

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 S_r [mm]	$20 \pm 10 \%$
Operating distance [mm]	0...16.2

Accuracy / deviations

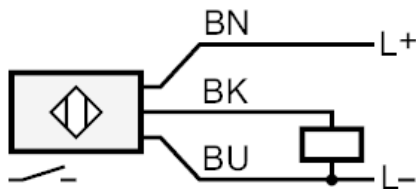
Correction factor	glass: 0.4 / water: 1 / ceramics: 0.2 / PVC: 0.2
Hysteresis [% of S_r]	1...15
Switch point drift [% of S_r]	-15...15



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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: 2
		cylinder screws: 2
		spring discs: 2
Remarks		
Pack quantity		1 pcs.
Electrical connection		
Cable: 2 m, PVC; 3 x 0.5 mm²		
Connection		



BN = Core colours : brown
BU = blue
BK = black