

## Inductive sensor

IGB2012-ARKG/2M/PUR



1 LED yellow



### Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | PNP/NPN          |
| Output function    | normally open    |
| Sensing range [mm] | 12               |
| Housing            | threaded type    |
| Dimensions [mm]    | M18 x 1 / L = 40 |

### Application

|                 |                                                 |
|-----------------|-------------------------------------------------|
| Special feature | Drag chain suitability; Increased sensing range |
| Application     | Industrial applications / factory automation    |

### Electrical data

|                             |                                                        |
|-----------------------------|--------------------------------------------------------|
| Operating voltage [V]       | 10...30 DC; ("supply limited voltage / current" to UL) |
| Protection class            | III                                                    |
| Reverse polarity protection | yes                                                    |

### Outputs

|                                                      |               |
|------------------------------------------------------|---------------|
| Electrical design                                    | PNP/NPN       |
| Output function                                      | normally open |
| Max. voltage drop switching output DC [V]            | 2.5           |
| Minimum load current [mA]                            | 2             |
| Max. leakage current [mA]                            | 0.6           |
| 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]         | 12        |
| Real sensing range Sr [mm] | 12 ± 10 % |
| Operating distance [mm]    | 0...9.72  |
| Increased sensing range    | yes       |



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| Accuracy / deviations         |                                       |                                                                                                            |
|-------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------|
| Correction factor             |                                       | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3                                |
| Hysteresis                    | [X01]                                 | 3...15                                                                                                     |
| Switch point drift            | [X01]                                 | -10...10                                                                                                   |
| Operating conditions          |                                       |                                                                                                            |
| Ambient temperature           | [°C]                                  | -40...85                                                                                                   |
| Protection                    |                                       | IP 65; IP 66; IP 67; IP 68; IP 69K                                                                         |
| 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                                                                                                    |
| Vibration resistance          | EN 60068-2-6 Fc                       | 20 g (10...3000 Hz) / 50 sweep cycles, 1 octave per minute, in 3 axes                                      |
| Shock resistance              | EN 60068-2-27 Ea                      | 100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes                           |
| Continuous shock resistance   | EN 60068-2-27                         | 40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes                                    |
| Fast temperature change       | EN 60068-2-14 Na                      | TA = -40 °C; TB = 85 °C; t1 = 30 min; t2 = < 10 s; 50 cycles                                               |
| Salt spray test               | EN 60068-2-52 Kb                      | severity level 5 (4 test cycles)                                                                           |
| MTTF                          | [ANN]                                 | 909                                                                                                        |
| Embedded software included    |                                       | yes                                                                                                        |
| UL approval                   | Ta                                    | -25...75 °C                                                                                                |
|                               | Enclosure type                        | Type 1                                                                                                     |
|                               | подача напруги                        | Limited Voltage/Current                                                                                    |
|                               | UL Approval no.                       | A007                                                                                                       |
|                               | File number UL                        | E174191                                                                                                    |
| Mechanical data               |                                       |                                                                                                            |
| Weight                        | [g]                                   | 84.1                                                                                                       |
| Housing                       |                                       | threaded type                                                                                              |
| Mounting                      |                                       | non-flush mountable                                                                                        |
| Dimensions                    | [mm]                                  | M18 x 1 / L = 40                                                                                           |
| Thread designation            |                                       | M18 x 1                                                                                                    |
| Materials                     |                                       | brass white bronze coated; sensing face: PBT orange; LED window: PEI; lock nuts: brass white bronze coated |
| Tightening torque             | [Nm]                                  | see operating instructions                                                                                 |
| Drag chain suitability        |                                       | yes                                                                                                        |
| Drag chain suitability        | bending radius for flexible use       | min. 10 x cable diameter                                                                                   |
|                               | bending cycles                        | > 5 Mio.                                                                                                   |
| Displays / operating elements |                                       |                                                                                                            |
| Display                       | switching status                      | 1 x LED, yellow                                                                                            |
| Аксессуары                    |                                       |                                                                                                            |
| Items supplied                | lock nuts: 2                          |                                                                                                            |
|                               | Tooth lock washer: 1, stainless steel |                                                                                                            |

# IGS709



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### Remarks

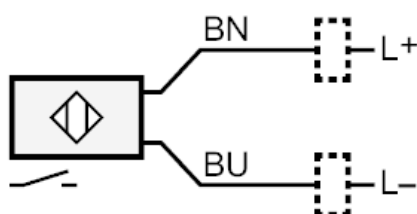
Pack quantity

1 pcs.

### Electrical connection

Cable: 2 m, PUR; 2 x 0.34 mm<sup>2</sup>

### Connection



BN =

Core colours :  
brown

BU =

blue