



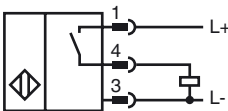
## Model Number

**NBB2-8GM40-E2-V3**

## Features

- Basic series
- 2 mm embeddable

## Connection



## Pinout



Wire colors in accordance with EN 60947-5-2

1	BN
3	BU
4	BK

## Accessories

### BF 8

Mounting flange, 8 mm

### V3-GM

Female connector, M8, 3-pin, field attachable

### V3-WM

Female connector, M8, 3-pin, field attachable

### V3-GM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

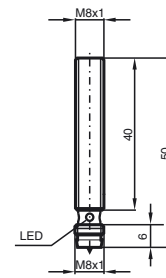
### V3-WM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

### EXG-08

Quick mounting bracket with dead stop

## Dimensions



## Technical Data

### General specifications

Switching element function	PNP	NO
Rated operating distance	$s_n$	2 mm
Installation	embeddable	
Output polarity	DC	
Assured operating distance	$s_a$	0 ... 1.62 mm
Reduction factor $r_{AI}$	0.45	
Reduction factor $r_{Cu}$	0.35	
Reduction factor $r_{V2A}$	0.75	

### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 3000 Hz
Hysteresis	$H$	typ. 5%
Reverse polarity protected	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
No-load supply current	$I_0$	$\leq 15$ mA
Indication of the switching state	Multihole-LED, yellow	

### Functional safety related parameters

MTTF <sub>d</sub>	2790 a
Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
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### Mechanical specifications

Connection type	Device connector M8 x 1, 3-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 IEC 60947-5-2:2007

### Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	Products with a maximum operating voltage of $\leq 36$ V do not bear a CCC marking because they do not require approval.