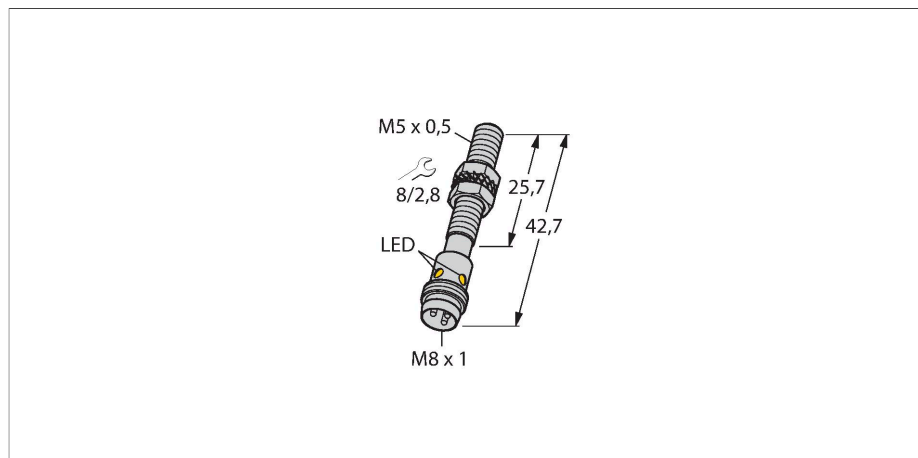


BI1U-EG05-AP6X-V1331

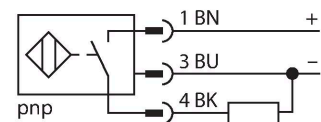
Inductive Sensor



Features

- M5 × 0.5 threaded barrel
- Stainless steel, 1.4427 SO
- Factor 1 for all metals
- Resistant to magnetic fields
- Large switching distance
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M8 x 1 male connector

Wiring diagram



Technical data

Type	BI1U-EG05-AP6X-V1331
ID	4602117
General data	
Rated switching distance	1 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
	$\leq \pm 20$ %, ≤ 0 °C
Hysteresis	3...15 %
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 100 mA
No-load current	20 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I_o	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
DC field stability	200 mT
AC field stability	200 mT _{ss}
Switching frequency	2 kHz
Mechanical data	
Design	Threaded barrel, M5 x 0.5

Functional principle

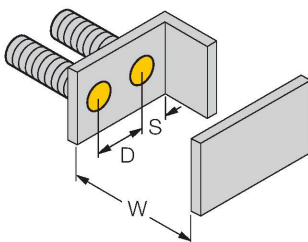
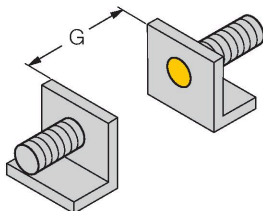
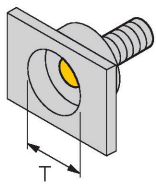
Inductive sensors are designed for wear-free and contactless detection of metal objects. Inprox3 sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

Dimensions	42.7 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	PA12
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M8 × 1
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

Mounting instructions/Description



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 active area B	Ø 5 mm