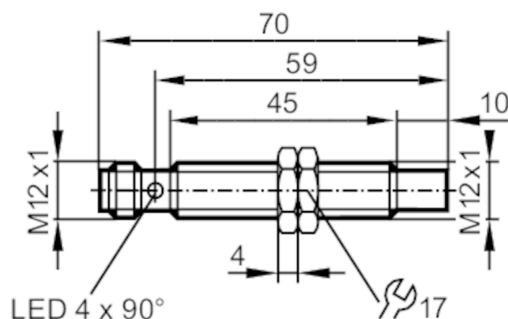


IFT245



Inductive full-metal sensor

IFK3006-BPKG/AM/PI/US



Product characteristics

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

Application

System	gold-plated contacts; Increased sensing range; Full-metal housing
Application	constant cleaning with aggressive cleaning agents; 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	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]	250
Short-circuit protection	yes
Overload protection	yes

Monitoring range

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 / aluminum: 0.8 / 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		EN 60068-2-75 Ehc	1 J
MTTF		[years]	1265
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]	29.75
Housing		Threaded type	
Mounting		non-flush mountable	
Dimensions		[mm]	M12 x 1 / L = 70
Thread designation		M12 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]	15
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.	

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Inductive full-metal sensor

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Electrical connection - plug

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



Connection



Diagrams and graphs

