

NCB1,5-18GM60-E3-D-V1

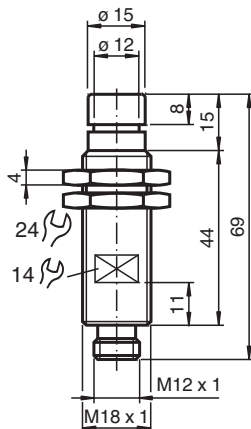


- 1.5 mm flush
- Compression proof up to 350 bar, dynamic on active surface
- For applications in hydraulic cylinder

## Inductive sensor



## Dimensions



## Technical Data

## General specifications

|                                   |                |                      |
|-----------------------------------|----------------|----------------------|
| Switching function                |                | Normally closed (NC) |
| Output type                       |                | PNP                  |
| Rated operating distance          | s <sub>n</sub> | 1.5 mm               |
| Installation                      |                | flush                |
| Output polarity                   |                | DC                   |
| Assured operating distance        | s <sub>a</sub> | 0 ... 1.22 mm        |
| Reduction factor r <sub>304</sub> |                | 0.5                  |
| Output type                       |                | 3-wire               |

### Nominal ratings

|                             |                |                            |
|-----------------------------|----------------|----------------------------|
| Operating voltage           | U <sub>B</sub> | 10 ... 60 V DC             |
| Switching frequency         | f              | 0 ... 1500 Hz              |
| Hysteresis                  | H              | typ. 5 %                   |
| Reverse polarity protection |                | reverse polarity protected |
| Short-circuit protection    |                | pulsing                    |
| Voltage drop                | U <sub>d</sub> | ≤ 2.5 V                    |

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

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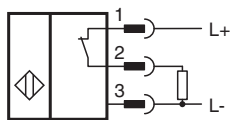
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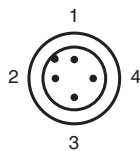
Technical Data

|                                                 |       |                                                                                             |
|-------------------------------------------------|-------|---------------------------------------------------------------------------------------------|
| Operating current                               | $I_L$ | 0 ... 200 mA                                                                                |
| No-load supply current                          | $I_0$ | ≤ 10 mA                                                                                     |
| <b>Limit data</b>                               |       |                                                                                             |
| Operating pressure                              |       | 350 bar (5076.4 psi)                                                                        |
| <b>Functional safety related parameters</b>     |       |                                                                                             |
| MTTF <sub>d</sub>                               |       | 1240 a                                                                                      |
| Mission Time (T <sub>M</sub> )                  |       | 20 a                                                                                        |
| Diagnostic Coverage (DC)                        |       | 0 %                                                                                         |
| <b>Compliance with standards and directives</b> |       |                                                                                             |
| Standard conformity                             |       |                                                                                             |
| Standards                                       |       | EN 60947-5-2:2007<br>EN 60947-5-2/A1:2012<br>IEC 60947-5-2:2007<br>IEC 60947-5-2 AMD 1:2012 |
| <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                             |       | -35 ... 80 °C (-31 ... 176 °F)                                                              |
| <b>Mechanical specifications</b>                |       |                                                                                             |
| Connection type                                 |       | Connector plug M12 x 1 , 4-pin                                                              |
| Housing material                                |       | Stainless steel 1.4305 / AISI 303                                                           |
| Sensing face                                    |       | Epoxy (black)                                                                               |
| Degree of protection                            |       | IP67                                                                                        |

Connection



Connection Assignment

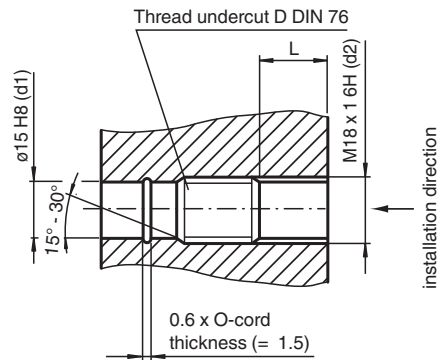


Wire colors in accordance with EN 60947-5-2

|   |    |         |
|---|----|---------|
| 1 | BN | (brown) |
| 2 | WH | (white) |
| 3 | BU | (blue)  |
| 4 | BK | (black) |

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Additional Information



L: recommended installation depth:  $L \geq 0.8 \times d2$

Accessories

|                                                                                   |                    |                                       |
|-----------------------------------------------------------------------------------|--------------------|---------------------------------------|
|  | <b>V1-G-2M-PUR</b> | Female cordset, M12, 4-pin, PUR cable |
|  | <b>V1-W-2M-PUR</b> | Female cordset, M12, 4-pin, PUR cable |

## Installation

### Note

Please refer to the technical information about this product at [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com). This information describes the necessary geometry of the installation space!

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