

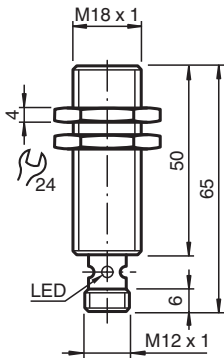
Inductive sensor NJ5-18GM50-E2-V1



- Comfort series
- 5 mm flush



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}		0.15
Reduction factor r_{304}		0.62
Reduction factor r_{Brass}		0.32
Output type		3-wire

Nominal ratings

Operating voltage	U_B	10 ... 60 V
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	1 ... 10 typ. 6 %

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

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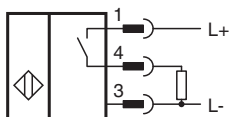
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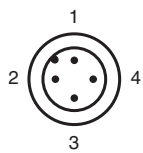
Technical Data

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 $I_L = 100 \text{ mA}$, switching element on	U_d	$1.5 \dots 2.5 \text{ V typ. } 1.9 \text{ V}$
Operating current	I_L	$0 \dots 200 \text{ mA}$
Lowest operating current	I_m	0 mA
Off-state current	I_r	$0 \dots 0.5 \text{ mA typ. } 0.01 \text{ mA}$
Off-state current $T_U = 40^\circ \text{C}$, switching element off		$\leq 100 \mu\text{A}$
No-load supply current	I_0	$\leq 9 \text{ mA}$
Time delay before availability	t_v	$\leq 30 \text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		750 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		Certified by China Compulsory Certification (CCC)
Ambient conditions		
Ambient temperature		$-25 \dots 70^\circ \text{C} (-13 \dots 158^\circ \text{F})$
Storage temperature		$-40 \dots 85^\circ \text{C} (-40 \dots 185^\circ \text{F})$
Mechanical specifications		
Connection type		Connector plug M12 x 1, 3-pin
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Dimensions		
Length		65 mm
Diameter		18 mm

Connection



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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