



# ALSONIC

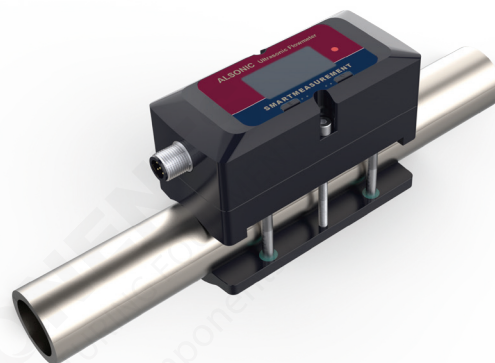
## Ultrasonic Clamped-on Flowmeter

### ALSONIC MN2



## GENERAL

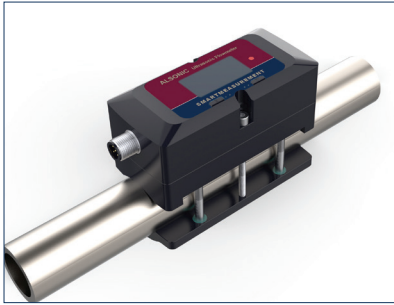
**SMARTMEASUREMENT™** ALSONIC MN2 is an integrated type transfer time ultrasonic flow meter with the clamp on type transducers. It is compact and very easy to install, making it suitable for flow process monitoring application involving various small pipe size. It is also another good choice for the devices process equipment liquid monitoring. Does not require the measured liquid to be conductive. Installation does not necessitate pipe cutting or process shutdowns, allowing operation to continue uninterrupted. There are no moving parts and no pressure loss. Installation could be performed without specialized training, just by an instructional video or step by step diagram. The enclosure is made of PP and fiberglass, ensuring durability in acidic or alkaline environment.



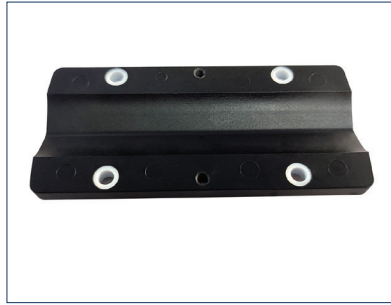
## SPECIFICATIONS

• Measuring Principle:	Transit time ultrasonic	• Accuracy:	Std: 3%FS Opt: 1.5%FS
• Pipe size:	Std: DN10~DN40 Opt: DN8	• Response time:	0.5s~3s
• Pipe material:	Metal /PVC, PP, PE or PVDF rigid plastic pipe (Common examples, if not listed, please contact the factory for confirmation)		
• Velocity:	0.08m/s~10m/s	• Power supply:	20~28VDC, 1A
• Medium:	Clean liquid water, Alcohol, Liquid gasoline, Chemical solvent and other fixed composition liquid other liquid (Single liquid medium without solid particles or impurities) /Common examples, if not listed, please contact the factory for confirmation		
• Medium temperature:	Standard: -10°C~65°C (Non-frozen) Options: -10°C~105°C (Non-frozen)	• Electric power:	1W
• Environment temperature:	-10°C~60°C	• Output:	4~20mA
• Vibration resistance:	10 to 55 Hz, double amplitude 1.5 mm, 2 hours in each XYZ axis	• Communication:	RS485 Modbus
• Impact resistant:	100 m/s <sup>2</sup> 16 ms pulse, 1000 times each for X, Y and Z axis	• Display:	1.5' Oled display
• Mounting screw:	SS304	• Keyboard:	2 touch buttons
• Enclosure material:	PP and F	• Power and I/O connection:	M12-A type aviation plug (Five-cores)
• Enclosure protection class:	IP54		

## FLOW METER COMPOSITION



ALSONIC MN2



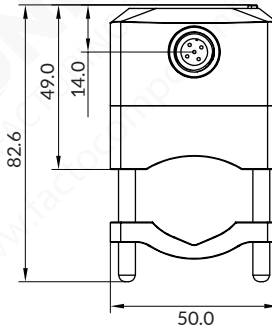
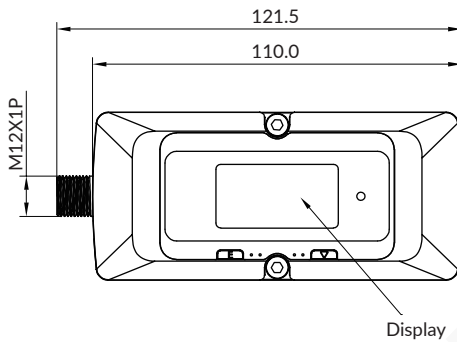
clamped on installation



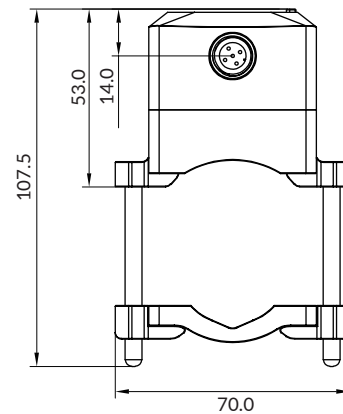
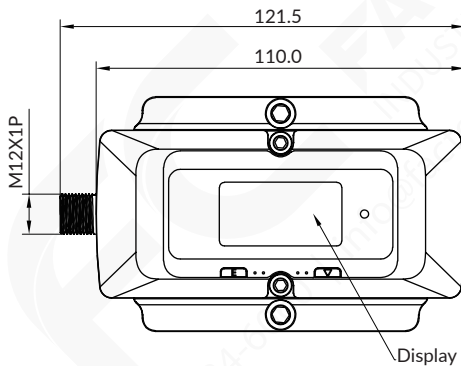
Connecting Cables

### ■ DIMENSIONS (mm)

#### DN10-DN25



#### DN32-DN40

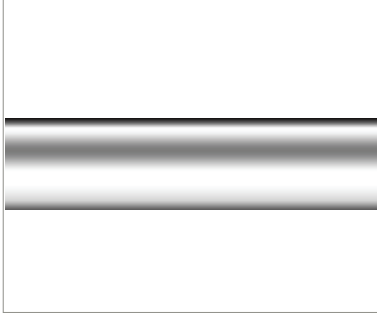


### ■ FLOW RANGE

Pipe size	OD (mm)	Flow range
DN8	Please contact the factory for confirmation	
DN10	Ø12mm~Ø18mm	2~30 LPM
DN15	Ø18mm~Ø23mm	5~60 LPM
DN20	Ø23mm~Ø28mm	10~100 LPM
DN25	Ø28mm~Ø33mm	10~150 LPM
DN32	Ø33mm~Ø44mm	20~260 LPM
DN40	Ø44mm~Ø52mm	20~400 LPM

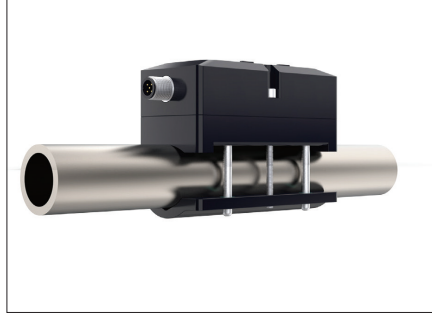
## CONNECTION/WIRING

### ■ 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.

### ■ Connection/ Wiring type

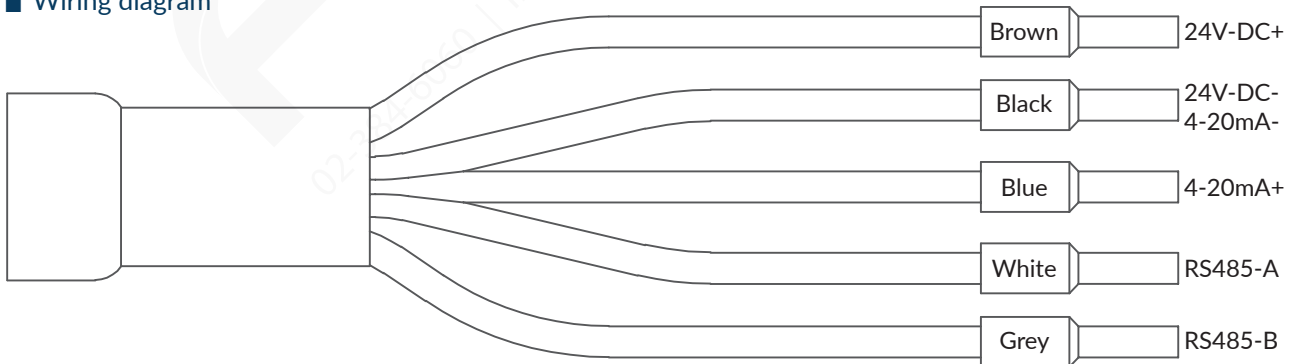


M12-A type aviation plug (Five-cores)

### ■ Connection/wiring definition

Color	Definition	Mark
Brown	24V DC 300mA	Power in +
Black	Flow 4~20mA OUT	4~20mA OUT +
Blue	0V	Power in - / 4~20mA OUT -
White	A	RS485
Grey	B	

### ■ Wiring diagram



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

<b>TYPE OF FLUID</b>
<b>FULL-SCALE FLOW RATE</b>
<b>LINE SIZE</b>

Please provide the name of your fluid, including operating temperature

Please provide the max and min flow rate, normal flow rate also

Please provide the pipe external diameter, pipe thickness and pipe material,

ALSONIC-MN2 SERIES						
EXAMPLE: ALSONIC-MN2						
ALSONIC	**	**	**	**	DESCRIPTION	
Ultrasonic clamped-on mini type, display, DC power,4~20mA,RS485	MN2				Flowmeter type	
DN10 (Ø12mm~Ø18mm)	10				Pipe size	
DN15 (Ø18mm~Ø23mm)	15					
DN20 (Ø23mm~Ø28mm)	20					
DN25 (Ø28mm~Ø33mm)	25					
DN32 (Ø33mm~Ø44mm)	32					
DN40 (Ø44mm~Ø52mm)	40					
Contact factory to confirm application details	8					
Standard: -10°C ~+65°C		NN			Process Temperature	
High temperature fluid: -10°C ~ +100°C		C2U			Process Temperature	
10~24VDC/1A			DC		Power supply	
None				NN	Output options	
OCT (Frequency)				OT		
1 Relay				OR		
Standard ±3%FS accuracy flowmeter with 2m signal cable				NN	Options	
±1.5%FS accuracy with multiple calibrations				HA		
Vernier Caliper				VC		
Thickness gauge				TT		
Other options				**		

ALSONIC Ultrasonic Clamped-on Flowmeter ALSONIC MN2 Datasheet | 28-11-2567 FACTOCOMPONENTS.CO.TH

