



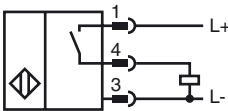
**Model Number**

NBB4-12GM30-E2-T-V1

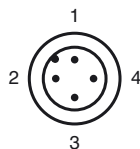
**Features**

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

**Connection**



**Pinout**



Wire colors in accordance with EN 60947-5-2

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

**Accessories**

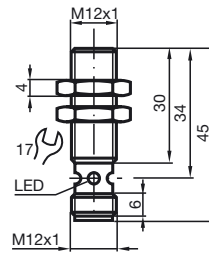
**EXG-12**

Quick mounting bracket with dead stop

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

Female cordset, M12, 4-pin, irradiated PUR cable

**Dimensions**



**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 $r_{AI}$		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 ... 1000 Hz
Hysteresis	$H$	1 ... 20 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>	1940 a
Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %

**Ambient conditions**

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

Connection type	connector M12 x 1, 4-pin
Cable version	PBT
Housing material	brass, nickel-plated
Sensing face	PBT
Protection degree	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	Products with a maximum operating voltage of $\leq 36$ V do not bear a CCC marking because they do not require approval.

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