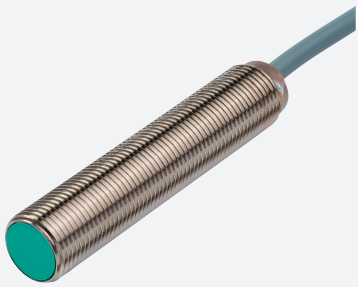


Inductive sensor

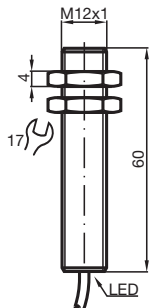
NBB2-12GM60-A2-3G-3D



- 2 mm flush
- ATEX-approval for zone 2 and zone 22



Dimensions



Technical Data

General specifications

Switching function		complementary
Output type		PNP
Rated operating distance	s_n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm
Reduction factor r_{Al}		0.25
Reduction factor r_{Cu}		0.15
Reduction factor r_{304}		0.66
Output type		4-wire

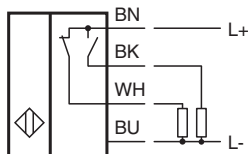
Nominal ratings

Operating voltage	U_B	10 ... 30 V DC
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Technical Data

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 ... 200 mA
Off-state current	I _r	0 ... 0.5 mA typ. 0.1 µA at 25 °C
No-load supply current	I ₀	≤ 20 mA
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1954 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)
Storage temperature		-40 ... 85 °C (-40 ... 185 °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		
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

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