

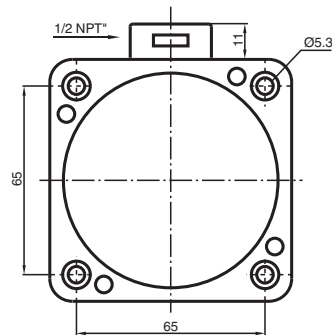
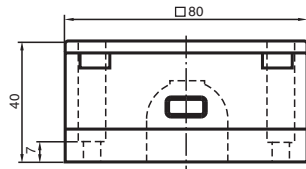


# Inductive sensor NJ50-FP-N-P4

■ Comfort series



## Dimensions



## Technical Data

### General specifications

|                            |       |                      |
|----------------------------|-------|----------------------|
| Switching function         |       | Normally closed (NC) |
| Output type                |       | NAMUR                |
| Rated operating distance   | $s_n$ | 50 mm                |
| Installation               |       | non-flush            |
| Assured operating distance | $s_a$ | 0 ... 40.5 mm        |
| Reduction factor $r_{AI}$  |       | 0.4                  |
| Reduction factor $r_{Cu}$  |       | 0.3                  |
| Reduction factor $r_{304}$ |       | 0.85                 |
| Output type                |       | 2-wire               |

### Nominal ratings

|                     |       |                                      |
|---------------------|-------|--------------------------------------|
| Nominal voltage     | $U_o$ | 8.2 V ( $R_i$ approx. 1 k $\Omega$ ) |
| Switching frequency | $f$   | 0 ... 100 Hz                         |
| Current consumption |       |                                      |

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

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## Technical Data

|   |  |
|---|--|
| Measuring plate not detected                    | min. 3 mA  |
| Measuring plate detected                        | ≤ 1 mA   |
| <b>Compliance with standards and directives</b> |  |
| Standard conformity                             |  |
| NAMUR   | EN 60947-5-6:2000<br>IEC 60947-5-6:1999  |
| 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>               |  |
| IECEX approval                                  |  |
| Equipment protection level Ga                   | IECEX PTB 11.0021X   |
| Equipment protection level Gb                   | IECEX PTB 11.0021X   |
| Equipment protection level Da                   | IECEX PTB 11.0021X   |
| ATEX approval                                   |  |
| Equipment protection level Ga                   | PTB 00 ATEX 2032 X   |
| Equipment protection level Gb                   | PTB 00 ATEX 2032 X   |
| Equipment protection level Da                   | PTB 00 ATEX 2032 X   |
| UL approval                                     |  |
| Ordinary Location                               | E87056   |
| Hazardous Location                              | E501628  |
| Control drawing                                 | 116-0451   |
| CCC approval                                    |  |
| Hazardous Location                              | 2020322315002304   |
| NEPSI approval                                  |  |
| NEPSI certificate                               | GYJ16.1394X  |
| CML approval                                    | on request   |
| <b>Ambient conditions</b>                       |  |
| Ambient temperature                             | -25 ... 70 °C (-13 ... 158 °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 ferrule 0.5 mm <sup>2</sup> , with connector sleeves 0.34 mm <sup>2</sup>   |
| Maximum core cross-section                      | without wire end ferrule 2.5 mm <sup>2</sup> , with connector sleeves 1.5 mm <sup>2</sup>  |
| Housing material                                | PBT/metal  |
| Sensing face                                    | PBT  |
| Degree of protection                            | IP67   |
| Note  | Tightening torque: 1.8 Nm (housing)  |
| <b>General information</b>                      |  |
| Use in the hazardous area                       | see instruction manuals  |

## Connection

