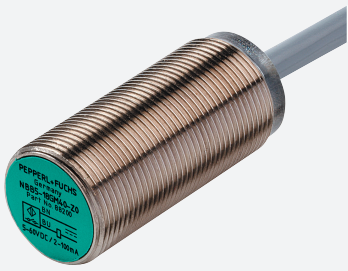


## Inductive sensor

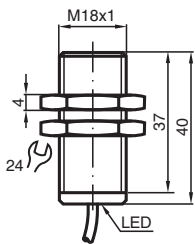
### NBB5-18GM40-Z0-5M



- 5 mm flush
- 2-wire DC



## Dimensions



## Technical Data

### General specifications

|                            |       |                          |
|----------------------------|-------|--------------------------|
| Rated operating distance   | $s_n$ | 5 mm                     |
| Installation               |       | flush                    |
| Output polarity            |       | DC                       |
| Assured operating distance | $s_a$ | 0 ... 4.05 mm            |
| Actual operating distance  | $s_r$ | 4.5 ... 5.5 mm typ. 5 mm |
| Reduction factor $r_{Al}$  |       | 0.34                     |
| Reduction factor $r_{Cu}$  |       | 0.31                     |
| Reduction factor $r_{304}$ |       | 0.72                     |
| Output type                |       | 2-wire                   |

### Nominal ratings

|                             |       |                           |
|-----------------------------|-------|---------------------------|
| Operating voltage           | $U_B$ | 5 ... 60 V                |
| Switching frequency         | $f$   | 0 ... 500 Hz              |
| Hysteresis                  | $H$   | 1 ... 10 % typ. 5 %       |
| Reverse polarity protection |       | reverse polarity tolerant |
| Short-circuit protection    |       | pulsing                   |
| Voltage drop                | $U_d$ | $\leq 5$ V                |

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

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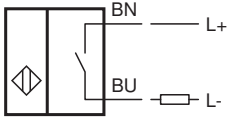
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 **PEPPERL+FUCHS**

Technical Data

|                                          |       |                                                   |
|------------------------------------------|-------|---------------------------------------------------|
| Operating current                        | $I_L$ | 2 ... 100 mA                                      |
| Lowest operating current                 | $I_m$ | 2 mA                                              |
| Off-state current                        | $I_r$ | 0 ... 0.5 mA typ.                                 |
| Switching state indicator                |       | all direction LED, yellow                         |
| Functional safety related parameters     |       |                                                   |
| MTTF <sub>d</sub>                        |       | 1870 a                                            |
| Mission Time (T <sub>M</sub> )           |       | 20 a                                              |
| Diagnostic Coverage (DC)                 |       | 0 %                                               |
| Compliance with standards and directives |       |                                                   |
| Standard conformity                      |       |                                                   |
| Standards                                |       | EN IEC 60947-5-2                                  |
| Approvals and certificates               |       |                                                   |
| UL approval                              |       | cULus Listed, General Purpose                     |
| CCC approval                             |       | Certified by China Compulsory Certification (CCC) |
| Ambient conditions                       |       |                                                   |
| Ambient temperature                      |       | -25 ... 70 °C (-13 ... 158 °F)                    |
| Mechanical specifications                |       |                                                   |
| Connection type                          |       | cable                                             |
| Housing material                         |       | brass, nickel-plated                              |
| Sensing face                             |       | PBT                                               |
| Degree of protection                     |       | IP67                                              |
| Cable                                    |       |                                                   |
| Wire end ferrules                        |       | yes                                               |
| Cable diameter                           |       | 4.8 mm ± 0.2 mm                                   |
| Bending radius                           |       | > 10 x cable diameter                             |
| Material                                 |       | PVC                                               |
| Color                                    |       | grey                                              |
| Number of cores                          |       | 2                                                 |
| Core cross section                       |       | 0.34 mm <sup>2</sup>                              |
| Length                                   | L     | 5 m                                               |
| Dimensions                               |       |                                                   |
| Length                                   |       | 40 mm                                             |
| Diameter                                 |       | 18 mm                                             |

Connection



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