



Model Number

NBB2-12GM40-E1

Features

- 2 mm flush

Accessories

BF 12

Mounting flange, 12 mm

EXG-12

Quick mounting bracket with dead stop

Technical Data

General specifications

| | | | |
|----------------------------|-------|---------------|----|
| Switching element function | | NPN | NC |
| Rated operating distance | s_n | 2 mm | |
| Installation | | flush | |
| Output polarity | | DC | |
| Assured operating distance | s_a | 0 ... 1.62 mm | |
| Reduction factor r_{Al} | | 0.3 | |
| Reduction factor r_{Cu} | | 0.2 | |
| Reduction factor r_{304} | | 0.7 | |

Nominal ratings

| | | |
|-----------------------------|-------|--|
| Operating voltage | U_B | 10 ... 30 V |
| Switching frequency | f | 0 ... 1000 Hz |
| Hysteresis | H | typ. 5% |
| Reverse polarity protection | | reverse polarity protected |
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | ≤ 3 V |
| Operating current | I_L | 0 ... 100 mA |
| Off-state current | I_r | 0 ... 0.5 mA typ. 0.1 μ A at 25 °C |
| No-load supply current | I_0 | ≤ 15 mA |
| Switching state indicator | | all direction LED, yellow |

Functional safety related parameters

| | |
|--------------------------|--------|
| MTTF _d | 2190 a |
| Mission Time (T_M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |

Ambient conditions

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

Mechanical specifications

| | |
|----------------------|----------------------|
| Connection type | cable PVC, 2 m |
| Core cross-section | 0.14 mm ² |
| Housing material | brass, nickel-plated |
| Sensing face | PBT |
| Degree of protection | IP67 |

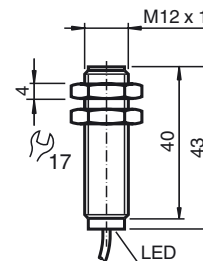
Compliance with standards and directives

| | |
|---------------------|---|
| 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

