

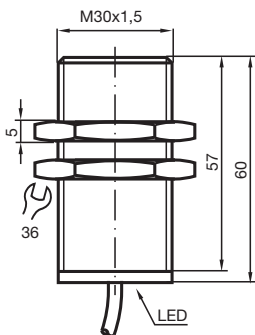
Inductive sensor  
NBB15-30GM60-A2



- Increased operating distance



Dimensions



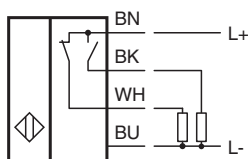
Technical Data

|                                   |                |                |
|-----------------------------------|----------------|----------------|
| General specifications            |                |                |
| Switching function                |                | complementary  |
| Output type                       |                | PNP            |
| Rated operating distance          | s <sub>n</sub> | 15 mm          |
| Installation                      |                | flush          |
| Output polarity                   |                | DC             |
| Assured operating distance        | s <sub>a</sub> | 0 ... 12.15 mm |
| Reduction factor r <sub>Al</sub>  |                | 0.3            |
| Reduction factor r <sub>Cu</sub>  |                | 0.3            |
| Reduction factor r <sub>304</sub> |                | 0.75           |
| Output type                       |                | 4-wire         |
| Nominal ratings                   |                |                |
| Operating voltage                 | U <sub>B</sub> | 10 ... 30 V    |

## Technical Data

|                                                 |                |                                                                                             |
|-------------------------------------------------|----------------|---------------------------------------------------------------------------------------------|
| Switching frequency                             | f              | 0 ... 200 Hz                                                                                |
| Reverse polarity protection                     |                | reverse polarity protected                                                                  |
| Short-circuit protection                        |                | pulsing                                                                                     |
| Voltage drop                                    | U <sub>d</sub> | ≤ 3 V                                                                                       |
| Operating current                               | I <sub>L</sub> | 0 ... 200 mA                                                                                |
| Off-state current                               | I <sub>r</sub> | 0 ... 0.5 mA typ. 0.1 µA at 25 °C                                                           |
| No-load supply current                          | I <sub>0</sub> | ≤ 25 mA                                                                                     |
| Switching state indicator                       |                | all direction LED, yellow                                                                   |
| <b>Functional safety related parameters</b>     |                |                                                                                             |
| MTTF <sub>d</sub>                               |                | 894 a                                                                                       |
| Mission Time (T <sub>M</sub> )                  |                | 20 a                                                                                        |
| Diagnostic Coverage (DC)                        |                | 0 %                                                                                         |
| <b>Compliance with standards and directives</b> |                |                                                                                             |
| 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 |
| <b>Approvals and certificates</b>               |                |                                                                                             |
| UL approval                                     |                | cULus Listed, General Purpose                                                               |
| CSA approval                                    |                | cCSAus Listed, General Purpose                                                              |
| CCC approval                                    |                | CCC approval / marking not required for products rated ≤36 V                                |
| <b>Ambient conditions</b>                       |                |                                                                                             |
| Ambient temperature                             |                | -25 ... 70 °C (-13 ... 158 °F)                                                              |
| <b>Mechanical specifications</b>                |                |                                                                                             |
| Connection type                                 |                | cabl PVC , 2 m                                                                              |
| Core cross-section                              |                | 0.34 mm <sup>2</sup>                                                                        |
| Housing material                                |                | brass, nickel-plated                                                                        |
| Sensing face                                    |                | PBT                                                                                         |
| Degree of protection                            |                | IP67                                                                                        |
| Cable                                           |                |                                                                                             |
| Cable diameter                                  |                | 4.8 mm ± 0.1 mm                                                                             |
| Bending radius                                  |                | > 10 x cable diameter                                                                       |

## Connection



## Accessories

|                                                                                     |               |                                       |
|-------------------------------------------------------------------------------------|---------------|---------------------------------------|
|  | <b>BF 30</b>  | Mounting flange, 30 mm                |
|  | <b>EXG-30</b> | Quick mounting bracket with dead stop |