



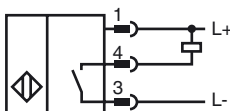
Model Number

NEN6-8GM45-E0-V3

Features

- Increased operating distance
- 6 mm non-flush

Connection



Pinout



Wire colors in accordance with EN 60947-5-2

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

Accessories

BF 8

Mounting flange, 8 mm

V3-GM

Female connector, M8, 3-pin, field attachable

V3-WM

Female connector, M8, 3-pin, field attachable

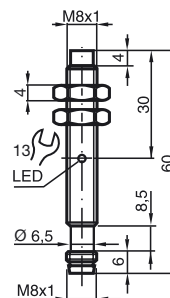
V3-GM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

V3-WM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

Dimensions



Technical Data

General specifications

| | | |
|------------------------------|---|---------------|
| Switching element function | NPN | NO |
| Rated operating distance | s_n | 6 mm |
| Installation | non-flush | |
| Output polarity | DC | |
| Assured operating distance | s_a | 0 ... 4.86 mm |
| Actuating element | mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 18 mm x 18 mm x 1 mm | |
| Reduction factor r_{Al} | 0.5 | |
| Reduction factor r_{Cu} | 0.45 | |
| Reduction factor r_{304} | 0.8 | |
| Reduction factor r_{Brass} | 0.55 | |

Nominal ratings

Installation conditions

| | |
|---|------------------------------|
| A | in steel 1.0037 (St37): 8 mm |
| B | 12 mm |
| C | 18 mm |
| F | 28 mm |

| | | |
|-----------------------------------|-------------|--|
| Operating voltage | U_B | 10 ... 30 V DC |
| Switching frequency | f | 0 ... 750 Hz |
| Hysteresis | H | 0.06 ... 0.6 mm |
| Reverse polarity protection | yes | |
| Short-circuit protection | pulsing | |
| Overload resistance | yes | |
| Wire breakage protection | yes | |
| Surge suppression | yes | |
| Ripple | 10 % | |
| Voltage drop | U_d | ≤ 2 V |
| Repeat accuracy | 0.3 mm | |
| Operating current | I_L | 0 ... 200 mA, above 50°C \leq 150 mA |
| Off-state current | I_r | ≤ 10 μ A |
| No-load supply current | I_0 | ≤ 15 mA |
| Time delay before availability | t_v | ≤ 50 ms |
| Indication of the switching state | LED, yellow | |

Functional safety related parameters

| | |
|--------------------------------|--------|
| MTTF _d | 1740 a |
| Mission Time (T _M) | 20 a |
| Diagnostic Coverage (DC) | 0 % |

Ambient conditions

| | |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 85 °C (-13 ... 185 °F) |
| Storage temperature | -40 ... 85 °C (-40 ... 185 °F) |

Mechanical specifications

| | |
|-------------------------------------|--------------------------------|
| Connection type | Device connector M8 x 1, 3-pin |
| Housing material | brass, nickel-plated |
| Sensing face | PBT |
| Protection degree | IP67 |
| Mass | 20 g |
| Tightening torque, fastening screws | max. 2 Nm |

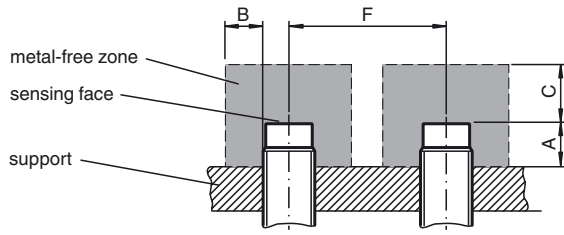
Compliance with standards and directives

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

Approvals and certificates

| | |
|--------------|--|
| UL approval | cULus Listed, General Purpose, Class 2 Power Source |
| CCC approval | Products with a maximum operating voltage of ≤ 36 V do not bear a CCC marking because they do not require approval. |

Installation conditions



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