

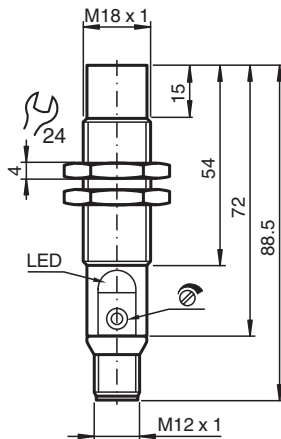


## Capacitive sensor CBN15-18GS75-E2-V1

- 15 mm non-flush
- The switching distance can be set over a wide range with the potentiometer



### Dimensions



### Technical Data

#### General specifications

|                          |       |                    |
|--------------------------|-------|--------------------|
| Switching function       |       | Normally open (NO) |
| Output type              |       | PNP                |
| Rated operating distance | $s_n$ | 2 ... 15 mm        |
| Installation             |       | non-flush          |
| Output polarity          |       | DC                 |
| Output type              |       | 3-wire             |

#### Nominal ratings

|                             |       |                            |
|-----------------------------|-------|----------------------------|
| Installation conditions     |       |                            |
| A                           |       | 30 mm                      |
| B                           |       | 18 mm                      |
| C                           |       | 30 mm                      |
| F                           |       | 36 mm                      |
| Operating voltage           | $U_B$ | 10 ... 30 V                |
| Switching frequency         | $f$   | 0 ... 100 Hz               |
| Reverse polarity protection |       | reverse polarity protected |
| Short-circuit protection    |       | pulsing                    |
| Voltage drop                | $U_d$ | $\leq 1.5$ V               |

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

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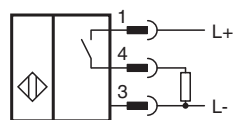
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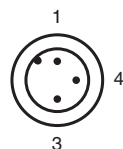
Technical Data

|                                                 |       |                                                              |
|-------------------------------------------------|-------|--------------------------------------------------------------|
| Temperature drift                               |       | max. 20 % at -5 ... 55 °C (23 ... 131 °F)                    |
| Operating current                               | $I_L$ | 0 ... 100 mA                                                 |
| No-load supply current                          | $I_0$ | ≤ 15 mA                                                      |
| Time delay before availability                  | $t_v$ | max. 300 ms                                                  |
| <b>Functional safety related parameters</b>     |       |                                                              |
| MTTF <sub>d</sub>                               |       | 226 a                                                        |
| Mission Time (T <sub>M</sub> )                  |       | 20 a                                                         |
| Diagnostic Coverage (DC)                        |       | 0 %                                                          |
| <b>Indicators/operating means</b>               |       |                                                              |
| LED green                                       |       | Operating display                                            |
| LED yellow                                      |       | indication switching state                                   |
| Potentiometer                                   |       | sensitivity adjustment                                       |
| <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                                    |       | CCC approval / marking not required for products rated ≤36 V |
| <b>Ambient conditions</b>                       |       |                                                              |
| Ambient temperature                             |       | -25 ... 85 °C (-13 ... 185 °F)                               |
| <b>Mechanical specifications</b>                |       |                                                              |
| Connection type                                 |       | Connector plug M12 x 1 , 3-pin                               |
| Housing material                                |       | Stainless steel 1.4305 / AISI 303                            |
| Sensing face                                    |       | PBT                                                          |
| Degree of protection                            |       | IP67                                                         |
| Dimensions                                      |       |                                                              |
| Length                                          |       | 88 mm                                                        |
| Diameter                                        |       | 18 mm                                                        |

Connection



Connection Assignment



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## Connection Assignment

Wire colors in accordance with EN 60947-5-2

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

## Installation

