

# Inductive sensor NCB50-FP-A2-C-P3-V1

- 50 mm flush
- 3-wire DC
- Weld Immune
- Optimum use at a distance >50 cm

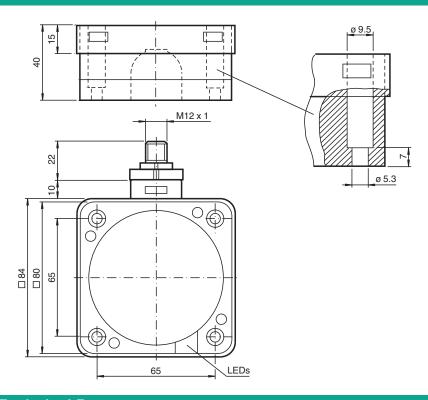








#### **Dimensions**

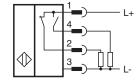


## **Technical Data**

General specifications		
Switching function		complementary
Output type		PNP
Rated operating distance	S <sub>n</sub>	50 mm
Installation		flush
Output polarity		DC
Assured operating distance	sa	0 40.5 mm
Reduction factor r <sub>Al</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		
Operating voltage	U <sub>B</sub>	10 60 V DC
Switching frequency	f	0 1 Hz
Hysteresis	Н	typ. 3 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	≤3 V
Operating current	IL	0 200 mA
Off-state current	l <sub>r</sub>	0 0.5 mA
No-load supply current	I <sub>0</sub>	≤ 20 mA
Time delay before availability	$t_{v}$	≤1s
Tuning-out		≥ 50 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF <sub>d</sub>		660 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
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		
Ambient temperature		-25 70 °C (-13 158 °F)
Mechanical specifications		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		PBT/metal
Sensing face		PBT, active surface PTFE coated
Housing base		metal
Degree of protection		IP68

## Connection





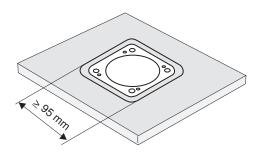
Wire colors in accordance with EN 60947-5-2

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