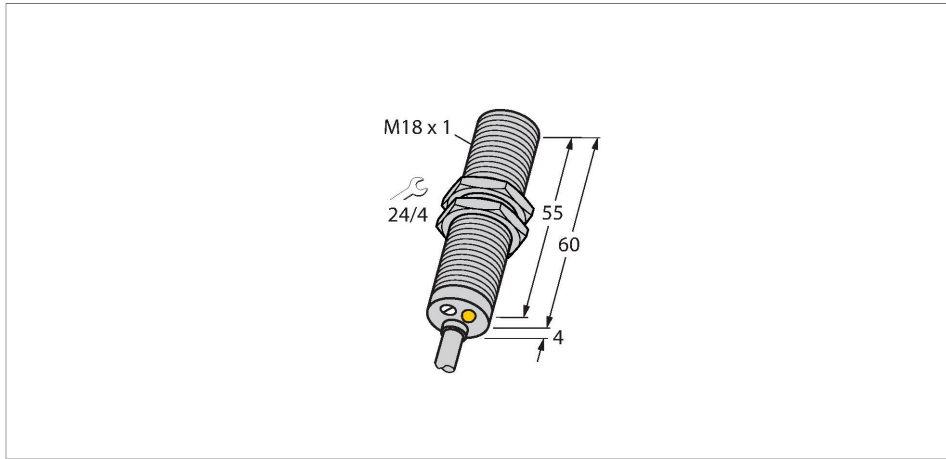


BI8-M18-LUAP6X

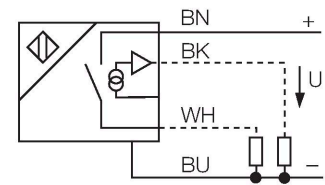
Inductive Sensor – With Analog and Switching Output



Features

- Threaded barrel, M18 x 1
- Chrome-plated brass
- 4-wire, 15...30 VDC
- NO contact, PNP output
- Analog output
- 0...10 V
- Cable connection

Wiring diagram

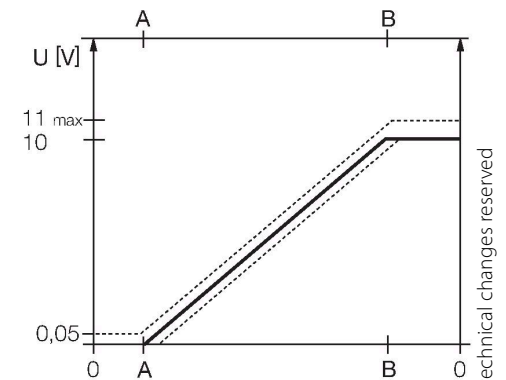


Technical data

Type	BI8-M18-LUAP6X
Ident. no.	4615010
Measuring range	1...5 mm
	switch point adjustable via potentiometer
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	$\leq 1\%$ of measuring range A - B
	0.5 %, after warm-up 0.5 h
Reproducibility	$\leq 40\ \mu\text{m}$
	$\leq 20\ \mu\text{m}$, after a warm-up time of 0.5 h
Linearity deviation	$\leq 5\%$
Temperature drift	$\leq \pm 0.06\%$ / K
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	15...30 VDC
Residual ripple	$\leq 10\%$ U_{ss}
DC rated operational current	$\leq 200\ \text{mA}$
No-load current	$\leq 8\ \text{mA}$
Isolation test voltage	$\leq 0.5\ \text{kV}$
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	no / Complete
Output function	4-wire, NO contact, PNP/Analog output
Voltage output	0...10 V

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.

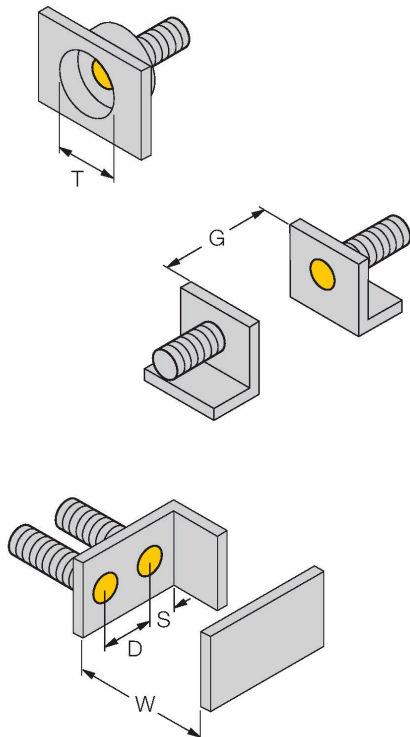


Technical data

Load resistance voltage output	≥ 4.7 kΩ
Measuring sequence frequency	200 Hz
Design	Threaded barrel, M18 × 1
Dimensions	54 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30
End cap	Plastic, EPTR
Max. tightening torque housing nut	25 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, Gray, LifYY, PVC, 2 m
Core cross-section	4 x 0.34 mm ²
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
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description



Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Diameter active area B	Ø 18 mm

Accessories

BST-18B

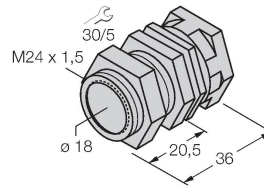
6947214



Mounting clamp for threaded barrel sensors, with 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.

MW18

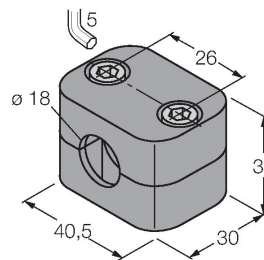
6945004



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

BSS-18

6901320



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