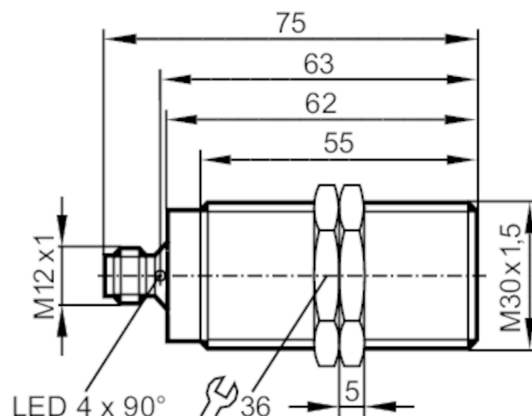


Inductive sensor

IIA3015BBPKG/US



Electrical data

Operating voltage	[V]	10...36 DC
Current consumption	[mA]	< 15
Protection class		II
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]	250
Switching frequency DC	[Hz]	100
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes

Detection zone

Sensing range	[mm]	15
Real sensing range Sr	[mm]	15 ± 10 %
Operating distance	[mm]	0...12.15
Increased sensing range		yes

Accuracy / deviations

Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2
Hysteresis	[% of Sr]	1...20

Operating conditions

Ambient temperature	[°C]	-40...70
Protection		IP 67



Inductive sensor

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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 line to line, Ri: 2 Ohm
	EN 61000-4-6 HF conducted	10 V
	EN 55011 emission	class B
	signal-to-noise ratio walkie-talkie	150 MHz (5 W): 7,5 cm / 450 MHz (5 W): 5 cm / 900 MHz (2 W): 0 cm
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 60068-2-29 Eb	40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes / -20...50 °C
MTTF	[years]	1638
Mechanical data		
Weight	[g]	208.4
Housing		threaded type
Mounting		flush mountable
Dimensions	[mm]	M30 x 1.5 / L = 75
Thread designation		M30 x 1.5
Materials		brass white bronze coated; sensing face: PBT uncoloured; 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		
		

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Inductive sensor

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Connection

