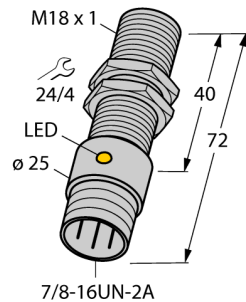


Inductive sensor BI5-G18-AN6X-B1341

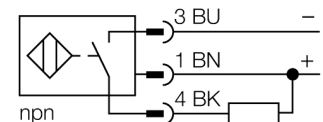
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- Threaded barrel, M18 x 1
- Chrome-plated brass
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- Connector, 7/8"

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

Type code	BI5-G18-AN6X-B1341
Ident no.	46952
Rated operating distance Sn	5 mm
Mounting condition	flush
Assured sensing range	$\leq (0,81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	$\leq 2\%$ of full scale
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	$\leq 10\%$ U_{ss}
DC rated operational current	≤ 200 mA
No-load current I_0	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I_0	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, NPN
Switching frequency	0.5 kHz
Design	threaded barrel, M18 x 1
Dimensions	72 mm
Housing material	Metal, CuZn, chrome-plated
Material active face	Plastic, PA
Max. tightening torque housing nut	25 Nm
Connection	male, 7/8"
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	• yellow

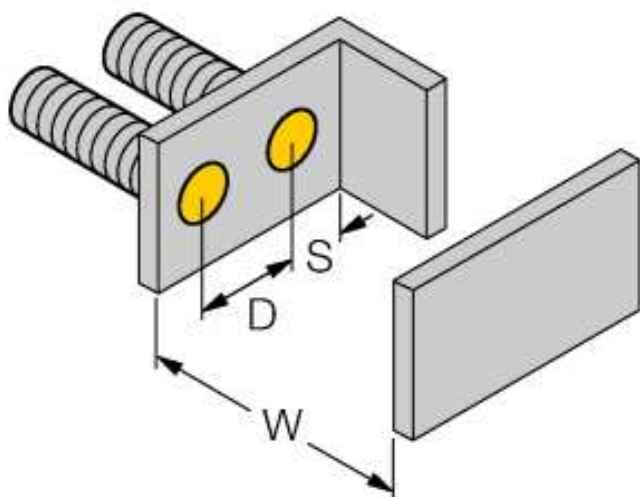
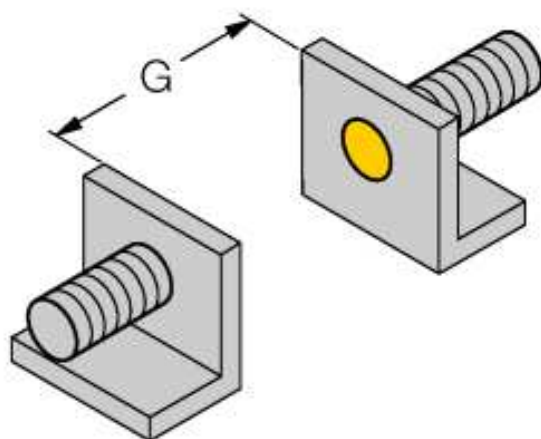
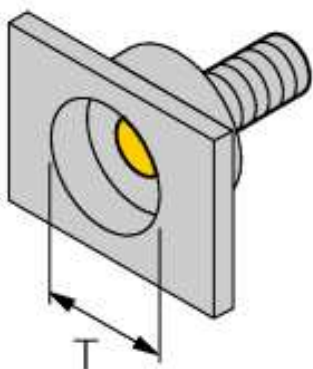
Inductive sensor BI5-G18-AN6X-B1341

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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 of the active area B	Ø 18 mm
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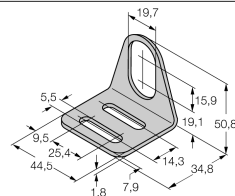
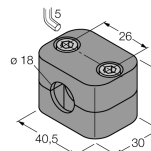


Inductive sensor BI5-G18-AN6X-B1341

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Accessories

Type code	Ident no.	Description	Dimension drawing
MW-18	6945004	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	 Technical drawing of the MW-18 mounting bracket. It is a U-shaped bracket with a central slot. Dimensions are provided in millimeters: overall width 44.5, slot width 25.4, slot depth 1.8, bracket thickness 5.5, mounting hole diameter 19.7, mounting hole offset 15.9, mounting hole distance 19.1, overall height 50.8, base width 14.3, and base offset 7.9.
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 Technical drawing of the BSS-18 mounting bracket. It is a rectangular block with a circular hole on the side. Dimensions are provided in millimeters: overall width 40.5, overall height 32, mounting hole diameter 18, mounting hole offset 26, and base offset 30.