

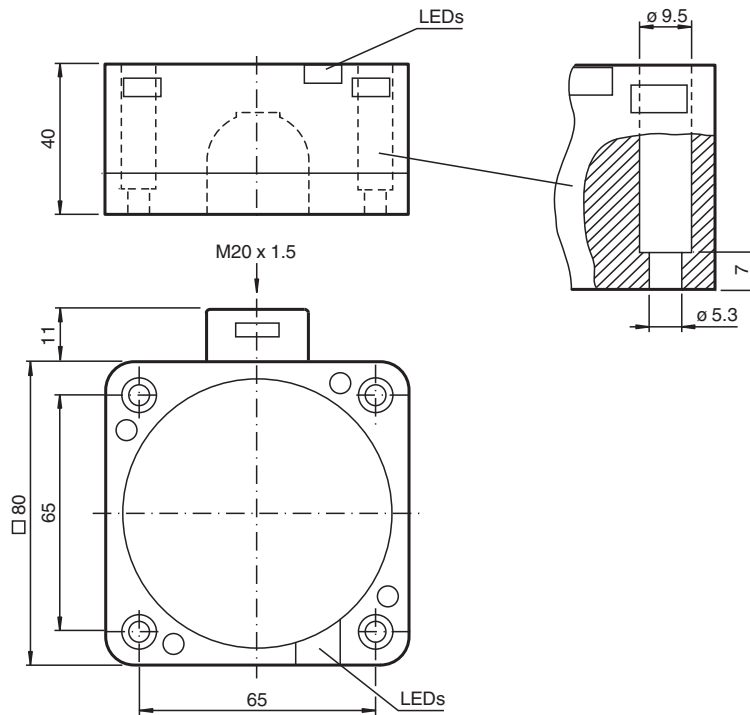


# Inductive sensor NCN40-FP-W-T-P1

- Temperature range  
-25 ... 100 °C (-13 ... 212 °F)



## Dimensions



## Technical Data

### General specifications

|                            |                              |               |
|----------------------------|------------------------------|---------------|
| Switching function         | Normally open/closed (NO/NC) |               |
| Output type                |                              | Two-wire      |
| Rated operating distance   | $s_n$                        | 40 mm         |
| Installation               |                              | non-flush     |
| Output polarity            |                              | AC            |
| Assured operating distance | $s_a$                        | 0 ... 32.4 mm |
| Reduction factor $r_{Al}$  |                              | 0.4           |
| Reduction factor $r_{Cu}$  |                              | 0.3           |
| Reduction factor $r_{304}$ |                              | 0.85          |

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

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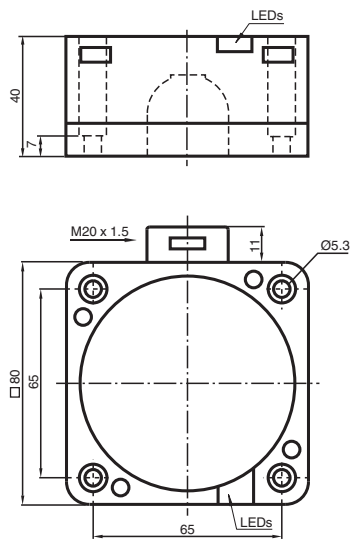
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**PEPPERL+FUCHS**

## Technical Data

|                                                 |       |                                                                                                                                                                                                                                                                |
|-------------------------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. 3000 mA                                                                                                                                                                                                                                                   |
| Temperature drift                               |       | -10 ... 15 % at < -25 °C                                                                                                                                                                                                                                       |
| 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 IEC 60947-5-2                                                                                                                                                                                                                                               |
| <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 ... 100 °C (-13 ... 212 °F)                                                                                                                                                                                                                                |
| <b>Mechanical specifications</b>                |       |                                                                                                                                                                                                                                                                |
| 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!<br>tightening torque 1.2 Nm + 10 %                                                                                                                     |
| Core cross section                              |       | up to 2.5 mm <sup>2</sup>                                                                                                                                                                                                                                      |
| Minimum core cross-section                      |       | without wire end ferrules 0.5 mm <sup>2</sup> , with connector sleeves 0.34 mm <sup>2</sup>                                                                                                                                                                    |
| Maximum core cross-section                      |       | without wire end ferrules 2.5 mm <sup>2</sup> , with connector sleeves 1.5 mm <sup>2</sup>                                                                                                                                                                     |
| Housing material                                |       | PBT                                                                                                                                                                                                                                                            |
| Sensing face                                    |       | PBT                                                                                                                                                                                                                                                            |
| Housing base                                    |       | PBT                                                                                                                                                                                                                                                            |
| Degree of protection                            |       | IP68                                                                                                                                                                                                                                                           |
| Tightening torque, housing screws               |       | 1 Nm                                                                                                                                                                                                                                                           |
| Dimensions                                      |       |                                                                                                                                                                                                                                                                |
| Height                                          |       | 40 mm                                                                                                                                                                                                                                                          |
| Width                                           |       | 80 mm                                                                                                                                                                                                                                                          |
| Length                                          |       | 80 mm                                                                                                                                                                                                                                                          |
| Note                                            |       | <sup>1)</sup> 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. |

Dimensions



Connection

