## IsoPAQ-11L/-12L

# 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.



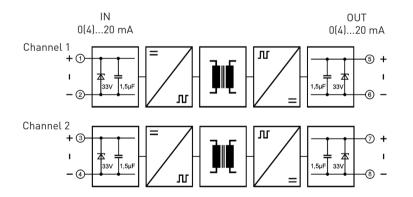
- Input to output galvanic isolation Protection against erroneous measurements due to parasitic voltages or ground loops
- 1- and 2-channel versions Allows for optimal cost efficiency
- No power supply required Reduced wiring saves installation costs
- Low voltage drop Input voltage drop of less than 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

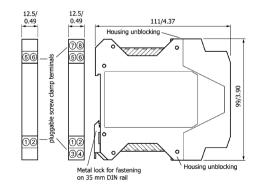
| Input                                 |   |                                |  |
|---------------------------------------|---|--------------------------------|--|
| Input signal                          | 0(4)-20 mA/max. 30 V  |                                |  |
| Operating current                     | < 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 l $ m ll$ 250 $\Omega$ load/6 ms l $ m ll$ 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



mm/inch

#### **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 |