

Inductive sensor

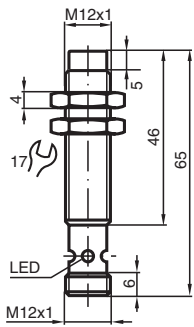
NBN4-12GM50-E2-C-V1



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

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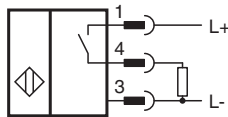
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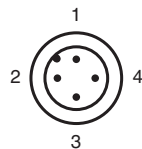
Technical Data

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	Multihole-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 IEC 60947-5-2
Approvals and certificates		
UL approval		cULus 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 plug M12 x 1 , 4-pin	
Core cross section		-
Housing material	Brass, PTFE coated	
Sensing face		PPS
Degree of protection	IP67	
Dimensions		
Length	46 mm	
Diameter	12 mm	

Connection



Connection Assignment



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Connection Assignment

Wire colors in accordance with EN 60947-5-2

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

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