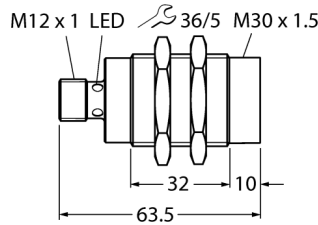
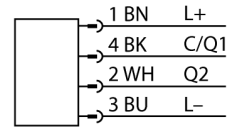


**HF Read/Write Head
IO-Link
TN-M30-IOL-H1141**



- 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!

Type	TN-M30-IOL-H1141
ID	100000975
Electrical data	
Operating voltage U_o	11...32 VDC
DC rated operating current I_o	≤ 50 mA
Inrush current	
Data transfer	700 For: 1 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 break/reverse polarity protection	yes
Output function	4-wire, Read/Write, IO-Link
Interface	IO-Link
Fieldbus Protocol	IO-Link
Mechanical data	
Mounting conditions	Non-flush
Ambient temperature	-25...+70 °C
Design	Threaded barrel, M30 x 1.5
Dimensions	63.5 mm
Housing diameter	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	Connector, M12 × 1
MTTF	acc. to SN 29500 (Ed. 99) 20 °C
Power-on indication	LED, Green
Included in delivery	Accessories
Packaging unit	1

HF Read/Write Head

IO-Link

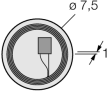


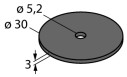
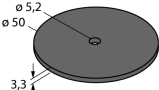
TN-M30-IOL-H1141

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

**HF Read/Write Head
IO-Link
TN-M30-IOL-H1141**

Data carrier

Dimensions	Type designation Ident - no.	Read-write distance		Transfer zone		Minimum distance between two read-write heads [mm]
		Recommend- ed (mm)	max. [mm]	length max. [mm]	width offset max. [mm]	
	TW-R7.5-B128 7030231	11	24	28	14	60
	TW-R16-B128 6900501 TW-R16-K2 7030410	17 14	35 29	40 32	20 16	60 60
	TW-R20-B128 6900502 TW-R20-B320 100005244 TW-R20-K2 6900505	17 17 15	36 36 33	38 38 36	19 19 18	60 60 60
	TW-R30-B128 6900503 TW-R30-B320 100005245 TW-R30-K2 6900506	24 24 20	49 49 42	56 56 48	28 28 24	60 60 60
	TW-R50-B128 6900504 TW-R50-B320 100005246 TW-R50-K2 6900507	30 30 28	62 62 58	72 72 68	36 36 34	60 60 60

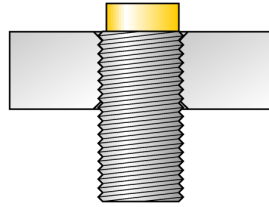
**HF Read/Write Head
IO-Link
TN-M30-IOL-H1141**

Mounting instructions

Diameter active area B

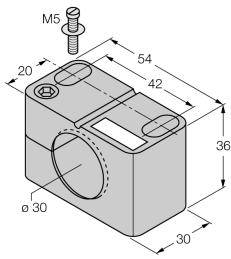
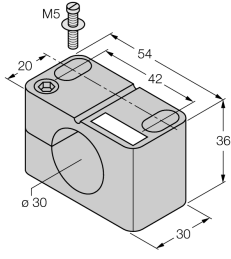
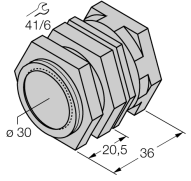
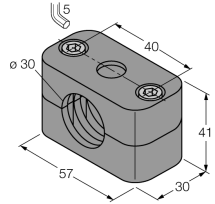
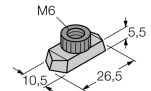
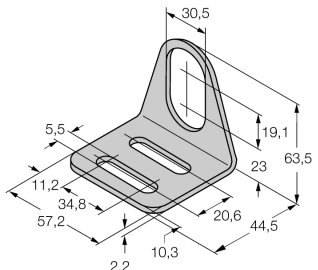
Ø 30

non-flush mounting



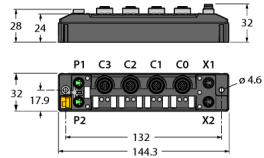
**HF Read/Write Head
IO-Link
TN-M30-IOL-H1141**

Accessories

Type code	Ident-No.		Dimension drawing
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-30	6945103	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-30	6901319	Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	
BSS-TSM 2 pcs	6901323	DIN rail nut for BSS and BSM mounting clips, for mounting on DIN rails	
MW-30	6945005	Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	

**HF Read/Write Head
IO-Link
TN-M30-IOL-H1141**

Accessories

Type code	Ident-No.		Dimension drawing
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	 <p>The dimension drawing shows two views of the module. The top view indicates a width of 28 mm and a depth of 24 mm. The front view shows a total width of 144.3 mm and a height of 32 mm. The front panel features four IO-Link ports labeled P1, C3, C2, C1, C0, and X1, and two universal PNP digital channels labeled P2 and X2. A dimension of 17.9 mm is shown for the distance between the IO-Link ports, and 132 mm for the distance between the digital channels. A diameter of 4.6 mm is indicated for one of the ports.</p>