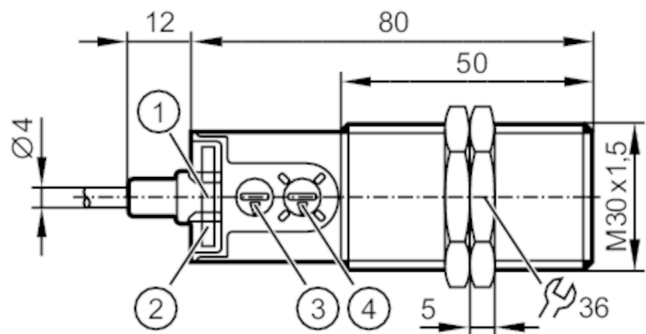




Capacitive sensor

KI-3250NFNKG/PL/2P/IO/5M/PUR



- 1 LED yellow switching status
- 2 LED green signal
- 3 potentiometer Sensing range
- 4 potentiometer Switching function



| Product characteristics                              |                                               |
|------------------------------------------------------|-----------------------------------------------|
| Electrical design                                    | NPN                                           |
| Output function                                      | normally open / normally closed; (selectable) |
| Sensing range [mm]                                   | 0.5...40                                      |
| Communication interface                              | IO-Link                                       |
| Housing                                              | threaded type                                 |
| Dimensions [mm]                                      | M30 x 1.5 / L = 92                            |
| Application                                          |                                               |
| Special feature                                      | Optical setting aid                           |
| 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 / normally closed; (selectable) |
| 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 %                                     |



## Capacitive sensor

KI-3250NFKG/PL/2P/IO/5M/PUR

| Accuracy / deviations         |                                                                                                                                                                 |                                                                                   |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Hysteresis                    | [% of Sr]                                                                                                                                                       | 1...15                                                                            |
| Switch point drift            | [% of Sr]                                                                                                                                                       | -10...10                                                                          |
| 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                                                                                                      |                                                                                   |
| Required master port type     | A                                                                                                                                                               |                                                                                   |
| 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]                                                                                                                                                         | 828                                                                               |
| 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]                                                                                                                                                             | 165                                                                               |
| 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                                                                   |
|                               | operation                                                                                                                                                       | 1 x LED, green                                                                    |
|                               | setting aid                                                                                                                                                     | 12 x LED, green                                                                   |
| Optical setting aid           | yes                                                                                                                                                             |                                                                                   |
| Accessories                   |                                                                                                                                                                 |                                                                                   |
| Items supplied                | lock nuts: 2                                                                                                                                                    |                                                                                   |

# KI6004



## Capacitive sensor

KI-3250NFNKG/PL/2P/IO/5M/PUR

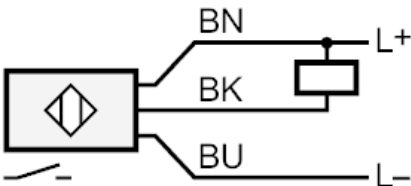
### Remarks

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

### Electrical connection

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

### Connection



|    |              |
|----|--------------|
| BN | Core colours |
| BK | brown        |
| BU | black        |
|    | blue         |