

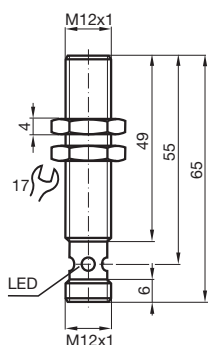


Inductive sensor NBB4-12GM50-E2-V1

- 4 mm flush
- Increased operating distance
- Extended temperature range



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 (-25 ... 70 °C (-13 ... 158 °F)) 0 ... 3.04 mm (-40 ... -25 °C (-40 ... -13 °F))
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
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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PEPPERL+FUCHS

Technical Data

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 µA at 25 °C
No-load supply current	I ₀	≤ 15 mA
Time delay before availability	t _v	≤ 5 ms
Switching state indicator		Multihole-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

EAC conformity		TR CU 020/2011
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		-40 ... 70 °C (-40 ... 158 °F)
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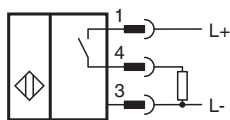
Mechanical specifications

Connection type		Connector plug M12 x 1 , 4-pin
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67

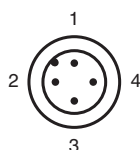
General information

Scope of delivery		2 self locking nuts in scope of delivery
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Connection



Connection



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Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Accessories

	BF 12	Mounting flange, 12 mm
	V1-G-2M-PUR	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	V1-W-2M-PUR	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey

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