



## Inductive sensor

IS-3003-BPKG



## Product characteristics

|                    |               |
|--------------------|---------------|
| Electrical design  | PNP           |
| Output function    | normally open |
| Sensing range [mm] | 3             |
| Housing            | rectangular   |
| Dimensions [mm]    | 28 x 10 x 16  |

## Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...30 DC |
| Current consumption [mA]    | < 15       |
| Protection class            | III        |
| Reverse polarity protection | yes        |

## Outputs

|                                                      |               |
|------------------------------------------------------|---------------|
| Electrical design                                    | PNP           |
| Output function                                      | normally open |
| Max. voltage drop switching output DC [V]            | 2.5           |
| Max. leakage current [mA]                            | 0.5           |
| Permanent current rating of switching output DC [mA] | 200           |
| Short-time current rating of switching output [mA]   | 200           |
| Switching frequency DC [Hz]                          | 100           |
| Short-circuit protection                             | yes           |
| Overload protection                                  | yes           |

## Detection zone

|                            |               |
|----------------------------|---------------|
| Sensing range [mm]         | 3             |
| Real sensing range Sr [mm] | $3 \pm 10 \%$ |

# IS5031



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|                                      |                           |                                                                             |
|--------------------------------------|---------------------------|-----------------------------------------------------------------------------|
| Operating distance                   | [mm]                      | 0...2.43                                                                    |
| <b>Accuracy / deviations</b>         |                           |                                                                             |
| Correction factor                    |                           | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2 |
| Hysteresis                           | [% of Sr]                 | 1...15                                                                      |
| Switch point drift                   | [% of Sr]                 | -10...20                                                                    |
| <b>Operating conditions</b>          |                           |                                                                             |
| Ambient temperature                  | [°C]                      | 0...50                                                                      |
| Protection                           |                           | IP 67                                                                       |
| <b>Tests / approvals</b>             |                           |                                                                             |
| EMC                                  | EN 61000-4-2 ESD          | -- CD / 8 kV AD                                                             |
|                                      | EN 61000-4-3 HF radiated  | 10 V/m                                                                      |
|                                      | EN 61000-4-4 Burst        | 2 kV                                                                        |
|                                      | EN 61000-4-5 Surge        | 0,5 kV                                                                      |
|                                      | EN 61000-4-6 HF conducted | 10 V                                                                        |
|                                      | EN 55011                  | class B                                                                     |
| Vibration resistance                 | EN 60947-5-2              |                                                                             |
| Shock resistance                     | EN 60947-5-2              |                                                                             |
| MTTF                                 | [years]                   | 3044                                                                        |
| UL approval                          | Ta                        | 0...50 °C                                                                   |
|                                      | Enclosure type            | Type 1                                                                      |
|                                      | power supply              | Class 2                                                                     |
|                                      | File number UL            | E174191                                                                     |
| <b>Mechanical data</b>               |                           |                                                                             |
| Weight                               | [g]                       | 44.1                                                                        |
| Housing                              |                           | rectangular                                                                 |
| Mounting                             |                           | non-flush mountable                                                         |
| Dimensions                           | [mm]                      | 28 x 10 x 16                                                                |
| Materials                            |                           | cover: PBT; housing: PBT                                                    |
| Tightening torque                    | [Nm]                      | < 0.5; (with washer)                                                        |
| <b>Displays / operating elements</b> |                           |                                                                             |
| Display                              | switching status          | 1 x LED, yellow                                                             |
| <b>Remarks</b>                       |                           |                                                                             |
| Pack quantity                        |                           | 1 pcs.                                                                      |

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### Electrical connection

Cable: 2 m, PVC, Ø 3.5 mm; 3 x 0.14 mm<sup>2</sup>

### Connection



|      |                |
|------|----------------|
| BK = | Core colours : |
| BN = | black          |
| BU = | brown          |
|      | blue           |