Model LWG-Y Turbine Liquid Flowmeter

Model LWG-Y turbine flowmeter is manufactured by our company with advanced technology from abroad, and is one of the most ideal flowmeters for measuring liquid. It has the characteristics of simple structure, high measurement accuracy, long service life, simple operation and easy maintenance. The product is widely used in metallurgy, chemical industry, petroleum, urban construction, environmental protection, food and other fields, high-precision measurement of water, tap water, diesel, gasoline and low viscosity crude oil volume flow.

Operating Principle

The turbine in the sensor rotates under the action of fluid, which changes the magnetic field of the signal detector. Therefore, the alternating voltage is induced in the coil of the signal detector, and the square wave signal is amplified, filtered and shaped by the amplifier. The frequency of the signal voltage is proportional to the speed of the impeller, that is, to the flow rate.

Features

LWG-Y turbine flowmeter has three series: G (high pressure), Z (medium pressure) and D (low pressure). Its operating pressure is up to 42Mpa.

The full carbide shielded cantilever beam bearing is used, which integrates the rotary bearing and the pressure bearing. The service life of the bearing is greatly improved, and it can work in a small amount of mud and dirt.

The sensor adopts all stainless steel structure and the turbine adopts 2Gr13. It has good corrosion resistance. Samarium drill permanent magnet alloy as a signal detector has strong output signal and good magnetic stability. It can work normally in the medium of 0 - 120 ℃.

Easy maintenance, flowmeter has self-rectifying structure, small and light, simple structure, can be assembled and disassembled in a short time, simple internal cleaning.

Product Category

1, Local display type:

Accumulated flow: 10 digits, 4 digits after decimal point

Instantaneous flow: Six digits, showing changes per liter

Display accuracy: +1 display unit

Signal output: Pulse output: 0-5000Hz, external 12-24VDC power supply

Current Output: 4-20mA External 24VDC Power Supply (Two-wire)

Built-in 3V lithium battery power supply. Long-term voltage indication occurs when voltage is below 2.7V.

2, Pulse output type:

Operating Voltage: 12VDC or 24VDC (one power supply must be selected before customers order)

Signal transmission distance: less than 300 meters

Output signal: square wave signal

Amplitude: 12VDC power supply amplitude is about 10V, 24VDC power supply amplitude is about 20V.

Installation: The amplifier and the turbine flow sensor are connected with M16 *1.5 threads. After the installation of the turbine flow sensor, the amplifier is screwed onto the turbine flow sensor, and the lock nut is tightened after the sensory amplifier is screwed to the end by hand.

Wiring: Pulse output amplifier has three external leads: red wire, white wire and shielding wire. The red wire is connected with the positive power supply, and the white wire is connected with other display devices or devices to shield and grounding.

3, 4-20 mA output type:

Operating Voltage: External Power Supply 24VDC (Two-wire).

Output signal: 4-20mA or 1-5V, 4mA corresponds to zero flow rate of turbine flow sensor, 20mA corresponds to maximum flow rate of turbine flow sensor. The flow range is shown in nameplate of turbine flow sensor.

Signal transmission distance: less than 3000 meters.

Installation: After installation of the turbine flow sensor, screw the amplifier to the joint of the turbine flow sensor (m16 *1.5 thread), and tighten the locking nut when the amplifier is in the end by hand.

Wiring: 4-2mA output amplifier has red and white leads, 24 VDC power supply for red lines and current output lines for white lines.

4, Split teletransmission display type:

Operating Voltage: 220 VAC or 240VAC power supply from external power supply (optional).

Signal transmission distance: less than 200 meters.

Instantaneous Four-digit Display Instrument: Total Nine-digit Display.

Display size: horizontal: 160mm *80mm.

Vertical: 80mm *160mm.

Display with 4-20mA output and can be connected to computer.

Technical Specifications

Measuring medium: liquid

Repeatability: <0.2%

Medium Temperature: 0 ~120℃

Operating pressure: 1.6-42MPa

Sensor accuracy: +0.5%, +1.0%

Ambient temperature: - 20 ~50℃

Relative humidity: 5%~95%

Protection Level: IP67 (IP68 customizable)

Model	Caliber (mm)	Flow Range (m3/h)	Operating Pressure of Model G （MPa）	Operating Pressure of Model Z （MPa）	Operating Pressure of Model D （MPa）
LWG-Y-4	4	0.04～0.25		4.0、6.3	1.6、2.5
LWG-Y-6	6	0.1～0.6		4.0、6.3	1.6、2.5
LWG-Y-10	10	0.2～1.2	10-32	4.0、6.3	1.6、2.5
LWG-Y-15	15	0.6～6	10-32	4.0、6.3	1.6、2.5
LWG-Y-20	20	0.8～8	10-32	4.0、6.3	1.6、2.5
LWG-Y-25	25	1～10	10-42	4.0、6.3	1.6、2.5
LWG-Y-32	32	1.5～15	10-42	4.0、6.3	1.6、2.5
LWG-Y-40	40	2～20	10-42	4.0、6.3	1.6、2.5
LWG-Y-50	50	4～40	10-42	4.0、6.3	1.6、2.5
LWG-Y-65	65	7～70	10-42	4.0、6.3	1.6、2.5
LWG-Y-80	80	10～100	10-42	4.0、6.3	1.6、2.5
LWG-Y-100	100	20～200	10-32	4.0、6.3	1.6、2.5
LWG-Y-125	125	30～300	10-25	4.0、6.3	1.6、2.5
LWG-Y-150	150	30～300	10-25	4.0、6.3	1.6、2.5
LWG-Y-200	200	80～800		4.0、6.3	1.6、2.5
LWG-Y-250	250	120～1200		4.0、6.3	1.6、2.5
LWG-Y-300	300	250～2500		4.0、6.3	1.6、2.5