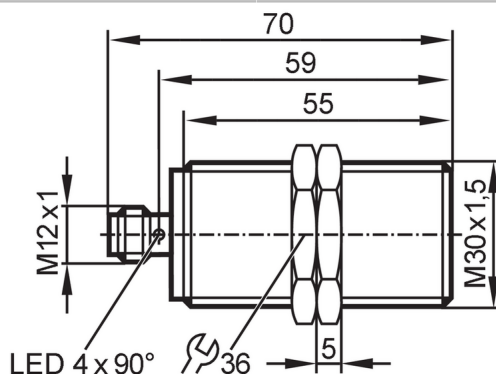




Inductive sensor

IHKC012BASKG/V4A/US-104



Product characteristics

Electrical design	PNP/NPN
Output function	normally open
Sensing range [mm]	12
Housing	Threaded type
Dimensions [mm]	M30 x 1.5 / L = 70

Application

Special feature	gold-plated contacts; Increased sensing range
Application	Use in mobile and harsh applications

Electrical data

Operating voltage [V]	10...36 DC
Current consumption [mA]	< 10
Protection class	II
Reverse polarity protection	yes

Outputs

Electrical design	PNP/NPN
Output function	normally open
Max. voltage drop switching output DC [V]	2.5
Minimum load current [mA]	2; (only in 2-wire operation)
Max. leakage current [mA]	0.5; (only in 2-wire operation)
Permanent current rating of switching output DC [mA]	100
Switching frequency DC [Hz]	100
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Monitoring range

Sensing range [mm]	12
Real sensing range S_r [mm]	$12 \pm 10 \%$
Operating distance [mm]	0...9.72



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Increased sensing range		yes		
Accuracy / deviations				
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3		
Hysteresis [% of Sr]		1...20		
Switch-point drift [% of Sr]		-10...10		
Operating conditions				
Ambient temperature [°C]		-40...85		
Protection		IP 67; IP 69K		
Tests / approvals				
EMC	Automotive area			
	Noise emission and noise interference: ECE R10		E1 type approval	
	noise immunity according to DIN ISO 11452-2		100 V/m	
	conducted interference in 24 V networks to ISO 7637-2: 2004 (pulse 1 to 4) and ISO16750-2: 2012 (load dump)			
	pulse		1 2a 2b 3a 3b 4 Load dump	
	Severity level		III III III III III III Test A	
	Failure criterion		C A C A A C C	
	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 61000-4-5 Surge		0,5 kV mains line to line	
	EN 61000-4-6 HF conducted		10 V	
	EN 55011		class B	
	Fast temperature changes	EN 60068-2-14 Na	TA = -40 °C; TB = 85 °C; t1 = 30 min; t2 = < 10 s; 50 cycles	
	Salt spray test	EN 60068-2-52 Kb	severity level 5 (4 test cycles)	
MTTF [years]	1253			
UL approval	Ta	0...40 °C		
	Enclosure type	Type 1		
	voltage supply	Limited Voltage/Current		
	UL approval number	A052		
	File number UL	E174191		
Mechanical data				
Weight [g]	125.7			
Housing	Threaded type			
Mounting	flush mountable			
Dimensions [mm]	M30 x 1.5 / L = 70			
Thread designation	M30 x 1.5			
Material	housing: stainless steel (1.4404 / 316L); sensing face: LCP white; LED window: PEI; lock nuts: brass white bronze coated			
Tightening torque [Nm]	80			
Displays / operating elements				
Display	Switching status	4 x 90° LED, yellow		
Accessories				
Items supplied	lock nuts: 2			

IIM200



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Remarks

Pack quantity 1 pcs.

Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 3, gold-plated



Connection

