

Inductive sensor

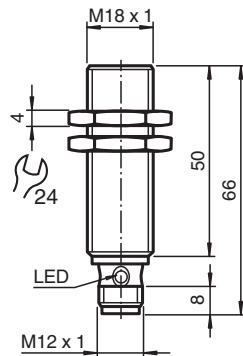
NJ5-18GM50-E2-V1-3G-3D



- 5 mm flush
- ATEX-approval for zone 2 and zone 22



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	5 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 4.05 mm
Actual operating distance	s_r	4.5 ... 5.5 mm typ. 5 mm
Reduction factor r_{Al}		0.2
Reduction factor r_{Cu}		0.13
Reduction factor r_{304}		0.62
Reduction factor r_{Brass}		0.26
Output type		3-wire

Nominal ratings

Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 2000 Hz

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

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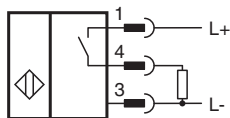
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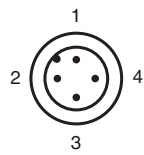
Technical Data

Hysteresis	H	3 ... 15 typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 3 \text{ V}$
Voltage drop at I_L		
Voltage drop $I_L = 200 \text{ mA}$, switching element on	U_d	1 ... 2 V typ. 1.5 V
Operating current	I_L	$\leq 200 \text{ mA}$
Off-state current	I_r	0 ... 0.5 mA typ. 0.01 mA
No-load supply current	I_0	$\leq 15 \text{ mA}$
Time delay before availability	t_v	$\leq 100 \text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1504 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		
UL approval		cULus Listed, General Purpose, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP66 / IP67
General information		
Scope of delivery		2 self locking nuts in scope of delivery
Use in the hazardous area		see instruction manuals

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Accessories

	BF 18	Mounting flange, 18 mm
	EXG-18	Quick mounting bracket with dead stop

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