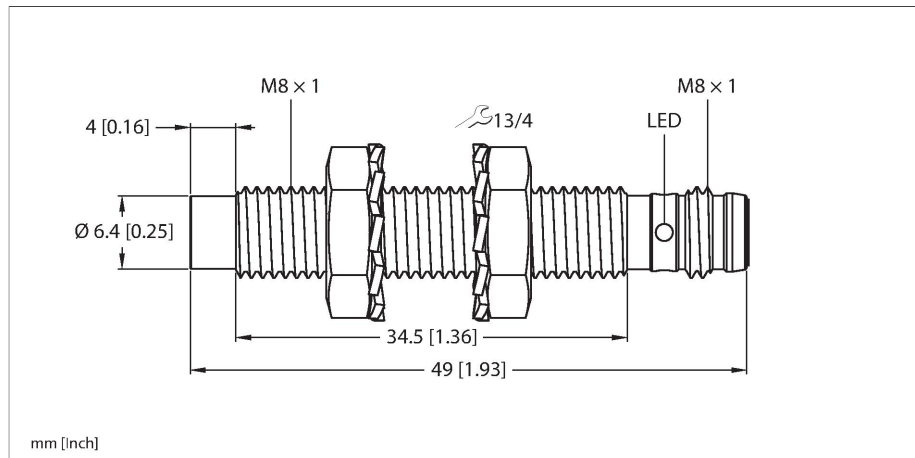


NI3-EG08-AP6X-V1131

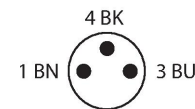
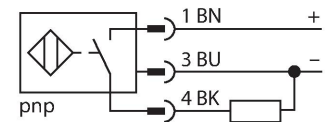
Inductive Sensor



Features

- M8 × 1 threaded barrel
- Stainless steel, 1.4305 (AISI 303)
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M8 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-EG08-AP6X-V1131
ID	4602750
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	20 %
Electrical data	
Operating voltage U_B	10...30 VDC
Ripple U_{ss}	≤ 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, PNP
Switching frequency	3 kHz
Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	49 mm
Housing material	Stainless steel, 1.4305 (AISI 303)

Technical data

Active area material	Plastic, PBT
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	2283 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

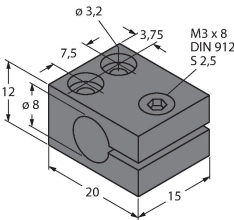
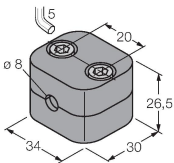
Mounting instructions

Mounting instructions/Description	
	Distance D3 x B
	Distance W3 x Sn
	Distance T3 x B
	Distance S1.5 x B
	Distance G6 x Sn
	Distance N2 x Sn
	Diameter active area BØ 8 mm

Accessories

BST-08B	6947210	MW08	6945008
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6		Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)	

BSS-08	6901322	MBS80	69479
Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene		Mounting clamp for smooth barrel sensors; mounting block material: Anodized aluminum	



Accessories

Dimension drawing	Type	ID	
	PKGV3M-2/TEL	6625385	Connection cable, M8 female connector, straight, 3-pin, stainless steel coupling nut, cable length: 2 m, jacket material: PVC, black; cULus approval