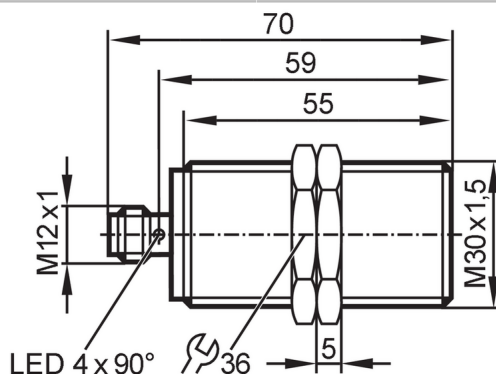




Inductive sensor

IIK012BBSKG/V4A/US-104



Product characteristics

Electrical design	PNP/NPN
Output function	normally closed
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 closed
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
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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	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
Salt spray test	EN 60068-2-52 Kb	severity level 5 (4 test cycles)
MTTF [years]		1253
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	A052
	File number UL	E174191

Mechanical data

Weight [g]	134
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
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Accessories

Items supplied	lock nuts: 2
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Remarks

Pack quantity	1 pcs.
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Electrical connection - plug

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





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Connection

