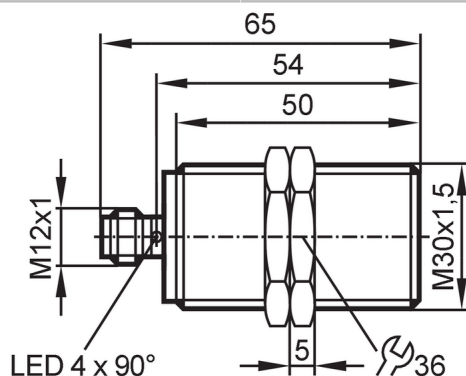




## Inductive full-metal sensor

IIC3010-APKG/AM/US-104



## Product characteristics

|                    |                    |
|--------------------|--------------------|
| Electrical design  | PNP                |
| Output function    | normally closed    |
| Sensing range [mm] | 10                 |
| Housing            | Threaded type      |
| Dimensions [mm]    | M30 x 1.5 / L = 65 |

## 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                                    | 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]                          | 50                 |
| Short-circuit protection                             | yes                |
| Type of short-circuit protection                     | yes (non-latching) |
| Overload protection                                  | yes                |

## Monitoring range

|                         |         |
|-------------------------|---------|
| Sensing range [mm]      | 10      |
| Operating distance [mm] | 0...8.1 |



## Inductive full-metal sensor

IIC3010-APKG/AM/US-104

| Accuracy / deviations                                                               |                                                                                                                                                      |                         |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Correction factor                                                                   | steel: 1 / stainless steel: 0.6 / brass: 0.8 / aluminum: 0.6 / copper: 0.2                                                                           |                         |
| Hysteresis [% of Sr]                                                                | 1...20                                                                                                                                               |                         |
| 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                 |
| 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]                                                                          | 135                                                                                                                                                  |                         |
| Housing                                                                             | Threaded type                                                                                                                                        |                         |
| Mounting                                                                            | flush mountable                                                                                                                                      |                         |
| Dimensions [mm]                                                                     | M30 x 1.5 / L = 65                                                                                                                                   |                         |
| Thread designation                                                                  | M30 x 1.5                                                                                                                                            |                         |
| 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]                                                              | 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                             |                                                                                                                                                      |                         |
|  |                                                                                                                                                      |                         |

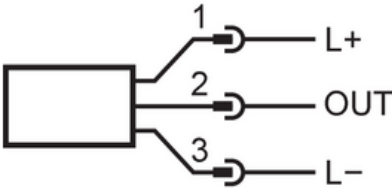
# IIC228



## Inductive full-metal sensor

IHK3010-APKG/AM/US-104

### Connection



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

DO: digital output; NC: normally closed