DATASHEET

Flow

Gas Vortex Flow Meter
Model PWF-GVF

Description

PWF-GVF pipe-type vortex flowmeter is a volume flowmeter for measuring the volume flow rate, standard volume flow rate or mass flow rate of gas, steam or liquid based on the Karman vortex principle. Stress vortex flowmeter is a type of velocity flowmeter, which is widely used in petroleum, chemical, electric power, light industry, power heating and other industries.

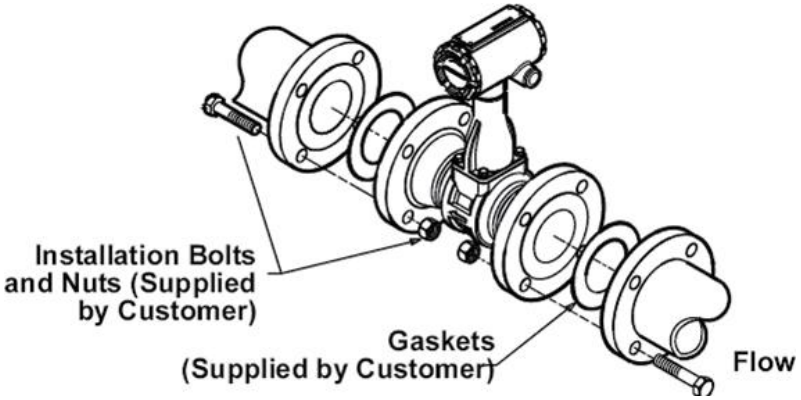
Features

- High Temperature-resistance, -40℃~+330℃
- No moving parts, long-term stability, simple structure, easy installation and maintenance.
- The output is pulse frequency, which is linear with the actual flow of the measured fluid; No zero drift; Stable performance; the structure is diverse, with pipeline type and insertion type flow sensor forms.
- The pressure loss is small (about 1/4~1/2 of that for orifice flowmeter), which is an energy-saving flow meter.
- The installation method is flexible, can be installed horizontally, vertically and at different angles according to different process pipelines on-site.
- Adopt interference elimination circuit and anti-vibration sensor head, has a certain resistance to environmental vibration.
- Use ultra-low power consumption single-chip microcomputer technology, one piece of 3.6V10AH lithium battery can be used for more than 5 years.
- The software corrects the nonlinearity of the meter coefficient to improve the measurement accuracy.
- EEPROM is used to protect the accumulated flow from power failure, and the protection time is more than 10 years

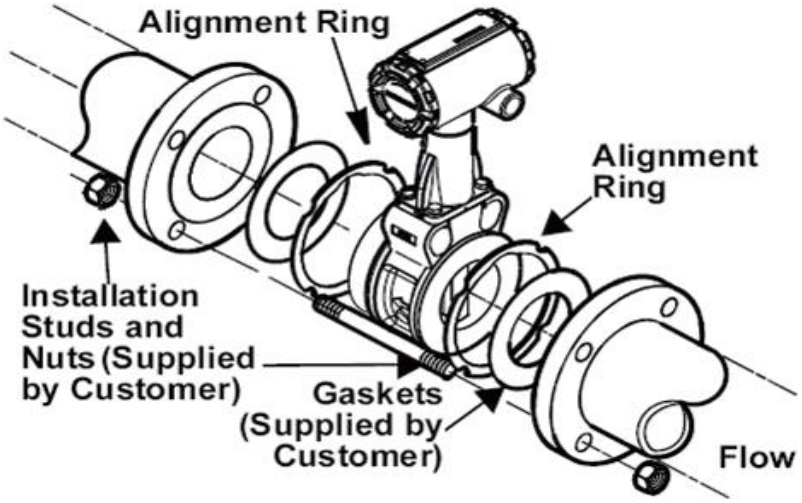
Specifications

Parameters	Specification	
Measuring Medium	Steam, compressed air, natural gas, biogas, coke oven gas and other medium and high flow rate media	
Meter Diameter	DN15～DN300	
Process Connection	Flanged	DN15~DN300
	Threaded	DN15~DN300
	Wafer type	DN15~DN300
	Insertion Type	DN250~DN1000
Accuracy	Flanged	±1.0%R, ±1.5%R
	Threaded	±1.0%R, ±1.5%R
	Wafer type	±1.0%R, ±1.5%R
	Insertion Type	±1.5%R, ±2.0%R, ±2.0%R
Range Ratio	1:10; 1:15; 1:20	
Pressure Rating	1.6MPa, 2.5MPa, 4.0MPa (others can be customized)	
Housing Material	SUS304 stainless steel; 316 stainless steel optional	
Working Conditions	Media Temp.: -40℃~+70℃, -40℃~+250℃, -40℃~+350℃ Environmental Temp.: -20℃~+60℃ Relative Humidity: 5%~90% Atmospheric pressure: 86kPa~106kPa	
Signal Output	Pulse, 4-20mA	
Communication	RS485, HART	
Power Supply	External Power: 12VDC(3-wire pulse output) 24VDC±15%(4-20mA, pulse, RS48) Internal Power: one piece of 3.6V10AH lithium battery, working voltage 2.0V~3.0V Dual-powered: 24VDC+Lithium battery	
Flange Standard	Typical: GB/T9113-2000 Others: DIN, ANSI, JIS...	
Electrical Connection	M20*1.5 female (NPT female can be customized)	
Explosion-proof Class	Ex d II CT6 Gb	
Protection Class	IP65	

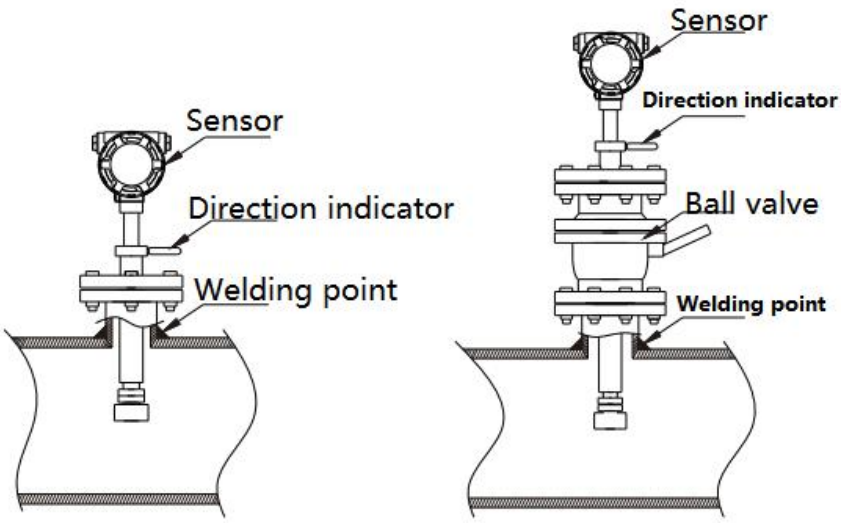
Installation Method



Flange Type Flow Meter



Wafer Type Flow Meter



Insertion Type Flow Meter

Part Selection Table

Model: PWF-GVF								Description
GVF-	□	□	□	□	□	□	□	
Connection	F							Flanged
	W							Wafer Type
Operational Temperature		L						Low temperature ≤70℃
		M						Medium temperature ≤250℃
		H						High temperature ≤350℃
Nominal Diameter(mm)			15					DN15
			20					DN20
			25					DN25
			32					DN32
			40					DN40
			50					DN50
			65					DN65
			80					DN80
			100					DN100
			125					DN125
			150					DN150
			200					DN200
			250					DN250
			300					DN300
Structure				C				Integrated meter
				S				Segregated meter
Meter Type					N			No display, 24V/12V power supply, pulse output
					A			No display, 24V power supply, 4-20mA output
					V			With site display, external power, 4-20mA/RS485/Pulse
					D			Temperature-compensated, external power, 4-20mA/RS485/Pulse
Accuracy						N		None explosion-proof
						E		Exd II CT6 Gb
Pressure Resistance Grade							N	Standard
							H(X)	High pressure(by customized)