

Open Channel Flowmeter Xonic 100LM

System Description

Xonic100LM Ultrasonic Open Channel Flowmeter use ultrasonic transit-time method for flow velocity and use level meter to receive level data. Xonic 100LM use 4 pair transducers for large open channel and 2 trnasducers pair for small open channel application. Xonic 100MC not only measure velocity, but measure sound speed and can compensate temperature change by it's own diagnostic functions. Xonic 100LM is newly developed and has very sophisticated diagnostic functions for better performance.

Xonic 100LM use certified new technology, that was recognized as NET (New Excellent Technology) from MoST in 2007 from Korean Government with PATENT "Very precise time measurement method" and Xonic 100LM also use PATENT "Transducer Design for Open Channel". The patent is about transducers alignment method in field, and engineers can align one transducers to opposite transducer very precisely with laser pointer. Xonic 100 transducers are designed as a ball type, so the transducer can be aligned to all derrections.

- Patent 10-0560364
- Patent 10-0918369
- NEP(New Excellent Product)
- NET(New Excellent Technology)
- Velocity from 0.01 m/s
- Large LCD Color Display



Patented Ball Type Transducers



Transducer with
Patented
Laser Pointer Tool

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Application

Xonic 100LM measure flow velocity directly with patented 4 path transducers. Transducers are located at the end of each side to prevent any obstructions, and level is located on the top of the open channel, and accuracy is within 1% of actual flow.

Cross Flow Installation

In case of winding open channel, Xonic 100LM can use Cross Flow Installation to keep better accuracy. Path 1 & 3, Path 2 & 4 can be installed as cross path to keep better accuracy.

Specification

- Principle : Anti-Round Mode, Transit-Time
With Cross Correlation, Fast Fourier Transform
- Measuring Path : 2 or 4 path
- Measuring Width : 20 meters
- Accuracy : 1%
- Sensitivity : 0.003 m/s
- Data Output : 4-20mADC, Relay
RS-232C / RS-485
- Data Input : 4-20mADC
- Datalogger : 4Mbytes
- Display : Large Color LCD (128x64)
- Temperature Range
Electronics : -20 to +60°C
Transducer : -40 to +120°C
- Power : 110~220VAC, free voltage
- Enclosure
Electronics : NEMA 4 (IP65)
Transducer : Submersible (IP68)

