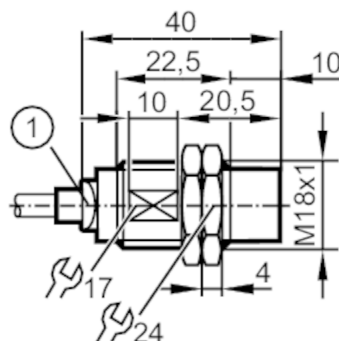




## Inductive sensor

IGB2012-ARKG/2M/PUR/UP



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]            | 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       |

# IGS711



## Inductive sensor

IGB2012-ARKG/2M/PUR/UP

| Accuracy / deviations         |  |  |
|-------------------------------|--|--|
| Correction factor             | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3                                |  |
| Hysteresis [% of Sr]          | 3...15   |  |
| Switch point drift [% of Sr]  | -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 per frequency; 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 [years]                  | 899  |  |
| UL approval                   | Ta   | -25...75 °C  |
|                               | Enclosure type   | Type 1   |
|                               | voltage supply   | Limited Voltage/Current  |
|                               | UL Approval no.  | A007   |
|                               | File number UL   | E174191  |
| Mechanical data               |  |  |
| Weight [g]                    | 85   |  |
| 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 |  |
| 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  |
| Accessories                   |  |  |
| Accessories (supplied)        | lock nuts: 2<br>lock washer: 1   |  |
| Remarks                       |  |  |
| Pack quantity                 | 1 pcs.   |  |

# IGS711



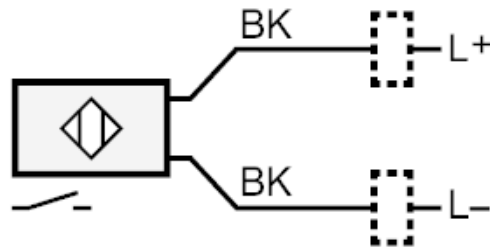
## Inductive sensor

IGB2012-ARKG/2M/PUR/UP

### Electrical connection

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

### Connection



Core colours :

BK =

black