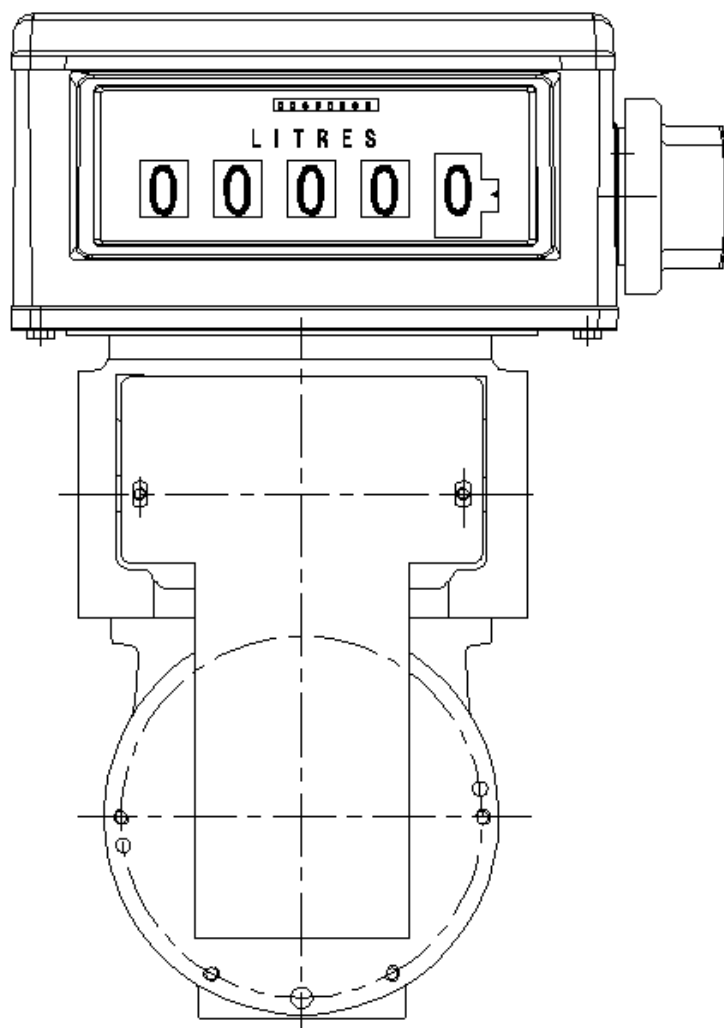


# SM Series Positive Displacement Vane Meter Manual

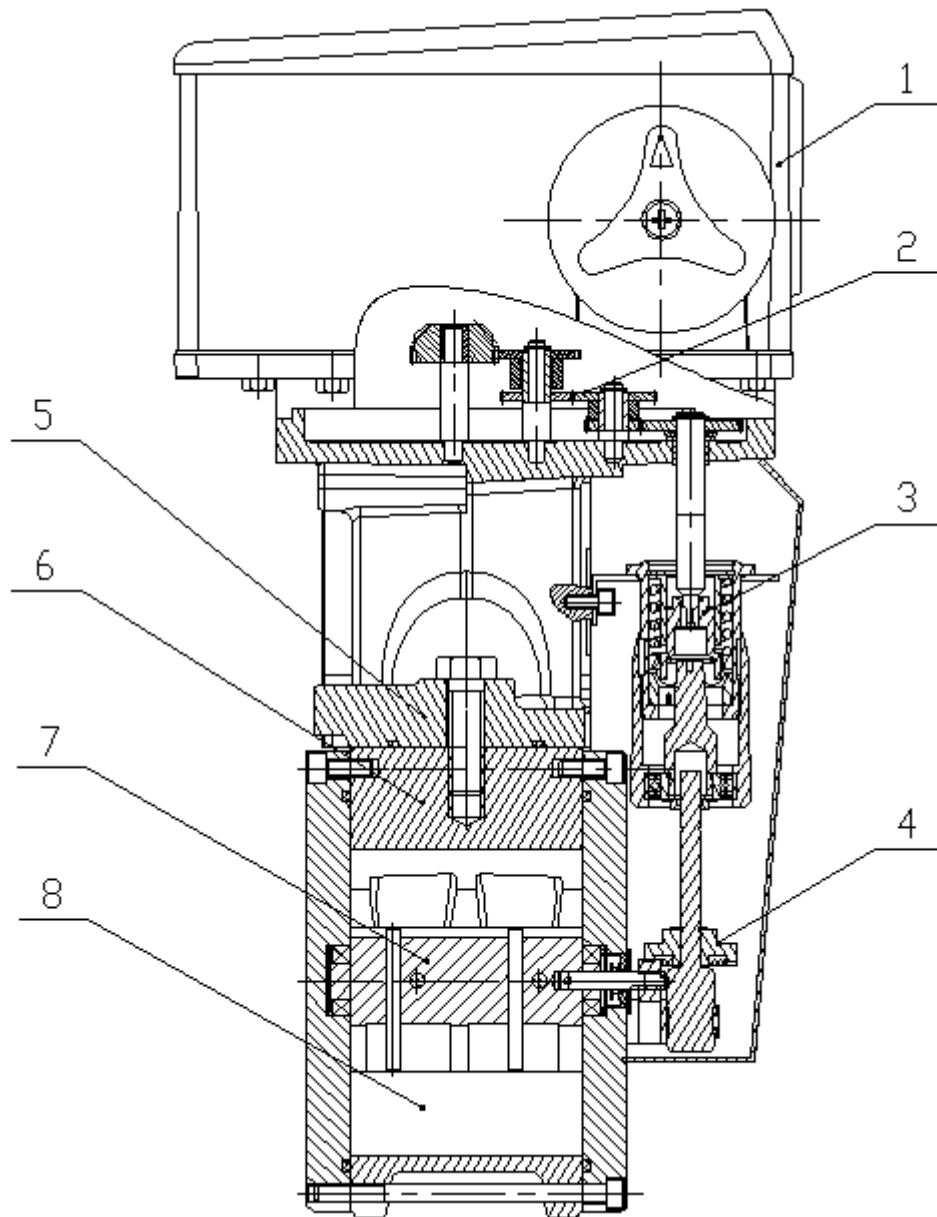


ZHEJIANG MAIDE MACHINE CO., LTD.

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## I Configuration & Principle

### 1、Configuration



1. Mechanical Register    2. Gear Assy.    3. Adjuster

4. Drive Gear    5. Connect Body    6. Cylinder

7. Rotor Assy.    8. Blades

## 2、 Principle

SM series positive displacement vane meter is used for measure the product oil of ductwork. Descend at the system pressure function, the vane and rotor is driven and rotary. In the meantime, vanes make back and forth sport along with the cylinder incurve slice, discharge ration oil to drive the transmission shaft to rotate and output the signal to the mechanical register.

## II Character

- 1) Key parts separately made into alloy material and engineering plastic which are provided with corrosive proof, wearable and perfect seal performance.
- 2) Transmission shaft is driven by rotor and vane, no intermission, no strike.
- 3) Precision adjuster adjust according to the error value, convenient, accurate and stable.

## III Technical Data

Model	SM-50	SM-80
Size	50mm/2"	80mm/3"
Volume Per Revolution	0.4L/R or 0.08US Gallon/R	0.4L/R or 0.08US Gallon/R
Flow Rate	40L/min~400L/min	133.3L/min~1333L/min
Accuracy	$\pm 0.2\%$	$\pm 0.2\%$
Repeatability	$\leq 0.1\%$	$\leq 0.1\%$

Max. Operation Pressure	8Bar/120PSI	10Bar/150PSI
Working Temperature	-40℃～+60℃	-40℃～+60℃
Max. Viscosity	800cps/3850SSU	800cps/3850SSU
Flow Rate Range Ratio	> 10 : 1	> 10 : 1
Accuracy Adjust Range	0.02% per Scale	0.02% per Scale

#### IV Install and Use

- 1) The normal work condition of the flow meter should conform to the fuel dispenser work environment requirements.
- 2) Do not need adjust and lubricate before use.
- 3) Measure accuracy should be adjusted by professional, turn to right the discharge decrease, turn to left the discharge increase.
- 4) Strictly forbid to clean with water.