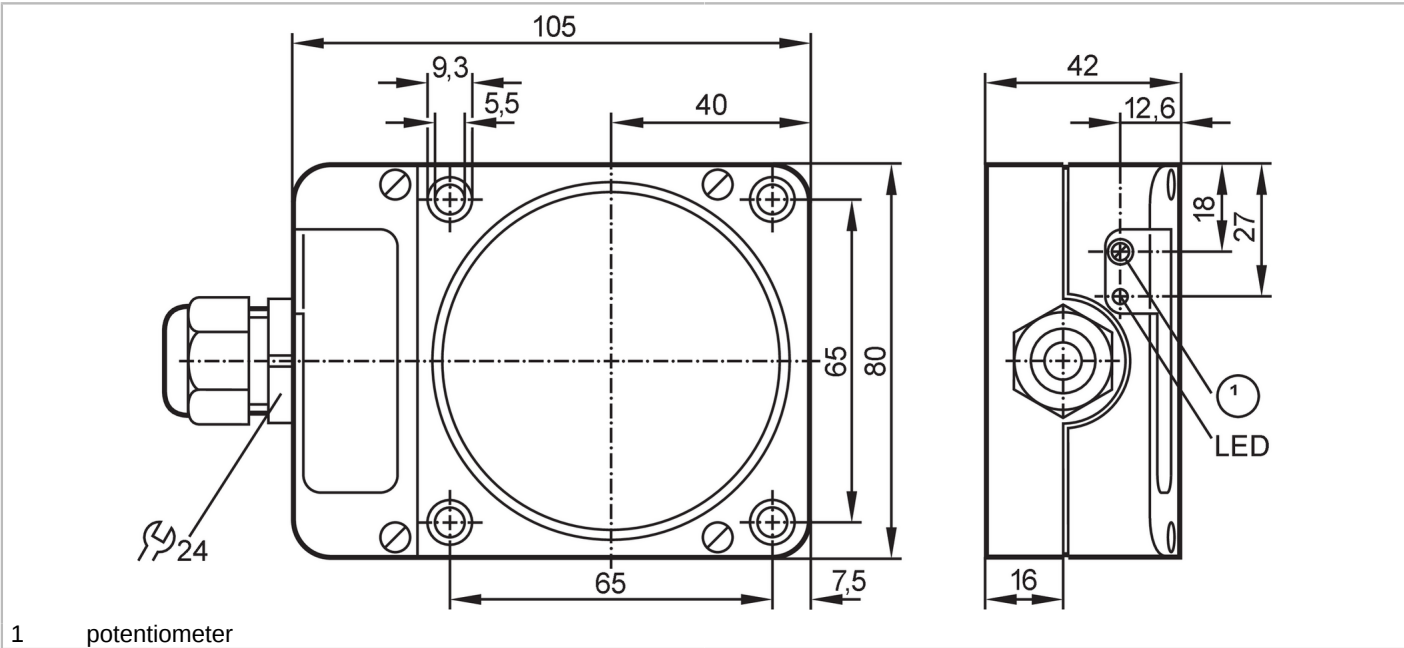


# ID002A



## Inductive sensor

IDE2060-FBOA/3D



1 potentiometer



### Product characteristics

|                 |      |                                      |
|-----------------|------|--------------------------------------|
| Output function |      | normally open / closed; (selectable) |
| Sensing range   | [mm] | 60                                   |
| Housing         |      | rectangular                          |
| Dimensions      | [mm] | 105 x 80 x 42                        |

### Application

|             |                                     |
|-------------|-------------------------------------|
| Application | For applications in hazardous areas |
|-------------|-------------------------------------|

### Electrical data

|                             |     |                |
|-----------------------------|-----|----------------|
| Operating voltage           | [V] | 20...250 AC/DC |
| Protection class            |     | II             |
| Reverse polarity protection |     | no             |

### Outputs

|                                                 |      |                                                 |
|-------------------------------------------------|------|-------------------------------------------------|
| Output function                                 |      | normally open / closed; (selectable)            |
| Max. voltage drop switching output DC           | [V]  | 6                                               |
| Max. voltage drop switching output AC           | [V]  | 6.5                                             |
| Minimum load current                            | [mA] | 5                                               |
| Max. leakage current                            | [mA] | 2.5 (250 V AC) / 1.3 (110 V AC) / 0.8 (24 V DC) |
| Permanent current rating of switching output AC | [mA] | 200                                             |
| Permanent current rating of switching output DC | [mA] | 100                                             |
| Short-time current rating of switching output   | [mA] | 2200; (20 ms / 0,5 Hz)                          |
| Switching frequency AC                          | [Hz] | 4                                               |
| Switching frequency DC                          | [Hz] | 4                                               |



## Inductive sensor

IDE2060-FBOA/3D

|                               |           |                                                                                                                      |                 |
|-------------------------------|-----------|----------------------------------------------------------------------------------------------------------------------|-----------------|
| Notes on switching frequency  | [Hz]      | only for resistive loads; 2 Hz for utilization category AC-140                                                       |                 |
| Short-circuit proof           |           | no                                                                                                                   |                 |
| Overload protection           |           | no                                                                                                                   |                 |
| Monitoring range              |           |                                                                                                                      |                 |
| Sensing range                 | [mm]      | 60                                                                                                                   |                 |
| Sensing range adjustable      |           | yes                                                                                                                  |                 |
| Factory setting sensing range | [mm]      | 60                                                                                                                   |                 |
| Real sensing range Sr         | [mm]      | 60 ± 10 %                                                                                                            |                 |
| Operating distance            | [mm]      | 0...48.6                                                                                                             |                 |
| Accuracy / deviations         |           |                                                                                                                      |                 |
| Correction factor             |           | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminum: 0.3 / copper: 0.2                                           |                 |
| Hysteresis                    | [% of Sr] | 1...15                                                                                                               |                 |
| Switch-point drift            | [% of Sr] | -10...10                                                                                                             |                 |
| Operating conditions          |           |                                                                                                                      |                 |
| Ambient temperature           | [°C]      | -20...60                                                                                                             |                 |
| Protection                    |           | IP 65                                                                                                                |                 |
| Tests / approvals             |           |                                                                                                                      |                 |
| ATEX marking                  |           |  II 3D Ex tc IIIC T90°C Dc X IP65 |                 |
| EMC                           |           | EN 60947-5-2                                                                                                         |                 |
| MTTF                          | [years]   | 454                                                                                                                  |                 |
| Mechanical data               |           |                                                                                                                      |                 |
| Weight                        | [g]       | 510                                                                                                                  |                 |
| Housing                       |           | rectangular                                                                                                          |                 |
| Mounting                      |           | non-flush mountable                                                                                                  |                 |
| Dimensions                    | [mm]      | 105 x 80 x 42                                                                                                        |                 |
| Material                      |           | PPE modified; PA                                                                                                     |                 |
| Tightening torque             | [Nm]      | housing screws: 0,9 Nm; screws: 4 Nm                                                                                 |                 |
| Displays / operating elements |           |                                                                                                                      |                 |
| Display                       |           | Switching status                                                                                                     | 1 x LED, yellow |
| Electrical connection         |           |                                                                                                                      |                 |
| Required protection           |           | miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting; Place the fuse outside the hazardous area.                 |                 |
| Accessories                   |           |                                                                                                                      |                 |
| Items supplied                |           | screwdriver: 1                                                                                                       |                 |
| Remarks                       |           |                                                                                                                      |                 |
| Remarks                       |           | Recommendation: check the unit for reliable function after a short circuit.                                          |                 |
| Pack quantity                 |           | 1 pcs.                                                                                                               |                 |

# ID002A



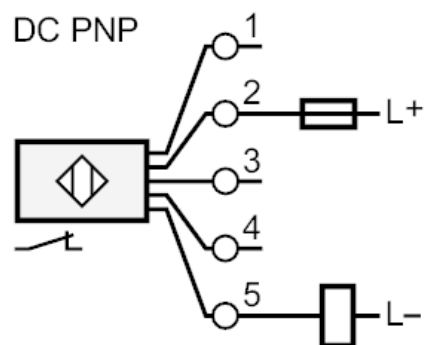
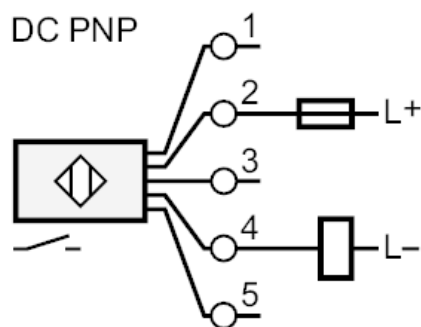
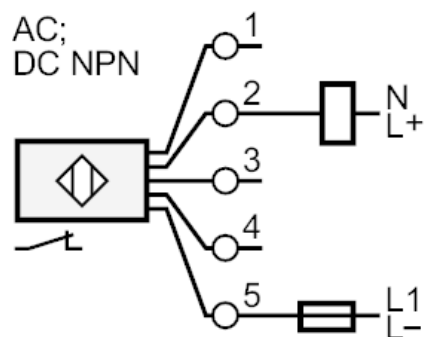
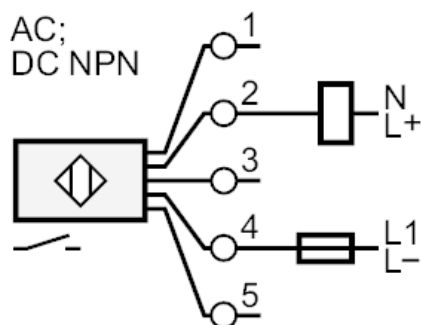
## Inductive sensor

IDE2060-FBOA/3D

### Electrical connection

terminals: 0.34...2.5 mm<sup>2</sup>; Cable sheath: Ø 5...9 mm; Cable gland: M20 X 1.5

### Connection



Note miniature fuse to IEC60127-2 sheet 1  $\leq 2$  A fast acting  
Place the fuse outside the hazardous area.