



Model Number

NJ2-12GM40-E2-Y302463

Features

- 2 mm flush

Accessories

BF 12

Mounting flange, 12 mm

EXG-12

Quick mounting bracket with dead stop

Technical Data

General specifications

| | | |
|----------------------------|-------|---------------------|
| Switching function | | Normally open (NO) |
| Output type | | PNP |
| Rated operating distance | s_n | 2 mm |
| Installation | | flush |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 1.62 mm |
| Actual operating distance | s_r | 1.8 ... 2.2 mm typ. |
| Reduction factor r_{AI} | | 0.23 |
| Reduction factor r_{Cu} | | 0.21 |
| Reduction factor r_{304} | | 0.7 |
| Output type | | 3-wire |

Nominal ratings

| | | |
|-----------------------------|-------|----------------------------|
| Operating voltage | U_B | 10 ... 60 V |
| Switching frequency | f | 0 ... 3000 Hz |
| Hysteresis | H | 1 ... 10 typ. 3 % |
| 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 | | 1.2 ... 2.5 V |

| | | |
|--------------------------------|-------|---------------|
| Operating current | I_L | 0 ... 200 mA |
| Off-state current | I_r | ≤ 0.5 mA |
| No-load supply current | I_0 | ≤ 9 mA |
| Time delay before availability | t_v | ≤ 20 ms |
| Switching state indicator | | LED, yellow |

Functional safety related parameters

| | | |
|--------------------------|--|-------|
| MTTF _d | | 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 connector M8 x 1, 3-pin PVC |
| | | L = 500 mm |
| Core cross-section | | 0.14 mm ² |
| Housing material | | Stainless steel 1.4305 / AISI 303 |
| Sensing face | | PBT |
| Degree of protection | | IP67 |

General information

| | | |
|-------------------|--|--|
| Scope of delivery | | 2 self locking nuts in scope of delivery |
|-------------------|--|--|

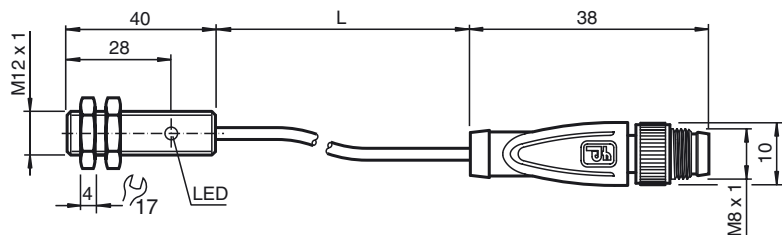
Compliance with standards and directives

| | | |
|---------------------|--|---|
| Standard conformity | | |
| Standards | | EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012 |

Approvals and certificates

| | | |
|-------------|--|-------------------------------|
| UL approval | | cULus Listed, General Purpose |
|-------------|--|-------------------------------|

Dimensions



Electrical Connection



Pinout



Wire colors in accordance with EN 60947-5-2

| | | |
|---|----|---------|
| 1 | BN | (brown) |
| 3 | BU | (blue) |
| 4 | BK | (black) |