



## Model Number

NJ5-18GM50-E-V1

## Features

- Comfort series
- 5 mm flush

## Accessories

### BF 18

Mounting flange, 18 mm

### V1-G

Female connector, M12, 4-pin, field attachable

### V1-W

Female connector, M12, 4-pin, field attachable

### V1-G-2M-PUR

Female cordset, M12, 4-pin, PUR cable

### EXG-18

Quick mounting bracket with dead stop

### V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

## Technical Data

### General specifications

Switching function	Normally open (NO)
Output type	NPN
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

### Nominal ratings

Installation conditions	
A	0 mm
B	18 mm
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

### Design data

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 $\mu$ 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 <sub>d</sub>	1410 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	Connector M12 x 1, 3-pin
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	PBT
Degree of protection	IP67

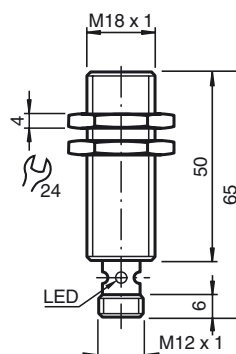
### Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

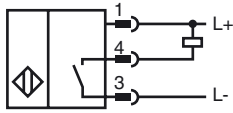
### Approvals and certificates

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

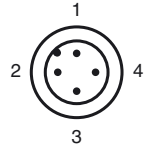
## Dimensions



**Electrical Connection**



**Pinout**



Wire colors in accordance with EN 60947-5-2

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