

# **SPI-94**

SIMPACT II

- flow meter
- 1 pulse counting input
- 2 or 4 relay outputs (or OC)
- RS-485 / Modbus RTU
- option: active current output



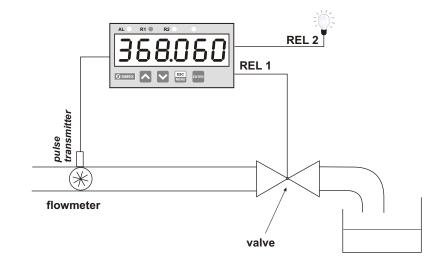
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SPI-94 are the flow meters designed to work in tandem with the pulse flow transducers with coefficients ranging from 0,01 to 9999,99 pulses per litre. A flow counter is to measure the actual instantaneous value and to record the balance of fluids, gases or bulk materials. A flow counter can also control industrial processes. The device can be connected with a flow transducer featuring electronic (open collector) or contact input. Wide balance range (up to 15 significant digits) enables flow volume control for a long time. The counters have 2 or 4 relay or OC outputs, depending on the actual instantaneous value of the flow or balance (only R1 output).

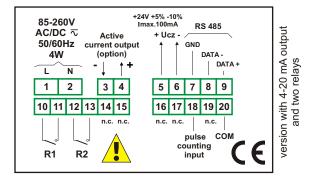
- display of instantaneous value and the balance,
- setting the volume units and the flow time,
- settable delay time of relays: up to 99 seconds or minutes,
- programmable decimal point position,
- threshold hysteresis setting,
- ACCESS option easy threshold modification.

### **Typical applications**

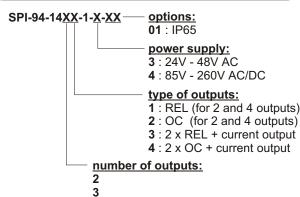
1. Filling a tank with the flow rate measurement and alarm signalling.



### **Examplary pin assignment**



## Ordering



#### Technical data

**Power supply**: 19V ÷ 50V DC; 16V ÷ 35V AC or 85 ÷ 260V AC/DC

Power consumption: for 85 ÷ 260V AC/DC and 16V ÷ 35V AC power supply:

max. 4,5 VA; 19V ÷ 50V DC power supply: max. 4,5 W

**Display**: LED, red, 6 x 13 mm high

Input: pulse, galvanically isolated with contacts oscillation damping

contact: max. frequency from 15 to 50 Hz (user selected), min. pulse length 5 ms; electronic: max. frequency 120 Hz, min. pulse length 500  $\mu$ s

Accuracy of instantaneous flow values: selected in the 0 ÷ 0,0000 range

Instantaneous flow unit: I or m<sup>3</sup> per second, minute or hour

Balance counter capacity: over 4 x 10° pulses (max. 15 significant digits)

**Balance accuracy**: selected in the 0 ÷ 0,000 range **Pulse waiting time**: settable from 0,5 do 15 seconds **Measuring range**: 0 ÷ 999999 + decimal point

Outputs: 2 or 4; relays 1A/250V AC (cos =1) or the OC 30mA/30VDC/ /100mW Transducer power supply output: 24V DC +5% -10% / max. 100 mA, stabilized, not

insulated from measuring inputs

Active current output: operating range max. 0 - 24 mA (option available with 2 relays, see ordering)

Communication interface: RS 485, 8N1, 2400 bit/s ÷ 115200 bit/s, Modbus RTU (not galvanically isolated)

Data memory: non-volatile memory, EEPROM type

Operating temperature:  $0^{\circ}C \div +50^{\circ}C$ Storage temperature:  $-10^{\circ}C \div +70^{\circ}C$ 

Protection class: IP 65 (front side when an additional frame is installed); IP 40 (front side);

IP 20 (case and connection clips)

Case: board

Case material: NORYL - GFN2S E1
Case dimensions: 96 x 48 x 100 mm
Panel cut-out dimensions: 90,5 x 43 mm

Installation depth: min. 102 mm Board thickness: max. 5 mm