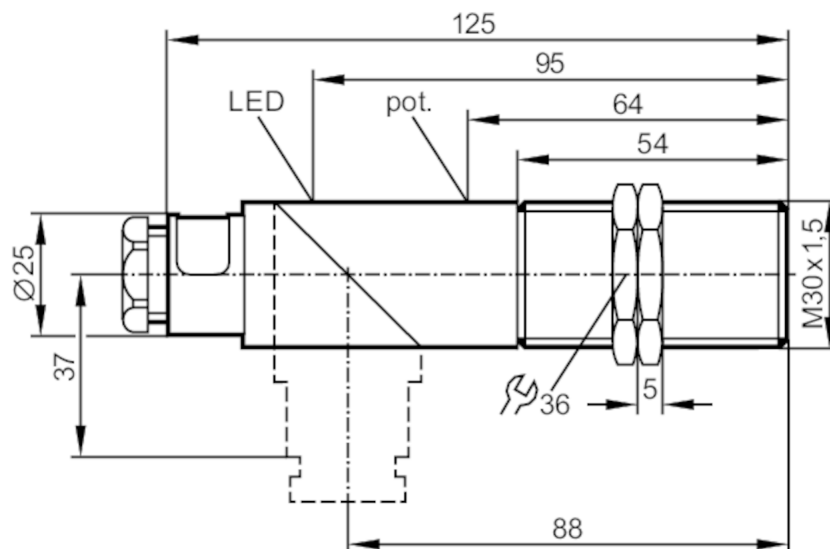




## Capacitive sensor

KIE2015-FBOA/NI

RT



## Product characteristics

|                 |      |                                      |
|-----------------|------|--------------------------------------|
| Output function |      | normally open / closed; (selectable) |
| Sensing range   | [mm] | 3...15                               |
| Housing         |      | Threaded type                        |
| Dimensions      | [mm] | M30 x 1.5 / L = 125                  |

## Electrical data

|                             |     |                |
|-----------------------------|-----|----------------|
| Operating voltage           | [V] | 20...250 AC/DC |
| Protection class            |     | II             |
| Reverse polarity protection |     | no             |

## Outputs

|                                                 |      |                                                 |
|-------------------------------------------------|------|-------------------------------------------------|
| Output function                                 |      | normally open / closed; (selectable)            |
| Max. voltage drop switching output DC           | [V]  | 8                                               |
| Max. voltage drop switching output AC           | [V]  | 10                                              |
| Minimum load current                            | [mA] | 5                                               |
| Max. leakage current                            | [mA] | 2.5 (250 V AC) / 1.7 (110 V AC) / 1.5 (24 V DC) |
| Permanent current rating of switching output AC | [mA] | 200; (for UL application: 250 / 100 DC)         |
| Permanent current rating of switching output DC | [mA] | 200; (for UL application: 250 AC / 100 DC)      |
| Short-time current rating of switching output   | [mA] | 1500; (20 ms / 0,5 Hz)                          |
| Switching frequency AC                          | [Hz] | 25                                              |
| Switching frequency DC                          | [Hz] | 40                                              |
| Short-circuit proof                             |      | no                                              |
| Overload protection                             |      | no                                              |



## Capacitive sensor

KIE2015-FBOA/NI

RT

| Monitoring range              |                  |                                                                             |
|-------------------------------|------------------|-----------------------------------------------------------------------------|
| Sensing range                 | [mm]             | 3...15                                                                      |
| Sensing range adjustable      |                  | yes                                                                         |
| Factory setting sensing range | [mm]             | 15                                                                          |
| Real sensing range Sr         | [mm]             | 15 ± 10 %                                                                   |
| Operating distance            | [mm]             | 0...12.1                                                                    |
| Accuracy / deviations         |                  |                                                                             |
| Correction factor             |                  | glass: 0.4 / water: 1 / ceramics: 0.2 / PVC: 0.2                            |
| Hysteresis                    | [% of Sr]        | 1...15                                                                      |
| Switch-point drift            | [% of Sr]        | -15...15                                                                    |
| Operating conditions          |                  |                                                                             |
| Ambient temperature           | [°C]             | -25...70                                                                    |
| Protection                    |                  | IP 65                                                                       |
| Increased immunity            |                  | yes; (Increased immunity to conducted radio frequency interference)         |
| Tests / approvals             |                  |                                                                             |
| EMC                           |                  | EN 60947-5-2                                                                |
| MTTF                          | [years]          | 468                                                                         |
| Mechanical data               |                  |                                                                             |
| Weight                        | [g]              | 136                                                                         |
| Housing                       |                  | Threaded type                                                               |
| Mounting                      |                  | non-flush mountable                                                         |
| Dimensions                    | [mm]             | M30 x 1.5 / L = 125                                                         |
| Thread designation            |                  | M30 x 1.5                                                                   |
| Material                      |                  | PBT; end cap: PC                                                            |
| Displays / operating elements |                  |                                                                             |
| Display                       | Switching status | 1 x LED, red                                                                |
| Electrical connection         |                  |                                                                             |
| Required protection           |                  | miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting                    |
| Accessories                   |                  |                                                                             |
| Items supplied                |                  | lock nuts: 2                                                                |
| Remarks                       |                  |                                                                             |
| Remarks                       |                  | Recommendation: check the unit for reliable function after a short circuit. |
| Pack quantity                 |                  | 1 pcs.                                                                      |

# KI0205



## Capacitive sensor

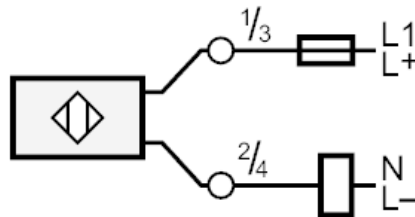
KIE2015-FBOA/NI

RT

### Electrical connection

terminals: ...2.5 mm<sup>2</sup>; Cable sheath: Ø 7...13 mm; Cable gland: M20 X 1.5

### Connection



Note miniature fuse to IEC60127-2 sheet 1  $\leq 2$  A fast acting