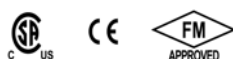
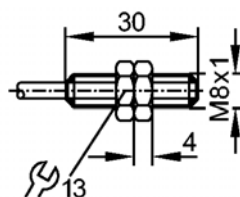




NE5001

IEA2001-N/1D/2G

Inductive sensors



Made in Germany

Product characteristics

Inductive sensor

Metal thread M8 x 1

Cable

ATEX approval

Group II, category 1D

Group II, category 1G/2G

Sensing range 1 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; (1k Ω)
Supply voltage [V]	7.5...30 DC; when used outside the hazardous area
Current consumption [mA]	< 1 *)
Protection class	III

Outputs

Output function	normally closed
Current rating [mA]	< 30; when used outside the hazardous area
Switching frequency [Hz]	2000

Range

Sensing range [mm]	1
Real sensing range (Sr) [mm]	$1 \pm 10 \%$

Accuracy / deviations

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

Environment

Ambient temperature [°C]	-20...80
Protection	IP 67

Tests / approvals

Approval	PTB 01 ATEX 2191 BVS 04 ATEX E153
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Marking of the unit	Ex II 1D Ex iaD 20 T 90°C Ta: -20...70°C Ex II 1D Ex iaD 20 T 100°C Ta: -20...80°C Ex II 1G Ex ia IIC T6 Ta: -20...55°C Ex II 1G Ex ia IIC T5 Ta: -20...65°C Ex II 2G Ex ia IIC T6 Ta: -20...70°C Ex II 2G Ex ia IIC T5 Ta: -20...80°C
EMC	EN 60947-5-6
Shock / vibration resistance	30g (11 ms) / 10-55 Hz (1 mm)
MTTF [Years]	6204
Safety classification	
Internal capacitance [nF]	< 80
Internal inductance [µH]	< 70
Mechanical data	
Mounting	flush mountable
Housing materials	brass special coating; active face: PBT
Weight [kg]	0.094
Electrical connection	
Connection	PVC cable / 2 m; 2 x 0.14 mm²
Wiring	
Core colours	BN + BU -
BN brown	
BU blue	
Accessories	
Accessories (included)	2 lock nuts
Remarks	
Remarks	*)
Pack quantity [piece]	1