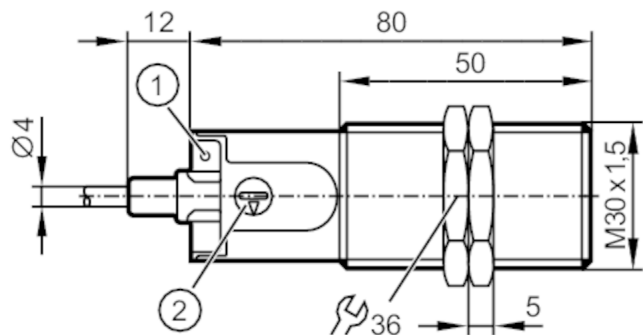




Capacitive sensor

KI-3250NBPKG/SL/1P/IO/5M/PUR



- 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 proof                             |           | yes                |
| Overload protection                             |           | yes                |
| Detection zone                                  |           |                    |
| 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             |



## Capacitive sensor

KI-3250NBPKG/SL/1P/IO/5M/PUR

|                               |                                                                                                                                                                 |                                                                                   |  |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--|
| 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; 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, 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]                                                                                                                                                         | 896.74                                                                            |  |
| UL approval                   | Ta                                                                                                                                                              | -25...60 °C                                                                       |  |
|                               | Enclosure type                                                                                                                                                  | Type 1                                                                            |  |
|                               | power supply                                                                                                                                                    | Limited Voltage/Current                                                           |  |
|                               | UL Approval no.                                                                                                                                                 | D002                                                                              |  |
|                               | File number UL                                                                                                                                                  | E174191                                                                           |  |
| Mechanical data               |                                                                                                                                                                 |                                                                                   |  |
| Weight                        | [g]                                                                                                                                                             | 164                                                                               |  |
| Housing                       | threaded type                                                                                                                                                   |                                                                                   |  |
| Mounting                      | non-flush mountable                                                                                                                                             |                                                                                   |  |
| Dimensions                    | [mm]                                                                                                                                                            | M30 x 1.5 / L = 92                                                                |  |
| Thread designation            | M30 x 1.5                                                                                                                                                       |                                                                                   |  |
| Materials                     | PBT; PC; POM                                                                                                                                                    |                                                                                   |  |
| Displays / operating elements |                                                                                                                                                                 |                                                                                   |  |
| Display                       | switching status                                                                                                                                                | 1 x LED, yellow                                                                   |  |
| Accessories                   |                                                                                                                                                                 |                                                                                   |  |
| Items supplied                | lock nuts: 2                                                                                                                                                    |                                                                                   |  |
| Remarks                       |                                                                                                                                                                 |                                                                                   |  |
| Pack quantity                 | 1 pcs.                                                                                                                                                          |                                                                                   |  |

# KI5324



## Capacitive sensor

KI-3250NBPKG/SL/1P/IO/5M/PUR

### Electrical connection

Cable: 5 m, PUR, Ø 4 mm; 3 x 0.34 mm<sup>2</sup>

### Connection



BK: OUT / IO-Link  
Core colours :  
BN = brown  
BU = blue  
BK = black