Flow Measurement, So easy

ETM™ Flow Meter

Clamp On Type Flow Meter — Series A-X3

α Clamp on type, No need to cut the pipe or do any other changes.

α No professional product knowledge required, installation and measurement can be done based on the guide.

α No moving parts or pressure changes involved, installation can be done without stop provide.

ACI Inc.

PRODUCT INTRODUCTION

ACI Inc. concentrates on the development of flow measurement technology. The products serve real-time flow measurement and participation process control in the production process. The main customers industries are: chemical production process, fine chemical production, cleaning industry, beverage industry, etc.

With the world's most advanced time measurement chip (time resolution of 50ps), ACI Inc. has developed a new generation of stable A-X3 series "Easy Test™" flowmeters.

The A-X3 is very unique in its structural design. It uses a circular magnetic steel to achieve automatic connection during installation. It takes only 2-3 minutes to complete the whole process from installation to measurement. It also adopts the current popular OLED display, which makes it easy to read in low light conditions.

A-X3 is widely used in the production process flow measurement and monitoring. The application of the product continuously and effectively controls the flow of the fluid, so as to improve the yield of the product and even save the input of the personnel, bringing benefits to the production enterprise.

A-X3 can meet different pipe requirements: stainless steel pipe, carbon steel pipe, copper pipe, plastic pipe (PVC, PVDF, PPR, PPH, HDPE, etc.).
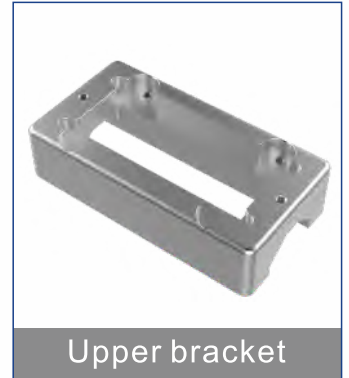
A-X3 also satisfies different clean fluid measurements: various acids, alcohols, chemical solvents, alcohol, beverage water, Coca-Cola water, etc.
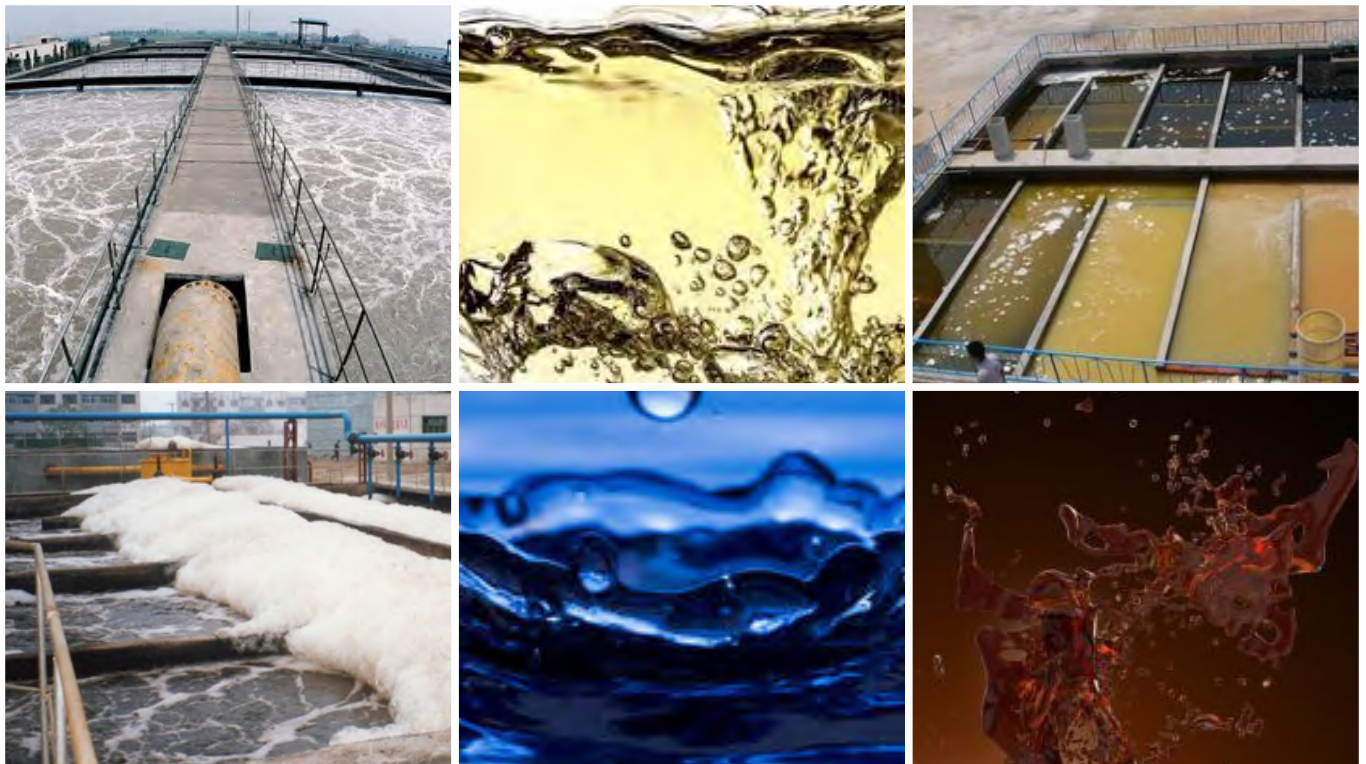
COMPONENT PARTS

ETM™

Upper bracket

Base bracket
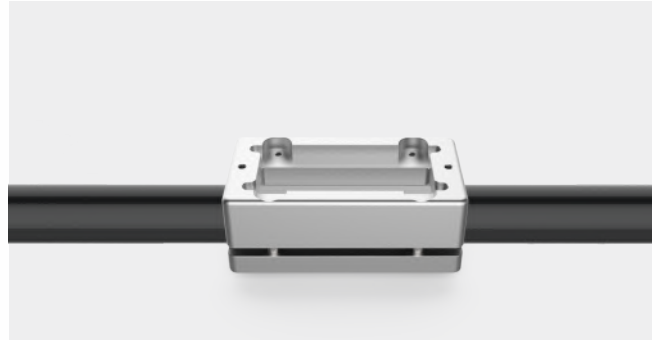

Connecting cables

APPLICATION

INSTALLATION STEPS

01 Clean the tube

Make sure no dirt, paint, or other stains on the surface of the tube.

02 Install the bracket

Align flow meter to the pipe position, Install screw on top part of the bracket, the bottom part of the bracket will automatically connect with the top part. tighten the four M4 screws.
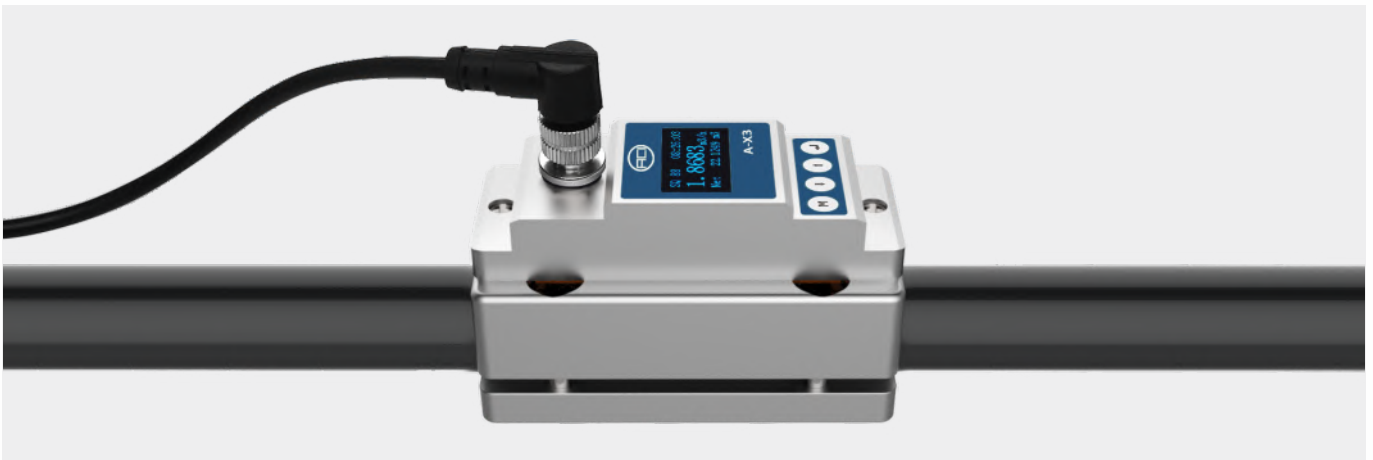
03 Install ETM™

Take the cover off the sensor, put the flow meter into Upper bracket, and tighten two M4 screws.

04 Connect the cable

Take out the cable, connect it to the socket, and tighten up.

05 Run the ETM™
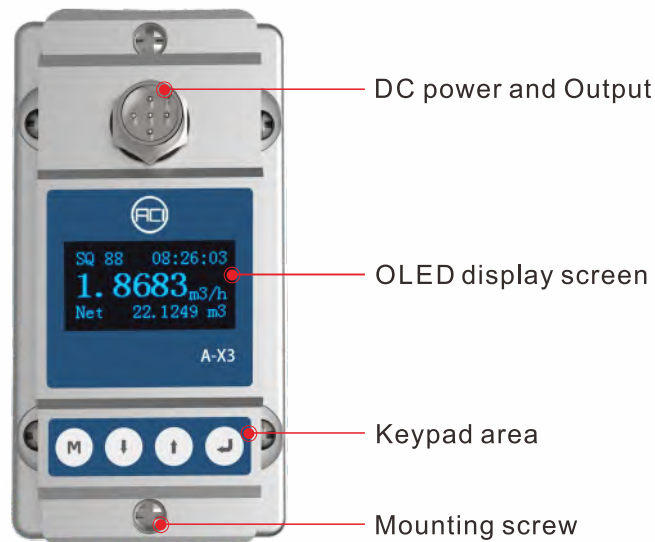

Please refer to the manual for cable connection; Power on and see if the SQ≥50 which indicates that the measurement has been stable.
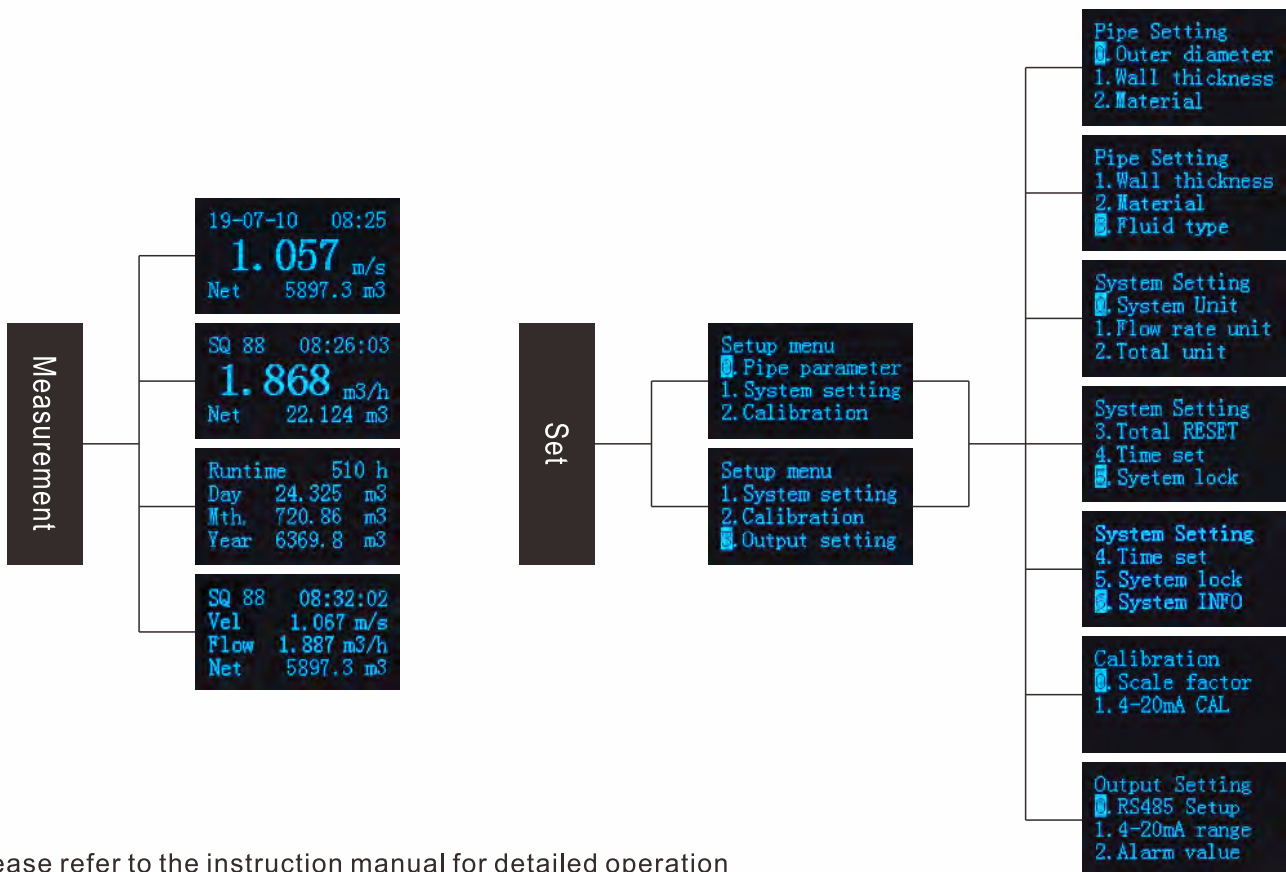
ETM™ SETTING

Special instructions:

ETM™, which is designed for different pipe diameter and materials, will be set in standard setting before it leaves the factory. There is no need to reset.

- DC power and Output
- OLED display screen
- Keypad area
- Mounting screw

DISPLAY MENU

Measurement

```
19-07-10   08:25
1.057 m/s
Net    5897.3 m3
```

```
SQ 88   08:26:03
1.868 m3/h
Net    22.124 m3
```

```
Runtime    510 h
Day   24.325  m3
Mth.  720.86  m3
Year  6369.8  m3
```

```
SQ 88   08:32:02
Vel    1.067 m/s
Flow  1.887 m3/h
Net   5897.3 m3
```

Set

```
Setup menu
0.Pipe parameter
1.System setting
2.Calibration
```

```
Setup menu
1.System setting
2.Calibration
3.Output setting
```

```
Pipe Setting
0.Outer diameter
1.Wall thickness
2.Material
```

```
Pipe Setting
1.Wall thickness
2.Material
3.Fluid type
```

```
System Setting
0.System Unit
1.Flow rate unit
2.Total unit
```

```
System Setting
3.Total RESET
4.Time set
5.Syetem lock
```

```
System Setting
4.Time set
5.Syetem lock
6.System INFO
```

```
Calibration
0.Scale factor
1.4-20mA CAL
```

```
Output Setting
0.RS485 Setup
1.4-20mA range
2.Alarm value
```

Please refer to the instruction manual for detailed operation

PERFORMANCE INDEX

| Product	ETM™ flow meter
Model	A-X3
Flow range	0.1 m/s ~ 5.0 m/s
Accuracy	±2.0%
Repeatability	0.8%
Pipe size	Φ6.35~Φ90
Data storage	Daily, Monthly, and Annual. Flow Totalizer
Analog output	4～20mA, Maximum load: 600Ω
Alarm output	OCT, upper and lower limit alarm function (optional)
Communication	RS485, support Modbus communication protocol
Power supply	24 VDC
Cable length	2.0m
Keypad	Four light touch buttons
Screen	OLED 128*64 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 digit
Piper material	Stainless steel pipe, carbon steel pipe, copper pipe, plastic pipe
Case material	Aluminum alloy
Environment temp.	0°C - 50°C
Medium temp.	0°C - 50°C
Environment humidity	0-95% relative humidity, without condensation
IP Grade	IP54

Model	A-X3-6.35	A-X3-9.53	A-X3-12.7	A-X3-15	A-X3-20	A-X3-25
Weight (KG)	0.91	0.91	0.90	0.90	0.84	0.84
Model	A-X3-32	A-X3-40	A-X3-50	A-X3-63	A-X3-75	A-X3-90
Weight (KG)	0.82	0.88	0.98	1.43	1.52	1.95

PIPING SPECIFICATION

Model	A-X3-6.35	A-X3-9.53	A-X3-12.7	A-X3-15	A-X3-20	A-X3-25
OD	Φ6.35	Φ9.53	Φ12.7	Φ15	Φ20	Φ25
ID	4mm	8mm	- -	10mm	15mm	20mm
DN	- -	DN8	- -	DN10	DN15	DN20
NB	- -	¼"	- -	⅜"	½"	¾"
Model	A-X3-32	A-X3-40	A-X3-50	A-X3-63	A-X3-75	A-X3-90
OD	Φ32	Φ40	Φ50	Φ63	Φ75	Φ90
ID	25mm	32mm	40mm	50mm	65mm	80mm
DN	DN25	DN32	DN40	DN50	DN65	DN80
NB	1"	1¼"	1½"	2"	2½"	3"

DIMENSIONS

Model	A (mm)	B (mm)	C (mm)	D(mm) min	D(mm) max
A-X3-6.35	- -	- -	- -	- -	- -
A-X3-9.53	25	10	58	1.5/Φ9.53	6/Φ14.03
A-X3-12.7	25	10	58	1/Φ12.7	6/Φ17.7
A-X3-15	25	10	58	1/Φ12.7	6/Φ17.7
A-X3-20	25	10	58	1/Φ16.5	7.5/Φ23
A-X3-25	25	15	58	1/Φ25	4/Φ28
A-X3-32	28.5	18.5	58	1/Φ32	4/Φ35
A-X3-40	29.5	24	68	1/Φ38	9/Φ45
A-X3-50	36	27	78	1/Φ48	7/Φ54
A-X3-63	41	32	91	1.5/Φ58	8.5/Φ64
A-X3-75	46.5	40	105	1/Φ72	7/Φ78
A-X3-90	51.5	43	119	1/Φ80	13/Φ92

42

40

A

B

D

C

106

106
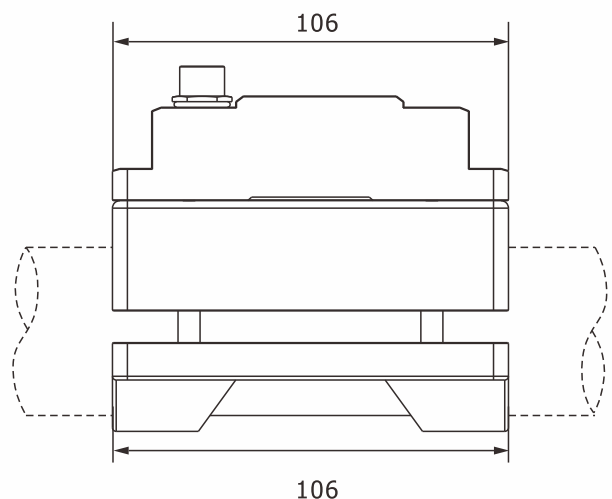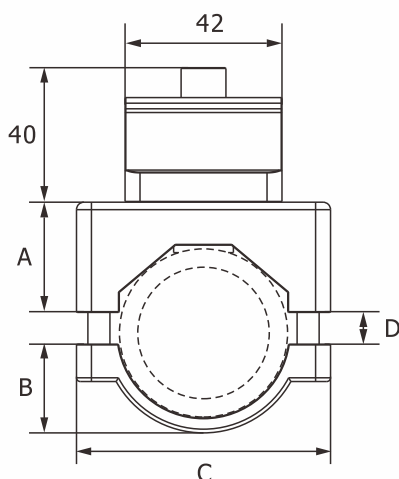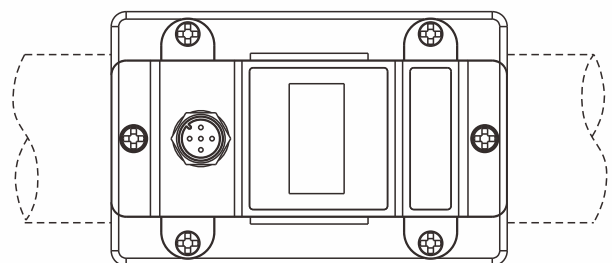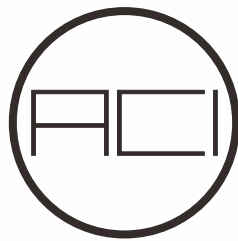
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