

Inductive sensor NCB50-FP-E2-P4

- Comfort series
- 50 mm flush
- 3-wire DC

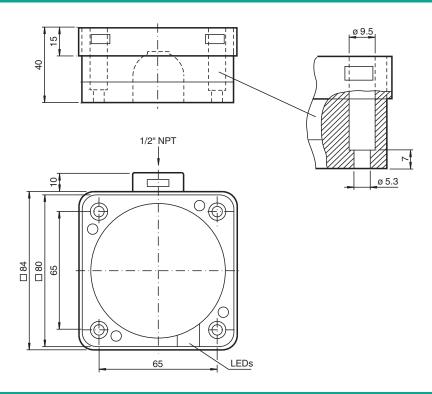








Dimensions

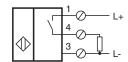


Technical Data

General specifications		
Switching function		Normally open (NO)
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 _{Al}		0.38
Reduction factor r _{Cu}		0.35
Reduction factor r ₃₀₄		0.83

Technical Data		
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 60 V DC
Switching frequency	f	0 80 Hz
Hysteresis	Н	typ. 3 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤3 V
Operating current	ال	0 200 mA
Off-state current	I _r	0 0.5 mA
No-load supply current	I ₀	≤ 20 mA
Time delay before availability	t _v	≤ 300 ms
Operating voltage indicator	,	LED, green
Switching state indicator		LED, yellow
Functional safety related parameters		•
MTTF _d		940 a
Mission Time (T _M)		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		screw terminals
Information for connection		A maximum of two conductors with the same core cross section may be mounted on one terminal connection! tightening torque 1.2 Nm + 10 $\%$
Core cross-section		up to 2.5 mm ²
Minimum core cross-section		without wire end ferrule 0.5 mm ² , with connector sleeves 0.34 mm ²
Maximum core cross-section		without wire end ferrule 2.5 mm ² , with connector sleeves 1.5 mm ²
Housing material		PBT
Sensing face		PBT
Housing base		metal
Degree of protection		IP68

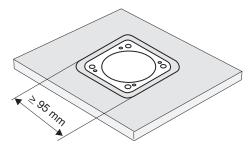
Connection



These sensors are especially designed for embeddable mounting in conveyor floors. Due to its precise

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.