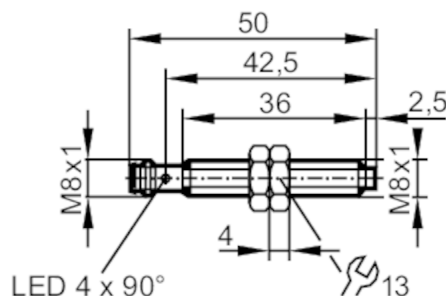


## Inductive sensor

IEB30,2-BPKG/AS



## Product characteristics

|                    |                                      |
|--------------------|--------------------------------------|
| Electrical design  | PNP                                  |
| Output function    | normally open                        |
| Sensing range [mm] | 0.2; (for target made of mild steel) |
| Housing            | threaded type                        |
| Dimensions [mm]    | M8 x 1 / L = 50                      |

## Application

|                 |                         |
|-----------------|-------------------------|
| Special feature | Increased sensing range |
|-----------------|-------------------------|

## 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]                          | 300           |
| Short-circuit protection                             | yes           |
| Overload protection                                  | yes           |

## Detection zone

|                               |                                      |
|-------------------------------|--------------------------------------|
| Sensing range [mm]            | 0.2; (for target made of mild steel) |
| Real sensing range $S_r$ [mm] | $0.2 \pm 10 \%$                      |
| Increased sensing range       | yes                                  |

## Accuracy / deviations

|                         |                                                                             |
|-------------------------|-----------------------------------------------------------------------------|
| Correction factor       | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3 |
| Hysteresis [mm]         | 0.002...0.025                                                               |
| Switch point drift [mm] | > 0.04                                                                      |
| Repeatability [mm]      | < 0.015                                                                     |

# IE5339



## Inductive sensor

IEB30,2-BPKG/AS

| Operating conditions          |                           |                                                                                                                |
|-------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------|
| Ambient temperature           | [°C]                      | 0...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                                                                                                        |
| Impact resistance             | EN 60068-2-75 Ehc         |                                                                                                                |
| Vibration resistance          | EN 60068-2-6 Fc           |                                                                                                                |
| Shock resistance              | EN 60068-2-27 Ea          |                                                                                                                |
| Continuous shock resistance   | EN 60068-2-29 Eb          |                                                                                                                |
| Fast temperature change       | EN 60068-2-14 Na          |                                                                                                                |
| Salt spray test               | EN 60068-2-52 Kb          |                                                                                                                |
| MTTF                          | [years]                   | 1379                                                                                                           |
| Embedded software included    |                           | yes                                                                                                            |
| UL approval                   | Ta                        | 0...80 °C                                                                                                      |
|                               | Enclosure type            | Type 1                                                                                                         |
|                               | power supply              | Limited Voltage/Current                                                                                        |
|                               | UL Approval no.           | A017                                                                                                           |
|                               | File number UL            | E174191                                                                                                        |
| Mechanical data               |                           |                                                                                                                |
| Weight                        | [g]                       | 18.8                                                                                                           |
| Housing                       |                           | threaded type                                                                                                  |
| Mounting                      |                           | non-flush mountable                                                                                            |
| Dimensions                    | [mm]                      | M8 x 1 / L = 50                                                                                                |
| Thread designation            |                           | M8 x 1                                                                                                         |
| Materials                     |                           | brass white bronze coated; sensing face: LCP orange;<br>LED window: PPSU; lock nuts: brass white bronze coated |
| Tightening torque             | [Nm]                      | A = 5 mm: 1,5 Nm; B = 2 Nm                                                                                     |
| Displays / operating elements |                           |                                                                                                                |
| Display                       | switching status          | 4 x LED, yellow                                                                                                |
| Accessories                   |                           |                                                                                                                |
| Items supplied                |                           | lock nuts: 2                                                                                                   |
| Remarks                       |                           |                                                                                                                |
| Pack quantity                 |                           | 1 pcs.                                                                                                         |

## Inductive sensor

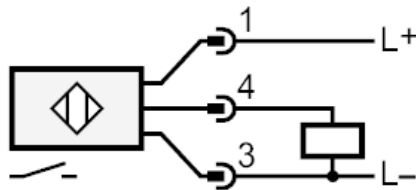
IEB30,2-BPKG/AS

### Electrical connection - plug

Connector: 1 x M8; coding: A



### Connection



### Diagrams and graphs

#### Installation

