# 1- & 2-channel Loop Powered Isolators for Separation of 0(4)-20 mA Signals

IsoPAQ-11L and IsoPAQ-12L are 1- and 2-channel loop powered isolators used for electrical isolation of 0(4)-20 mA signals to avoid measurement errors due to different voltage potentials or ground loops in an instrument installation.

The 2-channel version, IsoPAQ-12L offers a very cost effective alternative combined with a high-density mounting.

The isolators need no power supply, which contributes to reduced installation costs compared to isolation transmitters.

The high reliability ensures a safe system operation and low maintenance costs.





# • Input to output galvanic isolation

Protection against erroneous measurements due to parasitic voltages or ground loops

#### • 1- and 2-channel versions

Allows for optimal cost efficiency

#### • No power supply required

Reduced wiring saves installation costs

#### Low voltage drop

Input voltage drop of less than 2 V reduces impact on the primary current loop

#### High accuracy

Negligible additional measurement errors in the loop

# • High-density DIN-rail mounting

12.5 mm (0.5") housing combined with very low self heating allows for high density mounting

#### • Plug-in screw terminals

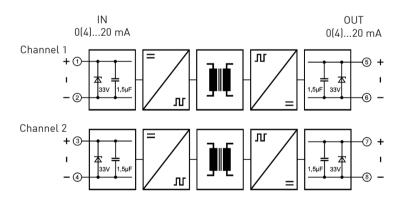
Simplifies installation and maintenance

# Specifications: IsoPAQ-11L/-12L

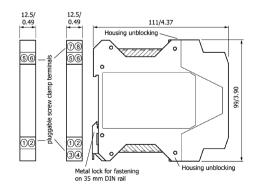
Input			
Input signal	0(4)-20 mA/max. 30 V		
Operating current	< 20 μΑ		
Voltage drop	< 2 V		
Overload	≤ 100 mA, ≤ 30 V		
Output			
Output signal	0(4)-20 mA/max. 28 V		
Response time	2 ms $\Omega$ 250 $\Omega$ load/6 ms $\Omega$ 750 $\Omega$ load		
(10 to 90 % of end value)			
Ripple	< 0.07 % of measured value, ~100 kHz		
General data			
Transmission error	± 0.1 % of end value		
Load error	$\pm$ 0.03 % of measured value/100 $\Omega$ load		
Temperature coefficient <sup>1]</sup>	$\pm$ 0.0015 %/K of measured value/100 $\Omega$ load		
Test voltage	1.5 kV, 50 Hz	Between all circuits	
Ambient temperature	Operation	-20 to +70 °C (-4 to +158 °F)	
	Transport and storage	-35 to +85 °C (-31 to +185 °F)	
EMC <sup>2)</sup>	EN 61326-1		
Construction	12.5 mm (0.5") housing, protection class: IP20		
Connection	≤ 2.5 mm², AWG 14		
Weight	Approx. 100 g		

Average TC in specified operating temperature range
Minor deviations possible during interference

# **Block diagram/Connections**



### **Dimensions**



# **Ordering information**

Product	Input / Output	Part No.
IsoPAQ-11L	1-channel, 0(4)-20 mA	70ISL11001
IsoPAQ-12L	2-channel, 0(4)-20 mA	70ISL12001



mm/inch