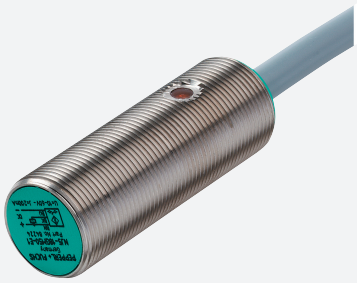
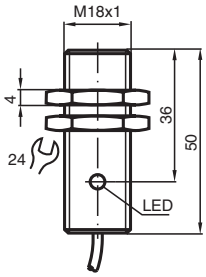


Inductive sensor

NJ5-18GM50-E3-5M

- Comfort series
- 5 mm flush

Dimensions



Technical Data

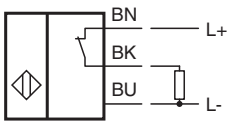
General specifications		
Switching function		Normally closed (NC)
Output type		PNP
Rated operating distance	s_n	5 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 4.05 mm
Actual operating distance	s_r	4.5 ... 5.5 mm typ. 5 mm
Reduction factor r_{Al}		0.2
Reduction factor r_{Cu}		0.15
Reduction factor r_{304}		0.62
Reduction factor r_{Brass}		0.32
Output type		3-wire
Nominal ratings		
Installation conditions		
A		0 mm
B		18 mm

Release date: 2024-05-28 Date of issue: 2024-06-08 Filename: 282960_eng.pdf

Technical Data

C		15 mm
Operating voltage	U_B	10 ... 60 V
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	1 ... 10 typ. 6 %
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 µA
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		
$MTTF_d$		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 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		cable PVC , 5 m
Core cross section		0.5 mm^2
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
Dimensions		
Length		50 mm
Diameter		18 mm

Connection Assignment



Release date: 2024-05-28 Date of issue: 2024-06-08 Filename: 282960_eng.pdf