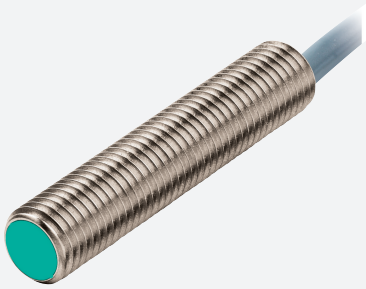


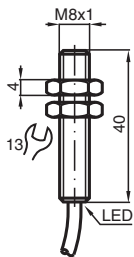
# Inductive sensor NCB1,5-8GM40-Z1



- 1.5 mm flush
- 2-wire DC



## Dimensions



## Technical Data

### General specifications

|                            |       |                       |
|----------------------------|-------|-----------------------|
| Switching function         |       | Normally closed (NC)  |
| Output type                |       | Two-wire              |
| Rated operating distance   | $s_n$ | 1.5 mm                |
| Installation               |       | flush                 |
| Output polarity            |       | DC                    |
| Assured operating distance | $s_a$ | 0 ... 1.21 mm         |
| Actual operating distance  | $s_r$ | 1.35 ... 1.65 mm typ. |
| Reduction factor $r_{AI}$  |       | 0.22                  |
| Reduction factor $r_{Cu}$  |       | 0.16                  |
| Reduction factor $r_{304}$ |       | 0.64                  |
| Output type                |       | 2-wire                |

### Nominal ratings

|                             |       |                           |
|-----------------------------|-------|---------------------------|
| Operating voltage           | $U_B$ | 5 ... 60 V                |
| Switching frequency         | $f$   | 0 ... 1200 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                       |       | LED, yellow                                       |
| <b>Functional safety related parameters</b>     |       |                                                   |
| MTTF <sub>d</sub>                               |       | 2772 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>               |       |                                                   |
| UL approval                                     |       | cULus Listed, General Purpose                     |
| CCC approval                                    |       | Certified by China Compulsory Certification (CCC) |
| <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                                    |       | LCP                                               |
| Degree of protection                            |       | IP67                                              |
| <b>Cable</b>                                    |       |                                                   |
| Wire end ferrules                               |       | yes                                               |
| Cable diameter                                  |       | 2.8 mm ± 0.1 mm                                   |
| Bending radius                                  |       | > 10 x cable diameter                             |
| Material                                        |       | PUR                                               |
| Color                                           |       | black                                             |
| Number of cores                                 |       | 2                                                 |
| Core cross section                              |       | 0.14 mm <sup>2</sup>                              |
| Length                                          | L     | 2 m                                               |
| <b>Dimensions</b>                               |       |                                                   |
| Length                                          |       | 40 mm                                             |
| Diameter                                        |       | 8 mm                                              |

## Connection

