



### Model Number

NBB10-30GM50-E2-C3-V1

### Features

- 10 mm flush
- Weld slag resistant coating
- Ceramic coated sensing face

### Accessories

#### EXG-30

Quick mounting bracket with dead stop

#### V1-G-OR2M-POC

Female cordset, M12, 4-pin, TPE cable, welding-bead resistant

#### V1-W-OR2M-POC

Female cordset, M12, 4-pin, TPE cable, welding-bead resistant

## Technical Data

### General specifications

Switching element function	PNP	NO
Rated operating distance	$s_n$	10 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 8.1 mm
Reduction factor $r_{Al}$		0.3
Reduction factor $r_{Cu}$		0.2
Reduction factor $r_{304}$		0.6

### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 10 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3$ 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
No-load supply current	$I_0$	$\leq 15$ mA
Switching state indicator		Multihole-LED, yellow
Mag. Field strength, AC fields		150 mT
Mag. Field strength, DC fields		150 mT

### Functional safety related parameters

MTTF <sub>d</sub>	1835 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	Connector M12 x 1, 4-pin
Housing material	Brass, PTFE coated
Sensing face	Ceramic coated
Protection degree	IP67

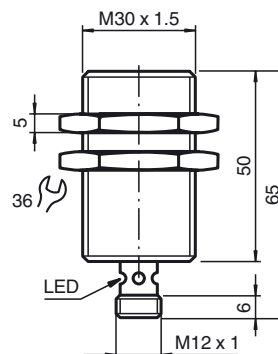
### Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

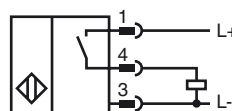
### Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V

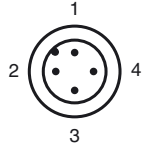
## Dimensions



## Electrical Connection



## Pinout



Wire colors in accordance with EN 60947-5-2

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