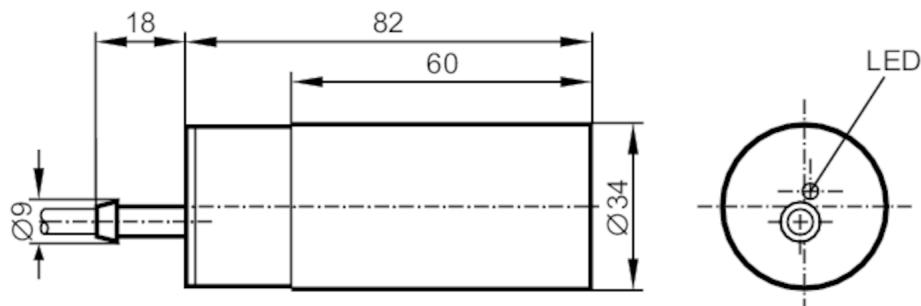




## Inductive sensor

IB-2020ZABOA/SS



## Product characteristics

|                 |      |               |
|-----------------|------|---------------|
| Output function |      | normally open |
| Sensing range   | [mm] | 20            |
| Housing         |      | tubular       |
| Dimensions      | [mm] | Ø 34 / L = 82 |

## Electrical data

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

## 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] | 50                                              |
| Short-circuit proof                             |      | no                                              |
| Overload protection                             |      | no                                              |

## Monitoring range

|                       |      |           |
|-----------------------|------|-----------|
| Sensing range         | [mm] | 20        |
| Real sensing range Sr | [mm] | 20 ± 10 % |
| Operating distance    | [mm] | 0...16.2  |

## Accuracy / deviations

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



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|                                      |                           |                                                                             |
|--------------------------------------|---------------------------|-----------------------------------------------------------------------------|
| Hysteresis                           | [% of Sr]                 | 1...20                                                                      |
| Switch-point drift                   | [% of Sr]                 | -10...10                                                                    |
| <b>Operating conditions</b>          |                           |                                                                             |
| Ambient temperature                  | [°C]                      | -25...100                                                                   |
| Protection                           |                           | IP 67                                                                       |
| <b>Tests / approvals</b>             |                           |                                                                             |
| 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                                                                     |
| MTTF                                 | [years]                   | 611                                                                         |
| <b>Mechanical data</b>               |                           |                                                                             |
| Weight                               | [g]                       | 290.5                                                                       |
| Housing                              |                           | tubular                                                                     |
| Mounting                             |                           | non-flush mountable                                                         |
| Dimensions                           | [mm]                      | Ø 34 / L = 82                                                               |
| Material                             |                           | housing: PBT; end cap: TPE                                                  |
| <b>Displays / operating elements</b> |                           |                                                                             |
| Display                              | Switching status          | 1 x LED, yellow                                                             |
| <b>Electrical connection</b>         |                           |                                                                             |
| Required protection                  |                           | miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting                    |
| <b>Accessories</b>                   |                           |                                                                             |
| Items supplied                       |                           | Mounting clamp: 1                                                           |
| <b>Remarks</b>                       |                           |                                                                             |
| Remarks                              |                           | Recommendation: check the unit for reliable function after a short circuit. |
| Pack quantity                        |                           | 1 pcs.                                                                      |

# IB0085



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### Electrical connection

Cable: 2 m, silicone; 2 x 0.75 mm<sup>2</sup>

### Connection



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

Core colors :

BN =

brown

BU =

blue