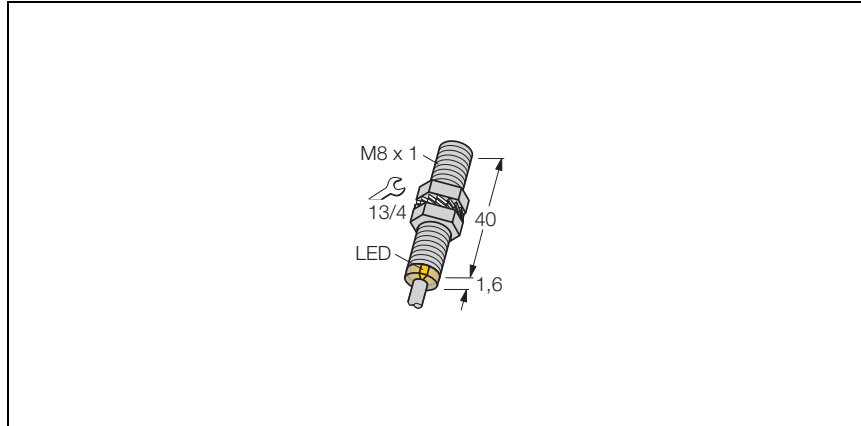
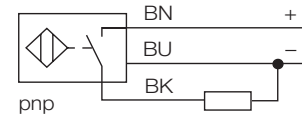


**Inductive sensor
with extended switching distance
Bi2-EG08-AP6X**



- threaded barrel, M8 x 1
- stainless steel, 1.4404
- large detection range
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- cable connection

Wiring diagram



Functional principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. For this purpose they use a high-frequency electro-magnetic AC field that interacts with the target. With inductive sensors, this field is generated by an LC resonant circuit with a ferrite core coil.

Type	Bi2-EG08-AP6X
Ident-No.	4602040
Rated operating distance Sn	2 mm
Mounting condition	flush
Assured sensing range	≤ (0,81 x Sn) mm
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Temperature drift	≤ ± 10 %
Hysteresis	3... 15 %
Repeatability	≤ 2 %
Ambient temperature	-25...+ 70°C
Operating voltage	10... 30VDC
Residual ripple	≤ 10 % U _{SS}
DC rated operational current	≤ 150 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Rated insulation voltage	≤ 0.5 kV
Short-circuit protection	yes / cyclic
Voltage drop at I _e	≤ 1.8V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Switching frequency	≤ 3 kHz
Housing	threaded barrel, M8 x 1
Dimensions	41.6 x 8 mm
Housing material	metal, AISI 316L
Material active face	plastic, plastic, PA12-GF20
End cap	plastic, PP
Tightening torque of housing nut	10 Nm
Connection	cable
Cable quality	Ø 4, LifYY-11Y, PUR, 2 m
Cable cross section:	3 x 0.25mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
Display switch state	LED yellow