

DATASHEET

Flow

Gas Ultrasonic Flow Meter Model PWF-GUF



Description

PWF-GUF gas ultrasonic flowmeter is produced with advanced German technology. All its key components are imported with high reliability and long service life. It is a new type of high-precision and high-reliability precision meter. Can be widely used in the flow measurement of gas in urban gas, petroleum, chemical, electric power, metallurgy and other industries.

It adopts a unique multiplexed dual-channel (DN25-DN80) and multiplexed six-channel (DN100-DN200) design, which can eliminate the influence of vortex and asymmetric flow, and the multiplexed channel adds redundant backup channels to improve the reliability of the system.

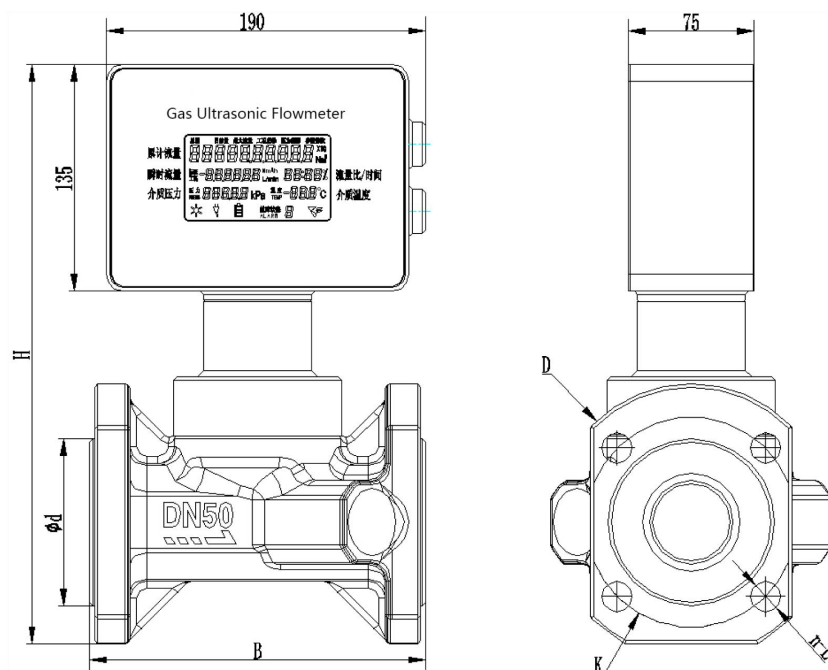
Features

- Electric field and magnetic field laminated shielding, high noise resistance
- Zero drift automatic correction, accuracy is not affected by the environment
- Measurement accuracy 1.0%
- Ultra-wide range ratio: 1:40
- Ultra-low "zero" starting flow
- The measurement range can cover Roots meter and Turbine meter
- Dual backup lithium battery power supply
- High-precision temperature and pressure compensation, volume correction
- Intelligent switching of various gas working conditions and standard conditions
- Large-capacity storage, can save one year of data
- Intelligent fault detection, fault alarm
- Maintenance-free, cleaning-free and long life
- The meter head can be rotated 180° for easy reading

Specifications

Parameters	Specification
Measuring Medium	Single-phase gas without vortex and without impurities such as oil.
Accuracy	1.0%
Repeatability	±0.2%
Meter Diameter	DN25~DN300
Process Connection	Flanged
Range Ratio	1:40
Pressure Rating	1.6MPa; 2.5MPa and 4.0MPa optional
Housing Material	Aluminum alloy or SUS304 stainless steel
Working Conditions	Media Temp.: -30℃~+80℃ Environmental Temp.: -20℃~+60℃ Relative Humidity: 5%~95% Atmospheric pressure: 70kPa~106kPa Intrinsically safe type can be used in 0 Zone hazardous area
Explosion Proof	Ex d II CT6 Gb
Input Signal	Flow signal: 200KHz±10%, $V_{pp} \geq 10\text{mV}$ Flow signal: Analogue output by temperature sensor Pressure signal: Analogue output by pressure sensor
Signal Output	Pulse, 4-20mA, alarm, RS485
Power Supply	External Power: 5-24VDC Internal Power: one piece of 3.6V10AH lithium battery(ER34615)
Power Consumption	External Power: Average $\leq 1\text{W}$ Internal Power: Average $\leq 1.5\text{mW}$, 2 pieces lithium battery can be used over 2 years
Protection Class	IP65

Dimensions



Nominal DN(mm)	B	1.6MPa					2.5MPa				
		H	D	d	K	n-L	H	D	d	K	n-L
25(1")	200	307	115	65	85	4-Φ14	307	115	65	85	4-Φ14
40(1-1/2")	200	345	150	84	110	4-Φ18	345	150	84	110	4-Φ18
50(2")	200	345	165	99	125	4-Φ18	345	165	99	125	4-Φ18
80(3")	240	393	200	132	160	8-Φ18	393	200	132	160	8-Φ18
100(4")	300	403	220	156	180	8-Φ18	411	235	156	190	8-Φ22
150(6")	450	428	285	211	240	8-Φ22	435	300	211	250	8-Φ26
200(8")	600	453	340	266	295	12-Φ22	463	360	274	310	12-Φ26

Flow Range

Nominal DN(mm)	Starting Flow(m3/h)	Measuring Range(m3/h)	Measuring Accuracy
25	0.02	1 ~ 40	1.0%
32	0.03	5 ~ 50	
40	0.05	6 ~ 100	
50	0.07	4 ~ 160	
65	0.08	7 ~ 180	
80	0.1	8 ~ 400	
100	0.2	16 ~ 700	
150	0.4	20 ~ 1400	
200	0.5	36 ~ 2000	

Part Selection Table

Model: PWF-GUF						Description	
GUF	□	□	□	□	□		
Diameter	25					DN25	
	32					DN32	
	40					DN40	
	50					DN50	
	65					DN65	
	80					DN80	
	100					DN100	
	150					DN150	
	200					DN200	
	250					DN250	
	300					DN300	
Housing Material		L			A=Aluminum alloy		
		M			S=SUS304		
Signal Output				N	No 4-20mA output		
				T2	2-wire 4-20mA output		
				T3	3-wire 4-20mA output		
				T4	RS485 Modbus RTU		
Working Absolute Pressure(MPa)					P1	1.6Mpa	
					P2	2.5Mpa	
					P3	4.0Mpa	
					PX	Others	