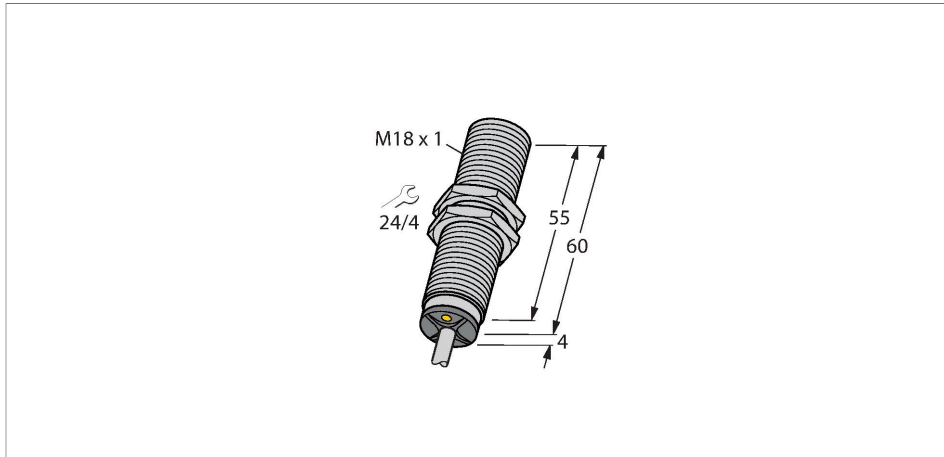


BI8-M18-LF10

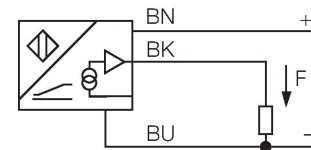
Inductive Sensor – With Analog Frequency Output



Features

- Threaded barrel, M18 x 1
- Chrome-plated brass
- 3-wire, 15...30 VDC
- Frequency output
- 1...10 kHz
- Cable connection

Wiring diagram

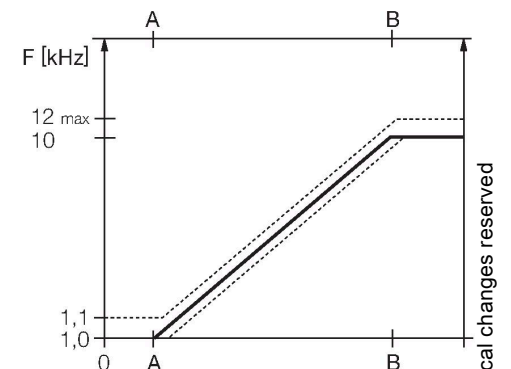


Technical data

Type	BI8-M18-LF10
Ident. no.	1535529
Measuring range	1...5 mm
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
Linearity deviation	$\leq 5\%$
Temperature drift	$\leq \pm 0.06\%$ / K
Ambient temperature	-25...+70 °C
Operating voltage	15...30 VDC
Residual ripple	$\leq 10\%$ U_{ss}
No-load current	≤ 8 mA
Isolation test voltage	≤ 0.5 kV
Output current	≤ 30 mA
Short-circuit protection	yes
Wire breakage/Reverse polarity protection	no / Complete
Output function	3-wire, Analog output
Frequency output	1...10 kHz
Output level	high $> U_B - 2,5$ V; low $< 2,5$ V V
Measuring sequence frequency	200 Hz

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.



BI8-M18-LF10 | 12/03/2020 03-17 | technical changes reserved

Technical data

Design	Threaded barrel, M18 × 1
Dimensions	64 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30
End cap	Plastic, EPTR
Max. tightening torque of housing nut	25 Nm
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Core cross-section	3 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

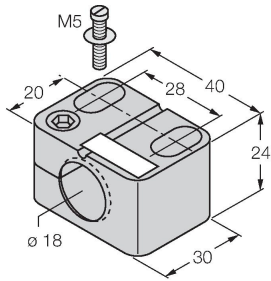
Mounting instructions

Mounting instructions/Description		
	Distance D	2 x B
	Distance W	12 mm
	Distance T	3 x B
	Distance S	1.5 x B
	Distance G	24 mm
	Diameter active area B	Ø 18 mm

Accessories

BST-18B

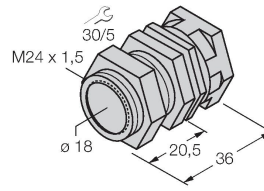
6947214



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

QM-18

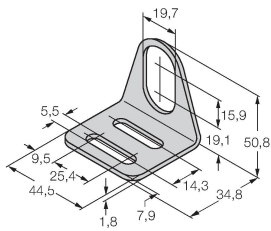
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Quick-mount bracket with dead-stop; material: Chrome-plated brass. Male thread M24 × 1.5. Note: The switching distance of the proximity switches may change when using quick-mount brackets.

MW-18

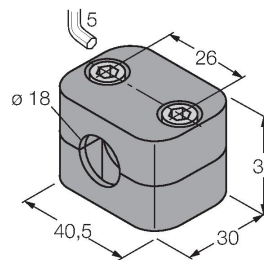
6945004



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