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	$\leq 3{,}5\ V + I_{OUT} \times R_O$

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

Galvanic separation — transformer-based
Strength test parameters	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 ±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
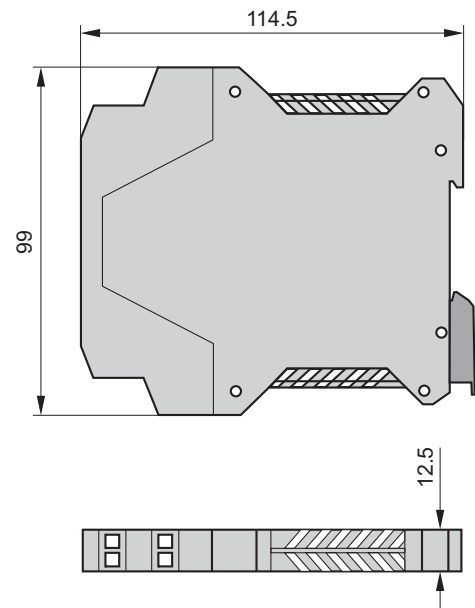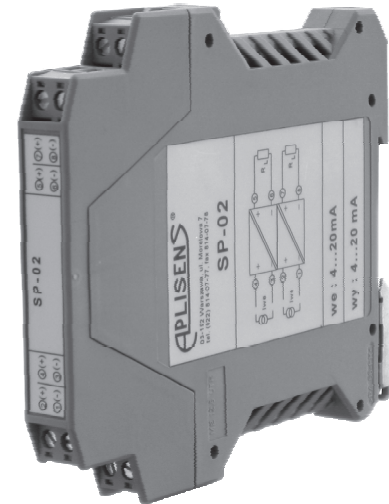
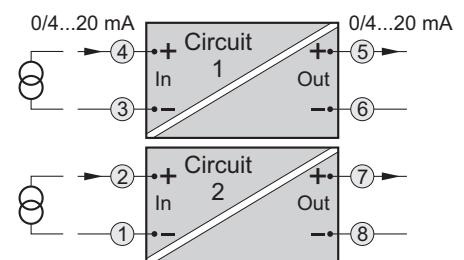## Ordering procedure

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