

Isolator/signal converter SP-11



- ✓ Single circuit or dual circuit version in 12.5 mm wide casing
- ✓ Opto-electronic galvanic separation (IN-OUT)
- ✓ Ability to select input signal
- ✓ 9...36 V power supply in the output signal loop
- ✓ Casing can be fitted on a standard rail (TS35)

Applications and functions

The SP-11 signal isolator provides galvanic isolation of an input current or voltage signal and converts it, through a separation system into an output signal 4...20 mA with a two-wire power supply in the output signal loop.

The device is typically used to provide galvanic isolation between the measurement circuits installed on an object, and the main section.

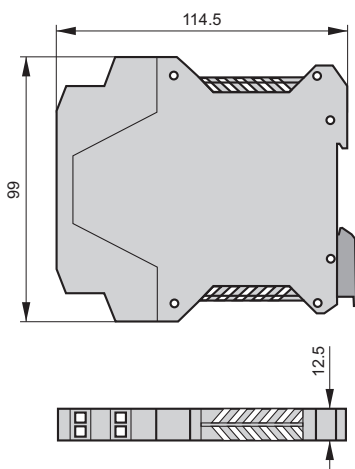
Configuration, calibration

The user can use switches to configure input and output settings for the following signals

Input	Switches			
	1	2	3	4
4...20 mA	+	-	+	+
0...20 mA	+	+	-	+
0...5 mA	+	+	-	-
1...5 mA	+	-	+	-
0...10 V	-	+	-	+
2...10 V	-	-	+	+

+ ON
- OFF

Access to switches by removing the front panel. Isolators can be produced to support other input and output signals. Calibration is carried out using potentiometers.



Technical parameters

• Input parameters

Input signal (selected by switch)

0...20 mA, 4...20 mA, 0...5mA, 1...5mA,
0...10 V, 2...10V

Input resistance

≥ 50 kΩ (voltage input) / 20 Ω (current input)

• Output parameters

Output signal: 4...20 mA

Load resistance: 0...500 Ω

• Galvanic separation: opto-electronic

Strength test parameters

1.5 kV AC, 50 Hz, 1 min

• Dynamic characteristics

Transmission band: 5 Hz (3 dB)

• Power supply

Supply voltage: 9...36 V

• Conditions of normal use

Ambient temperature: 5...60°C

Relative humidity: 30...80%

• Casing

Type: UEGM 22.5 (PHOENIX)

Ingress protection rating: IP 20

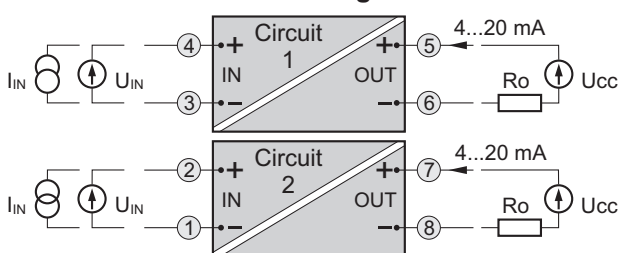
• Weight: 0.1 kg

• Conversion errors

Accuracy: ≤ ±0.16%

Typically, the converter is set for the range 4...20 mA / 4...20 mA. Setting of a different range will lower the class of the converter to 0.25% (tuning is possible using trimmers accessible from the front plate).

Electrical diagram



Ordering procedure

Standard version:

SP-11 / _____

Special version:

SP-11 / _____ **/** _____ **/** _____

Input signal

Number of circuits (1 or 2)