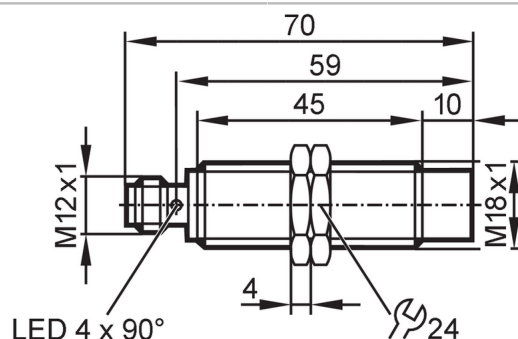




## Inductive sensor

IGKC012-ASKG/V4A/US-104



## Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | PNP/NPN          |
| Output function    | normally open    |
| Sensing range [mm] | 12               |
| Housing            | Threaded type    |
| Dimensions [mm]    | M18 x 1 / L = 70 |

## Application

|                 |                                               |
|-----------------|-----------------------------------------------|
| Special feature | gold-plated contacts; Increased sensing range |
| Application     | Use in mobile and harsh applications          |

## Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...36 DC |
| Current consumption [mA]    | < 10       |
| Protection class            | II         |
| Reverse polarity protection | yes        |

## Outputs

|                                                      |                                 |
|------------------------------------------------------|---------------------------------|
| Electrical design                                    | PNP/NPN                         |
| Output function                                      | normally open                   |
| Max. voltage drop switching output DC [V]            | 2.5                             |
| Minimum load current [mA]                            | 2; (only in 2-wire operation)   |
| Max. leakage current [mA]                            | 0.5; (only in 2-wire operation) |
| Permanent current rating of switching output DC [mA] | 100                             |
| Switching frequency DC [Hz]                          | 200                             |
| Short-circuit protection                             | yes                             |
| Type of short-circuit protection                     | yes (non-latching)              |
| Overload protection                                  | yes                             |

## Monitoring range

|                               |                |
|-------------------------------|----------------|
| Sensing range [mm]            | 12             |
| Real sensing range $S_r$ [mm] | $12 \pm 10 \%$ |
| Operating distance [mm]       | 0...9.72       |
| 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]                                                                                                                | 1...20                           |
| Switch-point drift                                                                  | [% of Sr]                                                                                                                | -10...10                         |
| Operating conditions                                                                |                                                                                                                          |                                  |
| Ambient temperature                                                                 | [°C]                                                                                                                     | -40...85                         |
| Protection                                                                          | IP 67; 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 61000-4-5 Surge                                                                                                       | 0,5 kV mains line to line        |
|                                                                                     | EN 61000-4-6 HF conducted                                                                                                | 10 V                             |
|                                                                                     | EN 55011                                                                                                                 | class B                          |
| Salt spray test                                                                     | EN 60068-2-52 Kb                                                                                                         | severity level 5 (4 test cycles) |
| MTTF                                                                                | [years]                                                                                                                  | 1253                             |
| UL approval                                                                         | Ta                                                                                                                       | -25...70 °C                      |
|                                                                                     | Enclosure type                                                                                                           | Type 1                           |
|                                                                                     | voltage supply                                                                                                           | Limited Voltage/Current          |
|                                                                                     | UL approval number                                                                                                       | A052                             |
|                                                                                     | File number UL                                                                                                           | E174191                          |
| Mechanical data                                                                     |                                                                                                                          |                                  |
| Weight                                                                              | [g]                                                                                                                      | 54.6                             |
| Housing                                                                             | Threaded type                                                                                                            |                                  |
| Mounting                                                                            | non-flush mountable                                                                                                      |                                  |
| Dimensions                                                                          | [mm]                                                                                                                     | M18 x 1 / L = 70                 |
| Thread designation                                                                  | M18 x 1                                                                                                                  |                                  |
| Material                                                                            | housing: stainless steel (1.4404 / 316L); sensing face: LCP white; LED window: PEI; lock nuts: brass white bronze coated |                                  |
| Tightening torque                                                                   | [Nm]                                                                                                                     | 50                               |
| 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: 3, gold-plated                             |                                                                                                                          |                                  |
|  |                                                                                                                          |                                  |



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### Connection

