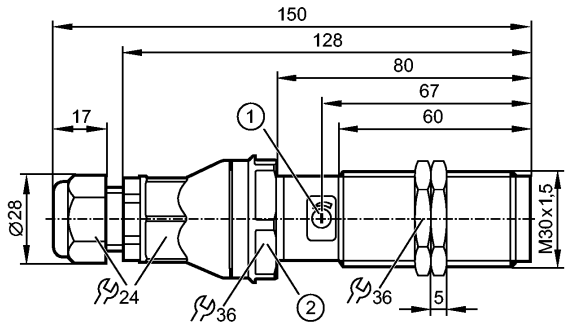
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KI000A

KIE2150NFBOA/3D

Capacitive sensors



1: potentiometer
2: tightening torque 10 Nm

Made in Germany

CE

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
Tests / approvals		

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Capacitive sensors

Marking of the unit		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 (80...2000 MHz) EN 61000-4-4 Burst: 2 kV EN 61000-4-5 Surge: 1 kV (line to line, Ri: 2Ohm) EN 61000-4-6 HF conducted: 3 V (0.15...80 MHz) EN 55011: class B
MTTF	[Years]	305

Mechanical data

Mounting		non-flush mountable
Housing materials		PBT; PA
Weight	[kg]	0.152

Displays / operating elements

Output status indication	LED	yellow

Electrical connection

Connection		terminals 0.34 up to 2.5 mm²; cable diameter 5...9 mm, cable gland M20 x 1.5

Wiring



Note: miniature fuse to IEC60127-2 sheet 1,
≤ 2 A (fast acting)
Place the fuse outside the hazardous area.

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