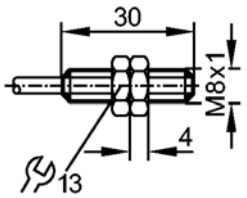
efector100

NE5001

IEA2001-N/1D/2G

Inductive sensors



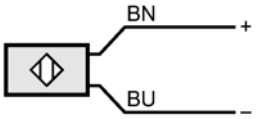
Made in Germany

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; (1kΩ)
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 ± 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

Marking of the unit	II 1D Ex iaD 20 T 90°C Ta: -20...70°C II 1D Ex iaD 20 T 100°C Ta: -20...80°C II 1G Ex ia IIC T6 Ta: -20...55°C II 1G Ex ia IIC T5 Ta: -20...65°C II 2G Ex ia IIC T6 Ta: -20...70°C 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 brown
BU blue



Accessories	
Accessories (included)	2 lock nuts
Remarks	
Remarks	*)
Pack quantity [piece]	1