



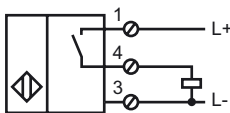
Model Number

NCB50-FP-E2-P1

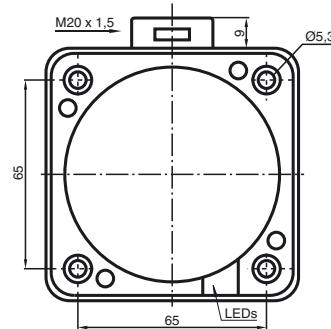
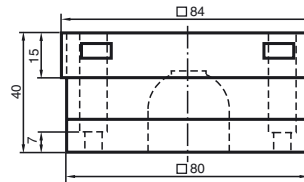
Features

- 50 mm embeddable
- 3-wire DC

Connection



Dimensions



Technical Data

General specifications

| | | |
|----------------------------|-------|---------------|
| Switching element function | | PNP NO |
| Rated operating distance | s_n | 50 mm |
| Installation | | embeddable |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 40.5 mm |
| Reduction factor r_{Al} | | 0.38 |
| Reduction factor r_{Cu} | | 0.35 |
| Reduction factor r_{303} | | 0.83 |

Nominal ratings

| | | |
|-----------------------------------|-------|----------------------------|
| Operating voltage | U_B | 10 ... 60 V DC |
| Switching frequency | f | 0 ... 80 Hz |
| Hysteresis | H | typ. 3 % |
| Reverse polarity protected | | 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 |
| Operating voltage display | | LED, green |
| Indication of the switching state | | LED, yellow |

Functional safety related parameters

| | |
|--------------------------------|-------|
| MTTF _d | 940 a |
| Mission Time (T _M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |

Ambient conditions

| | |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 70 °C (-13 ... 158 °F) |
|---------------------|--------------------------------|

Mechanical specifications

| | |
|--------------------|---------------------------|
| Connection type | screw terminals |
| Core cross-section | up to 2.5 mm ² |
| Housing material | PBT |
| Sensing face | PBT |
| Protection degree | IP68 |

Compliance with standards and directives

| | |
|---------------------|---|
| Standard conformity | |
| Standards | EN 60947-5-2:2007 IEC 60947-5-2:2007 |

Approvals and certificates

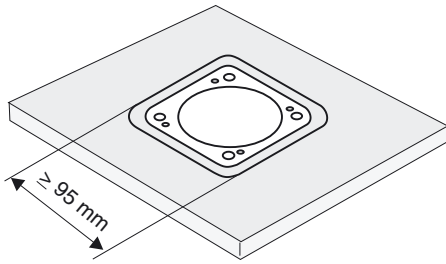
| | |
|--------------|---|
| UL approval | cULus Listed, General Purpose |
| CSA approval | cCSAus Listed, General Purpose |
| CCC approval | Certified by China Compulsory Certification (CCC) |

Release date: 2011-07-22 15:57 Date of issue: 2011-07-22 187388_eng.xml

Installation hint

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.