

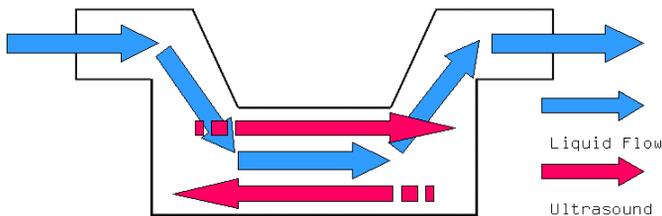
125v2 technical data

Applications

The Flownetix 125v2 uses innovative ultrasonic technology to provide a non-invasive flow meter at low cost. The meter has no moving parts so it cannot clog or jam due to contaminants in the flow. In addition, the unit features automatic temperature and viscosity compensation and low pressure drop. The Flownetix 125v2 is ideal for measuring beverage delivery, heating and cooling systems.

Measurement principle

The instrument utilizes an ultrasonic transit time in-line flow cell.



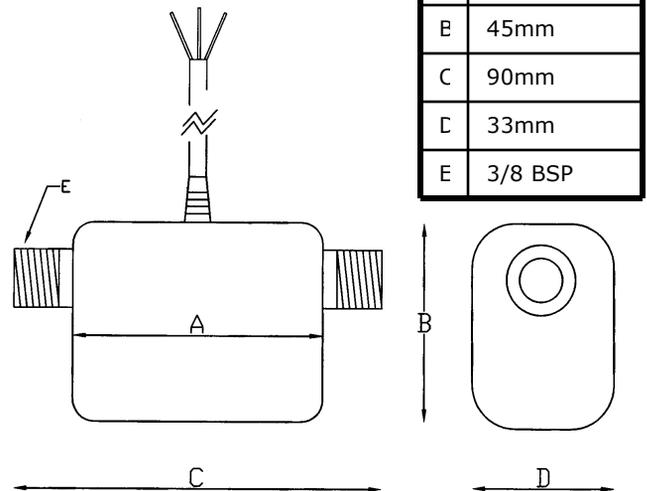
Sound transmitted upstream is accelerated by the flow, sound transmitted downstream is decelerated. The resulting time difference is proportional to flow and converted by a microcontroller into an output signal.

The 125v2 and 100series® products are low cost alternatives to mechanical meters and suitable for use in many applications where reliability or performance improvements over mechanical solutions are required. High volume production techniques enable the Flownetix 100series® to be manufactured for the largest demands. OEMs and high volume users can customize output types, plastic materials and cases to their own application.

For more details on how the Flownetix 100series® can fit with your application, please contact us directly.



Dimensions



The meter may be installed at any angle although it is recommended that it be installed as shown opposite so that the U-shaped measurement section remains full of liquid should the process empty of liquid.

3/8BSP plastic fittings must be used to connect to the meter to avoid damaging the thread. DO NOT OVER- TIGHTEN.

The outer case is not sealed and so liquid must not be allowed to come into contact with the outside of the meter.

Specification

Flow range	0.5 - 25 l/m
Minimum registered flow	Typically 0.15 l/m
Accuracy	±3% of reading or ±0.25l/m, whichever is the greater
Repeatability	±1% of reading or ±0.10l/m, whichever is the greater
Resolution	Better than 0.001 l/m
Reverse flow output	Options: Disabled (standard) Enabled (option)
Response time	Options: Standard 0.4s Varies for application
Materials	Wetted parts : EMS Griovy HT1V-4FA Black 9225 (FDA and EU approval for contact with all foodstuffs, including alcohol) Outer case : Nylon 6-6
Power supply	Options: 7.5-24VDC (standard) 5VDC (option)
Current consumption	Typically 4mA (zero power option available Q4 2005)
Output type	125v2-S; NPN open collector output, 1000 pulses/l (other pulse rates on request) 125v2-I: 4-20mA output (20mA = 25l/m, other ranges on request)
Pressure loss	0.5bar at 25l/m
Electrical connection	RED : + supply BLACK : Common BLUE : Pulse output (125v2-S), current output (125v2-I) YELLOW : Do not connect, factory use only

Application Information

Liquids

The measuring tube is manufactured from a food grade plastic and so is safe to use with drinking water and other beverages. Most oils and other non-corrosive substances can also be used, but please consult Flownetix before use. Special plastics are available on request for certain order quantities subject to testing.

Pipe inlet diameter

A pipe inlet diameter that matches the inlet on the meter is recommended.

Installation position

The meter should not be placed on the suction side of a pump, always on the outlet side. The meter is easily supported by pipework or hoses due to its low weight, but vibration should be avoided.

Entrained air/solids

Entrained air and solids cannot damage the meter due to its non-moving part design. High levels of air or solids can attenuate the ultrasonic signal so the unit is only suitable for use on normally clean fluids only.

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