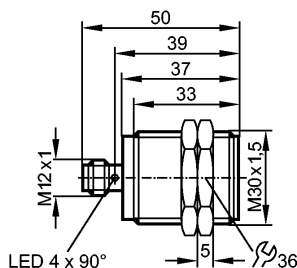


NI501A

IIB2015BN/US/1G/1D

Inductive sensors



Product characteristics

Inductive sensor
Metal thread M30 x 1.5
Quick disconnect
ATEX approval
Group II, category 1G/2G
Group II, category 1D
Sensing range 15 mm; [f] flush mountable

Electrical data

Electrical design	Connection to certified intrinsically safe circuits with the max. values U = 15 V / I = 50 mA / P = 120 mW
Nominal voltage [V]	8.2 DC; (1kΩ)
Supply voltage [V]	7.5...30 DC; when used outside the hazardous area
Current consumption [mA]	< 1 disabled; (> 2.1 mA enabled)
Protection class	II

Outputs

Output function	normally closed
Current rating [mA]	< 30; when used outside the hazardous area
Switching frequency [Hz]	100

Monitoring range

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

Accuracy / deviations

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

Environment

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

Tests / approvals

Approval	BVS 04 ATEX E 091 X IECEX BVS 06.0003
Marking of the unit	<p>Ⓔ II 1G Ex ia IIB T6 Ga</p> <p>Ⓔ II 2G Ex ia IIC T6 Gb</p> <p>Ⓔ II 1D Ex ia IIIC T 90°C Da</p>

NI501A

IIB2015BN/US/1G/1D

Inductive sensors

EMC	EN 60947-5-6
Shock / vibration resistance	30 g (11 ms) / 10-55 Hz (1 mm)
MTTF [Years]	2514

Safety classification

Internal capacitance [nF]	< 230
Internal inductance [µH]	< 210

Mechanical data

Mounting	flush mountable
Housing materials	brass special coating; active face: PBT; connector: PA
Weight [kg]	0.159

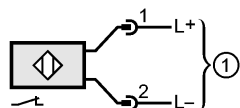
Displays / operating elements

Output status indication LED	yellow (4 x 90°)
------------------------------	------------------

Electrical connection

Connection	M12 connector
------------	---------------

Wiring



1 = connection to NAMUR-amplifier

Accessories

Accessories (included)	2 lock nuts
------------------------	-------------

Remarks

Pack quantity [piece]	1
-----------------------	---