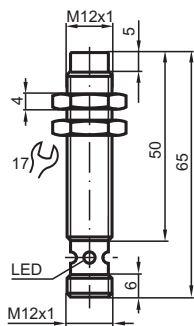


Inductive sensor
NBN4-12GM50-E3-V1

■ 4 mm non-flush



Dimensions



Technical Data

General specifications		
Switching function		Normally closed (NC)
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}		0.5
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.8
Hysteresis	H	typ. 5%
Nominal ratings		
Operating voltage	U_B	10 ... 30 V

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

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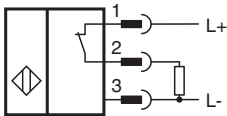
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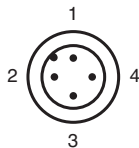
Technical Data

Switching frequency	f	0 ... 1200 Hz
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U _d	≤ 3 V
Repeat accuracy	R	≤ 0.01 mm
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	≤ 17 mA
Time delay before availability	t _v	≤ 8 ms
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		990 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
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		Connector 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

Connection



Connection Assignment



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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, M12, 4-pin, PUR cable
	V1-W-2M-PUR	Female cordset, M12, 4-pin, PUR cable

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