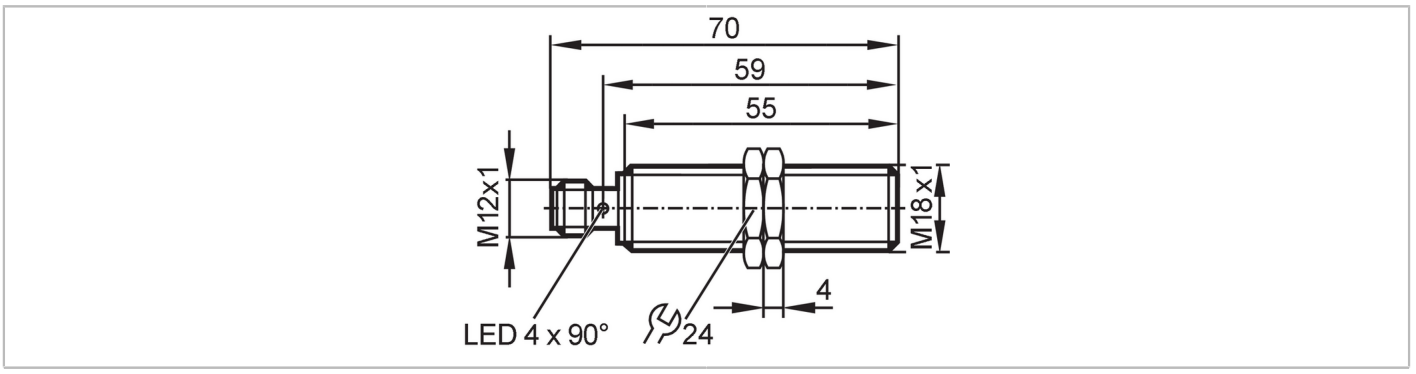
# IGR200

## Inductive full-metal sensor

IGK3006BBPKG/AM/SC/US-104




| | | | |
|---|---|---|---|
| **Product characteristics** | | | |
| Electrical design | | PNP | |
| Output function | | normally open | |
| Sensing range | [mm] | 6 | |
| Housing | | threaded type | |
| Dimensions | [mm] | M18 x 1 / L = 70 | |
| **Application** | | | |
| Special feature | | Gold-plated contacts; Increased sensing range; Full-metal housing; Magnetic-field immune | |
| Application | | Use in welding applications | |
| Pressure rating | | 100 bar | 10 MPa |
| Note on pressure rating | | sensing face | |
| Magnetic-field immune | | yes; (pulse duration of the welding current: < 200 ms) | |
| **Electrical data** | | | |
| Operating voltage | [V] | 10...30 DC | |
| Current consumption | [mA] | < 20 | |
| Protection class | | III | |
| 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] | 2 | |
| Short-circuit protection | | yes | |
| Type of short-circuit protection | | pulsed | |
| Overload protection | | yes | |
| **Detection zone** | | | |
| Sensing range | [mm] | 6 | |
| Operating distance | [mm] | 0...4.9 | |
| Increased sensing range | | yes | |

# IGR200

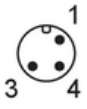
## Inductive full-metal sensor

IGK3006BBPKG/AM/SC/US-104

| | | | |
|---|---|---|---|
| **Accuracy / deviations** | | | |
| Correction factor | | steel: 1 / stainless steel: 0.7 / brass: 0.7 / aluminium: 0.5 / copper: 0.2 | |
| Hysteresis | [% of Sr] | 1...20 | |
| **Operating conditions** | | | |
| Ambient temperature | [°C] | 0...85 | |
| Protection | | IP 67 | |
| **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 emission | class B |
| Impact resistance | | | 1 J |
| MTTF | [years] | 1152 | |
| Embedded software included | | yes | |
| UL approval | | Ta | -25...70 °C |
| | | Enclosure type | Type 1 |
| | | voltage supply | Limited Voltage/Current |
| | | UL approval no. | A012 |
| | | File number UL | E174191 |
| **Mechanical data** | | | |
| Weight | [g] | 61.5 | |
| Housing | | threaded type | |
| Mounting | | flush mountable | |
| Dimensions | [mm] | M18 x 1 / L = 70 | |
| Thread designation | | M18 x 1 | |
| Materials | | housing: stainless steel (316L/1.4404) anti-spatter; sensing face: stainless steel (316L/1.4404) anti-spatter; LED window: PEI; lock nuts: stainless steel (316L/1.4404) anti-spatter | |
| Tightening torque | [Nm] | 20 | |
| Full-metal housing | | yes | |
| **Displays / operating elements** | | | |
| Display | | switching status | 4 x 90° LED, yellow |
| | | operation | 1 x LED, green |
| **Accessories** | | | |
| Items supplied | | lock nuts: 2 | |
| **Remarks** | | | |
| Pack quantity | | 1 pcs. | |

**Electrical connection - plug**

Connector: 1 x M12; coding: A; Contacts: 3, gold-plated

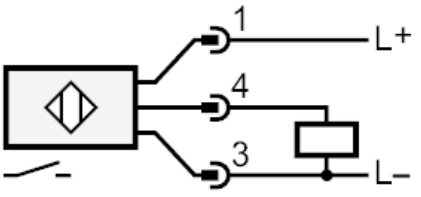


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## Inductive full-metal sensor

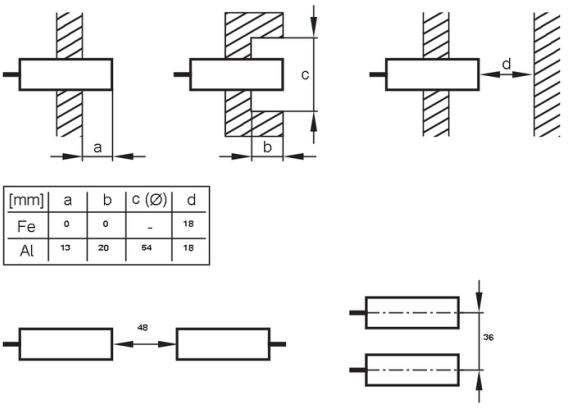
**IGK3006BBPKG/AM/SC/US-104**

### Connection




### Diagrams and graphs

Installation




| [mm] | a | b | c (Ø) | d |
|---|---|---|---|---|
| Fe | 0 | 0 | - | 18 |
| Al | 13 | 20 | 54 | 18 |