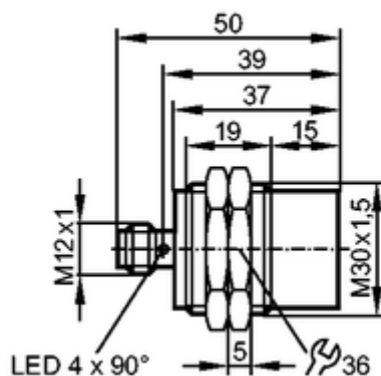




NI500A

IIB2022-N/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 22 mm; [nf] non-flush mountable

Electrical data

Electrical design	Connection to certified intrinsically safe circuits with the max. values $U = 15\text{ V}$ / $I = 50\text{ mA}$ / $P = 120\text{ mW}$
Nominal voltage [V]	8.2 DC; (1k Ω)
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]	22
Real sensing range (Sr) [mm]	22 \pm 10 %

Accuracy / deviations

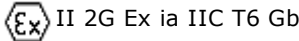
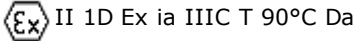

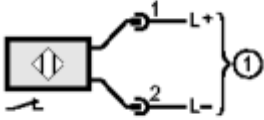
Correction factors	mild steel = 1 / stainless steel approx. 0.7 / brass approx. 0.5 / aluminium approx. 0.4 / copper approx. 0.3
Hysteresis [% of Sr]	1...15
Switch-point drift [% of Sr]	-10...10

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	II 1G Ex ia IIB T6 Ga

	 
EMC	EN 60947-5-6
Shock / vibration resistance	30 g (11 ms) / 10-55 Hz (1 mm)
MTTF [Years]	2455
Safety classification	
Internal capacitance [nF]	< 250
Internal inductance [μH]	< 120
Mechanical data	
Mounting	non-flush mountable
Housing materials	brass special coating; active face: PBT; connector: PA
Weight [kg]	0.151
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

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