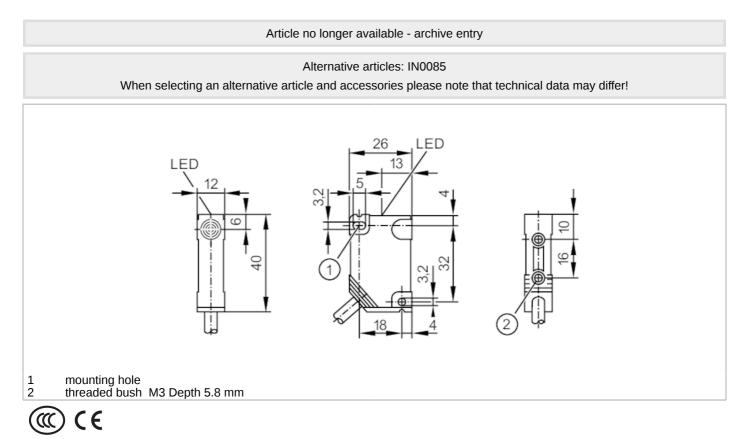
## IN0086

### Inductive sensor

IN-2004-BBOA/6M





| Product characteristics                            |      |   |  |
|--|------|---|--|
| Output function                                    |      | normally closed                                 |  |
| Sensing range                                      | [mm] | 4   |  |
| Housing  |      | rectangular                                     |  |
| Dimensions   | [mm] | 40 x 12 x 26                                    |  |
| Electrical data                                    |      |   |  |
| Operating voltage                                  | [V]  | 20250 AC/DC                                     |  |
| Protection class                                   |      | II  |  |
| Reverse polarity protection                        |      | yes   |  |
| Outputs  |      |   |  |
| Output function                                    |      | normally closed                                 |  |
| Max. voltage drop switching output DC              | [V]  | 6   |  |
| Max. voltage drop switching output AC              | [V]  | 6.7   |  |
| Minimum load current                               | [mA] | 5   |  |
| Max. leakage current                               | [mA] | 2.0 (250 V AC) / 1.3 (110 V AC) / 0.8 (24 V DC) |  |
| Permanent current rating of<br>switching output AC | [mA] | 250; (350 (50 °C))                              |  |
| Permanent current rating of switching output DC    | [mA] | 100   |  |
| Short-time current rating of switching output      | [mA] | 2200; (50 ms / 1 Hz)                            |  |
| Switching frequency AC                             | [Hz] | 25  |  |
| Switching frequency DC                             | [Hz] | 50  |  |

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| Short-circuit proof           |           | no  |                   |  |  |
|-------------------------------|-----------|---|-------------------|--|--|
| Overload protection           |           | I   | סר                |  |  |
| Monitoring range              |           |   |                   |  |  |
| Sensing range                 | [mm]      | 4   |                   |  |  |
| Real sensing range Sr         | [mm]      | 4 ± 10 %  |                   |  |  |
| Operating distance            | [mm]      | 03.25   |                   |  |  |
| Accuracy / deviations         |           |   |                   |  |  |
| Correction factor             |           | steel: 1 / stainless steel: 0.9 / brass: 0.6 / aluminum: 0.5 / copper: 0.4  |                   |  |  |
| Hysteresis                    | [% of Sr] | 120   |                   |  |  |
| Switch-point drift            | [% of Sr] | -1010   |                   |  |  |
| Operating conditions          |           |   |                   |  |  |
| Ambient temperature           | [°C]      | -2580   |                   |  |  |
| Protection                    |           | IP 67   |                   |  |  |
| Tests / approvals             |           |   |                   |  |  |
| EMC                           |           | EN 61000-4-2 ESD  | 4 kV CD / 8 kV AD |  |  |
|                               |           | EN 61000-4-3 HF radiated  | 3 V/m             |  |  |
|                               |           | EN 61000-4-4 Burst  | 2 kV              |  |  |
|                               |           | EN 61000-4-6 HF conducted   | 3 V               |  |  |
|                               |           | EN 55011 emission   | class B           |  |  |
| Mechanical data               |           |   |                   |  |  |
| Weight                        | [g]       | 0.273   |                   |  |  |
| Housing                       |           | rectangular   |                   |  |  |
| Mounting                      |           | non-flush mountable   |                   |  |  |
| Dimensions                    | [mm]      | 40 x 12 x 26  |                   |  |  |
| Material                      |           | PBT   |                   |  |  |
| Mounting hole                 |           |   |                   |  |  |
| Tightening torque             | [Nm]      | < 0.5   |                   |  |  |
| Threaded bush                 |           |   |                   |  |  |
| Tightening torque             | [Nm]      | < 1.2; (when brass insert in contact with counterpart)                      |                   |  |  |
| Displays / operating elements |           |   |                   |  |  |
| Display                       |           | Switching status  | 1 x LED, yellow   |  |  |
| Electrical connection         |           |   |                   |  |  |
| Required protection           |           | miniature fuse to IEC60127-2 sheet 1; $\leq$ 2 A; fast acting               |                   |  |  |
| Remarks                       |           |   |                   |  |  |
| Remarks                       |           | Recommendation: check the unit for reliable function after a short circuit. |                   |  |  |
| Pack quantity                 |           | 1 pcs.  |                   |  |  |
|                               |           |   |                   |  |  |

## IN0086

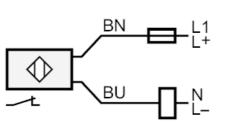
#### Inductive sensor

IN-2004-BBOA/6M

**Electrical connection** 

#### Cable: 6 m, PVC; 2 x 0.5 mm<sup>2</sup>

#### Connection



|      | Note miniature fuse to IEC60127-2 sheet $1 \le 2$ A fast acting |  |  |
|------|---|--|--|
|      | Core colors :   |  |  |
| BN = | brown   |  |  |
| BU = | blue  |  |  |

