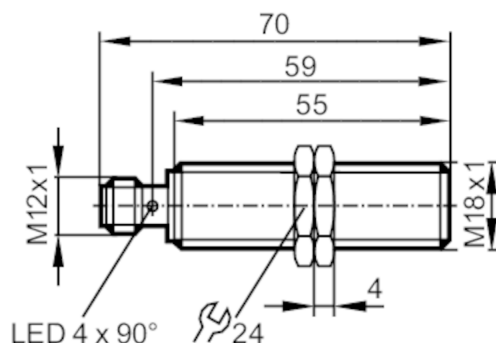


## Inductive sensor

IGK2008BFRKG/2LED/US-104



### Product characteristics

|                    |                                               |
|--------------------|-----------------------------------------------|
| Electrical design  | PNP/NPN                                       |
| Output function    | normally open / normally closed; (selectable) |
| Sensing range [mm] | 8                                             |
| Housing            | threaded type                                 |
| Dimensions [mm]    | M18 x 1 / L = 70                              |

### Application

|                 |                                                                    |
|-----------------|--------------------------------------------------------------------|
| Special feature | Gold-plated contacts; Increased sensing range; Optical setting aid |
| Application     | Use in machine tools, coolants and lubricants                      |

### Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...30 DC |
| Protection class            | II         |
| Reverse polarity protection | yes        |

### Outputs

|                                                      |                                               |
|------------------------------------------------------|-----------------------------------------------|
| Electrical design                                    | PNP/NPN                                       |
| Output function                                      | normally open / normally closed; (selectable) |
| Max. voltage drop switching output DC [V]            | 4.6                                           |
| Minimum load current [mA]                            | 4                                             |
| Max. leakage current [mA]                            | 1                                             |
| Permanent current rating of switching output DC [mA] | 100                                           |
| Switching frequency DC [Hz]                          | 400                                           |
| Short-circuit protection                             | yes                                           |
| Type of short-circuit protection                     | pulsed                                        |
| Overload protection                                  | yes                                           |

### Detection zone

|                         |         |
|-------------------------|---------|
| Sensing range [mm]      | 8       |
| Operating distance [mm] | 0...6.5 |
| Increased sensing range | yes     |



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| Accuracy / deviations                                                                          |                                                                                                                       |                     |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------|
| Correction factor                                                                              | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.5 / copper: 0.4                                           |                     |
| Hysteresis                                                                                     | [% of Sr]                                                                                                             | 1...15              |
| 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             |
| MTTF                                                                                           | [years]                                                                                                               | 1424                |
| Mechanical data                                                                                |                                                                                                                       |                     |
| Weight                                                                                         | [g]                                                                                                                   | 54                  |
| Housing                                                                                        | threaded type                                                                                                         |                     |
| Mounting                                                                                       | flush mountable                                                                                                       |                     |
| Dimensions                                                                                     | [mm]                                                                                                                  | M18 x 1 / L = 70    |
| Thread designation                                                                             | M18 x 1                                                                                                               |                     |
| Materials                                                                                      | housing: brass white bronze coated; sensing face: LCP white;<br>LED window: PEI; lock nuts: brass white bronze coated |                     |
| Tightening torque                                                                              | [Nm]                                                                                                                  | 25                  |
| Displays / operating elements                                                                  |                                                                                                                       |                     |
| Display                                                                                        | switching status                                                                                                      | 4 x 90° LED, yellow |
|                                                                                                | setting aid                                                                                                           | 1 x LED, red        |
| Optical setting aid                                                                            | yes                                                                                                                   |                     |
| 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

