

Analog Signal Isolator

1-channel

IMC-AO-11EX-I/L



The 1-channel analog signal isolator IMC-AO-11Ex-i/L features an intrinsically safe output circuit. The device can be mounted 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 normalized current signal is transmitted, galvanically isolated 1:1, from the non-Ex to the Ex-area. The output circuit is equipped with a short-circuit proof power source.

Intrinsically analog actuators like I/P converters (e.g. at control valves) or displays can be applied in the Ex area.

The device is loop-powered.

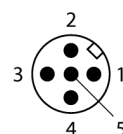
- Analog signal isolator, 1-channel
- Input circuit: 0/4...20 mA
- Output circuit: 0/4...20 mA
- Complete galvanic isolation
- Input reverse-polarity protected
- Protection class IP67
- Connection with M12 male connectors
- ATEX, c FM_{US}, IECEx
- Use in Zone 2/22



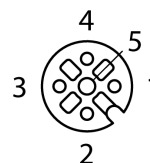
Dimensions



Pin assignment male M12

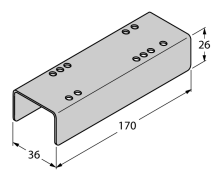


Pin assignment female M12 (intrinsically safe end)



Type	IMC-AO-11EX-I/L
ID	7560006
Nominal voltage	24 VDC loop-powered
Power consumption	≤ 3.5 W
Voltage input	max. 30 VDC
Input current	0...20 mA
Output circuits	
Output current	0...20 mA
Load resistance current output	≤ 0.4 kΩ
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	TÜV17ATEX195765 X
Application area	II (1) G, II (1) D
Ignition protection category	[Ex ia] IIB/IIC; [Ex iaD]
Ex approval acc. to conformity certificate	Turck Ex-13019HX
Application area	II 3G, II 3D
Ignition protection type	Ex nA [nL] IIC/IIB T4 or rather Ex tD A22 IP67 T80°C
Characteristic	linear
Approval	SIL2 acc. to EXIDA FMEDA
Mechanical data	
Protection class	IP67
Ambient temperature	-25...+70 °C
Storage temperature	-40...+80 °C
Dimensions	100 x 32 x 25 mm
Weight	120 g
Mounting instructions	panel
Housing material	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.	