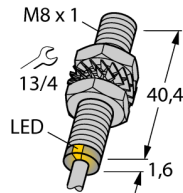
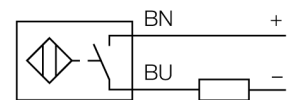


**Inductive sensor
with extended switching distance
BI2-EG08-AG41X**



- Threaded barrel, M8 x 1
- Stainless steel, 1.4404
- Large detection range
- DC 2-wire, 10...55 VDC
- Polarized version
- NO contact
- Cable connection

Wiring diagram



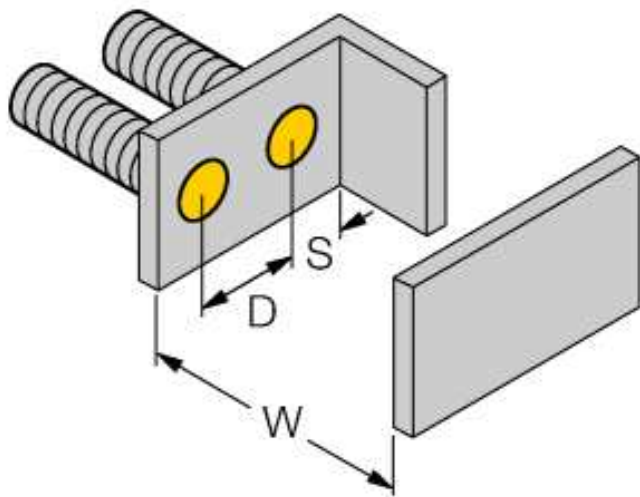
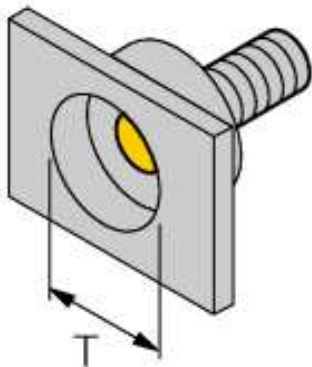
Functional principle

Inductive sensors detect metal objects contactless and wear-free. For this purpose they use a high-frequency electromagnetic AC field that interacts with the target. The sensors hosting a ferrite core coil generate the AC field through an LC resonant circuit.

Type code	BI2-EG08-AG41X
Ident no.	4562000
Rated operating distance Sn	2 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1; Al = 0.3; stainless steel = 0.7; Ms = 0.4
Repeatability	≤ 2 % of full scale
Temperaturdrift	10 %
Hysteresis	1...15 %
Ambient temperature	-25...+70 °C
Operating voltage	10...55VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 100 mA
Residual current	≤ 0.6 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes/ cyclic
Voltage drop at I _n	≤ 3.5 V
Smallest operating current I _m	≤ 3 mA
Switching frequency	1 kHz
Design	threaded barrel, M8 x 1
Dimensions	42 mm
Housing material	Metal, V4A (1.4404)
Material active face	Plastic, PA
End cap	Plastic, PP
Max. tightening torque housing nut	10 Nm
Connection	cable
Cable quality	4 mm, LifYY-11Y, PUR, 2 m
Cable cross section	2 x 0.25 mm ²
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	• yellow

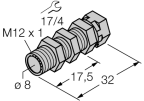
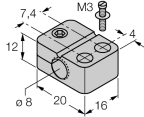
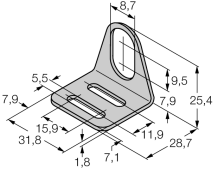
**Inductive sensor
with extended switching distance
BI2-EG08-AG41X**

Distance D	2 x B
Distance W	3 x Sn
Distance T	3 x B
Distance S	1.5 x B
Distance G	6 x Sn
<hr/>	
Diameter of the active area B	Ø 8 mm



**Inductive sensor
with extended switching distance
BI2-EG08-AG41X**

Accessories

Type code	Ident no.	Description	Dimension drawing
QM-08	6945100	Quick-mount bracket with dead-stop, chrome-plated brass, male thread M12 x 1. Note: The switching distance of proximity switches may be reduced through the use of quick-mount brackets.	
BST-08B	6947210	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
MW-08	6945008	Mounting bracket for threaded barrel devices; material: Stainless steel A2 1.4301 (AISI 304)	
BSS-08	6901322	Mounting bracket for smooth and threaded barrel devices; material: Polypropylene	