

Isolating transducer 1-channel IMC-AIA01-11EX-I/24VDC



The 1-channel isolating transducer IMC-AIA01-11EX-I/24VDC features an intrinsically safe input circuit. The device can be mounted directly in Zone 2.

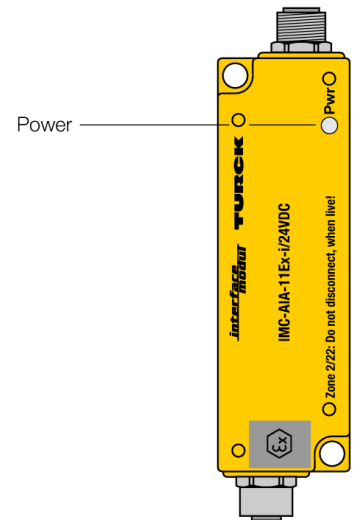
The device must be protected against mechanical load on connector and housing when mounted in zone 2 or 22. For this, use the TURCK cover plate IMC-SG (Ident no.7560016).

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.

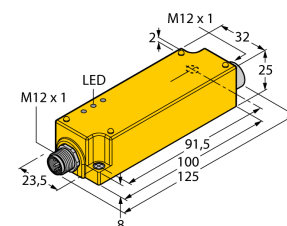
Intrinsically safe analog transmitters can be connected to the device in the Ex area.

The device requires a 24-VDC power supply. A green LED indicates operational readiness.

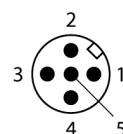
- 1-channel isolating transducer
- Output circuit: 4...20 mA
- Complete galvanic isolation
- Input reverse-polarity protected
- Protection class IP67
- Connection with M12 male connectors
- ATEX, FM_{US} , IECEx
- Use in Zone 2/22
- SIL low demand



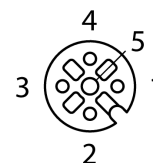
Dimensions



Pin assignment male M12

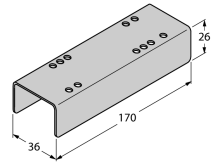


Pin assignment female M12 (intrinsically safe end)



Type	IMC-AIA01-11EX-I/24VDC
ID	100047944
Nominal voltage	24 VDC
Operating voltage U_s	20...30 VDC
Power consumption	≤ 1.5 W
Transmitter connection	
Supply voltage	≤ 14 V / 20 mA
Current	25 mA
Input current	4...20 mA
Output circuits	
Output current	4...20 mA
Load resistance current output	≤ 0.5 k Ω
Response characteristic	
Rise time (10...90 %)	≤ 10 ms
Fall time (90...10 %)	≤ 10 ms
Measuring accuracy (including linearity, hysteresis and repeatability)	≤ 0.1 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.005 % of full scale/K
Galvanic isolation	
Test voltage	2.5 kV RMS
Important note	For Ex-applications the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Ex approval acc. to conformity certificate	TÜV 18 ATEX 195739X
Application area	II (1) GD
Ignition protection category	[Ex ia] IIB
Ex approval acc. to conformity certificate	TÜV 07 ATEX 554129 X
Application area	II 3G, II 3D
Ignition protection type	Ex nA [nL] IIB/IIC T4 or rather Ex tD A22 IP67 T 80°C Dc
Characteristic	trapezoidal
Approval	SIL 2 acc. to EXIDA FMEDA
Displays/Operating elements	
Operational readiness	Green
Mechanical data	
Protection class	IP67
Ambient temperature	-25...+70 °C
Storage temperature	-40...+80 °C
Dimensions	100 x 32 x 25 mm
Weight	170 g
Mounting instructions	panel
Housing material	Plastic, Polycarbonate/ABS
Electrical connection	M12 receptacle
Tightening torque	3.5 Nm

Accessories

Type code	Ident-No.		Dimension drawing
IMC-SG	7560016	Metal cover plate for IMC modules (required for application in zones 2/22)	
SC-M12/3GD	6900390	Captive safety clip for sensors with M12 x 1 connectors and approval acc. to ATEX II 3 G or II 3 D.	