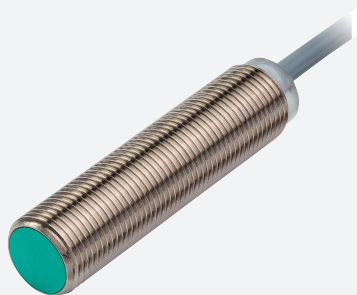


Inductive sensor

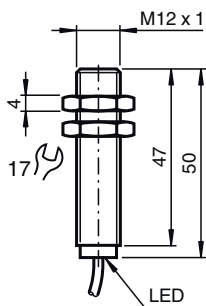
NBB4-12GM50-E2-3G-3D



- Increased operating distance
- 4 mm flush
- ATEX-approval for zone 2 and zone 22



Dimensions



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}	0.45	
Reduction factor r_{Cu}	0.35	
Reduction factor r_{304}	0.7	
Output type	3-wire	

Nominal ratings

Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 1000 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 ... 150 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C
Off-state current $T_U = 40$ °C, switching element off	$\leq$	

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

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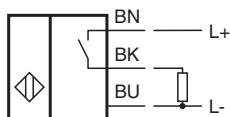
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PEPPERL+FUCHS

Technical Data

No-load supply current	I_0	$\leq 15 \text{ mA}$
Time delay before availability	t_v	$\leq 5 \text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1820 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 $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		cable PVC , 2 m
Cable version		PBT
Core cross-section		0.14 mm ²
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Cable		
Cable diameter		3.5 mm $\pm$ 0.2 mm
Bending radius		> 10 x cable diameter
Equipment protection level Dc (tc)		
Special conditions		
Maximum permissible ambient temperature T _{Umax}		dependant of the load current I _L and the max. operating voltage U _{Bmax} Information can be taken from the following list.
General information		
Use in the hazardous area		see instruction manuals

Connection



Accessories

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