

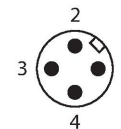
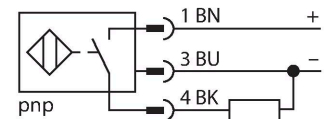
BI1-EG05-AP6X-0.2-RS4T/S1367

Inductive Sensors

Features

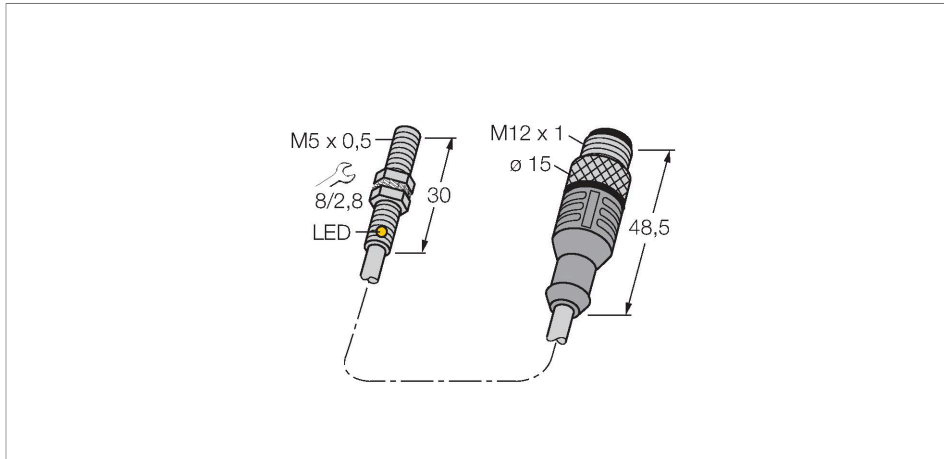
- M5 × 0.5 threaded barrel
- Stainless steel, 1.4301
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

Wiring diagram



Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this, they use a high-frequency electromagnetic AC field that interacts with the target. Inductive sensors generate this field via an RLC circuit with a ferrite coil.



Technical data

Type	BI1-EG05-AP6X-0.2-RS4T/S1367
ID	200016070
Special version	S1367 Corresponds to: Old design before 2019
General data	
Rated switching distance	1 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Temperature drift	$\leq \pm 10$ %
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	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	0.5 kV
Short-circuit protection	yes/Cyclic
Voltage drop at I_e	≤ 2.5 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, PNP
Switching frequency	3 kHz

Technical data

Mechanical data	
Design	Threaded barrel, M5 x 0.5
Dimensions	30 mm
Housing material	Stainless steel, 1.4427 SO
Active area material	Plastic, PA12
Material coupling nut	metal, CuZn, nickel-plated
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M12 × 1
Cable quality	Ø 3 mm, Gray, Lif9Y-11Y, PUR, 0.2 m
	Suited for E-ChainSystems® acc. to manufacturers declaration H1063M
Core cross-section	3 x 0.14 mm ²
Environmental conditions	
Ambient temperature	-25...+70 °C
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	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
------------------------	--------