

## 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

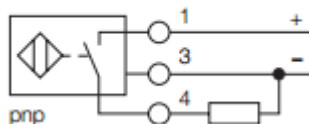
Normally open, pnp output

Terminal chamber

# Professionally approved products. Datasheet

<b>Rated operating distance Sn</b>	25 mm
Mounting condition	non-flush, partial embedding possible
Assured switching distance	$\leq (0,81 \times S_n)$ mm
Repeatability	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$ $\leq \pm 15 \%$ , $\leq -25 \text{ }^\circ\text{C} \vee \geq +70 \text{ }^\circ\text{C}$
Hysteresis	3... 15 %
Ambient temperature	-30...+ 85 °C
<b>Operating voltage</b>	10... 30 VDC
Residual ripple	$\leq 10 \%$ $U_{SS}$
DC rated operational current	$\leq 200$ mA
No-load current $I_0$	$\leq 15$ mA
Residual current	$\leq 0.1$ mA
Rated insulation voltage	$\leq 0.5$ kV
Short-circuit protection	yes / cyclic
Voltage dip at $I_e$	$\leq 1.8$ V
Wire breakage / Reverse polarity protection	yes / complete
Output function	3-wire, normally open, pnp
Insulation class	□
Switching frequency	$\leq 0.25$ kHz
<b>Housing</b>	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	$\leq 2.5$ mm <sup>2</sup>
Vibration resistance	55 Hz (1 mm)
Shock resistance	30g (11 ms)
Degree of protection	IP68
<b>Operating voltage display</b>	2 x LEDs green
Display switch state	2 x LED yellow

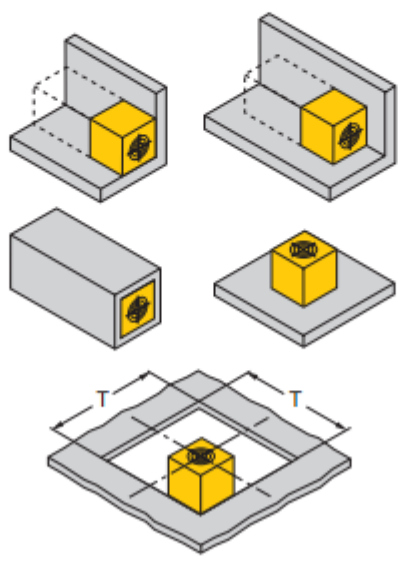
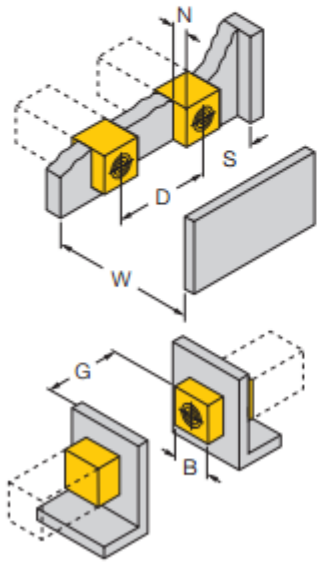
### Wiring diagram



### 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
<b>Width of the active area B</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