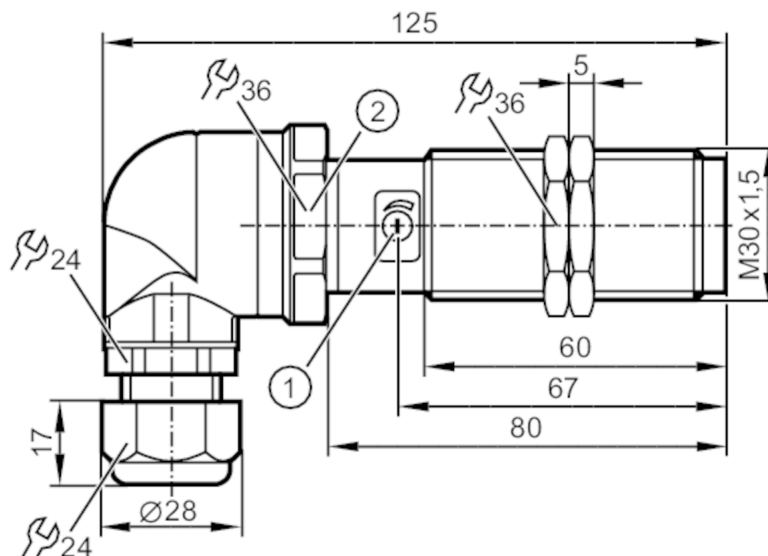




Capacitive sensor

KIE2150NFB0A/3D



- 1 potentiometer
2 Tightening torque 10 Nm



Product characteristics

Output function		normally open / 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 / 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 utilization category AC-140

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Short-circuit proof	no	
Overload protection	no	
Monitoring range		
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	
Material	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 unit for reliable function after a short circuit.	
Pack quantity	1 pcs.	

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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 ≤ 2 A fast acting
Place the fuse outside the hazardous area.