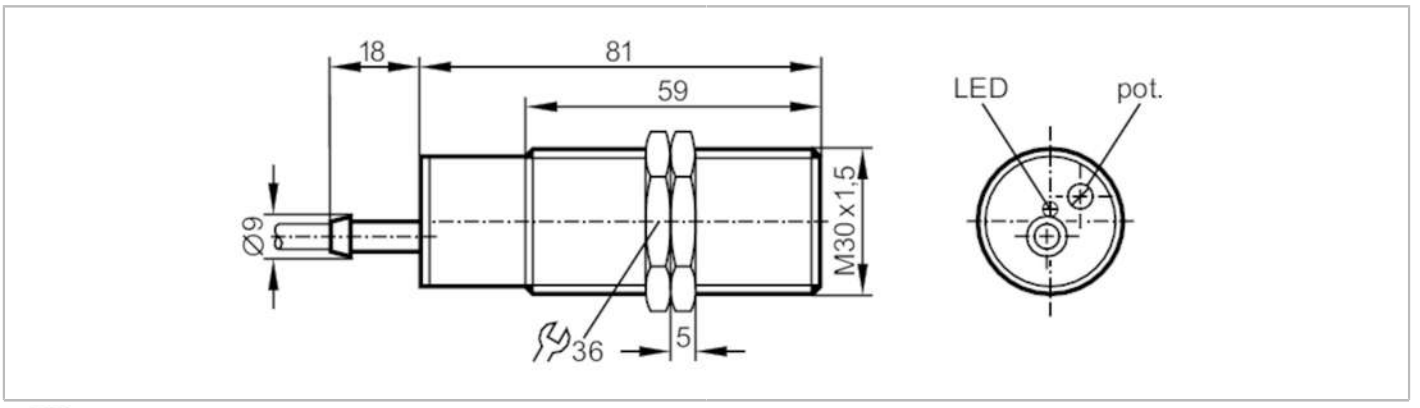
# KI0209

## Capacitive sensor

KI-2150-BBOA/NI




| | | |
|---|---|---|
| **Product characteristics** | | |
| Output function | | normally closed |
| Sensing range | [mm] | 15 |
| Housing | | threaded type |
| Dimensions | [mm] | M30 x 1.5 / L = 81 |
| **Electrical data** | | |
| Operating voltage | [V] | 20...250 AC/DC |
| Protection class | | II |
| Reverse polarity protection | | no |
| Max. power-on delay time | [ms] | 300 |
| **Outputs** | | |
| Output function | | normally closed |
| 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;  (350 (...50 °C)) |
| Permanent current rating of switching output DC | [mA] | 200;  (350 (...50 °C)) |
| Short-time current rating of switching output | [mA] | 2200;  (20 ms / 0,5 Hz) |
| Switching frequency AC | [Hz] | < 2 |
| Switching frequency DC | [Hz] | < 2 |
| Short-circuit proof | | no |
| Overload protection | | no |
| **Detection zone** | | |
| Sensing range | [mm] | 15 |
| Sensing range adjustable | | yes |
| Factory setting sensing range | [mm] | 15 |
| Real sensing range Sr | [mm] | 15 ± 10 % |

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| | | | |
|---|---|---|---|
| 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 | |
| **Mechanical data** | | | |
| Weight | [g] | 195.5 | |
| Housing | | threaded type | |
| Mounting | | non-flush mountable | |
| Dimensions | [mm] | M30 x 1.5 / L = 81 | |
| Thread designation | | M30 x 1.5 | |
| Materials | | housing: PBT; end cap: TPE | |
| **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. | |

# KI0209

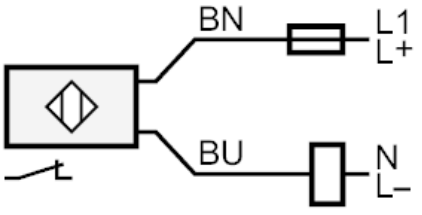
## Capacitive sensor

KI-2150-BBOA/NI

## Electrical connection

Cable: 2 m, PVC; 2 x 0.5 mm²

### Connection




Note miniature fuse to IEC60127-2 sheet 1 ≤ 2 A fast acting
Core colours :

| | |
|---|---|
| BN = | brown |
| BU = | blue |