

# TRG line



## SGZ-12

- two-wire circuits isolator with the translation
- free input and output standard
- additional 24V DC supply to power two-wire transmitters
- full galvanic isolation between input/output/supply circuits
- TS-35 DIN rail mounting

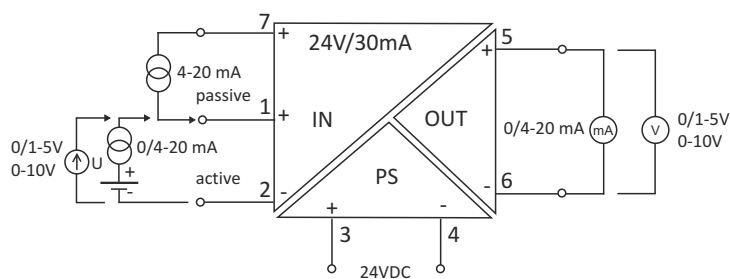
SGZ-12 type isolators are dedicated for making a galvanic isolation between input measuring circuit and output circuit.

The device needs 24V DC of power supply. Input, output and supply circuits are mutually isolated. The using of isolators allows to reduce the impact of interference and ground potential difference. It also helps to put together different types of signals (0÷5 mA, 0÷20 mA, 4÷20 mA, 0÷5V, 0÷10V, 1÷5V).

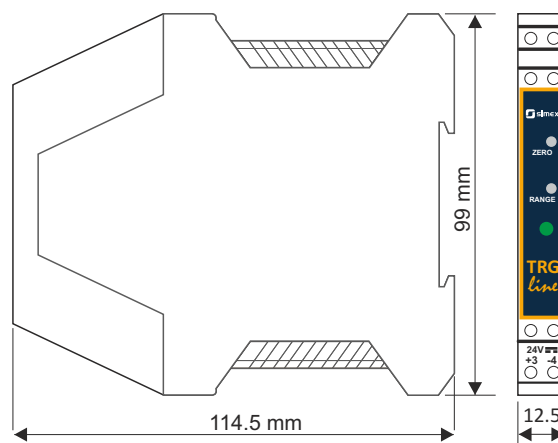
User is allowed to correct zero point and measuring range, using two potentiometers mounted on the front panel of housing.

### TYPICAL CONNECTIONS

Galvanic isolation between input / output / power supply circuits



### CASE DIMENSIONS



### TECHNICAL DATA

Power supply / consumption	21 ÷ 28 V DC / 65 mA
Input signal	<u>current:</u> 0/4 ÷ 20 mA, 0 ÷ 5 mA, resistance 50 Ω <u>voltage:</u> 0/1 ÷ 5V, 0 ÷ 10V, resistance ≥ 100 kΩ
Output signal	<u>current:</u> 0/4 ÷ 20 mA, resistance 50 Ω <u>voltage:</u> 0/1 ÷ 5V, 0 ÷ 10V, resistance ≥ 100 kΩ
Additional supply	24V DC ±1.5 V / 30 mA for 4-20 mA two-wire transmitters
Load resistance	<u>current:</u> 0/4 ÷ 20 mA, resistance 0 ÷ 700 Ω 0 ÷ 5 mA, resistance 0 ÷ 3 kΩ <u>voltage:</u> 0/1 ÷ 5V, 0 ÷ 10V, resistance ≥ 2 kΩ error: ±0.02%
Galvanic isolation	2 kV, capacity between circuits < 10 pF
Accuracy	±0.1%
Time constant	0.1s
Temperature drift	±0.01% / °C
Nonlinearity	±0.05%
IP protection	IP 20
Operating temperature	-20°C ÷ +60°C
Dimensions (WxHxD)	12.5 x 99 x 114.5 mm
Mounting	TS-35 DIN rail

### ORDERING

SGZ-12-X-X-2-3-001

input:	output:
1 : 0 - 5 mA	1 : 0 - 5 mA
2 : 0 - 20 mA	2 : 0 - 20 mA
3 : 4 - 20 mA	3 : 4 - 20 mA
4 : 0 - 5 V	4 : 0 - 5 V
5 : 0 - 10 V	5 : 0 - 10 V
6 : 1 - 5 V	6 : 1 - 5 V

#### Ordering example:

SGZ-12-3-5-2-3-001

1-track isolator/transmitter

input: 4-20 mA, output: 0-10V, power supply 24V