

## GENERAL

The Alsonic-DHL series is a hand-held transit-time ultrasonic flowmeter with a built-in data logger and clamp-on transducers for non-invasive liquid measurement. Our microprocessor based, user friendly, field programmable signal processor allows no interruption of the process flow resulting in low installation costs.

## FEATURES

- 4 line LCD display with flow rate, totalizer & diagnostics.
- High accuracy,  $\pm 1.0\%$ .
- Compact, lightweight design
- Wide range, fluid velocities ranging 1.5 ft~40 ft/sec ( $0.5 \sim \pm 12$  m/s).
- Ni-MH Battery life for up to 16 hours of continuous operation.
- Transducers for pipe sizes from 1"~ 48" (25 to 1200 mm).
- Transducers include magnetic base, which allows for mounting on metal pipes, without mounting belt or clamps.
- Data logger records parameters including flowrate, date, total flow and diagnostics.
- Response time less than 10 seconds.



## SPECIFICATIONS

Measuring Principle : Transit time Ultrasonic

Transducers: 1"~ 48" (25~1200mm)

Pipe Material: Cast Iron, Stainless Steel, Ductile Iron  
Copper, PVC, Aluminum, Asbestos  
Fiberglass

Liner Material: Epoxy, Rubber, Mortar, Polypropylene,  
Polystyryl, Polystyryene, Polyester, Ebonite,  
Polyethylene, Teflon... etc.

Display: 4 Line LCD with back-light.

Flowrate: 5 digit with decimal point

Totalizer: 9 digit, Forward, Reverse & Net values.

Engineer Unit: m<sup>3</sup>, Liter, US Gallon, Imperial Gallon,  
Million Gallon, Cubic Feet, US Barrels,  
Imperial Barrels, Oil Barrel.

Time Unit: Second, Minute, Hour, Day.

Add'l Parameters: Velocity, Date, Time, Signal condition

Accuracy:  $\pm 1\% \sim \pm 2\%$  of reading 1.5 ft~40 ft/sec ( $0.5 \sim 12$  m/s)

Repeatability:  $\pm 0.3\%$  of reading

Keypad: 23 Key with tactile action

Response Time: Less than 10 second

Fluid velocity: 1.5~40 ft/s ( $0.5 \sim \pm 12$  m/s)

Resolution: 0.05 m/s

Ambient Temperature: 14~140° F ( $-10 \sim +60$ ° C)

Ambient Humidity: 0-90% RH, non-condensing

Built-in battery: 11.1V Ni-MH Battery

Operation Time: > 16 Hours

Data Logger: 8G SD card  
flow rate, totalizer,  
time, date, etc..

Output: 4-20mA, maximum 750Ω

Data logger (FAT 16)  
Charger: 110~240V<sub>AC</sub> 50/60 Hz, 4-6 Hour charge  
time

Power consumption: Less than 2.5W

Dimension: 8.07" x 4.17" x 1.37" (205\*106\*35mm)

Weight: 1.4 lbs (0.65Kg)

Enclosure

Converter: IP54,NEMA 13

Transducer: IP68/NEMA 6P

## TRANSDUCER SPECIFICATION

### Standard-Transducers

Fluid Temperature: 14°F ~ +176°F (-10°C ~ +80°C)

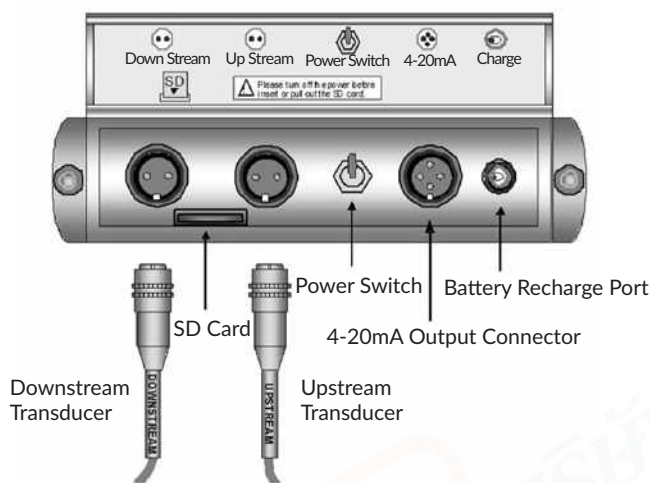
Pipe Size: 1"~48" (DN25~DN1200)

Protection: IP68

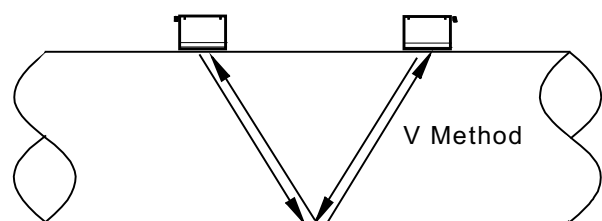
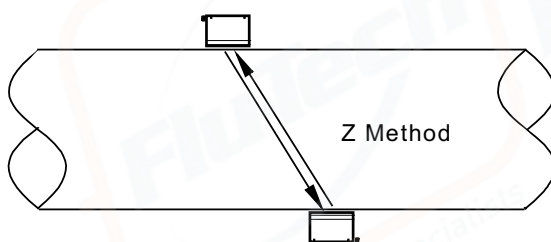
Cable: 5m(std), 10m, 15m (opt)



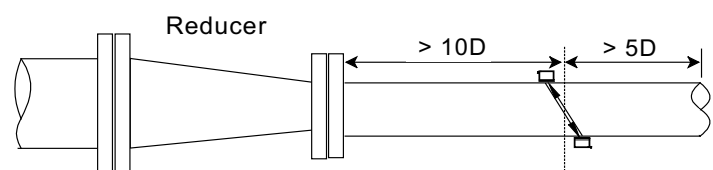
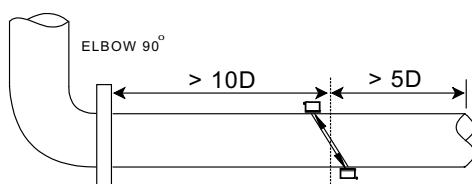
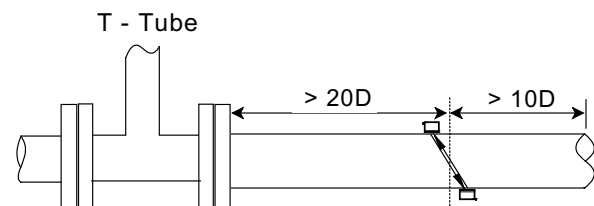
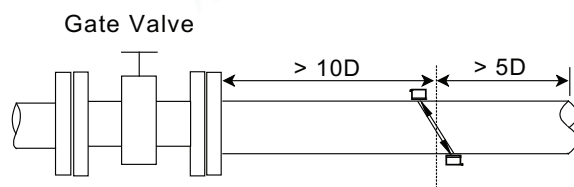
## CONNECTIONS



## INSTALLATION



## STRAIGHT RUN PIPING REQUIREMENT



## CONTENTS OF PORTABLE ULTRASONIC FLOWMETER KIT



## OTHER ACCESSORIES



TYPE OF FLUID	Please provide the name of your fluid, including operating density and viscosity
LINE SIZE	Pipe size and sensor connection type (insertion, clamp, etc..)
PROCESS PRESSURE AND TEMPERATURE	We will calibrate your flowmeter as close to your operating conditions as possible
PIPE MATERIAL	Please provide the name of your pipe material

ALSONIC								
Example : Alsonic-DHL-DTS-C1-DL								
ALSONIC DHL	**	**	**	**	**	**	**	DESCRIPTION
Handheld DHL	DHL							Portable Flowmeter
Basic Model, Includes:								
* Alsonic-DHL Handheld *1 set								
* Power Adaptor (110-240 V <sub>AC</sub> ,50/60Hz) *1 set								
* 4-20mA cable *1 set								
* Waterproof Carrying Case								
No transducers required			NTS					Transducers
Standard transducer, 1"~48" (25~1200mm)			DTS					
None cable needed				NC				Signal Cable Length
5M, 2 Cables				C1				
10M, 2 Cables				C2				
15M, 2 Cables				C3				
None option					NN			Option
8G SD card					DL			
Extra single cable. 10m * 2					Cable			
Thickness gauge					TT			