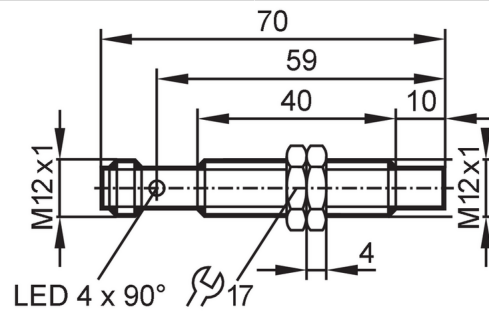


IFT246



Inductive full-metal sensor

IFK3006-ANKG/AM/PI/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	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...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 Sr [mm]	6 ± 10 %
Operating distance [mm]	0...4.9
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
	voltage 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
Accessories		
Items supplied	lock nuts: 2	
Remarks		
Pack quantity	1 pcs.	
Electrical connection - plug		
Connector: 1 x M12; coding: A; Contacts: 3, gold-plated		
		

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Connection



Diagrams and graphs

Installation

