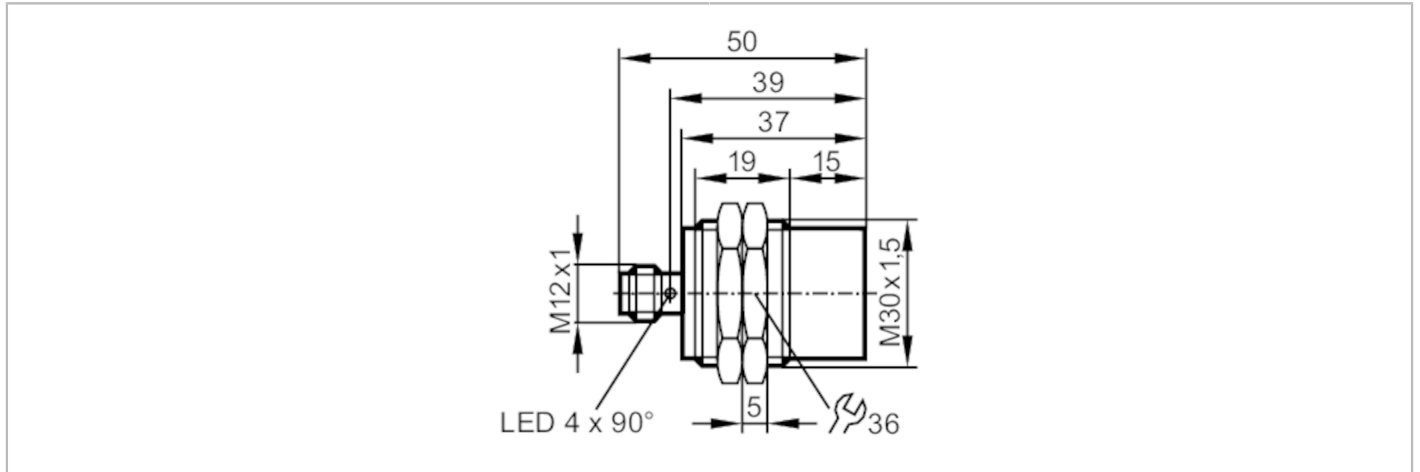


NI500A



Inductive NAMUR sensor

IIB2022-N/US/1G/1D



Product characteristics

Electrical design	NAMUR
Output function	normally closed
Sensing range [mm]	22
Housing	threaded type
Dimensions [mm]	M30 x 1.5 / L = 50

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	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

Detection zone

Sensing range [mm]	22
Real sensing range Sr [mm]	22 ± 10 %

Accuracy / deviations




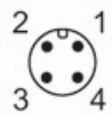
Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3
Hysteresis [% of Sr]	1...15
Switch point drift [% of Sr]	-10...10

NI500A



Inductive NAMUR sensor

IIB2022-N/US/1G/1D

Operating conditions		
Ambient temperature	[°C]	-20...70
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]	2455
Safety classification		
Max. internal capacitance	[nF]	250
Max. internal inductance	[µH]	120
Mechanical data		
Weight	[g]	151
Housing		threaded type
Mounting		non-flush mountable
Dimensions	[mm]	M30 x 1.5 / L = 50
Thread designation		M30 x 1.5
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		
		

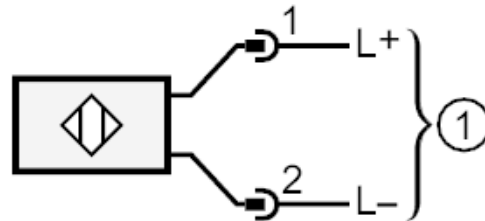
NI500A



Inductive NAMUR sensor

IIB2022-N/US/1G/1D

Connection



1 = connection to NAMUR amplifiers