**MEGAUF89 Series**
**Ultrasonic Open Channel Flow Meter**

## ■ GENERAL DESCRIPTION

*MEGAUF89 Series* ultrasonic flow meter system for open channels employs the latest in ultrasonic technology.

Utilizing our wealth of know-how and technical expertise, the *MEGAUF89 Series* ultrasonic open channel flow meter provide accurate and stable flow measurements.

It is applicable for liquids with free surfaces such as agricultural water, river water, waste water and industrial effluents.
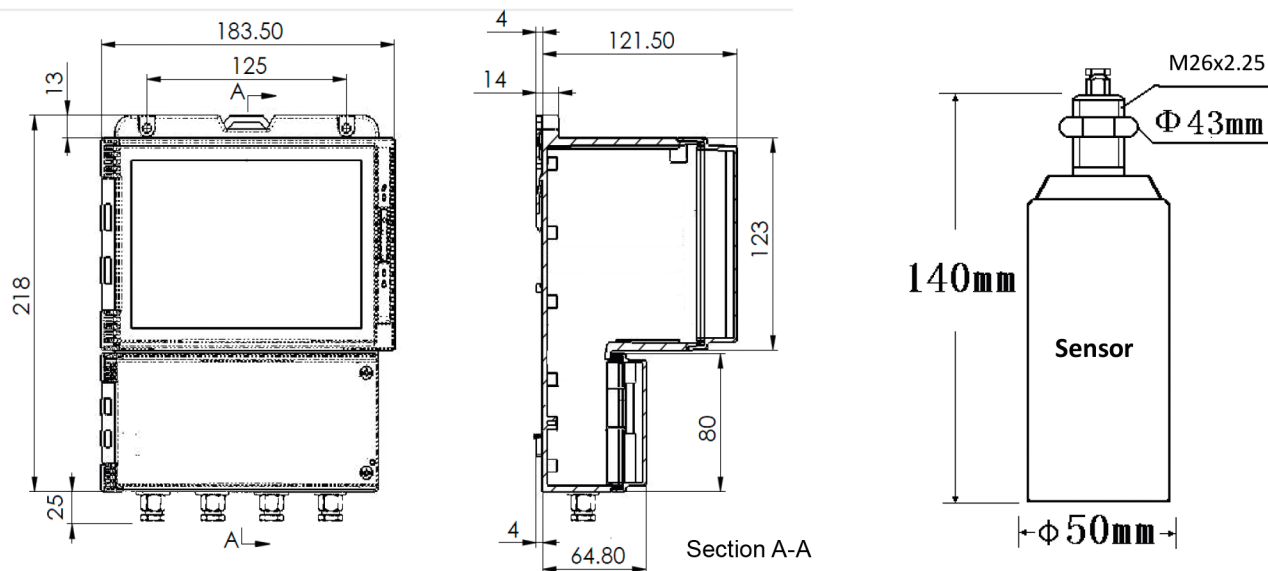
## ■ FEATURES

- MEGAUF89 Series Open Channel Flowmeter can show level, space, distance, time or flow on the display.
- The relays can be programmed to activate alarms, pump starters, or other control equipment. There is an isolated 4-20 mA output that can be connected to a chart recorder or PLC, to monitor level space or distance, independently from that shown on the display.
- There is an RS485 port, so that the *MEGAUF89 Series* Open Channel Flowmeter can be operated remotely by a PC or other equipment.
- All the parameters are stored in non-volatile memory, so the information is retained in the event of power interruption.
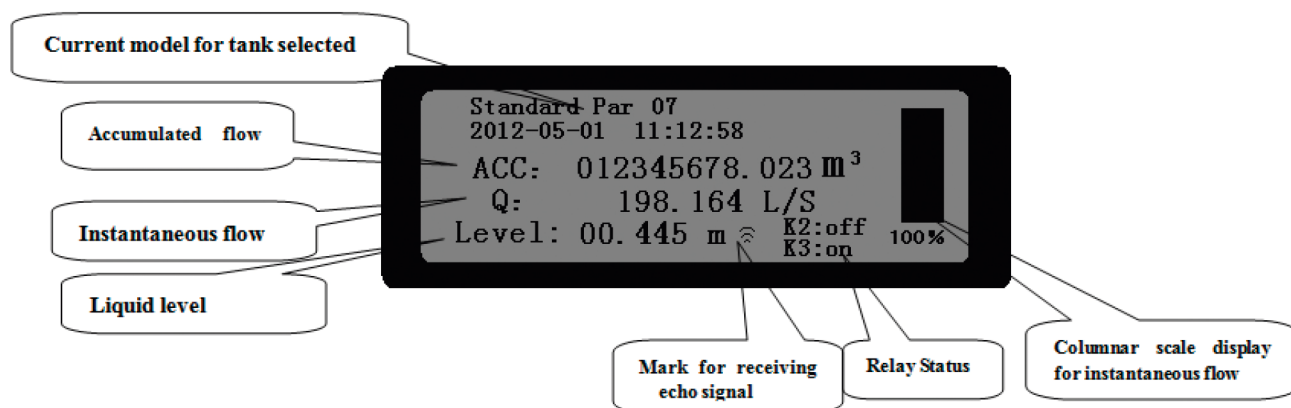
## ■ STANDARD SPECIFICATIONS

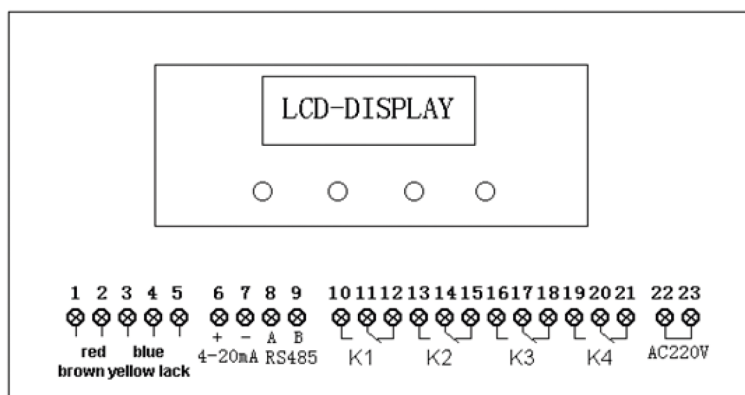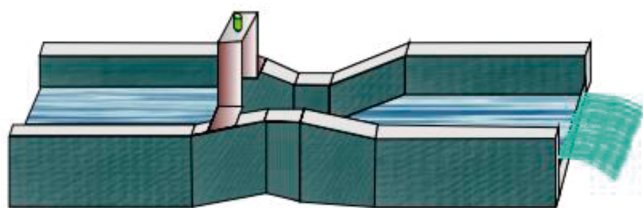| | |
|---|---|
| Flow range | 0 L/m～100m$^3$/s （confirmed by measuring weir tank size） |
| Total flow | 12 digit of decimal number, auto-zero after the expiration of the cumulative |
| Flow accuracy | 3％ |
| Distance measuring range | 3m |
| Distance measuring accuracy | 0.25％ |
| Liquid level distinguish | 1mm |
| Ambient temperature | -20～70℃ |
| Protection level | display part: IP65; probe part: IP67 |
| Power supply | 220VAC or 24V DC |
| Output | 4～20mA current output: (corresponding to flow rate)<br>Maximum loading resistance: 750Ω |
| Communication | RS485 interface |
| Relay output | 4 way relay output<br>Pulse output relay (K1)<br>High alarming relay (K2)<br>Low alarming relay（K3）<br>duplicate relay（K4）: design as required |
| Display | 192*64 LCD |
| Max. Cable Length | 50m |

## ■ DIMENSION



Section A-A

## ■ MENU DISPLAY

Current model for tank selected

Accumulated flow

Instantaneous flow

Liquid level

```
Standard Par 07
2012-05-01  11:12:58
ACC:   012345678.023 m³
Q:        198.164 L/S
Level: 00.445 m        K2:off   100%
                       K3:on
```

Mark for receiving echo signal

Relay Status

Columnar scale display for instantaneous flow

## ■ WIRING

LCD-DISPLAY

| 1 2 3 4 5 | 6 7 8 9 | 10 11 12 13 14 15 16 17 18 19 20 21 | 22 23 |
| red blue brown yellow lack | + − A B 4-20mA RS485 | K1  K2  K3  K4 | AC220V |

## ■ INSTALLATION



Parshall
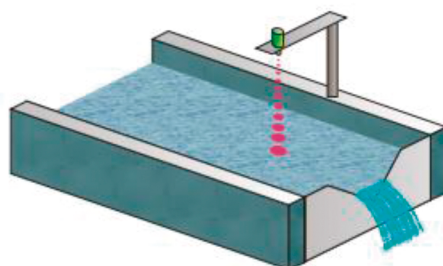


V-notch
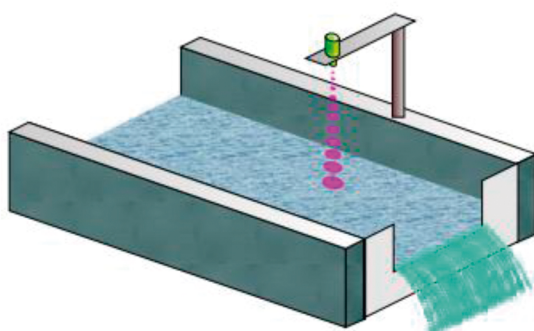


Rectangular
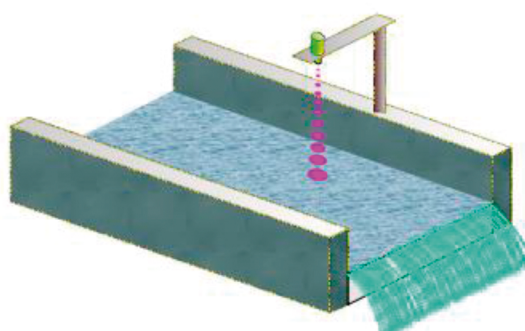


Rec Rectangular

## ■ MODEL SELECTION

| Example: MEGAUF89-C-A3-A-S | | | | | |
|---|---|---|---|---|---|
| MEGAUF89 | -X | -X | -X | -X | |
| Output | C | | | | 4~20mA |
| | R | | | | 4~20mA+RS485 |
| Alarm | | NN | | | Without alarm output |
| | | A1 | | | Pulse output relay K1 |
| | | A2 | | | High and Low alarm relay K2/K3 |
| | | A3 | | | Three relay including K1, K2 and K3 |
| | | A4 | | | Four relay including K1, K2, K3 and K4 |
| Power Supply | | | A | | 220VAC |
| | | | D | | 24VDC |
| Cable Length | | | | S | 10m |
| | | | | Z | Others |