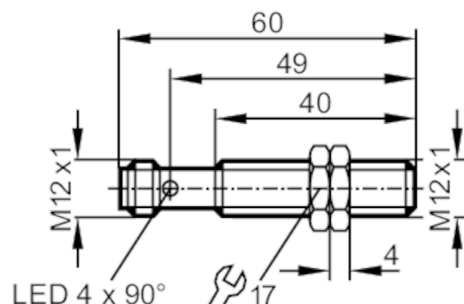




## Inductive full-metal sensor

IFK32,5BAPKG/AM/US-104/K0



## Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | PNP              |
| Output function    | normally closed  |
| Sensing range [mm] | 2.5              |
| Housing            | Threaded type    |
| Dimensions [mm]    | M12 x 1 / L = 60 |

## Application

|                         |                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------|
| System                  | gold-plated contacts; Increased sensing range; Full-metal housing; correction factor = 0 |
| Application             | Oils and coolants                                                                        |
| Media                   | Ferrous only; aluminum chip immune                                                       |
| 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                                    | PNP                |
| Output function                                      | normally closed    |
| 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]      | 2.5      |
| Operating distance [mm] | 0...2.02 |
| Increased sensing range | yes      |

# IFC264



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| Accuracy / deviations                                                                          |                                                                                                                                                |                         |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Correction factor                                                                              | steel: 1 / stainless steel: 0.5                                                                                                                |                         |
| Correction factor = 0                                                                          | yes                                                                                                                                            |                         |
| Operating conditions                                                                           |                                                                                                                                                |                         |
| Ambient temperature                                                                            | [°C]                                                                                                                                           | -25...70                |
| Protection                                                                                     | 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                                                                                                                                       | class B                 |
| Impact resistance                                                                              | 1 J                                                                                                                                            |                         |
| MTTF                                                                                           | [years]                                                                                                                                        | 1114                    |
| Embedded software included                                                                     | no                                                                                                                                             |                         |
| 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                      |
| 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: brass white bronze coated |                         |
| 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: gold-plated                                           |                                                                                                                                                |                         |
| <div></div> |                                                                                                                                                |                         |

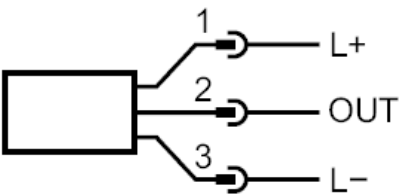
# IFC264



## Inductive full-metal sensor

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### Connection



|   |     |         |
|---|-----|---------|
| 1 | L+  |         |
| 2 | OUT | DO (NC) |
| 3 | L-  |         |

DO: digital output; NC: normally closed