

# Inductive sensor

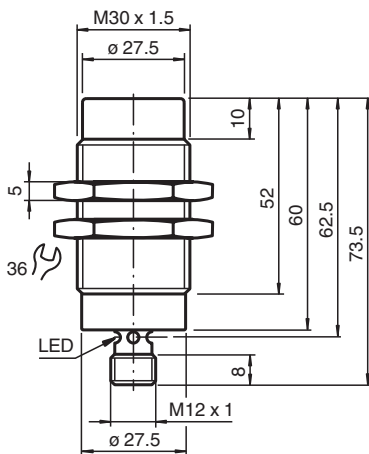
## NEN40-30GM60-E0-V1



- 40 mm non-flush
- Increased operating distance



### Dimensions



### Technical Data

| General specifications     |       |                                                                                                   |
|----------------------------|-------|---------------------------------------------------------------------------------------------------|
| Switching function         |       | Normally open (NO)                                                                                |
| Output type                |       | NPN                                                                                               |
| Rated operating distance   | $s_n$ | 40 mm                                                                                             |
| Installation               |       | non-flush                                                                                         |
| Output polarity            |       | DC                                                                                                |
| Assured operating distance | $s_a$ | 0 ... 32.4 mm                                                                                     |
| Reduction factor $r_{Al}$  |       | 0.42                                                                                              |
| Reduction factor $r_{Cu}$  |       | 0.37                                                                                              |
| Reduction factor $r_{304}$ |       | 0.78                                                                                              |
| Output type                |       | 3-wire                                                                                            |
| Nominal ratings            |       |                                                                                                   |
| Installation conditions    |       |                                                                                                   |
| A                          |       | in aluminum: 25 mm<br>in steel 1.0037 (St37): 35 mm<br>in brass 25 mm<br>in stainless steel 20 mm |
| B                          |       | 55 mm                                                                                             |

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

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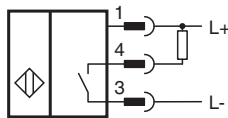
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**PEPPERL+FUCHS**

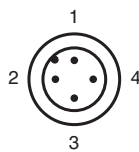
### Technical Data

|                                                 |       |                                                                            |
|-------------------------------------------------|-------|----------------------------------------------------------------------------|
| C                                               |       | 120 mm                                                                     |
| F                                               |       | 150 mm                                                                     |
| Operating voltage                               | $U_B$ | 10 ... 30 V                                                                |
| Switching frequency                             | $f$   | 0 ... 100 Hz                                                               |
| Hysteresis                                      | H     | $\leq 10 \%$                                                               |
| Reverse polarity protection                     |       | reverse polarity protected                                                 |
| Short-circuit protection                        |       | pulsing                                                                    |
| Voltage drop                                    | $U_d$ | $\leq 2 \text{ V}$                                                         |
| Operating current                               | $I_L$ | 0 ... 200 mA                                                               |
| Off-state current                               | $I_r$ | 0 ... 0.1 mA typ. 0.1 $\mu\text{A}$ at 25 °C                               |
| No-load supply current                          | $I_0$ | $\leq 10 \text{ mA}$                                                       |
| Switching state indicator                       |       | LED, yellow                                                                |
| <b>Functional safety related parameters</b>     |       |                                                                            |
| MTTF <sub>d</sub>                               |       | 211 a                                                                      |
| Mission Time (T <sub>M</sub> )                  |       | 20 a                                                                       |
| Diagnostic Coverage (DC)                        |       | 0 %                                                                        |
| <b>Compliance with standards and directives</b> |       |                                                                            |
| Standard conformity                             |       |                                                                            |
| Standards                                       |       | EN IEC 60947-5-2                                                           |
| <b>Approvals and certificates</b>               |       |                                                                            |
| CCC approval                                    |       | CCC approval / marking not required for products rated $\leq 36 \text{ V}$ |
| <b>Ambient conditions</b>                       |       |                                                                            |
| Ambient temperature                             |       | -25 ... 70 °C (-13 ... 158 °F)                                             |
| <b>Mechanical specifications</b>                |       |                                                                            |
| Connection type                                 |       | Connector plug M12 x 1 , 4-pin                                             |
| Housing material                                |       | chromium plated brass                                                      |
| Sensing face                                    |       | PBT                                                                        |
| Degree of protection                            |       | IP67                                                                       |
| <b>Dimensions</b>                               |       |                                                                            |
| Length                                          |       | 73.5 mm                                                                    |
| Diameter                                        |       | 30 mm                                                                      |

### Connection



### Connection Assignment



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## Connection Assignment

Wire colors in accordance with EN 60947-5-2

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

## Installation

