



ALSONIC

Ultrasonic Building Automation Water Meter

ALSONIC MN

GENERAL

SMARTMEASUREMENT™ ALSONIC MN are designed for small pipes as well as a better solution where small pipes ultrasonic technology. There is no need for coupling gels used for clamp on transducers. The plug and play method uses a circular magnetic steel to achieve better contact between the traducers and the pipe wall. It takes only 2-3 minutes reducing considerable install time compared to clamp-on transducers.

The Alsonic MN has individual fittings for pipes of DN15-DN40, LCD display, analog and MODBUS outputs. The Alsonic MN is designed for the chemical, Di-water, food and beverage or applications for small pipes and low flows of relatively clean liquid or where contact with the fluid must be avoid. ALSON-IC MN can be used in many material such as stainless steel pipe, carbon steel, copper pipe, plastic pipe (PVC, PVDF, PPR, PPH, HDPE, etc.)

ALSONIC EG MN is MN type with RTD as energy meter.



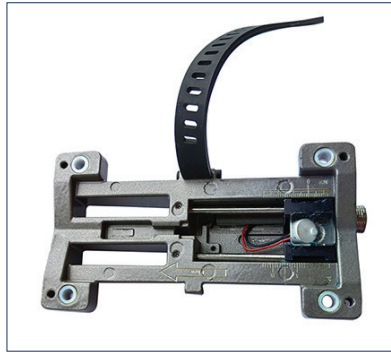
SPECIFICATIONS

- **Measuring Principle:** Transit time ultrasonic
- **Model:** ALSONIC MN
- **Flow range:** 0.1 m/s~5.0 m/s
- **Accuracy:** std $\pm 2\%$ RD, opt $\pm 1\%$ RD
- **Repeatability:** 0.8%
- **Pipe size:** DN15~DN40
- **Data storage:** Daily, monthly, and attual, total, etc.
- **Analog output:** 4~20mA, Maximum load: 600 Ω
- **Alarm output:** OCT, Upper and lower limit alarm function (optional)
- **Communication:** RS485, Support modbus communication protocol
- **Power supply:** 10-24 VDC/1A
- **Case material:** Aluminum alloy and ABS
- **Protection:** IP65
- **Cable length:** 1.8m -std
- **Keypad:** Five light touch buttons
- **Screen:** LCD 256*128 display screen
- **Units:** Metric and imperial units are available, Cubic Meters (m³), Liters(L), USA Gallons(GAL)/hour, /min, Default unit setting: m³ /h
- **Totalizer:** Six bit digit
- **Piper material:** Stainless steel pipe, carbon steel pipe, copper pipe, plastic pipe
- **Environment temp:** 0°C~50°C (32°F~122°F)
- **Medium temp:** 0°C~50°C (32°F~122°F)
- **Environment humidity:** 0-95% relative humidity,without condensation

ENERGY METER COMPOSITION



ALSONIC MN

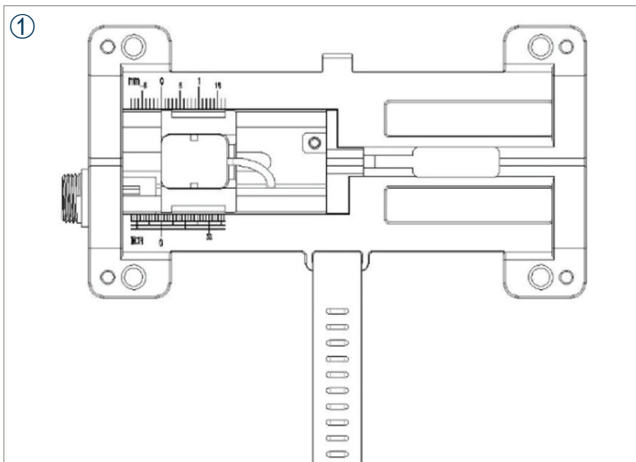


Clamped on transducer

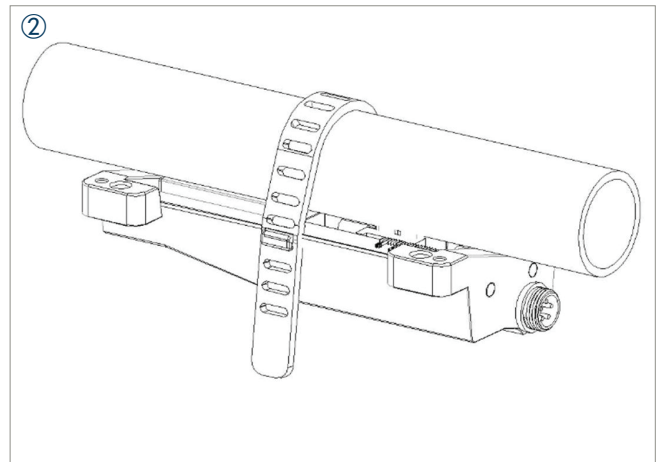


Connecting Cables

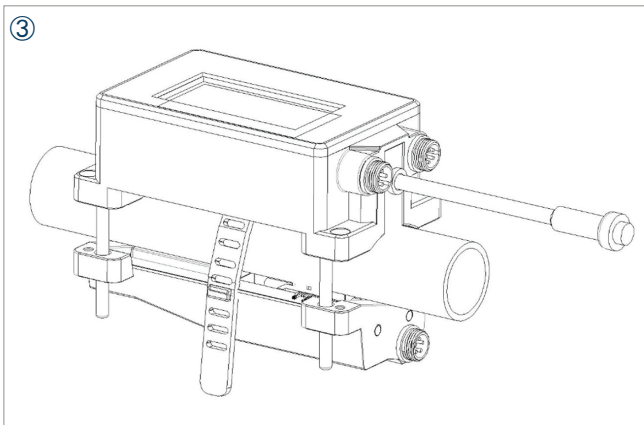
TRANSDUCER INSTALLATION STEPS



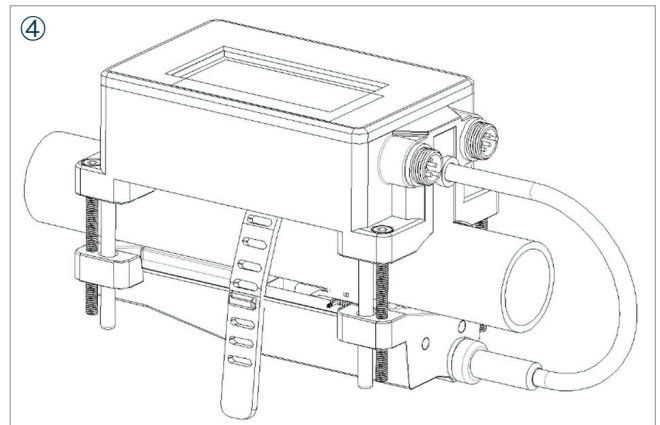
Please set parameters of M10 and M12 according to the actual situation on site, and adjust the end distance of the sensor according to the installation distance of M14. As shown in the figure below.



Fix the flow meter bottom part on the pipe on with the rubber strap supplied with the product.



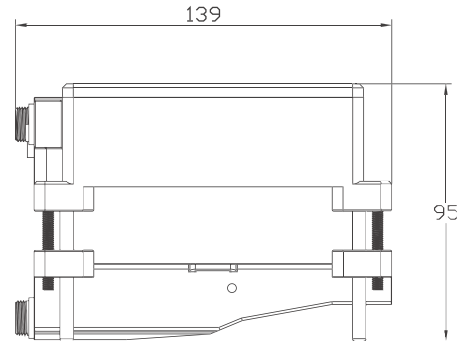
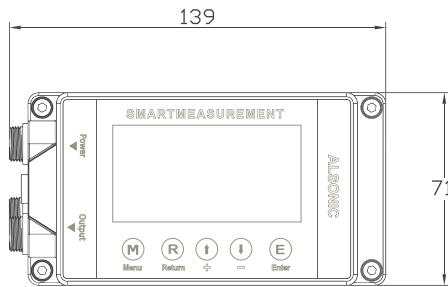
Insert the four fixing brackets of flow meter top part into the corresponding holes. Lock screws to fix both top and bottom part of flow meter.



Insert the aviation plug of the upper cover into the corresponding position of the bottom cover and tighten it. Then the installation is complete.

ALSONIC MINI FLOW METER

■ DIMENSIONS

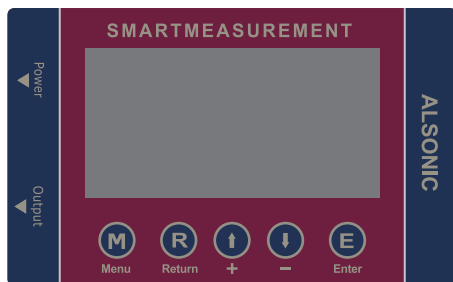


■ FLOW RANGE

Pipe diameter	Upper limit flow value (L/min)
DN15	60 L/m
DN20	100 L/m
DN25	200 L/m
DN32	300 L/m
DN40	400 L/m

Note: The inner diameter of the minimum measurable pipe section is greater than or equal to 12mm

■ DISPLAY



- Enter the main menu/confirm the current input and options
- Scroll down/Next option/Next number
- Page up/Previous option/Previous number
- Go back to the previous menu/delete the previous input data
- Used to switch between the six categories of menus.

Note: In normal conditions, press [Enter] key to alter the parameters; if you can't alter related parameters after pressing [Enter] key, it is possible that the system protection function is enabled to avoid touching by mistake. Please enter M54 menu and input the codes (if not available, it would be the ex-factory codes) to enable the correction authority.

■ Clean the tube



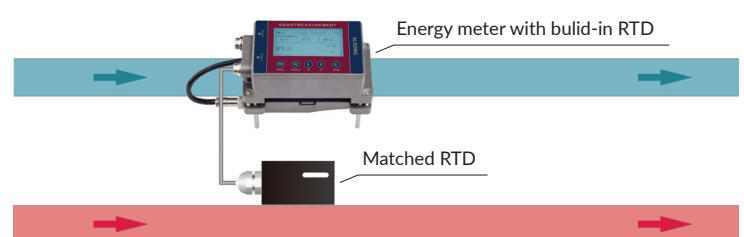
Make sure there are no dirt, paint, or other stains on the surface.

■ Install the flow sensor



Install the bracket on clear tube, then install flow sensor on the bracket.

■ Ultrasonic Energy meter



Please contact your **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
FULL-SCALE FLOW RATE	Please provide the max and min flow rate, normal flow rate also
LINE SIZE	Please provide the line size and connection
PRESSURE & TEMPERATURE	We will calibrate your flow meter as close to your operating conditions as possible

ALSONIC-MN SERIES					
EXAMPLE: ALSONIC-MN					
ALSONIC	**	**	**	**	DESCRIPTION
Flow meter -Ultrasonic clamped-on mn type, display, DC power	MN				Flowmeter type
Energy meter - -Ultrasonic clamped-on mn type, one build-in RTD, display, DC power	EG MN				
Standard -DN15 to DN40, up to 50°C		N			Transducers
Special transducer		**			
Standard 4-20mA and RS485			NN		Output
Other output			**		
None			NN		Output options
OCT (Frequency)			OT		
1 Relay			OR		
Standard ±2% RD meter with 2m signal cable				NN	Options
±1% RD meter with multiple calibrations				HA	
Matched RTD for energy meter with 9m cable				RTD	
Thickness gauge				TT	
Other options				**	

