

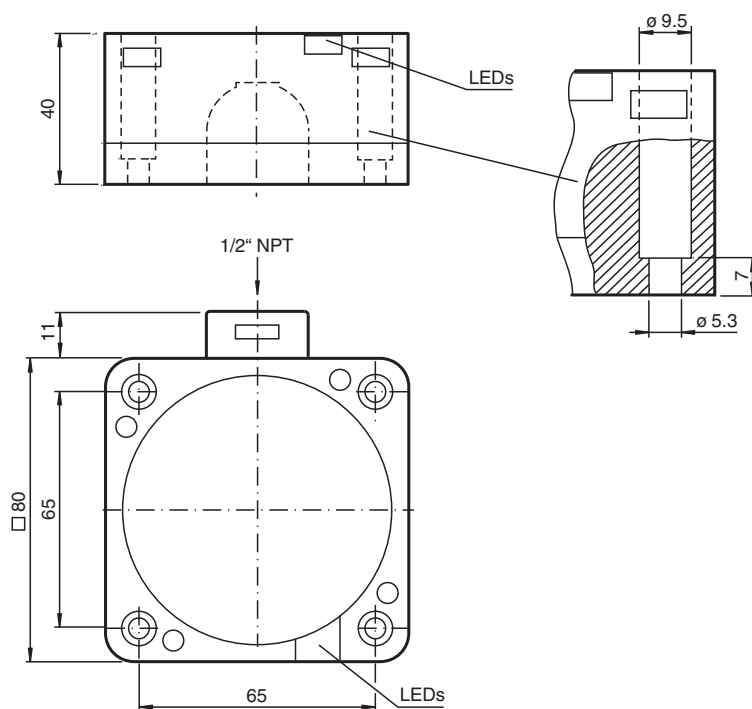


## Inductive sensor NCB40-FP-W-P4

- Comfort series
- 40 mm flush
- 2-wire AC



### Dimensions



### Technical Data

#### General specifications

|                            |       |                              |
|----------------------------|-------|------------------------------|
| Switching function         |       | Normally open/closed (NO/NC) |
| Output type                |       | Two-wire                     |
| Rated operating distance   | $s_n$ | 40 mm                        |
| Installation               |       | flush                        |
| Output polarity            |       | AC                           |
| Assured operating distance | $s_a$ | 0 ... 32.4 mm                |
| Reduction factor $r_{Al}$  |       | 0.25                         |
| Reduction factor $r_{Cu}$  |       | 0.23                         |

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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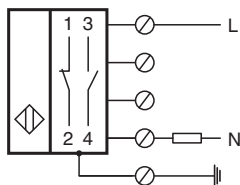
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**PEPPERL+FUCHS**

## Technical Data

|                                                 |       |                                                                                                                                                                                                                                                     |
|-------------------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reduction factor $r_{304}$                      |       | 0.85                                                                                                                                                                                                                                                |
| Output type                                     |       | 2-wire                                                                                                                                                                                                                                              |
| <b>Nominal ratings</b>                          |       |                                                                                                                                                                                                                                                     |
| Operating voltage AC                            | $U_B$ | 20 ... 253 V                                                                                                                                                                                                                                        |
| Switching frequency                             | $f$   | 0 ... 20 Hz                                                                                                                                                                                                                                         |
| Hysteresis                                      | $H$   | typ. 3 %                                                                                                                                                                                                                                            |
| Voltage drop                                    | $U_d$ | ≤ 5 V typ. 4V                                                                                                                                                                                                                                       |
| Momentary current<br>(20 ms, 0.1 Hz)            |       | max. 4000 mA                                                                                                                                                                                                                                        |
| Operating current                               | $I_L$ | 5 ... 500 mA                                                                                                                                                                                                                                        |
| Off-state current                               | $I_r$ | 0.3 ... 1 mA typ. 0.7 mA                                                                                                                                                                                                                            |
| Time delay before availability                  | $t_v$ | ≤ 100 ms                                                                                                                                                                                                                                            |
| Operating voltage indicator                     |       | LED, green                                                                                                                                                                                                                                          |
| Switching state indicator                       |       | LED, yellow                                                                                                                                                                                                                                         |
| <b>Compliance with standards and directives</b> |       |                                                                                                                                                                                                                                                     |
| Standard conformity                             |       |                                                                                                                                                                                                                                                     |
| Standards                                       |       | EN 60947-5-2:2007<br>EN 60947-5-2/A1:2012<br>IEC 60947-5-2:2007<br>IEC 60947-5-2 AMD 1:2012                                                                                                                                                         |
| <b>Approvals and certificates</b>               |       |                                                                                                                                                                                                                                                     |
| UL approval                                     |       | cULus Listed, General Purpose                                                                                                                                                                                                                       |
| CSA approval                                    |       | cCSAus Listed, General Purpose                                                                                                                                                                                                                      |
| CCC approval                                    |       | Certified by China Compulsory Certification (CCC)                                                                                                                                                                                                   |
| <b>Ambient conditions</b>                       |       |                                                                                                                                                                                                                                                     |
| Ambient temperature                             |       | -25 ... 70 °C (-13 ... 158 °F)                                                                                                                                                                                                                      |
| <b>Mechanical specifications</b>                |       |                                                                                                                                                                                                                                                     |
| Connection type                                 |       | screw terminals                                                                                                                                                                                                                                     |
| Core cross-section                              |       | max. 2.5 mm <sup>2</sup>                                                                                                                                                                                                                            |
| Housing material                                |       | PBT/base of metal                                                                                                                                                                                                                                   |
| Sensing face                                    |       | PBT                                                                                                                                                                                                                                                 |
| Housing base                                    |       | aluminum painted                                                                                                                                                                                                                                    |
| Degree of protection                            |       | IP68                                                                                                                                                                                                                                                |
| Note                                            |       | 1) In the temperature range below 0 °C, permissible operating voltage $U_b$ 80...253 V<br>Safety fuse ≤ 2 A (quick-blow) according to IEC 60127-2 Sheet 1<br>Recommendation: after a short circuit, check that the device is functioning correctly. |

## Connection



## Additional Information

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.

