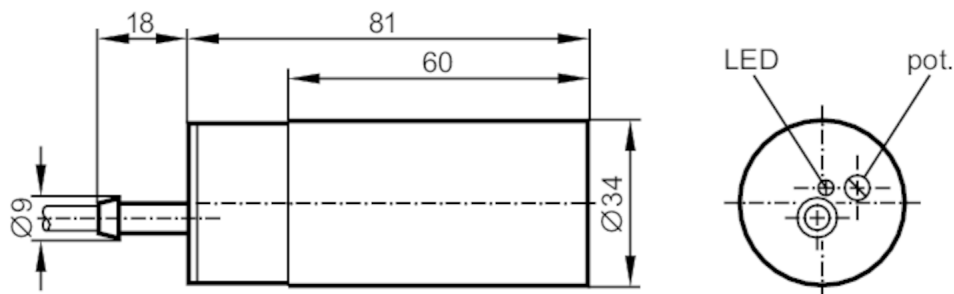


Capacitive sensor

KB-2020-ABOA/NI



Product characteristics

Output function		normally open
Sensing range	[mm]	3...20
Housing		cylindrical
Dimensions	[mm]	Ø 34 / L = 81

Electrical data

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

Outputs

Output function		normally open
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]	200; (for UL application: 250 / 100 DC)
Permanent current rating of switching output DC	[mA]	200; (for UL application: 250 AC / 100 DC)
Short-time current rating of switching output	[mA]	1500; (20 ms / 0,5 Hz)
Switching frequency AC	[Hz]	25
Switching frequency DC	[Hz]	40
Short-circuit proof		no
Overload protection		no

Detection zone

Sensing range	[mm]	3...20
Sensing range adjustable		yes
Factory setting sensing range	[mm]	20
Real sensing range S_r	[mm]	$20 \pm 10 \%$
Operating distance	[mm]	0...16.2



Capacitive sensor

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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]	-15...15
Operating conditions		
Ambient temperature	[°C]	-25...70
Protection	IP 65	
Increased immunity	yes; (increased immunity to conducted radio frequency interference)	
Tests / approvals		
EMC	EN 60947-5-2	
MTTF	[years]	488
Mechanical data		
Weight	[g]	284.5
Housing	cylindrical	
Mounting	non-flush mountable	
Dimensions	[mm]	Ø 34 / L = 81
Materials	PBT	
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	
Accessories		
Items supplied	Mounting clamps: 2	
	cylinder screws: 2	
	spring discs: 2	
Remarks		
Remarks	Recommendation: Check the safe functioning of the unit after a short circuit.	
Pack quantity	1 pcs.	

KB0025



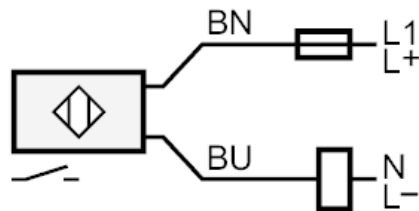
Capacitive sensor

KB-2020-ABOA/NI

Electrical connection

Cable: 2 m, PVC; 2 x 0.5 mm²

Connection



Note miniature fuse to IEC60127-2 sheet 1 $\leq$ 2 A fast acting
Core colours :

BN =

brown

BU =

blue