



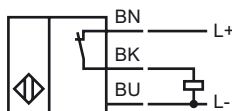
Model Number

NBB4-12GM50-E3-5M

Features

- Basic series
- Increased operating distance

Connection



Accessories

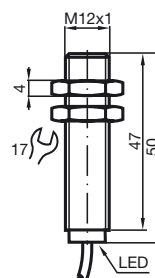
BF 12

Mounting flange, 12 mm

EXG-12

Quick mounting bracket with dead stop

Dimensions



Technical Data

General specifications

Switching element function		PNP	NC
Rated operating distance	s_n	4 mm	
Installation		embeddable	
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_{V2A}		0.7	

Nominal ratings

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 1000 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protected		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
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
Indication of the switching state		LED, yellow

Functional safety related parameters

MTTF _d	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 , 5 m
Cable version	3 x 0.14 mm ²
Core cross-section	0.14 mm ²
Housing material	brass, nickel-plated
Sensing face	PBT
Protection degree	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	Products with a maximum operating voltage of ≤ 36 V do not bear a CCC marking because they do not require approval.