

Inductive full-metal sensor

IHK3010-BPKG/AM/US-104



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	10
Housing	threaded type
Dimensions [mm]	M30 x 1.5 / L = 65

Application

Special feature	Gold-plated contacts; Full-metal housing
Application	constant cleaning with aggressive cleaning agents; regular cleaning processes
Pressure rating [bar]	100
Pressure rating [MPa]	10
Note on pressure rating	sensing face

Electrical data

Operating voltage [V]	10...30 DC
Current consumption [mA]	< 20
Protection class	III
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]	100
Switching frequency DC [Hz]	50
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes

Detection zone

Sensing range [mm]	10
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Operating distance	[mm]	0...8.1
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Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.6 / brass: 0.8 / aluminium: 0.6 / copper: 0.2	
Hysteresis	[% of Sr]	1...20

Operating conditions

Ambient temperature	[°C]	0...100
Protection	IP 68; IP 69K	

Tests / approvals

EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
	EN 55011 emission	class B
Impact resistance	1 J	
MTTF	[years]	1258
Embedded software included	yes	
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	UL Approval no.	A012
	File number UL	E174191

Mechanical data

Weight	[g]	137.5
Housing	threaded type	
Mounting	flush mountable	
Dimensions	[mm]	M30 x 1.5 / L = 65
Thread designation	M30 x 1.5	
Materials	housing: stainless steel (316L/1.4404); sensing face: stainless steel (316L/1.4404); LED window: PEI; lock nuts: stainless steel (316L/1.4404)	
Tightening torque	[Nm]	80
Full-metal housing	yes	

Displays / operating elements

Display	switching status	4 x 90° LED, yellow
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Accessories

Items supplied	lock nuts: 2	
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Remarks

Pack quantity	1 pcs.	
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Electrical connection



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Connection



Electrical connection - plug

Connector: 1 x M12; Contacts: gold-plated