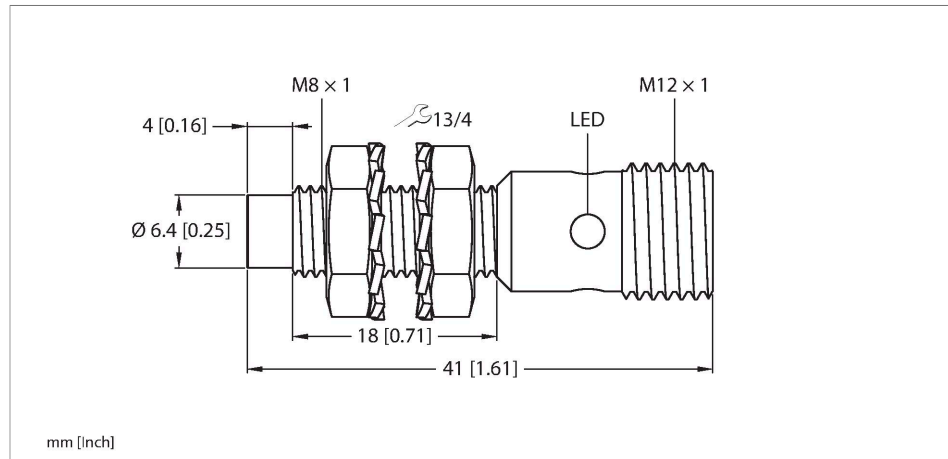


NI3-EG08K-AN6X-H1341

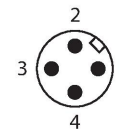
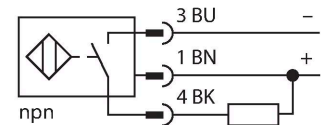
Inductive Sensor



Features

- M8 × 1 threaded barrel
- Stainless steel, 1.4305 (AISI 303)
- DC 3-wire, 10...30 VDC
- NO contact, NPN output
- M12 x 1 male connector

Wiring diagram



Technical data

Type	NI3-EG08K-AN6X-H1341
ID	4669760
General data	
Rated switching distance	3 mm
Mounting conditions	Non-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	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
Hysteresis	20 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{rs}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_o	≤ 150 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_o	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Output function	3-wire, NO contact, NPN
Switching frequency	3 kHz

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

Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	41 mm
Housing material	Stainless steel, 1.4305 (AISI 303)
Active area material	Plastic, PBT
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M12 x 1
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

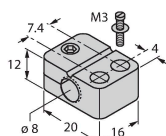
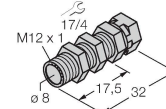
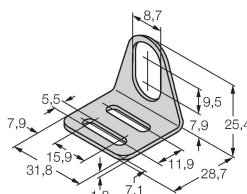
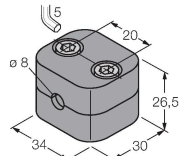
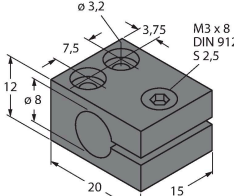
Mounting instructions/Description

The image contains three technical diagrams illustrating the mounting of a sensor. The top diagram shows a side view of a sensor mounted on a plate, with dimension T indicating the distance from the sensor's center to the edge of the plate. The middle diagram shows a top view of two sensors mounted on a plate, with dimension G indicating the distance between the centers of the two sensors. The bottom diagram shows a perspective view of a sensor mounted on a plate, with dimensions N, S, D, and W indicating various mounting parameters: N is the distance from the sensor's center to the top edge of the plate, S is the distance from the sensor's center to the bottom edge of the plate, D is the distance from the sensor's center to the left edge of the plate, and W is the distance from the sensor's center to the right edge of the plate.

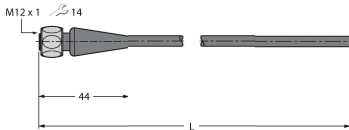
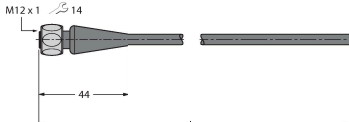
Distance D	3 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
Distance N	2 x Sn
Diameter active area B	Ø 8 mm

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Accessories

BST-08B  Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6	QM-08  Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.
MW08  Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	BSS-08  Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene
MBS80  Mounting clamp for smooth barrel sensors; mounting block material: Anodized aluminum	6945100 Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.

Wiring accessories

Dimension drawing	Type	ID	
	RKH4-2/TFE	6935482	Connection cable, M12 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, gray; temperature range: -25...+80 °C
	RKH4-2/TFG	6934384	Connection cable, M12 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: TPE, gray; temperature range: -40...+105 °C