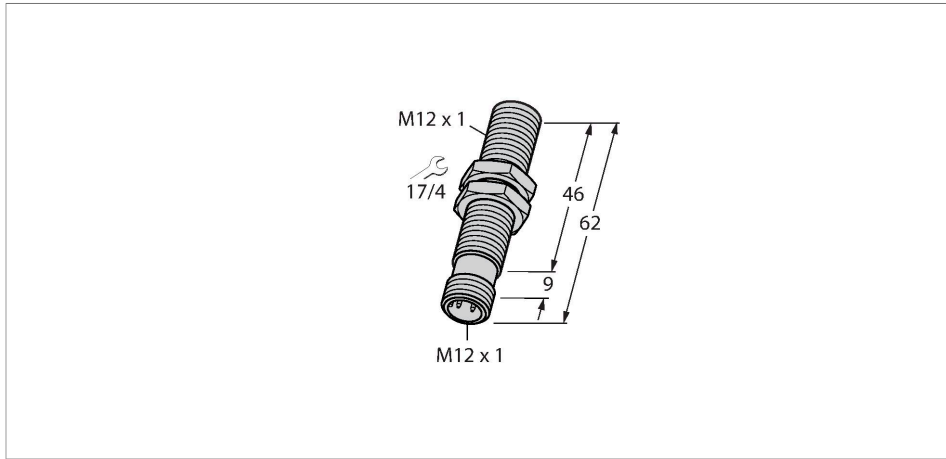


BI2-M12-LIU-H1141

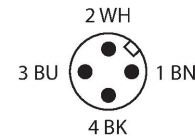
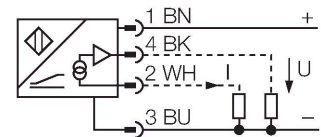
Inductive Sensor – With Analog Output



Features

- M12 x 1 threaded barrel
- Chrome-plated brass
- 4-wire, 15...30 VDC
- Analog output
- 0...10 V and 0...20 mA
- M12 x 1 male connector

Wiring diagram

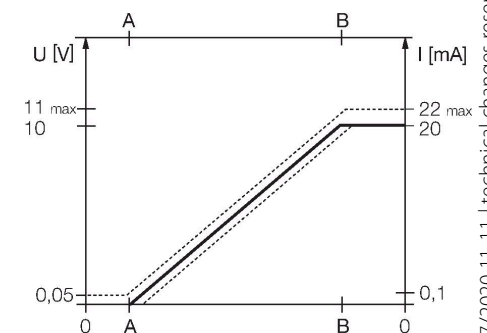


Technical data

Type	BI2-M12-LIU-H1141
Ident. no.	1535533
Measuring range	1...2.5 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × S _n) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 1 % of measuring range A - B
	0.5 %, after warm-up 0.5 h
Reproducibility	≤ 15 μm
	≤ 7.5 μm, after a warm-up time of 0.5 h
Linearity deviation	≤ 3 %
Temperature drift	≤ ± 0.06 % / K
Ambient temperature	-25...+70 °C
Operating voltage	15...30 VDC
Residual ripple	≤ 10 % U _{ss}
No-load current	≤ 8 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	no / Complete
Output function	4-wire, Analog output
Voltage output	0...10 V
Current output	0...20 mA
Load resistance voltage output	≥ 4.7 kΩ
Load resistance, current output	≤ 0.4 kΩ

Functional principle

Inductive TURCK sensors with analog output accomplish simple control tasks. They provide a current, voltage or frequency signal proportional to the target's distance. The output signal is linear to the distance of the target over the entire sensing range.



BI2-M12-LIU-H1141 | 05/27/2020 11-11 | technical changes reserved

Technical data

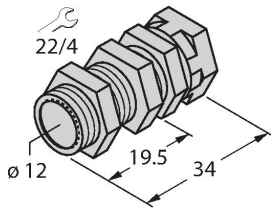
Measuring sequence frequency	200 Hz
Design	Threaded barrel, M12 × 1
Dimensions	62 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30
Max. tightening torque housing nut	10 Nm
Electrical connection	Connector, M12 × 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	751 years acc. to SN 29500 (Ed. 99) 40 °C

Mounting instructions

Mounting instructions/Description		
	Distance D	24 mm
	Distance W	9 mm
	Distance T	3 x B
	Distance S	18 mm
	Distance G	18 mm
	Diameter active area	Ø 12 mm
	B	

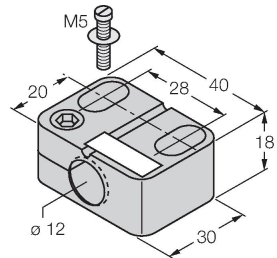
Accessories

QM-12 6945101



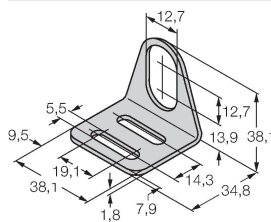
Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M16 × 1. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

BST-12B 6947212



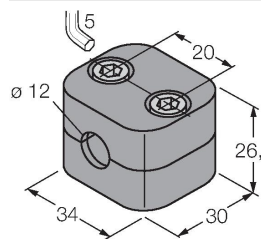
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

MW12 6945003



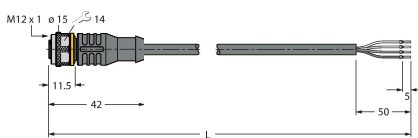
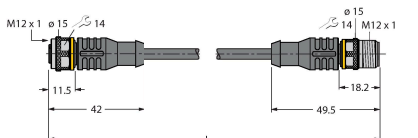
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)

BSS-12 6901321



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

Wiring accessories

Dimension drawing	Type	Ident. no.	
	RKC4.4T-2/TEL	6625013	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	RKC4.301T-0.15-RSC4.334T/TXL	6631382	Extension cable, M12 female/male, straight, 4-pin, cable length: 0.15m, jacket material: PUR, black; cULus approval; Adapter cable for sensors with analog output on pin 2, for connection to analog inputs of fieldbus modules with 4-wire technology