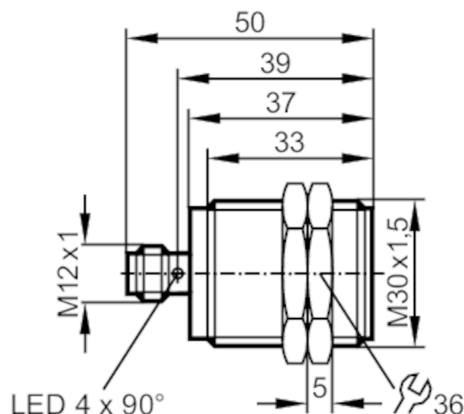


NI501A



Inductive NAMUR sensor

IIB2015BN/US/1G/1D



Product characteristics

Electrical design	NAMUR
Output function	normally closed
Sensing range [mm]	15
Housing	Threaded type
Dimensions [mm]	M30 x 1.5 / L = 50

Electrical data

Connection at circuit amplifier	yes
Switching amplifiers	connection to certified intrinsically safe circuits with the max. values: U = 15 V / I = 50 mA / P = 120 mW
Nominal voltage DC [V]	8.2; (1kΩ)
Supply voltage DC [V]	7.5...30; (when used outside the hazardous area)
Current consumption [mA]	< 1; (disabled; conductive: > 2,1)
Protection class	II

Outputs

Electrical design	NAMUR
Output function	normally closed
Permanent current rating of switching output DC [mA]	30; (when used outside the hazardous area)
Switching frequency DC [Hz]	100

Monitoring range

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

Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3
Hysteresis [% of Sr]	1...15
Switch-point drift [% of Sr]	-10...10

Operating conditions

Ambient temperature [°C]	-20...70
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NI501A



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Protection		IP 67	
Tests / approvals			
Approval		BVS 04 ATEX E 091 X; IECEx BVS 06.0003	
ATEX marking		 II 1G Ex ia IIB T6 Ga	
		 II 2G Ex ia IIC T6 Gb	
		 II 1D Ex ia IIIC T 90°C Da	
EMC		EN 60947-5-6	
Shock/vibration resistance		30 g (11 ms) / 10-55 Hz (1 mm)	
MTTF [years]		2514	
Safety classification			
Max. internal capacitance [nF]		230	
Max. internal inductance [μH]		210	
Mechanical data			
Weight [g]		162.2	
Housing		Threaded type	
Mounting		flush mountable	
Dimensions [mm]		M30 x 1.5 / L = 50	
Thread designation		M30 x 1.5	
Material		brass special coating; sensing face: PBT; LED window: PA	
Displays / operating elements			
Display		Switching status	4 x 90° LED, yellow
Accessories			
Items supplied		lock nuts: 2	
Remarks			
Pack quantity		1 pcs.	
Electrical connection - plug			
Connector: 1 x M12; coding: A			
			

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Connection



1 = connection to NAMUR-amplifier