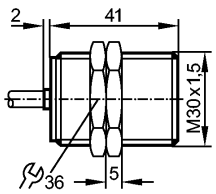
efector100

NI5002

IIA2010-N/1D/1G

Inductive sensors



Product characteristics		
Inductive sensor		
Metal thread M30 x 1.5		
Cable		
ATEX approval		
Group II, category 1D		
Group II, category 2G		
Sensing range 10 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		III
Outputs		
Output function		Normally closed
Current rating	[mA]	< 30; when used outside the hazardous area
Switching frequency	[Hz]	450
Range		
Sensing range	[mm]	10
Real sensing range (Sr)	[mm]	10 ± 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, when used outside hazardous areas
Protection		IP 67
Tests / approvals		
Approval		PTB 01 ATEX 2191 BVS 04 ATEX E153 IECEx BVS 06.0003 TIIS TC16109
Marking of the unit		Ex II 1G Ex ia IIB T6 Ga Ex II 2G Ex ia IIC T6 Gb Ex II 1D Ex ia IIIC T 90°C Da
EMC		EN 60947-5-6

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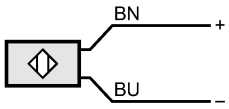
Shock / vibration resistance		30 g (11 ms) / 10-55 Hz (1 mm)
MTTF	[Years]	4963
Safety classification		
Internal capacitance	[nF]	< 145
Internal inductance	[µH]	< 140
Mechanical data		
Mounting		flush mountable
Housing materials		Brass special coating; active face: PBT
Weight	[kg]	0.241
Electrical connection		
Connection		PVC cable / 2 m; 2 x 0.5 mm²

Wiring

Core colours

BN brown

BU blue



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