METAL TUBE FLOW METER— MF200



Instruction Manual

1.0 DESCRIPTION

MF200 for low flow of gas, liquid and steam

Material: Aluminum alloy painted for casel body in stainless steel

Indication: Via magnetic coupling (no seals) Scales: Calibrated in I/h, m³/h, kg/h, % Flow Rate: Water- 0.4 I/h up to 6,000 I/h

Air- 21 NL/h up to 150,000 NL/h

Connection Types: BSP, NPT, flange type on request

Working Temperature:

combine with electronic parts: -40° C $\sim +150^{\circ}$ C combine without electronic parts: -40° C $\sim +180^{\circ}$ C

Working Pressure: Standard 100 kg/cm²; other options upon request

Connection Size: ¼"~2" Protection Class: IP65

Accuracy: ±2% F.S (±1.6% F.S option)





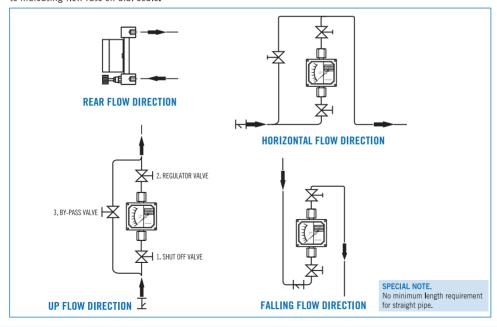
Patent No.
M275405

2.0 DIMENSIONS

Dimensions & Scale Range please refer to the technical catalogue.

3.0 INSTRUCTIONS MANUAL

MF200 flow meter consist of fixed orifice, float and indicator. Float and indicator provide one set of magnetic coupling in each side. Fluid turn thought float affects another magnet in mechanical indicator to indicating flow rate on dial scale.



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4.0 ZERO SETTING AND ADJUSTMENT

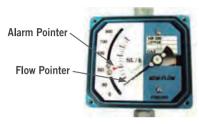
Open the upper cover, please take usage of screwdriver to adjust the flow pointer until it stop at zer opoint, (as Fig.1)

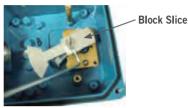
5.0 MAIN PARTS LIST

The setting steps:

Adjust the alarm pointer to request setting point, then let the pointer to match alarm pointer by hand, after that use hexangular wrench to adjust the block slice position by hand to cover inductive sensor making relay out LED lighting on the signal transducer meanwhile to lock block slice on correct position.







6.0 THE SETTING PRINCIPLE— INDUCTIVE SWITCH

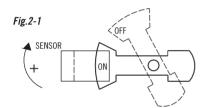


Fig.2-2

SENSOR

OFF

- 1. Two methods of setting which divides according to percentage of full flow rate.
- 2. It has to match signal transducer to use (as Fig.2-1 & 2-2)
- 3. The Specification of signal transducer.

1 SPDT: 24VDC KFD2-SR2-Ex1.W 115VAC KFD-SR5-Ex1.W

230VAC KFD2-SR6-Ex1.W 2 SPDT: 24VDC KFD2-SR2-Fx2.W

115VAC KFD2-SR5-Ex2.W 230VAC KFD2-SR6-Fx2 W

(A) 0%~60% of full flow rate:

Beginning no flow rate through this meter, the signal transducer light turns off (as Fig.3-2). When the flow rate increased reach to the alarm point, the signal transducer light turn on (as Fig.3-1). But increased flow rate pass over the alarm point meanwhile block slice leave the position of alarm point and signal transducer sensor turns off (as Fig.3-2)

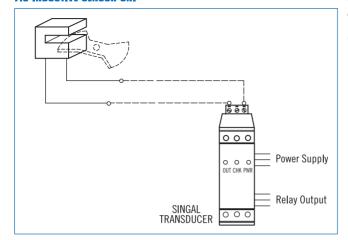
(B) 60%~100% of full flow rate:

The sensor turns off (no open) at the beginning (signal transducer light turns off as Fig. 3-2), while the flow rate increased reach to the alarm point, block slive cover the position where sensor is and sensor turns on. (as Fig.3-1 & 3-2)



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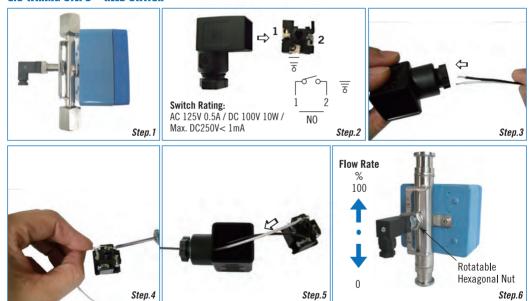
7.0 INDUCTIVE SENSOR UNI



8.0 NOTICE

After setting completion, please indeed lock the upper cover tightly, and have to a cable gland in entrance fixed cable to make sure water tightly.

9.0 WIRING STEPS— REED SWITCH



- Step. 1: The Finished product of MF200 configures with reed switch.
- Step.2: Take off the cover of conduit.
- Step.3: Put the electric wires into the conduit housing.
- Step.4: Connect the electric wires with the wiring holes of No.1 & 2 separately by a mini size of flat-head screwdriver.
- Step.5: Put the cover back on the conduit housing and fix the screw tightly.

Step.6: How to adjust the position of reed switch?

Release the rotatable hexagonal nut and adjust the alarm up and down by manual, then fix the nut tightly when the alarm in the request place. Please notice that the adjustable range is from $0\sim100\%$ flow rate.

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