SPI-94

SIMPACT II

- flow meter, batcher, totalizer
- 1 pulse counting input + 3 control inputs
- 2 or 4 relay outputs (or OC)
- option: active current output
- RS-485 / Modbus RTU

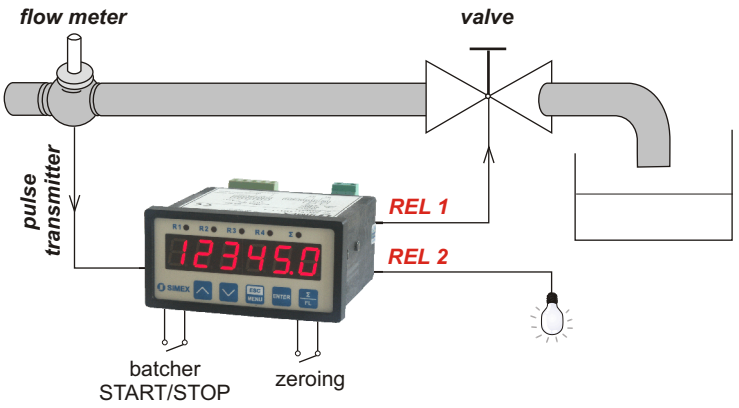
CE

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, equipped with electronic (open collector) or contact input. A flow counter allows to measure the actual instantaneous value and to record the total flow of fluids, gases or bulk materials. Wide range of total flow (up to 16 significant digits) enables flow volume control for a long time. Build in a batcher function makes possible application of **SPI-94** in a wide range of industry branches (food production, pharmacy, paint and varnish). The counters have 2 or 4 relay (or OC) outputs, depending on the actual instantaneous, batcher or total value of the flow (only R1 output).

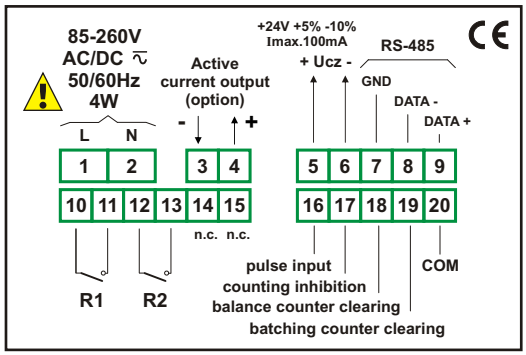
- display of instantaneous and the total flow values,
- batching and counting of doses,
- setting the volume units, the flow time and decimal point,
- settable delay time of control outputs: up to 99 sec. or min. and threshold hysteresis setting,
- ACCESS option - easy threshold modification.

Typical applications

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



Examplary pin assignment



version with 4-20 mA output and two relays

Technical data

Power supply: 19V ÷ 50V DC; 16V ÷ 35V AC or 85 ÷ 260V AC/DC, all separated
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, 6 x 13 mm high, red (green - on request)
Input: pulse, fully insulated

COM	- common
zeroing of batcher counter	- active edge or level
zeroing of total counter	- active edge or level
counting blockade	- active edge or level
pulse input	- counting input with denouncing filter and pulse width control, max. input frequency 10.0 kHz

Displayed values range: 0 ÷ 999999 + decimal point
Accuracy of instantaneous flow values: selected in the 0 ÷ 0,00000 range
Instantaneous flow unit: l or m^3 per second, minute or hour
Balance counter capacity: over 4 x 10^9 pulses (max. 16 significant digits)
Balance accuracy: selected in the ± 1 to ± 0,0001 range
Total flow and batcher counter precision: selected from range: 0 ÷ 0.000
Batcher counter range: 65536 m^3
Pulse waiting time: settable from 0,1 to 39,9 seconds
Outputs: 2 or 4; relays 1A/250V AC (cosφ=1) or the OC 30mA/30VDC/100mW
Transducer power supply output: 24V DC +5%, -10% / max. 100 mA, stabilized, not insulated from communication interface
Active current output: operating range max. 0 - 24 mA, load resistance max. 700 Ω (option available with 2 relays, see ordering)
Communication interface: RS-485, 8N1 and 8N2, 1200 bit/s ÷ 115200 bit/s, Modbus RTU (not galvanically insulated)
Data memory: non-volatile memory, EEPROM type
Operating temperature: 0°C ÷ +50°C
Storage temperature: -10°C ÷ +70°C
Protection class: IP 65 (front), available additional frame IP 65 for panel cut-out sealing; 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

Ordering

SPI-94-14XX-1-X-XX1

options:
00 : no options
01 : IP 65 frame

power supply:
3 : 24V AC/DC
4 : 85V - 260V AC/DC

number of outputs:
2
3
4

type of outputs:
1 : REL (for 2 and 4 outputs)
2 : OC (for 2 and 4 outputs)
3 : 2 x REL + current output
4 : 2 x OC + current output

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