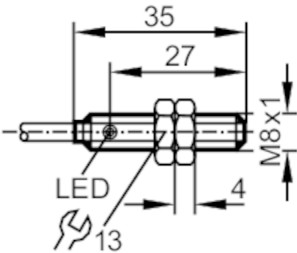




Inductive sensor

IEB3001-APKG



| Product characteristics                         |           |                                                                             |
|-------------------------------------------------|-----------|-----------------------------------------------------------------------------|
| Electrical design                               |           | PNP                                                                         |
| Output function                                 |           | normally closed                                                             |
| 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                               |           | PNP                                                                         |
| Output function                                 |           | normally closed                                                             |
| 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]      |                                                                             |
| Short-circuit protection                        |           | yes                                                                         |
| Overload protection                             |           | yes                                                                         |
| Detection zone                                  |           |                                                                             |
| Sensing range                                   | [mm]      | 1                                                                           |
| Real sensing range Sr                           | [mm]      | 1 ± 10 %                                                                    |
| Operating distance                              | [mm]      | 0...0.8                                                                     |
| Increased sensing range                         |           | no                                                                          |
| Accuracy / deviations                           |           |                                                                             |
| 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...10                                                                    |
| Operating conditions                            |           |                                                                             |
| Ambient temperature                             | [°C]      | -25...80                                                                    |
| Protection                                      |           | IP 67                                                                       |

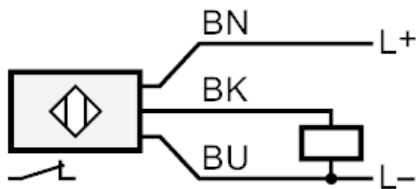
IE5078



Inductive sensor

IEB3001-APKG

| 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]                   | 2737                           |
| Mechanical data                           |                           |                                |
| Weight                                    | [g]                       | 51.1                           |
| 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

# IE5078

## Inductive sensor

IEB3001-APKG



### Diagrams and graphs

#### Installation

