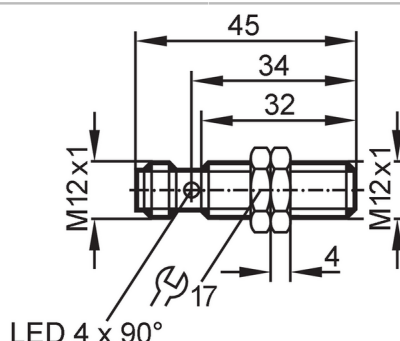


NF501A



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

Application

Application	For applications in hazardous areas
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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; (1k Ω)
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

Monitoring range

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

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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Protection	IP 67
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Tests / approvals

Approval	BVS 04 ATEX E 091 X; IECEx BVS 06.0003X
ATEX marking	Ex II 1G Ex ia IIC T6 Ga
	Ex II 1D Ex ia IIIC T200 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 [μH]	115

Mechanical data

Weight [g]	78.55
Housing	Threaded type
Mounting	flush mountable
Dimensions [mm]	M12 x 1 / L = 45
Thread designation	M12 x 1
Material	housing: brass special coating; sensing face: PBT; LED window: PA

Displays / operating elements

Display	Switching status	4 x 90° LED, yellow
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Accessories

Items supplied	lock nuts: 2
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Remarks

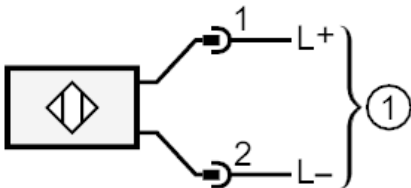
Pack quantity	1 pcs.
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Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 4



Connection



1 = connection to NAMUR-amplifier