



Model Number

NCN12-18GM50-Z7-V1

Features

- 12 mm non-flush
- 2-wire DC
- Increased operating distance

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

V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

Technical Data

General specifications

| | | | |
|------------------------------|-------|--------------|----|
| Switching element function | | DC | NC |
| Rated operating distance | s_n | 12 mm | |
| Installation | | non-flush | |
| Output polarity | | DC | |
| Assured operating distance | s_a | 0 ... 9.1 mm | |
| Reduction factor r_{Al} | | 0.4 | |
| Reduction factor r_{Cu} | | 0.4 | |
| Reduction factor r_{304} | | 0.75 | |
| Reduction factor r_{Brass} | | 0.55 | |

Nominal ratings

| | | |
|-----------------------------|-------|-----------------------------|
| Operating voltage | U_B | 3.5 ... 30 V |
| Switching frequency | f | 0 ... 1000 Hz |
| Reverse polarity protection | | reverse polarity-conductive |
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | ≤ 3.5 V |
| Temperature drift | | $\pm 15\%$ |
| Operating current | I_L | 2 ... 100 mA |
| Off-state current | I_r | typ. 0.8 mA |
| Switching state indicator | | LED, yellow |

Ambient conditions

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

Mechanical specifications

| | |
|----------------------|--------------------------|
| Connection type | Connector M12 x 1, 4-pin |
| Housing material | brass, nickel-plated |
| Sensing face | PBT |
| Degree of protection | IP67 |

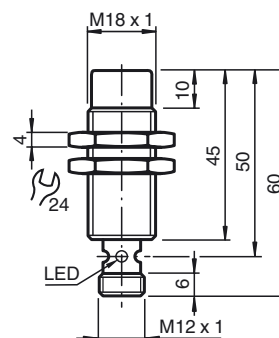
Compliance with standards and directives

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

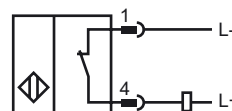
Approvals and certificates

| | |
|--------------|--|
| UL approval | cULus Listed, General Purpose |
| CSA approval | cCSAus Listed, General Purpose |
| CCC approval | CCC approval / marking not required for products rated ≤ 36 V |

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) |