



## Inductive full-metal sensor

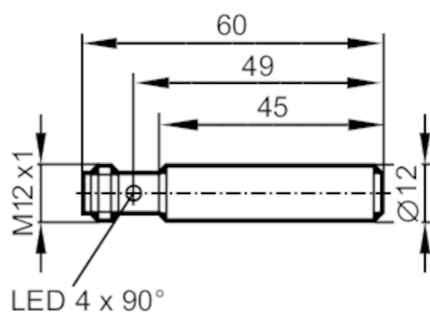
IFG3003BBPKG/AM/US-104

phase-out article

Discontinuation date: 03/31/2026

Alternative articles: IFT240

When selecting an alternative article and accessories please note that technical data may differ!



EC 1935/2004



## Product characteristics

|                    |               |
|--------------------|---------------|
| Electrical design  | PNP           |
| Output function    | normally open |
| Sensing range [mm] | 3             |
| Housing            | cylindrical   |
| Dimensions [mm]    | Ø 12 / L = 60 |

## Application

|                         |                                                                   |
|-------------------------|-------------------------------------------------------------------|
| Special feature         | Gold-plated contacts; Increased sensing range; Full-metal housing |
| Application             | Use in hygienic areas / regular cleaning processes                |
| Pressure rating         | 50 bar 5 MPa                                                      |
| Note on pressure rating | sensing face                                                      |

## 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]                          | 100           |
| Short-circuit protection                             | yes           |
| Type of short-circuit protection                     | pulsed        |
| Overload protection                                  | yes           |



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| Detection zone                |                           |                                                                                                                                                |
|-------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Sensing range                 | [mm]                      | 3                                                                                                                                              |
| Operating distance            | [mm]                      | 0...2.4                                                                                                                                        |
| Increased sensing range       |                           | yes                                                                                                                                            |
| Accuracy / deviations         |                           |                                                                                                                                                |
| Correction factor             |                           | steel: 1 / stainless steel: 0.6 / brass: 0.7 / aluminium: 0.6 / copper: 0.3                                                                    |
| Hysteresis                    | [% of Sr]                 | 1...20                                                                                                                                         |
| Operating conditions          |                           |                                                                                                                                                |
| Ambient temperature           | [°C]                      | 0...100                                                                                                                                        |
| Protection                    |                           | 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             |                           | 1 J                                                                                                                                            |
| MTTF                          | [years]                   | 1104                                                                                                                                           |
| Embedded software included    |                           | no                                                                                                                                             |
| UL approval                   | Ta                        | -25...70 °C                                                                                                                                    |
|                               | Enclosure type            | Type 1                                                                                                                                         |
|                               | power supply              | Limited Voltage/Current                                                                                                                        |
|                               | UL approval no.           | A012                                                                                                                                           |
|                               | File number UL            | E174191                                                                                                                                        |
| Mechanical data               |                           |                                                                                                                                                |
| Weight                        | [g]                       | 19.645                                                                                                                                         |
| Housing                       |                           | cylindrical                                                                                                                                    |
| Mounting                      |                           | flush mountable                                                                                                                                |
| Dimensions                    | [mm]                      | Ø 12 / L = 60                                                                                                                                  |
| Materials                     |                           | housing: stainless steel (316L/1.4404); sensing face: stainless steel (316L/1.4404); LED window: PEI; lock nuts: stainless steel (316L/1.4404) |
| Tightening torque             | [Nm]                      | 15                                                                                                                                             |
| Full-metal housing            |                           | yes                                                                                                                                            |
| Displays / operating elements |                           |                                                                                                                                                |
| Display                       | switching status          | 4 x 90° LED, yellow                                                                                                                            |
| Remarks                       |                           |                                                                                                                                                |
| Pack quantity                 |                           | 1 pcs.                                                                                                                                         |

# IFT243



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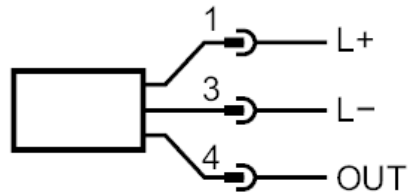
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### Electrical connection - plug

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



### Connection



|   |     |         |
|---|-----|---------|
| 1 | L+  |         |
| 3 | L-  |         |
| 4 | OUT | DO (NO) |

DO: digital output; NO: normally open