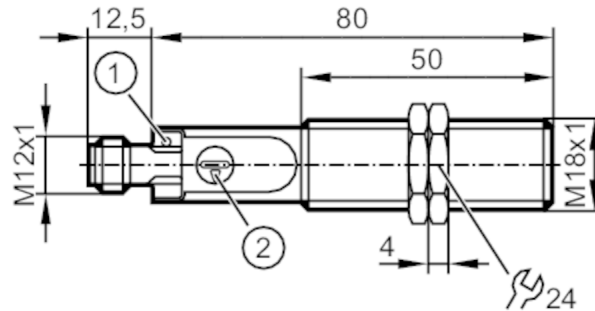


# KG5306



## Capacitive sensor

KG-3150NANKG/SL/1P/US/IO



- 1 LED yellow switching status  
2 potentiometer Sensing range



### Product characteristics

|                         |                    |
|-------------------------|--------------------|
| Electrical design       | NPN                |
| Output function         | normally open      |
| Sensing range [mm]      | 0.5...30           |
| Communication interface | IO-Link            |
| Housing                 | threaded type      |
| Dimensions [mm]         | M18 x 1 / L = 92.5 |

### Application

|                         |           |
|-------------------------|-----------|
| Medium temperature [°C] | -25...110 |
|-------------------------|-----------|

### Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...30 DC |
| Current consumption [mA]    | < 22       |
| 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] | 200           |
| Switching frequency DC [Hz]                          | 30            |
| Short-circuit proof                                  | yes           |
| Overload protection                                  | yes           |

### Detection zone

|                                    |           |
|------------------------------------|-----------|
| Sensing range [mm]                 | 0.5...30  |
| Sensing range adjustable           | yes       |
| Factory setting sensing range [mm] | 15        |
| Real sensing range Sr [mm]         | 15 ± 10 % |

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| Accuracy / deviations         |  |   |
|-------------------------------|--|---|
| Hysteresis                    | [% of Sr]  | 1...15  |
| Switch point drift            | [% of Sr]  | -15...15  |
| Interfaces                    |  |   |
| Communication interface       | IO-Link  |   |
| Transmission type             | COM2 (38,4 kBaud)  |   |
| IO-Link revision              | 1.1  |   |
| SDCI standard                 | IEC 61131-9  |   |
| Profiles                      | Smart Sensor: Process Data Variable; Device Identification   |   |
| SIO mode                      | yes  |   |
| Required master port type     | A  |   |
| Min. process cycle time       | [ms]   | 20  |
| IO-Link functions (acyclical) | application specific tag; operating hours counter; Schließer / Öffner (parametrierbar); PNP / NPN (parametrierbar); Switch point setting; Hysteresis |   |
| Operating conditions          |  |   |
| Ambient temperature           | [°C]   | -25...80  |
| Protection                    | IP 65; IP 67; IP 69K   |   |
| Tests / approvals             |  |   |
| EMC                           | EN 61000-4-2   | 8 kV AD / 4 kV CD   |
|                               | EN 61000-4-3   | 10 V/m  |
|                               | EN 61000-4-4   | 2 kV  |
|                               | EN 61000-4-6   | 10 V  |
|                               | EN 55011   | class B   |
| Vibration resistance          | DIN EN 60947-5-2   | 1 mm amplitude, oscillation period 5 min., 30 min. per axis at resonance or 55 Hz |
| Shock resistance              | DIN EN 60947-5-2   | 30 g 6 shocks / 11 ms half-sine (x, y, z)   |
| MTTF                          | [years]  | 1204  |
| UL approval                   | UL Approval no.  | D003  |
| Mechanical data               |  |   |
| Weight                        | [g]  | 26.4  |
| Housing                       | threaded type  |   |
| Mounting                      | non-flush mountable  |   |
| Dimensions                    | [mm]   | M18 x 1 / L = 92.5  |
| Thread designation            | M18 x 1  |   |
| Materials                     | PBT; PC; POM   |   |
| Tightening torque             | [Nm]   | 8   |
| Displays / operating elements |  |   |
| Display                       | switching status   | 1 x LED, yellow   |
| Accessories                   |  |   |
| Accessories (supplied)        | lock nuts: 2   |   |
| Remarks                       |  |   |
| Pack quantity                 | 1 pcs.   |   |
| Electrical connection - plug  |  |   |
| Connector: 1 x M12            |  |   |

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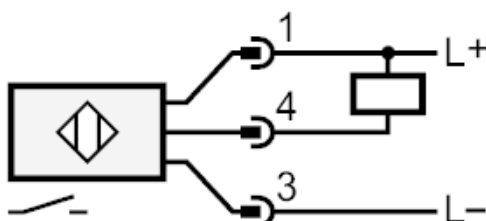


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### Connection



4: OUT / IO-Link