



**Model Number**

**NBN4-12GM50-E2-V1**

**Features**

- 4 mm non-flush

**Accessories**

- BF 12**  
Mounting flange, 12 mm
- V1-G**  
Female connector, M12, 4-pin, field attachable
- V1-W**  
Female connector, M12, 4-pin, field attachable
- V1-G-2M-PUR**  
Female cordset, M12, 4-pin, PUR cable
- V1-W-2M-PUR**  
Female cordset, M12, 4-pin, PUR cable

**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	R	$\leq 0.01$ 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		Multihole-LED, yellow

**Functional safety related parameters**

MTTF <sub>d</sub>	990 a
Mission Time (T <sub>M</sub> )	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, 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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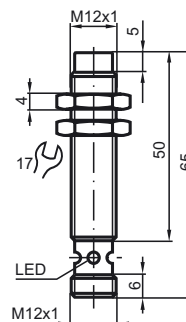
**Compliance with standards and directives**

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

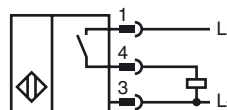
**Approvals and certificates**

EAC conformity	TR CU 020/2011
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)