

EPF Doppler Ultrasonic Flow Meter



INTRODUCTION

The doppler ultrasonic flow meter adopts contactless measurement. It is simple to install, convenient, and easy to maintain. It is suitable for measuring liquids in pipelines that contain tiny particles, impurities or air bubbles. Precise, stable & reliable, this flow meter is applicable in the sewage and wastewater to detect the flow rate of water in pipelines.

The doppler ultrasonic flow meter (EPF) transmits pulse waves to the pipeline through a sensor. The pulse wave signal is reflected after encountering particles in the liquid or air and is then received by the sensor. Based on the changing values of the frequency, the movement speed of the particles can be calculated. The average flow rate is therefore calculated using a set flow field data.



FEATURES

- It's available to have a the flow measurement without cutting or disassembling the existing pipes, easy for on-site installation.
- LCM display shows instantaneous and cumulative flow rates.
- 4-20mA output, pulse wave output, RS485 Modbus communication.
- Suitable for various types of wastewater with high bubble content and liquids containing particulate impurities.
- Interface languages: Traditional Chinese, Simplified Chinese, English.

APPLICATION

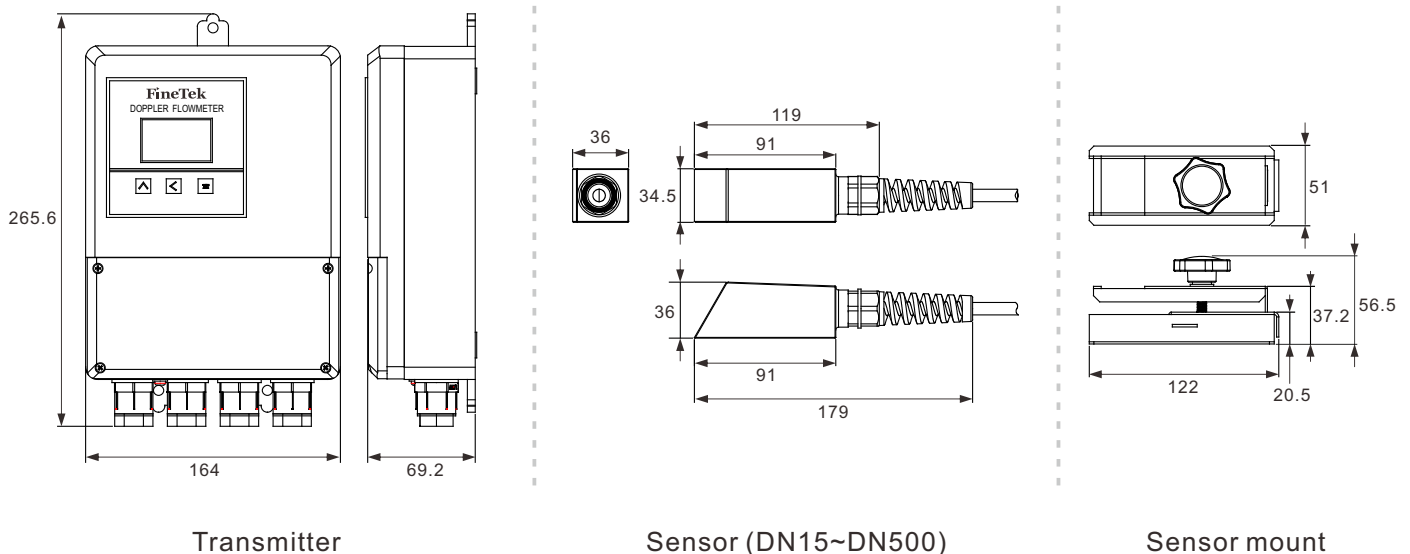
Sewage, wastewater, mud, grinding compound, viscous liquids used in pipes, and fluids containing solids or air bubbles.

* The required minimum dimension of the solid or air bubble is 100 μm and the minimum concentration is 75 ppm.

- Sewage treatment
- Pulp and paper industry
- Petrochemical industry
- Food industry

DIMENSION

(Unit:mm)



SPECIFICATIONS

Screen dimensions	LCM 128*64 pixel backlight
Communication interface	RS-485(Modbus)
Analog output	4~20mA
Pulse width	Automatic (pulse wave width 50%)
Pulse mode	NPN transistor output 32vdc/200mA
Pipeline dimensions	DN15 ~ DN500
Flow range	0.03 ~ 12 m/s
Measurement accuracy	12.5%~100% of F.S. · ±2% O.R. (Note 1) 1%~12.5% of F.S. · ±0.25% F.S. (Note 1)
Pipeline composition	Materials capable of sending ultrasounds such as PVC, carbon steel, stainless steel, cast iron, ductile iron, etc.
Power input	18~32 VDC/100~240VAC
Operating temperature	-20° ~ 70°C
Conveyor protection level	Waterproof and dust-proof IP67
Sensor operating temperature	-25° ~ 55°C
Sensor cable length	6.8m
Sensor protection level	Waterproof and dust-proof IP66

Note1 :

- FineTek water flow measuring equipment; fluid temperature: 20 ± 10°C; ambient temperature: 20 ± 5°C
Diameter of the pipeline: 15D and above upstream; 5D and above downstream.
- In a fixed environment, the value of linearity + error range + repeatability must be taken into consideration.
- The measured value may have additional errors due to the type and state of the pipeline, fluid type, fluid temperature, etc.

ORDERING INFORMATION

EPF 1 ⁰⁵ ⁰⁶ 0 0 - 0 ¹⁰ ¹¹ ¹² ¹³ ¹⁴ ¹⁵ ¹⁶ ¹⁷ ¹⁸ ¹⁹

⁰⁵ ⁰⁶ Model

04: Separate type

¹⁰ Power supply

D: 24 Vdc A: 100~240Vac

¹¹ ¹² ¹³ ¹⁴ Maximum diameter range

D500: DN15~DN500

¹⁵ ¹⁶ Cable length

06: 6.8M

¹⁷ Output method

0: Standard

¹⁸ ¹⁹ Optional functions

00: None

