1147</b> 7030236	28	50	54	27	120
	<b>HT-IDENT-H1187</b> 7030238	28	50	54	27	120
	<b>TN-Q14-0.15-RS4.47T</b> 7030235	20	38	44	22	90
	<b>Q14-R/W-OPEN-PCB/C37</b> 7030445	20	38	44	22	90
	<b>TN-Q80-H1147</b> 7030007	20	52	60	30	240
	<b>TN-Q80-H1147/S1126</b> 7030217	20	52	60	30	240
	<b>TNLR-Q80-H1147</b> 7030230	50	85	90	45	240
	<b>TNLR-Q80-H1147/S1126</b> 7030219	50	85	90	50	240

Read/write heads

Dimensions	Type designation	Read-write distance		Transfer zone		Minimum distance between two read-write heads [mm]
		Ident - no.	Recommend- ed (mm)	max. [mm]	length max. [mm]	
	<b>TNLR-Q80L400-H1147</b> 7030204Lengthwise	30	95	410	37	240
	<b>TNLR-Q80L400-H1147</b> 7030204	50	95	74	205	240
	<b>TNLR-Q80L400-H1147/S1126</b> 7030324	50	95	74	205	240
	<b>TNLR-Q80L400-H1147/S1126</b> 7030324Lengthwise	30	95	410	37	240
	<b>TNLR-Q80L400-H1147L</b> 7030234	50	95	74	205	240
	<b>TNLR-Q80L400-H1147L</b> 7030234Lengthwise	30	95	410	37	240
	<b>TNLR-Q80L400-H1147L/S1126</b> 7030325	50	95	74	205	240
	<b>TNLR-Q80L400-H1147L/S1126</b> 7030325Lengthwise	30	95	410	205	240
	<b>TNLR-Q350-H1147</b> 7030220	60	203	360	180	1110
	<b>TNLR-Q350-H1147/S1126</b> 7030319	60	203	360	180	1110
	<b>TN-S32XL-H1147</b> 7030008	20	67	125	62	420

**Compatible handhelds**

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