

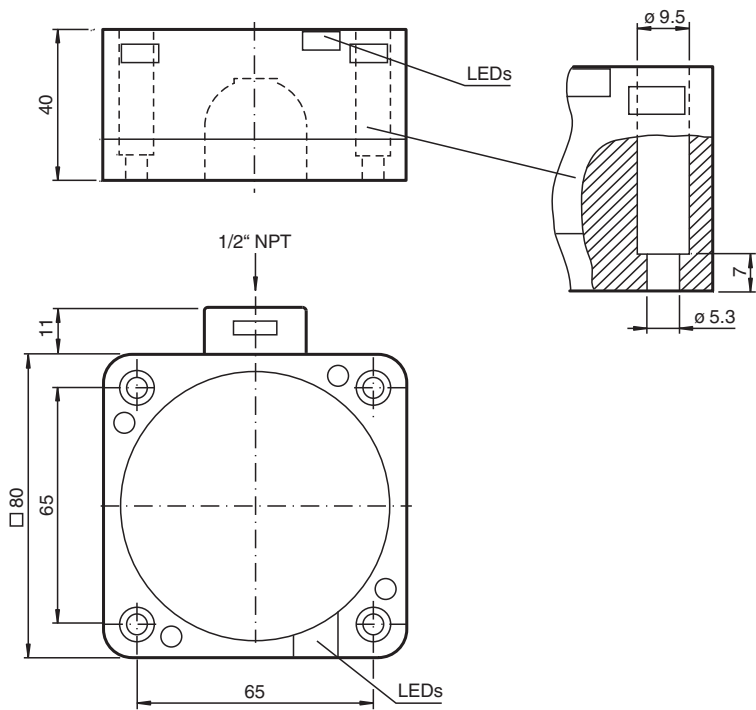


# Inductive sensor NCN50-FP-W-P2

■ Comfort series



## Dimensions



## Technical Data

| General specifications     |       |                              |
|----------------------------|-------|------------------------------|
| Switching function         |       | Normally open/closed (NO/NC) |
| Output type                |       | Two-wire                     |
| Rated operating distance   | $s_n$ | 50 mm                        |
| Installation               |       | non-flush                    |
| Output polarity            |       | AC                           |
| Assured operating distance | $s_a$ | 0 ... 40.5 mm                |
| Reduction factor $r_{Al}$  |       | 0.4                          |
| Reduction factor $r_{Cu}$  |       | 0.3                          |

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

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**PEPPERL+FUCHS**

## Technical Data

|                                                 |       |                                                                                                                                                                                                                                                     |
|-------------------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reduction factor $r_{304}$                      |       | 0.85                                                                                                                                                                                                                                                |
| Output type                                     |       | 2-wire                                                                                                                                                                                                                                              |
| <b>Nominal ratings</b>                          |       |                                                                                                                                                                                                                                                     |
| Operating voltage                               | $U_B$ | 20 ... 253 V                                                                                                                                                                                                                                        |
| Switching frequency                             | $f$   | 0 ... 20 Hz                                                                                                                                                                                                                                         |
| Hysteresis                                      | $H$   | typ. 3 %                                                                                                                                                                                                                                            |
| Short-circuit protection                        |       | no                                                                                                                                                                                                                                                  |
| 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                              |       | up to 2.5 mm <sup>2</sup>                                                                                                                                                                                                                           |
| Housing material                                |       | PBT                                                                                                                                                                                                                                                 |
| Sensing face                                    |       | PBT                                                                                                                                                                                                                                                 |
| Housing base                                    |       | PBT                                                                                                                                                                                                                                                 |
| 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

