



Inductive NAMUR sensor

IIA2010-N/10M/1D/1G/2G



Product characteristics		
Electrical design		NAMUR
Output function		normally closed
Sensing range	[mm]	10
Housing		threaded type
Dimensions	[mm]	M30 x 1.5 / L = 41
Electrical data		
Connection to switching amplifiers		yes
Switching amplifiers		connection to certified intrinsically safe circuits with the max. values: U = 15 V / I = 50 mA / P = 120 mW
Nominal voltage DC	[V]	8.2; (1kΩ)
Supply voltage DC	[V]	7.5...30; (when used outside the hazardous area)
Current consumption	[mA]	< 1; (disabled; conductive: > 2,1)
Protection class		III
Outputs		
Electrical design		NAMUR
Output function		normally closed
Permanent current rating of switching output DC	[mA]	30; (when used outside the hazardous area)
Switching frequency DC	[Hz]	450
Detection zone		
Sensing range	[mm]	10
Real sensing range Sr	[mm]	10 ± 10 %
Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3
Hysteresis	[% of Sr]	1...15
Switch point drift	[% of Sr]	-10...10
Operating conditions		
Ambient temperature	[°C]	-20...80
Protection		IP 67



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Tests / approvals	
Approval	PTB 01 ATEX 2191; BVS 04 ATEX E 153 X; IECEx BVS 06.0003X; TIIS TC16109
ATEX marking	 II 1G Ex ia IIB T6 Ga Ta -20...70°C
	 II 1G Ex ia IIB T5 Ga Ta -20...80°C
	 II 2G Ex ia IIC T6 Gb Ta -20...70°C
	 II 2G Ex ia IIC T5 Gb Ta -20...80°C
	 II 1D Ex ia IIIC T20090°C Da Ta: -20...70°C
	 II 1D Ex ia IIIC T200100° C Da Ta: -20...80°C
EMC	EN 60947-5-6
Shock/vibration resistance	30 g (11 ms) / 10-55 Hz (1 mm)
MTTF [years]	4697
Safety classification	
Max. internal capacitance [nF]	147
Max. internal inductance [μH]	148
Mechanical data	
Weight [g]	537
Housing	threaded type
Mounting	flush mountable
Dimensions [mm]	M30 x 1.5 / L = 41
Thread designation	M30 x 1.5
Materials	brass special coating; sensing face: PBT
Accessories	
Items supplied	lock nuts: 2
Remarks	
Pack quantity	1 pcs.
Electrical connection	
Cable: 10 m, PVC; 2 x 0.5 mm ²	
Connection	



BN = Core colours :
brown
BU = blue