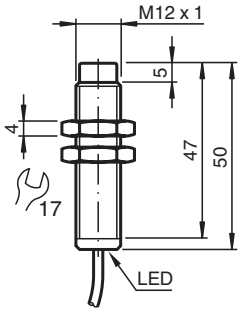
Inductive sensor

NBN4-12GM50-E2-C

- 4 mm non-flush
- Weld Immune



Dimensions



Technical Data

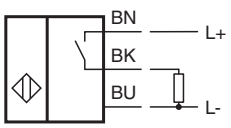
General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	4 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 3.24 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.7
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 1200 Hz
Hysteresis	H	typ. 5%
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing

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Technical Data

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
Constant magnetic field	B	200 mT
Alternating magnetic field	B	200 mT
Switching state indicator		LED, yellow
Safety-relevant product characteristics		
$MTTF_d$		990 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
UL approval		cULus Listed Load Type: General Purpose Circuitry: Class 2 Power Source Enclosure Type Rating: Type 1 Supply/Switching Voltage: 30 V DC Output Switching Current: 200 mA
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
Housing material		Brass, PTFE coated
Sensing face		PPS
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		3.5 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		3
Core cross section		0.14 mm^2
Length	L	2 m
Dimensions		
Length		50 mm
Diameter		12 mm

Connection Assignment



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