

MINISONIC: Dual Pipe Version Ultrasonic Flowmeters



This document completes the data sheet of the MINISONIC 600 & MINISONIC 2000 range.

MINISONIC 600-B

Pipes less than 630mm outside diameter

MINISONIC 2000-2

Pipes up to 3300mm outside diameter

DESCRIPTION

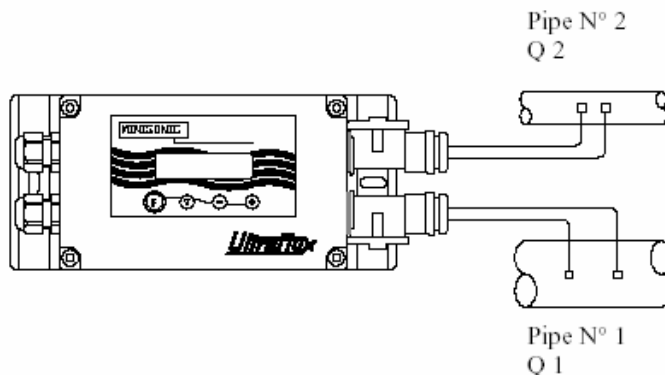
The dual pipe versions main purpose is to offer a performance ultrasonic flow measurement solution at a cheaper price compared to the use of two separated converters.

These two versions can calculate, display and transmit a QT flow value equal to the sum or the difference of the two elementary flows (Q1, Q2) the device measures on two independent pipes.

The following diagram shows a typical application :

The choice of probes is the same for the 2 measuring points.

- Installation on two different pipes :



$$\begin{aligned} &Q 1 \\ &Q 2 \\ &Q T = (Q1+Q2) \\ &\text{or} \\ &Q T = (Q1-Q2) \end{aligned}$$

Ultraflux
Ultrasonic Measurements

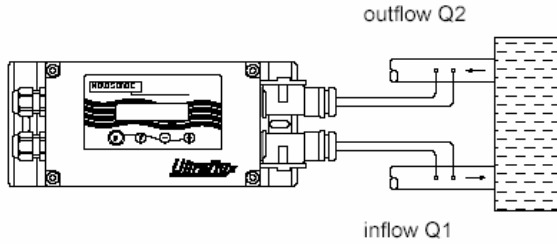
Represented by:

Flowline Manufacturing Ltd, Elstree Business Centre, Elstree Way, Borehamwood, WD6 1RX

Tel: 020 8207 6565 Fax: 020 8207 3082 Email: sales@flowline.co.uk Web: www.flowline.co.uk

flowline
SPECIALISTS IN FLOW MEASUREMENT

➤ Installation on a same network :



$$Q_1$$

$$Q_2$$

$$Q_T = (Q_1 - Q_2)$$

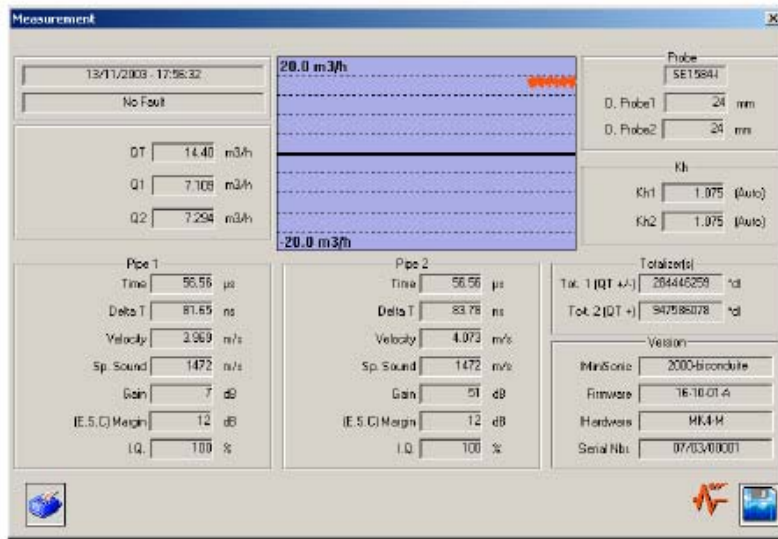
Interest: to improve the measurement reliability or do a line balance or a leak detection.

It is also possible to use Channel 1 only and keep the Channel 2 for later use.

Composition of a measuring point:

To the MINISONIC xxx-B converter and its accessories (software, PC cable...) must be added the 4 probes (two per pipe), the integral or optional supports, the coupling kits for external probes, the probe/converter link cables and, if required, accessory modules: power supply transformer, Zener barriers...

RESOURCES AND CHARACTERISTICS



Windows PC software for calibration, data recording.

Easy use with user friendly display.

The resources and characteristics are the same as those of the single pipe MINISONIC with among others, the two 4-20 mA outputs or the two programmable relays. We propose a IP65 wall mounted industrial version (OP 67 with an optional and external extension box) and an explosion proof version (ATEX, EEx d IIC T6) with an EEx e or EEx d connection box from where start the 4 cables to the probes.

PERFORMANCES (please refer to the data sheet of the MINISONIC range)

- Typical accuracy following dry calibration: < 0.3% (DN > 100 mm). Error curve linearization available.
- Practical accuracy with common liquids (water,...):
 - DN ≤ 100 mm : +/-1% if v > 0.3 m/s if not +/-3 mm/s
 - DN > 100 mm : +/-0.5% if v > 0.3 m/s if not +/-1 mm/s