



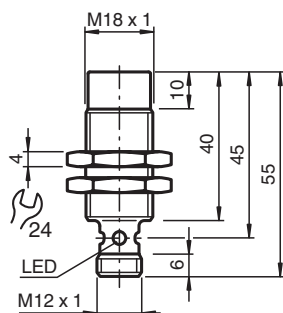
# Inductive sensor

## NCN8-18GM40-Z0-V1

- 8 mm non-flush
- 2-wire DC



## Dimensions



## Technical Data

### General specifications

|                            |       |                          |
|----------------------------|-------|--------------------------|
| Switching function         |       | Normally open (NO)       |
| Output type                |       | Two-wire                 |
| Rated operating distance   | $s_n$ | 8 mm                     |
| Installation               |       | non-flush                |
| Output polarity            |       | DC                       |
| Assured operating distance | $s_a$ | 0 ... 6.5 mm             |
| Actual operating distance  | $s_r$ | 7.2 ... 8.8 mm typ. 8 mm |
| Reduction factor $r_{Al}$  |       | 0.44                     |
| Reduction factor $r_{Cu}$  |       | 0.4                      |
| Reduction factor $r_{304}$ |       | 0.7                      |
| Output type                |       | 2-wire                   |

### Nominal ratings

|                                |       |                           |
|--------------------------------|-------|---------------------------|
| Operating voltage              | $U_B$ | 5 ... 60 V                |
| Switching frequency            | $f$   | 0 ... 300 Hz              |
| Hysteresis                     | $H$   | 1 ... 15 % typ. 5 %       |
| Reverse polarity protection    |       | reverse polarity tolerant |
| Short-circuit protection       |       | pulsing                   |
| Voltage drop                   | $U_d$ | $\leq 5$ V                |
| Operating current              | $I_L$ | 2 ... 100 mA              |
| Off-state current              | $I_r$ | 0 ... 0.5 mA typ.         |
| Time delay before availability | $t_v$ | $\leq 20$ ms              |

Release date: 2024-12-10 Date of issue: 2024-12-10 Filename: 126072\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

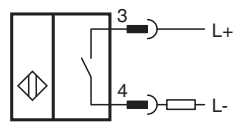
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

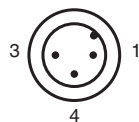
Technical Data

|                                                 |                                                   |
|-------------------------------------------------|---------------------------------------------------|
| Switching state indicator                       | Multihole-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>               |                                                   |
| 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                                 | Connector plug                                    |
| Housing material                                | Stainless steel 1.4305 / AISI 303                 |
| Sensing face                                    | PBT                                               |
| Degree of protection                            | IP67                                              |
| Connector                                       |                                                   |
| Threading                                       | M12 x 1                                           |
| Number of pins                                  | 3                                                 |
| Mass                                            | 46 g                                              |
| Dimensions                                      |                                                   |
| Length                                          | 40 mm                                             |
| Diameter                                        | 18 mm                                             |

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

|   |    |         |
|---|----|---------|
| 1 | BN | (brown) |
| 3 | BU | (blue)  |
| 4 | BK | (black) |

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