

Inductive sensor

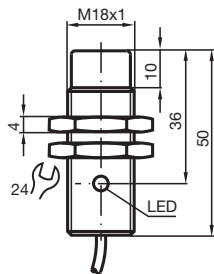
NJ8-18GM50-E3



- Comfort series
- 8 mm non-flush



Dimensions



Technical Data

General specifications			
Switching function		Normally closed (NC)	
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	
Actual operating distance	s_r	7.2 ... 8.8 mm typ. 8 mm	
Reduction factor r_{Al}		0.42	
Reduction factor r_{Cu}		0.4	
Reduction factor r_{304}		0.72	
Reduction factor r_{Brass}		0.5	
Output type		3-wire	

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

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Technical Data

Nominal ratings

Installation conditions		
A		10 mm
B		54 mm
C		24 mm
Operating voltage	U_B	10 ... 60 V
Switching frequency	f	0 ... 1000 Hz
Hysteresis	H	1 ... 10 typ. 7.5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Voltage drop at I_L		
Voltage drop $I_L = 100$ mA, switching element on	U_d	1.5 ... 2.5 V typ. 1.9 V
Operating current	I_L	0 ... 200 mA
Lowest operating current	I_m	0 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.01 mA
Off-state current $T_U = 40$ °C, switching element off		≤ 100 μ A
No-load supply current	I_0	≤ 9 mA
Time delay before availability	t_v	≤ 30 ms
Switching state indicator		LED, yellow

Functional safety related parameters

MTTF _d		1424 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

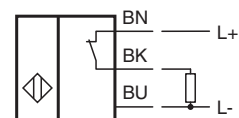
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)

Ambient conditions

Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)

Mechanical specifications

Connection type		cable PVC , 2 m
Core cross-section		0.5 mm ²
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67



Connection Assignment

Accessories

	BF 18	Mounting flange, 18 mm
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Release date: 2020-03-24 Date of issue: 2020-03-30 Filename: 282969_eng.pdf