



ALSONIC

Hand-held Transit-Time Ultrasonic Flowmeter

Model ALSONIC-DHL Series

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	Response Time:	Less than 10 second
Transducers:	1"~ 48" (25~1200mm)	Fluid velocity:	1.5~40 ft/s ($0.5 \sim \pm 12$ m/s)
Pipe Material:	Cast Iron, Stainless Steel, Ductile Iron Copper, PVC, Aluminum, Asbestos Fiberglass	Resolution:	0.05 m/s
Liner Material:	Epoxy, Rubber, Mortar, Polypropylene, Polystyryl, Polystyryene, Polyester, Ebonite, Polyethylene, Teflon... etc.	Ambient Temperature:	14~140° F ($-10 \sim +60$ ° C)
Display:	4 Line LCD with back-light.	Ambient Humidity:	0-90% RH, non-condensing
Flowrate:	5 digit with decimal point	Built-in battery:	11.1V Ni-MH Battery
Totalizer:	9 digit, Forward, Reverse & Net values.	Operation Time:	> 16 Hours
Engineer Unit:	m ³ , Liter, US Gallon, Imperial Gallon, Million Gallon, Cubic Feet, US Barrels, Imperial Barrels, Oil Barrel.	Data Logger:	8G SD card flow rate, totalizer, time, date, etc..
Time Unit:	Second, Minute, Hour, Day.	Output:	4-20mA, maximum 750Ω Data logger (FAT 16)
Add'l Parameters:	Velocity, Date, Time, Signal condition	Charger:	110~240V _{AC} 50/60 Hz, 4-6 Hour charge time
Accuracy:	$\pm 1\% \sim \pm 2\%$ of reading 1.5 ft~40 ft/sec ($0.5 \sim 12$ m/s)	Power consumption:	Less than 2.5W
Repeatability:	$\pm 0.3\%$ of reading	Dimension:	8.07" x 4.17" x 1.37" (205*106*35mm)
Keypad:	23 Key with tactile action	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)

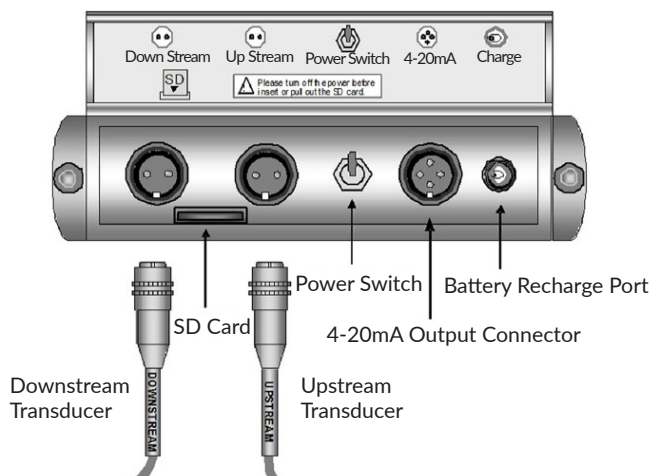
Pipe Size: 1"~48" (DN25~DN1200)

Protection: IP68

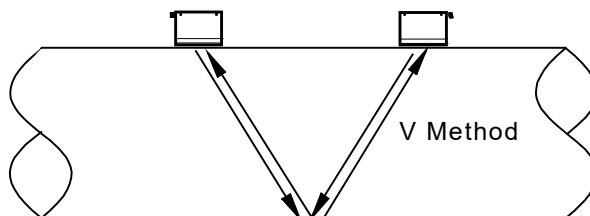
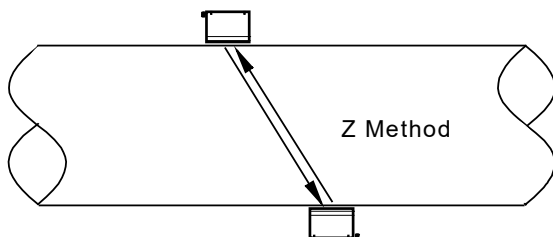
Cable: 5m(std), 10m, 15m (opt)



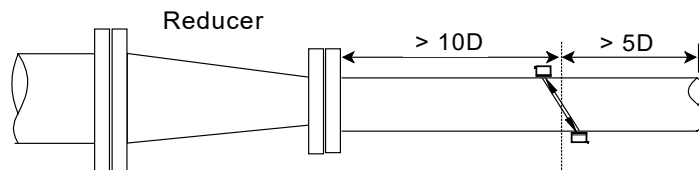
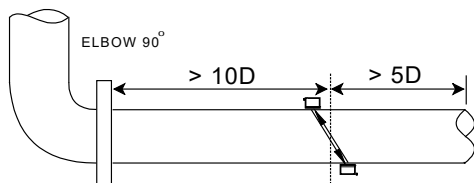
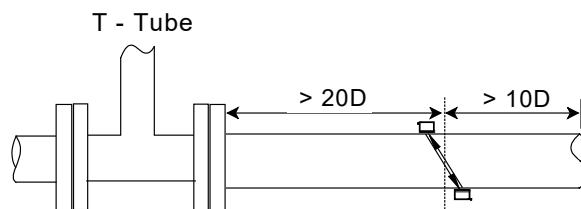
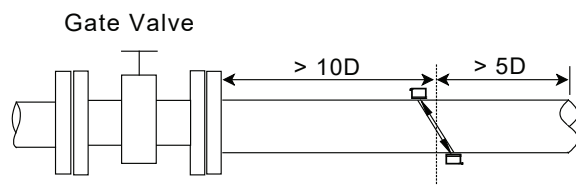
CONNECTIONS



INSTALLATION



STRAIGHT RUN PIPING REQUIREMENT



CONTENTS OF PORTABLE ULTRASONIC FLOWMETER KIT



OTHER ACCESSORIES



** Please contact your local SmartMeasurement application engineer
You also need to provide the following information:

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

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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 _{AC} , 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				

