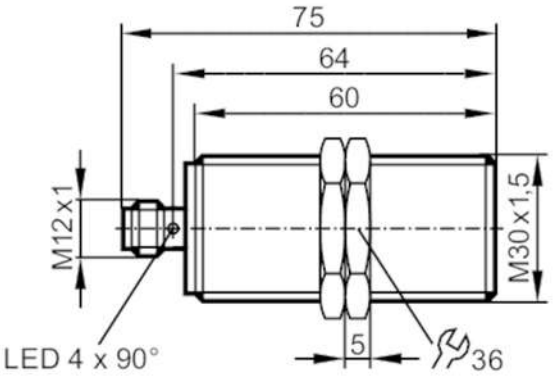
II5971

Inductive sensor

IIA3015BBPKG/US



Product characteristics		
Electrical design		PNP
Output function		normally open
Sensing range	[mm]	15
Housing		threaded type
Dimensions	[mm]	M30 x 1.5 / L = 75
Application		
Special feature		Gold-plated contacts
Application		Industrial applications / factory automation
Electrical data		
Operating voltage	[V]	10...32 DC
Current consumption	[mA]	10
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]	200
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

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Accuracy / deviations			
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3	
Hysteresis	[% of Sr]	1...20	
Switch point drift	[% of Sr]	-10...10	
Operating conditions			
Ambient temperature	[°C]	-40...70	
Protection		IP 67	
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	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) / 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
MTTF	[years]	1083	
Mechanical data			
Weight	[g]	140	
Housing		threaded type	
Mounting		flush mountable	
Dimensions	[mm]	M30 x 1.5 / L = 75	
Thread designation		M30 x 1.5	
Materials		housing: brass white bronze coated; sensing face: PBT white; LED window: PEI; lock nuts: brass white bronze coated	
Tightening torque	[Nm]	50	
Displays / operating elements			
Display		switching status	4 x LED, yellow
Accessories			
Items supplied		lock nuts: 2	
Remarks			
Pack quantity		1 pcs.	

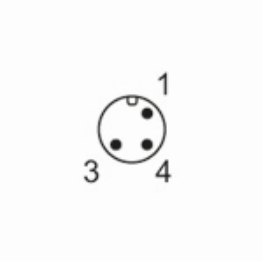
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Electrical connection - plug

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



Connection

