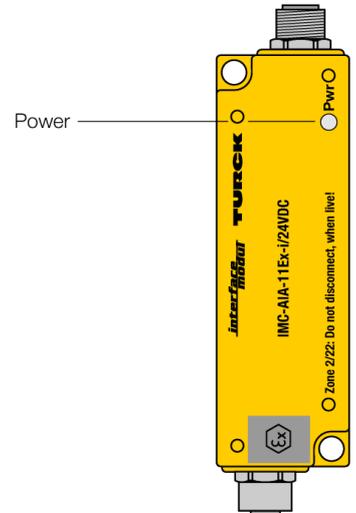
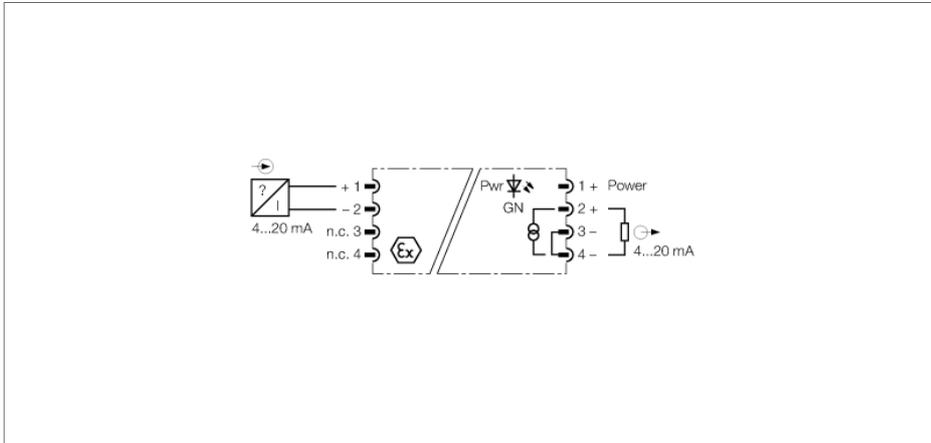




**Isolating transducer**  
**1-channel**  
**IMC-AIA-11EX-I/24VDC**

**TURCK**

Industrial  
Automation



The analog signal isolator IMC-AIA-11Ex-i/24VDC is single-channeled and 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 power supply. The green LED indicates operational readiness.

- **Single-channel isolating transducer with M12x1 male connectors**
- **Intrinsically safe input circuit Ex ia**
- **Output circuit: 0/4...20mA**
- **Application area acc. to ATEX: II (1) GD, II 3 GD**
- **Galvanic separation of input circuits, output circuits and power supply**
- **Protection class IP67**



# Isolating transducer

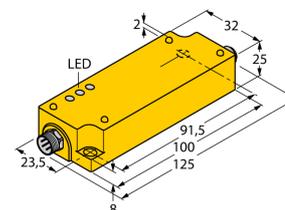
## 1-channel

### IMC-AIA-11EX-I/24VDC

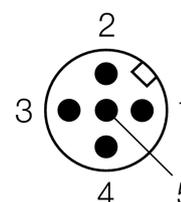
**TURCK**

Industrial  
Automation

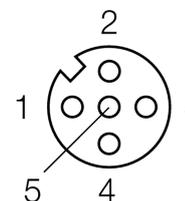
#### Dimensions



#### pin configuration M12 connectors



#### pin assignment female M12 (intrinsically safe end)



<b>Type</b>	IMC-AIA-11EX-I/24VDC												
Ident-No.	7560009												
<b>Nominal voltage</b>	24 VDC												
Operating voltage range	20...30 VDC												
Power consumption	≤ 1.5 W												
<b>Transmitter connection</b>													
Supply voltage	≤ 14 V												
Current	25 mA												
Current input	0...20 mA												
<b>Output circuits</b>													
Output current	0...20 mA												
Load resistance current output	≤ 0.5 kΩ												
<b>Limit frequency</b>	≤ 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												
<b>Galvanic separation</b>													
Test voltage	2.5 kV												
<b>Ex approval acc. to conformity certificate</b>	TÜV 07 ATEX 553644												
Application area	II (1) GD												
Protection type	[Ex ia] IIB												
Max. output voltage U <sub>o</sub>	≤ 21.8 V												
Max. output current I <sub>o</sub>	≤ 64.5 mA												
Max. output power P <sub>o</sub>	≤ 1130 mW												
Rated voltage	250 V												
Characteristic	Trapezoidal												
Internal inductance/capacitance L <sub>i</sub> /C <sub>i</sub>	negligibly small												
External inductance/capacitance L <sub>e</sub> /C <sub>e</sub>													
	<table border="1"> <thead> <tr> <th>Ex ia</th> <th colspan="2">IIB</th> </tr> </thead> <tbody> <tr> <td>Lo[mH]</td> <td>5.8</td> <td>0.2</td> </tr> <tr> <td>Co[μF]</td> <td>469</td> <td>799</td> </tr> </tbody> </table>	Ex ia	IIB		Lo[mH]	5.8	0.2	Co[μF]	469	799			
Ex ia	IIB												
Lo[mH]	5.8	0.2											
Co[μF]	469	799											
<b>Ex approval acc. to conformity certificate</b>	TÜV 07 ATEX 554129 X												
Application area	II 3 GD												
Protection class for belonging equipment	Ex nA [nL] IIC/IIB T4 bzw. Ex tD A22 IP67 T80°C												
Max. output voltage U <sub>o</sub>	≤ 21.8 V												
Max. output current I <sub>o</sub>	≤ 64.5 mA												
Max. output power P <sub>o</sub>	≤ 1130 mW												
External inductance/capacitance L <sub>e</sub> /C <sub>e</sub>	Ci = 11nF, Li negligibly small												
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	<table border="1"> <thead> <tr> <th>Ex nL</th> <th>IIC</th> <th colspan="2">IIB</th> </tr> </thead> <tbody> <tr> <td>Lo [mH]</td> <td>0.85</td> <td>0.2</td> <td>10</td> </tr> <tr> <td>Co [nF]</td> <td>129</td> <td>219</td> <td>800 1200</td> </tr> </tbody> </table>	Ex nL	IIC	IIB		Lo [mH]	0.85	0.2	10	Co [nF]	129	219	800 1200
Ex nL	IIC	IIB											
Lo [mH]	0.85	0.2	10										
Co [nF]	129	219	800 1200										
<b>Indication</b>													
Operational readiness	green												
<b>Protection class</b>	IP67												
Ambient temperature	-25...+70 °C												
Storage temperature	-40...+80°C												
Dimensions	100 x 32 x 25 mm												
Weight	151 g												
Mounting instruction	Mounting on backplane												
Housing material	Polycarbonate/ABS												
Electrical connection	M12 flange connection												