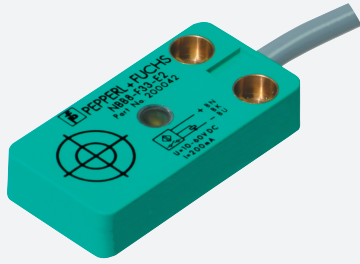


# Inductive sensor

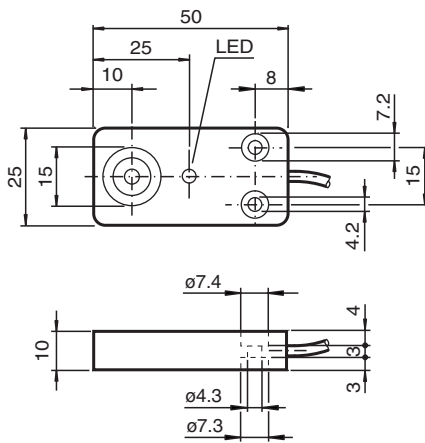
## NBB8-F33-E2-3M-Y265018



- 8 mm flush
- 3-wire DC



### Dimensions



### Technical Data

| General specifications      |       |                            |
|-----------------------------|-------|----------------------------|
| Switching function          |       | Normally open (NO)         |
| Output type                 |       | PNP                        |
| Rated operating distance    | $s_n$ | 8 mm                       |
| Installation                |       | flush                      |
| Output polarity             |       | DC                         |
| Assured operating distance  | $s_a$ | 0 ... 6.48 mm              |
| Reduction factor $r_{Al}$   |       | 0.3                        |
| Reduction factor $r_{Cu}$   |       | 0.2                        |
| Reduction factor $r_{304}$  |       | 0.6                        |
| Output type                 |       | 3-wire                     |
| Nominal ratings             |       |                            |
| Operating voltage           | $U_B$ | 10 ... 60 V DC             |
| Switching frequency         | $f$   | 0 ... 350 Hz               |
| Hysteresis                  | $H$   | typ. 5 %                   |
| Reverse polarity protection |       | reverse polarity protected |
| Short-circuit protection    |       | pulsing                    |

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

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 PEPPERL+FUCHS

## Technical Data

|   |       |   |
|---|-------|---|
| Voltage drop                                    | $U_d$ | $\leq 3 \text{ V}$                      |
| Operating current                               | $I_L$ | 0 ... 200 mA                            |
| Off-state current                               | $I_r$ | 0 ... 0.1 mA                            |
| No-load supply current                          | $I_0$ | $\leq 10 \text{ mA}$                    |
| Time delay before availability                  | $t_v$ | $\leq 50 \text{ ms}$                    |
| Switching state indicator                       |       | LED yellow                              |
| <b>Functional safety related parameters</b>     |       |   |
| MTTF <sub>d</sub>                               |       | 1171 a                                  |
| Mission Time (T <sub>M</sub> )                  |       | 20 a                                    |
| Diagnostic Coverage (DC)                        |       | 0 %                                     |
| <b>Compliance with standards and directives</b> |       |   |
| Standard conformity                             |       |   |
| Standards                                       |       | EN 60947-5-2:2007<br>IEC 60947-5-2:2007 |
| <b>Approvals and certificates</b>               |       |   |
| UL approval                                     |       | cULus Listed, General Purpose           |
| CSA approval                                    |       | cCSAus Listed, General Purpose          |
| <b>Ambient conditions</b>                       |       |   |
| Ambient temperature                             |       | -35 ... 70 °C (-31 ... 158 °F)          |
| Storage temperature                             |       | -40 ... 85 °C (-40 ... 185 °F)          |
| <b>Mechanical specifications</b>                |       |   |
| Connection type                                 |       | cablc PVC , 3 m                         |
| Core cross section                              |       | 0.34 mm <sup>2</sup>                    |
| Housing material                                |       | PBT                                     |
| Sensing face                                    |       | PBT                                     |
| Degree of protection                            |       | IP67                                    |
| Note  |       | Tightening torque: 5 Nm                 |

## Connection

