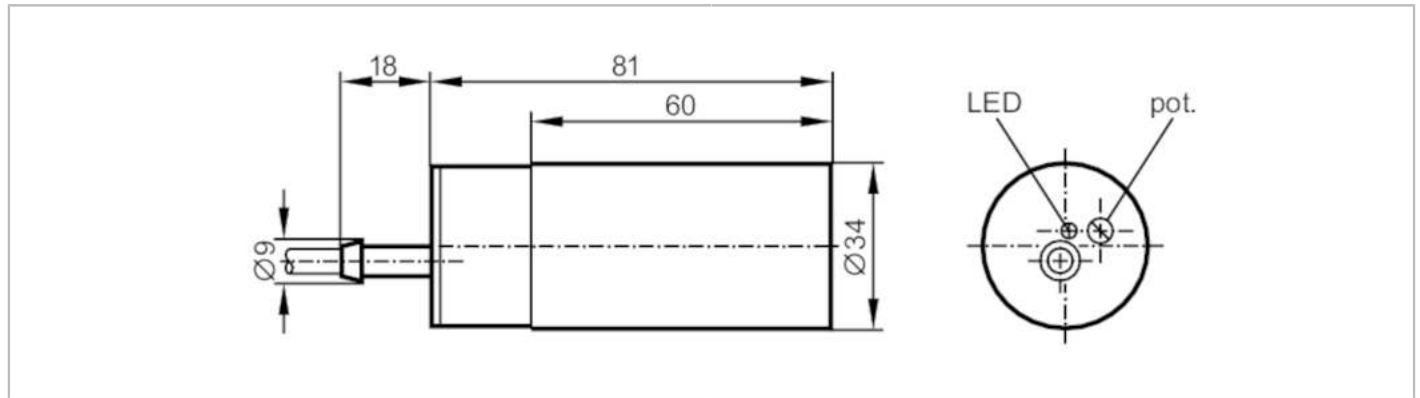


# KB5004



## Capacitive sensor

KB-3020-BPKG/NI



Product characteristics		
Electrical design		PNP
Output function		normally open
Sensing range	[mm]	3...20
Housing		cylindrical
Dimensions	[mm]	Ø 34 / L = 81
Electrical data		
Operating voltage	[V]	10...36 DC
Current consumption	[mA]	13; (24 V)
Protection class		II
Reverse polarity protection		yes
Outputs		
Electrical design		PNP
Output function		normally open
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	250
Switching frequency DC	[Hz]	40
Short-circuit proof		yes
Overload protection		yes
Detection zone		
Sensing range	[mm]	3...20
Sensing range adjustable		yes
Factory setting sensing range	[mm]	20
Real sensing range Sr	[mm]	20 ± 10 %
Operating distance	[mm]	0...16.2
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

# KB5004



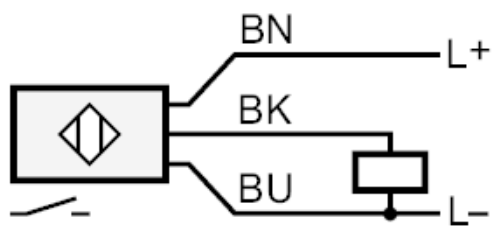
## Capacitive sensor

KB-3020-BPKG/NI

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]	778
Mechanical data		
Weight	[g]	255.5
Housing		cylindrical
Mounting		non-flush mountable
Dimensions	[mm]	Ø 34 / L = 81
Materials		PBT
Displays / operating elements		
Display		switching status 1 x LED, yellow
Accessories		
Items supplied		Mounting clamps: 1 screwdriver: 1
Remarks		
Pack quantity		1 pcs.

**Electrical connection**  
Cable: 2 m, PVC; 3 x 0.5 mm<sup>2</sup>

### Connection



Core colours :

BN = brown  
BU = blue  
BK = black