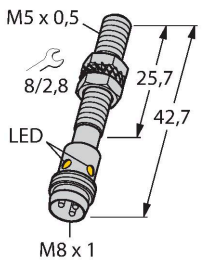
BI1U-EG05-AP6X-V1331
Inductive Sensor



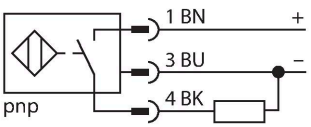
Technical data

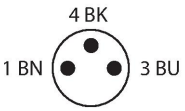
Type	BI1U-EG05-AP6X-V1331
ID	4602117
General data	
Rated switching distance	1 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.81 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	≤ ±10 %
	≤ ± 20 %, ≤ 0 °C
Hysteresis	3…15 %
Electrical data	
Operating voltage U_B	10…30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_e	≤ 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_e	≤ 1.8 V
Wire break/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

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





Functional principle

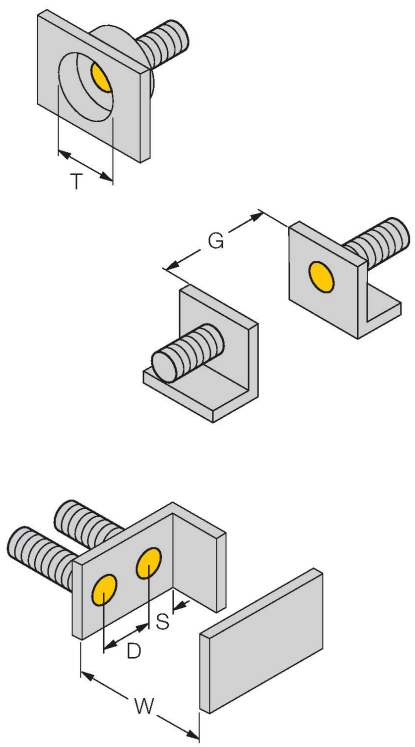
Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox3 sensors have significant advantages due to their patented multi-coil system. They excel thanks to their optimum switching distances, maximum flexibility and operational reliability as well as efficient standardization.

Technical data

Mechanical data	
Design	Threaded barrel, M5 x 0.5
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

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