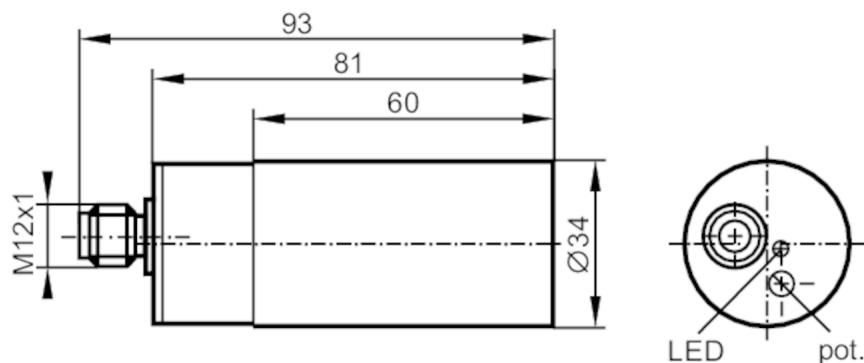


Capacitive sensor

KB-3020-BPKG/NI/US-100-DPS



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	20
Housing	cylindrical
Dimensions [mm]	Ø 34 / L = 93

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]	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



Capacitive sensor

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Switch point drift	[% of Sr]	-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]	169.5
Housing		cylindrical
Mounting		non-flush mountable
Dimensions	[mm]	Ø 34 / L = 93
Materials		PBT

Displays / operating elements

Display	switching status	1 x LED, yellow
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Accessories

Items supplied		Mounting clamps: 2
		cylinder screws: 2
		spring discs: 2

Remarks

Pack quantity		1 pcs.
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Electrical connection - plug

Connector: 1 x M12; coding: A



Connection

