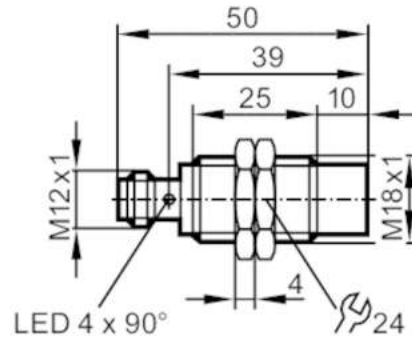


# IGC205



## Inductive sensor

IGB3012-BPKG/US-104



### Product characteristics

|                   |      |                  |
|-------------------|------|------------------|
| Electrical design |      | PNP              |
| Output function   |      | normally open    |
| Sensing range     | [mm] | 12               |
| Housing           |      | threaded type    |
| Dimensions        | [mm] | M18 x 1 / L = 50 |

### Application

|                 |  |   |
|-----------------|--|---|
| Special feature |  | Gold-plated contacts; Increased sensing range |
| Application     |  | Use in machine tools, coolants and lubricants |

### Electrical data

|                             |      |            |
|-----------------------------|------|------------|
| Operating voltage           | [V]  | 10...30 DC |
| Current consumption         | [mA] | < 10       |
| Protection class            |      | II         |
| Reverse polarity protection |      | yes        |

### Outputs

|   |      |               |
|---|------|---------------|
| Electrical design                               |      | PNP           |
| 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] | 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 [% of Sr]         | 3...15  |  |
| Switch point drift [% of Sr] | -10...10  |  |

### Operating conditions

|                          |          |  |
|--------------------------|----------|--|
| Ambient temperature [°C] | -25...70 |  |
| Protection               | IP 68    |  |

### 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           |
| MTTF [years]               | 1711                      |                   |
| Embedded software included | yes                       |                   |
| UL approval                | Ta                        | 0...40 °C         |
|                            | Enclosure type            | Type 1            |
|                            | power supply              | Hazardous voltage |
|                            | UL Approval no.           | A003              |
|                            | File number UL            | E174191           |

### Mechanical data

|                    |  |  |
|--------------------|--|--|
| Weight [g]         | 43.8   |  |
| Housing            | threaded type  |  |
| Mounting           | non-flush mountable  |  |
| Dimensions [mm]    | M18 x 1 / L = 50   |  |
| Thread designation | M18 x 1  |  |
| Materials          | housing: brass white bronze coated; sensing face: LCP; LED window: PEI; lock nuts: white bronze coated |  |

### Displays / operating elements

|         |                  |                     |
|---------|------------------|---------------------|
| Display | switching status | 4 x 90° LED, yellow |
|---------|------------------|---------------------|

### Accessories

|                |              |  |
|----------------|--------------|--|
| Items supplied | lock nuts: 2 |  |
|----------------|--------------|--|

### Remarks

|               |        |  |
|---------------|--------|--|
| Pack quantity | 1 pcs. |  |
|---------------|--------|--|

### Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: gold-plated



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### Connection

