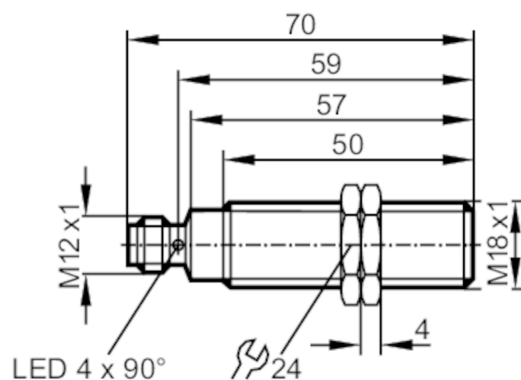


## Inductive full-metal sensor

IGK34,5-BPKG/AM/US-104/K0



### Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | PNP              |
| Output function    | normally open    |
| Sensing range [mm] | 4.5              |
| Housing            | threaded type    |
| Dimensions [mm]    | M18 x 1 / L = 70 |

### Application

|                         |                                                                   |
|-------------------------|-------------------------------------------------------------------|
| Special feature         | Gold-plated contacts; Full-metal housing; Correction factor K = 0 |
| Application             | Use in machine tools, coolants and lubricants                     |
| Media                   | ferrous only; aluminium chip immune                               |
| Pressure rating [bar]   | 100                                                               |
| Pressure rating [MPa]   | 10                                                                |
| 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 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           |
| Type of short-circuit protection                     | pulsed        |
| Overload protection                                  | yes           |



## Inductive full-metal sensor

IGK34,5-BPKG/AM/US-104/K0

| Detection zone                |                           |                                                                                                                                                |
|-------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Sensing range                 | [mm]                      | 4.5                                                                                                                                            |
| Operating distance            | [mm]                      | 0...3.64                                                                                                                                       |
| Accuracy / deviations         |                           |                                                                                                                                                |
| Correction factor             |                           | steel: 1 / stainless steel: 0.5                                                                                                                |
| Hysteresis                    | [% of Sr]                 | 1...20                                                                                                                                         |
| Correction factor K = 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             | EN 60068-2-27 Ehc         | 1 J                                                                                                                                            |
| MTTF                          | [years]                   | 1258                                                                                                                                           |
| Embedded software included    |                           | yes                                                                                                                                            |
| UL approval                   | Ta                        | 25...70 °C                                                                                                                                     |
|                               | Enclosure type            | Type 1                                                                                                                                         |
|                               | power supply              | Limited Voltage/Current                                                                                                                        |
|                               | UL Approval no.           | A012                                                                                                                                           |
|                               | File number UL            | E174191                                                                                                                                        |
| Mechanical data               |                           |                                                                                                                                                |
| Weight                        | [g]                       | 55.3                                                                                                                                           |
| Housing                       |                           | threaded type                                                                                                                                  |
| Mounting                      |                           | flush mountable                                                                                                                                |
| Dimensions                    | [mm]                      | M18 x 1 / L = 70                                                                                                                               |
| Thread designation            |                           | M18 x 1                                                                                                                                        |
| Materials                     |                           | housing: stainless steel (316L/1.4404); sensing face: stainless steel (316L/1.4404); LED window: PEI; lock nuts: stainless steel (316L/1.4404) |
| Tightening torque             | [Nm]                      | 50                                                                                                                                             |
| 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.                                                                                                                                         |

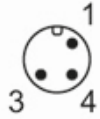
# IGC249



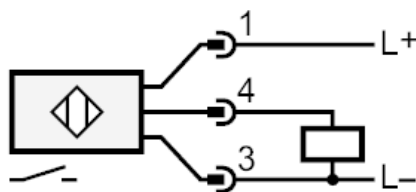
## Inductive full-metal sensor

IGK34,5-BPKG/AM/US-104/K0

### Electrical connection



### Connection



### Electrical connection - plug

Connector: 1 x M12; Contacts: gold-plated