

ZNC-OGM Electronic Flowmeter

User Manual





The product control panel adopts modular design, with complete functions, simple structure, easy operation, etc. it can be widely used in petroleum, chemical, pharmaceutical, transportation, food industry and commercial. The screen is a digital LCD, the screen is divided into three rows.

I. Technical parameters

Model	OGM-25	OGM-40	OGM-50
Nominal diameter	1"	1.5"	2"
Minimum flow L/min	12	25	30
Maximum flow L/min	120	250	300
Measurement accuracy	±0.5%	±0.5%	±0.5%
Repeatability	±0.3%	±0.3%	±0.3%
Large viscosity	1000CPS	1000CPS	1000CPS
Maximum working pressure; peak working pressure (PWP)	3.4MPa	1.8MPa	1.8MPa
Single count	0.00-9999.9	0.00-9999.9	0.00-9999.9
Total cumulative number	0.00-999999.9	0.00-999999.9	0.00-999999.9

II. Key operation instructions

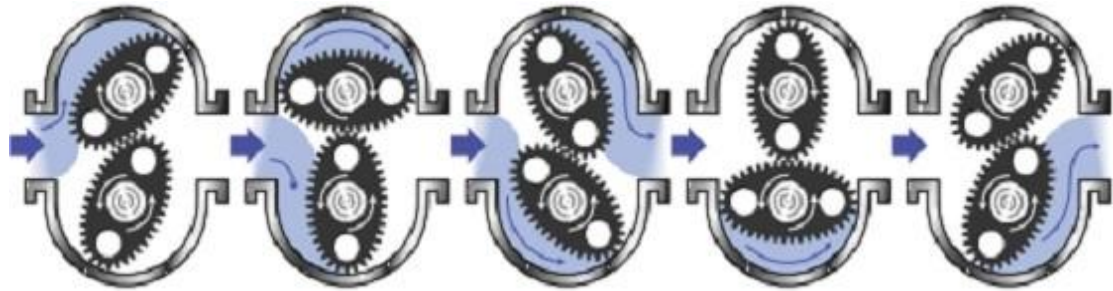
1.Start: press START button to start, or the sensor has a measurement pulse signal, the flow meter in 1 minutes without any operation automatically shut down. Single data reset: press CLEAR key in the normal state, remove the single fill data.

2.View total cumulative: in the normal state of the TOTAL button to press TOTAL button for 5 seconds, then the next line appears to be the word, the following is a total cumulative, 3 seconds after the automatic return.

3.Single cumulative reset: in the normal state, the TOTAL button for 5 seconds, depending on the total cumulative, and then press TOTAL button, a single flash, press CLEAR key to remove a single cumulative.

III. Operational principle

The measuring of the elliptical gear flowmeter is mainly composed of two meshing gears, the shell and the electronic part.



Working principle of elliptical gear flowmeter

1. Flow meter installed in the oil pump outlet, if installed in the inlet, the filter pressure is damaged, so that the negative pressure of the pump increases, so that the measurement is not accurate, the pump inlet and outlet also need to be completely sealed, otherwise it will make the flow meter is not accurate.
2. In the front of the flow meter should be installed in the filter, not more than 0.2MM of the particles passed, in order to prevent the flow of the flow meter is stuck in the face of the particle surface.
3. Flowmeter should be equipped with one-way valve and the pipeline liquid flows in only one, to prevent reverse gear meter, or idling inaccurate measurement of flowmeter.
4. Flow meter should be installed correctly, the meter display screen should be 90 degrees upward or sideways installation, not installed.
5. Flow meter installation direction should be the same as the direction of the arrow on the housing of the liquid direction and the direction of the liquid.
6. The pressure loss of flow meter is proportional to liquid flow rate, the liquid viscosity increases and the pressure loss increases.

IV. Calibration error coefficient

In the standby mode, the E- button is displayed in the standby mode, and the last digit is displayed by START. The CLEAR is displayed in the last digit of the START. The number of TOTAL is reduced, and the coefficient is calibrated. The error coefficient is calculated. The error coefficient is 5 seconds after the error coefficient is calibrated. Calibration. Calibration range: 0000 - 20000. The error of the flow meter and the oil is about 0.05%.



V. Measurement unit setting

In standby mode, press START button for 5 seconds, press START key to enter the unit, press UN or /US to select /KG, /M3, TOTAL, CLEAR, /L, /GA, START, 2, 5 seconds, exit from the unit conversion settings

VI. Maintenance and maintenance

When the battery voltage is too low, the LCD displays the battery sign on the screen, and the user needs to change the battery.

The battery life is too short to cause damage to the flow meter. The design of this meter is about 2 years, but it is recommended that every year, the battery should be removed.

VII. Common failure and troubleshooting

Phenomenon	Reason	Exclusion method
Gear to turn	1.When the installation of impurities into the flow, the flow meter inside gear	After the cleaning is removed, the gear is marked by Hao Anfang.
	2.The liquid is not clear, the filter is filled with impurities	Cleaning filter, remove impurities
	3.Too small to be tested.	Pressure
	4.Turn the wheel stuck	
	5.Flow over a specified value	
	6.The direction of the flow of the liquid is opposite to the direction of the shell.	
Measurement error increases	7.Flow is too small, below the specified value	Increase flow
	8.Bypass leakage	Check the bypass to prevent leakage
	9.The use of a long period of time, the elliptical gears, etc.	With gear change
	10.Liquid containing gas, liquid viscosity and the viscosity difference between the test liquid viscosity	Adjustment coefficient
	11.Inlet and pump suction port connection is not sealed	