

SP-02 current signal isolator without auxiliary power

- ✓ **Single circuit or dual circuit version in 12,5 mm wide casing**
- ✓ **Accuracy 0,16%**
- ✓ **Casing can be fitted on a standard rail (TS35, TS32)**

Applications and functions

The SP-02 signal isolator provides galvanic separation of an input signal (0/4...20 mA) and converts it, through a separation system into an output signal (0/4...20 mA), with a two-wire power supply in the input signal loop.

The device is typically used to provide galvanic separation between the measurement circuits installed on an object, and the main section. This enables the effect of object-related interference in the monitoring, control and recording systems of automatic devices to be largely eliminated.

Technical parameters

Input data

Input signal 0/4...20 mA
Voltage drop at input $\leq 3,5 \text{ V} + I_{OUT} \times R_o$

Output data

Output signal 0/4...20 mA
Load resistance R_o 0...500 Ω

Galvanic separation

Strength test parameters transformer-based
 1,5 kV, 50 Hz, 1 min

Dynamic characteristics

Transmission band 5 Hz (3 dB)

Conversion errors

Accuracy $\leq \pm 0,16\%$
 When converting a 0...20 mA signal to 0...20 mA in the range below 1% of signal, the error increases to $\pm 0,5\%$.

Effect of temperature fluctuations 0,1% / 10°C

Effect of load resistance fluctuations 0,1% / 100 Ω

Conditions of normal use

Ambient temperature 5...60°C

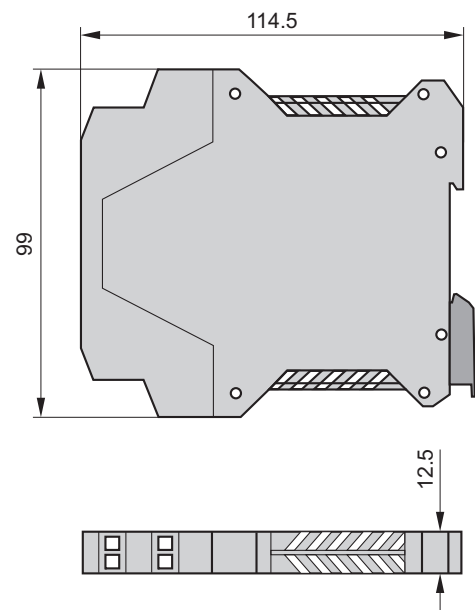
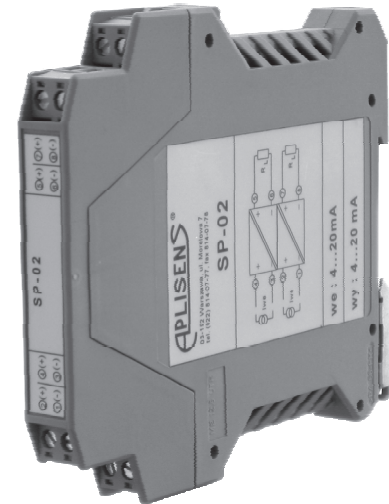
Relative humidity 30...80%

Casing

Type ME 12.5 (PHOENIX)

Ingress protection rating IP20

Weight 0,1 kg

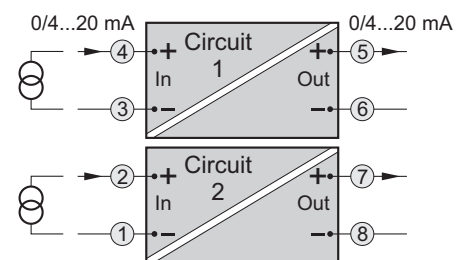


Ordering procedure

Standard version: **SP-02 /**

Special version: **SP-02 / 0...10 V /**
 (with 0...10 V voltage output)

Number of circuits (1 or 2)



Electrical diagram