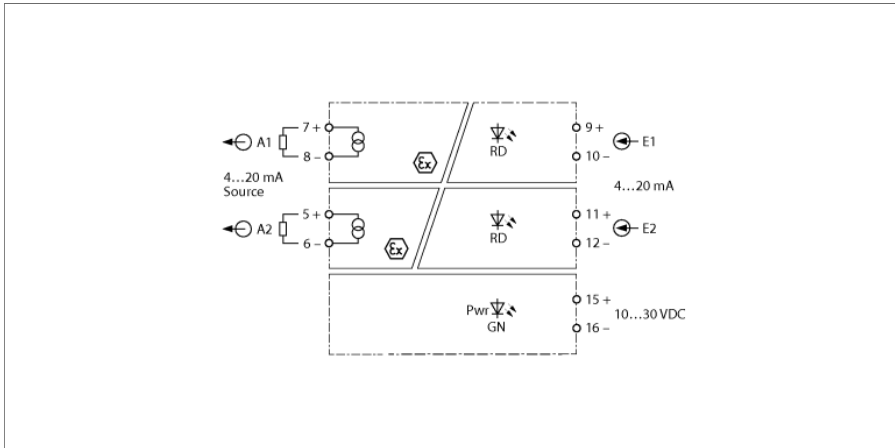


**Analog Signal Isolator  
2-channel  
IMX12-AO01-2I-2I-H0/24VDC**



The 2-channel IMX12-AO01-2I-2I-H0/24VDC signal isolator is designed to transmit the normalized current signal galvanically isolated 1:1 from the non-Ex area to the Ex-area. In addition to the analog signal also digital HART® communication signals can be transmitted bidirectionally. Typical applications are for example, the control of I/P converters or indicators in the Ex area.

The Pwr LED lights green to indicate operational readiness. The device can detect a wire break or short circuit on the field side, the input of the related channel then switches to a high impedance state. A fault in the input circuit leads to a flashing red LED according to NE44.

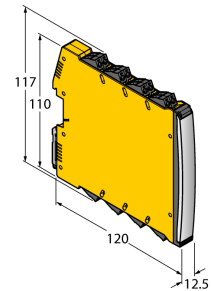
The device can be used in safety circuits up to SIL2 (high and low demand according to IEC 61508) and meets the requirements of the NE21. It is equipped with removable screw terminals.

- ATEX, IECEx, INMETRO, NEPSI, Kosha, TIIS, TR CU
- Installation in zone 2
- SIL 2
- Output circuits monitored for wire-break and short-circuit
- Complete galvanic isolation
- HART transparent
- Removable screw terminals

**Analog Signal Isolator  
2-channel  
IMX12-AO01-2I-2I-H0/24VDC**

<b>Type designation</b>	IMX12-AO01-2I-2I-H0/24VDC
Ident no.	7580405
<b>Nominal voltage</b>	24 VDC
Operating voltage range	10...30 VDC
Power consumption	≤ 2.2 W
<b>Input current</b>	2 x 4...20 mA
<b>Output circuits</b>	
Output current	2 x 4...20 mA
Load resistance, current output	≤ 0.8 kΩ
Short-circuit	at a load resistance of < 30 Ω the input current is < 500 μA
Wire break	at a load resistance of > 30 kΩ the input current is < 500 μA
<b>Rise time (10...90 %)</b>	≤ 10 ms
Fall time (90...10 %)	≤ 10 ms
Measuring accuracy	≤ 0.05 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.002 % / K
<b>Galvanic isolation</b>	
Test voltage	2.5 kV
Input 1 to output 1	375 V peak value acc. to EN 60079-11
Input 2 to output 2	375 V peak value acc. to EN 60079-11
Input 1 to supply	150 V RMS acc. to EN 50178 and EN 61010-1
Input 2 to supply	150 V RMS acc. to EN 50178 and EN 61010-1
Output 1 to supply	375 V peak value acc. to EN 60079-11
Output 2 to supply	375 V peak value acc. to EN 60079-11
Output 1 to output 2	50 V RMS acc. to EN 50178 and EN 61010-1
Input 1 to input 2	150 V RMS acc. to EN 50178 and EN 61010-1
<b>Important note</b>	For Ex-applications the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Ex approval acc. to conformity certificate	TÜV 15 ATEX 153600 X
Application area	II (1) G, II (1) D
ignition protection category	[Ex ia Ga] IIC; [Ex ia Da] IIIC
Application area	II 3 (1) G
Ignition protection type	Ex nA [ia Ga] IIC T4 Gc
<b>Important note</b>	If the device is used in applications to achieve functional safety according to IEC 61508, the safety manual must be used. Information in the data sheet are not valid for functional safety.
Use in SIL safety circuits	SIL 2 acc. to IEC 61508
<b>Indication</b>	
Operational readiness	green
Error indication	red

**Dimensions**



**Analog Signal Isolator  
2-channel  
IMX12-AO01-2I-2I-H0/24VDC**

<b>Protection class</b>	IP20																																																																																
Flammability class acc. to UL 94	V-0																																																																																
Ambient temperature	-25...+70 °C																																																																																
Storage temperature	-40...+80 °C																																																																																
Relative humidity	≤ 95 %																																																																																
Dimensions	120 x 12.5 x 117 mm																																																																																
Weight	156 g																																																																																
Mounting instructions	DIN rail (NS35)																																																																																
Housing material	Polycarbonate/ABS																																																																																
Electrical connection	Removable screw clamp terminals, 2-pin																																																																																
Terminal cross-section	0.2...2.5 mm <sup>2</sup> (24 ... 13 AWG)																																																																																
Tightening torque	0.5 Nm																																																																																
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