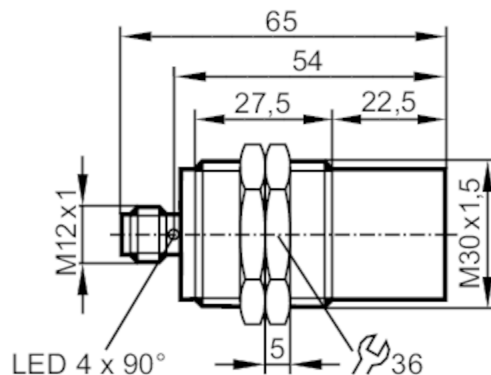




Inductive full-metal sensor

IIK3025-BPKG/AM/P/US-104



Product characteristics

Electrical design		PNP
Output function		normally open
Sensing range	[mm]	25
Dimensions	[mm]	M30 x 1.5 / L = 65

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...30 DC
Current consumption	[mA]	< 20
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]	100
Short-circuit protection		yes
Overload protection		yes

Detection zone

Sensing range	[mm]	25
Real sensing range Sr	[mm]	25 ± 10 %
Operating distance	[mm]	0...20.25
Increased sensing range		yes



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Accuracy / deviations		
Correction factor	steel: 1 / stainless steel: 1 / brass: 0.9 / aluminium: 0.6 / copper: 0.5	
Hysteresis [% of Sr]	3...15	
Switch point drift [% of Sr]	-10...10	
Operating conditions		
Ambient temperature [°C]	0...100	
Protection	IP 65; IP 66; 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	
Vibration resistance	EN 60068-2-6 Fc	20 g (10...3000 Hz) / 50 sweep cycles, 1 octave per minute, in 3 axes
Shock resistance	EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes
Continuous shock resistance	EN 60068-2-27	40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes
Fast temperature change	EN 60068-2-14 Nc	TA = 0°C; TB =100°C; t1 = 30 min; t2 = < 10 s 50 cycles
MTTF [years]	1386	
Embedded software included	yes	
UL approval	Ta	0...70 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	UL Approval no.	A012
	File number UL	E174191
Mechanical data		
Weight [g]	165.165	
Mounting	non-flush mountable	
Dimensions [mm]	M30 x 1.5 / L = 65	
Thread designation	M30 x 1.5	
Materials	housing: stainless steel (1.4404 / 316L); sensing face: stainless steel (1.4404 / 316L); LED window: PEI; lock nuts: stainless steel (1.4404 / 316L)	
Tightening torque [Nm]	80	
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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Electrical connection

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



Connection



Diagrams and graphs

