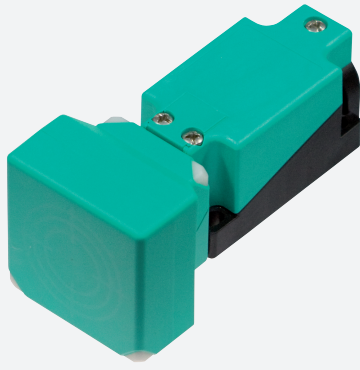


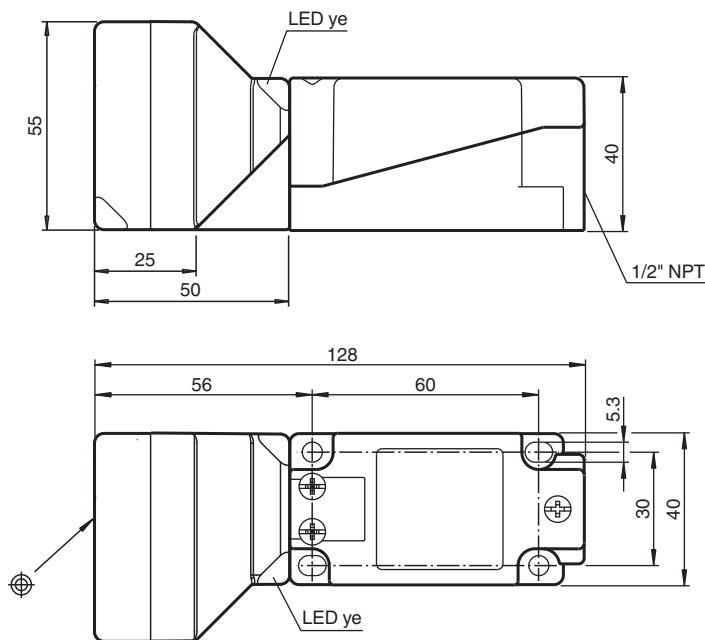


## Inductive sensor NBN40-U4LK-N0

- Sensor head bidirectional and rotatable
- 40 mm non-flush



### Dimensions



### Technical Data

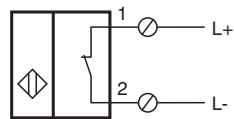
#### General specifications

|                            |       |                      |
|----------------------------|-------|----------------------|
| Switching function         |       | Normally closed (NC) |
| Output type                |       | NAMUR                |
| Rated operating distance   | $s_n$ | 40 mm                |
| Installation               |       | non-flush            |
| Assured operating distance | $s_a$ | 0 ... 32.4 mm        |
| Reduction factor $r_{AI}$  |       | 0.41                 |
| Reduction factor $r_{Cu}$  |       | 0.38                 |
| Reduction factor $r_{304}$ |       | 0.75                 |

## Technical Data

|                                                 |       |                                                                                                                                            |
|-------------------------------------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Reduction factor $r_{\text{Brass}}$             |       | 0.46                                                                                                                                       |
| Output type                                     |       | 2-wire                                                                                                                                     |
| <b>Nominal ratings</b>                          |       |                                                                                                                                            |
| Installation conditions                         |       |                                                                                                                                            |
| A                                               |       | 25 mm                                                                                                                                      |
| Nominal voltage                                 | $U_o$ | 8.2 V                                                                                                                                      |
| Switching frequency                             | f     | 0 ... 100 Hz                                                                                                                               |
| Hysteresis                                      | H     | 2 ... 20 typ. 10 %                                                                                                                         |
| Reverse polarity protection                     |       | reverse polarity protected                                                                                                                 |
| Short-circuit protection                        |       | yes                                                                                                                                        |
| <b>Current consumption</b>                      |       |                                                                                                                                            |
| Measuring plate not detected                    |       | min. 2.5 mA                                                                                                                                |
| Measuring plate detected                        |       | ≤ 1 mA                                                                                                                                     |
| Switching state indicator                       |       | LED, yellow                                                                                                                                |
| <b>Compliance with standards and directives</b> |       |                                                                                                                                            |
| Standard conformity                             |       |                                                                                                                                            |
| NAMUR                                           |       | EN 60947-5-6:2000<br>IEC 60947-5-6:1999                                                                                                    |
| Electromagnetic compatibility                   |       | NE 21:2012                                                                                                                                 |
| 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                                     |       |                                                                                                                                            |
| Ordinary Location                               |       | E87056                                                                                                                                     |
| Hazardous Location                              |       | E501628                                                                                                                                    |
| Control drawing                                 |       | 116-0451                                                                                                                                   |
| CCC approval                                    |       | CCC approval / marking not required for products rated ≤36 V                                                                               |
| <b>Ambient conditions</b>                       |       |                                                                                                                                            |
| Ambient temperature                             |       | -25 ... 100 °C (-13 ... 212 °F)                                                                                                            |
| Storage temperature                             |       | -40 ... 100 °C (-40 ... 212 °F)                                                                                                            |
| <b>Mechanical specifications</b>                |       |                                                                                                                                            |
| Connection type                                 |       | screw terminals                                                                                                                            |
| Information for connection                      |       | A maximum of two conductors with the same core cross section may be mounted on one terminal connection!<br>tightening torque 1.2 Nm + 10 % |
| Core cross-section                              |       | up to 2.5 mm <sup>2</sup>                                                                                                                  |
| Minimum core cross-section                      |       | without wire end ferrule 0.5 mm <sup>2</sup> , with connector sleeves 0.34 mm <sup>2</sup>                                                 |
| Maximum core cross-section                      |       | without wire end ferrule 2.5 mm <sup>2</sup> , with connector sleeves 1.5 mm <sup>2</sup>                                                  |
| Housing material                                |       | PA                                                                                                                                         |
| Sensing face                                    |       | PA                                                                                                                                         |
| Housing base                                    |       | metal                                                                                                                                      |
| Degree of protection                            |       | IP67 / IP69K                                                                                                                               |
| <b>General information</b>                      |       |                                                                                                                                            |
| Use in the hazardous area                       |       | see instruction manuals                                                                                                                    |

Connection



Accessories

|                                                                                   |                       |                                    |
|-----------------------------------------------------------------------------------|-----------------------|------------------------------------|
|  | <b>MHW 01</b>         | Modular mounting bracket           |
|  | <b>MH 04-2057B</b>    | Mounting aid for VariKont and +U1+ |
|  | <b>KCD2-SR-Ex1.LB</b> | 24 V DC                            |

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