

Inductive sensor

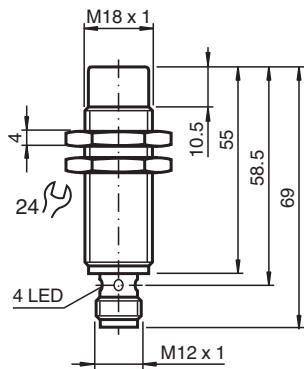
NBN8-18GM50-E2-T-V1



- Extended temperature range
- 8 mm non-flush



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	8 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 6.48 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 24 mm x 24 mm x 1 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.7
Reduction factor r_{Brass}		0.4
Output type		3-wire

Nominal ratings

Installation conditions		
A		15 mm
B		20 mm
C		15 mm
F		28 mm

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

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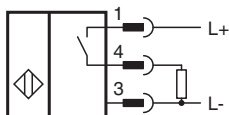
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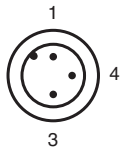
Technical Data

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 300 Hz
Hysteresis	H	0.04 ... 1.76 mm
Reverse polarity protection		yes
Short-circuit protection		yes
Overload resistance		yes
Wire breakage protection		yes
Inductive overvoltage protection		yes
Ripple		10 %
Voltage drop	U_d	≤ 2.5 V
Repeat accuracy	R	0.2 mm
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C
No-load supply current	I_0	≤ 7 mA
Time delay before availability	t_v	≤ 40 ms
Switching state indicator		Multihole-LED, yellow
Functional safety related parameters		
MTTF _d		1935 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		
CCC approval		CCC approval / marking not required for products rated ≤ 36 V
Ambient conditions		
Ambient temperature		-25 ... 100 °C (-13 ... 212 °F)
Storage temperature		-40 ... 100 °C (-40 ... 212 °F)
Mechanical specifications		
Connection type		Connector plug
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Connector		
Threading		M12 x 1
Number of pins		3
Mass		50 g
Dimensions		
Length		69 mm
Diameter		18 mm

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

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