

Analog signal isolator 1-channel IMC-AI-11EX-I/L



The 1-channel analog signal isolator IMC-AI-11EX-I/L features an intrinsically safe input 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 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 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
- Cable with M12 connectors



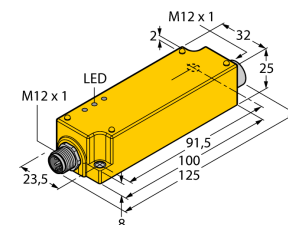


Analog signal isolator

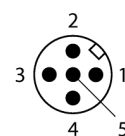
1-channel

IMC-AI-11EX-I/L

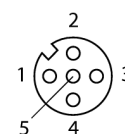
Dimensions



Pin assignment male M12



Pin assignment female M12 (intrinsically safe end)



Type designation	IMC-AI-11EX-I/L
Ident no.	7560004
Nominal voltage	24 VDC loop-powered
Power consumption	≤ 3 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
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
Important note	For Ex-applications the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Ex approval acc. to conformity certificate	TÜV17 ATEX195765 X
Ignition protection category	[Ex ia Ga] IIC; [Ex ia Da] IIIC
Ex approval acc. to conformity certificate	TÜV 07 ATEX 553945 X
Application area	II 3 GD
Ignition protection type	Ex nA [nL] IICIB T4 or rather Ex tDA 22 IB67 T80°C
Approval	SIL2 acc. to EXIDA FMEDA
Protection class	IP67
Ambient temperature (min.)	-25 °C
Ambient temperature (max.)	70 °C
Storage temperature	-40...+80 °C
Dimensions	100 x 32 x 25 mm
Weight	157 g
Mounting instructions	panel
Housing material	Polycarbonate/ABS
Electrical connection	M12 receptacle
Tightening torque	3.5 Nm

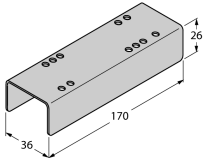


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Accessories

Type code	Ident no.	Description	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.	