



### Model Number

**NBN4-12GM50-E2**

### Features

- 4 mm non-flush

### Accessories

**BF 12**  
Mounting flange, 12 mm

## Technical Data

### General specifications

Switching element function		PNP	NO
Rated operating distance	$s_n$	4 mm	
Installation		non-flush	
Output polarity		DC	
Assured operating distance	$s_a$	0 ... 3.24 mm	
Reduction factor $r_{Al}$		0.5	
Reduction factor $r_{Cu}$		0.4	
Reduction factor $r_{304}$		0.8	
Hysteresis	H	typ. 5%	

### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	f	0 ... 1200 Hz
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3$ V
Repeat accuracy		$\leq 0.01$ mm
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	$I_0$	$\leq 17$ mA
Time delay before availability	$t_v$	$\leq 8$ ms
Switching state indicator		LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>	990 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	cable PVC , 2 m
Core cross-section	0.14 mm <sup>2</sup>
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67

### General information

Scope of delivery	2 self locking nuts in scope of delivery
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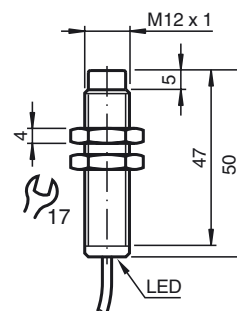
### Compliance with standards and directives

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

