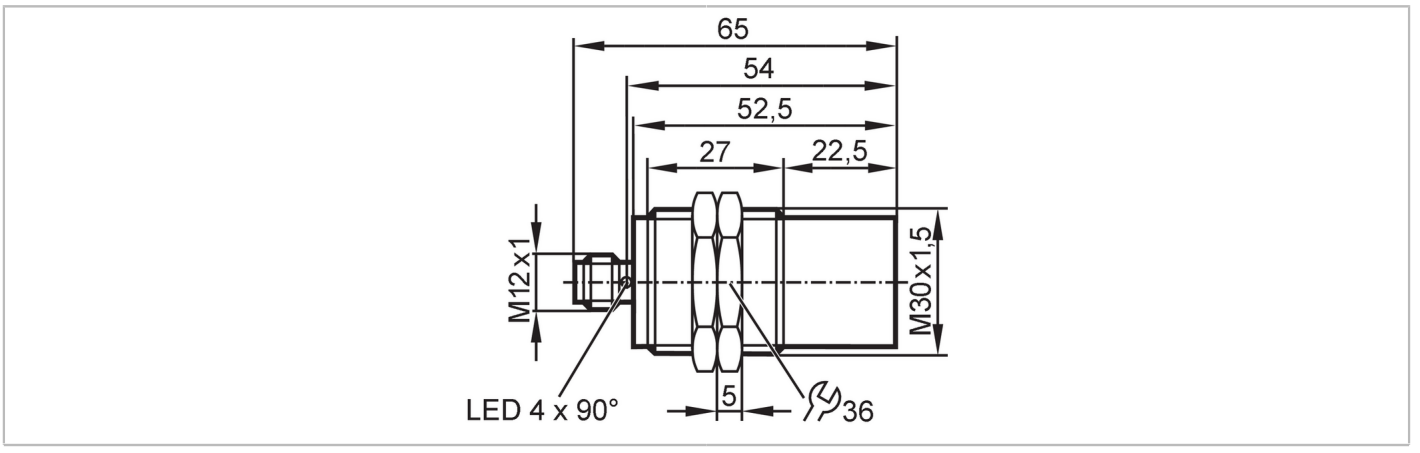
# IIT231

## Inductive full-metal sensor

IIK3025-BPKG/AM/P/US




EC 1935/2004

| | | | |
|---|---|---|---|
| **Product characteristics** | | | |
| Electrical design | | PNP | |
| Output function | | normally open | |
| Sensing range | [mm] | 25 | |
| Housing | | threaded type | |
| Dimensions | [mm] | M30 x 1.5 / L = 65 | |
| **Application** | | | |
| Special feature | | Gold-plated contacts; Increased sensing range; Full-metal housing | |
| Application | | Use in hygienic areas / regular cleaning processes | |
| Pressure rating | | 100 bar | 10 MPa |
| Note on pressure rating | | sensing face | |
| **Electrical data** | | | |
| Operating voltage | [V] | 10...30 DC | |
| Current consumption | [mA] | < 25 | |
| 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] | 100 | |
| Short-circuit protection | | yes | |
| Overload protection | | yes | |
| **Detection zone** | | | |
| Sensing range | [mm] | 25 | |
| Real sensing range Sr | [mm] | 25 ± 10 % | |
| Operating distance | [mm] | 0...20.3 | |
| Increased sensing range | | yes | |

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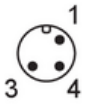
## Inductive full-metal sensor

IIK3025-BPKG/AM/P/US

| | | | |
|---|---|---|---|
| **Accuracy / deviations** | | | |
| Correction factor | | steel: 1 / stainless steel: 1 / brass: 0.9 / aluminium: 0.6 / copper: 0.5 | |
| Hysteresis | [% of Sr] | 1...20 | |
| Switch point drift | [% of Sr] | -10...10 | |
| **Operating conditions** | | | |
| Ambient temperature | [°C] | 0...100 | |
| Protection | | IP 65; 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 emission | class B |
| Impact resistance | | EN 60068-2-75 Ehc | 1 J |
| MTTF | [years] | 1262 | |
| Embedded software included | | yes | |
| UL approval | | Ta | 0...70 °C |
| | | Enclosure type | Type 1 |
| | | voltage supply | Limited Voltage/Current |
| | | UL approval no. | A012 |
| | | File number UL | E174191 |
| **Mechanical data** | | | |
| Weight | [g] | 165.043 | |
| Housing | | threaded type | |
| Mounting | | non-flush mountable | |
| Dimensions | [mm] | M30 x 1.5 / L = 65 | |
| Thread designation | | M30 x 1.5 | |
| Materials | | housing: stainless steel (316L/1.4404); sensing face: stainless steel (316L/1.4404); lock nuts: stainless steel (316L/1.4404) | |
| Tightening torque | [Nm] | 80 | |
| Full-metal housing | | yes | |
| **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: 3, gold-plated

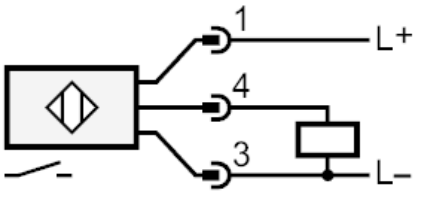


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## Inductive full-metal sensor

**IIK3025-BPKG/AM/P/US**

### Connection




### Diagrams and graphs

