

## Inductive sensor

### NCB1,5-18GM60-E2-D-V1

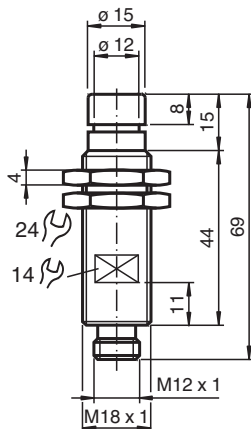


- 1.5 mm flush
- Compression proof up to 350 bar, dynamic on active surface
- For applications in hydraulic cylinder

## Inductive sensor



## Dimensions



## Technical Data

### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | PNP                |
| Rated operating distance   | $s_n$ | 1.5 mm             |
| Installation               |       | flush              |
| Output polarity            |       | DC                 |
| Assured operating distance | $s_a$ | 0 ... 1.22 mm      |
| Reduction factor $r_{AI}$  |       | 0.3                |
| Reduction factor $r_{CU}$  |       | 0.2                |
| Reduction factor $r_{304}$ |       | 0.5                |

### Nominal ratings

|                             |       |                            |
|-----------------------------|-------|----------------------------|
| Operating voltage           | $U_B$ | 10 ... 60 V DC             |
| Switching frequency         | $f$   | 0 ... 1500 Hz              |
| Hysteresis                  | $H$   | typ. 5 %                   |
| Reverse polarity protection |       | reverse polarity protected |
| Short-circuit protection    |       | pulsing                    |

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

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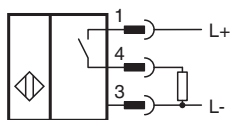
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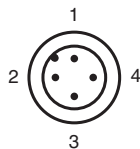
Technical Data

|                                                 |       |                                                   |
|-------------------------------------------------|-------|---------------------------------------------------|
| Voltage drop                                    | $U_d$ | $\leq 3\text{ V}$                                 |
| Operating current                               | $I_L$ | 0 ... 200 mA                                      |
| No-load supply current                          | $I_0$ | $\leq 10\text{ mA}$                               |
| <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>IEC 60947-5-2:2007           |
| <b>Approvals and certificates</b>               |       |                                                   |
| UL approval                                     |       | cULus Listed, General Purpose                     |
| CSA approval                                    |       | cCSAus 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 M12 x 1 , 4-pin                         |
| Housing material                                |       | Stainless steel 1.4305 / AISI 303                 |
| Sensing face                                    |       | Epoxy (black)                                     |
| Degree of protection                            |       | IP67                                              |

Connection



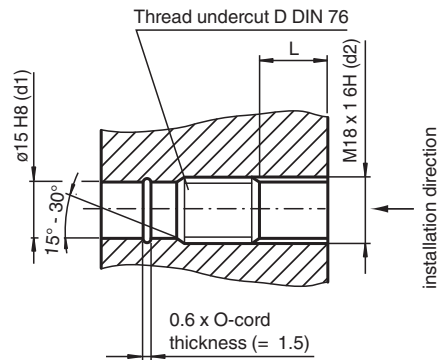
Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Additional Information



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

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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