

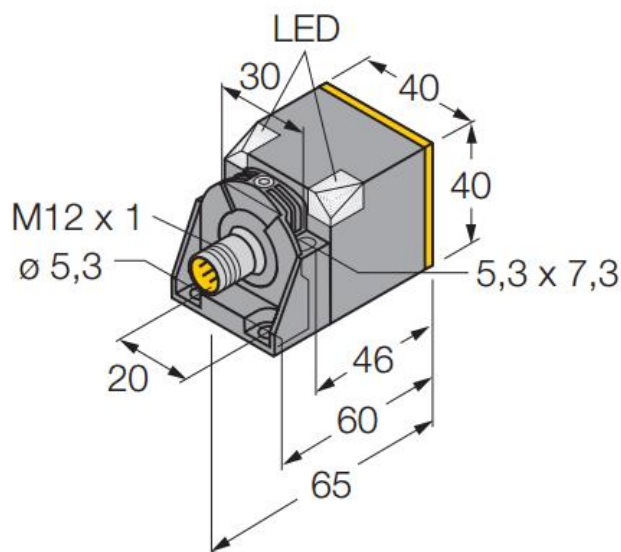
Datasheet

35 mm PNP Block Inductive Proximity Sensor, 200 mA, 10 → 30 V dc, IP68

RS Stock number 208-190



Dimensions: (mm)



- rectangular, height 40 mm
- variable orientation of active face in 5 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
- extended switching distance
- degree of protection IP68
- magnetic field immune
- extended temperature range
- high switching frequency
- predamping protection through self-compensation
- 3-wire DC, 10...30 VDC
- normally open, pnp output
- connector, M12 x 1

Specification

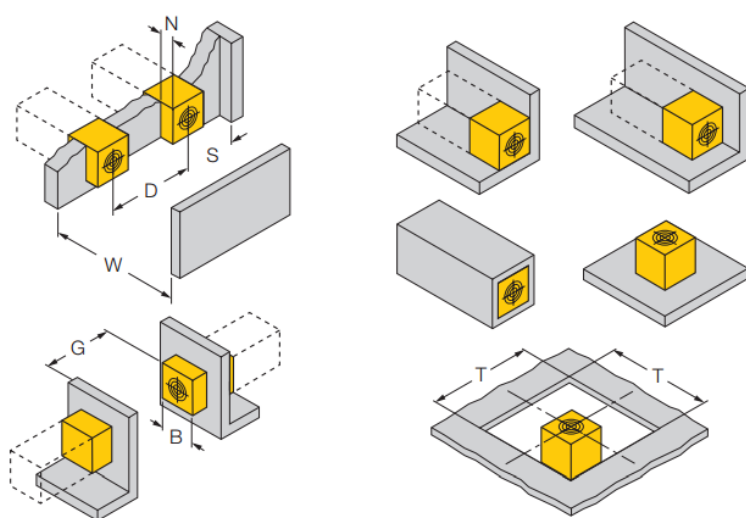
Rated operating distance Sn	35 mm
Mounting condition	non-flush, partial embedding possible
Assured switching distance	$\leq (0,81 \times S_n)$ mm
Repeatability	$\leq 2 \%$
Temperature drift	$\leq \pm 10 \%$ $\leq \pm 15 \%$, $\leq -25 \text{ °C}$ v $\geq +70 \text{ °C}$
Hysteresis	3... 15 %
Ambient temperature	-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, CK40
Dimensions	65 x 40 x 40 mm variable orientation of active face in 5 directions
Housing material	plastic, PBT-GF30-V0, black
Material active area	plastic, PA6-GF30-X, yellow
Connection	Connector, M12 x 1
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
Included in scope of supply	BS4-CK40

Mounting instructions

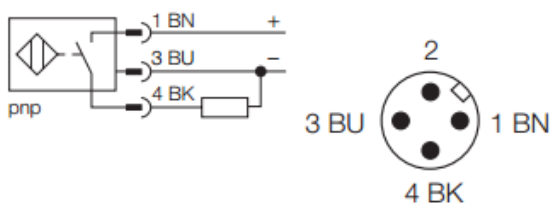
	minimum distances
Distance D	120 mm
Distance W	105 mm
Distance T	140 mm
Distance S	60 mm
Distance G	210 mm
Distance N	30 mm

Width of the active area B

40 mm



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 di-