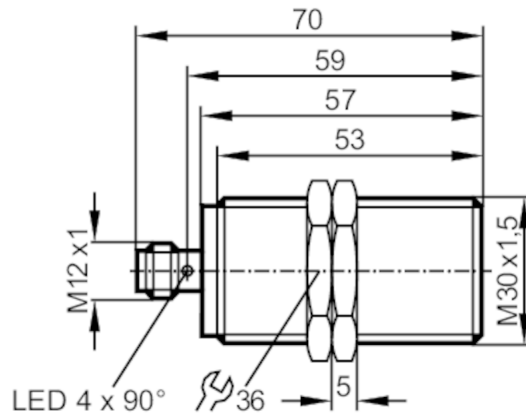




Inductive sensor

IIK012BBSKG/US-104



Electrical data

Operating voltage	[V]	10...36 DC
Current consumption	[mA]	< 10; (only in 3-wire operation)
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
Overload protection		yes

Detection zone

Sensing range	[mm]	12
Operating distance	[mm]	0...9.72
Increased sensing range		yes

Accuracy / deviations

Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.45 / copper: 0.35
Hysteresis	[% of Sr]	1...20

Operating conditions

Ambient temperature	[°C]	-40...85
Protection		IP 67; IP 69K



Inductive sensor

IIKC012BBSKG/US-104

Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	30 V/m
	EN 61000-4-4 Burst	2 V
	EN 61000-4-5 Surge	0,5 kV mains line to line
	EN 61000-4-6 HF conducted	10 V
	EN 55011	class B
Vibration resistance	EN 60068-2-6 Fc	20 g (10...3000 Hz) / -20...50 °C
		50 sweep cycles per frequency; 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 / -40...85 °C
Continuous shock resistance	EN 60068-2-30 Eb	40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes / -20...50 °C
Salt spray test	EN 60068-2-52 Kb	severity level 5 (4 test cycles)
MTTF	[years]	1101
UL approval	Ta	-40...85 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	File number UL	E174191

Mechanical data		
Weight	[g]	139.5
Housing		threaded type
Mounting		flush mountable
Dimensions	[mm]	M30 x 1.5 / L = 70
Thread designation		M30 x 1.5
Materials		housing: stainless steel; sensing face: LCP natural; connector housing: PEI; lock nuts: brass

Displays / operating elements		
Display	switching status	4 x 90° LED, yellow

Accessories		
Accessories (supplied)		lock nuts: 2

Remarks		
Pack quantity		1 pcs.

Electrical connection - plug

Connector: 1 x M12; Contacts: gold-plated



II5923



Inductive sensor

IIKC012BBSKG/US-104

2-wire

