

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

System	gold-plated contacts; correction factor = 1; Magnetic-field immune
Application	Inductive sensors for welding applications
Magnetic-field immune	yes
Max. electromagnetic 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

Monitoring range

Sensing range [mm]	10
Real sensing range Sr [mm]	10 ± 10 %



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Operating distance	[mm]	0...8.1
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Accuracy / deviations

Correction factor		steel: 1 / stainless steel: 1 / brass: 1 / aluminum: 1 / copper: 1
Hysteresis	[% of Sr]	3...15
Switch-point drift	[% of Sr]	-10...10
Correction factor = 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
	voltage supply	Limited Voltage/Current
	UL approval number	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
Material		housing: brass weld coated; sensing face: LCP black; lock nuts: brass weld coated

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 - plug

Connector: 1 x M12; coding: A; Contacts: gold-plated



IIW200



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Connection

