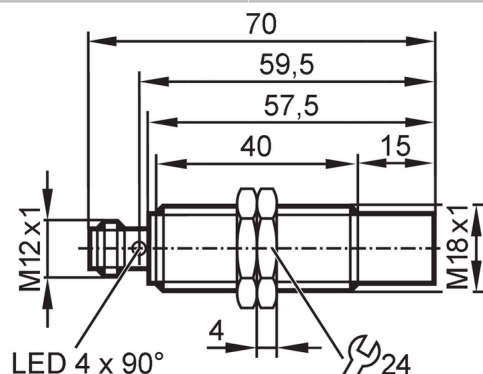




Inductive full-metal sensor

IGK3012-ANKG/AM/P/US-104



Product characteristics

Electrical design	NPN
Output function	normally open
Sensing range [mm]	12
Housing	Threaded type
Dimensions [mm]	M18 x 1 / L = 70

Application

System	gold-plated contacts; Increased sensing range; 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]	< 25
Protection class	III
Reverse polarity protection	yes

Outputs

Electrical design	NPN
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]	250
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Monitoring range

Sensing range [mm]	12
Real sensing range Sr [mm]	12 ± 10 %
Operating distance [mm]	0...9.7



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Increased sensing range	yes
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Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 1 / brass: 0.9 / aluminum: 0.8 / copper: 0.5	
Hysteresis [% of Sr]	1...20	
Switch-point drift [% of Sr]	-10...10	

Operating conditions

Ambient temperature [°C]	0...100
Protection	IP 65; IP 67; 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	EN 60068-2-75 Ehc	1 J
MTTF [years]	1262	
Embedded software included	yes	
UL approval	Ta	0...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	A012
	File number UL	E174191

Mechanical data

Weight [g]	56
Housing	Threaded type
Mounting	non-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); 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
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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



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Connection



Diagrams and graphs

