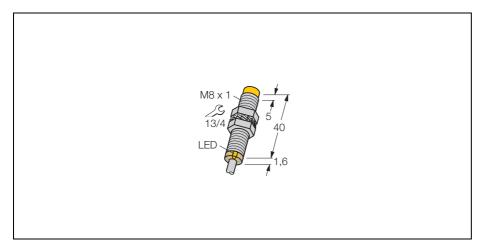
## Inductive sensor with extended switching distance Ni4-EG08-AG41X

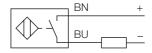




Rated operating distance Sn Mounting condition Assured sensing range Correction factors Temperature drift	4561000  4 mm  non-flush $\leq (0.81 \times Sn) \text{ mm}$ St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3 $\leq \pm 10 \%$
Mounting condition Assured sensing range Correction factors	non-flush $\leq (0.81 \times \text{Sn}) \text{ mm}$ St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Assured sensing range Correction factors	≤ (0,81 x Sn) mm St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
Correction factors	St37 = 1, V2A ~ 0.7, Ms ~ 0.4, Al ~ 0.3
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Temperature drift	≤ ± 10 %
and the same of th	
Hysteresis	1 15 %
Repeatability	≤ 2 %
Ambient temperature	-25+ 70°C
Operating voltage	10 55VDC
Residual ripple	≤ 10 % U <sub>ss</sub>
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 <sub>e</sub>	≤ 3.5V
Output function	2-wire, normally open, 2-wire
Smallest operating current I <sub>m</sub>	≥3 mA
Switching frequency	≤1 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:	2 x 0.25mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP67
Display switch state	LED yellow

- threaded barrel, M8 x 1
- stainless steel, 1.4404
- large detection range
- 2-wire DC, 10...55 VDC
- polarized version
- normally open
- 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.