

MINISONIC: Dual Chord Version Ultrasonic Flowmeters



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

MINISONIC 600-2

Pipes less than 630mm outside diameter

MINISONIC 2000-2

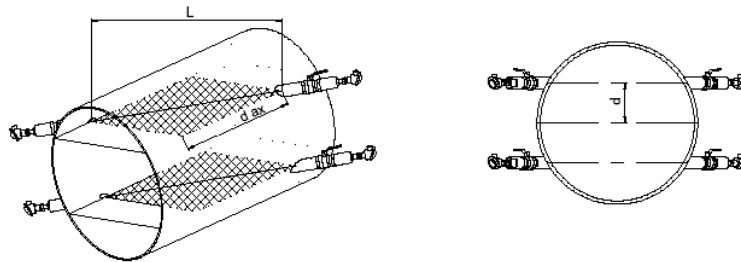
Pipes up to 3300mm outside diameter

DESCRIPTION

Compared to a single chord version, the use of two chords placed correctly on the same pipe provides better monitoring for the hydraulic conditions specific to the site and is the key to better accuracy.

There are two main possible acquisition configurations:

- Two parallel and symmetrical chords with intrusive or wetted probes (SM) aligned in pairs:



Good geometrical control is essential. The construction of a measuring spool may be recommended.

Main advantages of this configuration:

- A good control of turbulent/laminar flow configuration transitions.
- Improved measurement precision over a large flow range.
- When a spool is used, there is the possibility of calibration on a flow rig.

Ultraflux

Ultrasonic Measurements 

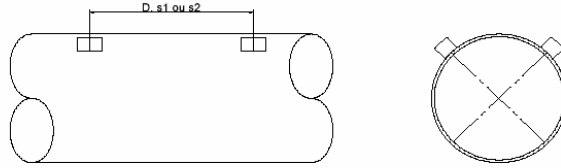
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SPECIALISTS IN FLOW MEASUREMENT

- Two cross-path diametrical planes with clamp-on external probes:



The installation will be in Direct or Reflex mode depending on the options and conditions on site.

Composition of a measuring point:

To the MINISONIC xxx-2 converter and its accessories (software, PC cable...) must be added the 4 probes (two per chord), 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

The resources and characteristics are the same as those of the single chord 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

Typical accuracy following dry calibration: < 0.3% (DN > 100 mm). Error curve linearization is 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

