



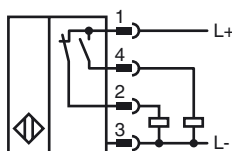
## Model Number

NBB1,5-8GM50-A2-V1

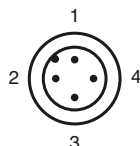
## Features

- 1.5 mm flush

## Connection



## Pinout



Wire colors in accordance with EN 60947-5-2

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

## Accessories

### BF 8

Mounting flange, 8 mm

### V1-G

4-pin, M12 female field-attachable connector

### V1-W

4-pin, M12 female field-attachable connector

### V1-G-2M-PUR

Cable socket, M12, 4-pin, PUR cable

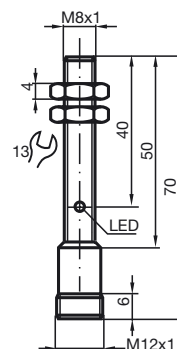
### V1-W-2M-PUR

Cable socket, M12, 4-pin, PUR cable

### EXG-08

Quick mounting bracket with dead stop

## Dimensions



## Technical Data

### General specifications

|                            |       |                |
|----------------------------|-------|----------------|
| Switching element function | PNP   | NO/NC          |
| Rated operating distance   | $s_n$ | 1.5 mm         |
| Installation               |       | flush          |
| Output polarity            |       | DC             |
| Assured operating distance | $s_a$ | 0 ... 1.215 mm |
| Reduction factor $r_{Al}$  |       | 0.45           |
| Reduction factor $r_{Cu}$  |       | 0.35           |
| Reduction factor $r_{304}$ |       | 0.75           |

### Nominal ratings

|                             |       |                                        |
|-----------------------------|-------|----------------------------------------|
| Operating voltage           | $U_B$ | 10 ... 30 V                            |
| Switching frequency         | $f$   | 0 ... 1500 Hz                          |
| Reverse polarity protection |       | reverse polarity protected             |
| Short-circuit protection    |       | pulsing                                |
| Voltage drop                | $U_d$ | $\leq 3$ V                             |
| Operating current           | $I_L$ | 0 ... 100 mA                           |
| Off-state current           | $I_r$ | 0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C |
| No-load supply current      | $I_0$ | $\leq 20$ mA                           |
| Switching state indication  |       | LED, yellow                            |

### Functional safety related parameters

|                          |        |
|--------------------------|--------|
| MTTF <sub>d</sub>        | 2660 a |
| Mission Time ( $T_M$ )   | 20 a   |
| Diagnostic Coverage (DC) | 0 %    |

### Ambient conditions

|                     |                                |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 70 °C (-13 ... 158 °F) |
|---------------------|--------------------------------|

### Mechanical specifications

|                   |                                 |
|-------------------|---------------------------------|
| Connection type   | Device connector M12 x 1, 4-pin |
| Housing material  | brass, nickel-plated            |
| Sensing face      | LCP                             |
| Protection degree | IP67                            |

### 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 |