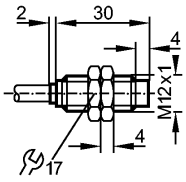
efector100®

NF5030

IFA2004-N/V2A/6M/1D/1G

Inductive sensors



Product characteristics

Inductive sensor		
Metal thread M12 x 1		
Cable		
ATEX approval		
Group II, category 1D		
Group II, category 1G/2G		
Sensing range 4 mm; [nf] non-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]	1500
Monitoring range		
Sensing range	[mm]	4
Real sensing range (Sr)	[mm]	4 ± 10 %
Accuracy / deviations		
Correction factors		mild steel = 1 / stainless steel approx. 0.7 / brass approx. 0.5 / aluminium approx. 0.4 / copper 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 TIIS TC16107 IECEx BVS 06.0003
Marking of the unit		Ex II 1G Ex ia IIC T6 Ga Ta: -20...70° C Ex II 1G Ex ia IIC T5 Ga Ta: -20...80° C Ex II 1D Ex ia IIIC T90° C Da Ta: -20...70° C Ex II 1D Ex ia IIIC T100° 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]	5096
Safety classification		
Internal capacitance	[nF]	< 141
Internal inductance	[µH]	< 134

NF5030 - Inductive sensor - eclass: 27270101 / 27-27-01-01

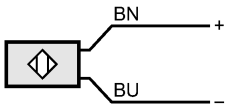
Mechanical data		
Mounting		non-flush mountable
Housing materials		stainless steel; PBT
Weight	[kg]	0.253
Electrical connection		
Connection		PVC cable / 6 m; 2 x 0.34 mm²

Wiring

Core colors

BN brown

BU blue



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