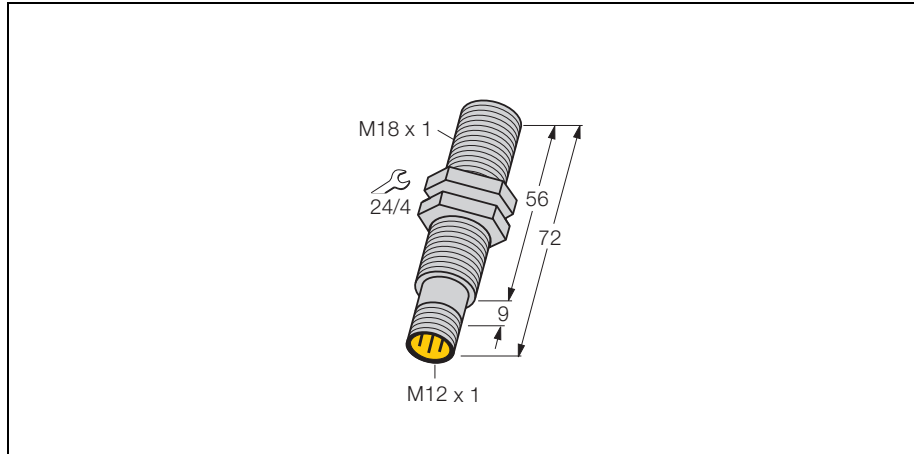
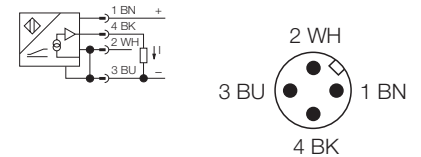


**Inductive sensor
for the food industry with analogue output
Bi7-EM18EWD-Li-H1143**



- Threaded barrel, M18 x 1
- stainless steel, 1.4404
- front cap made of liquid crystal polymer Vectra C130
- high degree of protection IP69K for extreme environmental conditions
- special double-lip seal
- protection against all common acid and alkaline cleaning agents
- permanently legible type label due to laser engraving
- suited for applications in the food industry
- 3-wire, 15...30 VDC
- analogue output
- 0...20 mA
- connector, M12 x 1

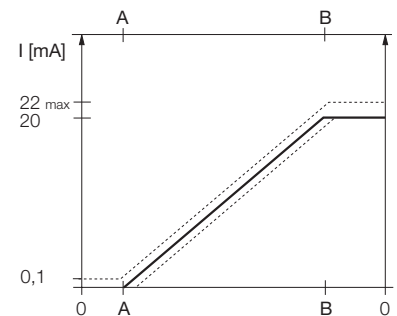
Wiring diagram



Functional principle

Simple control tasks can be accomplished with inductive TURCK sensors featuring an analogue output. They provide a current, voltage or frequency signal that is proportional to the target's distance. With TURCK's analogue sensors, this output signal is linear to the distance of the target over the entire sensing range.

Measuring range

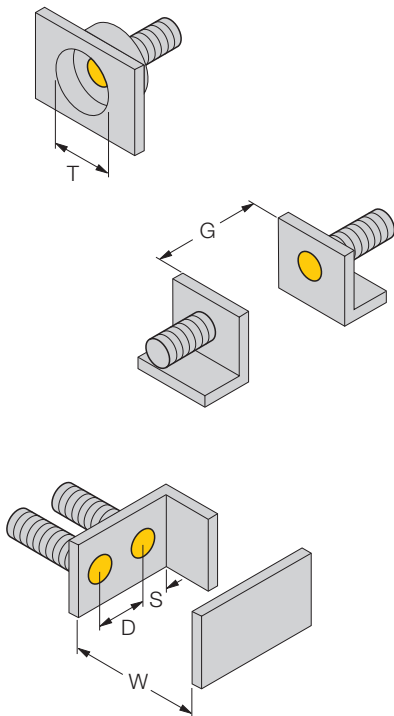


Type	Bi7-EM18EWD-Li-H1143
Ident-No.	1535568
Measuring range [A...B]	2... 5 mm
Mounting condition	flush
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Repeatability	≤ 1 % of measuring range A - B
	≤ 0.5 %, after a warm-up time of 0.5 h
Reproducibility	≤ 30µm
	≤ 15µm, after a warm-up time of 0.5 h
Linearity deviation	≤ 5% of full scale
Temperature drift	≤ ± 0.06 %/K
Ambient temperature	-25...+ 70 °C
Operating voltage	15... 30VDC
Residual ripple	≤ 10 % U _{SS}
No-load current I ₀	≤ 8 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, analogue output
current output	0... 20 mA
Load resistance current output	≤ 0.4 kΩ
Measuring sequence frequency	200 Hz
Output recovery time	≤ 12 ms
Housing	threaded barrel, M18 x 1
Dimensions	72 mm
Housing material	metal, AISI 316L
Material active face	plastic, LCP-GF30
Connector housing	plastic, PP
Admissible pressure on front cap	≤ 15 bar
Tightening torque of housing nut	25 Nm
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67

**Inductive sensor
for the food industry with analogue output
Bi7-EM18EWD-Li-H1143**

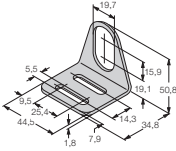

Mounting instructions	minimum distances
Distance D	2 x B
Distance W	12 mm
Distance T	3 x B
Distance S	1.5 x B
Distance G	24 mm

Diameter of the active area B	Ø 18 mm
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**Inductive sensor
for the food industry with analogue output
Bi7-EM18EWD-Li-H1143**

Accessories

Type code	Ident-No.	Short text	Dimension drawing
MW-18	6945004	mounting bracket; material: stainless steel A2 1.4301 (AISI 304)	
BSS-18	6901320	fixing clamp; material: polypropylene	
IM43-13-SR	7540041	limit value monitor; single 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 normally open contact each; removable terminal blocks; 27 mm wide; universal voltage supply 20...250 VUC; further limit value monitors are described in our "Interface Technology" catalogue.	