



Inductive NAMUR sensor

IGA2005-N/1D/1G/2G



Product characteristics

Electrical design	NAMUR
Output function	normally closed
Sensing range [mm]	5
Housing	threaded type
Dimensions [mm]	M18 x 1 / L = 33

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	II

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]	720

Detection zone

Sensing range [mm]	5
Real sensing range Sr [mm]	5 ± 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
Note on ambient temperature	when used outside the hazardous area
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 TC16108	
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 T200 90°C Da Ta: -20...70°C	
	II 1D Ex ia IIIC T200 100° 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]	145
Max. internal inductance	[µH]	45
Mechanical data		
Weight	[g]	169.5
Housing		threaded type
Mounting		flush mountable
Dimensions	[mm]	M18 x 1 / L = 33
Thread designation		M18 x 1
Materials		brass special coating; sensing face: PBT
Accessories		
Items supplied		lock nuts: 2
Remarks		
Pack quantity		1 pcs.
Electrical connection		
Cable: 2 m, PVC; 2 x 0.5 mm²		
Connection		



BN = Core colours : brown
BU = blue