



Model Number

NBN3-F25L-E2-V1

Features

- Direct mounting on standard actuators

Accessories

V1-W

Female connector, M12, 4-pin, field attachable

V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

V1-G-2M-PUR

Female cordset, M12, 4-pin, PUR cable

V1-G

Female connector, M12, 4-pin, field attachable

Technical Data

General specifications

| | | |
|-----------------------------|-------|---------------------|
| Switching function | | Normally open (NO) |
| Output type | | PNP |
| Rated operating distance | s_n | 3 mm |
| Installation | | flush mountable |
| Output polarity | | DC |
| Assured operating distance | s_a | 0 ... 2.43 mm |
| Actual operating distance | s_r | 2.7 ... 3.3 mm typ. |
| Reduction factor r_{Al} | | 0.5 |
| Reduction factor r_{Cu} | | 0.4 |
| Reduction factor r_{304} | | 1 |
| Reduction factor r_{St37} | | 1.2 |
| Output type | | 3-wire |

Nominal ratings

| | | |
|--------------------------------|-------|--|
| Operating voltage | U_B | 10 ... 30 V |
| Switching frequency | f | 0 ... 500 Hz |
| Hysteresis | H | typ. 5 % |
| Reverse polarity protection | | all connections |
| Short-circuit protection | | pulsing |
| Voltage drop | U_d | ≤ 3 V |
| Design data | | |
| Operating current | I_L | 0 ... 200 mA |
| Off-state current | I_r | 0 ... 0.5 mA typ. 0.1 μ A at 25 °C |
| No-load supply current | I_0 | ≤ 25 mA |
| Time delay before availability | t_v | ≤ 500 ms |
| Operating voltage indicator | | LED, green |
| Switching state indicator | | LED, yellow |

Ambient conditions

| | |
|---------------------|--------------------------------|
| Ambient temperature | -25 ... 70 °C (-13 ... 158 °F) |
| Storage temperature | -40 ... 85 °C (-40 ... 185 °F) |

Mechanical specifications

| | |
|-------------------------------------|-------------------------------|
| Connection type | Connector plug M12 x 1, 4-pin |
| Housing material | PBT |
| Sensing face | PBT |
| Degree of protection | IP67 |
| Tightening torque, fastening screws | M5 x 25 : 2.7 Nm |
| Note | Mounted on mechanical drive |

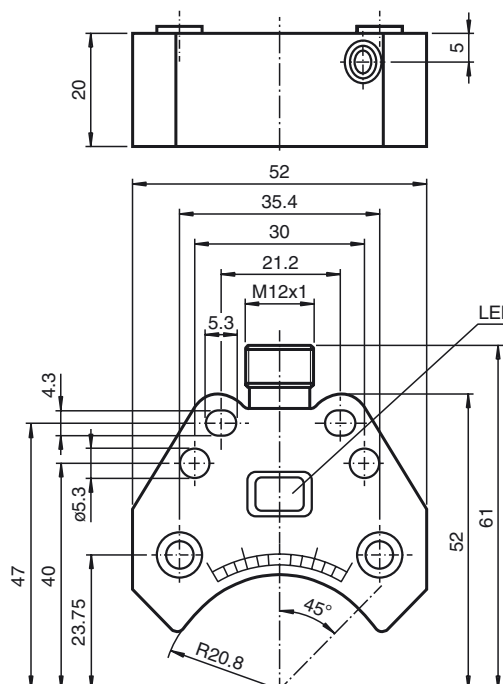
Compliance with standards and directives

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

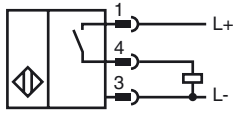
Approvals and certificates

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

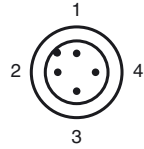
Dimensions



Electrical Connection



Pinout



Wire colors in accordance with EN 60947-5-2

| | | | |
|---|--|----|---------|
| 1 | | BN | (brown) |
| 2 | | WH | (white) |
| 3 | | BU | (blue) |
| 4 | | BK | (black) |