



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	≤ 3 V
Operating current	I_L	0 ... 100 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A
No-load supply current	I_0	≤ 15 mA
Time delay before availability	t_v	≤ 20 ms
Switching state indicator		Multihole-LED, yellow

Functional safety related parameters

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

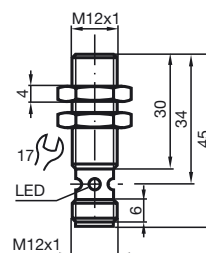
Compliance with standards and directives

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

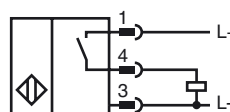
Approvals and certificates

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

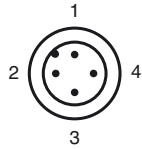
Dimensions



Electrical Connection



Pinout



Wire colors in accordance with EN 60947-5-2

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