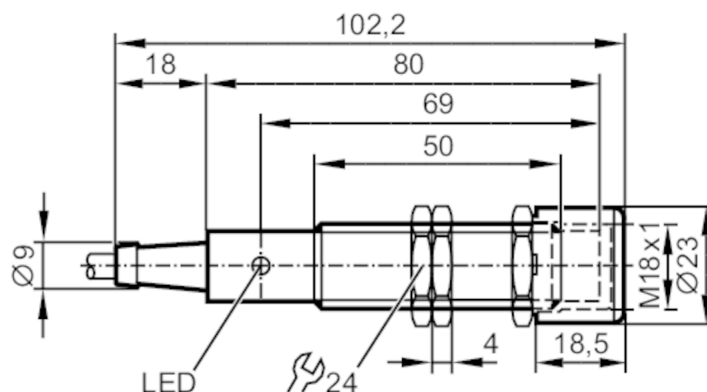


# IG001A



## Inductive sensor

IGA2008-ABOA/3D



### Product characteristics

|                    |                  |
|--------------------|------------------|
| Output function    | normally open    |
| Sensing range [mm] | 8                |
| Housing            | Threaded type    |
| Dimensions [mm]    | M18 x 1 / L = 80 |

### Application

|              |                                                             |
|--------------|-------------------------------------------------------------|
| Installation | use in hazardous areas only with installed protective cover |
|--------------|-------------------------------------------------------------|

### Electrical data

|                             |                |
|-----------------------------|----------------|
| Operating voltage [V]       | 20...250 AC/DC |
| Protection class            | II             |
| Reverse polarity protection | yes            |

### Outputs

|                                                      |                                                                |
|------------------------------------------------------|----------------------------------------------------------------|
| Output function                                      | normally open                                                  |
| Max. voltage drop switching output DC [V]            | 6                                                              |
| Max. voltage drop switching output AC [V]            | 6.5                                                            |
| Minimum load current [mA]                            | 5                                                              |
| Max. leakage current [mA]                            | 2.5 (250 V AC) / 1.3 (130 V AC) / 0.8 (24 V DC)                |
| Permanent current rating of switching output AC [mA] | 150                                                            |
| Permanent current rating of switching output DC [mA] | 100                                                            |
| Short-time current rating of switching output [mA]   | 2200; (20 ms / 0,5 Hz)                                         |
| Switching frequency AC [Hz]                          | 25                                                             |
| Switching frequency DC [Hz]                          | 50                                                             |
| Notes on switching frequency [Hz]                    | only for resistive loads; 2 Hz for utilization category AC-140 |
| Short-circuit protection                             | no                                                             |
| Overload protection                                  | no                                                             |

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| Monitoring range              |                           |                                                                                                          |
|-------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------|
| Sensing range                 | [mm]                      | 8                                                                                                        |
| Real sensing range Sr         | [mm]                      | 8 ± 10 %                                                                                                 |
| Operating distance            | [mm]                      | 0...6.48                                                                                                 |
| Accuracy / deviations         |                           |                                                                                                          |
| Correction factor             |                           | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminum: 0.3 / copper: 0.2                               |
| Hysteresis                    | [% of Sr]                 | 1...20                                                                                                   |
| Switch-point drift            | [% of Sr]                 | -10...10                                                                                                 |
| Operating conditions          |                           |                                                                                                          |
| Ambient temperature           | [°C]                      | -20...60                                                                                                 |
| Protection                    |                           | IP 67                                                                                                    |
| Tests / approvals             |                           |                                                                                                          |
| ATEX marking                  |                           | II 3D Ex tc IIIC T80°C Dc X                                                                              |
| 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                                                                                                      |
|                               | IEC 60255-5               | 1 kV line to line, Ri: 500 Ohm                                                                           |
|                               | EN 55011 emission         | class B                                                                                                  |
| MTTF                          | [years]                   | 604                                                                                                      |
| Mechanical data               |                           |                                                                                                          |
| Weight                        | [g]                       | 184.5                                                                                                    |
| Housing                       |                           | Threaded type                                                                                            |
| Mounting                      |                           | non-flush mountable                                                                                      |
| Dimensions                    | [mm]                      | M18 x 1 / L = 80                                                                                         |
| Thread designation            |                           | M18 x 1                                                                                                  |
| Material                      |                           | brass white bronze coated; sensing face: PBT; lock nuts: brass white bronze coated; Protective cover: PA |
| Displays / operating elements |                           |                                                                                                          |
| Display                       | Switching status          | 1 x LED, yellow                                                                                          |
| Electrical connection         |                           |                                                                                                          |
| Required protection           |                           | miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting; Place the fuse outside the hazardous area.     |
| Accessories                   |                           |                                                                                                          |
| Items supplied                |                           | lock nuts: 3                                                                                             |
|                               |                           | Protective cover: 1                                                                                      |
| Remarks                       |                           |                                                                                                          |
| Remarks                       |                           | Recommendation: check the unit for reliable function after a short circuit.                              |
| Pack quantity                 |                           | 1 pcs.                                                                                                   |

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### Electrical connection

Cable: 2 m, PVC; 2 x 0.50 mm<sup>2</sup>

### Connection



Note miniature fuse to IEC60127-2 sheet 1  $\leq$  2 A fast acting  
Place the fuse outside the hazardous area.

Core colors :  
BN = brown  
BU = blue