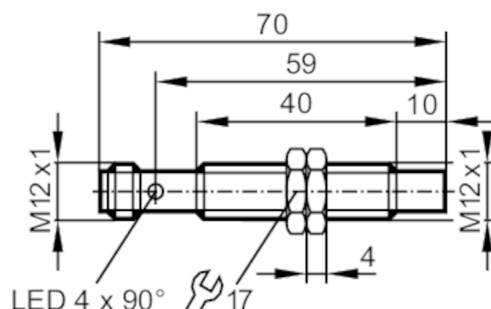




Inductive full-metal sensor

IFK3006-ANKG/AM/P/US-104



Product characteristics

Electrical design	NPN
Output function	normally open
Sensing range [mm]	6
Housing	threaded type
Dimensions [mm]	M12 x 1 / L = 70

Application

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

Electrical data

Operating voltage [V]	10...36 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]	500
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes

Detection zone

Sensing range [mm]	6
Real sensing range S_r [mm]	$6 \pm 10 \%$
Operating distance [mm]	0...4.9



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Increased sensing range	yes
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Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 1 / brass: 0.9 / aluminium: 0.75 / copper: 0.6	
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	1 J	
MTTF [years]	1265	
Embedded software included	yes	
UL approval	Ta	0...40 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	File number UL	E174191

Mechanical data

Weight [g]	29.7
Housing	threaded type
Mounting	non-flush mountable
Dimensions [mm]	M12 x 1 / L = 70
Thread designation	M12 x 1
Materials	housing: stainless steel (316L/1.4404); sensing face: stainless steel (316L/1.4404); LED window: PEI; lock nuts: stainless steel (316L/1.4404)
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

Installation

