



Model Number

NJ8-18GM50-E3

Features

- Comfort series
- 8 mm non-flush

Accessories

BF 18

Mounting flange, 18 mm

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

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 %

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

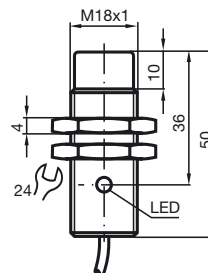
Compliance with standards and directives

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)

Dimensions





Electrical Connection

