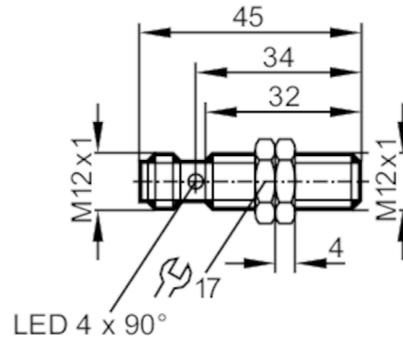


NF501A



Inductive NAMUR sensor

IFB2004BN/US/1G/1D



Product characteristics

Electrical design		NAMUR
Output function		normally closed
Sensing range	[mm]	4
Housing		threaded type
Dimensions	[mm]	M12 x 1 / L = 45

Electrical data

Connection to switching amplifiers		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		III

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]	700

Detection zone

Sensing range	[mm]	4
Real sensing range Sr	[mm]	4 ± 10 %
Operating distance	[mm]	0...3.24

Accuracy / deviations

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

Operating conditions

Ambient temperature	[°C]	-20...70
Protection		IP 67

NF501A



Inductive NAMUR sensor

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Tests / approvals	
Approval	BVS 04 ATEX E 091 X; IECEx BVS 06.0003
ATEX marking	Ex II 1G Ex ia IIC T6 Ga
	Ex 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]	3119

Safety classification	
Max. internal capacitance [nF]	210
Max. internal inductance [μ H]	115

Mechanical data	
Weight [g]	71.5
Housing	threaded type
Mounting	flush mountable
Dimensions [mm]	M12 x 1 / L = 45
Thread designation	M12 x 1
Materials	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



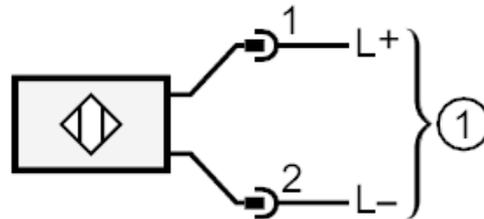
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Inductive NAMUR sensor

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Connection



1 = connection to NAMUR amplifiers