GF-X5 Clamp-on Ultrasonic Flow Sensor

Introduction

The GF-X5 clamp-on ultrasonic flow sensor is compact and requires no external system for measurement and output. The sensor can be clamped directly to the outside of the metal or plastic pipe, the liquid flow rate in the pipe for accurate measurement, accuracy of up to ± 1.5%.

The sensor does not come into direct contact with the liquid in line and will not contaminate the liquid. The clamp-on construction design allows for quick installation on any liquid piping without damaging the piping, saving a great deal of installation time while providing flexibility.

- ✓ High precision and high stability.
- ✓ Non-invasive measurement, no direct contact with the fluid, hygienic and safe.
- ✓ No clogging, no steering, no dead space, low fluid pressure loss.
- ✓ Standard outputs are available for seamless integration with customer systems.
- ✓ 4-line IPS Lcd display
- ✓ Easy to read in dark environments
- ✓ Flow rate and temperature bar graph
- ✓ Manu list with 4 buttons, easy setting

Suitable medium

Metal Pipe: Stainless Steel, Carbon Steel, Copper

Plastic Pipe: PVDF, PPH, PVC/CPVC, PDA/PU, PPR, HDPE

Liquid Medium: Available for virtually any single clean liquid measurement, for a wide range of acids, bases, organic liquids, chemical solvents, alcohols, beverages, and water.

Successful customer applications include diluting sulfuric acid, sodium chlorate, white spirit, sodium carbonate, hydrocarbon, triethylamine alcohol, alcohol, ethylenediamine, propylene oxide, etc.

Specification

Item	Parameter
Flow Velocity	0.1m/s ~ 12m/s
Accuracy	±1.5%
Repeatability	±0.4%
Pipe Diameter	DN25~DN250
Calibration	Default @22±3℃, water
Case Material	Plastic
Clamp Material	Aluminum alloy
Power Supply	12~36 VDC 3W
Output	4~20mA (max. load 600Ω)
Alarm Output	Upper and lower flow limits; Upper and lower temperature limits (optional)
Interface	RS485 Modbus
Indicator	2.4" 320x240 IPS LCD, 4 direction display
Accumulator	7-bit flow accumulation
Data Storage	Cumulative daily, monthly and annual flow, 10 years
Display Unit	m³/h（default）, LPM, ml/min, GPM, LPH
Liquid Temperature	Standard: 0℃~50℃ Optional: 0℃~120℃
Medium Temperature	-20℃~70℃
Humidity	0%~95%RH, no condensation
Protection	IP54, IP65 (Optional)
Cable Length	2m shielded cable (default), customized cable allows up to 30m

Pipe Reference

Model	Unit	-9.53	-12.7	-15	-20
OD	mm	Φ9.53	Φ12.7	Φ15	Φ20
Diameter	DN	DN6	DN8	DN10	DN15
Diameter	NPS	1/8"	1/4''	3/8"	1/2"
OD Range	mm	9.53-12.7	12.7-14	14-17	17-20
Flow Rate	L/min	0.2-20	0.44-30	0.57-50	0.92-70
Flow Rate	m³/h	0.01-1	0.03-2	0.03-3	0.06-4
Model	Unit	-9.53	-12.7	-15	-20
OD	mm	Φ25	Φ32	Φ40	Φ50
Diameter	DN	DN20	DN25	DN32	DN40
Diameter	NPS	3/4"	1"	1.2"	1.5"
OD Range	mm	22-30	30-35	38-45	48-54
Flow Rate	L/min	1.36-150	2.71-200	4.24-330	6.8-460
Flow Rate	m³/h	0.08-10	0.16-15	0.25-20	0.41-30

Model	Unit	-9.53	-12.7	-15	-20
OD	mm	Φ63	Φ75	Φ90	Φ110
Diameter	DN	DN50	DN65	DN80	DN100
Diameter	NPS	2"	2.5"	3"	4"
OD Range	mm	58-68	68-78	88-96	108-116
Flow Rate	L/min	9.54-700	14.8-1030	21.8-1360	36.5-2170
Flow Rate	m³/h	0.57-40	0.89-60	1.31-80	2.19-130

∗ Above is the measurable flow range (0.1m/s-5.0my/s) and the accuracy flow range is (0.3m/s-5.0m/s).