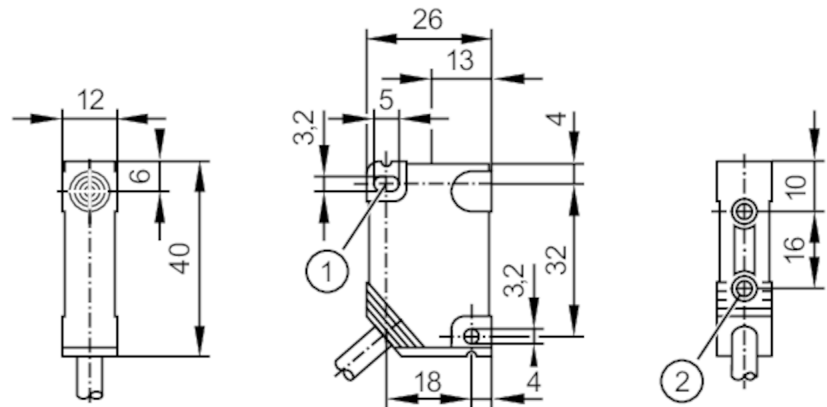




Inductive NAMUR sensor

IN-2004-N/1D/1G/2G



- 1 mounting hole
- 2 threaded bush M3 Depth 5.8 mm



Product characteristics		
Electrical design		NAMUR
Output function		normally closed
Sensing range	[mm]	4
Housing		rectangular
Dimensions	[mm]	40 x 12 x 26
Electrical data		
Connection at circuit amplifier		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]	400
Monitoring range		
Sensing range	[mm]	4
Real sensing range Sr	[mm]	4 ± 10 %
Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3
Hysteresis	[% of Sr]	1...15
Switch-point drift	[% of Sr]	-10...10
Operating conditions		
Ambient temperature	[°C]	-20...80

NN5002



Inductive NAMUR sensor

IN-2004-N/1D/1G/2G

Protection	IP 67	
Tests / approvals		
Approval	PTB 01 ATEX 2191; BVS 04 ATEX E 153 X; IECEX BVS 06.0003X	
ATEX marking	Ex II 1G Ex ia IIB T6 Ga Ta -20...70°C	
	Ex II 1G Ex ia IIB T5 Ga Ta -20...80°C	
	Ex II 2G Ex ia IIC T6 Gb Ta -20...70°C	
	Ex II 2G Ex ia IIC T5 Gb Ta -20...80°C	
	Ex II 1D Ex ia IIIC T20090°C Da Ta: -20...70°C	
	Ex 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]	4899	
Safety classification		
Max. internal capacitance [nF]	110	
Max. internal inductance [μH]	135	
Mechanical data		
Weight [g]	147.5	
Housing	rectangular	
Mounting	non-flush mountable	
Dimensions [mm]	40 x 12 x 26	
Material	PBT	
Mounting hole		
Tightening torque [Nm]	< 0.5	
Threaded bush		
Tightening torque [Nm]	< 1.2; (when brass insert in contact with counterpart)	
Remarks		
Pack quantity	1 pcs.	

NN5002



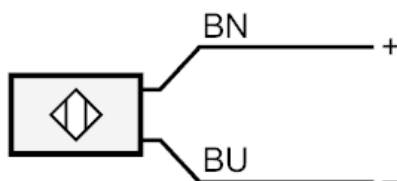
Inductive NAMUR sensor

IN-2004-N/1D/1G/2G

Electrical connection

Cable: 2 m, PVC; 2 x 0.5 mm²

Connection



BN = Core colors :
brown
BU = blue