

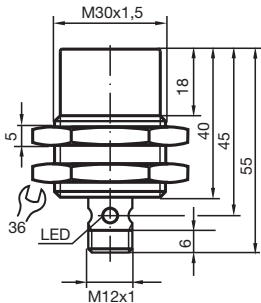
# Inductive sensor

## NBN15-30GM40-Z3-V1

- 15 mm non-flush
- 2-wire DC



### Dimensions



### Technical Data

| General specifications            |                |                       |
|-----------------------------------|----------------|-----------------------|
| Switching function                |                | Normally open (NO)    |
| Output type                       |                | Two-wire              |
| Rated operating distance          | s <sub>n</sub> | 15 mm                 |
| Installation                      |                | non-flush             |
| Output polarity                   |                | DC                    |
| Assured operating distance        | s <sub>a</sub> | 0 ... 12.2 mm         |
| Actual operating distance         | s <sub>r</sub> | 13.5 ... 16.5 mm typ. |
| Reduction factor r <sub>Al</sub>  |                | 0.4                   |
| Reduction factor r <sub>Cu</sub>  |                | 0.35                  |
| Reduction factor r <sub>304</sub> |                | 0.7                   |
| Nominal ratings                   |                |                       |
| Operating voltage                 | U <sub>B</sub> | 5 ... 60 V            |

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

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**PEPPERL+FUCHS**

Technical Data

|                             |                |                           |
|-----------------------------|----------------|---------------------------|
| Switching frequency         | f              | 0 ... 150 Hz              |
| Hysteresis                  | H              | 1 ... 10 typ. 5 %         |
| Reverse polarity protection |                | reverse polarity tolerant |
| Short-circuit protection    |                | pulsing                   |
| Voltage drop                | U <sub>d</sub> | ≤ 5 V                     |
| Operating current           | I <sub>L</sub> | 2 ... 100 mA              |
| Lowest operating current    | I <sub>m</sub> | 2 mA                      |
| Off-state current           | I <sub>r</sub> | 0 ... 0.5 mA typ.         |
| Switching state indicator   |                | Multihole-LED, yellow     |

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 |  | Certified by China Compulsory Certification (CCC) |

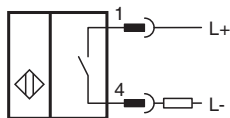
Ambient conditions

|                     |  |                                |
|---------------------|--|--------------------------------|
| Ambient temperature |  | -25 ... 70 °C (-13 ... 158 °F) |
|---------------------|--|--------------------------------|

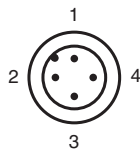
Mechanical specifications

|                      |  |                           |
|----------------------|--|---------------------------|
| Connection type      |  | Connector M12 x 1 , 4-pin |
| Housing material     |  | brass, nickel-plated      |
| Sensing face         |  | PBT                       |
| Degree of protection |  | IP67                      |

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Accessories

|                                                                                   |                    |                                       |
|-----------------------------------------------------------------------------------|--------------------|---------------------------------------|
|  | <b>BF 30</b>       | Mounting flange, 30 mm                |
|  | <b>V1-G-2M-PUR</b> | Female cordset, M12, 4-pin, PUR cable |

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