

Datasheet

25mm PNP Block Inductive Proximity Sensor

RS Stock number [208-263](#)



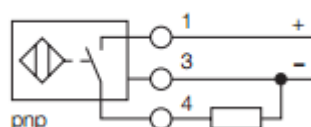
Specifications:

- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- Corner LEDs with high luminance level
- Optimum visibility of operating voltage display and switching state in any installation position
- Factor 1 for all metals
- Degree of protection IP68
- Magnetic field immune
- Extended temperature range
- High switching frequency
- Pre-damping protection through self-compensation
- 3-wire DC, 10...30 VDC
- Normally open, pnp output
- Terminal chamber

Professionally approved products. Datasheet

Rated operating distance Sn	25 mm
Mounting condition	non-flush, partial embedding possible
Assured switching distance	$\leq (0,81 \times S_n)$ mm
Repeatability	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$ $\leq \pm 15 \%$, $\leq -25 \text{ °C}$ v $\geq +70 \text{ °C}$
Hysteresis	3... 15 %
Ambient temperature	-30...+ 85 °C
Operating voltage	10... 30 VDC
Residual ripple	$\leq 10 \%$ U_{SS}
DC rated operational current	≤ 200 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 dip at I_e	≤ 1.8 V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Insulation class	□
Switching frequency	≤ 0.25 kHz
Housing	rectangular, CP40
Dimensions	114 x 40 x 40 mm variable orientation of active face in 9 directions
Housing material	plastic, PBT-GF30-V0, black
Material active area	plastic, PA6-GF30-X, yellow
Connection	Terminal chamber
Clamping ability	≤ 2.5 mm ²
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP68
Operating voltage display	2 x LEDs green
Display switch state	2 x LED yellow

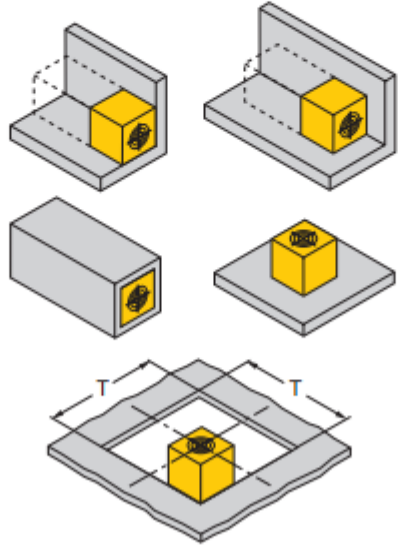
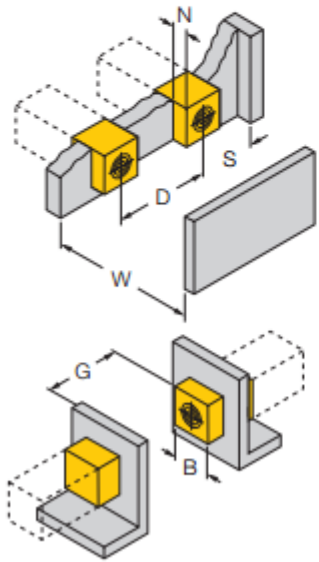
Wiring diagram



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.

Mounting instructions	minimum distances
Distance D	240 mm
Distance W	75 mm
Distance T	100 mm
Distance S	20 mm
Distance G	150 mm
Distance N	30 mm
Width of the active area B	40 mm



up to 4-side flush mounting possible
 1-side flush mounting: $S_r = 22 \text{ mm}$
 2-side flush mounting: $S_r = 20 \text{ mm}$
 3-side flush mounting: $S_r = 17 \text{ mm}$
 4-side flush mounting: $S_r = 13 \text{ mm}$

back-mounting without reduction of the switching distance

recessed mounting with switching distance reduction possible