

TRG
line



SGT-12

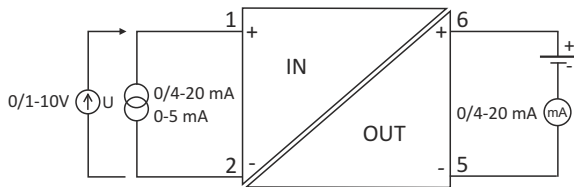
- two-wire circuits isolator / multiplier
- free input standard
- two separated output tracks
- full galvanic isolation with the translation
- TS-35 DIN rail mounting

Isolators / multipliers type **SGT-12** are dedicated for providing galvanic isolation between controlled system (ex. transmitter, encoder) and main unit (regulator, indicator, data logger). Standard input signal (0÷5 mA, 0÷20 mA, 4÷20 mA, 0÷5V, 0÷10V, 1÷5V) after galvanic isolation can be converted into 4-20 mA output signal in two isolated current loops. Current output signal can also be processed into voltage signal with standard load resistance. The using of isolators/multipliers allows to reduce the impact of interference and ground potential difference. It also helps to match standard input signals to passive two-wire 4-20 mA outputs.

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

TYPICAL CONNECTIONS

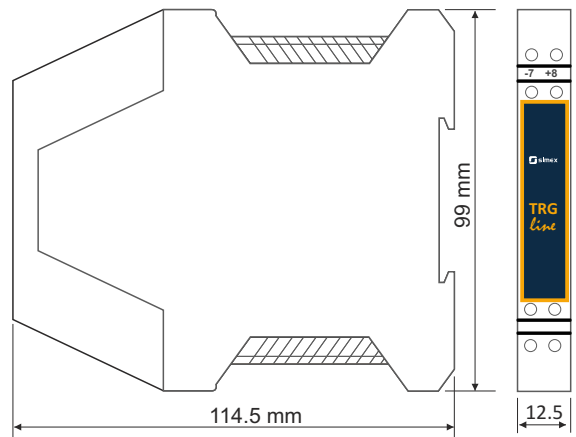
Galvanic isolation between input / output circuits



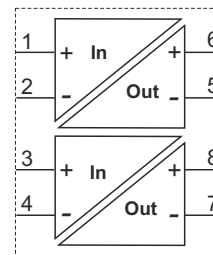
TECHNICAL DATA

Power supply	7 ÷ 36V DC
Input signal	current: 0/4 ÷ 20 mA, resistance 50 Ω, 0 ÷ 5 mA, resistance 200 Ω voltage: 0/1 ÷ 5V, 0 ÷ 10V, resistance ≥ 100 kΩ
Output signal	4 ÷ 20 mA current loops supplied from external power
Load resistance	max. 750 Ω for Uz=24V $R_{load} = (U_z - 9V) / 20 \text{ mA}$ [kΩ] error: ±0.05%
Galvanic isolation	2 kV, capacity between circuits < 10 pF
Accuracy	±0.15%
Time constant	0.1s (on request 0.05 ÷ 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, TS-32 DIN rail

CASE DIMENSIONS



PIN ASSIGNMENT



ORDERING

SGT-12-XX-3X-2-5-001

input 1:		output 2:
1 : 0 - 5 mA		0 : no output
2 : 0 - 20 mA		3 : 4 - 20 mA
3 : 4 - 20 mA	input 2:	
4 : 0 - 5 V	0 : no input	
5 : 0 - 10 V	1 : 0 - 5 mA	
6 : 1 - 5 V	2 : 0 - 20 mA	
	3 : 4 - 20 mA	
	4 : 0 - 5 V	
	5 : 0 - 10 V	
	6 : 1 - 5 V	

Order examples:

SGT-12-23-33-2-5-001

Isolator, in. 1: 0-20 mA, in. 2: 4-20 mA, out.: 2 x 4-20 mA

SGT-12-10-33-2-5-001

Multiplier, in. 1: 0-5 mA, out.: 2 x 4-20 mA

