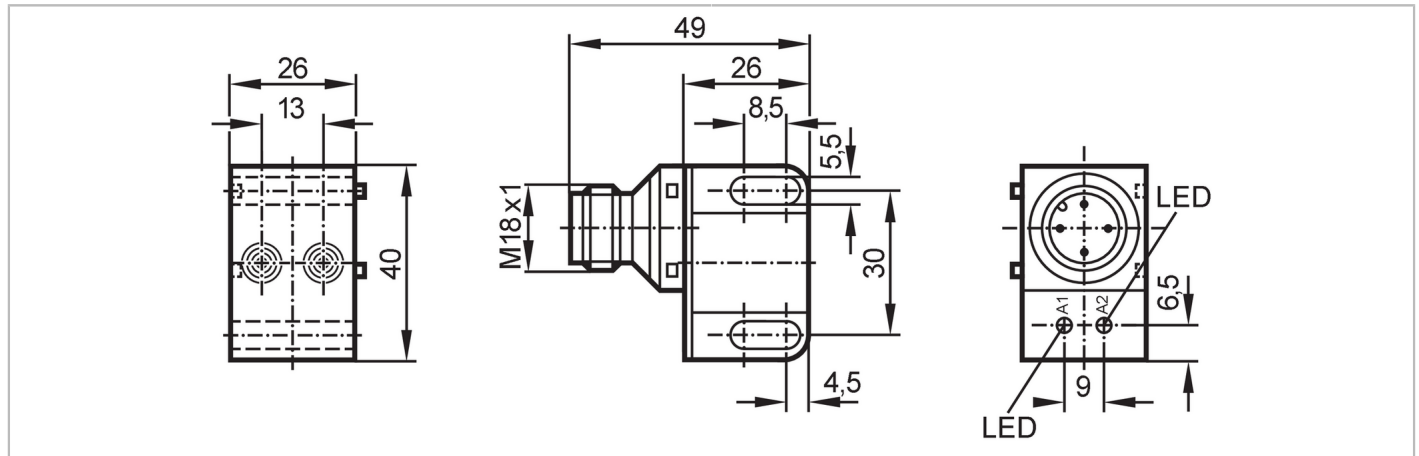


NN5013



Inductive NAMUR dual sensor for valve actuators

IND2004DN/BS-200-K/1D/1G/2G

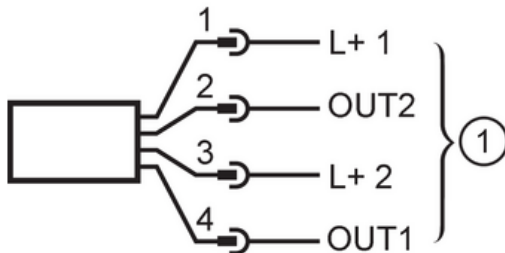


Product characteristics	
Electrical design	NAMUR
Output function	2 x normally closed
Sensing range [mm]	4
Housing	rectangular
Dimensions [mm]	40 x 26 x 26
Application	
Application	Position sensor for valve actuators
Electrical data	
Connection at circuit amplifier	yes
Switching amplifiers	connection 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...15
Current consumption [mA]	< 1; (disabled; conductive: > 2,1)
Protection class	III
Outputs	
Electrical design	NAMUR
Output function	2 x normally closed
Switching frequency DC [Hz]	1800
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
Protection	IP 67



Inductive NAMUR dual sensor for valve actuators

IND2004DN/BS-200-K/1D/1G/2G

Tests / approvals		
Approval	DMT 02 ATEX E 028 X; BVS 04 ATEX E 153 X; IECEx BVS 06.0003X; TIIS TC17612	
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]	1253	
Safety classification		
Max. internal capacitance [nF]	140; (per intrinsically safe electric circuit)	
Max. internal inductance [µH]	130; (per intrinsically safe electric circuit)	
Mechanical data		
Weight [g]	79	
Housing	rectangular	
Mounting	non-flush mountable	
Dimensions [mm]	40 x 26 x 26	
Material	housing: PBT; cover: PC	
Displays / operating elements		
Display	Switching status	2 x LED, yellow
Remarks		
Pack quantity	1 pcs.	
Electrical connection - plug		
Connector: 1 x M18; coding: A		
		
Connection		
		
(1)	connection to NAMUR-amplifier	
1	L+ 1	
2	OUT2	DO (NC)
3	L+ 2	
4	OUT1	DO (NC)
DO: digital output; NC: normally closed		