



### Model Number

NRB2-8GH40-E2

### Features

- 2 mm flush
- Reduction factor = 1
- Magnetic field resistant
- Stainless steel housing
- Front face FDA conform

## Technical Data

### General specifications

|                            |       |                    |
|----------------------------|-------|--------------------|
| Switching function         |       | Normally open (NO) |
| Output type                |       | PNP                |
| Rated operating distance   | $s_n$ | 2 mm               |
| Installation               |       | flush              |
| Output polarity            |       | DC                 |
| Assured operating distance | $s_a$ | 0 ... 1.62 mm      |
| Reduction factor $r_{Al}$  |       | 1                  |
| Reduction factor $r_{Cu}$  |       | 1                  |
| Reduction factor $r_{304}$ |       | 1                  |
| Reduction factor $r_{317}$ |       | 1                  |
| Output type                |       | 3-wire             |

### Nominal ratings

|                             |       |  |
|-----------------------------|-------|--|
| Operating voltage           | $U_B$ | 10 ... 30 V DC                         |
| Switching frequency         | $f$   | 0 ... 4000 Hz                          |
| Hysteresis                  | $H$   | typ. 5 %                               |
| Reverse polarity protection |       | reverse polarity protected             |
| Short-circuit protection    |       | pulsing                                |
| Voltage drop                | $U_d$ | $\leq 2$ V                             |
| Operating current           | $I_L$ | 0 ... 200 mA                           |
| Off-state current           | $I_r$ | 0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C |
| No-load supply current      | $I_0$ | $\leq 15$ mA                           |
| Constant magnetic field     | $B$   | 200 mT                                 |
| Alternating magnetic field  | $B$   | 200 mT                                 |
| Switching state indicator   |       | LED, yellow                            |

### Functional safety related parameters

|                          |          |
|--------------------------|----------|
| MTTF <sub>d</sub>        | 1010.5 a |
| Mission Time ( $T_M$ )   | 20 a     |
| Diagnostic Coverage (DC) | 0 %      |

### Ambient conditions

|                     |                                 |
|---------------------|---------------------------------|
| Ambient temperature | -25 ... 85 °C (-13 ... 185 °F)  |
| Storage temperature | -40 ... 100 °C (-40 ... 212 °F) |

### Mechanical specifications

|                      |                                    |
|----------------------|------------------------------------|
| Connection type      | cable PVC, 2 m                     |
| Core cross-section   | 0.14 mm <sup>2</sup>               |
| Housing material     | stainless steel 1.4404 / AISI 316L |
| Sensing face         | LCP, (conforms with FDA)           |
| Degree of protection | IP67                               |

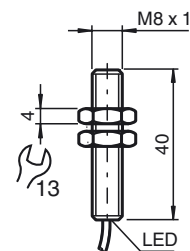
### Compliance with standards and directives

|                     |   |
|---------------------|---|
| 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, General Purpose, Class 2 Power Source                |
| CCC approval | CCC approval / marking not required for products rated $\leq 36$ V |

## Dimensions



## Electrical Connection

