



### Model Number

**CBB4-12GH60-E2-V1**

### Features

- 4 mm flush
- Operating distance adjustable via potentiometer
- Suitable for foodstuff conditions
- Resistant against aggressive media

### Accessories

#### BF 12

Mounting flange, 12 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 element function |       | PNP           | NO |
| Rated operating distance   | $s_n$ | 4 mm          |    |
| Installation               |       | flush         |    |
| Output polarity            |       | DC            |    |
| Assured operating distance | $s_a$ | 0 ... 2.88 mm |    |

### Nominal ratings

|                             |       |                            |  |
|-----------------------------|-------|----------------------------|--|
| Installation conditions     |       |                            |  |
| A                           |       | 0 mm                       |  |
| B                           |       | 0 mm                       |  |
| C                           |       | 15 mm                      |  |
| F                           |       | 15 mm                      |  |
| Operating voltage           | $U_B$ | 10 ... 36 V DC             |  |
| Switching frequency         | f     | 0 ... 50 Hz                |  |
| Reverse polarity protection |       | reverse polarity protected |  |
| Short-circuit protection    |       | pulsing                    |  |
| Voltage drop                | $U_d$ | $\leq 2.5$ V               |  |
| Operating current           | $I_L$ | 0 ... 100 mA               |  |
| No-load supply current      | $I_0$ | $\leq 12$ mA               |  |
| Switching state indicator   |       | LED, yellow                |  |

### Functional safety related parameters

|                          |      |
|--------------------------|------|
| 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) |
|---------------------|--------------------------------|

### Mechanical specifications

|                      |                                    |
|----------------------|------------------------------------|
| Connection type      | Connector M12 x 1, 4-pin           |
| Housing material     | stainless steel 1.4404 / AISI 316L |
| Sensing face         | PEEK                               |
| Degree of protection | IP65                               |

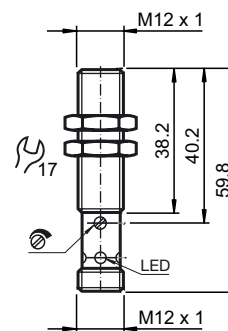
### Compliance with standards and directives

|                     |   |
|---------------------|---|
| Standard conformity |   |
| Standards           | EN 60947-5-2:2007<br>IEC 60947-5-2:2007 |

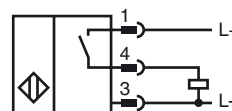
### Approvals and certificates

|              |                                |
|--------------|--------------------------------|
| UL approval  | cULus Listed, General Purpose  |
| CSA approval | cCSAus Listed, General Purpose |

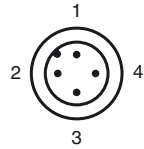
## Dimensions



## Electrical Connection



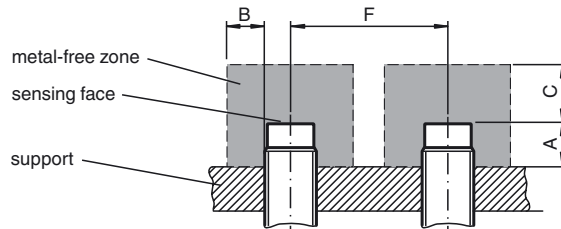
Pinout



Wire colors in accordance with EN 60947-5-2

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

Installation Conditions



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