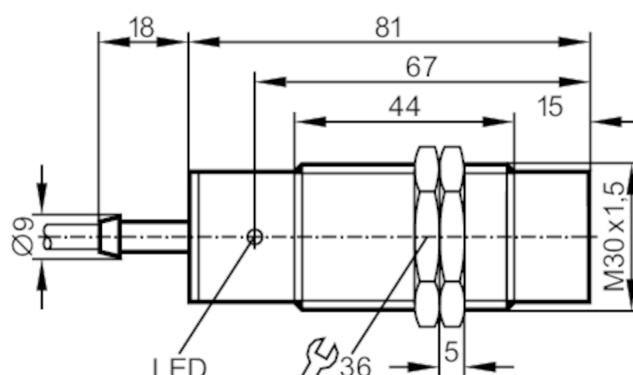




## Inductive sensor

IIA2015-BBOA/RT



## Product characteristics

|                 |      |                    |
|-----------------|------|--------------------|
| Output function |      | normally closed    |
| Sensing range   | [mm] | 15                 |
| Housing         |      | Threaded type      |
| Dimensions      | [mm] | M30 x 1.5 / L = 81 |

## Electrical data

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

## Outputs

|                                                 |      |                                                 |
|-------------------------------------------------|------|-------------------------------------------------|
| Output function                                 |      | normally closed                                 |
| 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] | 50                                              |
| Short-circuit proof                             |      | no                                              |
| Overload protection                             |      | no                                              |

## Monitoring range

|                       |      |           |
|-----------------------|------|-----------|
| Sensing range         | [mm] | 15        |
| Real sensing range Sr | [mm] | 15 ± 10 % |
| Operating distance    | [mm] | 0...12.1  |



## Inductive sensor

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| 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]                                                                        | -25...80          |
| Protection                    |           |                                                                             | IP 67             |
| Tests / approvals             |           |                                                                             |                   |
| EMC                           |           | EN 60947-5-2                                                                |                   |
|                               |           | EN 55011                                                                    | class B           |
| MTTF                          | [years]   | 607                                                                         |                   |
| UL approval                   |           | Ta                                                                          | 0...40 °C         |
|                               |           | Enclosure type                                                              | Type 1            |
|                               |           | voltage supply                                                              | Hazardous voltage |
|                               |           | File number UL                                                              | E174191           |
| Mechanical data               |           |                                                                             |                   |
| Weight                        | [g]       | 254                                                                         |                   |
| Housing                       |           | Threaded type                                                               |                   |
| Mounting                      |           | non-flush mountable                                                         |                   |
| Dimensions                    | [mm]      | M30 x 1.5 / L = 81                                                          |                   |
| Thread designation            |           | M30 x 1.5                                                                   |                   |
| Material                      |           | brass white bronze coated; PBT                                              |                   |
| Displays / operating elements |           |                                                                             |                   |
| Display                       |           | Switching status                                                            | 1 x LED, red      |
| Electrical connection         |           |                                                                             |                   |
| Required protection           |           | miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting                    |                   |
| Accessories                   |           |                                                                             |                   |
| Items supplied                |           | lock nuts: 2                                                                |                   |
| Remarks                       |           |                                                                             |                   |
| Remarks                       |           | Recommendation: check the unit for reliable function after a short circuit. |                   |
| Pack quantity                 |           | 1 pcs.                                                                      |                   |

# II0275



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### Electrical connection

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

### Connection



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

Core colors :

BN =

brown

BU =

blue