



Isolating transducer 1-channel IMC-AIA-11EX-I/24VDC

TURCK

Industrial
Automation



The 1-channel isolating transducer IMC-AIA-11Ex-i/24VDC features an intrinsically safe input circuit. The device can be mounted in zone 2.

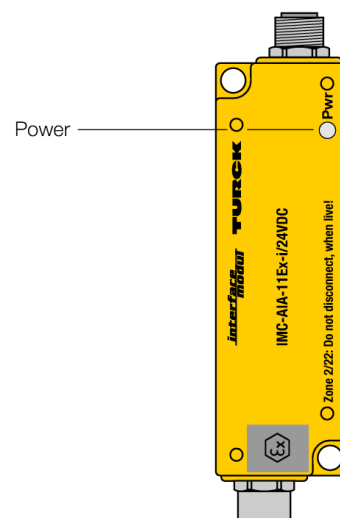
In case of unprotected mounting in zone 2 resp. zone 22 the devices must be protected against mechanical damages of the connectors and the housings with the TURCK cover plate IMC-SG (Ident no.7560016).

The standard current signal is transmitted from the Ex-area to the safe area without attenuation (1:1). The output circuit is equipped with a short-circuit protected power source.

Intrinsically safe analog data transmitters can be connected to the device in the Ex area.

The device is designed for 24 VDC supply. The green LED indicates operational readiness.

- Isolating transducer with M12 x 1 males, 1-channel
- Intrinsically safe input circuit Ex ia
- Output circuit: 0/4...20 mA
- Application area acc. to ATEX: II (1) G, II (1) D, II 3G, II 3D
- Complete galvanic separation
- Protection class IP67





Isolating transducer

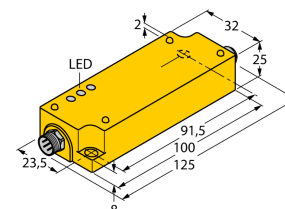
1-channel

IMC-AIA-11EX-I/24VDC

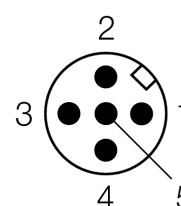
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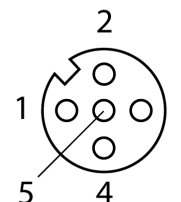
Dimensions



pin configuration M12 connectors



pin assignment female M12 (intrinsically safe end)



Type code	IMC-AIA-11EX-I/24VDC																		
Ident no.	7560009																		
Nominal voltage	24 VDC																		
Operating voltage range	20...30 VDC																		
Power consumption	≤ 1.5 W																		
Transmitter connection																			
Supply voltage	≤14 V																		
Current	25 mA																		
Current input	0...20 mA																		
Output circuits																			
Output current	0...20 mA																		
Load resistance current output	≤ 0.5 kΩ																		
Limit frequency	≤ 50 Hz																		
Rise time (10-90%)	≤ 10 ms																		
Dropout time (90...10%)	≤ 10 ms																		
Measuring accuracy	≤ 0.1 % of full scale																		
Reference temperature	23 °C																		
Temperature drift	≤ 0.005 % / K																		
Galvanic separation																			
Test voltage	2.5 kV																		
Ex approval acc. to conformity certificate	TÜV 07 ATEX 553644																		
Application area	II (1) GD																		
Protection type	[Ex ia] IIB																		
Max.output voltage U _o	≤ 21.8 V																		
Max. output current I _o	≤ 64.5 mA																		
Max. output power P _o	≤ 1130 mW																		
Rated voltage	250 V																		
Characteristic	Trapezoidal																		
Internal inductance/capacitance L/C _i	Li = negligibly small; Ci = 11 nF																		
External inductance/capacitance L _e /C _e																			
<table><tr><td>Ex ia</td><td colspan="4">IIB</td></tr><tr><td>Lo[mH]</td><td>5.8</td><td colspan="2">0.2</td><td></td></tr><tr><td>Co[nF]</td><td>469</td><td colspan="2">799</td><td></td></tr></table>					Ex ia	IIB				Lo[mH]	5.8	0.2			Co[nF]	469	799		
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Lo[mH]	5.8	0.2																	
Co[nF]	469	799																	
Ex approval acc. to conformity certificate	TÜV 07 ATEX 554129 X																		
Application area	II 3G, II 3D																		
Protection class for belonging equipment	Ex nA [nL] IIB/IIC T4 bzw. Ex tD A22 IP67 T 80°C																		
	Dc																		
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<table><tr><td>Ex nL</td><td colspan="2">IIC</td><td colspan="2">IIB</td></tr><tr><td>Lo [mH]</td><td>0.85</td><td>0.2</td><td>22</td><td>10</td></tr><tr><td>Co [nF]</td><td>129</td><td>219</td><td>800</td><td>1200</td></tr></table>					Ex nL	IIC		IIB		Lo [mH]	0.85	0.2	22	10	Co [nF]	129	219	800	1200
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Lo [mH]	0.85	0.2	22	10															
Co [nF]	129	219	800	1200															
MTTF	300 years acc. to SN 29500 (Ed. 99) 40 °C																		
Indication																			
Operational readiness	green																		
Protection class	IP67																		
Ambient temperature	-25...+70 °C																		
Storage temperature	-40...+80°C																		
Dimensions	100x 32x 25 mm																		
Weight	151 g																		
Mounting instruction	Mounting on backplane																		
Housing material	Polycarbonate/ABS																		
Electrical connection	M12 flange connection																		
Tightening torque	3.5 Nm																		