



JLC International, Inc. Phone: (800)-599-4732
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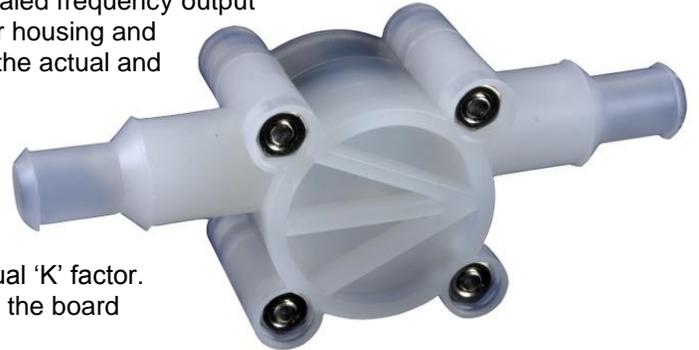
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Pre-scaler for Flow Meter Series 800 /900 / 1000

Same fixed 'K'-factor for all flowmeters installed

This simple flowmeter mounted electronic package gives a scaled frequency output proportional to flow. The Pre-scaler board fits inside the meter housing and receives the pulses directly from the sensor. After calibration the actual and required 'K' factors are entered, the software does the rest.

This output pulse could be the same for all flowmeters in a batch giving total interchangeability without recalibrating the associated instrumentation. Alternatively the output could be in suitable units, for example one pulse per tenth of a gallon or every liter. It must always be lower than the actual 'K' factor. The pulse width of the output pulse can also be set permitting the board to be used with slow scanning electronics without difficulty.



The Pre-scaler is encapsulated in the housing ensuring the sensor assembly is fully protected against the environment. The flow meter of the series 800 / 900 / 1000 with Pre-scaler uses a four wire system with the same flying lead being used for both programming and customer connections. This simplified approach ensures the integrity of the encapsulation and terminations.



Features

- Programmable pulse output and width
- All flow meters in range with the same 'K' factor
- Full meter interchangeability
- Supply voltage 5 – 24 Vdc
- For flowmeters series 800, 900 and 1000
- Floating point calculations
- Factory pre-programmed

Technical Specifications

- Pulse output: NPN, Hall Effect – switch current 10 mA max.
- Programming: USB interfaced via program cable with computer
- Frequency input: 5 – 500 Hz
- Frequency output: 0 – 500 Hz
- Power supply: 5 – 24 Vdc
- Working temperature: 0 – 50 °C (32 – 122 °F)



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Calibration Procedure

As with all our flowmeters, calibration is performed typically at our factory. The calibration rig is traceable to national (UK) and international standards. A calibration certificate is produced and the “ideal” ‘K’ factor selected for the meters specification. The meter is then connected to a computer with a USB link and the ratio between the required ‘K’ factor and the actual ‘K’ factor is set. The basic procedure is shown in the following example:-

1. Flow calibration shows a meter factor of 1120 pulses per liter
2. The customer requires 1000 pulses per liter
3. 1120 is entered as the actual ‘K’ factor
4. 1000 is entered as the required ‘K’ factor

In addition:

- a. The required pulse width can be either the default 50/50 mark space ratio or a desired pulse width can be set i.e. 0.3 msec which will remain constant at all frequencies.
- b. Should the meter be required to run with slow scanning electronic packages it is recommended to set for a much lower ratio with longer pulse duration; e.g. an output of one pulse per liter the pulse width could be set to 1 second if the flow is below 30 liters per minute.

