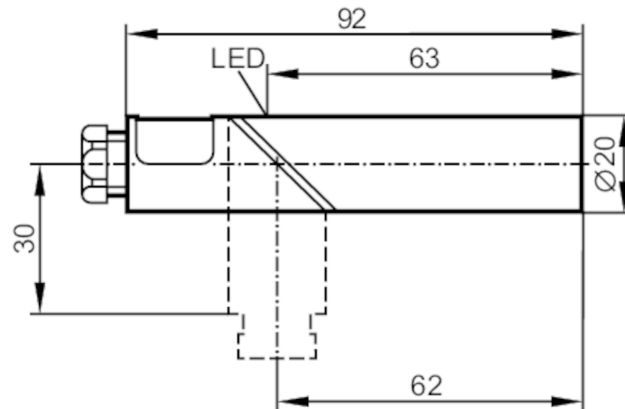




## Inductive sensor

IAE2010-FBOA



## Product characteristics

|                 |      |   |
|-----------------|------|---|
| Output function |      | normally open / normally closed; (selectable) |
| Sensing range   | [mm] | 10  |
| Housing         |      | cylindrical                                   |
| Dimensions      | [mm] | Ø 20 / L = 92                                 |

## Electrical data

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

## Outputs

|   |      |   |
|---|------|---|
| Output function                                 |      | normally open / normally 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] | 250; (350 (...50 °C))                           |
| 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] | 25  |
| Switching frequency DC                          | [Hz] | 70  |
| Short-circuit proof                             |      | no  |
| Overload protection                             |      | no  |

## Detection zone

|                       |      |           |
|-----------------------|------|-----------|
| Sensing range         | [mm] | 10        |
| Real sensing range Sr | [mm] | 10 ± 10 % |
| Operating distance    | [mm] | 0...8.1   |

# IA0032



## Inductive sensor

IAE2010-FBOA

| Accuracy / deviations         |   |                   |
|-------------------------------|---|-------------------|
| Correction factor             | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2   |                   |
| Hysteresis [% of Sr]          | 1...15  |                   |
| Switch point drift [% of Sr]  | -10...10  |                   |
| Operating conditions          |   |                   |
| Ambient temperature [°C]      | -25...80  |                   |
| Protection                    | IP 65   |                   |
| Tests / approvals             |   |                   |
| EMC                           | EN 60947-5-2  |                   |
|                               | EN 55011  | class B           |
| MTTF [years]                  | 606   |                   |
| UL approval                   | Ta  | 0...40 °C         |
|                               | Enclosure type  | Type 1            |
|                               | power supply  | Hazardous voltage |
|                               | File number UL  | E174191           |
| Mechanical data               |   |                   |
| Weight [g]                    | 83.5  |                   |
| Housing                       | cylindrical   |                   |
| Mounting                      | non-flush mountable   |                   |
| Dimensions [mm]               | Ø 20 / L = 92   |                   |
| Materials                     | PBT; LED window: PC   |                   |
| 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                      |                   |
| Accessories                   |   |                   |
| Items supplied                | Mounting clamps: 1  |                   |
| Remarks                       |   |                   |
| Remarks                       | Recommendation: Check the safe functioning of the unit after a short circuit. |                   |
| Pack quantity                 | 1 pcs.  |                   |

# IA0032



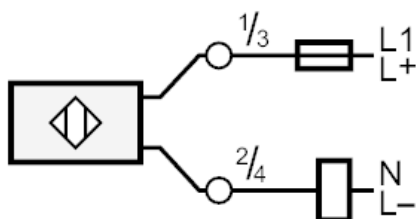
## Inductive sensor

IAE2010-FBOA

### Electrical connection

terminals: ...2.5 mm<sup>2</sup>; Cable sheath: Ø 4.5...10 mm; Cable gland: M16 X 1.5

### Connection



Note miniature fuse to IEC60127-2 sheet 1  $\leq$  2 A fast acting