Gentos Measurement & Control Co., Ltd.

pFlow

GF-S-CL Ultrasonic Flow Sensor



Product Introduction

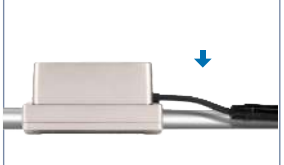


The GF-S-CL ultrasonic flow sensor, based on the principle of ultrasonic transit-time method, accurately measures flow velocity through complex algorithms such as sampling, calculation, and correction, with the aid of highly reliable signal processing circuits. This product features an integrated clamp-on structure, which makes installation quick and easy without the need for direct contact with the fluid medium, effectively avoiding interference with existing production processes. With just a few simple steps, accurate flow measurement can be achieved. For applications requiring flow measurement in small diameter pipes, this ultrasonic flow meter is undoubtedly an ideal choice.



01

Easy installation,
No breaking pipeline



02

No need to adjust,
Clip on to measure



03

360° rotatable
display screen



04

LCD color
display screen

Scope of Application

By collecting flow data and combining it with temperature data collected from other sensors and devices, a temperature control and regulation data model is established to achieve precise thermal management. This ensures a constant temperature state for heat-generating equipment. It is applied in industries such as liquid cooling, cleaning, liquid crystal, medical, and laboratories.



Liquid Cooling



Cleaning



Liquid Crystal



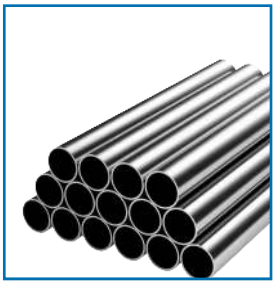
Medical

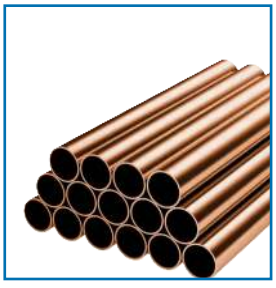


Laboratories

Suitable Pipe Types

Stainless Steel、Copper





PVC、PPR





Pipe Material	Nominal Inner Diameter of Pipe	Applicable Range of Pipe Outer Diameter (mm)		Adapter pipe outer diameter (mm)	Measurable Flow Range (m3/h)
		Level A	Level B		
Stainless Steel PVC PPR Copper	DN15	18.5~22.5		ϕ18.5~ϕ22.5	0.2~3.5
	DN20	24~29	22.5~27.5	ϕ22.5~ϕ29	0.4~6
	DN25	30.5~35.5	29~34	ϕ29~ϕ35	0.5~9
	DN32	37.5~42.5	36~41	ϕ36~ϕ42.5	0.9~15
	DN40	49.5~54.5	48~53	ϕ48~ϕ54.5	1.3~23
	DN50	58.5~63.5	57~62	ϕ57~ϕ63.5	2.0~35
Note: B Level needs to be achieved by pasting attached rubber pads on both sides of the inner wall of the pipe clamp.					

Characteristics



① Permanent coupling pads design,less maintenance cost.

② Reusable for various materials,less purchase cost.

③ Comprehensive & Intuitive Display
Include date,flow,velocity,etc.
Clear reading with color fonts in dim light.

Fast installation steps



Step 1 Cleaning pipes

Perform pipe surface treatment to remove impurities such as paint, rust, dirt, etc. that are easily removed from the surface.



Step 2 Installation of Pipe Clamp

Snap the upper and lower pipe clamps to the selected location on the pipe. If looseness is found, adhesive pads may be applied to the inside of the lower clamps to enhance the tightening effect.



Step 3 Tighten the screws

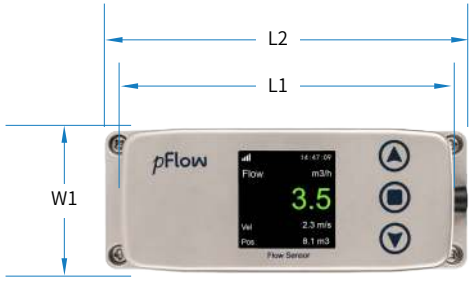
Tighten the 4 screws connecting the upper and lower hose clamps securely to ensure stability and no looseness.



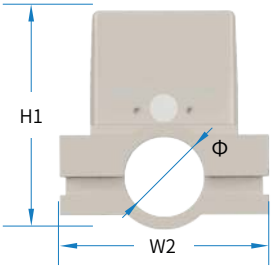
Step 4 Power on and start measurement

Set the actual pipe outer diameter, wall thickness and pipe parameters through the "Pipe Parameter Setting" menu item to make the measurement more accurate.

Product Size



Top View



Left View



Front View

Pipe Size Comparison Table

Unit: mm

Nominal Inner Diameter of Pipe	W1	W2	L1	L2	H1	H2	ϕ
DN15	42	42	96	110	63	32.5	22.5
DN20	42	59.5	96	110	69.5	32.5	29
DN25	42	59.5	96	110	76	32.5	35.5
DN32	42	64.5	96	110	83	32.5	42.5
DN40	42	76.5	96	110	95	32.5	54.5
DN50	42	85.5	96	110	104	32.5	63.5

Installation Description

1. After the designated location is selected, the area outside the pipe to be installed must be cleaned, and select the dense part of the pipe for installation.

2. The special coupling sticker of the company is pasted on the center of the sensor, the sensor will be coupling paste extrusion to the pipe wall, so that the sensor and the pipe wall between the tight fit, no air bubbles exist to facilitate ultrasonic signal transmission.

3. The direction of the arrow on the nameplate of the instrument should be consistent with the direction.



Color	Identifier	Definition
Brown	+	10~36VDC Power Supply
Black	-	Power Ground
Green	A	RS485+
White	B	RS485-
Red	I+	4~20mA+
Yellow	I-	4~20mA-

Product Model

Format of Selection Model : GF-S Format: GF-S-A-B-C

Model	Description Of Transmitter
GF-S	Model Name：Ultrasonic Flow Sensor
	Flow Velocity: 0.03m/s ~5.0m/s
	Accuracy: ±3%FS,（0.3m/s ~5m/s）
	Pipe Size: DN15、DN20、DN25、DN32、DN40、DN50
	Medium: Water
	Pipe Material: Stainless Steel, PVC, Copper, PPR
	Communication Interface: RS485, Support MODBUS Protocol
	Output: 4~20mA
	Power Supply: 10～36VDC/500mA
	Keyboard: 3 touch keys
	Display Screen: 1.54"LCD color screen, resolution 240*240
	Temperature: Transmitter: 14°F to 122°F (-10°C ~ 50°C)
	Transducer: 32°F to 140°F (0°C ~ 60°C)
	Humidity: Relative humidity 0~99%, No condensation
	IP Rating: IP54
	Casing Material: PC engineering plastic
	Clamp Material: PC engineering plastic
	Transmitter: All-in-one
	Transducer: Clamp on
	Cable: ϕ 5 black six-core shielded cable with self-locking connectors
	Standard length: 4m
A	**Analog Output**
CL	4~20mA
B	**Application Industry**
EM	Energy Equipment Supporting
HC	Medical Equipment Supporting
AQC	Intelligent Aquaculture Supporting
AGC	Intelligent Agriculture Supporting
C	**Pipe Size**
	DN15、DN20、DN25、DN32、DN40、DN50

Selection Example: Model: GF-S series; Specification :CL-EM-DN15
Analysis :[Model: GF-S series; Specification: 4~20mA,Energy Equipment Supporting,DN15]

Note：The accuracy is obtained by Gentos flow calibration facilities. Errors may occur due to the type of pipeline, fluid type, temperature, etc. used by the customer.

Hint: The product provides options for selecting the application industry at the factory. Please refer to the Selection B.

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The information provided is for reference only. Specific parameters are subject to the instruction manual.
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