



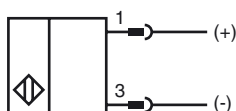
Model Number

NCB4-12GM60-B3-V1

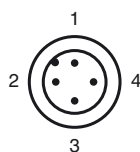
Features

- Comfort series
- 4 mm embeddable
- Cylindrical
- NO/NC selectable
- On/Off delay (disconnectable)

Connection



Pinout



Accessories

BF 12

Mounting flange, 12 mm

V1-W

4-pin, M12 female field-attachable connector

V1-W-2M-PUR

Cable socket, M12, 4-pin, PUR cable

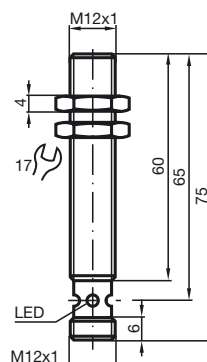
V1-G-2M-PUR

Cable socket, M12, 4-pin, PUR cable

EXG-12

Quick mounting bracket with dead stop

Dimensions



Technical Data

General specifications

| | | |
|-------------------------------|-------|--------------------|
| Switching element function | | NO/NC programmable |
| Rated operating distance | s_n | 4 mm |
| Installation | | embeddable |
| Output polarity | | AS-Interface |
| Assured operating distance | s_a | 0 ... 3.24 mm |
| Reduction factor r_{Al} | | 0.23 |
| Reduction factor r_{Cu} | | 0.21 |
| Reduction factor r_{304} | | 0.7 |
| Slave type | | Standard slave |
| AS-Interface specification | | V2.1 |
| Required master specification | | ≥ V2.1 |

Nominal ratings

| | | |
|-----------------------------------|-------|-------------------------------------|
| Operating voltage | U_B | 26.5 ... 31.9 V via AS-i bus system |
| Switching frequency | f | 0 ... 500 Hz |
| Hysteresis | H | 1 ... 15 typ. 5 % |
| Reverse polarity protected | | reverse polarity protected |
| No-load supply current | I_0 | ≤ 25 mA |
| Indication of the switching state | | dual-LED, yellow |
| Fault indication | | dual-LED, red |

Functional safety related parameters

| | |
|--------------------------|--------|
| MTTF _d | 2140 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 | Device connector M12 x 1 4-pin |
| Housing material | Stainless steel 1.4305 / AISI 303 |
| Sensing face | PBT |
| Protection degree | IP67 |

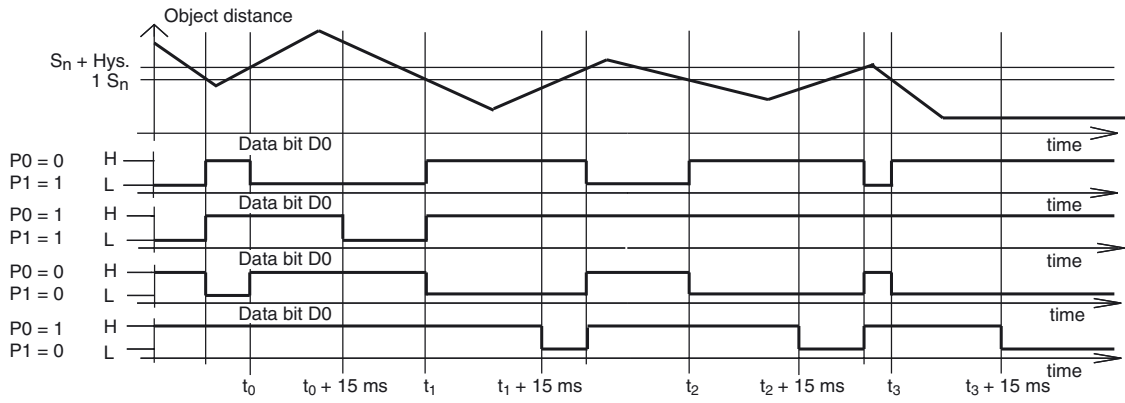
Compliance with standards and directives

| | |
|---------------------|---|
| 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 | Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval. |

On/off delay:



The on/off delay is preset and switched on (P0=1). On delay approx.15 ms, when P0=1 and NO function (P1=1). Off delay approx.15 ms, when P0=1 and NC function (P1=0).