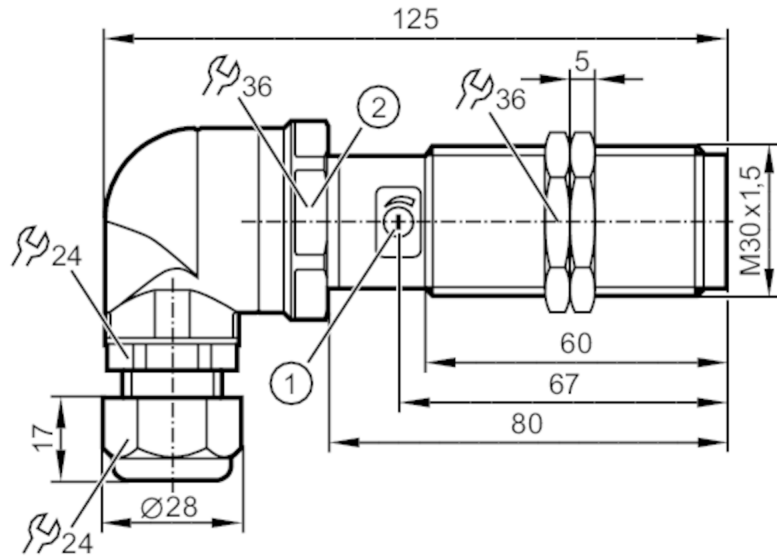


KI001A



Capacitive sensor

KIE2150NFB0A/3D



- 1 potentiometer
2 Tightening torque 10 Nm



Product characteristics

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

Electrical data

| | | |
|-----------------------------|-----|---------------------------|
| Operating voltage | [V] | 30...250 AC / 20...250 DC |
| Protection class | | II |
| Reverse polarity protection | | yes |
| Measuring principle | | capacitive |

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] | 100; (150 (...40 °C)) |
| Permanent current rating of switching output DC | [mA] | 100; (150 (...40 °C)) |
| Short-time current rating of switching output | [mA] | 1000; (20ms / 0,5Hz) |
| Switching frequency AC | [Hz] | 10 |
| Switching frequency DC | [Hz] | 10 |
| Notes on switching frequency | [Hz] | only for resistive loads; 2 Hz for utilisation category AC-140 |

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Capacitive sensor

KIE2150NFB0A/3D

| | | |
|--------------------------------------|---------------------------|---|
| 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 % |
| 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] | | -20...20 |
| Operating conditions | | |
| Ambient temperature [°C] | | -20...60 |
| Protection | | IP 65; IP 67 |
| Tests / approvals | | |
| ATEX marking | |  II 3D Ex tc IIIC T90°C Dc X |
| EMC | EN 61000-4-2 ESD | kV / 8 kV AD |
| | EN 61000-4-3 HF radiated | 3 V/m |
| | EN 61000-4-4 Burst | 2 kV |
| | EN 61000-4-5 Surge | 1 kV line to line, Ri: 2 Ohm |
| | EN 61000-4-6 HF conducted | 3 V |
| | EN 55011 | class B |
| MTTF [years] | | 305 |
| Mechanical data | | |
| Weight [g] | | 156.5 |
| Housing | | threaded type |
| Mounting | | non-flush mountable |
| Dimensions [mm] | | M30 x 1.5 / L = 125 |
| Thread designation | | M30 x 1.5 |
| Materials | | PBT; PA |
| 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; Place the fuse outside the hazardous area. |
| Accessories | | |
| Items supplied | | lock nuts: 2 |
| Remarks | | |
| Remarks | | Recommendation: Check the safe functioning of the unit after a short circuit. |
| Pack quantity | | 1 pcs. |

KI001A



Capacitive sensor

KIE2150NFBOA/3D

Electrical connection

terminals: 0.34...2.5 mm²; Cable sheath: Ø 5...9 mm; Cable gland: M20 X 1.5

Connection



Note miniature fuse to IEC60127-2 sheet 1 \leq 2 A fast acting
Place the fuse outside the hazardous area.