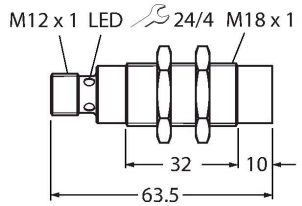
TN-M18-IOL2-H1141
HF Read/Write Head – IO-Link



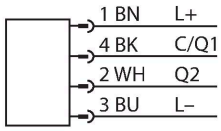
Technical data

Type	TN-M18-IOL2-H1141
ID	100012160
Approvals	CE UKCA cULus
Radio approvals	EU/RED: Europe UK SI 2017/1206: United Kingdom FCC: USA IC: Canada
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
The following chip types are supported	NXP I-Code SLI-X NXP I-Code SLI-S NXP I-Code SLIX2 EM4233SLIC Fujitsu MB89R118
Wire breakage/Reverse polarity protection	yes
Output function	4-wire, Read/Write, IO-Link
Mechanical data	
Mounting conditions	Non-flush
Ambient temperature	-25…+80 °C
Design	Threaded barrel, M18 x 1
Dimensions	63.5 mm
Housing diameter	Ø 18 mm

Features

- Threaded barrel, M18 x 1
- Chrome-plated brass
- Process value in 32-byte IO-Link telegram
- Operation in SIO mode possible
- RSSI value output
- Alarm outputs, parameterizable (e.g. for RSSI threshold)
- Password function for accessing the tag (separate hardware must be used to enable the password function)
- Operating hours counter
- Male connector, M12 × 1, 4-pin

Pin Assignment



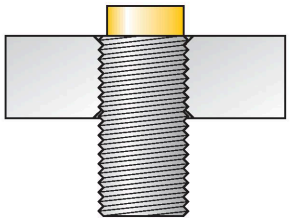
Functional principle

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

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	756 years acc. to SN 29500 (Ed. 99) 20 °C
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 3 (230.4 kBaud)
Process data width	256 bit
Minimum cycle time	10 ms
Function pin 4	IO-Link/SIO
Function Pin 2	SIO
Transmission rate	230.4 kbaud
Packaging unit	1

Mounting instructions/Description



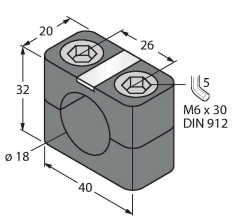
Diameter active area B	Ø 18 mm

non-flush mounting

Accessories

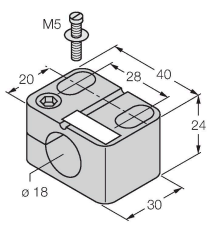
BSN 18 69472

Mounting clamp for threaded barrel sensors; material: PA66-GF

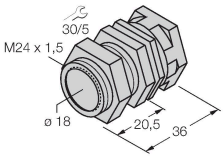


BST-18N 6947215

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

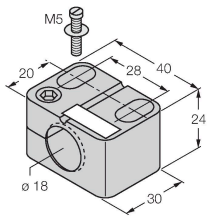


QM-18	6945102



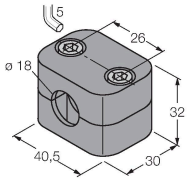
Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M24 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

BST-18B	6947214



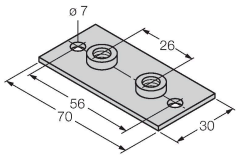
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

BSS-18	6901320



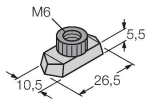
Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene

BSS-SPV2	6901316



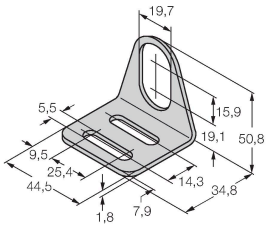
Weld-on plate for BSS mounting brackets

BSS-TSM 2 pcs	6901323



DIN rail nut for BSS and BSM mounting clips, for mounting on DIN rails

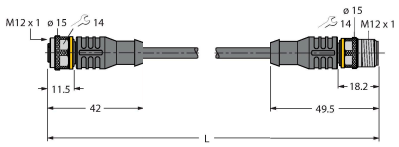
MW-18	6945004



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