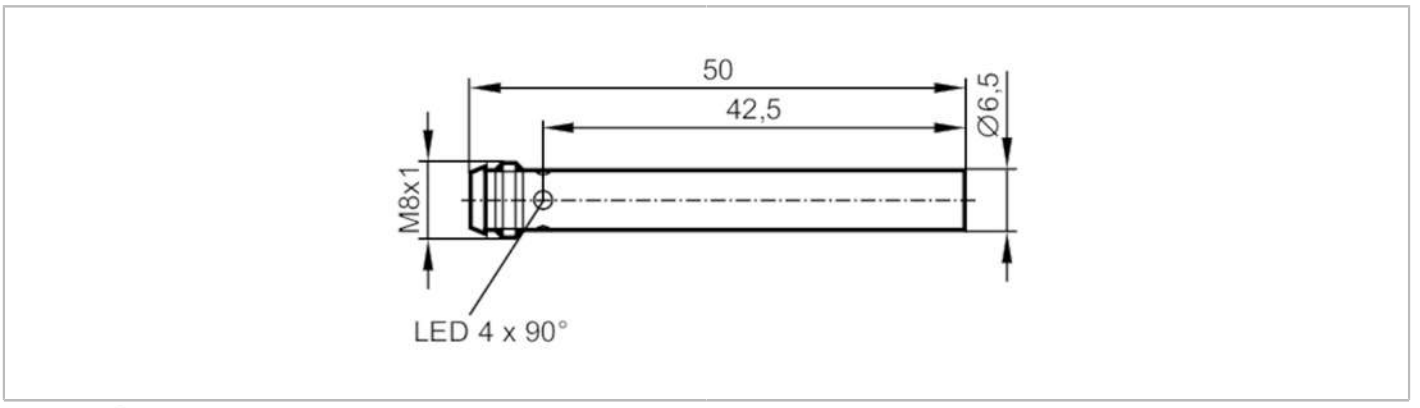
# IT5020

## Inductive sensor

ITB3001-APKG/AS




| | | |
|---|---|---|
| **Product characteristics** | | |
| Electrical design | | PNP |
| Output function | | normally closed |
| 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 closed |
| 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 Sr | [mm] | 1 ± 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 Sr] | 1...20 |
| Switch point drift | [% of Sr] | -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] | 16.7 | |
| 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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**ITB3001-APKG/AS**

### Connection

