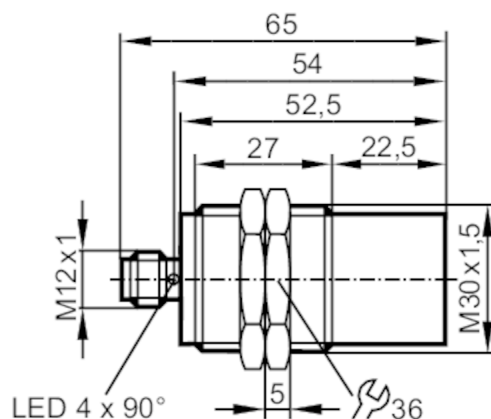




## Inductive full-metal sensor

IHK3025-BPKG/AM/P/US



## 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

|                         |                                                                               |
|-------------------------|-------------------------------------------------------------------------------|
| System                  | gold-plated contacts; Increased sensing range; Full-metal housing             |
| Application             | constant cleaning with aggressive cleaning agents; 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           |

## Monitoring range

|                               |                |
|-------------------------------|----------------|
| Sensing range [mm]            | 25             |
| Real sensing range $S_r$ [mm] | $25 \pm 10 \%$ |
| Operating distance [mm]       | 0...20.3       |



## Inductive full-metal sensor

IIK3025-BPKG/AM/P/US

|                               |                                                                                                                                     |                         |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| Increased sensing range       | yes                                                                                                                                 |                         |
| Accuracy / deviations         |                                                                                                                                     |                         |
| Correction factor             | steel: 1 / stainless steel: 1 / brass: 0.9 / aluminum: 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 number                                                                                                                  | 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                                                                                                                           |                         |
| Material                      | housing: stainless steel (1.4404 / 316L); sensing face: stainless steel (1.4404 / 316L); 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.                                                                                                                              |                         |



## Inductive full-metal sensor

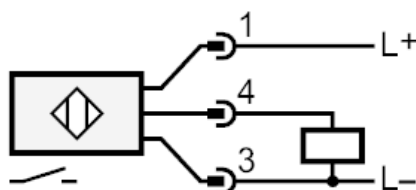
IIK3025-BPKG/AM/P/US

### Electrical connection - plug

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



### Connection



### Diagrams and graphs

