

## Inductive sensor

IA-2010ZABOA/SS



## Product characteristics

|                 |      |               |
|-----------------|------|---------------|
| Output function |      | normally open |
| Sensing range   | [mm] | 10            |
| Housing         |      | cylindrical   |
| Dimensions      | [mm] | Ø 20 / L = 77 |

## Electrical data

|                             |     |                |
|-----------------------------|-----|----------------|
| Operating voltage           | [V] | 20...250 AC/DC |
| Protection class            |     | II             |
| Reverse polarity protection |     | yes            |

## Outputs

|                                                 |      |                                                 |
|-------------------------------------------------|------|-------------------------------------------------|
| Output function                                 |      | normally open                                   |
| 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] | 100; (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                             |      | yes                                             |

## Detection zone

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

## Accuracy / deviations

|                   |  |                                                                             |
|-------------------|--|-----------------------------------------------------------------------------|
| Correction factor |  | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2 |
|-------------------|--|-----------------------------------------------------------------------------|



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|                    |           |          |
|--------------------|-----------|----------|
| Hysteresis         | [% of Sr] | 1...15   |
| Switch point drift | [% of Sr] | -10...10 |

Operating conditions

|                     |      |           |
|---------------------|------|-----------|
| Ambient temperature | [°C] | -25...100 |
| Protection          |      | IP 67     |

Tests / approvals

|      |              |     |
|------|--------------|-----|
| EMC  | EN 60947-5-2 |     |
| MTTF | [years]      | 605 |

Mechanical data

|            |      |                     |
|------------|------|---------------------|
| Weight     | [g]  | 180.5               |
| Housing    |      | cylindrical         |
| Mounting   |      | non-flush mountable |
| Dimensions | [mm] | Ø 20 / L = 77       |
| Materials  |      | PBT                 |

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 |
|----------------|--------------------|

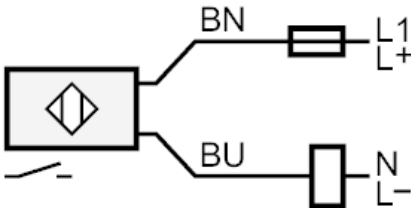
Remarks

|               |                                                                               |
|---------------|-------------------------------------------------------------------------------|
| Remarks       | Recommendation: Check the safe functioning of the unit after a short circuit. |
| Pack quantity | 1 pcs.                                                                        |

Electrical connection

Cable: 2 m, silicone; 2 x 0.75 mm²

Connection



Note miniature fuse to IEC60127-2 sheet 1 ≤ 2 A fast acting  
Core colours :  
BN = brown  
BU = blue