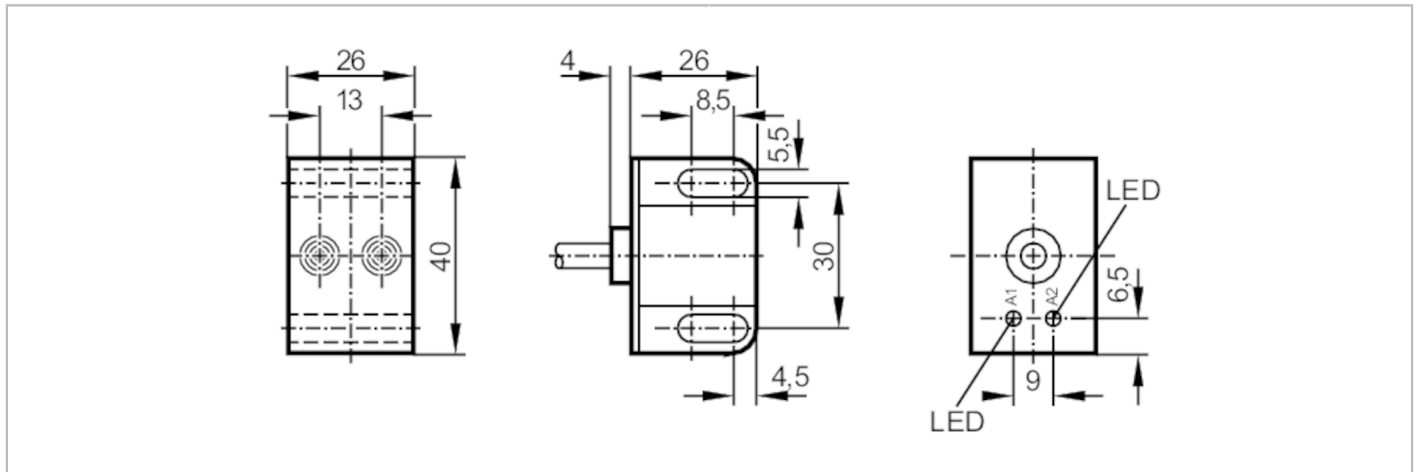


NN5009



Inductive NAMUR dual sensor for valve actuators

IND2004DN/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
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...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
Detection zone	
Sensing range [mm]	4
Real sensing range Sr [mm]	4 ± 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	DMT 02 ATEX E 028; BVS 04 ATEX E 153 X; IECEx BVS 06.0003X; TIIS TC17612												
ATEX marking	<table border="0"> <tr> <td style="text-align: center;">Ⓔ</td> <td>II 1G Ex ia IIB T6 Ga Ta -20...70°C</td> </tr> <tr> <td style="text-align: center;">Ⓔ</td> <td>II 1G Ex ia IIB T5 Ga Ta -20...80°C</td> </tr> <tr> <td style="text-align: center;">Ⓔ</td> <td>II 2G Ex ia IIC T6 Gb Ta -20...70°C</td> </tr> <tr> <td style="text-align: center;">Ⓔ</td> <td>II 2G Ex ia IIC T5 Gb Ta -20...80°C</td> </tr> <tr> <td style="text-align: center;">Ⓔ</td> <td>II 1D Ex ia IIIC T200 90°C Da Ta: -20...70°C</td> </tr> <tr> <td style="text-align: center;">Ⓔ</td> <td>II 1D Ex ia IIIC T200 100° C Da Ta: -20...80°C</td> </tr> </table>	Ⓔ	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
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Ⓔ	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 circuit)
Max. internal inductance [μH]	130; (per intrinsically safe circuit)

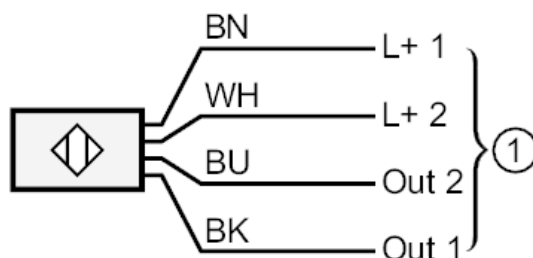
Mechanical data	
Weight [g]	162.5
Housing	rectangular
Mounting	non-flush mountable
Dimensions [mm]	40 x 26 x 26
Materials	housing: PBT; cover: PC

Displays / operating elements		
Display	switching status	2 x LED, yellow

Remarks	
Pack quantity	1 pcs.

Electrical connection	
Cable: 2 m, silicone; 4 x 0.34 mm ²	

Connection



- 1 = connection to NAMUR amplifiers
 Core colours :
 BK = black
 BN = brown
 BU = blue
 WH = white