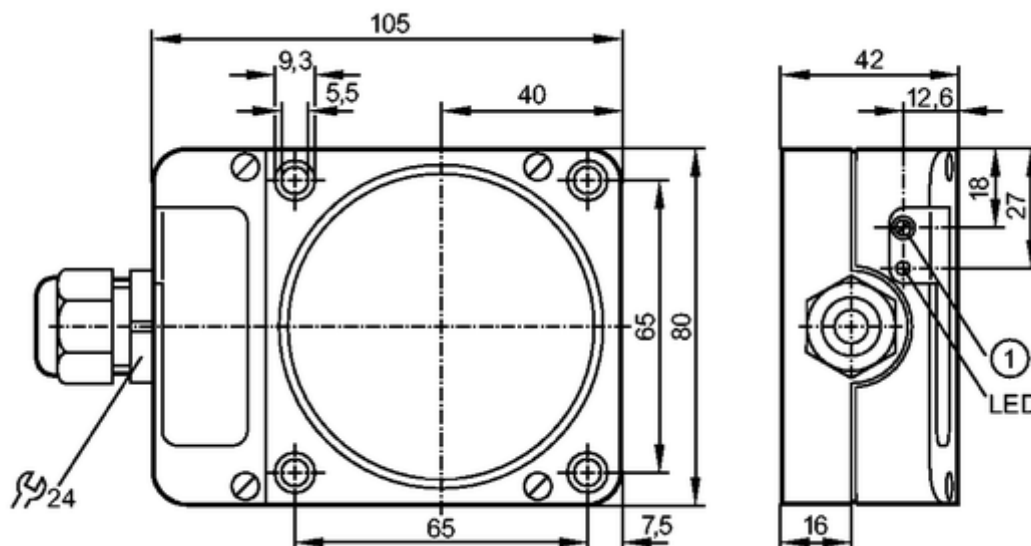


KD001A

KDE2060-FBOA / NI / 3D

Capacitive sensors



1: potentiometer

**Product characteristics**

Capacitive sensor

Rectangular, plastics

Terminals

Increased immunity to conducted radio frequency interference

ATEX approval

Group II, category 3D

Sensing range 60 mm; adjustable; [nf] non-flush mountable

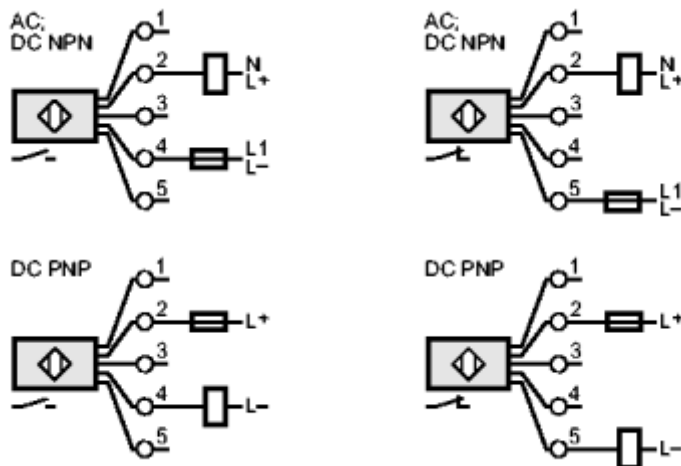
Electrical data

Electrical design	AC/DC
Operating voltage [V]	20...250 AC/DC
Protection class	II
Reverse polarity protection	no

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) / < 1.3 (24 V DC)
Current rating	
- Current rating (continuous) [mA]	130; 250 (...40 °C)
- Current rating (peak) [mA]	î: 1500 (20 ms / 0.5 Hz)
Short-circuit proof	no
Overload protection	no
Switching frequency [Hz]	4; only for resistive loads; 2 Hz for utilisation category AC-140

Monitoring range	
Sensing range [mm]	60, adjustable
Real sensing range (Sr) [mm]	60 ± 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]	-15...15
Environment	
Ambient temperature [°C]	-20...60
Protection	IP 65
Tests / approvals	
Marking of the unit	 II 3D Ex tc IIIC T90°C Dc X IP65
EMC	IEC 60947-5-2: 2008-08
MTTF [Years]	270
Mechanical data	
Mounting	non-flush mountable
Housing materials	modified PPE; PA
Tightening torque [Nm]	0.9 (housing screws) 4 (screws)
Weight [kg]	0.282
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

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

Remarks	
Remarks	Recommendation: check the unit for reliable function after a short circuit.
Pack quantity [piece]	1

ifm efector, inc. • 1100 Atwater Drive • Malvern • PA 19355 — We reserve the right to make technical alterations without prior notice. — US — KD001A — 21.01.2015