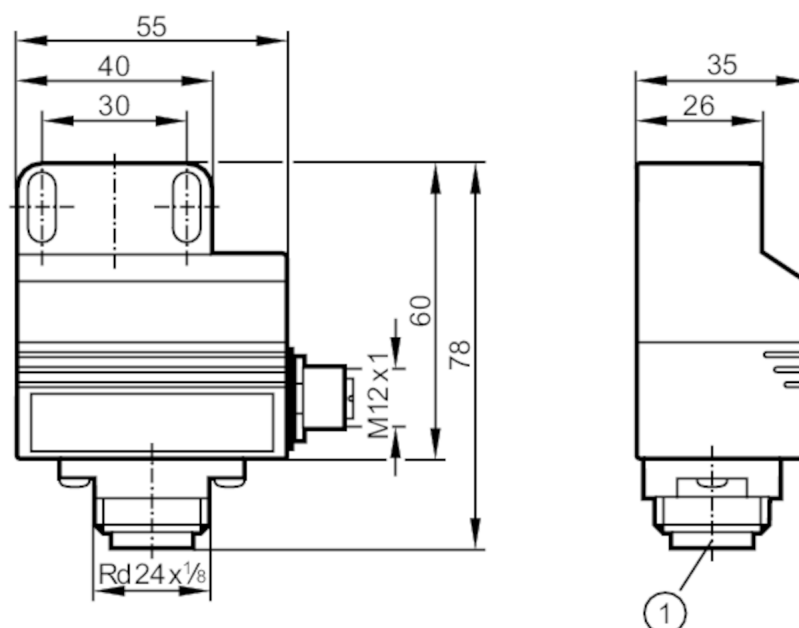




Inductive NAMUR dual sensor for valve actuators

IND2004DN/T1/1D/2G



1 field connection



Application

Application for actuators using standard ISO 5211 (VDI/VDE) mounting

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)
Current consumption [mA]	< 1; (disabled; conductive: > 2,2)
Protection class	III

Outputs

Electrical design	NAMUR
Output function	2 x normally closed
Switching frequency DC [Hz]	250

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

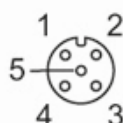
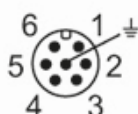
Operating conditions

Ambient temperature [°C]	-20...70
Protection	IP 67



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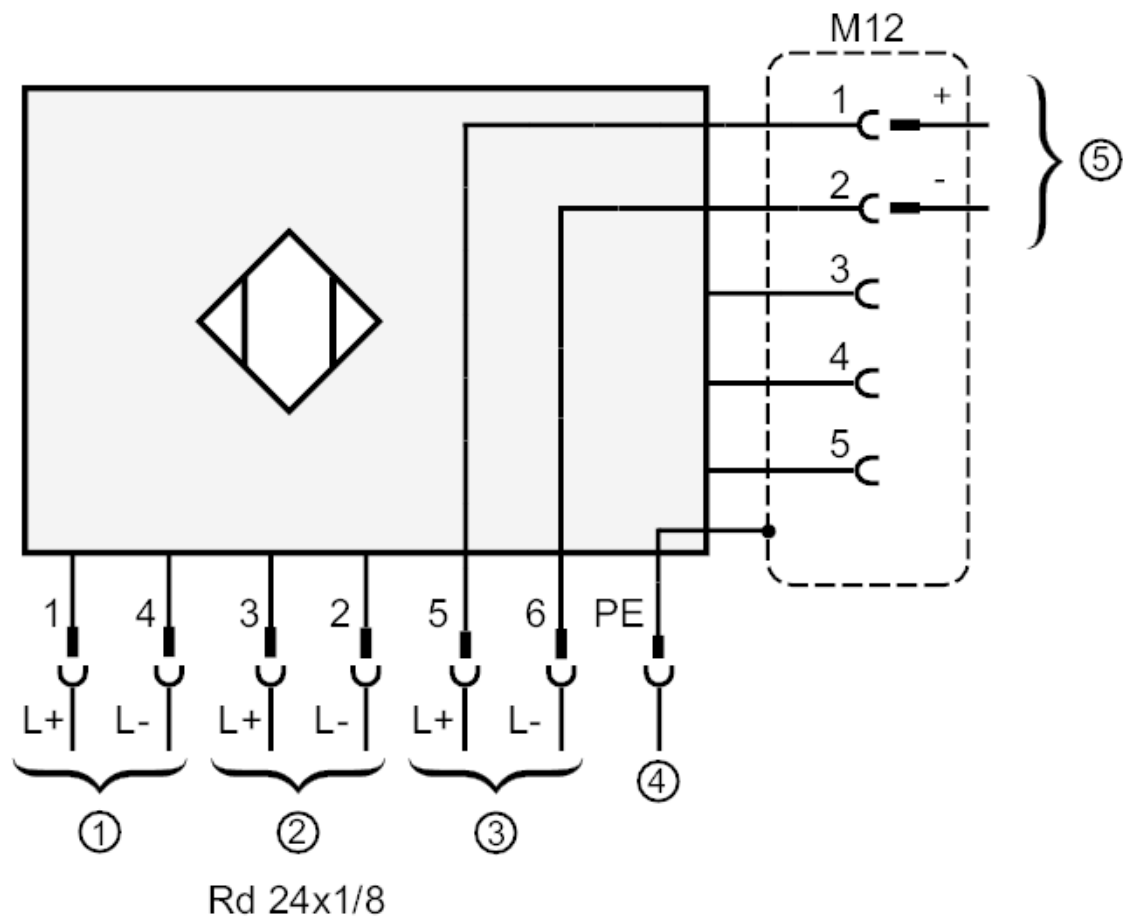
IND2004DN/T1/1D/2G

Tests / approvals		
Approval	BVS 03 ATEX E131; BVS 04 ATEX E153; IECEx BVS 06.0003	
ATEX marking	 II 2G Ex ia IIC T6 Gb Ta: -20...70°C	
	 II 1D Ex ia IIIB T 90°C Da Ta: -20...70°C	
	 II 2G Ex ia IIC T5 Gb Ta: -20...80°C	
	 II 1D Ex ia IIIB T 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]	1218	
Safety classification		
Max. internal capacitance [nF]	150; (per intrinsically safe circuit)	
Max. internal inductance [μH]	150; (per intrinsically safe circuit)	
Mechanical data		
Weight [g]	173.8	
Housing	rectangular	
Mounting	non-flush mountable	
Dimensions [mm]	40 x 26 x 60	
Materials	housing: PBT; cover: PC	
Displays / operating elements		
Display	switching status	2 x LED, yellow
Remarks		
Remarks	solenoid valve circuit Ex-i: connection to certified intrinsically safe circuits with the max. values: U = 28 V DC / P = 2 W	
Pack quantity	1 pcs.	
Electrical connection - socket		
Connector: 1 x M12		
		
Electrical connection - plug		
Connector: Rd24		
		

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Connection



- 1 = sensor 1
- 2 = sensor 2
- 3 = solenoid valve Ex-i
- 4 = potential equalisation of plug housing Connector M12
- 5 = solenoid valve Ex-i