

## Inductive sensor

IEB3001-ANKG



## Product characteristics

|                    |                 |
|--------------------|-----------------|
| Electrical design  | NPN             |
| 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]    | 15; (24 V) |
| Protection class            | III        |
| Reverse polarity protection | yes        |

## Outputs

|                                                      |               |
|------------------------------------------------------|---------------|
| Electrical design                                    | NPN           |
| 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: 0.3 / copper: 0.2 |
| Hysteresis [% of $S_r$ ]         | 1...15                                                                      |
| Switch point drift [% of $S_r$ ] | -10...10                                                                    |

## Operating conditions

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

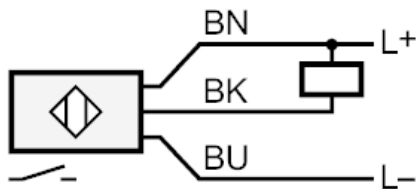
# IE5082



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| 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]                   | 2673                           |
| Mechanical data                           |                           |                                |
| Weight                                    | [g]                       | 50.9                           |
| Housing                                   |                           | threaded type                  |
| Mounting                                  |                           | flush mountable                |
| Dimensions                                | [mm]                      | M8 x 1 / L = 35                |
| Thread designation                        |                           | M8 x 1                         |
| Materials                                 |                           | brass white bronze coated; 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, PVC; 3 x 0.14 mm <sup>2</sup> |                           |                                |
| Connection                                |                           |                                |



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



### Diagrams and graphs

#### Installation

