

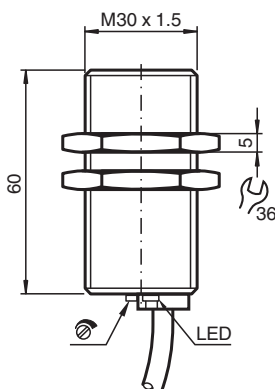


## Capacitive sensor CCB10-30GS60-E0

- 10 mm flush
- Operating distance adjustable via potentiometer
- High EMC resistance
- Stainless steel version
- Operating voltage range 10 V ... 60 V DC



### Dimensions



### Technical Data

#### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | NPN                |
| Rated operating distance   | $s_n$ | 10 mm              |
| Installation               |       | flush              |
| Output polarity            |       | DC                 |
| Assured operating distance | $s_a$ | 0 ... 8.1 mm       |
| Output type                |       | 3-wire             |

#### Nominal ratings

|                             |       |                            |
|-----------------------------|-------|----------------------------|
| Installation conditions     |       |                            |
| A                           |       | 0 mm                       |
| B                           |       | 0 mm                       |
| C                           |       | 20 mm                      |
| F                           |       | 40 mm                      |
| Operating voltage           | $U_B$ | 10 ... 60 V DC             |
| Switching frequency         | $f$   | 0 ... 10 Hz                |
| Reverse polarity protection |       | reverse polarity protected |
| Short-circuit protection    |       | pulsing                    |
| Voltage drop                | $U_d$ | $\leq 2.8$ V               |

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

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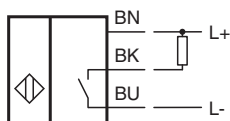
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**PEPPERL+FUCHS**

## Technical Data

|                                                        |       |                                                   |
|--------------------------------------------------------|-------|---------------------------------------------------|
| Operating current                                      | $I_L$ | 0 ... 200 mA                                      |
| Off-state current                                      | $I_r$ | 0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C            |
| Off-state current $T_U = 40$ °C, switching element off |       | $\leq 100$ $\mu$ A                                |
| No-load supply current                                 | $I_0$ | $\leq 20$ mA                                      |
| Time delay before availability                         | $t_v$ | $\leq 50$ ms                                      |
| Switching state indicator                              |       | LED, yellow                                       |
| <b>Functional safety related parameters</b>            |       |                                                   |
| MTTF <sub>d</sub>                                      |       | 760 a                                             |
| Mission Time ( $T_M$ )                                 |       | 20 a                                              |
| Diagnostic Coverage (DC)                               |       | 0 %                                               |
| <b>Indicators/operating means</b>                      |       |                                                   |
| 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                                           |       | Certified by China Compulsory Certification (CCC) |
| <b>Ambient conditions</b>                              |       |                                                   |
| Ambient temperature                                    |       | -25 ... 70 °C (-13 ... 158 °F)                    |
| Storage temperature                                    |       | -40 ... 85 °C (-40 ... 185 °F)                    |
| <b>Mechanical specifications</b>                       |       |                                                   |
| Connection type                                        |       | cable PVC , 2 m                                   |
| Housing material                                       |       | Stainless steel 1.4305 / AISI 303                 |
| Sensing face                                           |       | PBT                                               |
| Degree of protection                                   |       | IP67                                              |
| <b>Cable</b>                                           |       |                                                   |
| Cable diameter                                         |       | 6.4 mm $\pm$ 0.2 mm                               |
| Bending radius                                         |       | > 10 x cable diameter                             |
| <b>Dimensions</b>                                      |       |                                                   |
| Length                                                 |       | 60 mm                                             |
| Diameter                                               |       | 30 mm                                             |

## Connection



## Installation

