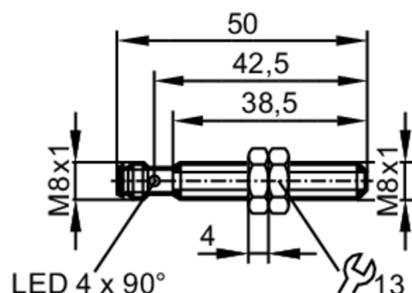


## Inductive full-metal sensor

IEB3002BANKG/AM/AS



## Product characteristics

|                    |                 |
|--------------------|-----------------|
| Electrical design  | NPN             |
| Output function    | normally open   |
| Sensing range [mm] | 2               |
| Housing            | Threaded type   |
| Dimensions [mm]    | M8 x 1 / L = 50 |

## Application

|                         |                                               |
|-------------------------|-----------------------------------------------|
| System                  | gold-plated contacts; Increased sensing range |
| Application             | Oils and coolants                             |
| Pressure rating         | 50 bar 5 MPa                                  |
| Note on pressure rating | sensing face                                  |

## Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...30 DC |
| Current consumption [mA]    | < 10       |
| 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] | 100           |
| Switching frequency DC [Hz]                          | 100           |
| Short-circuit protection                             | yes           |
| Overload protection                                  | yes           |

## Monitoring range

|                            |          |
|----------------------------|----------|
| Sensing range [mm]         | 2        |
| Real sensing range Sr [mm] | 2 ± 10 % |
| Operating distance [mm]    | 0...1.6  |
| Increased sensing range    | yes      |



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| Accuracy / deviations                                                                          |                                                                                                                                                       |                         |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Correction factor                                                                              | steel: 1 / stainless steel: 0.7 / brass: 0.7 / aluminum: 0.6 / copper: 0.5                                                                            |                         |
| Hysteresis                                                                                     | [% of Sr]                                                                                                                                             | 1...20                  |
| Switch-point drift                                                                             | [% of Sr]                                                                                                                                             | -10...10                |
| Operating conditions                                                                           |                                                                                                                                                       |                         |
| Ambient temperature                                                                            | [°C]                                                                                                                                                  | -25...70                |
| 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                                                                              |                                                                                                                                                       | 1 J                     |
| MTTF                                                                                           | [years]                                                                                                                                               | 1386                    |
| Embedded software included                                                                     | yes                                                                                                                                                   |                         |
| UL approval                                                                                    | Ta                                                                                                                                                    | -25...70 °C             |
|                                                                                                | Enclosure type                                                                                                                                        | Type 1                  |
|                                                                                                | voltage supply                                                                                                                                        | Limited Voltage/Current |
|                                                                                                | UL approval number                                                                                                                                    | A017                    |
|                                                                                                | File number UL                                                                                                                                        | E174191                 |
| Mechanical data                                                                                |                                                                                                                                                       |                         |
| Weight                                                                                         | [g]                                                                                                                                                   | 18                      |
| Housing                                                                                        | Threaded type                                                                                                                                         |                         |
| Mounting                                                                                       | flush mountable                                                                                                                                       |                         |
| Dimensions                                                                                     | [mm]                                                                                                                                                  | M8 x 1 / L = 50         |
| Thread designation                                                                             | M8 x 1                                                                                                                                                |                         |
| Material                                                                                       | housing: stainless steel (1.4404 / 316L); sensing face: stainless steel (1.4404 / 316L); LED window: PPSU; lock nuts: stainless steel (1.4404 / 316L) |                         |
| Tightening torque                                                                              | [Nm]                                                                                                                                                  | < 5                     |
| Displays / operating elements                                                                  |                                                                                                                                                       |                         |
| Display                                                                                        | Switching status                                                                                                                                      | 4 LED, yellow           |
| Accessories                                                                                    |                                                                                                                                                       |                         |
| Items supplied                                                                                 | lock nuts: 2                                                                                                                                          |                         |
| Remarks                                                                                        |                                                                                                                                                       |                         |
| Pack quantity                                                                                  | 1 pcs.                                                                                                                                                |                         |
| Electrical connection - plug                                                                   |                                                                                                                                                       |                         |
| Connector: 1 x M8; coding: A; Contacts: gold-plated                                            |                                                                                                                                                       |                         |
| <div></div> |                                                                                                                                                       |                         |





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### Connection

