



## Inductive sensor

IGKC012-ASKG/M/V4A/US-104-DRS



### 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

|             |                                                                    |
|-------------|--------------------------------------------------------------------|
| System      | gold-plated contacts; Increased sensing range; optical setting aid |
| Application | regular cleaning processes                                         |

### Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...30 DC |
| Current consumption [mA]    | 12; (24 V) |
| Protection class            | II         |
| Reverse polarity protection | yes        |

### Outputs

|                                                      |                                 |
|------------------------------------------------------|---------------------------------|
| Electrical design                                    | PNP/NPN                         |
| Output function                                      | normally open                   |
| Max. voltage drop switching output DC [V]            | 2.8                             |
| 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]                          | 300                             |
| Short-circuit protection                             | yes                             |
| Type of short-circuit protection                     | yes (non-latching)              |
| Overload protection                                  | yes                             |

### Monitoring range

|                    |    |
|--------------------|----|
| Sensing range [mm] | 12 |
|--------------------|----|



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|                         |      |           |
|-------------------------|------|-----------|
| Real sensing range Sr   | [mm] | 12 ± 10 % |
| Operating distance      | [mm] | 0...9.7   |
| Increased sensing range |      | yes       |

### 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] | 0...100       |
| Protection          |      | 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                 |
| MTTF        | [years]                   | 1359                    |
| UL approval | Ta                        | 0...40 °C               |
|             | Enclosure type            | Type 1                  |
|             | voltage supply            | Limited Voltage/Current |
|             | File number UL            | E174191                 |

### Mechanical data

|                    |      |                                                     |
|--------------------|------|-----------------------------------------------------|
| Weight             | [g]  | 52.7                                                |
| Housing            |      | Threaded type                                       |
| Mounting           |      | non-flush mountable                                 |
| Dimensions         | [mm] | M18 x 1 / L = 70                                    |
| Thread designation |      | M18 x 1                                             |
| Material           |      | stainless steel (1.4404 / 316L); sensing face: PEEK |

### 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

|               |  |                                                  |
|---------------|--|--------------------------------------------------|
| Remarks       |  | suitable for PLC type 1 according to IEC 61131-2 |
| Pack quantity |  | 1 pcs.                                           |

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### Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: gold-plated

