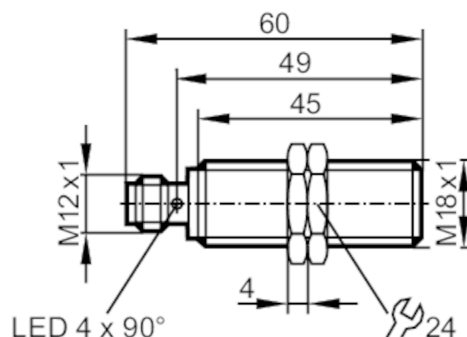




## Inductive sensor

IGK3008BANKG/US-104



### Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | NPN              |
| Output function    | normally open    |
| Sensing range [mm] | 8                |
| Housing            | Threaded type    |
| Dimensions [mm]    | M18 x 1 / L = 60 |

### Application

|             |                                                                                                |
|-------------|------------------------------------------------------------------------------------------------|
| System      | gold-plated contacts; Increased sensing range                                                  |
| Application | Suitable for industrial, mobile, cooling and lubricating applications; Industrial applications |

### Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...30 DC |
| Current consumption [mA]    | < 10       |
| Protection class            | III        |
| Reverse polarity protection | yes        |

### Outputs

|                                                      |               |
|------------------------------------------------------|---------------|
| Electrical design                                    | NPN           |
| 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]                          | 400           |
| Short-circuit protection                             | yes           |
| Overload protection                                  | yes           |

### Monitoring range

|                            |          |
|----------------------------|----------|
| Sensing range [mm]         | 8        |
| Real sensing range Sr [mm] | 8 ± 10 % |
| Operating distance [mm]    | 0...6.48 |
| Increased sensing range    | yes      |



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| Accuracy / deviations                                |                                                                                                            |                                                                                    |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Correction factor                                    | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3                                 |                                                                                    |
| Hysteresis                                           | [% of Sr]                                                                                                  | 3...15                                                                             |
| Switch-point drift                                   | [% of Sr]                                                                                                  | -10...10                                                                           |
| Operating conditions                                 |                                                                                                            |                                                                                    |
| Ambient temperature                                  | [°C]                                                                                                       | -40...85                                                                           |
| Protection                                           | IP 65; IP 66; 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                                                                                                   | class B                                                                            |
| Vibration resistance                                 | EN 60068-2-6 Fc                                                                                            | 20 g (10...3000 Hz) / 50 sweep cycles per frequency; 1 octave per minute in 3 axes |
| Shock resistance                                     | EN 60068-2-27 Ea                                                                                           | 100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes   |
| Continuous shock resistance                          | EN 60068-2-27                                                                                              | 40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes            |
| Fast temperature changes                             | EN 60068-2-14 Na                                                                                           | TA = -40 °C; TB = 85 °C; t1 = 30 min; t2 = < 10 s; 50 cycles                       |
| Salt spray test                                      | EN 60068-2-52 Kb                                                                                           | severity level 5 (4 test cycles)                                                   |
| Embedded software included                           | yes                                                                                                        |                                                                                    |
| UL approval                                          | Ta                                                                                                         | -25...70 °C                                                                        |
|                                                      | Enclosure type                                                                                             | Type 1                                                                             |
|                                                      | voltage supply                                                                                             | Limited Voltage/Current                                                            |
|                                                      | UL approval number                                                                                         | A001                                                                               |
|                                                      | File number UL                                                                                             | E174191                                                                            |
| Mechanical data                                      |                                                                                                            |                                                                                    |
| Weight                                               | [g]                                                                                                        | 48.3                                                                               |
| Housing                                              | Threaded type                                                                                              |                                                                                    |
| Mounting                                             | flush mountable                                                                                            |                                                                                    |
| Dimensions                                           | [mm]                                                                                                       | M18 x 1 / L = 60                                                                   |
| Thread designation                                   | M18 x 1                                                                                                    |                                                                                    |
| Material                                             | brass white bronze coated; sensing face: PBT orange; LED window: PEI; lock nuts: brass white bronze coated |                                                                                    |
| Displays / operating elements                        |                                                                                                            |                                                                                    |
| Display                                              | Switching status                                                                                           | 4 x 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 |                                                                                                            |                                                                                    |

# IGS234

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### Connection

