



ALSONIC-HL

Hand-held Transit-Time Ultrasonic Flowmeter Model ALSONIC-HL Series

GENERAL

Alsonic-HL series is a hand-held transit-time ultrasonic flowmeter with clamp-on transducers for non-invasive liquid measurement. Our microprocessor based, user friendly, field programmable flow measurement technique allows no interruption of the process flow and has low installation costs.

FEATURES

- ❑ 4 line LCD display with flowrate, totalizer & signal condition.
- ❑ The flowmeter is designed for high accuracy +/-1.0%.
- ❑ Small sized (210 * 90 * 30mm) and light - weight (500 g)
- ❑ Wide range, Velocities (0.3 ~ +/- 32 m/s).
- ❑ Ni-MH Battery life for up to 12 hours continuous operation.
- ❑ Transducers for pipe sizes of 15 to 6000 mm.
- ❑ High accuracy of +/-0.5% of reading (or +/-0.2% of reading)
- ❑ Transducers include magnet device, which can install on Metal pipe without mounting belt.
- ❑ Data logger which records flowrate, date, total flow, signal condition..Etc.
- ❑ Response time less than 1 second



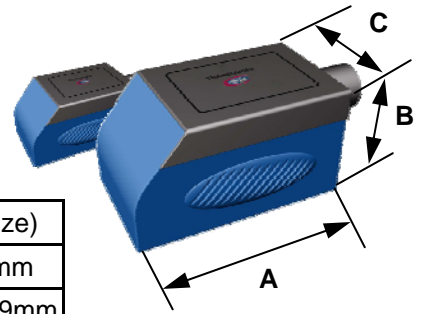
SPECIFICATION

- | | | | |
|-----------------------|--|-----------------------|--|
| ● Measuring Principle | : Transit time Ultrasonics | ● Keypad | : 18 Key with tactile action |
| ● Transducers | : SCS : 15 mm ~ 100 mm (1/2" ~ 4")
SCM: 50 mm ~ 1000 mm (2" ~ 38")
SCL: 300 mm ~ 6000 mm (12" ~ 240")
SHS: 15 mm ~ 100 mm (1/2" ~ 4")
SHL: 50 mm ~ 1000 mm (2" ~ 38") | ● Response Time | : Less than 1 second |
| ● Pipe Material | : Cast Iron, Stainless Steel, Ductile Iron
Copper, PVC, Aluminum, Asbestos
Fiberglass... etc. | ● Flow velocity | : 0.3 ~ +/- 32 m/s |
| ● Liner Material | : Tar Epoxy, Rubber, Mortar, Polypropylene,
Polystyrene, Polystyrene, Polyester, Ebonite,
Polyethylene, Teflon... etc. | ● Resolution | : 0.0001 m/s |
| ● Display | : 4 Line LCD with illumination.
Flowrate : 5 digit with decimal point
Totalizer : 8 digit, Forward, Reverse & Net values.
Engineer Unit : M3, Liter, US Gallon, Imperial Gallon,
Million Gallon, Cubic Feet, US Barrels,
Imperial Barrels, Oil Barrel.
Time Unit : Second, Minute, Hour, Day.
Other : Velocity, Date, Time, Signal condition. | ● Ambient Temperature | : -20 ~ +50 °C |
| ● Accuracy | : +/- 1% ~ +/- 2% of reading (0.5 ~ 30 m/s)
+/- 0.5% of reading (online calibration) | ● Ambient Humidity | : 90% RH or Less |
| ● Repeatability | : +/-0.2% of reading | ● Built-in battery | : Ni-MH Battery |
| | | ● Operation Time | : > 12 Hours |
| | | ● Charger | : 90 ~ 260Vac 50/60 Hz, 8-12 Hr charging |
| | | ● Data Storage | : Operation parameters and totalization
data are stored by EEPROM for more
than 10 years |
| | | ● Operation Time | : > 10 Hours |
| | | ● Charger | : 90 ~ 260Vac 50/60 Hz, 8-12 Hour charging |
| | | ● Data Logger | : 64 data include flowrate, totalizer,
time, date. |
| | | ● Alarm | : High/Low with buzzer |
| | | ● Power consumption | : Less than 2W |
| | | ● Dimension | : 210 * 90 * 30 mm |
| | | ● Weight | : 0.50 Kg |
| | | ● Enclosure | |
| | | Converter | : IP65 |
| | | Sensor | : IP68 (Submersible) |

SmartMeasurement.

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➤ TRANSDUCER SPECIFICATION



• **Standard-Transducers**

Fluid Temperature : -40 ~ +110 °C

Model	SCS (Small Size)	SCM (Medium Size)	SCL (Large Size)
Pipe Size	DN15-100mm	DN50-1000mm	DN300-6000mm
A*B*C	45mm*23mm*25mm	64mm*32mm*35mm	98mm*45mm*49mm

• **High Temperature Transducers**

Fluid Temperature : -40 ~ +160 °C

Model	SHS (Small Size)	SHL (Medium Size)
Pipe Size	DN15-100mm	DN50-1000mm



➤ ACCESSORY (standard package)



Case



Silicone grease

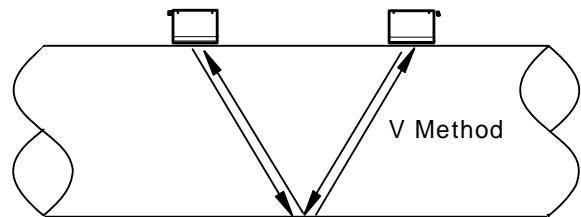
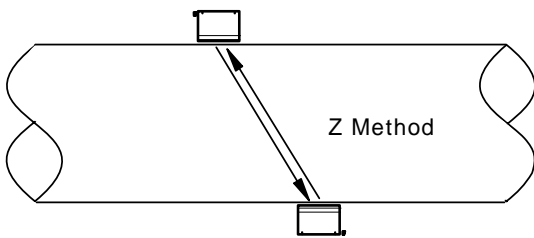


Mounting Belt

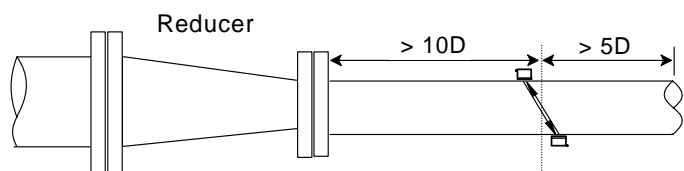
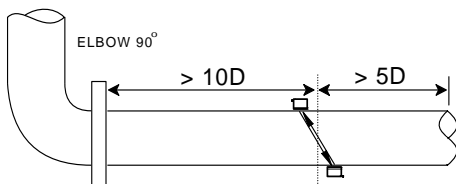
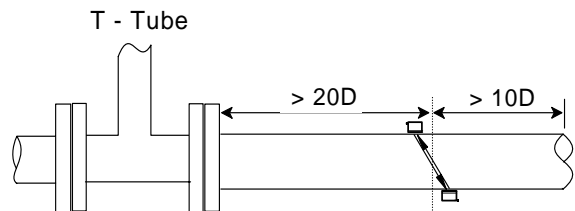
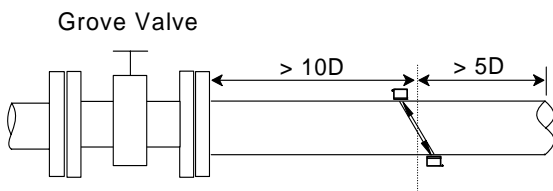


Measuring Tape

➤ INSTALLATION



➤ STRAIGHT RUN PIPING REQUIREMENT



COMBINATION FOR ULTRASONIC FLOWMETER



OTHER ACCESSORY



Waterproof Case



Mounting Belt



Thickness gauge

**** Please contact your local SMC application engineer**

You also need to provide the following information:

Type of Fluid	We need 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 calibration your Flowmeter as close to your application as possible
Type of Electronics	output and install type (compact, wallmount, panelmount,etc..)
Pipe Material	We need the name of your pipe material

➤ Model Selection Guide

Aliaisonic-DL						
Example : Alsonic-DL-SCS-C1-NS						
Aliaisonic-	**	**	**	**		Description
Handheld DL Basic Model, Include: * Alsonic-PL Handheld * 1 set * Power Adaptor (90-264 Vac, 50/60Hz) * 1 set * RS232 communication cable * 1 set * Silicone grease * 1 Box * Waterproof Carrying Case * Measuring Tape	DL					Portable Flowmeter
No transducers required		NTS				Transducers
Small clamp sensor, 15 ~ 100 mm		SCS				
Middle clamp sensor, 50 ~ 1000 mm		SCM				
Large clamp sensor, 300 ~ 6000 mm		SCL				
High Temperature clamp sensor (-30-160°C), 15 ~ 100 mm		SHS				
High Temperature clamp sensor (-30-160°C), 50 ~ 1000 mm		SHL				
None cable needed			NC			Signal Cable Length
5M, 2 Cables			C1			
10M, 2 Cables			C2			
15M, 2 Cables			C3			
None option				NS		Accessories
thinkness gague				TT		
Waterproof case				WPC		
Extra single cable. 10m * 2				Cable		
Mounting Belt. 6m * 2				MS		