SPP-94

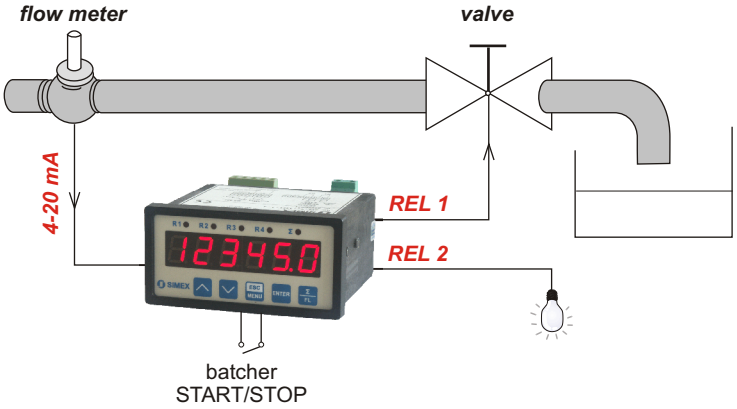
- **flow meter, batcher, totalizer**
- **1 input 0/4-20 mA**
- **1 programmable function input**
- **2 or 4 relay (or OC) outputs**
- **option: active current output**
- **RS-485 / Modbus RTU**

SPP-94 are the flow meters designed to work in tandem with the pulse flow transducers with current input of 0-20 mA or 4-20 mA. 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 **SPP-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 values of the flow (only R1 output).

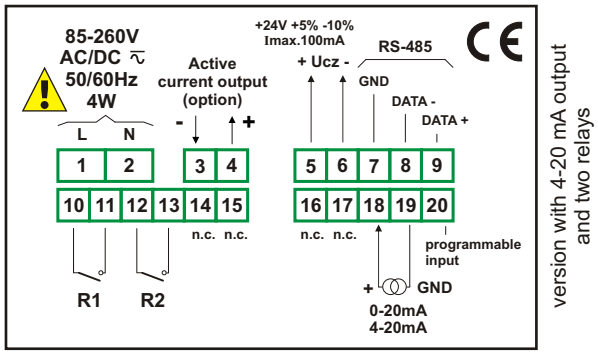
- display of instantaneous and the total flow values,
- batching and counting of doses,
- setting the volume units, the flow time and decimal point,
- settable delay time of control outputs: up to 99 sec. or min. and threshold hysteresis setting,
- ACCESS option - easy threshold modification.

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

Ordering

SPP-94-11XX-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

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)
Inputs: measurement - current 0-20 mA or 4-20 mA, overload-protected, sinking current limited to about 40 mA
programmable - binary 24V DC, not separated
Displayed values range: 0 ÷ 999999 + decimal point
Current measurement accuracy: 0.1% @25°C (for 0÷20 mA range)
Stability: 50 ppm/°C
Accepted prolonged input overload: 20%
Resistance of measuring input: < 65 Ω (typical 55 Ω)
Totalizer counter capacity: over 4 x 10^9 m^3 with max. resistance 0,001 l
Total flow and batcher counter precision: selected from range: 0 ÷ 0.000
Batcher counter range: 65536 m^3
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 measuring inputs
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