



Features:

- LCD display the instantaneous flow rate.
- Built-in data logger and can storage 2000 lines of data.
- Convenient use, fast testing and less maintenance.
- Applicable for various pure liquids including water, lubricants, gasoline.

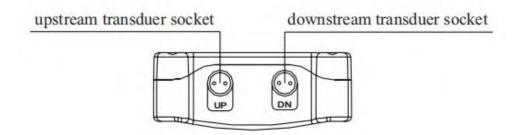
Specification:

Model	ATO-SPE-2000H		
Accuracy	$\pm 1\%$ of reading at flow rate >0.2 m/s		
Linearity	0.50%		
Repeatability	0.20%		
Response Time	0-999 seconds, user-selectable		
Velocity	0.2~32 m/s		
Pipe Size	40 mm-1200 mm		
Totalizer	7-digit totals for net, positive and negative flow		
	respectively		
Liquid Type	Virtually all liquids		
Transducer (Optional)	Standard clamp-on transducers: small/medium/large;		
	High-temperature clamp-on transducers:		
	small/medium/large		
Protection Grade	Transducer: IP67		
Transducer Cable Length	Standard 5m x 2		
Operating Temperature	Main unit: -30 °C~90 °C, Transducers: -30 °C~160 °C		
Operating Humidity	Main unit: ≤85% RH		
	3 AAA built-in Ni-H batteries (Can work over 12		
Power Supply	hours after a full charge), external charger with		
	100V-240V AC		
Display	4 x 16 English letters		
Signal Output	OCT output (6~1000 ms)		
Data Logger	Built-in data logger, can store over 2000 lines of data		
Housing Material	ABS		
Main Unit Size	100x66x20 mm		
Main Unit Weight	500g with batteries		



Structure;

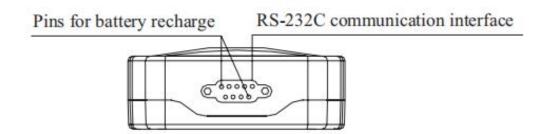
Top view:



Front View:



Bottom View:





Transducer Selection:

Transducer	Measuring Pipe Size Range	Temperature Range	Dimensions (mm)
Standard clamp-on transducer - Small	DN40-DN100		45*25*32
Standard clamp-on transducer - Medium	DN50-DN700 -30 °C~90 °C		64*39*44
Standard clamp-on transducer - Large	DN300-DN1200		97*54*33
High-temp clamp-on transducer - Small	DN40-DN100		45*25*32
High-temp clamp-on transducer - Medium	DN50-DN700	-30 °C~160 °C	64*39*44
High-temp clamp-on transducer - Large	DN300-DN1200		97*54*33



Transducer Installation Notice:

Piping Configuration	Upstream Dimension	Downstream Dimension
and Transducer Position	L up x Diameters	L dn x Diameters
L up L dn	10D	5D
Lup Ldn	10D	5D
L up L dn	10D	5D
L up L dn	12D	5D
Lup Ldn	20D	5D
L up L dn	20D	5D
L up L dn	30D	5D

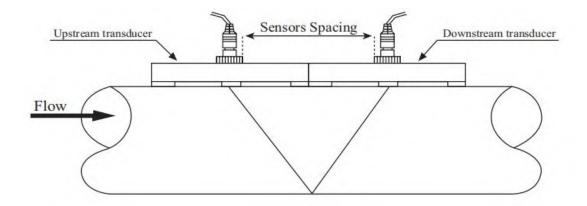
- The pipeline where the transducer is installed must have a long enough straight pipe section, of course, the longer the better, generally 10 times the pipe diameter upstream, 5 times the pipe diameter downstream, and 30 times the pipe diameter from the pump port. At the same time, ensure that the liquid in this section must be full.
- Make sure that the temperature range of the pipe under test is within the applicable range of the sensor, usually at room temperature.
- Take the corrosion or scaling of the pipeline into consideration. It is better to choose a newer pipeline for the measurement. If it is not available, subtract the corrosion from the pipe wall thickness or consider scaling as the pipe lining.



Transducer Installation Method:

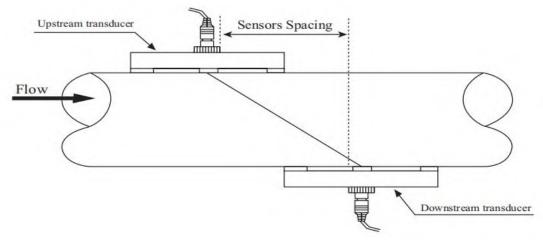
1. V-method Installation

It is the moswidely used mode for daily measurement with pipe inner diameters ranging from 20 millimeter to 300 millimeter.



2. Z-method Installation

It is commonly used when the pipe diameter is between 300 millimeters and 500 millimeters.



3. W-method Installation

It is usually used on plastic pipes with a diameter from 10 millimeters to 100 millimeters.

