

TRG
line



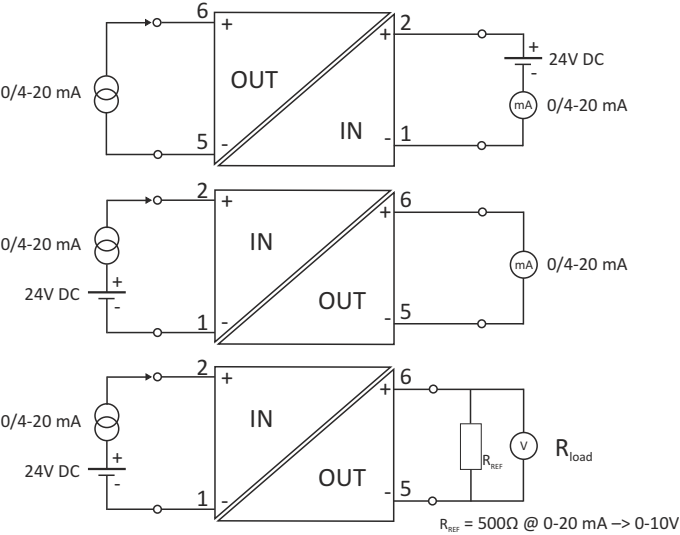
SGS-12, SGS-22

- isolated, self-powered isolators
- 1, 2, 3 or 4 tracks
- 2 types of housing
- galvanic isolation between input/output circuits
- TS-35 DIN rail mounting

SGS series isolators create galvanic isolation between 0/4-20 mA input and 0/4-20 mA output circuits. Isolator doesn't need any power supply. 0/4-20 mA current output signal can also be processed into voltage 0/2-10V signal with standard 500Ω load resistance. Quality of isolation depends on breakdown voltage and also capacity between separated circuits.

TYPICAL CONNECTIONS

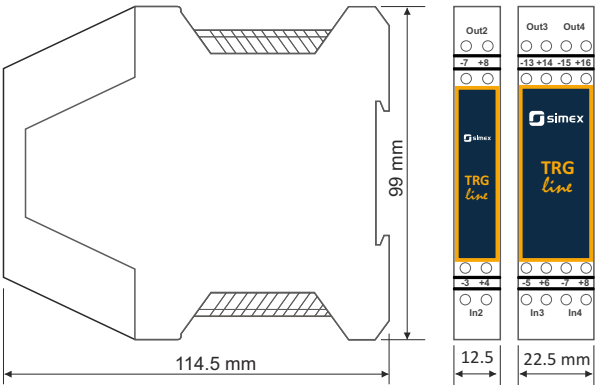
Galvanic isolation between current circuits



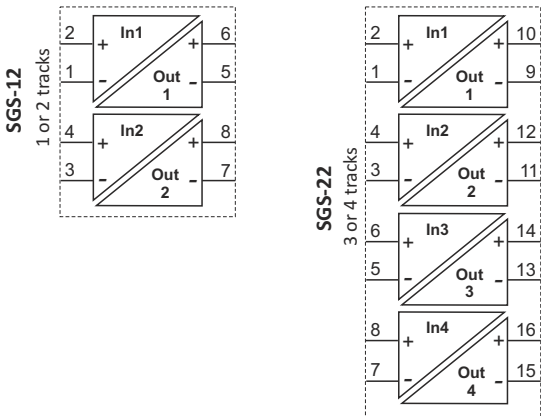
TECHNICAL DATA

Power supply	directly from current loop
Input signal	direct current 0 ÷ 30 mA (max. current: 50 mA, max. voltage: 30V), input voltage divider: 1,9V + 20mA x R _{load}
Output signal	<u>current</u> : direct current I _{out} = I _{in} ; load resistance: 0-1000 Ω <u>voltage</u> : with external resistor on output terminals; for 0/4÷20 mA input: R _{REF} = 50 Ω → 0/0.2 ÷ 1V R _{REF} = 250 Ω → 0/2 ÷ 5V R _{REF} = 500 Ω → 0/2 ÷ 10V
Galvanic isolation	2 kV, capacity between circuits < 100 pF
Accuracy	±0.05% - 0.05% (R _{load} / 100Ω)
Time constant	min. 5 ms
Temperature drift	±0.005% / °C
IP protection	IP 20
Operating temperature	-20°C ÷ +60°C
Dimensions (WxHxD)	SGS-12: 12.5 x 99 x 114.5 mm; SGS-22: 22.5 x 99 x 114.5 mm
Mounting	TS-35 DIN rail

CASE DIMENSIONS



PIN ASSIGNMENT



ORDERING

SGS-12-XX-2-4-001

in/out 1:
2 : 0 - 20 mA
3 : 4 - 20 mA

in/out 2:
0 : no input/output
2 : 0 - 20 mA
3 : 4 - 20 mA

SGS-22-XXXX-2-4-001

in/out 1:
2 : 0 - 20 mA
3 : 4 - 20 mA

in/out 2:
2 : 0 - 20 mA
3 : 4 - 20 mA

in/out 4:
0 : no input/output
2 : 0 - 20 mA
3 : 4 - 20 mA

in/out 3:
2 : 0 - 20 mA
3 : 4 - 20 mA

Ordering example:
SGS-22-3230-2-4-001:
3-tracks isolator, in/out 1: 4-20mA,
in/out 2: 0-20mA, in/out 3: 4-20mA