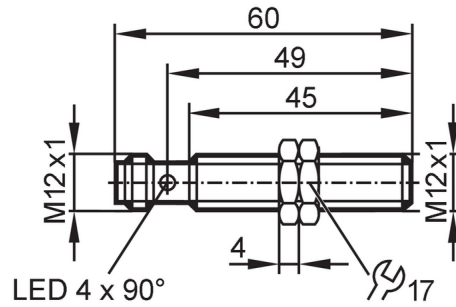




## Inductive full-metal sensor

IFK3003BANKG/AM/V4A/US-104



### Product characteristics

|                    |                  |  |
|--------------------|------------------|--|
| Electrical design  | NPN              |  |
| Output function    | normally open    |  |
| Sensing range [mm] | 3                |  |
| Housing            | Threaded type    |  |
| Dimensions [mm]    | M12 x 1 / L = 60 |  |

### Application

|                         |  |        |
|-------------------------|--|--------|
| Special feature         | gold-plated contacts; Full-metal housing   |        |
| Application             | Industrial applications; Oils and coolants |        |
| Pressure rating         | 100 bar                                    | 10 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                                    | NPN                |  |
| 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                     | yes (non-latching) |  |
| Overload protection                                  | yes                |  |

### Monitoring range

|                         |         |  |
|-------------------------|---------|--|
| Sensing range [mm]      | 3       |  |
| Operating distance [mm] | 0...2.4 |  |

### Accuracy / deviations

|                      |  |  |
|----------------------|--|--|
| Correction factor    | steel: 1 / stainless steel: 0.6 / brass: 0.7 / aluminum: 0.6 / copper: 0.3 |  |
| Hysteresis [% of Sr] | 1...20   |  |

# IFC266



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| Operating conditions                                    |                           |  |
|---|---------------------------|--|
| Ambient temperature                                     | [°C]                      | -25...70   |
| Protection  |                           | IP 67; IP 68; ("Coolant")  |
| 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  |
| MTTF  | [years]                   | 1177   |
| Embedded software included                              |                           | yes  |
| UL approval   | Ta                        | -25...70 °C  |
|   | Enclosure type            | Type 1   |
|   | voltage supply            | Limited Voltage/Current  |
|   | UL approval number        | A012   |
|   | File number UL            | E174191  |
| Mechanical data   |                           |  |
| Weight  | [g]                       | 28.3   |
| Housing   |                           | Threaded type  |
| Mounting  |                           | flush mountable  |
| Dimensions  | [mm]                      | M12 x 1 / L = 60   |
| Thread designation                                      |                           | M12 x 1  |
| Material  |                           | housing: stainless steel (1.4404 / 316L); sensing face: stainless steel (1.4404 / 316L); LED window: PEI; lock nuts: stainless steel (1.4404 / 316L) |
| Tightening torque                                       | [Nm]                      | 15   |
| 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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### Connection

