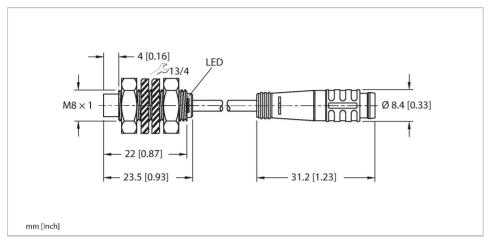


# NI3-EG08K-AP6X-0.2-PSG3 Inductive Sensor



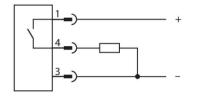
#### Technical data

Type	NI3-EG08K-AP6X-0.2-PSG3
ID	4669691
General data	
Rated switching distance	3 mm
Mounting conditions	Non-flush
Secured operating distance	≤ (0.81 × Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeat accuracy	≤ 2 % of full scale
Hysteresis	20 %
Electrical data	
Operating voltage U <sub>B</sub>	1030 VDC
Ripple U <sub>ss</sub>	≤ 10 % U <sub>Bmax</sub>
DC rated operating current I <sub>e</sub>	≤ 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 <sub>e</sub>	≤ 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

#### **Features**

- ■M8 × 1 threaded barrel
- Stainless steel, 1.4427 SO
- ■DC 3-wire, 10...30 VDC
- ■NO contact, PNP output
- Pigtail M8 x 1 with snap-lock 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.

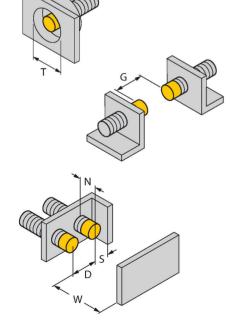


## Technical data

Dimensions	23.5 mm
Housing material	Stainless steel, 1.4305 (AISI 303)
Active area material	Plastic, PBT
End cap	Plastic, PP
Max. tightening torque of housing nut	5 Nm
Electrical connection	Cable with connector, M8 × 1
Cable quality	Ø 3.3 mm, Gray, LifY-11Y, PUR, 0.2 m
Core cross-section	3 x 0.14 mm²
Environmental conditions	
Ambient temperature	-25+70 °C
Ambient temperature Vibration resistance	-25+70 °C 55 Hz (1 mm)
Vibration resistance	55 Hz (1 mm)
Vibration resistance Shock resistance	55 Hz (1 mm) 30 g (11 ms)
Vibration resistance Shock resistance Protection class	55 Hz (1 mm) 30 g (11 ms) IP67 2283 years acc. to SN 29500 (Ed. 99) 40

## Mounting instructions

#### Mounting instructions/Description



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



### Accessories

BST-08B 6947210

Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

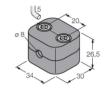


QM-08 6945100

Quick-mount bracket with deadstop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quickmount brackets.

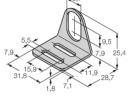
MW08 6945008

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

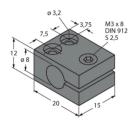


BSS-08 6901322
Mounting clamp for smooth ar

Mounting clamp for smooth and threaded barrel sensors; material: Polypropylene



MBS80 69479



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