



### Model Number

NJ5-18GM50-E2

### Features

- Comfort series
- 5 mm flush

### Accessories

#### BF 18

Mounting flange, 18 mm

#### EXG-18

Quick mounting bracket with dead stop

## 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                     |

### 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  | $U_d$ | $\leq 3$ V                 |
| Voltage drop at $I_L$                                   |       | 1.5 ... 2.5 V typ. 1.9 V   |
| Voltage drop $I_L = 100$ mA, switching element on $U_d$ |       |                            |

### 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 $\leq 100$ $\mu$ A |       |                           |
| No-load supply current  | $I_0$ | $\leq 9$ mA               |
| Time delay before availability  | $t_v$ | $\leq 30$ ms              |
| Switching state indicator   |       | LED, yellow               |

### Functional safety related parameters

|                          |       |
|--------------------------|-------|
| MTTF <sub>d</sub>        | 750 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 <sup>2</sup>               |
| Housing material     | Stainless steel 1.4305 / AISI 303 |
| Sensing face         | PBT                               |
| Degree of protection | IP67                              |

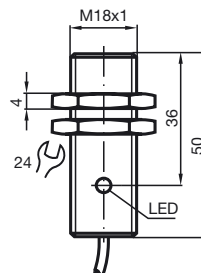
### Compliance with standards and directives

|                     |   |
|---------------------|---|
| Standard conformity |   |
| Standards           | EN 60947-5-2:2007<br>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

