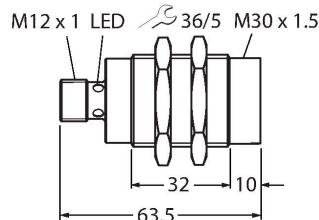


TN-M30-IOL-H1141

HF Read/Write Device – IO-Link



Technical data

Type	TN-M30-IOL-H1141
ID	100000975
Electrical data	
Operating voltage	11...32 VDC
DC rated operational current	≤ 50 mA
inrush current	700 mA For: 1 ms
Data transfer	Inductive coupling
Technology	HF RFID
Operating frequency	13.56 MHz
Radio communication and protocol standards	ISO 15693 NFC Typ 5
Read/Write distance max.	62 mm
Wire breakage/Reverse polarity protection	yes
Output function	4-wire, Read/Write, IO-Link
Mechanical data	
Mounting conditions	Non-flush
Ambient temperature	-25...+70 °C
Design	Threaded barrel, M30 × 1.5
Dimensions	63.5 mm
Housing diameter	Ø 30 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PBT, yellow
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Electrical connection	M12 × 1
MTTF	acc. to SN 29500 (Ed. 99) 20 °C

Features

- Threaded barrel, M30 x 1.5
- Chrome-plated brass
- Process value in 32-bit IO-Link telegram
- M12 × 1 male connector, 4-pin

Pin Assignment



Functional principle

The HF read/write devices 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 device and tag used.

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

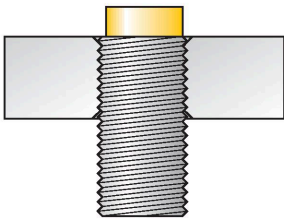
The read/write distances of the tags for mounting in metal TW-R**-M(MF) were determined in metal.

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 on-the-fly reading and writing!

Technical data

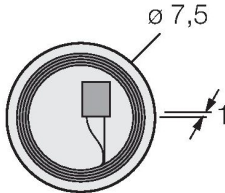
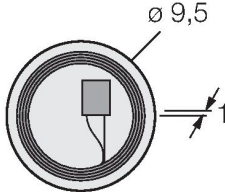
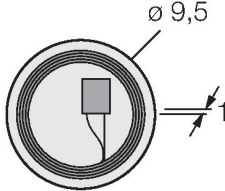
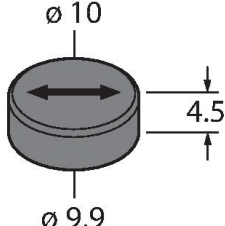
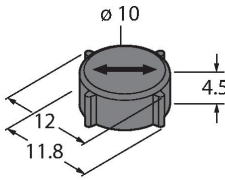
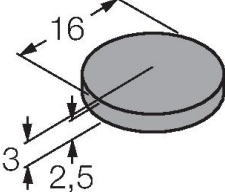
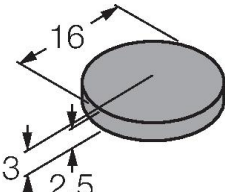
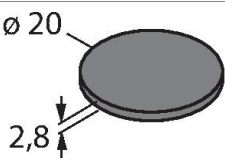
Power-on indication	LED, Green
Included in delivery	Accessories
IO-Link	
IO-Link specification	V 1.1
IO-Link port type	Class A
Programming	IO-Link, PACTware, parameterization tag
Communication mode	COM 2 (38.4 kBaud)
Process data width	32 bit
Minimum cycle time	14.4 ms
Function Pin 4	IO-Link
Transmission rate	26.5 kbps
Packaging unit	1

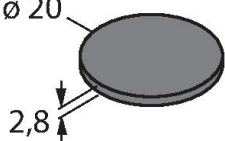
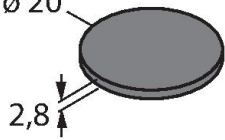
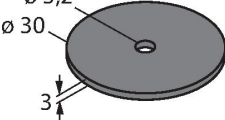
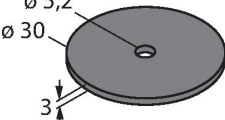
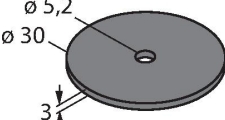
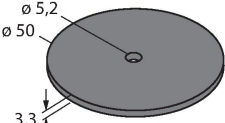
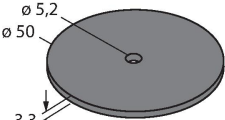
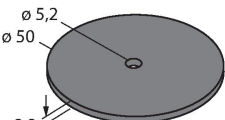
Mounting instructions/Description



Diameter active area B Ø 30 mm

non-flush mounting

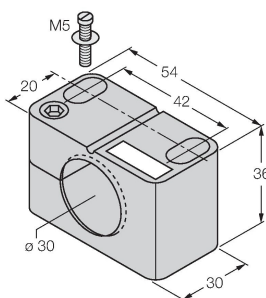
Dimensions	Type designation	Read-write distance		Transfer zone		Minimum distance between two read-write heads
	Ident - no.	Recommended (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	[mm]
	TW-R7.5-B128 7030231	11	24	28	14	60
	TW-R9.5-B128 7030252	14	28	30	15	60
	TW-R9.5-K2 7030558	12	26	28	14	60
	TW-R10-M-B146 7030545	8	17	26	13	60
	TW-R12-M-B146 7030500	8	17	26	13	60
	TW-R16-B128 6900501	17	35	40	20	60
	TW-R16-K2 7030410	14	29	32	16	60
	TW-R20-B128 6900502	17	36	38	19	60

	TW-R20-B320 100005244	17	36	38	19	60
	TW-R20-K2 6900505	15	33	36	18	60
	TW-R30-B128 6900503	24	49	56	28	60
	TW-R30-B320 100005245	24	49	56	28	60
	TW-R30-K2 6900506	20	42	48	24	60
	TW-R50-B128 6900504	30	62	72	36	60
	TW-R50-B320 100005246	30	62	72	36	60
	TW-R50-K2 6900507	28	58	68	34	60

Accessories

BST-30B

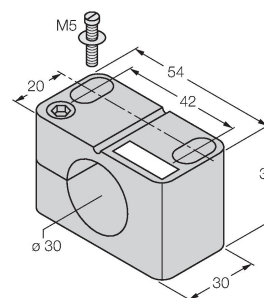
6947216



Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

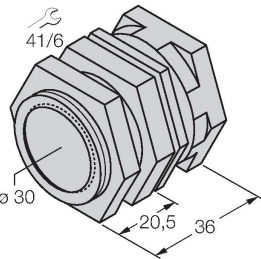
BST-30N

6947217



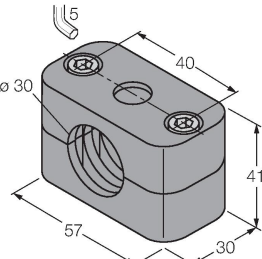
Mounting clamp for threaded barrel sensors, without dead-stop; material: PA6

QM-306945103



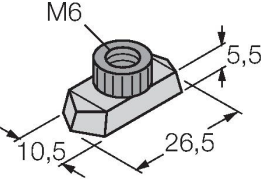
Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M36 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

BSS-306901319



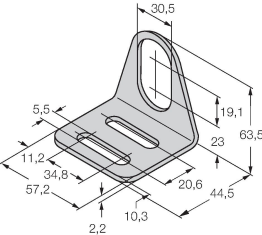
Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

BSS-TSM 2 pcs6901323



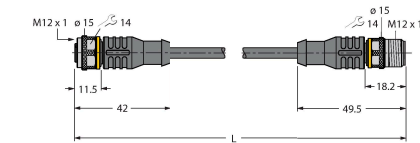
DIN rail nut for BSS mounting clamps, for mounting on DIN rails

MW-306945005

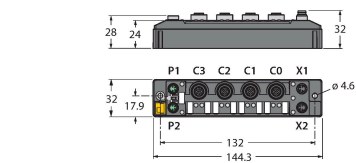


Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

Accessories

Dimension drawing	Type	ID	
	RKC4.4T-2-RSC4.4T/TXL	6625608	Extension cable, M12 female connector, straight, 4-pin to M12 male connector, straight, 4-pin; cable length: 2 m, jacket material: PUR, black; cULus approval; other cable lengths and versions available, see www.turck.com

Accessories

Dimension drawing	Type	ID	
	TBEN-S2-4IOL	6814024	Compact multiprotocol I/O module, 4 IO-Link Master 1.1 Class A, 4 universal PNP digital channels 0.5 A