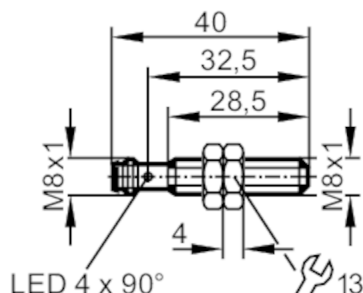


## Inductive sensor

IEBC003BBSKG/AS



## Product characteristics

|                    |                 |
|--------------------|-----------------|
| Electrical design  | PNP/NPN         |
| Output function    | normally closed |
| Sensing range [mm] | 3               |
| Housing            | Threaded type   |
| Dimensions [mm]    | M8 x 1 / L = 40 |

## Electrical data

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

## Outputs

|                                                      |                                 |
|------------------------------------------------------|---------------------------------|
| Electrical design                                    | PNP/NPN                         |
| Output function                                      | normally closed                 |
| Max. voltage drop switching output DC [V]            | 3.5                             |
| Minimum load current [mA]                            | 2; (only in 2-wire operation)   |
| Max. leakage current [mA]                            | 0.5; (only in 3-wire operation) |
| Permanent current rating of switching output DC [mA] | 100                             |
| Switching frequency DC [Hz]                          | 800                             |
| Short-circuit protection                             | yes                             |
| Type of short-circuit protection                     | yes (non-latching)              |
| Overload protection                                  | yes                             |

## Monitoring range

|                         |         |
|-------------------------|---------|
| Sensing range [mm]      | 3       |
| Operating distance [mm] | 0...2.4 |

## Accuracy / deviations

|                      |                                                                            |
|----------------------|----------------------------------------------------------------------------|
| Correction factor    | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3 |
| Hysteresis [% of Sr] | 1...20                                                                     |

# IE5349



## Inductive sensor

IEBC003BBSKG/AS

| Operating conditions          |                           |                                                                   |
|-------------------------------|---------------------------|-------------------------------------------------------------------|
| Ambient temperature           | [°C]                      | 0...60                                                            |
| Protection                    |                           | IP 65; IP 67; (with ifm socket duly screwed on)                   |
| Tests / approvals             |                           |                                                                   |
| EMC                           | EN 60947-5-2              |                                                                   |
|                               | 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 61000-4-5 Surge        | 0,5 kV line to line, Ri: 2 Ohm                                    |
|                               | EN 61000-4-6 HF conducted | 10 V                                                              |
|                               | EN 55011                  | class B                                                           |
| MTTF                          | [years]                   | 1858                                                              |
| UL approval                   | Ta                        | -25...80 °C                                                       |
|                               | Enclosure type            | Type 1                                                            |
|                               | voltage supply            | Class 2                                                           |
|                               | File number UL            | E174191                                                           |
| Mechanical data               |                           |                                                                   |
| Weight                        | [g]                       | 14                                                                |
| Housing                       |                           | Threaded type                                                     |
| Mounting                      |                           | flush mountable                                                   |
| Dimensions                    | [mm]                      | M8 x 1 / L = 40                                                   |
| Thread designation            |                           | M8 x 1                                                            |
| Material                      |                           | brass special coating; sensing face: LCP orange; lock nuts: brass |
| Tightening torque             | [Nm]                      | A = 5 mm: ≤ 1 Nm; B: ≤ 2 Nm                                       |
| Displays / operating elements |                           |                                                                   |
| Display                       | Switching status          | 4 x 90° LED, yellow                                               |
| Accessories                   |                           |                                                                   |
| Items supplied                |                           | lock nuts: 2                                                      |
| Remarks                       |                           |                                                                   |
| Pack quantity                 |                           | 1 pcs.                                                            |

# IE5349

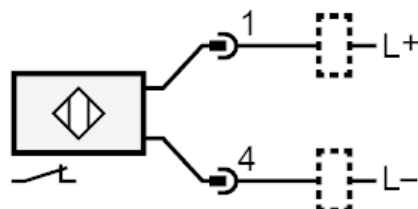
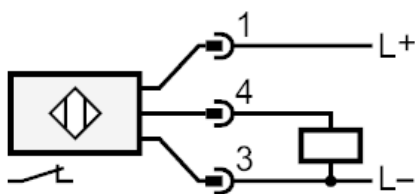


## Inductive sensor

IEBC003BBSKG/AS

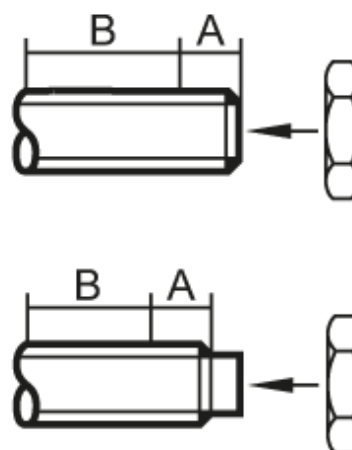
### Electrical connection - plug

Connector: 1 x M8; coding: A



### Diagrams and graphs

#### Installation



Tightening  
torque

A (5 mm):  $\leq 1 \text{ Nm}$

B:  $\leq 2 \text{ Nm}$