

# SPI-N118

- ▣ flow meter, batcher, totalizer
- ▣ 1 pulse counting input + 3 control inputs
- ▣ 0 or 2 relay outputs (or OC)
- ▣ power supply output 24V DC
- ▣ RS-485 / Modbus RTU

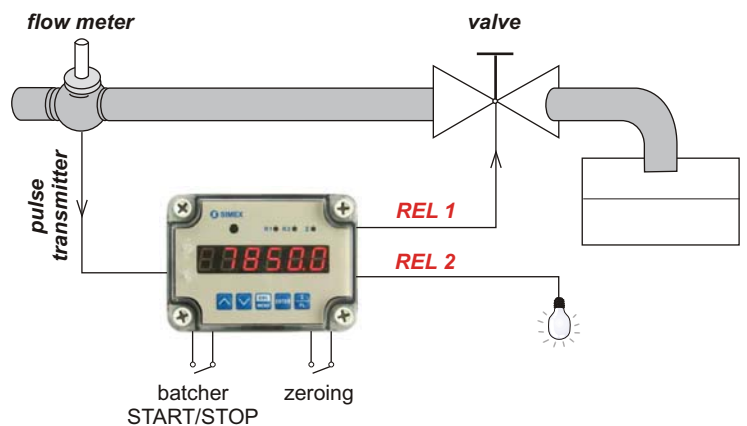


**SPI-N118** are the flow meters in tight, wall mounted case (IP 65), designed to work in tandem with the pulse flow transducers with coefficients ranging from 0,01 to 9999,99 pulses per litre, equipped with electronic (open collector) or contact input. A flow counter allows to measure the actual instantaneous 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-N118** in a wide range of industry branches (food production, pharmacy, paint and varnish). The counters may have 2 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.

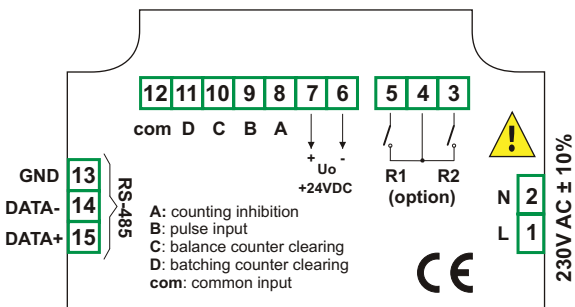


## Technical data

- Power supply:** 230V AC  $\pm 10\%$  separated, 110V AC  $\pm 5\%$  separated or 24V DC  $\pm 15\%$  not separated
- Power consumption:** for 230V AC and 110V AC: max. 2,6 VA; for 24V DC: max. 4,5 W
- Display:** LED, 6 x 13 mm high, red (green - on request), brightness adjustable in 8 steps
- 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 debouncing filter and pulse width control, max. input frequency 10.0 kHz

- Displayed values range:** 0 + 999999 + decimal point
- Frequency measurement accuracy:**  $\pm 0.02\%$  (full temperature range)
- Precision of flow readout:** equivalent to used flow sensor precision
- Accuracy of instantaneous flow values:** selected in the 0 + 0,00000 range
- Instantaneous flow unit:** l or m<sup>3</sup> per second, minute or hour
- Balance counter capacity:** over  $4 \times 10^9$  pulses (max. 16 significant digits)
- Balance accuracy:** selected in the  $\pm 1$  to  $\pm 0,0001$  range
- Total flow and batcher counter precision:** selected from range: 0 + 0.000
- Batcher counter range:** 65536 m<sup>3</sup>
- Pulse waiting time:** settable from 0,1 to 39,9 seconds
- Outputs:** 0 or 2; relays 1A/250V AC ( $\cos\phi=1$ ) or the OC 30mA/30VDC/100mW
- Transducer power supply output:** 24V DC, non-stabilized, not insulated from measuring inputs; for 230V and 110V AC power supply:  $\pm 3V$  max. 25 mA; for 24V DC power supply:  $\pm 15\%$  max. 100 mA
- 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 (standard), -20°C + +50°C (option)
- Storage temperature:** -10°C + +70°C (standard), -20°C + +70°C (with option 08)
- Protection class:** IP 65
- Case:** wall-mounted
- Case material:** ABS + fibreglass
- Case dimensions:** without glands: 110 x 80 x 67 mm; with glands: 110 x 105 x 67 mm

## Exemplary pin assignment



## Ordering

SPI-N118-14XX-1-X-XX1

- options:**
  - 00 : no options
  - 08 : operating temp. -20°C + +50°C
- power supply:**
  - 1 : 24V DC
  - 2 : 230V AC
  - 8 : 110V AC
- type of outputs:**
  - 0 : no output
  - 1 : REL
  - 2 : OC
- number of outputs:**
  - 0
  - 2