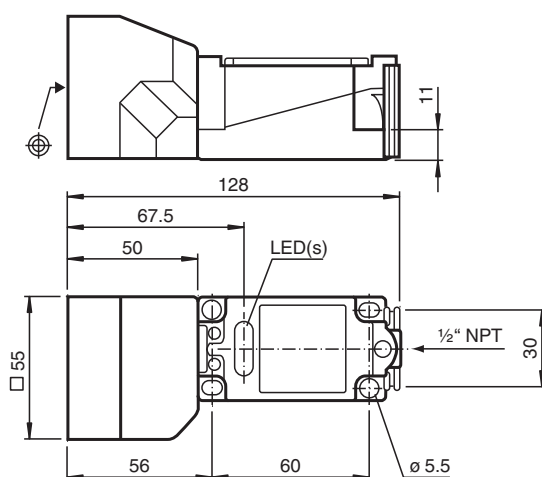


# Inductive sensor NJ40+U4+N

■ 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 $r_{AI}$  |       | 0.4                  |
| Reduction factor $r_{Cu}$  |       | 0.3                  |
| Reduction factor $r_{304}$ |       | 0.85                 |
| Output type                |       | 2-wire               |

### Nominal ratings

|                              |       |                                      |
|------------------------------|-------|--------------------------------------|
| Nominal voltage              | $U_o$ | 8.2 V ( $R_i$ approx. 1 k $\Omega$ ) |
| Switching frequency          | $f$   | 0 ... 80 Hz                          |
| Current consumption          |       |                                      |
| Measuring plate not detected |       | $\geq 3$ mA                          |
| Measuring plate detected     |       | $\leq 1$ mA                          |

### Functional safety related parameters

|                          |  |        |
|--------------------------|--|--------|
| MTTF <sub>d</sub>        |  | 2588 a |
| Mission Time ( $T_M$ )   |  | 20 a   |
| Diagnostic Coverage (DC) |  | 0 %    |

### Compliance with standards and directives

|                     |  |  |
|---------------------|--|--|
| Standard conformity |  |  |
|---------------------|--|--|

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

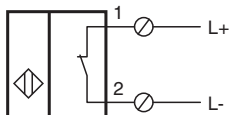
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

**PEPPERL+FUCHS**

## Technical Data

|                                   |                                                                                                                                            |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| NAMUR                             | EN 60947-5-6:2000<br>IEC 60947-5-6:1999                                                                                                    |
| 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> |                                                                                                                                            |
| IECEx approval                    |                                                                                                                                            |
| Equipment protection level Gb     | IECEx PTB 11.0021X                                                                                                                         |
| Equipment protection level Da     | IECEx PTB 11.0021X                                                                                                                         |
| ATEX approval                     |                                                                                                                                            |
| Equipment protection level Gb     | PTB 00 ATEX 2032 X                                                                                                                         |
| Equipment protection level Da     | PTB 00 ATEX 2032 X                                                                                                                         |
| FM approval                       |                                                                                                                                            |
| Control drawing                   | 116-0165                                                                                                                                   |
| UL approval                       | cULus Listed, General Purpose                                                                                                              |
| CSA approval                      | cCSAus Listed, General Purpose                                                                                                             |
| CCC approval                      |                                                                                                                                            |
| Hazardous Location                | 2020322315002302                                                                                                                           |
| NEPSI approval                    |                                                                                                                                            |
| NEPSI certificate                 | GYJ16.1394X                                                                                                                                |
| <b>Ambient conditions</b>         |                                                                                                                                            |
| Ambient temperature               | -25 ... 100 °C (-13 ... 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                  | PBT/metal                                                                                                                                  |
| Sensing face                      | PBT                                                                                                                                        |
| Degree of protection              | IP68                                                                                                                                       |
| <b>General information</b>        |                                                                                                                                            |
| Use in the hazardous area         | see instruction manuals                                                                                                                    |

## Connection



## Accessories

|                                                                                     |                    |                                          |
|-------------------------------------------------------------------------------------|--------------------|------------------------------------------|
|  | <b>MHW 01</b>      | Modular mounting bracket                 |
|  | <b>MH 04-2681F</b> | Mounting aid for VariKont, +U1+ and +U9* |

Accessories

|                                                                                   |             |                                    |
|-----------------------------------------------------------------------------------|-------------|------------------------------------|
|  | MH 04-2057B | Mounting aid for VariKont and +U1+ |
|-----------------------------------------------------------------------------------|-------------|------------------------------------|

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