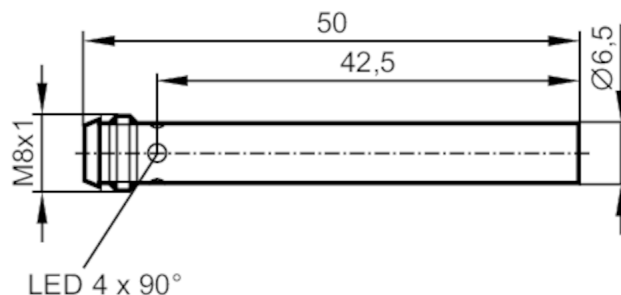


## Inductive sensor

ITB3001-BPKG/AS



## Product characteristics

|                    |                |
|--------------------|----------------|
| Electrical design  | PNP            |
| Output function    | normally open  |
| Sensing range [mm] | 1              |
| Housing            | cylindrical    |
| Dimensions [mm]    | Ø 6.5 / L = 50 |

## Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...30 DC |
| Current consumption [mA]    | 10         |
| Protection class            | III        |
| Reverse polarity protection | yes        |

## Outputs

|                                                      |               |
|------------------------------------------------------|---------------|
| Electrical design                                    | PNP           |
| Output function                                      | normally open |
| Max. voltage drop switching output DC [V]            | 2.5           |
| Permanent current rating of switching output DC [mA] | 100           |
| Switching frequency DC [Hz]                          | 2000          |
| Short-circuit protection                             | yes           |
| Overload protection                                  | yes           |

## Detection zone

|                               |              |
|-------------------------------|--------------|
| Sensing range [mm]            | 1            |
| Real sensing range $S_r$ [mm] | $1 \pm 10\%$ |
| Operating distance [mm]       | 0...0.81     |

## Accuracy / deviations

|                                  |                                                                             |
|----------------------------------|-----------------------------------------------------------------------------|
| Correction factor                | steel: 1 / stainless steel: 0.7 / brass: 0.3 / aluminium: 0.3 / copper: 0.1 |
| Hysteresis [% of $S_r$ ]         | 1...20                                                                      |
| Switch point drift [% of $S_r$ ] | -10...10                                                                    |

## Operating conditions

|                          |                                                 |
|--------------------------|-------------------------------------------------|
| Ambient temperature [°C] | -25...80                                        |
| Protection               | IP 65; (with ifm socket duly screwed on: IP 67) |



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| Tests / approvals          |                           |                         |
|----------------------------|---------------------------|-------------------------|
| EMC                        | EN 61000-4-2 ESD          | 4 kV CD / 8 kV AD       |
|                            | EN 61000-4-3 HF radiated  | 10 V/m                  |
|                            | EN 61000-4-4 Burst        | 2 kV                    |
|                            | EN 61000-4-6 HF conducted | 10 V                    |
|                            | EN 55011 emission         | class B                 |
| MTTF                       | [years]                   | 1379                    |
| Embedded software included |                           | yes                     |
| UL approval                | Ta                        | -25...70 °C             |
|                            | Enclosure type            | Type 1                  |
|                            | power supply              | Limited Voltage/Current |
|                            | UL Approval no.           | A017                    |
|                            | File number UL            | E174191                 |

| Mechanical data |      |                                                                       |
|-----------------|------|-----------------------------------------------------------------------|
| Weight          | [g]  | 16.8                                                                  |
| Housing         |      | cylindrical                                                           |
| Mounting        |      | flush mountable                                                       |
| Dimensions      | [mm] | Ø 6.5 / L = 50                                                        |
| Materials       |      | brass white bronze coated; sensing face: PBT orange; LED window: PPSU |

| Displays / operating elements |                  |                     |
|-------------------------------|------------------|---------------------|
| Display                       | switching status | 4 x 90° LED, yellow |

| Accessories    |  |                    |
|----------------|--|--------------------|
| Items supplied |  | Mounting clamps: 1 |

| Remarks       |  |        |
|---------------|--|--------|
| Pack quantity |  | 1 pcs. |

| Electrical connection - plug |  |  |
|------------------------------|--|--|
| Connector: 1 x M8; coding: A |  |  |



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### Connection

