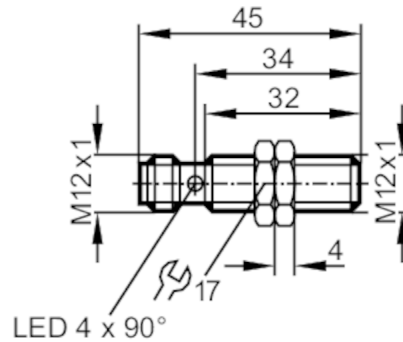


NF501A



Inductive NAMUR sensor

IFB2004BN/US/1G/1D



Made in Germany



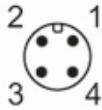
Electrical data	
Connection to switching amplifiers	yes
Switching amplifiers	connection to certified intrinsically safe circuits with the max. values: U = 15 V / I = 50 mA / P = 120 mW
Nominal voltage DC [V]	8.2; (1kΩ)
Supply voltage DC [V]	7.5...30; (when used outside the hazardous area)
Current consumption [mA]	< 1; (disabled; conductive: > 2,1)
Protection class	III
Outputs	
Output function	normally closed
Permanent current rating of switching output DC [mA]	30; (when used outside the hazardous area)
Switching frequency DC [Hz]	700
Electrical design	NAMUR
Range	
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

IFB2004BN/US/1G/1D

Tests / approvals		
Approval	BVS 04 ATEX E 091 X; IECEx BVS 06.0003	
ATEX marking	II 1G Ex ia IIC T6 Ga	
	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 [μH]	115	
Mechanical data		
Weight [g]	70.2	
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; plug: PA	
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		
		

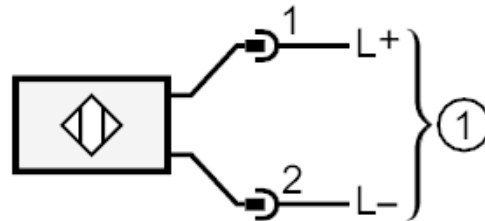
NF501A



Inductive NAMUR sensor

IFB2004BN/US/1G/1D

Connection



1 = connection to NAMUR amplifiers