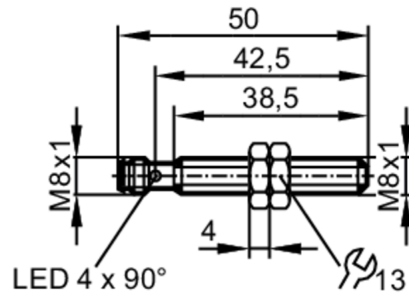


IE5375



Inductive sensor

IEB3002BBPKG/SC/AS



Product characteristics

| | | |
|-------------------|------|-----------------|
| Electrical design | | PNP |
| Output function | | normally open |
| Sensing range | [mm] | 2 |
| Housing | | threaded type |
| Dimensions | [mm] | M8 x 1 / L = 50 |

Application

| | | |
|-----------------|--|---------------------------------------|
| Special feature | | Increased sensing range; anti-spatter |
|-----------------|--|---------------------------------------|

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] | 1000 |
| Short-circuit protection | | yes |
| Overload protection | | yes |

Detection zone

| | | |
|--------------------------|------|--------------|
| Sensing range | [mm] | 2 |
| Real sensing range S_r | [mm] | $2 \pm 10\%$ |
| Operating distance | [mm] | 0...1.6 |
| Increased sensing range | | yes |

Accuracy / deviations


| | | |
|--------------------|---------------|---|
| Correction factor | | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3 |
| Hysteresis | [% of S_r] | 1...20 |
| Switch point drift | [% of S_r] | -10...10 |

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| Operating conditions | | |
|---|---------------------------|--|
| Ambient temperature | [°C] | -25...80 |
| Protection | | IP 65; IP 67; (with ifm socket duly screwed on) |
| 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 | class B |
| MTTF | [years] | 1379 |
| Embedded software included | | yes |
| UL approval | Ta | -25...80 °C |
| | Enclosure type | Type 1 |
| | power supply | Limited Voltage/Current |
| | UL Approval no. | A017 |
| | File number UL | E174191 |
| Mechanical data | | |
| Weight | [g] | 17.55 |
| Housing | | threaded type |
| Mounting | | flush mountable |
| Dimensions | [mm] | M8 x 1 / L = 50 |
| Thread designation | | M8 x 1 |
| Materials | | brass anti-spatter; sensing face: LCP black; LED window: PPSU; lock nuts: brass anti-spatter |
| Tightening torque | [Nm] | A = 5 mm: 1,5 Nm; B = 2 Nm |
| Displays / operating elements | | |
| Display | switching status | 4 LED, yellow |
| Accessories | | |
| Items supplied | | lock nuts: 2 |
| Remarks | | |
| Pack quantity | | 1 pcs. |
| Electrical connection - plug | | |
| Connector: 1 x M8; coding: A | | |
|  | | |

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Connection



Diagrams and graphs

Installation

