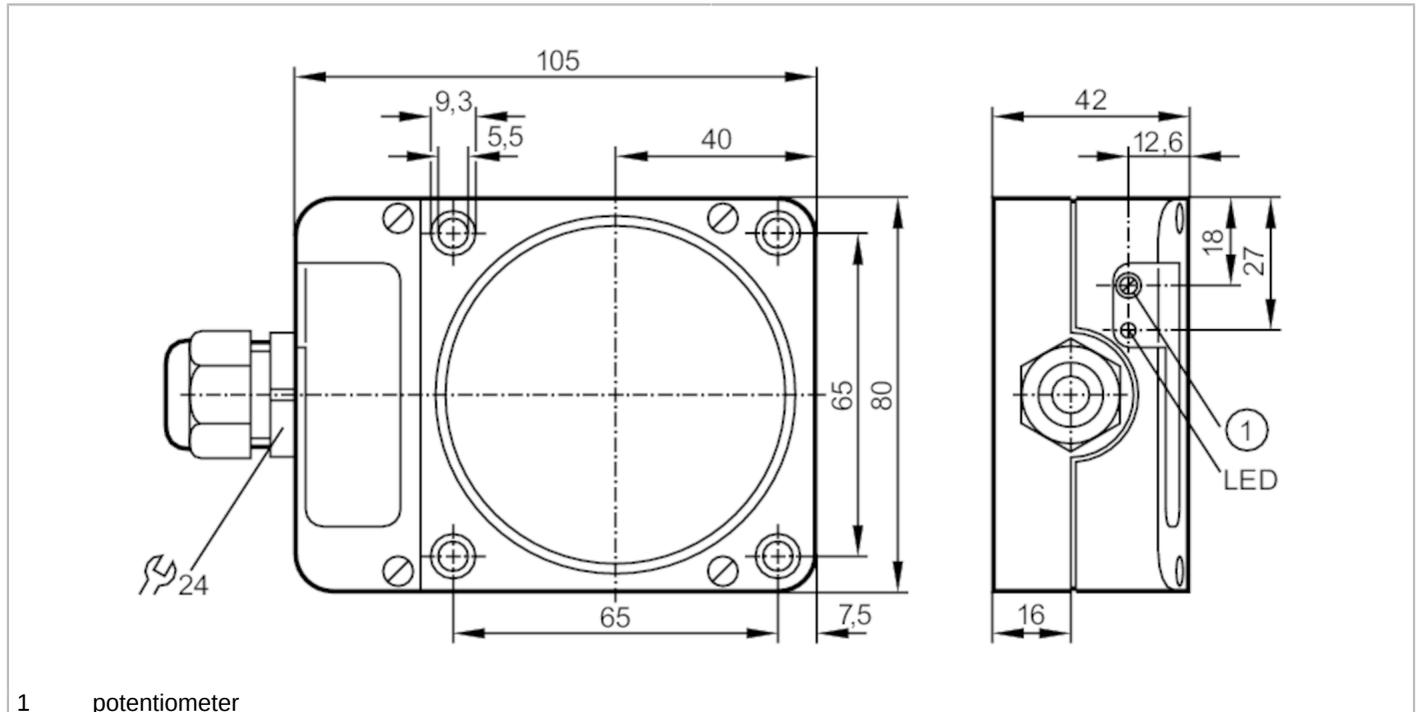


# KD001A



## Capacitive sensor

KDE2060-FBOA/NI/3D



Product characteristics	
Output function	normally open / closed; (selectable)
Sensing range [mm]	60
Housing	rectangular
Dimensions [mm]	105 x 80 x 42
Electrical data	
Operating voltage [V]	20...250 AC/DC
Protection class	II
Reverse polarity protection	no
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) / 1.3 (24 V DC)
Permanent current rating of switching output AC [mA]	130; (250 (...40 °C))
Permanent current rating of switching output DC [mA]	130; (250 (...40 °C))
Short-time current rating of switching output [mA]	1500; (20 ms / 0,5 Hz)
Switching frequency AC [Hz]	4
Switching frequency DC [Hz]	4

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## Capacitive sensor

KDE2060-FBOA/NI/3D

Notes on switching frequency [Hz]	only for resistive loads; 2 Hz for utilization category AC-140	
Short-circuit proof	no	
Overload protection	no	
<b>Monitoring range</b>		
Sensing range [mm]	60	
Sensing range adjustable	yes	
Factory setting sensing range [mm]	60	
Real sensing range Sr [mm]	60 ± 10 %	
<b>Accuracy / deviations</b>		
Correction factor	glass: 0.4 / water: 1 / ceramics: 0.2 / PVC: 0.2	
Hysteresis [% of Sr]	1...15	
Switch-point drift [% of Sr]	-15...15	
<b>Operating conditions</b>		
Ambient temperature [°C]	-20...60	
Protection	IP 65	
Increased immunity	yes	
<b>Tests / approvals</b>		
ATEX marking	Ex II 3D Ex tc IIIC T90°C Dc X IP65	
EMC	EN 60947-5-2	
MTTF [years]	270	
<b>Mechanical data</b>		
Weight [g]	281.5	
Housing	rectangular	
Mounting	non-flush mountable	
Dimensions [mm]	105 x 80 x 42	
Material	PPE modified; PA	
Tightening torque [Nm]	housing screws: 0,9 Nm; screws: 4 Nm	
<b>Displays / operating elements</b>		
Display	Switching status	1 x LED, yellow
<b>Electrical connection</b>		
Required protection	miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting; Place the fuse outside the hazardous area.	
<b>Remarks</b>		
Remarks	Recommendation: check the unit for reliable function after a short circuit.	
Pack quantity	1 pcs.	

# KD001A



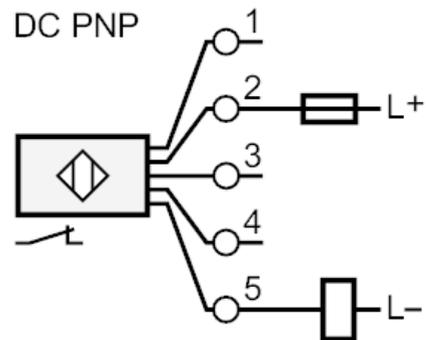
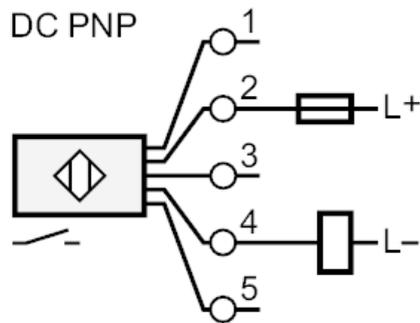
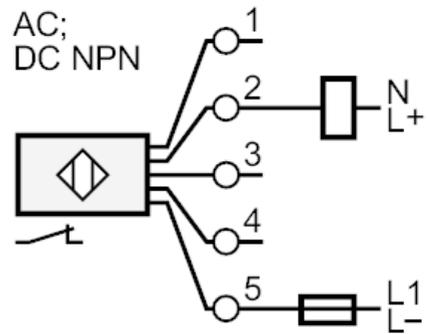
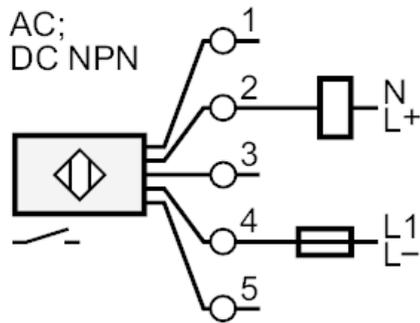
## Capacitive sensor

KDE2060-FBOA/NI/3D

### Electrical connection

terminals: 0.34...2.5 mm<sup>2</sup>; 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.