



### Model Number

**NBB4-12GM30-E2-T-V1**

### Features

- Increased operating distance
- 4 mm flush
- Temperature range  
-25 ... 100 °C (-13 ... 212 °F)

### Accessories

#### EXG-12

Quick mounting bracket with dead stop

#### V1-G-2M-PUR-H/S

Female cordset, M12, 4-pin, irradiated 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 ... 3.24 mm	
Reduction factor $r_{Al}$		0.45	
Reduction factor $r_{Cu}$		0.35	
Reduction factor $r_{304}$		0.7	

### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 500 Hz
Hysteresis	$H$	1 ... 20 typ. 5 %
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
No-load supply current	$I_0$	$\leq 15$ mA
Time delay before availability	$t_v$	$\leq 20$ ms
Switching state indicator		Multihole-LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>	1940 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
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### Mechanical specifications

Connection type	4-pin, M12 x 1 connector
Cable version	PBT
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67
Mass	30 g

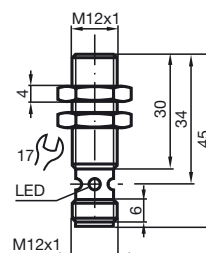
### Compliance with standards and directives

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

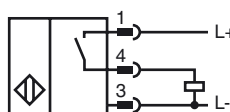
### Approvals and certificates

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)