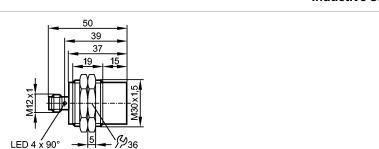
efector100°

NI500A

IIB2022-N/US/1G/1D **Inductive sensors**













C - US APPROVED
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

Sensing range 22 mm; [nf] non-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]	7.530 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 ± 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]	115			
Switch-point drift	[% of Sr]	-1010			
Environment					
Amhient temperature	[°C]	-20 70			

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Environment		
Ambient temperature	[°C]	-2070
Protection		IP 67

Tests / approvals	
Approval	BVS 04 ATEX E 091 X IECEx BVS 06.0003
Marking of the unit	⟨Ex⟩ 1G Ex ia B T6 Ga ⟨Ex⟩ 2G Ex ia C T6 Gb ⟨Ex⟩ 1D Ex ia C T 90°C Da
EMC	EN 60947-5-6

efector100°



Accessories

Remarks

Pack quantity

Accessories (included)

IIB2022-N/US/1G/1D



Inductive sensors

Shock / vibration resistance	е	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 elen	nents			
Output status indication	LED	yellow (4 x 90°)		
Electrical connection				
Connection		M12 connector		
Wiring $2 \longrightarrow 4$ $2 \longrightarrow 4$				
1 = connection to NAMUR-amplifier				

2 lock nuts

1

[piece] ifm efector, inc. • 1100 Atwater Drive • Malvern • PA 19355 - US - NI500A - 01.07.2010