Introduction

FLOVEL FUM-1000 installs the sensor by the band.
It measures the velocity of the fluid by transit time. By adding temperature sensor, it also measure calories. It has algorithm to measure the sensor signal strength and align the distance between sensor precisely. So we can attach the sensor easily.

Features

- ✓ Display flow rate, accumulated flow, signal status of sensor by 2 line LCD
- ✓ A wide range of flow measurement : Min. 0.01 ~ Max. 30m/s (Forward & Reverse)
- ✓ Applicable tubing Size : 15 ~ 6,000mm(1/2 ~ 240 inch)
- ✓ Measurement accuracy : ±1.0%(R.D)
- ✓ When equipped with magnetic pipe, separate mounting belt doesn`t need because sensor has magnetism.
- ✓ 64 bit Data Logger Function (Option), Display date.
- ✓ Response rate : Less than 1 second
- ✓ Measure and Display the distance between sensor automatically by signal rate of sensor
- ✓ Depending on pipe and properties of fluid, it can be installed in three ways like 'V', 'Z' and 'W'

Specification

- Principle : Transit time
- Measuring range: S Type ; 15 ~ 100mm (1/2 ~ 4inch)
  : M2 Type ; 50 ~ 700mm (2 ~ 28inch)
  : L2 Type ; 300 ~ 6,000mm (12 ~ 240inch)
- Pipe material : Cast iron, Stainless steel, Soft iron, Copper, PVC, Aluminum, Asbestos, Glass fiber
- Lining Material : Epoxy, Rubber, Cement, PE, PS, PP, Ebonite, Teflon, etc
- Display : 2 Line LCD
  Flowrate : 5 digit with decimal point
  Totalizer : 8 digits, forward, reverse & net values
  Measurement unit : m^3, Liter, ft^3 , Gallon(US, Imperial, Million), Barrels(US, Imperial, Oil)
  Time unit : second, minute, hour, day
  The others : Flow rate, Date, Time, Signal status
- Accuracy : ±1.0% of reading(0.5~30m/s)
  : ±0.5% of reading(online Calibration : Option)
- Repeatability : 0 ~ 30m/s(R.D) (±0.2 ~ 0.5% of measurement value)
- Linearity : ±0.5%
- Keypad : 16 Key with tactile action
- Response time : less than 1 second
- Velocity : 0.01 ~ 30m/s(Forward & Reverse)
- Resolution : 0.0001m/s
- Ambient Temperature : -20 ~+70℃
- Transmitter Mounting : Wall mounting
- Max. Cable length : 150m
- Power consumption : less than 12W
- Power supply : 90 ~ 260VAC 50/60Hz, 12 ~ 36VDC
- Data storage : Operation parameters and totalization date are stored by EEPROM for more than 10years
- Output : 4 ~ 20mA or 0 ~ 20mA
- Pulse Output : 1 ~ 9,999Hz
- Data Logger (Option) : 64 data include Flowrate, Totalizer, Time, Date
- Alarm : High or Low Buzzer
- Communication : RS-485
- Dimension : 213W×184H×105Dmm
- Weight : 3kg
- Enclosure Construction
  Converter : IP65
  Sensor : IP68(Water-proof)

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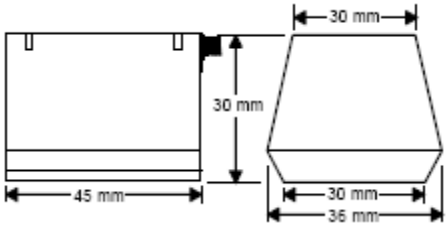
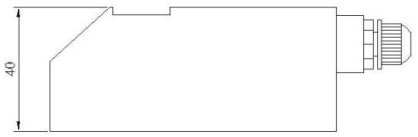
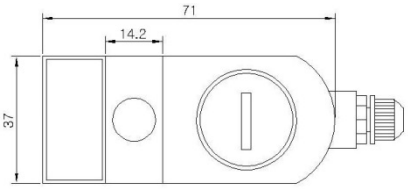
Sensor Specification

- 'S' Type Sensor
  Range of pipe size : 15 ~ 100mm(1/2 ~ 4inch)
  Sensor size : 45 × 36 × 30mm
  Temperature: -20 ~ +70℃, Option (120℃)

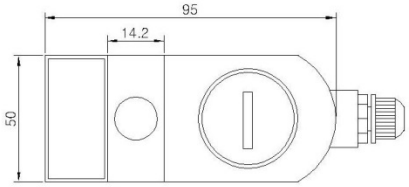


- 'M2' Type Sensor
  Range of pipe size: 50 ~ 700mm(2 ~ 28inch)
  Sensor size : 71 × 40 × 37 mm
  Temperature: -20 ~ +70℃, Option (120℃)





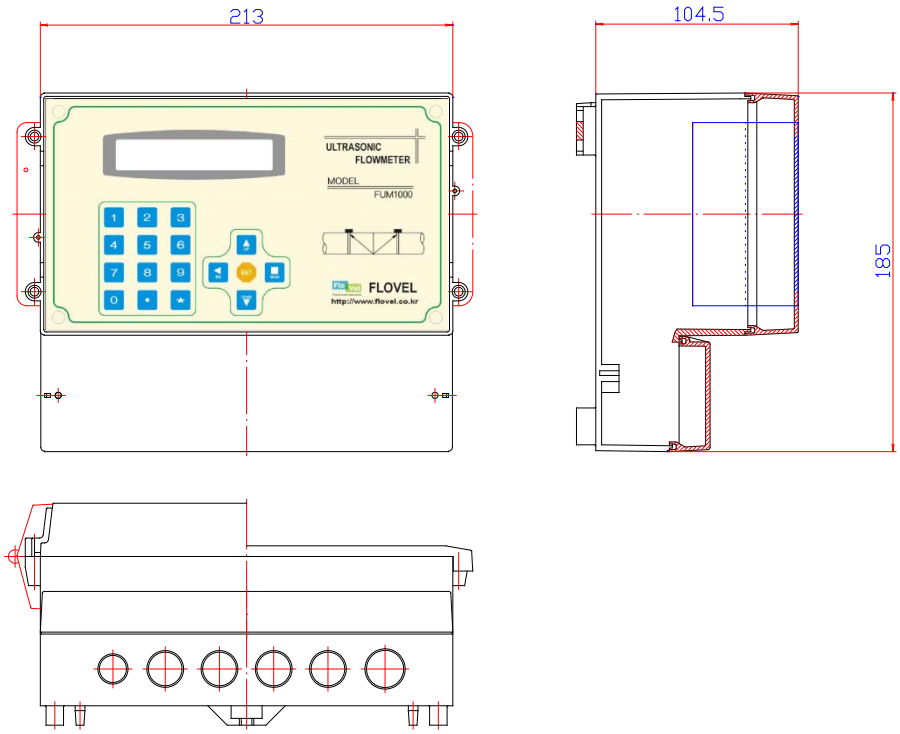
- 'L2' Type Sensor
  Range of pipe size : 300 ~ 6000mm(12 ~ 240inch)
  Sensor size : 95 × 43 × 50mm
  Temperature: -20 ~ +70℃, Option (120℃)



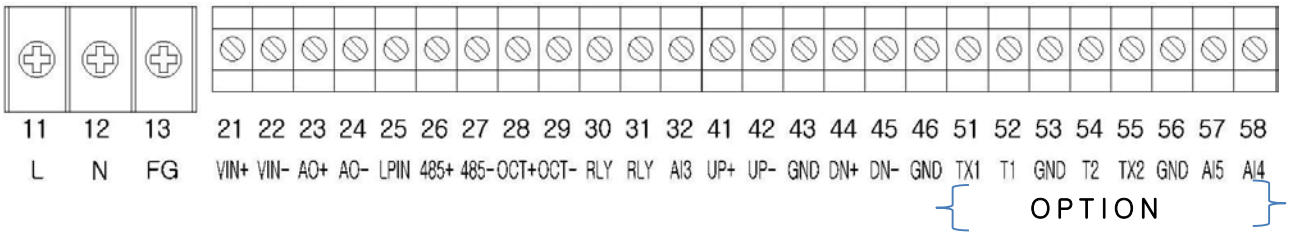
The others Accessory

- ◆ Special Cable (1 set)
- ◆ Sensor Mounting Bracket (1 set)
- ◆ Sensor Mounting Wire (1 set)
- ◆ Adjusting Bolts (1 set)
- ◆ Wire Clamp (1 set)
- ◆ Grease (1 ea)

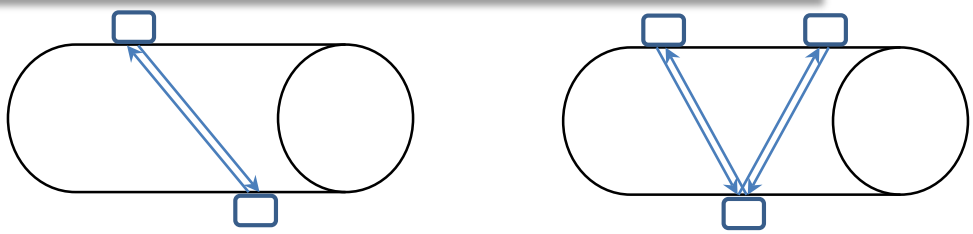
FUM-1000 Dimension



FUM-1000 Wire Connection



FUM-1000 Installation

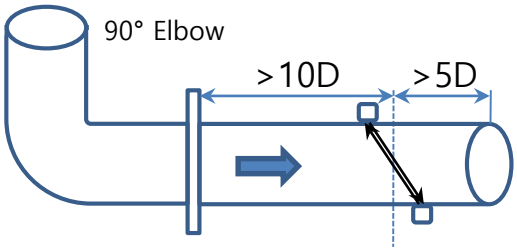


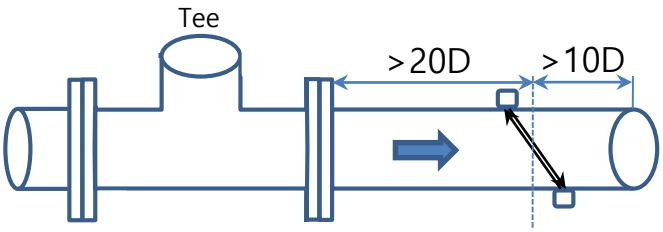
'Z' Method

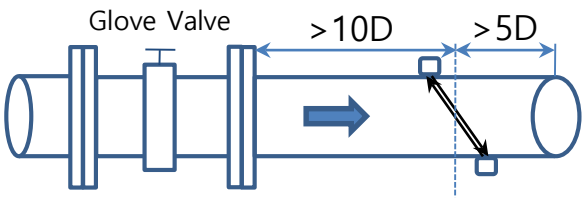
'V' Method

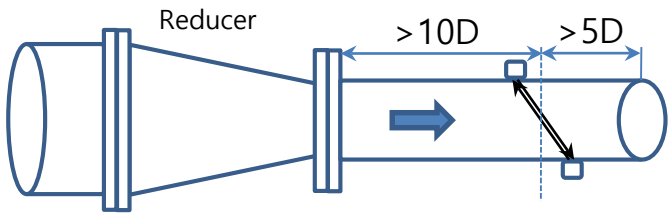
※ 'W', 'I' Method can apply small pipe

Straight pipe requirements









Product Selection

FUM-1000		
Ex.) FUM-1000 –M2-010-AC (FUM-1000 Clamp on type+Middle pipe sensor+Cable 10m+90~260VAC Power)		
Transmitter	FUM-1000	Wall Mount
Sensor	S	Small pipe / 15 ~ 100 mm(1/2 ~ 4inch)
	M2	Middle pipe / 50 ~ 700 mm(2 ~ 28inch)
	L2	Large pipe / 300 ~ 6,000 mm(12 ~ 240inch)
Signal Cable	length	10 m Option : Max. 150 m
Power Options	AC	90 ~ 260 VAC 50/60 Hz
	DC	24 VDC