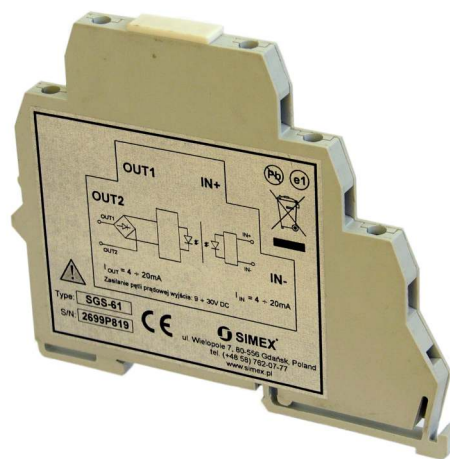


SGS-61

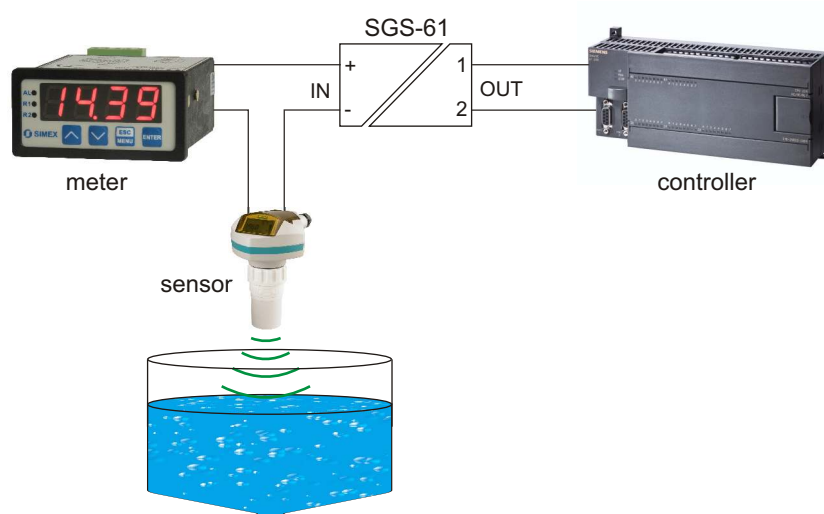
- ▣ galvanic separator
- ▣ full galvanic isolation of 4-20 mA
- ▣ correction of characteristic
- ▣ thin DIN rail housing - 6,1 mm only



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

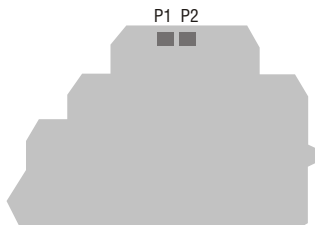


Calibration

The correction of system transmittance is realised via potentiometers P1, P2, available from 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 in 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 k Ω (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: 0,05 % / $^{\circ}$ C

Operating temperature: 0 + 50 $^{\circ}$ C

Storage temperature: -10 + 70 $^{\circ}$ C

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-61-1115-0-1-001