

## Model Number

**NBN4-F25-E8-V1**

## Features

- **Direct mounting on standard actuators**
- **Small construction with sturdy plastic housing of protection class IP 67**
- **LED for power on**
- **M12 male connector**

## Accessories

**BT32**
Activator for F25 series

**BT33**
Activator for F25 series

**BT34**
Activator for F25 series

**BT32XAS**
Activator for F25 series

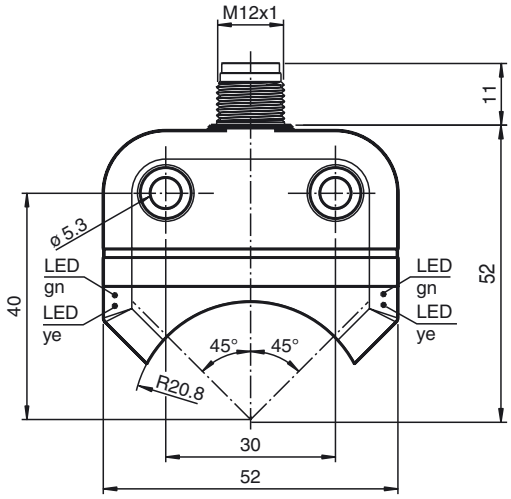
**BT43-RG-01**
Activator for F25 series including protective housing and mounting plate

## Technical Data

| | | |
|---|---|---|
| **General specifications** | | |
| Switching function | | 2 x normally open (NO) |
| Output type | | PNP |
| Rated operating distance | $s_n$ | 4 mm |
| Installation | | flush mountable |
| Output polarity | | DC |
| Assured operating distance | $s_a$ | 0 ... 3.24 mm |
| Actual operating distance | $s_r$ | 3.6 ... 4.4 mm typ. |
| Reduction factor $r_{Al}$ | | 0.5 |
| Reduction factor $r_{Cu}$ | | 0.4 |
| Reduction factor $r_{304}$ | | 1 |
| Reduction factor $r_{St37}$ | | 1.1 |
| Output type | | 3-wire |
| **Nominal ratings** | | |
| Operating voltage | $U_B$ | 10 ... 30 V DC |
| Switching frequency | f | 0 ... 1000 Hz |
| Hysteresis | H | typ. 5 % |
| Reverse polarity protection | | reverse polarity protected |
| Short-circuit protection | | pulsing |
| Voltage drop | $U_d$ | ≤ 2.5 V |
| Design data | | |
| Operating current | $I_L$ | 0 ... 200 mA |
| Off-state current | $I_r$ | 0 ... 0.5 mA typ. 0.1 µA at 25 °C |
| No-load supply current | $I_0$ | ≤ 22.5 mA |
| Time delay before availability | $t_v$ | ≤ 100 ms |
| Operating voltage indicator | | LED, green |
| Switching state indicator | | LED, yellow |
| **Functional safety related parameters** | | |
| $MTTF_d$ | | 860 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 | | Connector plug M12 x 1 , 4-pin |
| Connector housing | | metal |
| Housing material | | PBT |
| Sensing face | | PC |
| Degree of protection | | IP67 |
| Mass | | 48 g |
| 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<br>EN 60947-5-2/A1:2012<br>IEC 60947-5-2:2007<br>IEC 60947-5-2 AMD 1:2012 |
| **Approvals and certificates** | | |
| UL approval | | cULus Listed |
| CCC approval | | CCC approval / marking not required for products rated ≤36 V |

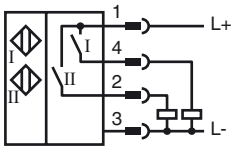
## Dimensions



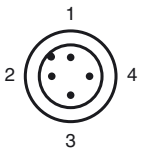




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## Electrical Connection




## Pinout




Wire colors in accordance with EN 60947-5-2

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

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".
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