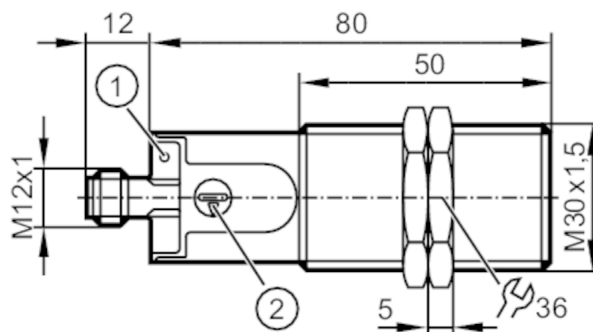




## Capacitive sensor

KI-3250NBPKG/SL/1P/US/IO



- 1 LED yellow Switching status  
2 potentiometer Sensing range



## Product characteristics

|                         |                    |
|-------------------------|--------------------|
| Electrical design       | PNP                |
| Output function         | normally open      |
| Sensing range [mm]      | 0.5...40           |
| Communication interface | IO-Link            |
| Housing                 | Threaded type      |
| Dimensions [mm]         | M30 x 1.5 / L = 92 |

## 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 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 protection                             | yes           |
| Overload protection                                  | yes           |

## Monitoring range

|                                    |           |
|------------------------------------|-----------|
| Sensing range [mm]                 | 0.5...40  |
| Sensing range adjustable           | yes       |
| Factory setting sensing range [mm] | 25        |
| Real sensing range Sr [mm]         | 25 ± 10 % |

## Accuracy / deviations

|                      |        |
|----------------------|--------|
| Hysteresis [% of Sr] | 1...15 |
|----------------------|--------|

# KI5309



## Capacitive sensor

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|                    |           |          |
|--------------------|-----------|----------|
| 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 class    | A                                                                                                                                                               |
| Min. process cycle time       | [ms] 20                                                                                                                                                         |
| IO-Link functions (acyclical) | application specific tag; operating hours counter; normally open / normally closed (configurable); 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       | 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, vibration duration 5 min., 30 min. per axis with resonance or 55 Hz |
| Shock resistance     | DIN EN 60947-5-2   | 30 g 6 shocks / 11 ms half-sine (x, y, z)                                           |
| MTTF                 | [years]            | 896.74                                                                              |
| UL approval          | Ta                 | -25...60 °C                                                                         |
|                      | Enclosure type     | Type 1                                                                              |
|                      | voltage supply     | Limited Voltage/Current                                                             |
|                      | UL approval number | D001                                                                                |
|                      | File number UL     | E174191                                                                             |

### Mechanical data

|                    |                         |
|--------------------|-------------------------|
| Weight             | [g] 50.8                |
| Housing            | Threaded type           |
| Mounting           | non-flush mountable     |
| Dimensions         | [mm] M30 x 1.5 / L = 92 |
| Thread designation | M30 x 1.5               |
| Material           | PBT; PC; POM            |
| Tightening torque  | [Nm] 8                  |

### Displays / operating elements

|         |                  |                 |
|---------|------------------|-----------------|
| Display | Switching status | 1 x LED, yellow |
|---------|------------------|-----------------|

### Accessories

|                |              |
|----------------|--------------|
| Items supplied | lock nuts: 2 |
|----------------|--------------|

### Remarks

|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

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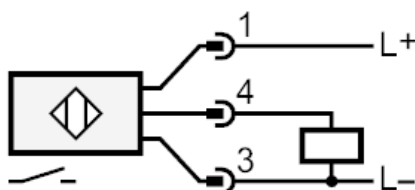
KI-3250NBPKG/SL/1P/US/IO

### Electrical connection - plug

Connector: 1 x M12; coding: A



### Connection



4: OUT / IO-Link