

Inductive sensor

IIK3010-BPKG/K1/SC/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; Correction factor K = 1; Magnetic-field immune
Application	Use in welding applications
Magnetic-field immune	yes
Max. magnetic field immunity [mT]	300

Electrical data

Operating voltage [V]	10...30 DC
Current consumption [mA]	< 20
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]	100
Switching frequency DC [Hz]	2000
Short-circuit protection	yes
Overload protection	yes

Detection zone

Sensing range [mm]	10
Real sensing range Sr [mm]	10 ± 10 %
Operating distance [mm]	0...8.1



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Accuracy / deviations			
Correction factor		steel: 1 / stainless steel: 1 / brass: 1 / aluminium: 1 / copper: 1	
Hysteresis	[% of Sr]	3...15	
Switch point drift	[% of Sr]	-10...10	
Correction factor K = 1		yes	
Operating conditions			
Ambient temperature		[°C]	-25...70
Protection			IP 67
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	class B
MTTF	[years]	661	
Embedded software included		yes	
UL approval		Ta	-25...70 °C
		Enclosure type	Type 1
		power supply	Limited Voltage/Current
		UL Approval no.	A005
		File number UL	E174191
Mechanical data			
Weight		[g]	99
Housing		threaded type	
Mounting		flush mountable	
Dimensions		[mm]	M30 x 1.5 / L = 65
Thread designation		M30 x 1.5	
Materials		housing: brass anti-spatter; sensing face: LCP black; lock nuts: brass anti-spatter	
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

