Gentos Measurement & Control Co., Ltd.

pFlow

GFCL Ultrasonic Flowmeter



Overview



GFCL ultrasonic flowmeter adopts the measurement principle of transit-time method, relies on high-reliability signal processing circuits, and accurately measures flow rate through complex algorithms such as sampling, calculation, and correction. The product is designed with an integrated external clamping structure for quick and easy installation and operates without direct contact with the fluid medium, effectively avoiding interference with existing production processes. Accurate flow measurement can be realized in just a few simple steps. For small pipe diameter flow measurement needs, GFCL clamp-on ultrasonic flowmeter is undoubtedly the best choice.



01

No need to adjust,
Clip on to measure



02

Easy installation,
No breaking pipeline



03

360° rotatable
display screen



04

LCD color
display screen

Scope of application

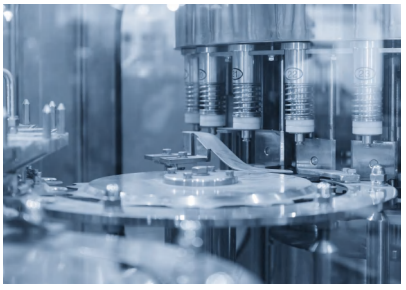
By collecting flow data and combining it with temperature data collected from other sensors and devices, a temperature control and regulation data model is established to achieve precise thermal management. This ensures a constant temperature state for heat-generating equipment. It is applied in industries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



Liquid cooling



Cleaning



Liquid crystal



Medical



Laboratories

Suitable pipe types

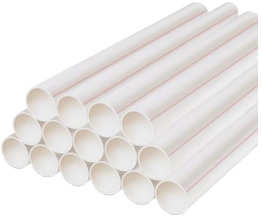
Stainless Steel、Copper

PVC、PPR



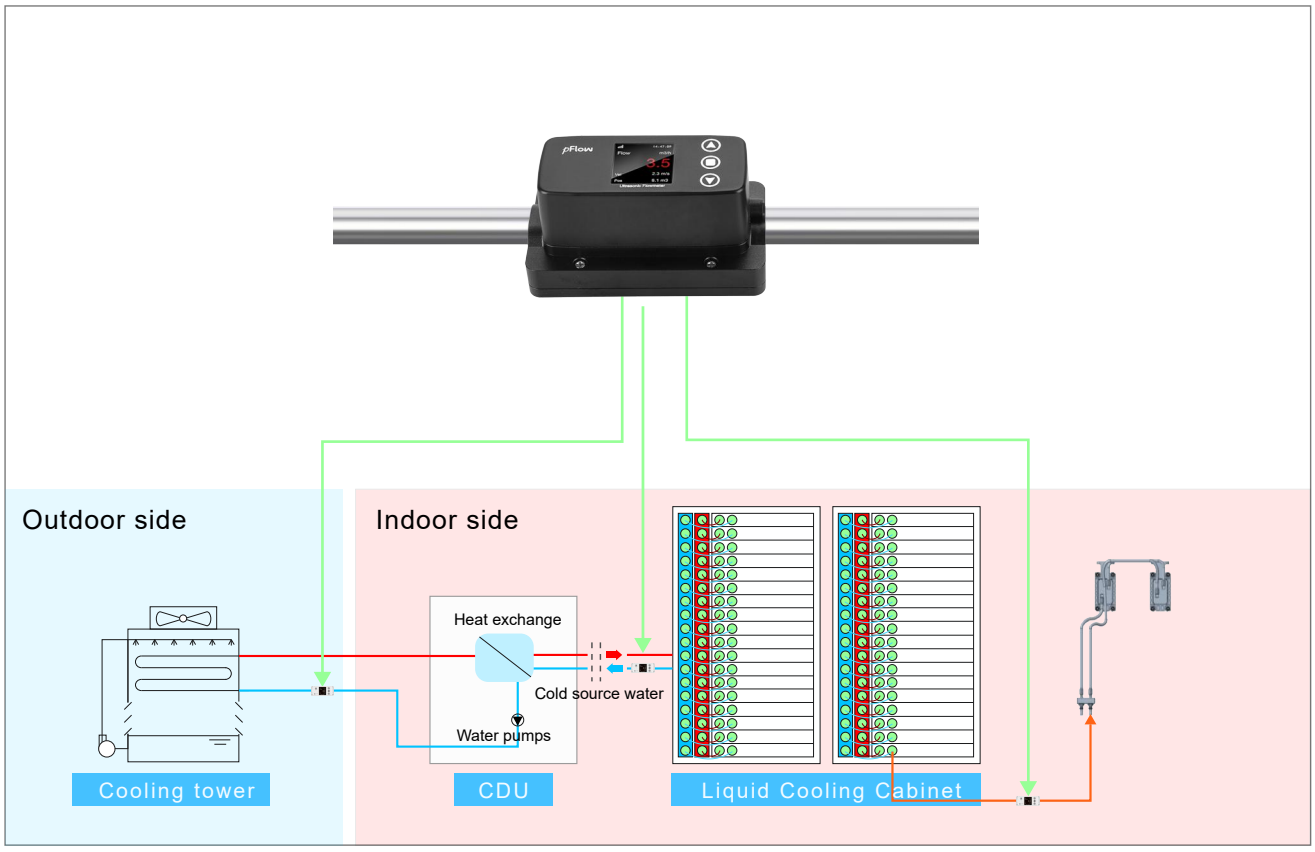




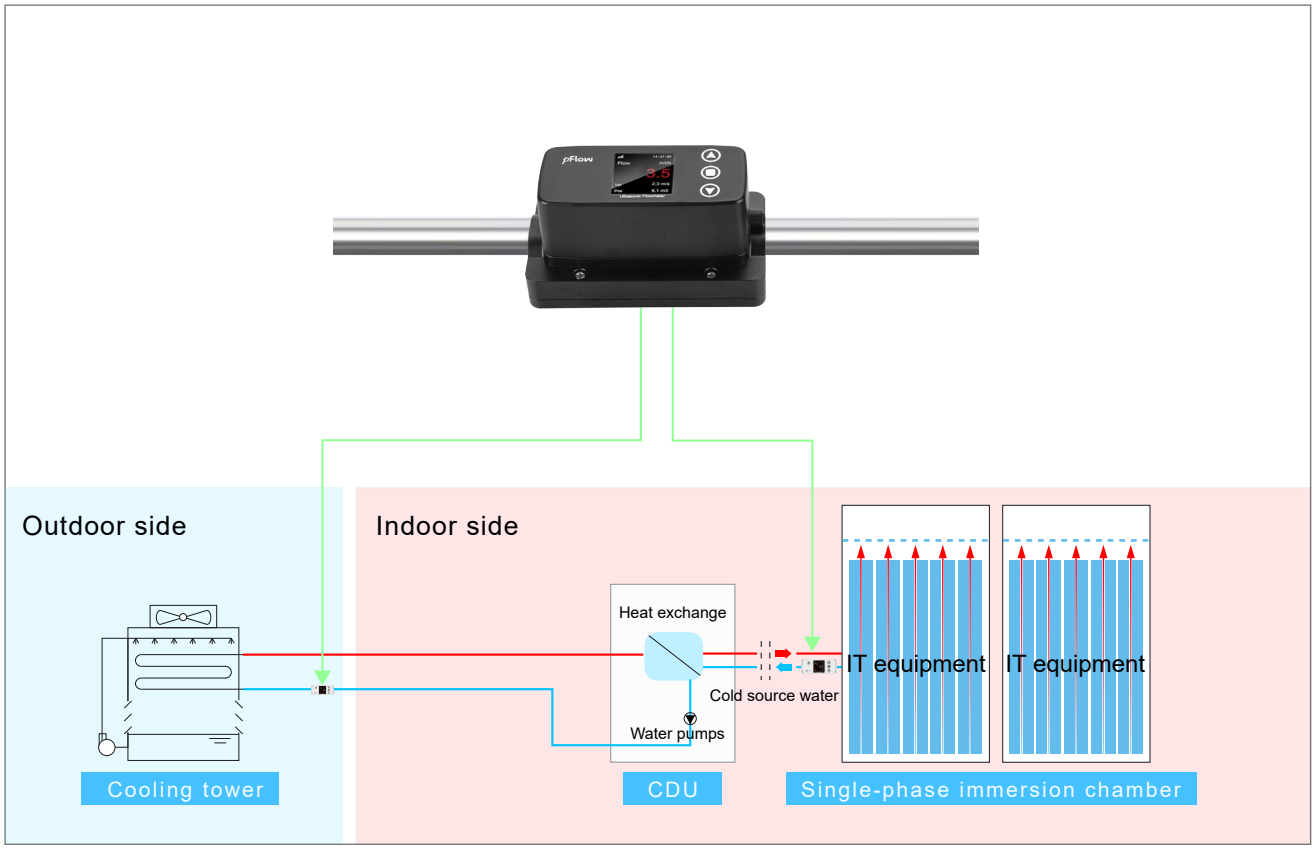


Pipe Materials	Pipe Nominal Inside Diameter	Pipe Clamps for Pipe O.D. Range		Flow Range (0.03-5m/s)
		Class A	Class B	
Stainless steel Copper PVC PPR	DN15	(18.5~22.5)mm		(0.02~3.5)m3/h
	DN20	(24~29)mm	(22.5~27.5)mm	(0.04~6)m3/h
	DN25	(30.5~35.5)mm	(29~34)mm	(0.05~9)m3/h
	DN32	(37.5~42.5)mm	(36~41)mm	(0.09~15)m3/h
	DN40	(49.5~54.5)mm	(48~53)mm	(0.13~23)m3/h
	DN50	(58.5~63.5)mm	(57~62)mm	(0.20~35)m3/h
Remarks: B class is realized by sticking the attached adhesive pads on both sides of the inner wall of the pipe clamp.				

Application System Schematic



*Technical Principle of Cold Plate Liquid Cooling Systems



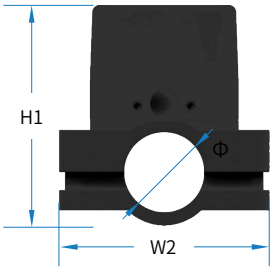
*Technical Principle of Immersion Liquid Cooling Systems

Product Size

Top View



Left View



Front View



Dimension Comparison Table

Unit (mm)

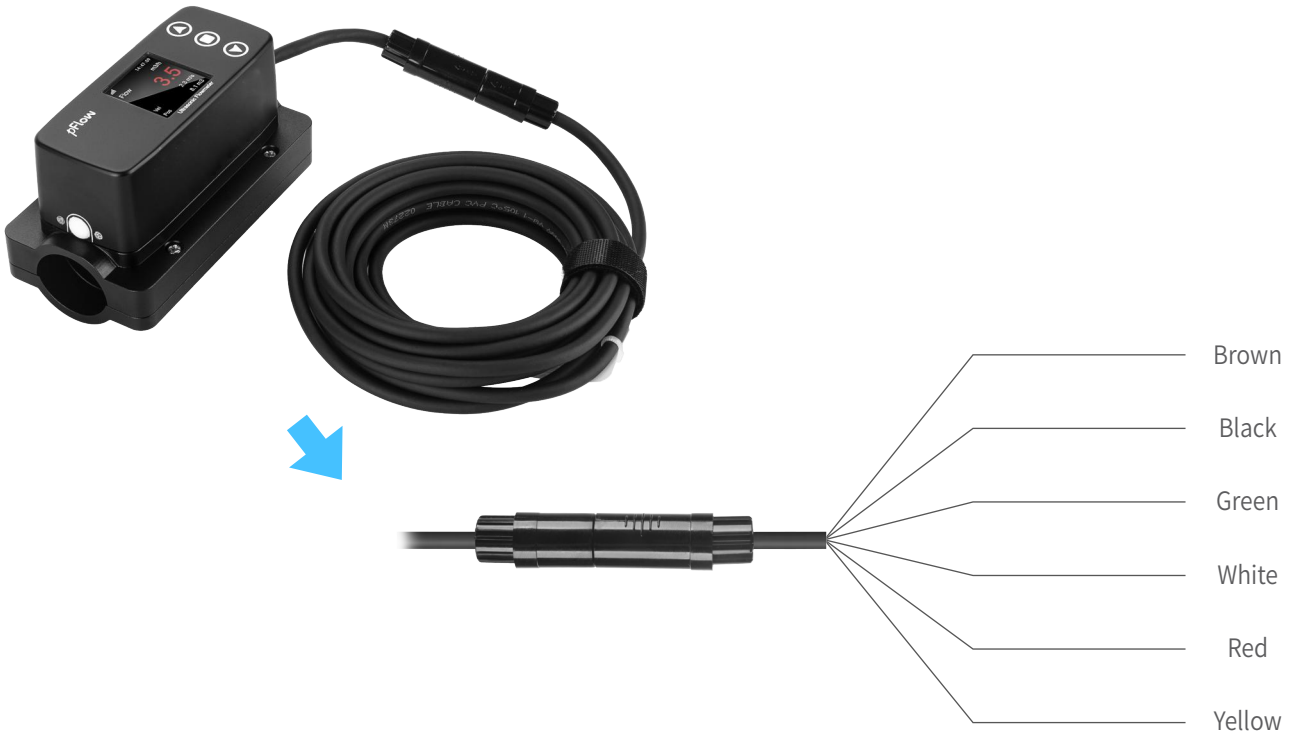
Pipe Nominal Inner Diameter	W1	W2	L1	L2	H1	H2	ϕ
DN15	42	42	96	110	63	32.5	22.5
DN20	42	59.5	96	110	69.5	32.5	29
DN25	42	59.5	96	110	76	32.5	35.5
DN32	42	64.5	96	110	83	32.5	42.5
DN40	42	76.5	96	110	95	32.5	54.5
DN50	42	85.5	96	110	104	32.5	63.5

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.

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



Color	Identifier	Function
Brown	+	10~36 VDC 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 : GFCL Format: GFCL - A-B-C-D-E

Model	Description Of Transmitter
GF	Model Name: Ultrasonic Flowmeter
	Velocity Range: 0.03m/s~5.0m/s
	Accuracy: 2.0% (0.3m/s~5m/s Standard)*
	Repeatability: 0.4%
	Communication Interface: RS485, Support Protocol And MODBUS Protocol
	Output: 4~20mA
	Medium: Water
	IP Rating: IP54
	Power Supply: 10～36VDC/500mA
	Keyboard: 3 Touch Keys
	Enclosure Material: PC(Polycarbonate)
	Pipe Clamp Material: Aluminum Alloy
	Display: 1.54 TFT-LCD Colorful Display. Resolution: 240*240
	Temp: Ambient Temperature: -10°C~50°C
	Fluid Temperature: 0°C~60°C
	Transmitter: All-in-one
	Transducer: Clamp On Type
	Cable: ϕ5 Six-Core Cable. 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

D	Color
	Black

E	Clamp material
1	Aluminum alloy
2	PC (Polycarbonate) engineering plastic

Selection Example: Model: GF series; Specification :CL-EM-DN15-Black-1

Analysis :[Model: GF series; Specification: 4~20mA,Energy Equipment Supporting,DN15,Black，Aluminum alloy Clamp material]

*The accuracy obtained through Gentos flow standard device may vary due to factors such as the type of pipeline used, the type of fluid being measured, temperature variations, etc.

Noted: Products have been configured with application industry options at the factory, and the data center corresponds to EM (Equipment Matching).

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The information provided is for reference only. Specific parameters are subject to the instruction manual.
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GT-SC083-A10221