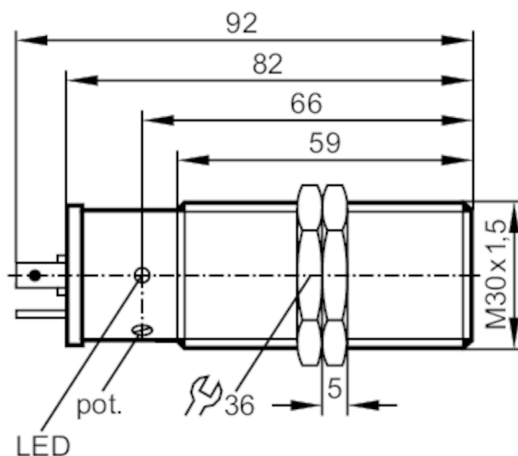


## Capacitive sensor

KI-2015-FBOA/NI/SS-000-K



## Product characteristics

|                 |      |                                               |
|-----------------|------|-----------------------------------------------|
| Output function |      | normally open / normally closed; (selectable) |
| Sensing range   | [mm] | 15                                            |
| Housing         |      | threaded type                                 |
| Dimensions      | [mm] | M30 x 1.5 / L = 92                            |

## Electrical data

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

## Outputs

|                                                 |      |                                                 |
|-------------------------------------------------|------|-------------------------------------------------|
| Output function                                 |      | normally open / normally 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; (250 (...50 °C))                           |
| Permanent current rating of switching output DC | [mA] | 200; (250 (...50 °C))                           |
| 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                                              |

## Detection zone

|                          |      |                |
|--------------------------|------|----------------|
| Sensing range            | [mm] | 15             |
| Real sensing range $S_r$ | [mm] | $15 \pm 10 \%$ |
| Operating distance       | [mm] | 0...12.1       |



## Capacitive sensor

KI-2015-FBOA/NI/SS-000-K

| 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]                                                                          | -20...70                                                            |
| Protection                                               |           |                                                                               | IP 65                                                               |
| Increased immunity                                       |           |                                                                               | yes; (increased immunity to conducted radio frequency interference) |
| Tests / approvals                                        |           |                                                                               |                                                                     |
| EMC                                                      |           | EN 60947-5-2                                                                  |                                                                     |
| MTTF                                                     |           | [years]                                                                       | 293                                                                 |
| Mechanical data                                          |           |                                                                               |                                                                     |
| Weight                                                   |           | [g]                                                                           | 104                                                                 |
| Housing                                                  |           |                                                                               | threaded type                                                       |
| Mounting                                                 |           |                                                                               | non-flush mountable                                                 |
| Dimensions                                               |           | [mm]                                                                          | M30 x 1.5 / L = 92                                                  |
| Thread designation                                       |           |                                                                               | M30 x 1.5                                                           |
| Materials                                                |           |                                                                               | PBT                                                                 |
| Displays / operating elements                            |           |                                                                               |                                                                     |
| Display                                                  |           | switching status                                                              | 1 x LED, yellow                                                     |
| 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 safe functioning of the unit after a short circuit. |                                                                     |
| Pack quantity                                            |           | 1 pcs.                                                                        |                                                                     |
| Electrical connection - plug                             |           |                                                                               |                                                                     |
| Connector: 1 x valve plug type A DIN (DIN EN 175301-803) |           |                                                                               |                                                                     |

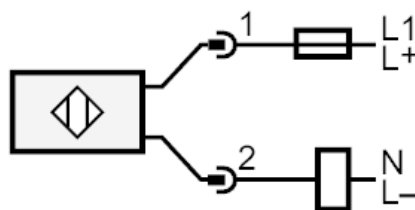




## Capacitive sensor

KI-2015-FBOA/NI/SS-000-K

### Connection



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