



## Model Number

CCB10-30GS60-E2-V1

## Features

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

## Accessories

### BF 30

Mounting flange, 30 mm

### V1-G

Female connector, M12, 4-pin, field attachable

### V1-W

Female connector, M12, 4-pin, field attachable

### V1-G-2M-PUR

Female cordset, M12, 4-pin, PUR cable

### V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

## Technical Data

### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | PNP                |
| 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                           |
| 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                            |

### Functional safety related parameters

|                          |       |
|--------------------------|-------|
| MTTF <sub>d</sub>        | 760 a |
| Mission Time ( $T_M$ )   | 20 a  |
| Diagnostic Coverage (DC) | 0 %   |

### Indicators/operating means

|               |                        |
|---------------|------------------------|
| Potentiometer | sensitivity adjustment |
|---------------|------------------------|

### Ambient conditions

|                     |                                |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 70 °C (-13 ... 158 °F) |
| Storage temperature | -40 ... 85 °C (-40 ... 185 °F) |

### Mechanical specifications

|                      |                                   |
|----------------------|-----------------------------------|
| Connection type      | Connector plug M12 x 1, 4-pin     |
| Housing material     | Stainless steel 1.4305 / AISI 303 |
| Sensing face         | PBT                               |
| Degree of protection | IP67                              |

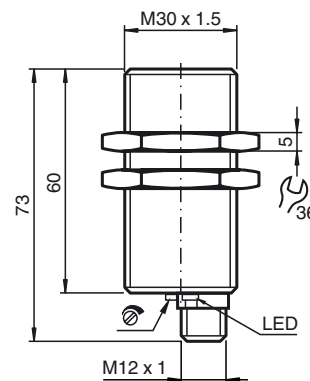
### Compliance with standards and directives

|                     |   |
|---------------------|---|
| 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 |

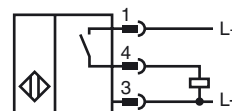
### Approvals and certificates

|              |   |
|--------------|---|
| UL approval  | cULus Listed, General Purpose                     |
| CCC approval | Certified by China Compulsory Certification (CCC) |

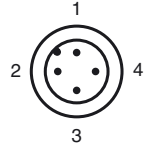
## Dimensions



## Electrical Connection



Pinout



Wire colors in accordance with EN 60947-5-2

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

Installation Conditions

