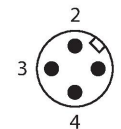
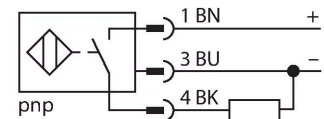


BI1.5-EG08F-AP6X-0.5-RS4T/S1765 Inductive Sensor – Stainless Steel Front

Features

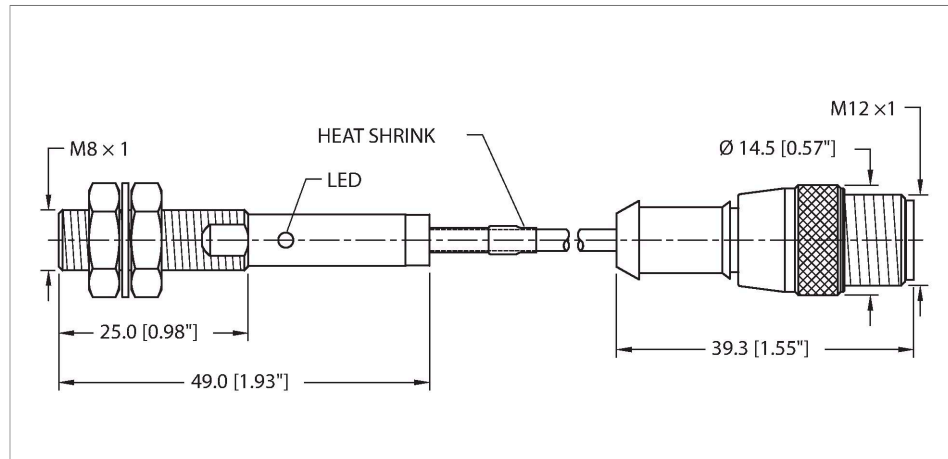
- Threaded barrel, M8 x 1
- Stainless steel, 1.4305
- DC 3-wire, 10...30 VDC
- NO contact, PNP output
- Pigtail with male end M12 x 1

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	BI1.5-EG08F-AP6X-0.5-RS4T/S1765
ID	4614676
Special version	S1765 corresponds to: weldguard coated sensor with silicone sleeving
General data	
Rated switching distance	1.5 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	$\leq 10\%$ of full scale
Hysteresis	3...15 %
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	$\leq 10\% U_{ss}$
DC rated operational current	≤ 200 mA
No-load current	10 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes / Cyclic
Voltage drop at I_o	≤ 2 V
Wire breakage/Reverse polarity protection	yes / Complete
Output function	3-wire, NO contact, PNP
Switching frequency	0.2 kHz

Technical data

Mechanical data	
Design	Threaded barrel, M8 x 1
Dimensions	49 mm
Housing material	Stainless steel, 1.4305 (AISI 303)
Active area material	Stainless steel, 1.4305 (AISI 303)
Max. tightening torque of housing nut	9 Nm
Electrical connection	Cable with connector, M12 x 1
Cable quality	Ø 4 mm, Gray, LifYY, PVC, 0.5 m
Core cross-section	3 x 0.25 mm ²
Environmental conditions	
Ambient temperature	-25...+70 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Switching state	LED, Yellow

Mounting instructions

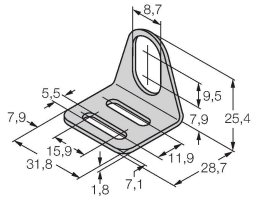
Mounting instructions/Description	
	Distance D
	30 mm
	Distance W
	4.5 mm
	Distance T
	8 mm (Fe metal); 50 mm (non Fe-metal)
	Distance S
	15 mm (Fe metal); 25 mm (non Fe-metal)
	Distance G
	35 mm
	Diameter active area B
	Ø 8 mm
Switching distance not reduced when flush mounted in ferrous metals	
When mounted in non-ferrous metals the active face has to protrude 10 mm.	
The values depend on the mounting nuts used. Therefore we recommend the use of the nuts which are included in the delivery.	

Accessories

MW-08

6945008

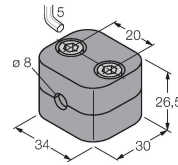
Mounting bracket for threaded barrel sensors; material: Stainless steel A2 1.4301 (AISI 304)



BSS-08

6901322

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



MBS80

69479

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

