ALSONIC-DHL

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 for instalation with no interruption of the process flow, resulting in low installation costs.

↗ FEATURES

☐ 4 line LCD display with flow rate, totalizer & diagnostics

☐ High accuracy; ±1.0%

☐ Compact, lightweight design

☐ Wide range of fluid velocities (0.5 ~ ± 12 m/s)

☐ Ni-MH Battery life for up to 16 hours of continuous operation.

☐ Transducers for pipe sizes ranging from 1"~48" (25 to 1200 mm)

☐ Transducers include magnetic base; 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

↗ SPECIFICATION

- Measuring Principle : Transit time ultrasonics
- Transducers : 1" ~ 48" (25 ~ 1200 mm)
- Pipe Material : Cast Iron, Stainless Steel, Ductle Iron Copper, PVC, Aluminum, Asbestos Fiberglass
- Liner Material : Epoxy, Rubber, Mortar, Polypropylene, Polystryal, Polystryene, 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.
  - Volumetric Units : m^3, Liter, US Gallon, Imperial Gallon, Million Gallon, Cubic Feet, US Barrels, Imperial Barrels, Oil Barrel
  - Time Units : Second, Minute, Hour, Day
  - Additional Parameters : Velocity, Date, Time, Signal condition
- Accuracy : ± 1% ~ ± 2% of reading (0.5 ~ 12 m/s)
- Repeatability : ±0.3% of reading

- Keypad : 23 Key with tactile action
- Response Time : Less than 10 second
- Fluid velocity : 1.5~40 feet/sec (0.5 ~ ±12 m/s)
- Resolution : 0.05 m/s
- Ambient Temperature : 14~ 140 °F (-10 ~ +60 °C)
- Ambient Humidity : 90% RH, non-condensing
- Built-in battery : 11.1V_{DC} Ni-MH Battery
- Operation Time : > 16 Hours
- Data Logger : 2Gb SD card flow rate, totalizer, time, date, etc..
- Output : 4-20mA, maximum 750Ω Data logger (FAT16)
- Charger : 110 ~ 240V_{AC} 50/60 Hz, 4-6 Hour charge tim
- Power consumption : Less than 2.5W
- Dimensions : 8.07" x 4.17" x 1.37" (205 * 106 * 35 mm)
- Weight : 1.4 lbs (0.65 Kg)
- Enclosure
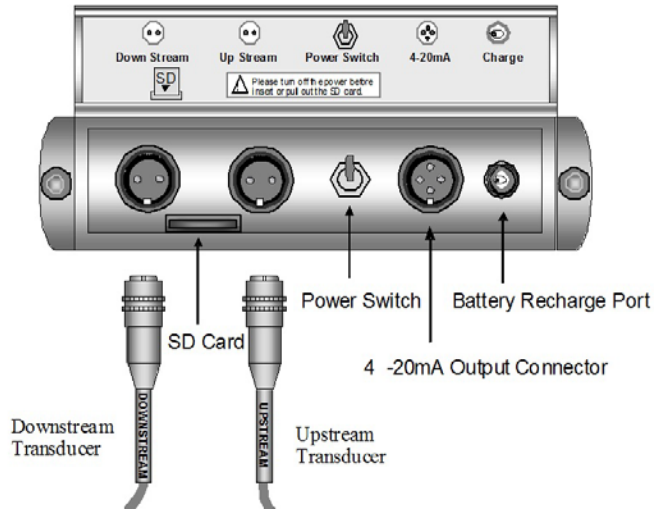 - Converter : IP54,NEMA 13
  - Transducer : IP68
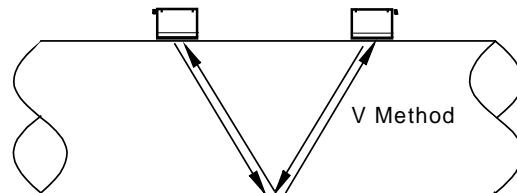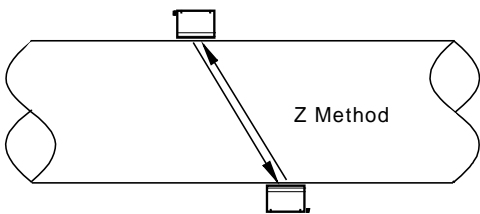
⤢ TRANSDUCER SPECIFICATIONS

● **Standard-Transducers**

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

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

Protection: IP68

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

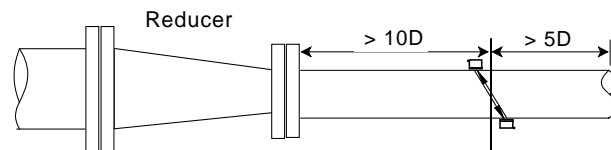## ⤢ CONNECTIONS
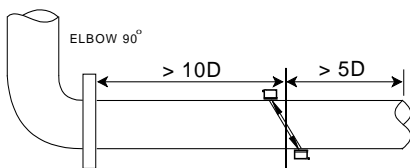

⤢ INSTALLATION

Z Method

V Method

⤢ STRAIGHT RUN PIPING REQUIREMENT

Grove Valve

> 10D   > 5D

T - Tube

> 20D   > 10D

ELBOW 90°

> 10D   > 5D

Reducer

> 10D   > 5D
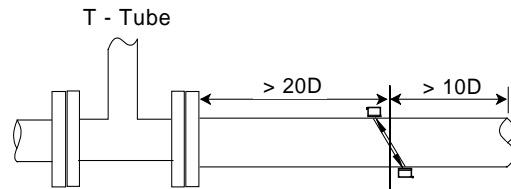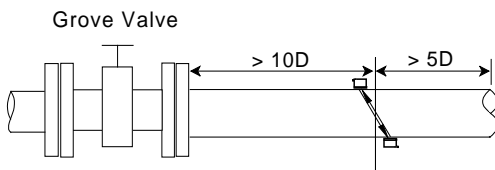
↗CONTENTS OF PORTABLE ULTRASONIC FLOWMETER KIT

Signal cables

Transducers

Display module

Mounting Straps

Charger

4-20mA connection cable

↗OTHER ACCESSORIES

Measuring Tape

Longer signal cable

Thickness gauge

2G SD card

** Please contact your local SMC 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	**Nominal 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**
Type of Electronics	**Output and installation type (compact, wall mount, panel mount,etc..)**
Pipe Material	**Please provide the name of your pipe material (Copper, PVC, black iron, etc.)**

⬈ Model Selection Guide

Alsonic-DHL						
Example : Alsonic-DHL-DTS-C1-DL						
Alsonic-	**	**	**	**		**Description**

Handheld DHL
 	
    Basic Model, Including:
 	
    * Alsonic-DHL Handheld * 1 set
 	
    * Power Adapter (110-240 V_{AC}, 50/60Hz) * 1 set
 	
    * 4-20mA cable * 1 set
 	
    * Waterproof Carrying Case
	DHL					Portable Flowmeter

No transducers required		NTS				Transducers
Standard transducers, 1" ~ 48" (25 ~ 1200 mm)		DTS				
No cable needed			NC			Signal Cable Length
5 m length, 2 Cables			C1			
10 m length, 2 Cables			C2			
15 m length, 2 Cables			C3			
None option				NN		Option
2Gb SD card				DL		
Extra signal cable; 10m * 2				Cable		
Digital thickness gauge				TT		