APLISENS ®

Power supply/isolator/signal converter ZSP-41/1 and ZSP-41/2

- ✓ **Full galvanic separation of circuits (IN-OUT, IN-SUP, OUT-SUP)**
- ✓ **Ability to select input and output signals**
- ✓ **Ability to use input line to power a two-wire transmitter**
- ✓ **Casing can be fitted on a standard rail (TS35)**

Applications and functions

The ZSP-41 provides galvanic separation of an input signal (4 ÷ 20 mA, 0 ÷ 20 mA, 0 ÷ 10 V) and converts it, through a separation system into an output signal. An additional input line may be connected to any two-wire transmitter to provide it with a 19 ÷ 24 V. The device is typically used to provide galvanic separation between the measurement circuits installed on an object, and the main section.

Configuration, calibration

The user can use switches to configure input and output settings for the following signals. Access to switches by removing the front panel. Isolator can be produced to support other input and output signals. Calibration is carried out using potentiometers.
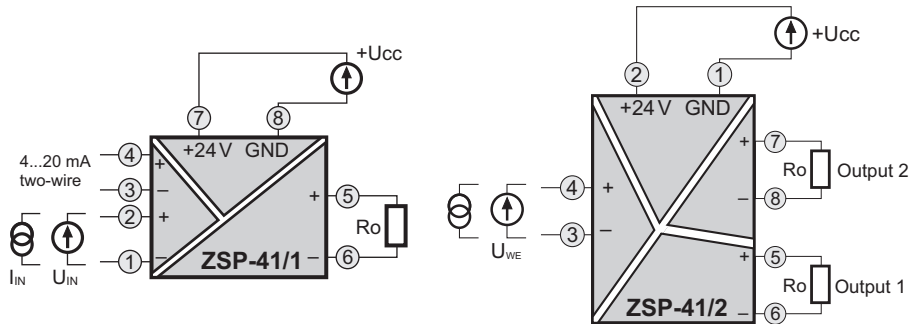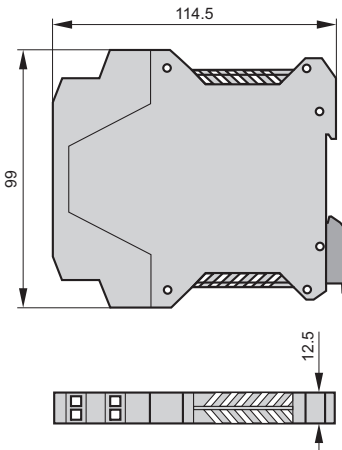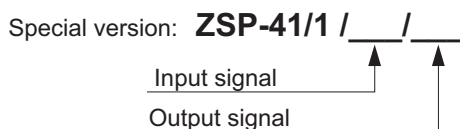

Technical parameters

- **Input parameters**
  Input signal (selected by switch)
  0...20 mA, 4...20 mA, 0...10 V
  Input resistance
  $\geq 50\ k\Omega$ (voltage input) / $\leq 50\ \Omega$ (current input)

- **Output parameters**
  Output signal (selected by switch)
  0...20 mA, 4...20 mA, 0...10 V
  Load resistance
  0...500 Ω (current output) / $\geq 1\ k\Omega$ (voltage output)

- **Galvanic separation**: opto-electronic
  Strength test parameters
  1,5 kV AC, 50 Hz, 1 min

- **Dynamic characteristics**
  Transmission band: 5 Hz (3 dB)

- **Power supply**
  Supply voltage: 24 V ± 20%
  Supply current: $\leq$ 100 mA

- **Conditions of normal use**
  Ambient temperature: 5...60°C
  Relative humidity: 30...80%

- **Casing**
  Type: UEGM 22.5 (PHOENIX)
  Ingress protection rating: IP20

- **Weight**: 0,1 kg

- **Conversion errors**
  Accuracy: $\leq$ ±0,16%
  Typically, the converter is set for the range 4...20 mA / 4...20 mA. Setting of a different range will lower the class of the converter to 0,25% (tuning is possible using trimmers accessible from the front plate).

Ordering procedure

Standard version: **ZSP-41/1**

Special version: **ZSP-41/1 /___/___**
   Input signal
   Output signal

Standard version: **ZSP-41/2**

Special version: **ZSP-41/2 /___/___**
   Input signal
   Output signal