

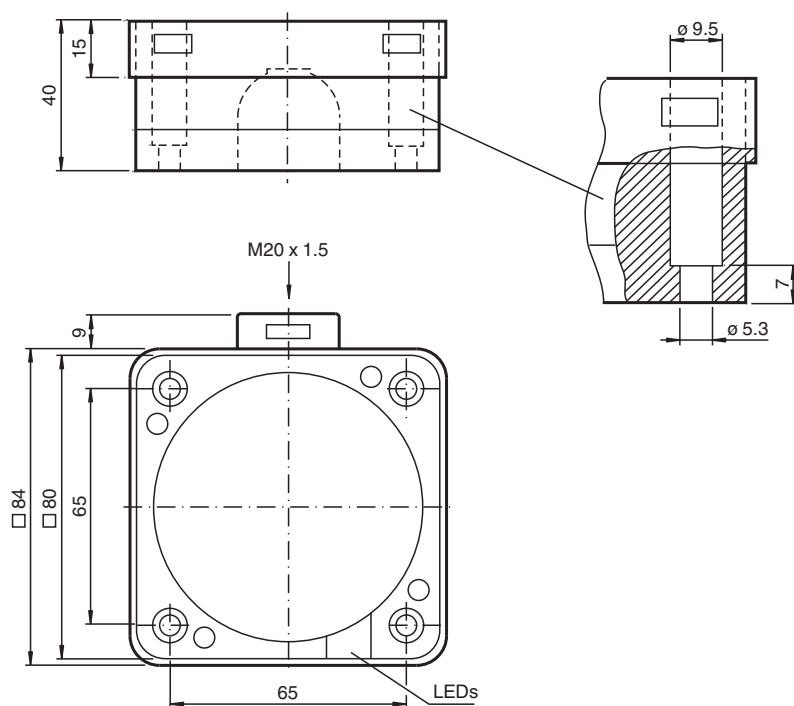


Inductive sensor NCB50-FP-A2-P1

- 50 mm flush
- 4-wire DC



Dimensions



Technical Data

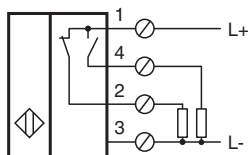
General specifications

Switching function		complementary
Output type		PNP
Rated operating distance	s_n	50 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 40.5 mm
Reduction factor r_{Al}		0.38
Reduction factor r_{Cu}		0.35

Technical Data

Reduction factor r_{304}	0.83
Nominal ratings	
Operating voltage	U_B 10 ... 60 V DC
Switching frequency	f 0 ... 80 Hz
Hysteresis	H typ. 3 %
Reverse polarity protection	reverse polarity protected
Short-circuit protection	pulsing
Voltage drop	U_d ≤ 3 V
Operating current	I_L 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	670 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	PBT
Degree of protection	IP68
Mass	445 g

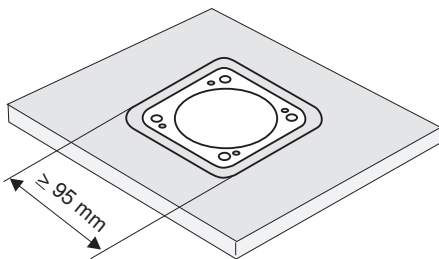
Connection



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.