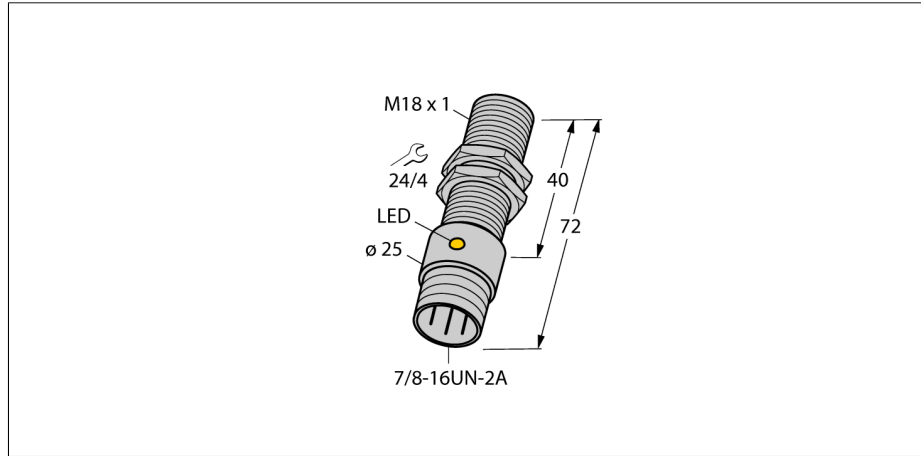
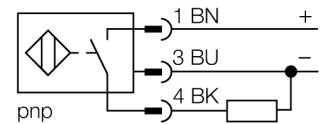


Inductive sensor
BI5-G18-AP6X-B1341



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

Wiring diagram



Functional principle

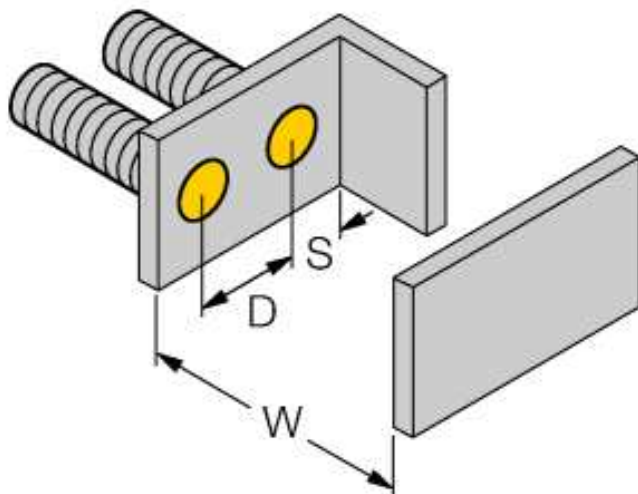
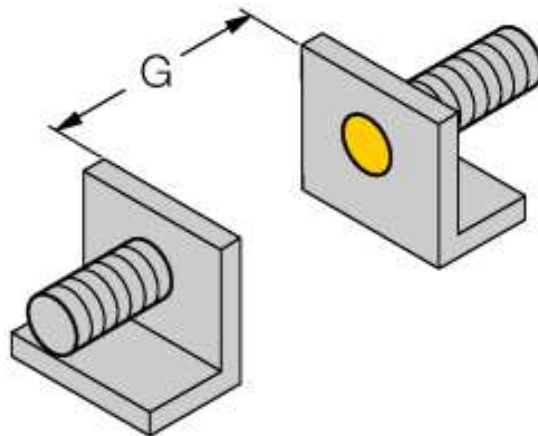
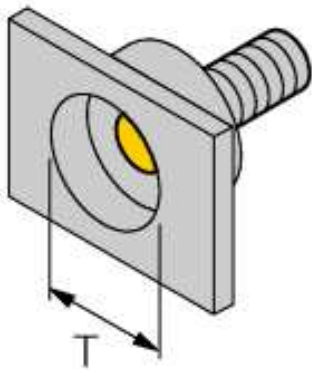
Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

Type code	BI5-G18-AP6X-B1341
Ident no.	46963
Rated operating distance Sn	5 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperaturdrift	10 %
Hysteresis	3...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...30VDC
Residual ripple	≤ 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 _N	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes/ complete
Output function	3-wire, NO contact, PNP
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-AP6X-B1341**

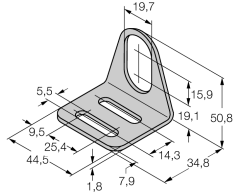
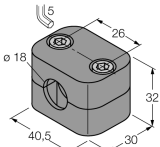
Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn

Diameter of the active area B \varnothing 18 mm



**Inductive sensor
BI5-G18-AP6X-B1341**

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)	 <p>Technical drawing of a stainless steel mounting bracket (MW-18) for threaded barrel devices. The drawing shows a side view with the following dimensions: 19.7 (width of the top flange), 15.9 (height of the top flange), 50.8 (total height), 19.1 (height of the main body), 14.3 (width of the main body), 34.8 (width of the base), 7.9 (width of the base), 1.8 (thickness of the base), 44.5 (total width), 25.4 (width of the mounting slot), 9.5 (width of the mounting slot), and 5.5 (width of the mounting slot).</p>
BSS-18	6901320	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	 <p>Technical drawing of a polypropylene mounting bracket (BSS-18) for smooth and threaded barrel devices. The drawing shows a side view with the following dimensions: 5 (height of the top flange), 26 (width of the top flange), 32 (total height), 30 (width of the main body), 40.5 (total width), and 18 (diameter of the mounting hole).</p>