



Model Number

NBB4-12GM50-E2-Y319936

Features

- 4 mm flush
- Increased operating distance

Accessories

BF 12

Mounting flange, 12 mm

EXG-12

Quick mounting bracket with dead stop

Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
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}		0.39
Reduction factor r_{Cu}		0.35
Reduction factor r_{304}		0.75
Reduction factor r_{Brass}		0.49
Output type		3-wire

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 800 Hz
Hysteresis	H	typ. 5%
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V

Design data

Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C
No-load supply current	I_0	≤ 15 mA
Time delay before availability	t_v	≤ 5 ms
Switching state indicator		LED, yellow

Ambient conditions

Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
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Mechanical specifications

Connection type		Cable connector M12 x 1, cable PVC, L = 800 mm
Cable version		3 x 0.14 mm ²
Core cross-section		0.14 mm ²
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67

General information

Scope of delivery		2 nuts 2 toothed lock washers
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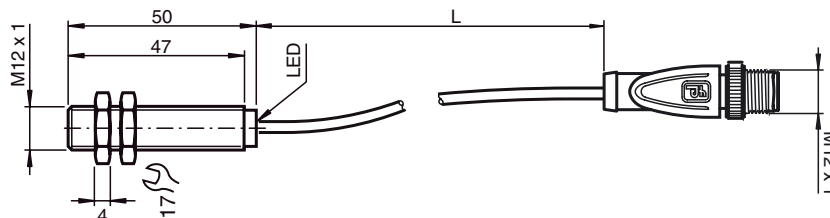
Compliance with standards and directives

Standard conformity		
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

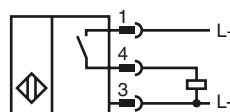
Approvals and certificates

UL approval		cULus 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)