

# Inductive sensor NCB50-FP-A2-P1-V1

- 50 mm flush
- 4-wire DC



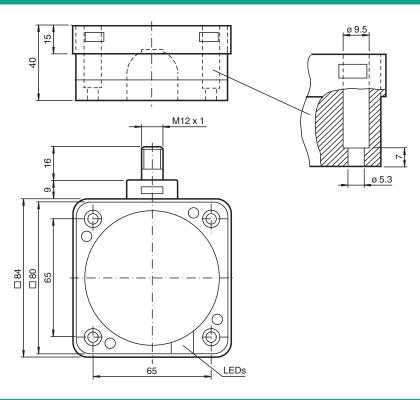








## **Dimensions**



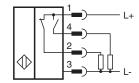
## **Technical Data**

General specifications		
Switching function		complementary
Output type		PNP
Rated operating distance	$s_n$	50 mm
Installation		flush
Output polarity		DC
Assured operating distance	Sa	0 40.5 mm
Reduction factor r <sub>AI</sub>		0.38
Reduction factor r <sub>Cu</sub>		0.35
Reduction factor r <sub>304</sub>		0.83



#### Technical Data Output type 4-wire **Nominal ratings** 10 ... 60 V DC Operating voltage $U_{\text{\footnotesize B}}$ Switching frequency f 0 ... 80 Hz Hysteresis Н typ. 3 % Reverse polarity protection reverse polarity protected Short-circuit protection pulsing Voltage drop $U_d$ $\leq$ 3 V 0 ... 200 mA Operating current $\mathsf{I}_\mathsf{L}$ Off-state current 0 ... 0.5 mA $I_r$ No-load supply current $I_0$ ≤ 20 mA Time delay before availability ≤ 300 ms Operating voltage indicator LED, green Switching state indicator LED, yellow Functional safety related parameters 680 a $\mathsf{MTTF}_\mathsf{d}$ 20 a Mission Time (T<sub>M</sub>) 0 % Diagnostic Coverage (DC) Compliance with standards and directives Standard conformity Standards EN 60947-5-2:2007 IEC 60947-5-2:2007 Approvals and certificates **UL** approval cULus Listed, General Purpose CSA approval cCSAus Listed, General Purpose CCC approval Certified by China Compulsory Certification (CCC) **Ambient conditions** -25 ... 70 °C (-13 ... 158 °F) Ambient temperature Storage temperature -25 ... 85 °C (-13 ... 185 °F) Mechanical specifications Connection type Connector plug M12 x 1, 4-pin PBT Housing material PBT Sensing face Housing base **PBT** IP68 Degree of protection

### Connection



## **Connection Assignment**



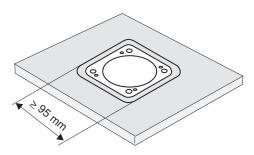
Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

## Mounting

These sensors are especially designed for embeddable mounting in conveyor floors. Due to its precise location in metal base plates the sensor is afforded a high degree of mechanical protection. No clearance is required between the sensor and the base plate, avoiding the need for protective guarding to prevent possible foot injury.

The large sensing range ensures positive detection, and thus provides consistent control and monitoring of the conveyor.



Warning! Once the metal screening has been removed, the sensor can no longer be embeddable mounted.

## **Accessories**

	V1-W-2M-PUR	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey
2	V1-G-2M-PUR	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey