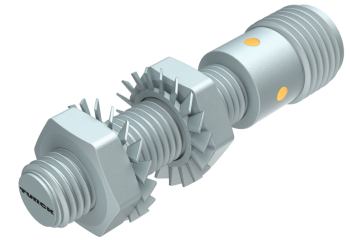
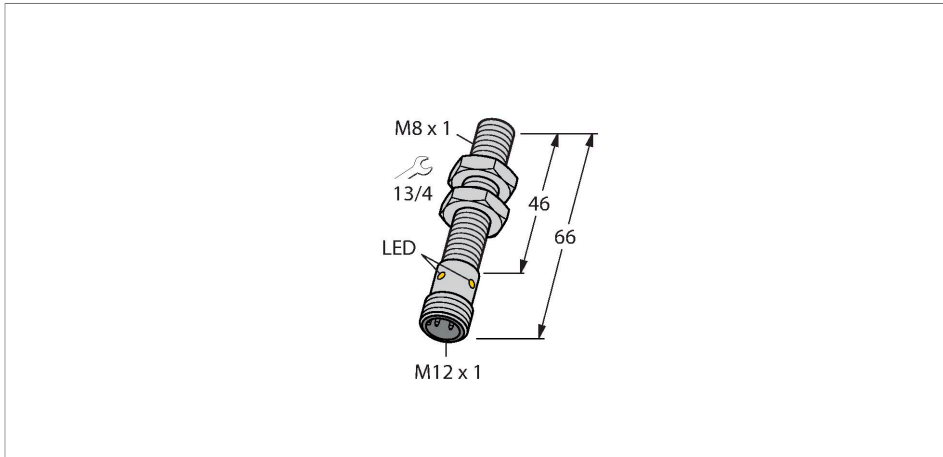


# BI3-EGT08FE-AP6X-H1341

## Inductive Sensor – Stainless Steel Front



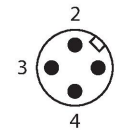
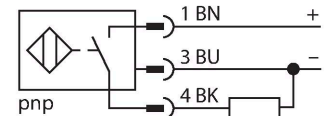
### Technical data

Type	BI3-EGT08FE-AP6X-H1341
ID	46147030
<b>General data</b>	
Rated switching distance	3 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	$\leq 5\%$ of full scale
Hysteresis	20 %
<b>Electrical data</b>	
Operating voltage	10...30 VDC
Residual ripple	$\leq 20\% U_{ss}$
DC rated operational current	$\leq 200$ mA
No-load current	10 mA
Residual current	$\leq 0.1$ mA
Isolation test voltage	$\leq 0.5$ kV
Short-circuit protection	yes / Cyclic
Voltage drop at $I_o$	$\leq 2$ V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Switching frequency	1 kHz
<b>Mechanical data</b>	
Design	Threaded barrel, M8 x 1

### Features

- Threaded barrel, M8 x 1
- Stainless steel, PTFE-coated
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- M12 x 1 male connector

### Wiring diagram



### Functional principle

The inductive all-metal switches operate on the basis of the electromagnetic pulse method. Unlike standard inductive sensors, the magnetic field is not generated through oscillation but through short, periodic current pulses flowing through the coil. The magnetic field induces voltage in the object to be detected, which, for its part creates a current flow in this object. After switching off the current pulse, the current in the object also drops, now inducing voltage back in the emitter coil. This voltage is the wanted signal and remains unaffected by

BI3-EGT08FE-AP6X-H1341 | 11/07/2023 14-10 | technical changes reserved

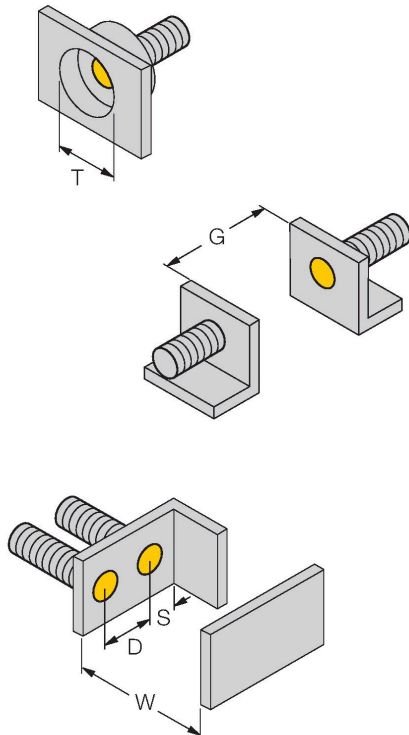
## Technical data

energy dissipation in the magnetic field. Only non-ferromagnetic or poorly conductive metals provide a low signal.

Dimensions	66 mm
Housing material	Stainless steel, 1.4305 (AISI 303), PTFE-coated
Active area material	Stainless steel, 1.4305 (AISI 303), PTFE-coated
Admissible pressure on front cap	≤ 100 bar
Max. tightening torque of housing nut	10 Nm
Electrical connection	Connector, M12 × 1
<b>Environmental conditions</b>	
Ambient temperature	-25...+85 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67 IP68
MTTF	409 years acc. to SN 29500 (Ed. 99) 20 °C
Switching state	LED, Yellow, LED flashing: 0.8 s <sub>r</sub> < s ≤ s <sub>r</sub>

## Mounting instructions

### Mounting instructions/Description



Distance D	22 mm
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Distance W	9 mm
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Distance T	24 mm
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Distance S	6 mm
------------	------

Distance G	18 mm
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Diameter active area B	Ø 8 mm
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The following reduction factors apply when flush-mounted in:

Steel: 1.0

Aluminium: 0.9

Brass: 0.9

Stainless steel: 1.0

## Accessories

BST-08B

6947210

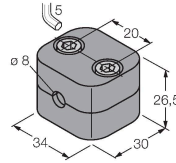
Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6



BSS-08

6901322

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



MBS80

69479

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

