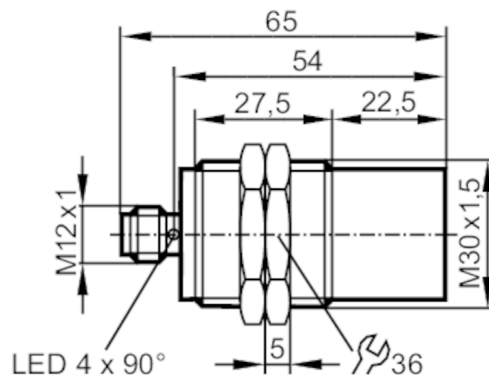




Inductive full-metal sensor

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
Pressure rating	[MPa]	10
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 S_r	[mm]	$25 \pm 10 \%$
Operating distance	[mm]	0...20.25



Inductive full-metal sensor

IIK3025-BPKG/AM/P/US-104

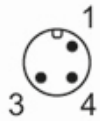
Increased sensing range		yes	
Accuracy / deviations			
Correction factor		steel: 1 / stainless steel: 1 / brass: 0.9 / aluminium: 0.6 / copper: 0.5	
Hysteresis [% of Sr]		3...15	
Switch point drift [% of Sr]		-10...10	
Operating conditions			
Ambient temperature [°C]		0...100	
Protection		IP 65; IP 66; 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 (316L/1.4404); sensing face: stainless steel (316L/1.4404); LED window: PEI; lock nuts: stainless steel (316L/1.4404)		
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.		

Inductive full-metal sensor

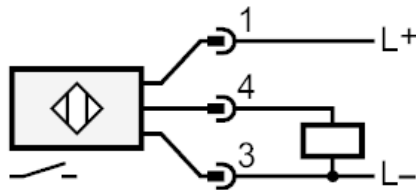
IIK3025-BPKG/AM/P/US-104

Electrical connection

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



Connection



Diagrams and graphs

