

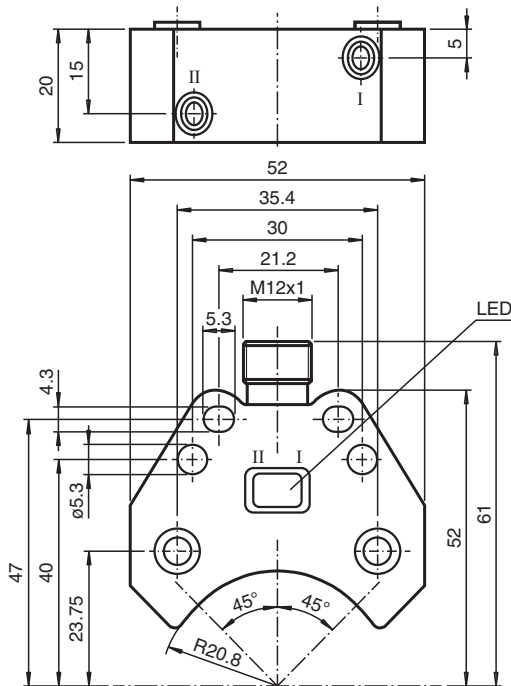


# Inductive sensor NCN3-F25-N4-V1

- Direct mounting on standard actuators
- ATEX & IECEx certifications



## Dimensions



## Technical Data

### General specifications

|                             |       |                          |
|-----------------------------|-------|--------------------------|
| Switching function          |       | 2 x normally closed (NC) |
| Output type                 |       | NAMUR                    |
| Rated operating distance    | $s_n$ | 3 mm                     |
| Installation                |       | flush mountable          |
| Assured operating distance  | $s_a$ | 0 ... 2.43 mm            |
| Actual operating distance   | $s_r$ | 2.7 ... 3.3 mm typ.      |
| Reduction factor $r_{Al}$   |       | 0.52                     |
| Reduction factor $r_{Cu}$   |       | 0.43                     |
| Reduction factor $r_{304}$  |       | 0.86                     |
| Reduction factor $r_{Si37}$ |       | 1                        |

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

|                                                 |       |                                                      |
|-------------------------------------------------|-------|------------------------------------------------------|
| Reduction factor $r_{\text{Brass}}$             |       | 0.54                                                 |
| Output type                                     |       | 2-wire                                               |
| <b>Nominal ratings</b>                          |       |                                                      |
| Nominal voltage                                 | $U_o$ | 8.2 V ( $R_i$ approx. 1 k $\Omega$ )                 |
| Switching frequency                             | $f$   | 0 ... 1500 Hz                                        |
| Hysteresis                                      | $H$   | typ. 5 %                                             |
| Reverse polarity protection                     |       | reverse polarity protected                           |
| Short-circuit protection                        |       | yes                                                  |
| Suitable for 2:1 technology                     |       | yes , Reverse polarity protection diode not required |
| Current consumption                             |       |                                                      |
| Measuring plate not detected                    |       | $\geq 3$ mA                                          |
| Measuring plate detected                        |       | $\leq 1$ mA                                          |
| Time delay before availability                  | $t_v$ | $\leq 1$ ms                                          |
| Switching state indicator                       |       | LED, yellow                                          |
| <b>Functional safety related parameters</b>     |       |                                                      |
| MTTF <sub>d</sub>                               |       | 1010 a                                               |
| Mission Time ( $T_M$ )                          |       | 20 a                                                 |
| Diagnostic Coverage (DC)                        |       | 0 %                                                  |
| <b>Compliance with standards and directives</b> |       |                                                      |
| Standard conformity                             |       |                                                      |
| NAMUR                                           |       | EN 60947-5-6:2000<br>IEC 60947-5-6:1999              |
| Electromagnetic compatibility                   |       | NE 21:2007                                           |
| Standards                                       |       | EN IEC 60947-5-2                                     |
| <b>Approvals and certificates</b>               |       |                                                      |
| IECEX approval                                  |       |                                                      |
| Equipment protection level Ga                   |       | IECEX TUN 17.0021X                                   |
| Equipment protection level Gb                   |       | IECEX TUN 17.0021X                                   |
| Equipment protection level Da                   |       | IECEX TUN 17.0021X                                   |
| Equipment protection level Mb                   |       | IECEX TUN 17.0021X                                   |
| ATEX approval                                   |       |                                                      |
| Equipment protection level Ga                   |       | TÜV 99 ATEX 1479 X                                   |
| Equipment protection level Gb                   |       | TÜV 99 ATEX 1479 X                                   |
| Equipment protection level Da                   |       | TÜV 99 ATEX 1479 X                                   |
| UL approval                                     |       | cULus Listed, General Purpose                        |
| Ordinary Location                               |       | E87056                                               |
| Hazardous Location                              |       | E501628                                              |
| Control drawing                                 |       | 116-0456                                             |
| CCC approval                                    |       |                                                      |
| Hazardous Location                              |       | 2020322315002262                                     |
| NEPSI approval                                  |       |                                                      |
| NEPSI certificate                               |       | GYJ19.1410X                                          |
| <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                                 |       | Connector plug                                       |
| Housing material                                |       | PBT                                                  |
| Sensing face                                    |       | PBT                                                  |
| Degree of protection                            |       | IP67                                                 |
| Connector                                       |       |                                                      |
| Threading                                       |       | M12 x 1                                              |
| Number of pins                                  |       | 4                                                    |

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Technical Data

|                                     |                             |
|-------------------------------------|-----------------------------|
| Mass                                | 45 g                        |
| Tightening torque, fastening screws | M5 x 25 : 2.7 Nm            |
| Dimensions                          |                             |
| Height                              | 20 mm                       |
| Width                               | 52 mm                       |
| Length                              | 52 mm                       |
| Note                                | Mounted on mechanical drive |
| General information                 |                             |
| Use in the hazardous area           | see instruction manuals     |

Connection

