

# Inductive sensor

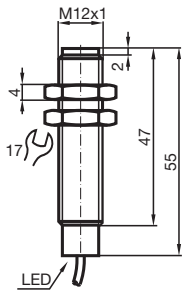
## NMB2-12GM55-E2-FE



- Stainless steel sensing face
- Sensing range 2 mm
- 3-wire DC
- Ferrous targets



### Dimensions



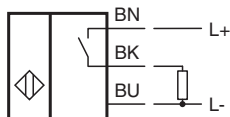
### Technical Data

| 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      |  |
| Actuating element            |       | Ferrous targets    |  |
| Reduction factor $r_{Al}$    |       | 0                  |  |
| Reduction factor $r_{Cu}$    |       | 0                  |  |
| Reduction factor $r_{304}$   |       | 0.2                |  |
| Reduction factor $r_{316Ti}$ |       | 0                  |  |
| Reduction factor $r_{St37}$  |       | 1                  |  |

## Technical Data

|                                          |                |                                                              |
|------------------------------------------|----------------|--------------------------------------------------------------|
| Reduction factor r <sub>Brass</sub>      |                | 0                                                            |
| Nominal ratings                          |                |                                                              |
| Operating voltage                        | U <sub>B</sub> | 10 ... 30 V DC                                               |
| Switching frequency                      | f              | 100 Hz                                                       |
| Hysteresis                               | H              | 3 ... 15 typ. 5 %                                            |
| Reverse polarity protection              |                | reverse polarity protected                                   |
| Short-circuit protection                 |                | pulsing                                                      |
| Voltage drop                             | U <sub>d</sub> | ≤ 2 V DC                                                     |
| Operating current                        | I <sub>L</sub> | ≤ 200 mA                                                     |
| Current consumption                      |                | < 14 mA                                                      |
| Off-state current                        | I <sub>r</sub> | ≤ 10 μA                                                      |
| Functional safety related parameters     |                |                                                              |
| MTTF <sub>d</sub>                        |                | 990 a                                                        |
| Mission Time (T <sub>M</sub> )           |                | 20 a                                                         |
| Diagnostic Coverage (DC)                 |                | 0 %                                                          |
| Indicators/operating means               |                |                                                              |
| Operation indicator                      |                | Dual LED<br>Green: power<br>Yellow: output                   |
| Compliance with standards and directives |                |                                                              |
| Standard conformity                      |                |                                                              |
| Standards                                |                | EN 60947-5-2:2007<br>IEC 60947-5-2:2007                      |
| 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 |
| Ambient conditions                       |                |                                                              |
| Ambient temperature                      |                | -40 ... 70 °C (-40 ... 158 °F)                               |
| Mechanical specifications                |                |                                                              |
| Connection type                          |                | 2 m PUR cable                                                |
| Core cross-section                       |                | 0.34 mm <sup>2</sup>                                         |
| Housing material                         |                | Stainless steel 1.4305 / AISI 303                            |
| Sensing face                             |                | Stainless steel 1.4305 / AISI 303                            |
| Degree of protection                     |                | IP69K                                                        |

## Connection



## Accessories

|  |              |              |
|--|--------------|--------------|
|  | <b>AB-12</b> | Mounting aid |
|--|--------------|--------------|