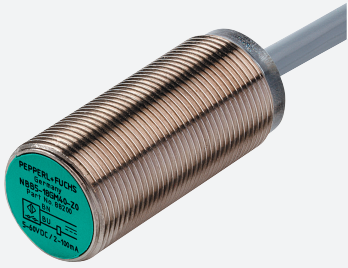


## Inductive sensor

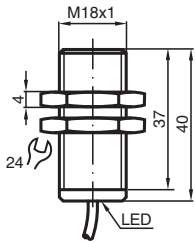
### NCB5-18GM40-Z0-3G-3D



- 5 mm flush
- ATEX-/IECEx-approvals for zone 2/22 (Ex ec/tc)
- Stainless steel housing
- Reverse polarity tolerant



## Dimensions



## Technical Data

### General specifications

|                            |       |                          |
|----------------------------|-------|--------------------------|
| Switching function         |       | Normally open (NO)       |
| Output type                |       | Two-wire                 |
| 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 $r_{AI}$  |       | 0.37                     |
| Reduction factor $r_{CU}$  |       | 0.33                     |
| Reduction factor $r_{304}$ |       | 0.7                      |
| Output type                |       | 2-wire                   |

### Nominal ratings

|                             |       |                           |
|-----------------------------|-------|---------------------------|
| Operating voltage           | $U_B$ | 5 ... 60 V                |
| Switching frequency         | $f$   | 0 ... 350 Hz              |
| Hysteresis                  | $H$   | 1 ... 10 % typ. 5 %       |
| Reverse polarity protection |       | reverse polarity tolerant |

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

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 **PEPPERL+FUCHS**

## Technical Data

|                                                 |       |                                          |
|-------------------------------------------------|-------|------------------------------------------|
| Short-circuit protection                        |       | pulsing                                  |
| Voltage drop                                    | $U_d$ | $\leq 5 \text{ V}$                       |
| 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                |
| <b>Functional safety related parameters</b>     |       |                                          |
| MTTF <sub>d</sub>                               |       | 1739 a                                   |
| Mission Time (T <sub>M</sub> )                  |       | 20 a                                     |
| Diagnostic Coverage (DC)                        |       | 0 %                                      |
| <b>Compliance with standards and directives</b> |       |                                          |
| Standard conformity                             |       |                                          |
| Standards                                       |       | EN IEC 60947-5-2                         |
| <b>Approvals and certificates</b>               |       |                                          |
| IECEx approval                                  |       |                                          |
| Equipment protection level Gc (ec)              |       | IECEx TUR 21.0017X                       |
| Equipment protection level Dc (tc)              |       | IECEx TUR 21.0018X                       |
| ATEX approval                                   |       |                                          |
| Equipment protection level Gc (ec)              |       | TÜV 20 ATEX 8523 X                       |
| Equipment protection level Dc (tc)              |       | TÜV 20 ATEX 8524 X                       |
| UL approval                                     |       | cULus Listed, General Purpose            |
| CCC approval                                    |       |                                          |
| Hazardous Location                              |       | 2024322315005947<br>2024322315005860     |
| <b>Ambient conditions</b>                       |       |                                          |
| Ambient temperature                             |       | -25 ... 70 °C (-13 ... 158 °F)           |
| <b>Mechanical specifications</b>                |       |                                          |
| Connection type                                 |       | cable                                    |
| Housing material                                |       | Stainless steel 1.4305 / AISI 303        |
| Sensing face                                    |       | PBT                                      |
| Degree of protection                            |       | IP66 / IP67                              |
| <b>Cable</b>                                    |       |                                          |
| 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     | 2 m                                      |
| Mass                                            |       | 103 g                                    |
| <b>Dimensions</b>                               |       |                                          |
| Length                                          |       | 40 mm                                    |
| Diameter                                        |       | 18 mm                                    |
| <b>General information</b>                      |       |                                          |
| Scope of delivery                               |       | 2 self locking nuts in scope of delivery |
| Use in the hazardous area                       |       | see instruction manuals                  |

## Connection Assignment

