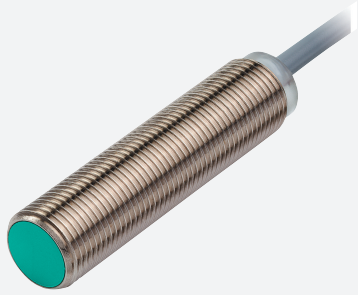
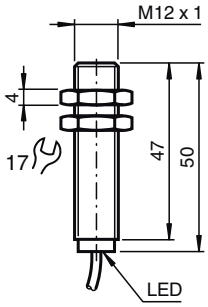
Inductive sensor

NBB4-12GM50-E3-5M

- Basic series
- Increased operating distance



Dimensions



Technical Data

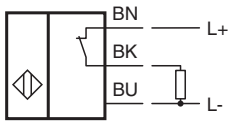
General specifications		
Switching function		Normally closed (NC)
Output type		PNP
Rated operating distance	s_n	4 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 3.24 mm
Reduction factor r_{Al}		0.45
Reduction factor r_{Cu}		0.35
Reduction factor r_{304}		0.7
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V
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	≤ 15 mA
Time delay before availability	t_v	≤ 5 ms

Release date: 2020-03-23 Date of issue: 2020-03-30 Filename: 182401_eng.pdf

Technical Data

Switching state indicator		LED, yellow
Functional safety related parameters		
$MTTF_d$		1315 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 , 5 m
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 self locking nuts in scope of delivery

Connection Assignment



Accessories

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

Release date: 2020-03-23 Date of issue: 2020-03-30 Filename: 182401_eng.pdf