

## FMG200 Series High Precision Gear Flowmeter

### PRINCIPLE & FEATURES

FMG200 gear flow sensor is equipped with double gears to operate. Through high-precision gear volume calculation medium through volume, micro fluid medium measurement can be achieved. It is a new type of volumetric flow sensor, which is used to measure the flow or instantaneous flow of liquid in pipeline continuously or intermittently

- Pulse / analog dual output
- PNP / NPN arbitrary switching
- LED display
- High pressure resistance (1.0-45mpa)
- High and low temperature resistance (- 196 ° C-200 ° C)
- Can measure all kinds of viscous medium
- High precision and repeatability
- Range ratio width (1:100)
- Wide measurement range
- Strong anti-corrosion and anti pollution ability (acid and alkali)

### APPLICATION

FMG200 gear flow sensor is widely used in low flow precise measurement of various industries, applicable media: additive fuel, flotation cell for water treatment, corrosion inhibitor, catalyst, emulsifier, oil, grease, perfume, adhesive, solvent, ink and insecticide and some high viscosity media. Application industries include automobile, aviation, mining, electric power, chemical industry, pharmaceutical industry, food industry, coating industry, petroleum industry, environmental protection industry, printing industry, etc.

Especially suitable for flow measurement of heavy oil, polyvinyl alcohol, resin and other medium with high viscosity

Small volume, light weight, small vibration and noise and stable operation. It can also be used to measure small flow of small diameter. Small initial flow, wide range ratio, suitable for measuring liquid flow with large variation. The measurement accuracy is not affected by pressure and flow change, stable performance, long service life and large flow capacity

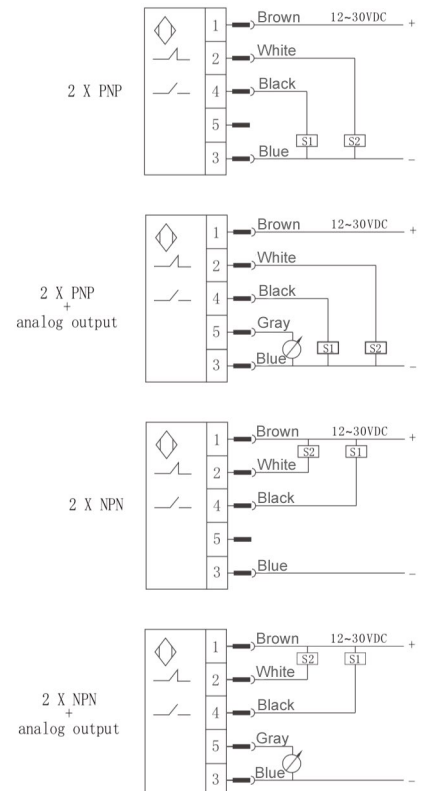
- Resin and glue measurement
- Measurement of hydraulic oil, lubricating oil and grease
- Fuel oil measurement
- Ink and asphalt measurement
- Liquid nitrogen, freezing liquid and solvent measurement
- Filling measurement of edible oil, fish oil and food
- Chemical engineering and anti-corrosion requirements fluid measurement
- Fluid quantitative control system

### TECHNICAL PARAMETER

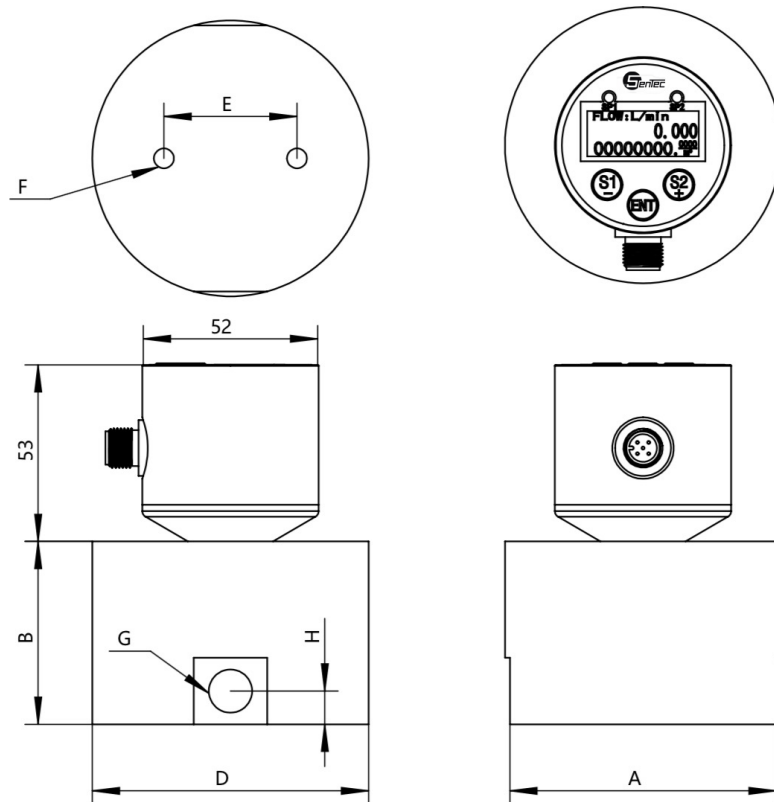
Range	0.005 ~ 330 L / min (support customized range)
Output signal	4-20mA, PNP / NPN
Accuracy	0.5% F.S
Repeatability	0.1%F. S
Power supply	16~ 30VDC
Medium temperature	- 30 ~ 80 ° C (high temperature customized 150 ° C)
Pressure resistant	Aluminum (150bar), Stainless steel (400bar), PP (withstand voltage 50bar)
Material	Shell: aluminum, stainless steel, Display: stainless steel



### ELECTRIC CONNECTION



## DIMENSION (mm)



## SIZE &amp; FLOW RANGE

CODE	M2	M4	M6	M10	M15	M25	M32
Range	5-300mL/min	0.1-3L/min	0.15-8L/min	0.8-20L/min	3-50L/min	20-200L/min	30-330L/min
A	80	80	80	80	110	140	160
B	55	55	62	65	65	85	100
D	83	83	83	83	113	158	218
H	16	16	14	14	28	40	45
E	40	55	55	55	90	110	180
F	2*M6	2*M6	2*M6	2*M6	2*M6	2*M8	2*M8
G	G1/4	G3/8	G1/2	G1/2	G3/4	G1	M35*1.5

**ORDER CODE**

FMG200	M15	S2	F	L	-	Explanation
FMG200						High precision gear flowmeter
	M15					Measurement range: M2-M32 optional MC=Customized range
		S2				Two way switch
		SF				Two way switching value + pulse output
		A3				Output signal 2-way PNP / NPN + 4 - 20mA
			F			Sealing material FKM (standard)
			P			Sealing material PP (anticorrosive)
				L		Body material: alumina
				S		Body material:304SS
				P		Body material:PP
					-	T: High temperature resistance 150 °C

**FLOW CALCULATION METHOD**

The K-factor (flow factor) of FMG200 gear flow sensor precisely defines the number of pulses per liter per unit flow.  $Q=f \times K / 60$

$Q$  = instantaneous flow rise / min

$f$  = output pulse frequency Hz

$K$  = coefficient pulse of gear flowmeter / min

**OPTIONAL ACCESSORIES**

Name	Picture/Dimension (mm)	Material	Model	M12*1-4PIN/5PIN Self Connector Picture/Dimension (mm)	Model
M12*1-5PIN (2 meter cable)		PUR	ZL05-PU02G		GL04 (4PIN)
M12*1-5PIN (5 meter cable)			ZL05-PU05G		
M12*1-5PIN (10 meter cable)			ZL05-PC02G		
	ZL05-PC05G				
	ZL05-PC10G				
M12*1-5PIN (2 meter cable)		PUR	ZL05-PU02W		WL04 (4PIN)
M12*1-5PIN (5 meter cable)			ZL05-PU05W		
M12*1-5PIN (10 meter cable)			ZL05-PC02W		
		ZL05-PC05W			
		ZL05-PC10W			