

Inductive full-metal sensor

IGK3005-BPKG/AM/US-104



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	5
Housing	Threaded type
Dimensions [mm]	M18 x 1 / L = 70

Application

System	gold-plated contacts; Full-metal housing
Application	Use in hygienic areas / regular cleaning processes
Pressure rating	100 bar 10 MPa
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]	100
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Monitoring range

Sensing range [mm]	5
Operating distance [mm]	0...4.05



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Accuracy / deviations		
Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.7 / aluminum: 0.5 / 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]	1114	
Embedded software included	no	
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	A012
	File number UL	E174191
Mechanical data		
Weight [g]	55	
Housing	Threaded type	
Mounting	flush mountable	
Dimensions [mm]	M18 x 1 / L = 70	
Thread designation	M18 x 1	
Material	housing: stainless steel (1.4404 / 316L); sensing face: stainless steel (1.4404 / 316L); LED window: PEI; lock nuts: stainless steel (1.4404 / 316L)	
Tightening torque [Nm]	50	
Full-metal housing	yes	
Displays / operating elements		
Display	Switching status	4 x 90° LED, yellow
Accessories		
Items supplied	lock nuts: 2	
Remarks		
Pack quantity	1 pcs.	
Electrical connection - plug		
Connector: 1 x M12; coding: A; Contacts: gold-plated		
		

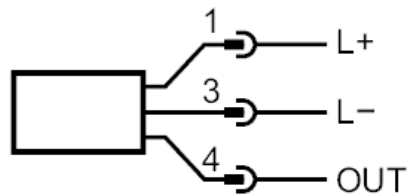
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Connection



1	L+	
3	L-	
4	OUT	DO (NO)

DO: digital output; NO: normally open