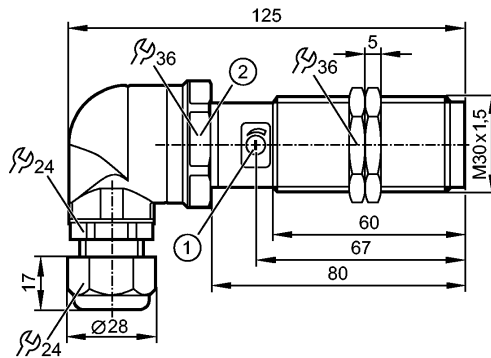


KI001A

KIE2150NFBOA/3D

Capacitive sensors



- 1: potentiometer
- 2: tightening torque 10 Nm

Made in Germany



Product characteristics

Capacitive sensor
Plastic thread M30 x 1.5
Terminals
ATEX approval
Group II, category 3D
Sensing range 15 mm; adjustable; [nf] non-flush mountable

Electrical data

Electrical design	AC/DC
Operating voltage [V]	20...250 DC / 30...250 AC
Protection class	II
Reverse polarity protection	yes

Outputs

Output function	normally open / closed programmable
Voltage drop [V]	< 10 AC / < 8 DC
Minimum load current [mA]	5
Leakage current [mA]	< 2.5 (250 V AC) / < 1.7 (110 V AC) / < 1.5 (24 V DC)

Current rating

- Current rating (continuous) [mA]	100 (150 bei <40°C)
- Current rating (peak) [mA]	î: 1000 (20ms / 0.5Hz)
Short-circuit proof	no
Overload protection	no
Switching frequency [Hz]	10 *

Range

Sensing range [mm]	15, adjustable
Real sensing range (Sr) [mm]	15 ± 10 %

Accuracy / deviations

Correction factors	water = 1 / glass approx. 0.4 / ceramics approx. 0.2 / PVC approx. 0.2
Hysteresis [% of Sr]	1...15
Switch-point drift [% of Sr]	-20...20


Environment

Ambient temperature [°C]	-20...60
Protection	IP 65 / IP 67

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Capacitive sensors

Tests / approvals	
Marking of the unit	Ex 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: 20hm) EN 61000-4-6 HF conducted: 3 V EN 55011: class B
MTTF [Years]	305
Mechanical data	
Mounting	non-flush mountable
Housing materials	PBT; PA
Weight [kg]	0.159
Displays / operating elements	
Output status indication	LED yellow
Electrical connection	
Connection	terminals 0.34 up to 2.5 mm ² ; cable diameter 5...9 mm, cable gland M20 x 1.5
Wiring	
	
<p>Note: miniature fuse to IEC60127-2 sheet 1, ≤ 2 A (fast acting) Place the fuse outside the hazardous area.</p>	
Accessories	
Accessories (included)	2 lock nuts
Remarks	
Remarks	*) only for resistive loads; 2 Hz for utilisation category AC-140 Recommendation: check the unit for reliable function after a short circuit.
Pack quantity [piece]	1