

Inductive sensor

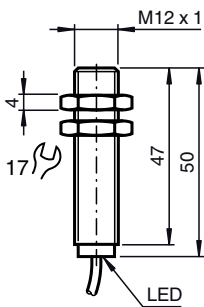
NBB4-12GM50-E0



- Basic series
- 4 mm flush
- Increased operating distance



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		NPN
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
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

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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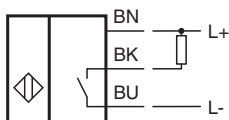
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Technical Data

Switching state indicator	LED, yellow
Functional safety related parameters	
MTTF _d	1600 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %
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
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated ≤36 V
Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications	
Connection type	cable PVC , 2 m
Core cross-section	0.14 mm ²
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67
Cable	
Cable diameter	3 mm + 0.3 mm
Bending radius	> 10 x cable diameter
General information	
Scope of delivery	2 self locking nuts in scope of delivery

Connection



Accessories

	BF 12	Mounting flange, 12 mm
	EXG-12	Quick mounting bracket with dead stop