

Inductive sensor NCB50-FP-E2-P1

- 50 mm flush
- 3-wire DC

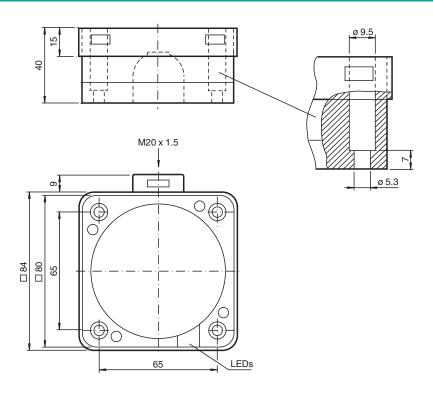








Dimensions

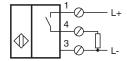


Technical Data

General specifications			
Switching function		Normally open (NO)	
Output type		PNP	
Rated operating distance	Sn	50 mm	
Installation		flush	
Output polarity		DC	
Assured operating distance	Sa	0 40.5 mm	
Reduction factor r _{AI}		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	IL	0 200 mA
Off-state current	l _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
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		PBT
Degree of protection		IP68

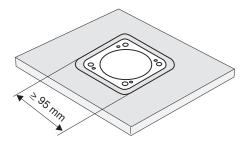
Connection



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.