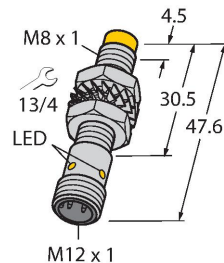


NI3-M08-VN6X-H1341

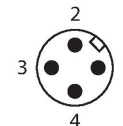
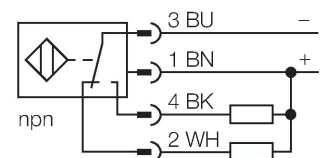
Inductive Sensor – With Increased Switching Distance



Features

- Threaded barrel, M8 x 1
- Nickel-plated brass
- Large sensing range
- DC 4-wire, 10...30 VDC
- Changeover contact, NPN 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	NI3-M08-VN6X-H1341
ID	4602863
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	≤ 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_o	≤ 200 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	4-wire, Complementary contact, NPN
Switching frequency	2.8 kHz
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	47.6 mm
Housing material	Metal, CuZn, Nickel Plated

Technical data

Active area material	Plastic, PP-GF20
Max. tightening torque of housing nut	7 Nm
Electrical connection	Connector, M12 × 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

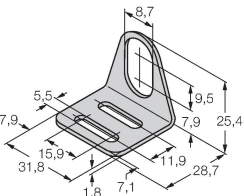
Mounting instructions/Description

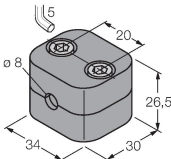
The image contains three isometric diagrams illustrating different mounting configurations for a sensor. The sensor is represented by a yellow cylinder with a threaded end. The mounting brackets are shown in grey.

- Top Diagram:** A single sensor is mounted on a bracket. The dimension T is indicated as the distance from the sensor's center to the back of the bracket.
- Middle Diagram:** Two sensors are mounted on a bracket. The dimension G is indicated as the distance between the centers of the two sensors.
- Bottom Diagram:** A sensor is mounted on a bracket. The dimensions are indicated as follows:
 - N : Distance from the sensor's center to the top of the bracket.
 - S : Distance from the sensor's center to the bottom of the bracket.
 - D : Distance from the sensor's center to the front of the bracket.
 - W : Distance from the sensor's center to the side of the bracket.

Distance D	$3 \times B$
Distance W	$3 \times S_n$
Distance T	$3 \times B$
Distance S	$1.5 \times B$
Distance G	$6 \times S_n$
Distance N	$2 \times S_n$
Diameter active area B	$\varnothing 8 \text{ mm}$

Accessories

MW08	6945008
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	
	

BSS-08	6901322
Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene	
	

MBS8069479



Mounting clamp for smooth barrel sensors; mounting block material: Anodized aluminum

Accessories

Dimension drawing	Type	ID	
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RKC4.4T-2/TEL

6625013

Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval

