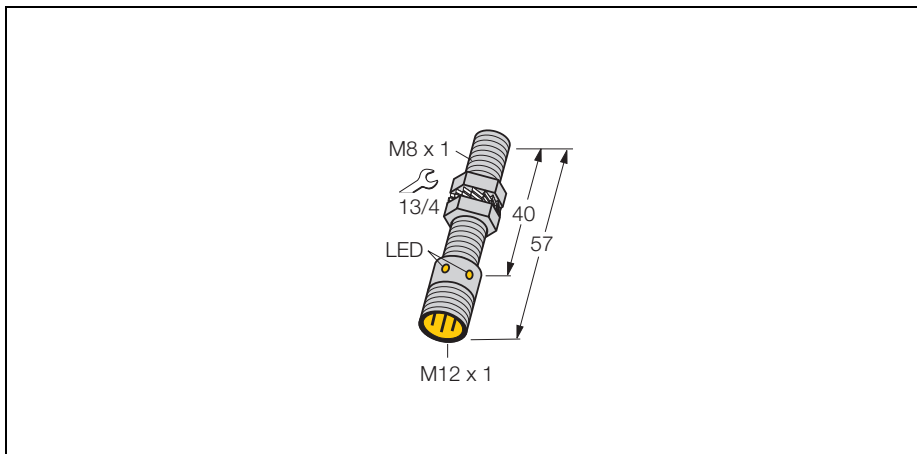
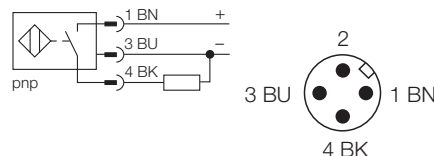


Inductive Sensor



- threaded barrel, M8 x 1
- stainless steel, 1.4404
- factor 1 for all metals
- degree of protection IP68
- magnetic field immune
- extended temperature range
- high switching frequency
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- connector, M12 x 1

Wiring diagram



Functional principle

Inductive sensors are designed for wear-free and non-contact detection of metal objects. Due to a ferrite-less 3-coil system, uprox factor 1 sensors have distinct advantages. They detect all metals at the same switching distance, are magnetic field immune and feature large switching distances.

Ident-No.	4600540
Rated operating distance Sn	1.5 mm
Mounting condition	flush
Assured switching distance	$\leq (0,81 \times S_n) \text{ mm}$
Repeatability	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$
Hysteresis	$\leq \pm 15 \%$, $\leq -25 \text{ }^\circ\text{C}$ v $\geq +70 \text{ }^\circ\text{C}$
Ambient temperature	-30...+ 85 °C

Operating voltage	10... 30 VDC
Residual ripple	$\leq 10 \%$ U_{SS}
DC rated operational current	$\leq 150 \text{ mA}$
No-load current I_0	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Rated insulation voltage	$\leq 0.5 \text{ kV}$
Short-circuit protection	yes / cyclic
Voltage dip at I_e	$\leq 1.8 \text{ V}$
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Insulation class	□
Switching frequency	$\leq 2 \text{ kHz}$

Housing	threaded barrel, M8 x 1
Dimensions	57 mm
Housing material	metal, A4 1.4404 (AISI 316L)
Material active area	plastic, PA12-GF20
Tightening torque of housing nut	10 Nm
Connection	Connector, M12 x 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP68

Display switch state	LED yellow
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Mounting instructions

	minimum distances
Distance D	$2 \times B$
Distance W	$3 \times S_n$
Distance T	$3 \times B$
Distance S	$1,5 \times B$
Distance G	$6 \times S_n$

Diameter of the active area B $\varnothing 8 \text{ mm}$

