

## Inductive sensor

IEB3001-BPKG/PH



## Product characteristics

|                    |                 |
|--------------------|-----------------|
| Electrical design  | PNP             |
| Output function    | normally open   |
| Sensing range [mm] | 1               |
| Housing            | threaded type   |
| Dimensions [mm]    | M8 x 1 / L = 35 |

## Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...36 DC |
| Current consumption [mA]    | 10; (24 V) |
| 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] | 200           |
| Switching frequency DC [Hz]                          | 750           |
| Notes on switching frequency [Hz]                    | 1000 nb       |
| 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...0.8       |

## Accuracy / deviations

|                                  |                                                                             |
|----------------------------------|-----------------------------------------------------------------------------|
| Correction factor                | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.4 / copper: 0.3 |
| Hysteresis [% of $S_r$ ]         | 3...15                                                                      |
| Switch point drift [% of $S_r$ ] | -10...10                                                                    |

## Operating conditions

|                          |          |
|--------------------------|----------|
| Ambient temperature [°C] | -25...80 |
| Protection               | IP 67    |

# IE5199



## Inductive sensor

IEB3001-BPKG/PH

### Tests / approvals

|      |                           |                   |
|------|---------------------------|-------------------|
| 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                  | class B           |
| MTTF | [years]                   | 2804              |

### Mechanical data

|                    |      |                          |
|--------------------|------|--------------------------|
| Weight             | [g]  | 47                       |
| Housing            |      | threaded type            |
| Mounting           |      | flush mountable          |
| Dimensions         | [mm] | M8 x 1 / L = 35          |
| Thread designation |      | M8 x 1                   |
| Materials          |      | brass nickel-plated; PBT |
| Tightening torque  | [Nm] | A = 5 mm: 1 Nm; B: 2 Nm  |

### Displays / operating elements

|         |                  |                 |
|---------|------------------|-----------------|
| Display | switching status | 1 x LED, yellow |
|---------|------------------|-----------------|

### Accessories

|                |              |
|----------------|--------------|
| Items supplied | lock nuts: 2 |
|----------------|--------------|

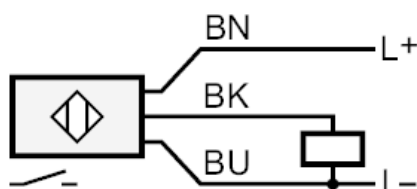
### Remarks

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

### Electrical connection

Cable: 2 m, PUR; highly flexible; 3 x 0.14 mm<sup>2</sup>

### Connection



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

# IE5199

## Inductive sensor

IEB3001-BPKG/PH



### Diagrams and graphs

#### Installation

