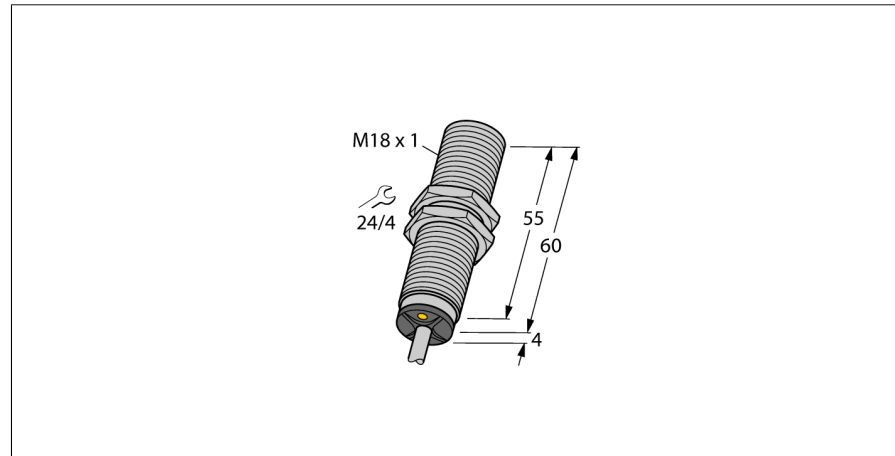
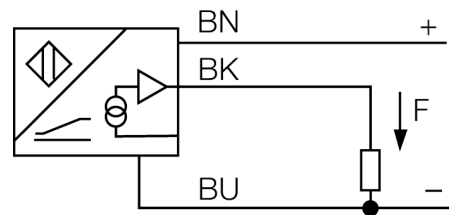


**Inductive sensor
with analog frequency output
BI8-M18-LF10**



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

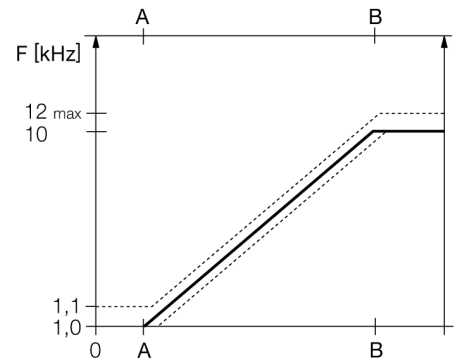
Wiring diagram



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.

Measuring range

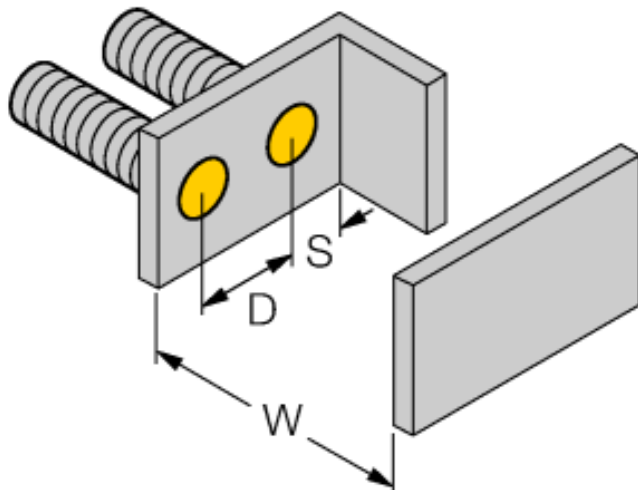
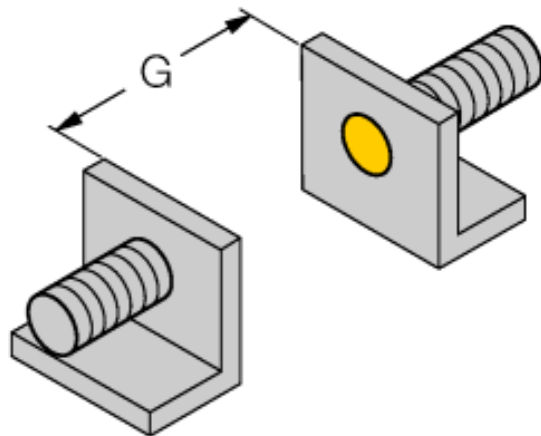
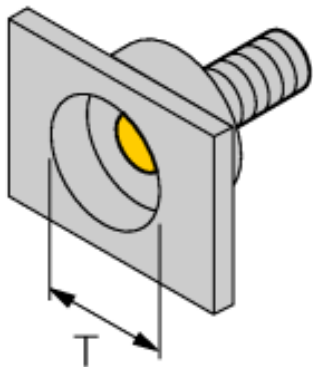


Type code	BI8-M18-LF10
Ident no.	1535529
Measuring range [A...B]	1...5mm
Mounting condition	flush
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 1 % of measuring range A - B
	≤ 0.5 %, after warm-up 0.5 h
Linearity deviation	≤ 5 %
Temperature drift	≤ ± 0.06 % / K
Ambient temperature	-25...+70 °C
Operating voltage	15...30VDC
Residual ripple	≤ 10 % U _s
No-load current I ₀	≤ 8 mA
Rated insulation voltage	≤ 0.5 kV
Output current	≤ 30 mA
Short-circuit protection	yes
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, analog output
Frequency output	1...10 kHz
Output level(U _s)	high > U _s - 2.5 V; low < 2.5 V
Measuring sequence frequency	200 Hz
Design	threaded barrel, M18 x 1
Dimensions	64 mm
Housing material	metal, CuZn, chrome-plated
Material active area	Plastic, PA
End cap	Plastic, EPTR
Max. tightening torque housing nut	25 Nm
Connection	cable
Cable quality	5.2 mm, LiYY, PVC, 2 m
Cable 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

**Inductive sensor
with analog frequency output
BI8-M18-LF10**

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 of the active area B \varnothing 18 mm

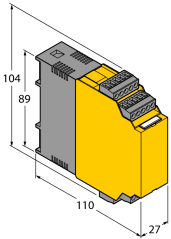
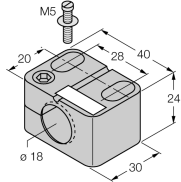
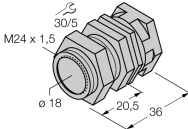
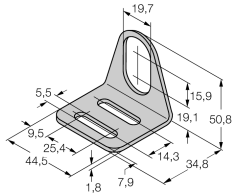


**Inductive sensor
with analog frequency output
BI8-M18-LF10**

TURCK

Industrial
Automation

Accessories

Type code	Ident no.	Description	Dimension drawing
IM43-13-SR	7540041	Limit value monitor; 1-channel; input 0/4...20 mA or 0/2...10 V; supply of 2- or 3-wire transmitters/sensors; limit value adjustment via teach button; three relay outputs with one NO contact each; removable terminal blocks; 27 mm wide; universal voltage supply 20...250 VUC; further limit value monitors are described in our "Interface Technology" catalog.	
BST-18B	6947214	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
QM-18	6945102	Quick-mount bracket with dead-stop; material: Chrome-plated brass Male thread M24 x 1.5. Note: The switching distance of proximity switches can be reduced by the use of quick-mount brackets.	
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	