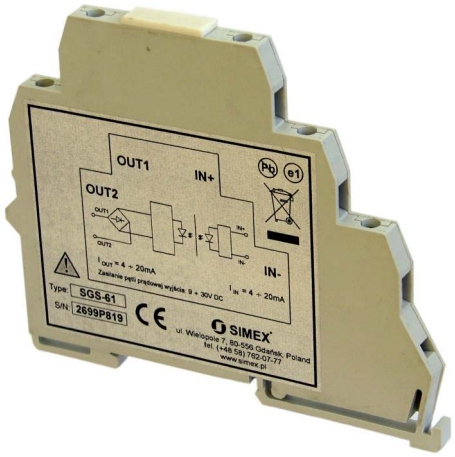
SGS-61

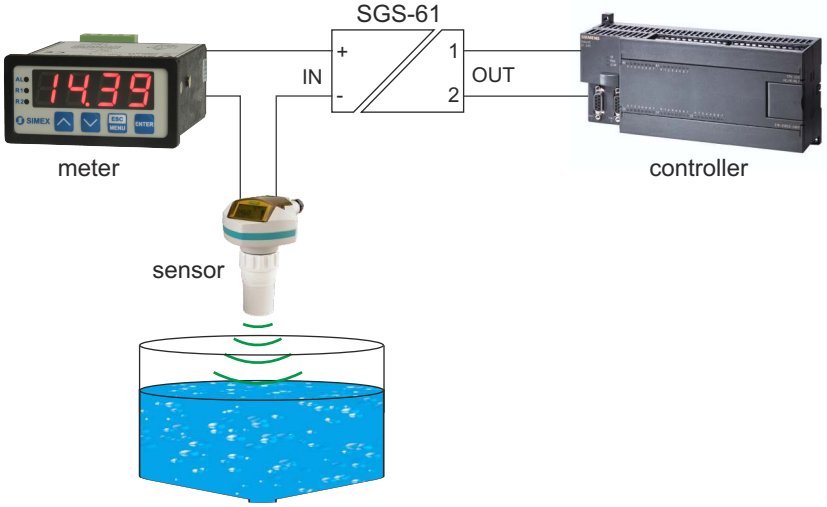
- galvanic separator
- full galvanic isolation of 4-20 mA
- correction of characteristic
- thin DIN rail housing - 6,1 mm only



Separator **SGS-61** allows to input full galvanic isolation between transmitter and receiver of 4-20 mA current loop. Additionally it enables a possibility of connecting more than one receiver (e.g. two meters) with common ground in series in one current loop. Thanks to powering directly from current loop the device does not require any additional power supply, and full galvanic isolation allows using it in many applications with high requirements. Potentiometers which are available from the front, allow to trim minimum current and slope of characteristic, so the correction of whole current loop is possible. The device was built into a very thin housing (6,1 mm) designed for DIN rail mounting, what gives a possibility of its easy application in existing and being assembled systems.

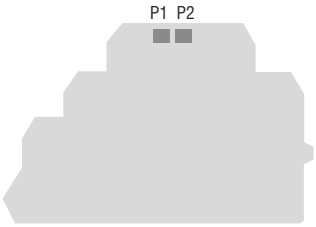
- powered directly from current loop,
- trim minimum current and slope of characteristic,
- very thin DIN housing - 6,1 mm only.

Typical applications



Calibration

The correction of system transmittance is realised via potentiometers P1, P2, available from the front after removing of small cap.
P1 - regulation of 4,00 mA (@ I_{IN} = 4,00 mA, min. current)
P2 - regulation of 20,00 mA (@ I_{IN} = 20,00 mA, slope)



After regulation it is recommended to check circuit characteristic for both 4 mA and 20 mA.

Warning: proper sequence is necessary while circuit calibration. First potentiometer P1, next P2.

Technical data

Input loop:
Current: 4 ÷ 20 mA; $I_{IN\ MIN}$ = 3,9 mA; $I_{IN\ MAX}$ = 24 mA
Voltage drop: max. 5,5 V
Input side powered directly from input current loop

Output loop:
Current: 4 ÷ 20 mA; $I_{OUT\ MIN}$ = 3,9 mA; $I_{OUT\ MAX}$ = 24 mA
Powering of output loop: 9 ÷ 30 V DC (any polarisation connected to OUT1, OUT2)
Max load resistance: max. 1 kΩ (for 30 V / I_{OUT} = 20 mA supply)

Another data:
Transmittance factor: $K_I = I_{OUT} / I_{IN} = 1$
Bandwith: 200 Hz (3 dB)
Separation: between input and output loops
Insulation voltage: 750 V
Temperature stability: 100 ppm / °C
Operating temperature: 0°C ÷ +50°C (standard), -20°C ÷ +50°C (option)
Storage temperature: -10°C ÷ +70°C (standard), -20°C ÷ +70°C (with option **08**)
Protection level: IP 20
Housing type: DIN rail mounted (35 mm rail)
Housing dimensions: 80 x 6,1 x 93,8 mm
Weight: 35 g

Ordering

SGS-61-1115-0-1-XX1

options:
00 : no options
08 : operating temp. -20°C ÷ +50°C