SiteLab

Ultrasonic Flowmeter

SL1288i



SiteLab Ultrasonic Flowmeter SL1288i

About SL1288i

SL1288i Portable Ultrasonic Flowmeter enables the user to do flow measurement checks at many points in a flowprocess without the need for a permanent installation.

This ultrasonic flowmeter adopts Gentos unique PICOFLY time measurement technology, which could make the resolution reach to 10 picoseconds (0.01 nanosecond). It realizes the high respondence and high accuracy ultrasonic measurement technology and application.

Comparing with other traditional flowmeter or ultrasonic flowmeter, it has distinctive features such as high precision, high reliability, high capability and low cost, the flowmeter features other advantages:

PICOFLY technology designed.
Less hardware components, low voltage broadband pulse transmission, low consumption power.
Clear, user-friendly menu selections make flowmeter simple and convenient to use.
Daily, monthly and yearly totalized flow.
Parallel operation of positive, negative and net flow totalizes with scale factor (span) and 7 digit display.

Applications



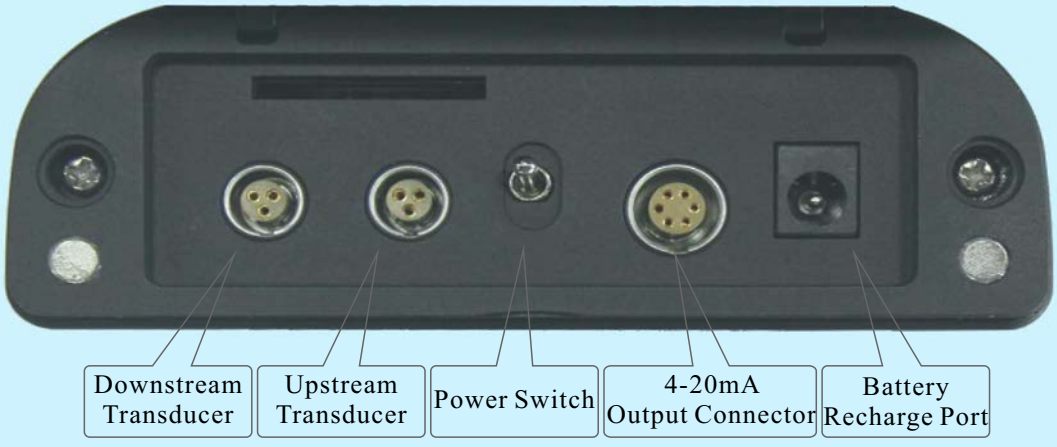
SiteLab Ultrasonic Flowmeter SL1288i

Specification

Performance specifications	
Flow range	±0.03 ~ ±40 ft/s (±0.01~ ±12 m/s)
Accuracy	±0.5% of measured value
Repeatability	0.15%.
Linearity	±0.5%.
Pipe Size	Clamp-on:0.6″~ 240″ (15mm~6000mm)
Function specifications	
Outputs	Analog output: 4~20mA, Max 750 Ω.
SD card	Storage: 2GB; Max: 512 days; Interval: 1 ~ 60 seconds.
Power supply	rechargeable Lithium Battery Power (continuous operation of mainbattery 10 hours).
Keypad	Tactile Keys.
Display	3.5 inch TFT color screen(320 × 240), backlit LCD.
Temperature	Transmitter:14℉~122℉(-10℃~50℃) Transducer:-40℉~176℉(-40℃~80℃,standard)
Humidity	0 to 99% RH,non-condensing
Physical specifications	
Transmitter	NEMA13 (IP54).
Transducer	Encapsulated design, IP68; Standard cable length: 5m.
Weight	Transmitter:approximately1.0kg.

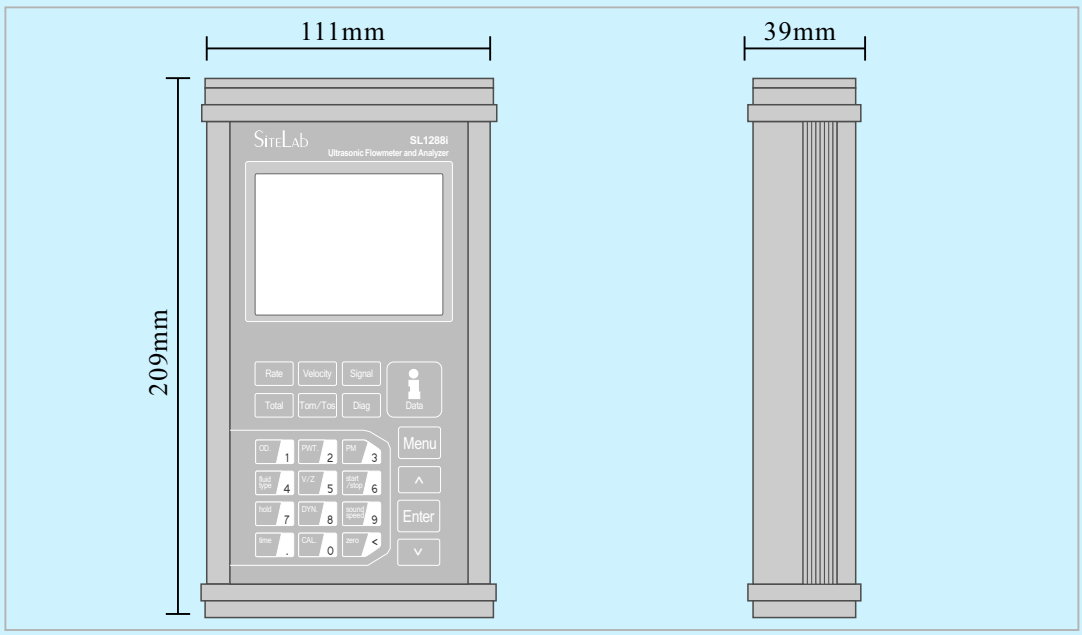
SiteLab Ultrasonic Flowmeter SL1288i

Wiring Diagram

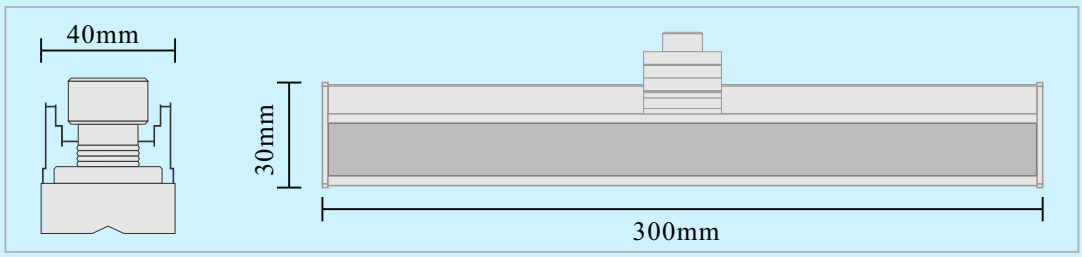


Transmitter Dimensions

Transmitter



Transducer





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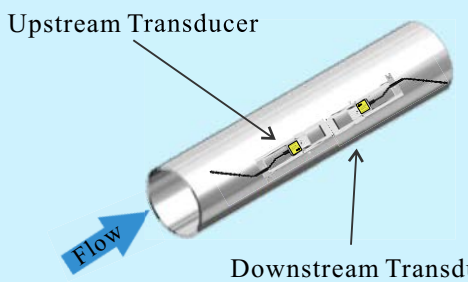
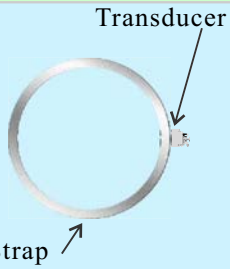
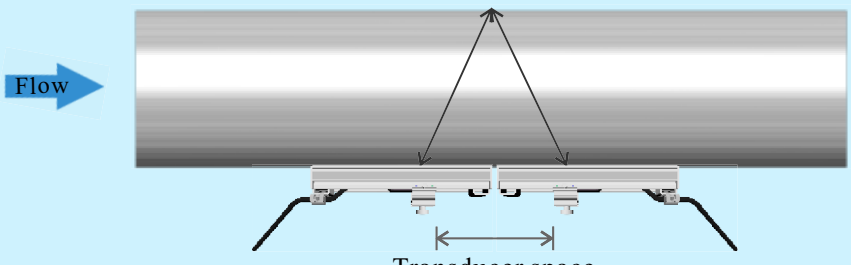
Transducer Installation Methods

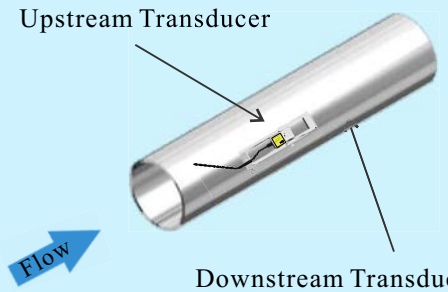
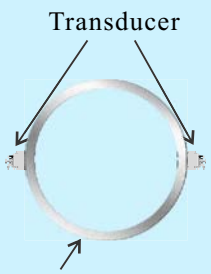
V method measuring pipe size : 50mm-400mm

Side View	Section
	

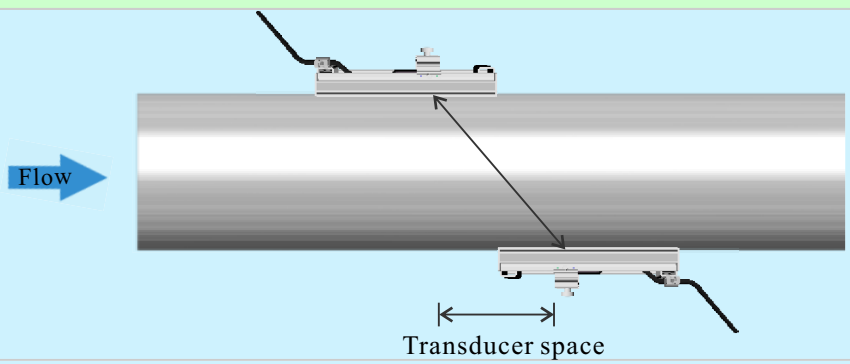
Top View



Z method measuring pipe size: 25mm-1200mm

Side View	Section
	

Top View





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Installation Site Selection

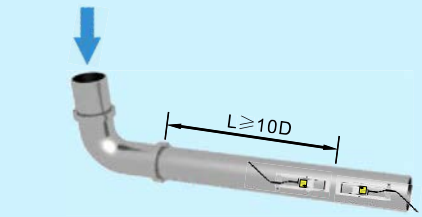
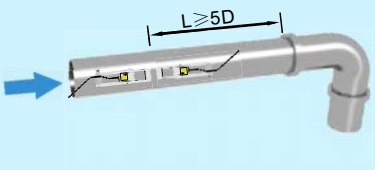
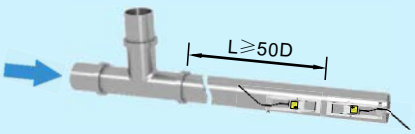
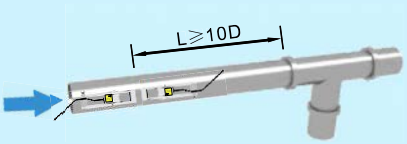
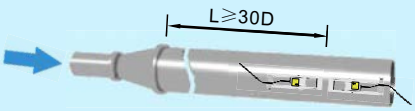
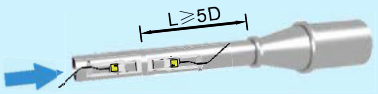
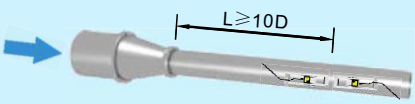
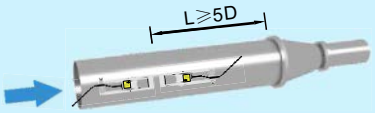
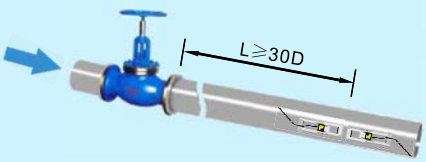
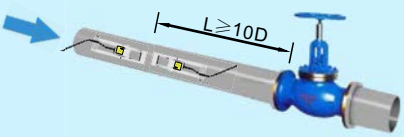
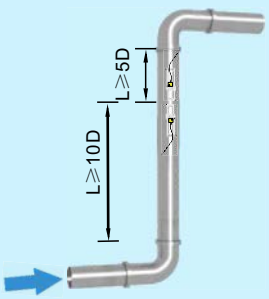
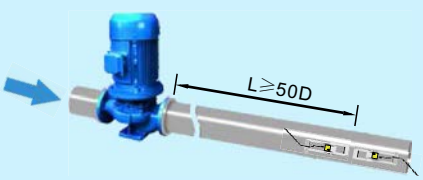
When selecting a measurement site, it is important to select an area where the fluid flow profile is fully developed to guarantee a highly accurate measurement. Use the following guidelines to select a proper installation site:

1.Choose a section of pipe that is always full of liquid, such as a vertical pipe with flow in the upward direction or a full horizontal pipe.

2.Ensure enough straight pipe length at least equal to the figure shown below for the upstream and downstream transducers installation.

3.Ensure that the pipe surface temperature at the measuring point is within the transducer temperature limits.

4.Consider the inside condition of the pipe carefully. If possible, select a section of pipe where the inside is free of excessive corrosion or scaling.

	Straight length of upstream piping	Straight length of downstream piping
90° Bend		
Tee		
Diffuser		
Reduce		
Valve		
Vertical		



SiteLab Ultrasonic Flowmeter SL1288i

Ordering Information

Model	Description
SL1288i	Handheld Ultrasonic Flowmeter Installation method: Handheld 2G SD card high memory data logging, maximum memorize 512 days data. Flow Range: ±0.03 ft/s ~ ±40 ft/s (±0.01 m/s~ ±12 m/s) Accuracy: ±0.5% of measured value Repeatability: 0.15% Output: 4-20mA Internal lithium power supply: 10hours Pipe size range: 0.6″~240″(15mm~6000mm) Transducer: IP68, CP magnet portable transducer, 5m cable
Code	Type of transducers
P010	P type magnet portable transducer Operating temperature:40℉~176℉(-40℃~80℃)
Code	Transducer Cable Length
016	CP type of cable Standard 16ft (5m)
xx	Maximum lengthen to 30m, per 5m is a lengthen unit.
Standard Model: SL1288i-P010-016 Description: Portable transducers, 5m cable.	

Packaging

①Carrying Case
②Transmitter
③Transducer with scaled rack
④Pipe Circles
⑤Grease Coupling Compound
⑥SD Card

SiteLab

Ultrasonic Flowmeter SL1278




About SL1278

SL 1278 Portable Ultrasonic Flowmeter enables the user to doflow measurement checks at many points in a flow processwithout the need for a permanent installation.

This universal transit-time meter features a dual-functionpush button interface, ergonomic handheld design and abeautiful 3.5in TFT backlit digital display that significantlysimplifies setup and data collection.

Comparing with other traditional flowmeter or ultrasonicflowmeter, it has distinctive features such as high precision,high reliability, high capability and low cost, the flowmeterfeatures other advantages:

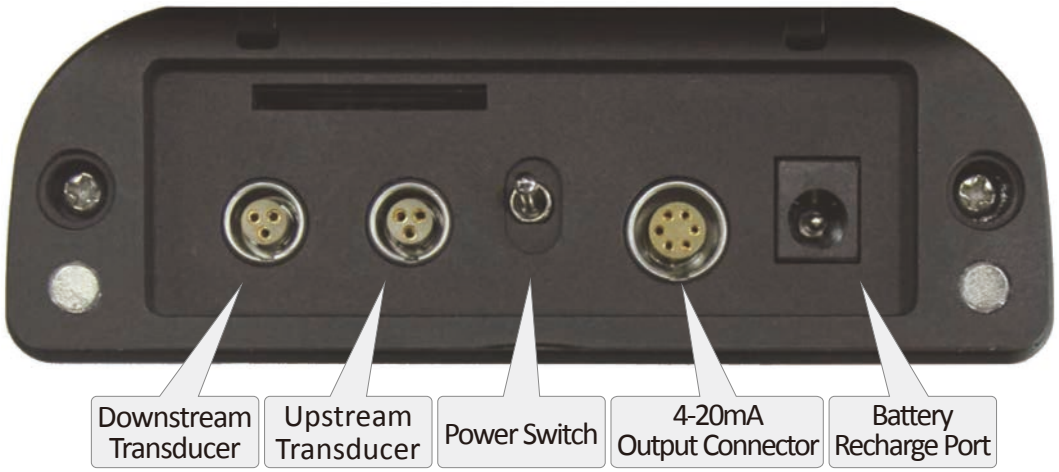
TVT technology designed.Less hardware components, low voltage broadband pulse transmission, low consumption power.Clear, user-friendly menu selections make flowmeter simpleand convenient to use.
Daily, monthly and yearly totalized flow.
Parallel operation of positive, negative and net flow totalizeswith scale factor (span) and 7 digit display, while the output of totalize pulse and frequency output are transmitted viarelay and open collector.

Applications

Specification

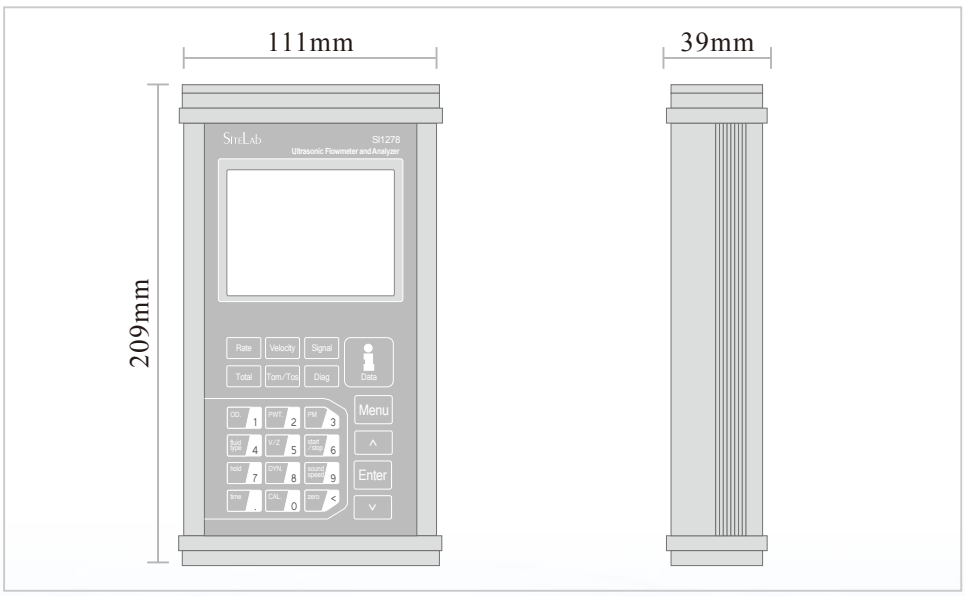
Performance specifications	
Flow range	±0.03 ~ ±40 ft/s (±0.01~ ±12 m/s)
Accuracy	±1%.
Repeatability	0.3%.
Linearity	±1%.
Pipe Size	Clamp-on:1″~ 48″ in(25mm~1200mm)
Function specifications	
Outputs	Analog output: 4~20mA, Max 750 Ω.
SD card	Storage: 8GB; Max: 512 files; Interval: 1 ~ 60 seconds.
Power supply	rechargeable Lithium Battery Power (continuous operation of mainbattery 10 hours).
Keypad	Tactile Keys.
Display	3.5 inch TFT screen(320 × 240), backlit LCD.
Temperature	Transmitter:14°F~122°F(-10°C~50°C) Transducer:40°F~176°F(-40°C~80°C)
Humidity	0 to 99% RH,non-condensing
Physical specifications	
Transmitter	NEMA13 (IP54).
Transducer	Encapsulated design, IP68; Standard cable length: 5m.
Weight	Transmitter:approximately1.0kg.

Wiring Diagram



Transmitter Dimensions

Transmitter



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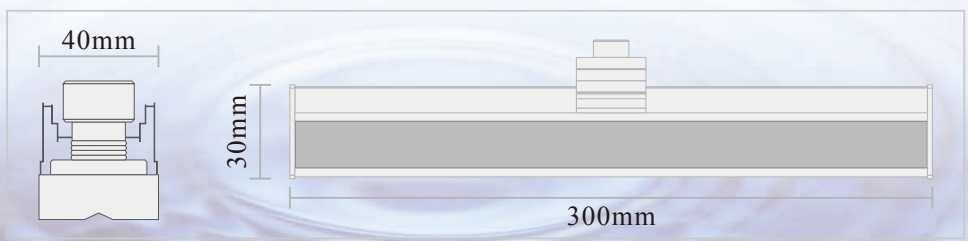
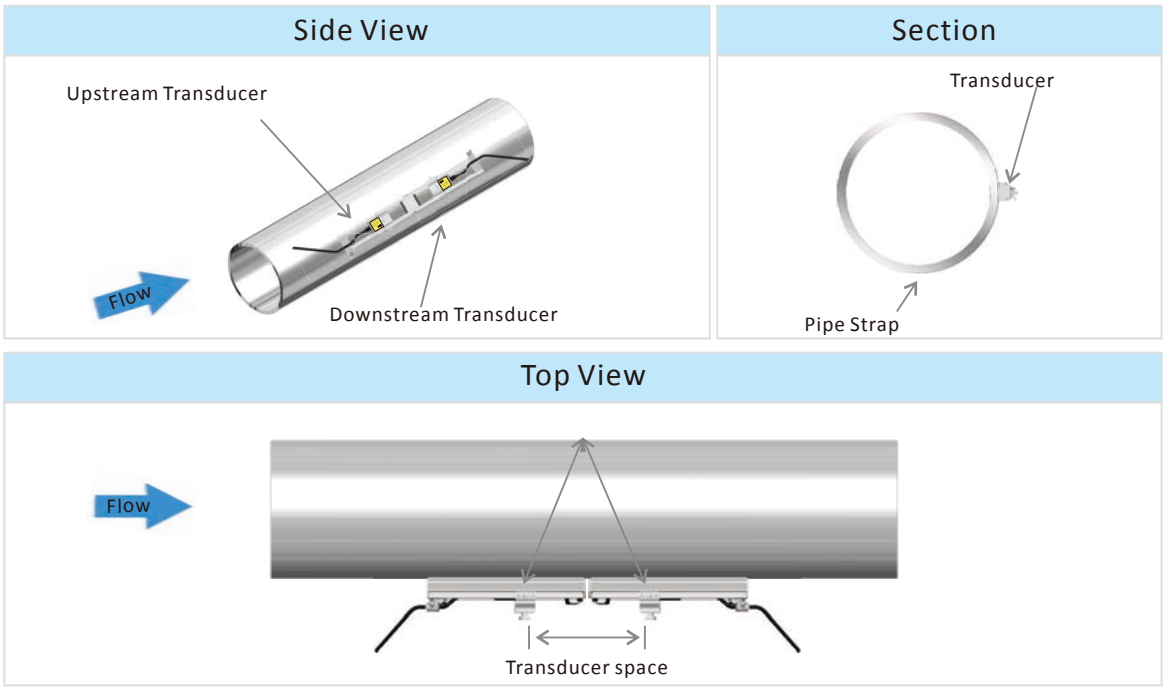
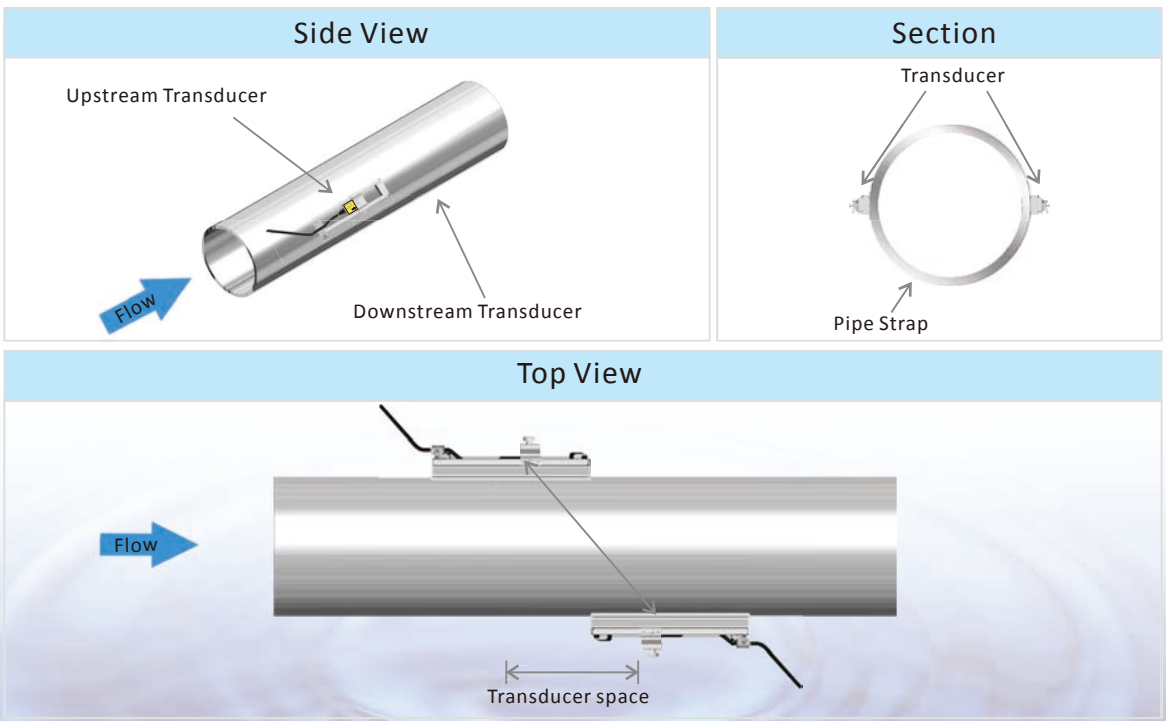


Transducer Installation Methods

V method measuring pipe size : 50mm-400mm



Z method measuring pipe size: 25mm-1200mm



Installation Site Selection

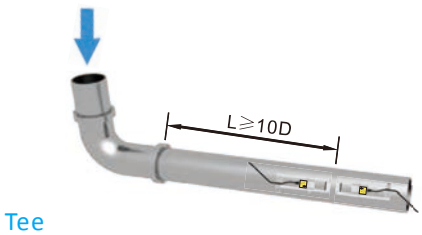
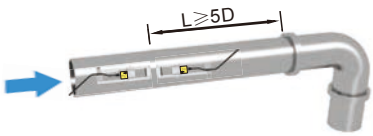
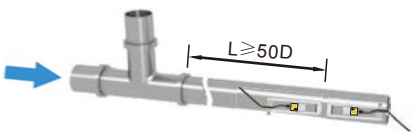
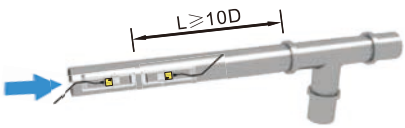
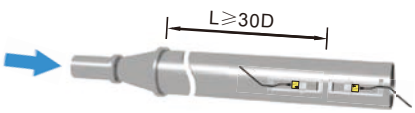
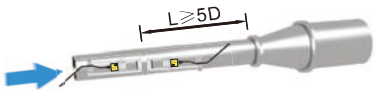
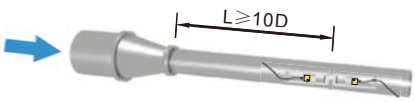
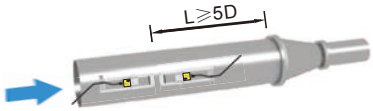
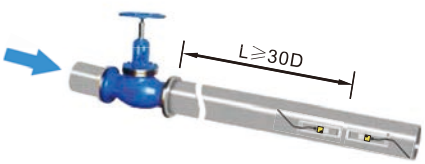
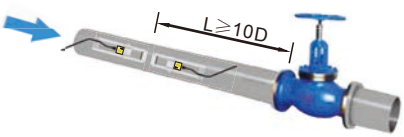
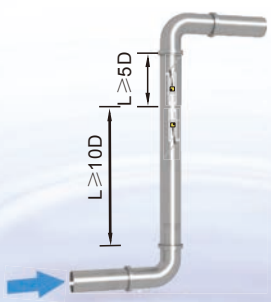
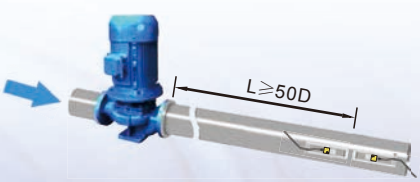
When selecting a measurement site, it is important to select an area where the fluid flow profile is fully developed to guarantee a highly accurate measurement. Use the following guidelines to select a proper installation site:

Choose a section of pipe that is always full of liquid, such as a vertical pipe with flow in the upward direction or a full horizontal pipe.

Ensure enough straight pipe length at least equal to the figure shown below for the upstream and downstream transducers installation.

Ensure that the pipe surface temperature at the measuring point is within the transducer temperature limits.

Consider the inside condition of the pipe carefully. If possible, select a section of pipe where the inside is free of excessive corrosion or scaling.

	Straight length of upstream piping	Straight length of downstream piping
90° Bend		
Tee		
Diffuser		
Reduce		
Valve		
Vertical		

Ordering Information

Description	
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Type of transducers	
P010	P type magnet portable transducer Operating temperature:40℉~176℉(-40℃~80℃)
Transducer Cable Length	
016	P type of cable Standard 16ft (5m)
xx	Maximum lengthen to 305m, per 5m is a lengthen unit.
Standard Model: P117-P010-016 Description: Portable transducers, 5m cable.	

Packaging

① Carrying Case
② Flow Transmitter
③ Transducer with scaled rack
④ Pipe Circles
⑤ Grease Coupling Compound
⑥ SD Card