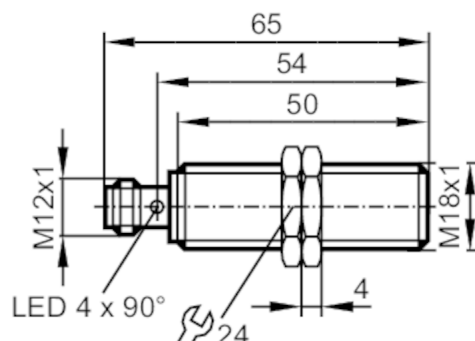


## Inductive sensor

IGK3005-BPKG/K1/V4A/US-104



## Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | PNP              |
| Output function    | normally open    |
| Sensing range [mm] | 5                |
| Housing            | Threaded type    |
| Dimensions [mm]    | M18 x 1 / L = 65 |

## Application

|  |  |
|--|--|
| System                                   | gold-plated contacts; correction factor = 1; Magnetic-field immune |
| Application                              | Oils and coolants  |
| Magnetic-field immune                    | yes  |
| Max. electromagnetic field immunity [mT] | 300  |

## Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...30 DC |
| Current consumption [mA]    | 20         |
| Protection class            | II         |
| 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]                          | 2000          |
| Short-circuit protection                             | yes           |
| Overload protection                                  | yes           |


## Monitoring range

|                               |               |
|-------------------------------|---------------|
| Sensing range [mm]            | 5             |
| Real sensing range $S_r$ [mm] | $5 \pm 10 \%$ |
| Operating distance [mm]       | 0...4.05      |



## Inductive sensor

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| Accuracy / deviations  |           |   |                         |
|--|-----------|---|-------------------------|
| Correction factor  |           | steel: 1 / stainless steel: 1 / brass: 1 / aluminum: 1 / copper: 1  |                         |
| Hysteresis   | [% of Sr] | 3...15  |                         |
| Switch-point drift   | [% of Sr] | -10...10  |                         |
| Correction factor = 1  |           | yes   |                         |
| Operating conditions   |           |   |                         |
| Ambient temperature  |           | [°C]  | -25...70                |
| Protection   |           | IP 68; ("Coolant")  |                         |
| Tests / approvals  |           |   |                         |
| MTTF   |           | [years]   | 657                     |
| Embedded software included   |           | yes   |                         |
| UL approval  |           | Ta  | -25...70 °C             |
|  |           | Enclosure type  | Type 1                  |
|  |           | voltage supply  | Limited Voltage/Current |
|  |           | UL approval number  | A005                    |
|  |           | File number UL  | E174191                 |
| Mechanical data  |           |   |                         |
| Weight   |           | [g]   | 45.5                    |
| Housing  |           | Threaded type   |                         |
| Mounting   |           | flush mountable   |                         |
| Dimensions   |           | [mm]  | M18 x 1 / L = 65        |
| Thread designation   |           | M18 x 1   |                         |
| Material   |           | housing: stainless steel (1.4404 / 316L); sensing face: LCP white;<br>LED window: PEI white; lock nuts: brass white bronze coated |                         |
| 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> |           |   |                         |



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### Connection

