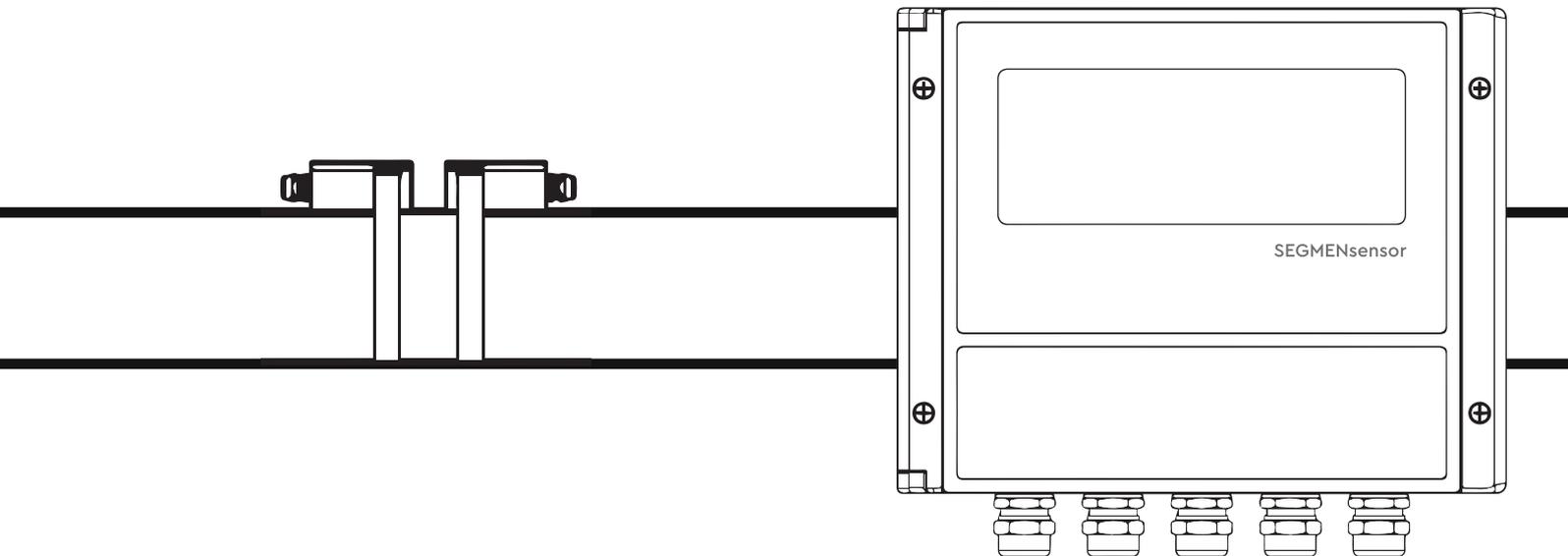


# SEGMENsensor



## ULTRASOME FLOW METER-SEG901

Suitable for any diameter pipe

## Introduction

It is a wall-mount, clamp- on type ultrasonic flowmeter which use the transfer time technology. Clamp on type ultrasonic flowmeter is easy to install and no need to cut off the pipe, that saves you lots of troubles and cost. At the same time has our unique calculate software to ensure the high accuracy and low velocity response.



Could add the RTD model and temperature sensor become an energy meter to monitoring the energy use, help to save the energy.

## Application

Ultrasonic flowmeter widely application in oil industry, water treatment, pure water, chemical and etc.



## Specification

### Performance

Flow range	$\pm 0.09\text{ft/s} \sim \pm 40\text{ft/s}$ ( $\pm 0.01\text{m/s} \sim \pm 12\text{m/s}$ )
Accuracy	$\pm 0.5\%$ of reading (for $\pm 1.5\text{ft/s} \sim \pm 40\text{ft/s}$ )
Repeatability	0.15% of measured value
Linearity	$\pm 0.5\%$
Pipe size	1" to 200" (25mm to 5000mm). Pipe size under 1" is an option

### Function

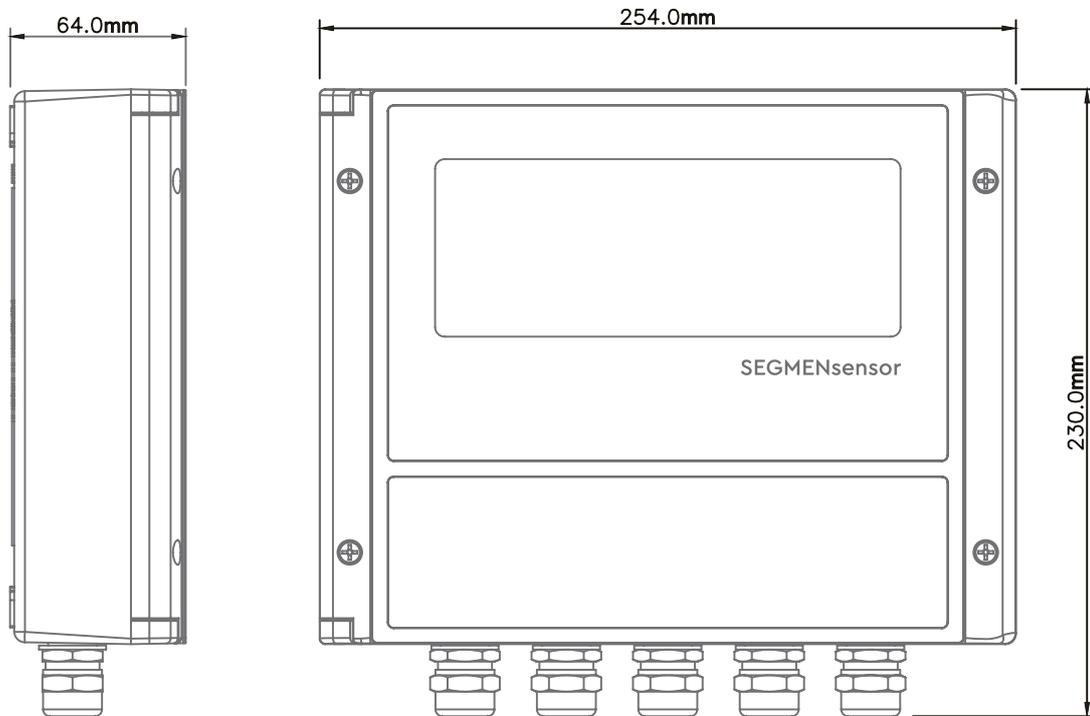
Outputs	Analog output: 4~20mA, max load 750 $\Omega$ . Pulse output: 0~9999Hz, OCT, (min. and max. frequency is adjustable) Relay output: SPST, max 1Hz, (1A@125VAC or 2A@30VDC)
Communication	RS232&RS485
Memory	TF card (Max 4G)
Power supply	90 to 245 VAC, 48 to 63 Hz. Or 10 to 36VDC
Display	240*128 back lit LCD
Temperature	Transmitter: -40°F ~ 140°F (-40°C ~ 60°C) Transducer: -40°F ~ 176°F (-40°C ~ 80°C, standard)
Humidity	Up to 99% RH, non-condensing

### Physical

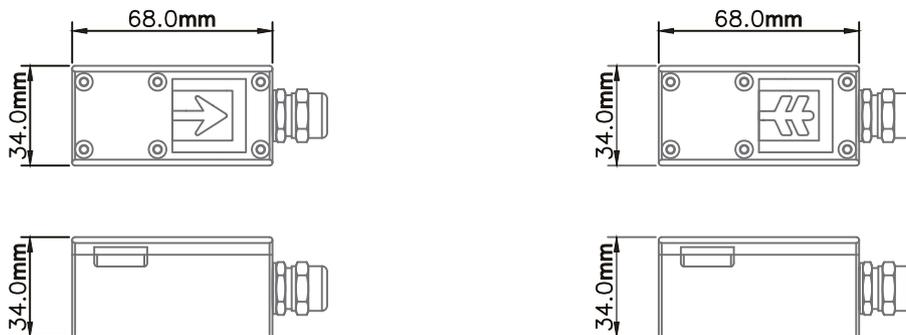
Transmitter	IP65
Transducer	IP68 Encapsulated design Double-shielded transducer cable Standard/maximum cable length: 30ft/900ft (9m/274m)

## Product size

### Transmitter size

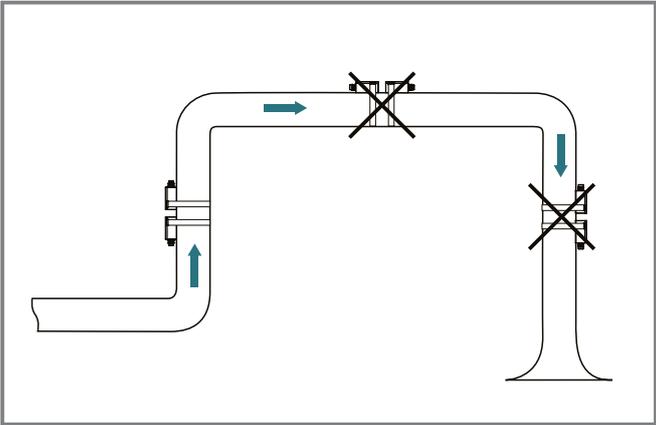


### Transducer size

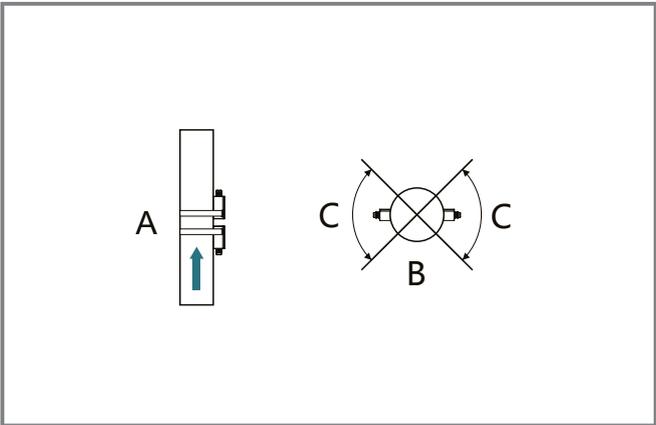


## Installation site selection

The first condition for ultrasonic flow meter is the pipe must be full of liquid, the bubbles will greatly influence the accuracy of the measurement, please avoid the follow installation position:



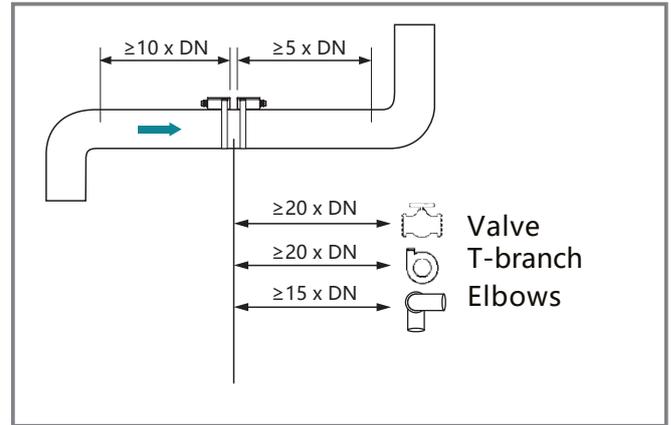
The suggestion installation area is as following:



- A is for upright pipeline, please notice the water direction is from the bottom to top.
- B is for horizontal pipeline, the transducers need to be installed inside the C area, angle for area C, max 120°.

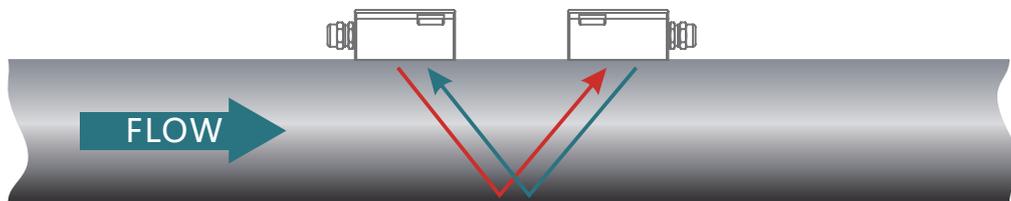
## Straight pipe demand

We suggest avoiding the valve, T-branc pipe and elbows if the condition allow. Please satisfied the hardest position installation requirements when you face more than one interfering resource.



## Measuring principle

Transfer time technical means the ultrasonic signal from the transducer is transmitted and received through the moving liquid, there will be a difference between the upstream and downstream transit time, which can be used to calculate flow and velocity.



## Ordering confirmation

SEG	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	-	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	-	<input type="checkbox"/>	-	<input type="checkbox"/>
	Type		Sensor		Signal output		Connection mode
	Accuracy: ±0.5%		C01:External clamp sensor,IP68,-40°F~+176°F (-40°C~+80°C)  C01U:External clamp sensor,IP68,-40°F~+266°F(-40°C~+130°C)  C01W:Plug-in sensor,IP68,-40°F~+266°F(-40°C~+130°C)		1.OCT,Relay output, RS232/RS485, 4-20mA  2.OCT,Relay output, RS232/RS485, 4-20mA, RTD		D: Connector  P: Cable  M: Display meter with digital display

### Optional

SEG		-		-	<input type="checkbox"/>	-	<input type="checkbox"/>
			Sensor		Temperature sensor		Cable Length
			AC power,90 to 245 VAC  SD card(8G)  Calorimeter Features Includes RTD + an external clip-on PT1000, PT1000 standard cable length is 9m		T:PT100		Standard cable for sensors below 80 °C is 9m, with a USD10/m extension  Standard cable for sensors 130°C is 9m, with a USD20/m extension

Model selection example:C01-1-P9,External clamp sensor,OCT,Relay output,RS485,4-20mA,9m cable.