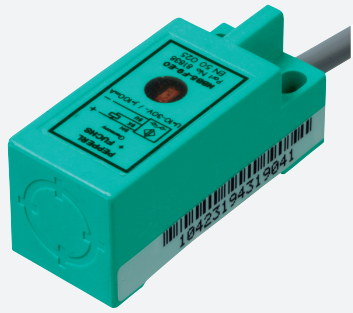


# Inductive sensor

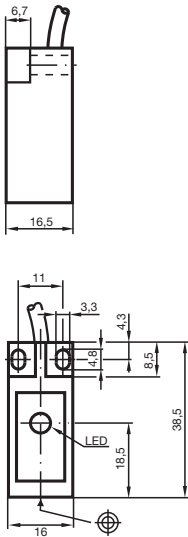
## NBB5-F9-E2



- 5 mm flush
- 3-wire DC



### Dimensions



### Technical Data

#### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | PNP                |
| Rated operating distance   | $s_n$ | 5 mm               |
| Installation               |       | flush              |
| Output polarity            |       | DC                 |
| Assured operating distance | $s_a$ | 0 ... 4.05 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 ... 30 V DC |
| Switching frequency | $f$   | 0 ... 500 Hz   |

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

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**PF** PEPPERL+FUCHS

## Technical Data

|                             |       |  |
|-----------------------------|-------|--|
| Hysteresis                  | H     | typ. 5 %                               |
| Reverse polarity protection |       | reverse polarity protected             |
| Short-circuit protection    |       | pulsing                                |
| Voltage drop                | $U_d$ | $\leq 3$ V                             |
| Operating current           | $I_L$ | 0 ... 150 mA                           |
| Off-state current           | $I_r$ | 0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C |
| No-load supply current      | $I_o$ | $\leq 15$ mA                           |
| Switching state indicator   |       | LED, yellow                            |

### Compliance with standards and directives

|                     |  |   |
|---------------------|--|---|
| Standard conformity |  |   |
| Standards           |  | EN 60947-5-2:2007<br>IEC 60947-5-2:2007 |

### Approvals and certificates

|              |  |  |
|--------------|--|--|
| UL approval  |  | cULus Listed, General Purpose                                      |
| CSA approval |  | cCSAus Listed, General Purpose                                     |
| CCC approval |  | CCC approval / marking not required for products rated $\leq 36$ V |

### Ambient conditions

|                     |  |                                |
|---------------------|--|--------------------------------|
| Ambient temperature |  | -25 ... 70 °C (-13 ... 158 °F) |
|---------------------|--|--------------------------------|

### Mechanical specifications

|                      |  |                      |
|----------------------|--|----------------------|
| Connection type      |  | cablc PVC , 2 m      |
| Core cross section   |  | 0.14 mm <sup>2</sup> |
| Housing material     |  | PBT                  |
| Sensing face         |  | PBT                  |
| Degree of protection |  | IP67                 |

## Connection

