



Inductive sensor

IGKC012-ASKG/M/US-104-DRS/2LED



| 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; Optical setting aid |
| Application                                     |      | Industrial applications / factory automation                       |
| 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] | 0.6; (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                |      | pulsed                                                             |
| Overload protection                             |      | yes                                                                |
| Detection zone                                  |      |                                                                    |
| Sensing range                                   | [mm] | 12                                                                 |
| Real sensing range Sr                           | [mm] | 12 ± 10 %                                                          |
| Operating distance                              | [mm] | 0...9.7                                                            |



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|                               |                                                                                                                        |                     |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------------|
| Increased sensing range       | yes                                                                                                                    |                     |
| Accuracy / deviations         |                                                                                                                        |                     |
| Correction factor             | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.5 / copper: 0.4                                            |                     |
| Hysteresis [% of Sr]          | 3...15                                                                                                                 |                     |
| Switch point drift [% of Sr]  | -10...10                                                                                                               |                     |
| Operating conditions          |                                                                                                                        |                     |
| Ambient temperature [°C]      | -25...70                                                                                                               |                     |
| Protection                    | IP 67                                                                                                                  |                     |
| 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]                  | 1548                                                                                                                   |                     |
| UL approval                   | Ta                                                                                                                     | 0...40 °C           |
|                               | Enclosure type                                                                                                         | Type 1              |
|                               | power supply                                                                                                           | Unlimited Voltage   |
|                               | UL Approval no.                                                                                                        | A040                |
|                               | File number UL                                                                                                         | E174191             |
| Mechanical data               |                                                                                                                        |                     |
| Housing                       | threaded type                                                                                                          |                     |
| Mounting                      | non-flush mountable                                                                                                    |                     |
| Dimensions [mm]               | M18 x 1 / L = 70                                                                                                       |                     |
| Thread designation            | M18 x 1                                                                                                                |                     |
| Materials                     | housing: brass white bronze coated; sensing face: PBT orange;<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                       |                                                                                                                        |                     |
| 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



### Connection

