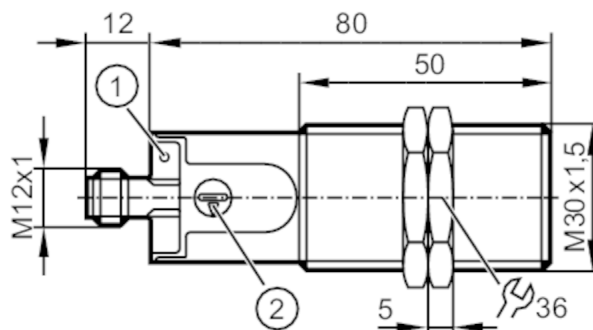


# KI5310



## Capacitive sensor

KI-3150QAPKG/SL/1P/US/IO



- 1 LED yellow switching status
- 2 potentiometer Sensing range



### 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                               |      | PNP             |
| Output function                                 |      | normally closed |
| Max. voltage drop switching output DC           | [V]  | 2.5             |
| Permanent current rating of switching output DC | [mA] | 200             |
| Switching frequency DC                          | [Hz] | 40              |
| Short-circuit protection                        |      | yes             |
| Overload protection                             |      | yes             |

### Detection zone

|                               |      |           |
|-------------------------------|------|-----------|
| Sensing range                 | [mm] | 0.5...24  |
| Sensing range adjustable      |      | yes       |
| Factory setting sensing range | [mm] | 15        |
| Real sensing range Sr         | [mm] | 15 ± 10 % |

### Accuracy / deviations

|                    |           |          |
|--------------------|-----------|----------|
| Hysteresis         | [% of Sr] | 1...15   |
| Switch point drift | [% of Sr] | -15...15 |

# KI5310



## Capacitive sensor

KI-3150QAPKG/SL/1P/US/IO

| 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                                                                                   |
| Operating conditions          |                                                            |                                                                                      |
| Ambient temperature           | [°C]                                                       | -25...80                                                                             |
| Protection                    | IP 65; IP 67; IP 69K                                       |                                                                                      |
| Tests / approvals             |                                                            |                                                                                      |
| EMC                           | EN 61000-4-2                                               | 30 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.,<br>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]                                                    | 903.84                                                                               |
| UL approval                   | UL Approval no.                                            | D001                                                                                 |
| Mechanical data               |                                                            |                                                                                      |
| Weight                        | [g]                                                        | 52.9                                                                                 |
| Housing                       | threaded type                                              |                                                                                      |
| Mounting                      | quasi flush                                                |                                                                                      |
| Dimensions                    | [mm]                                                       | M30 x 1.5 / L = 92                                                                   |
| Thread designation            | M30 x 1.5                                                  |                                                                                      |
| 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            |                                                            |                                                                                      |

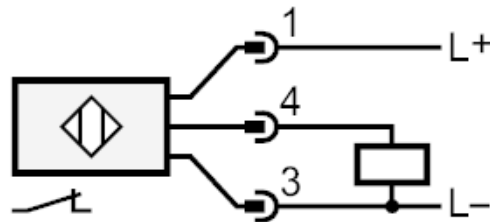
# KI5310

## Capacitive sensor

KI-3150QAPKG/SL/1P/US/IO



### Connection



4: OUT / IO-Link