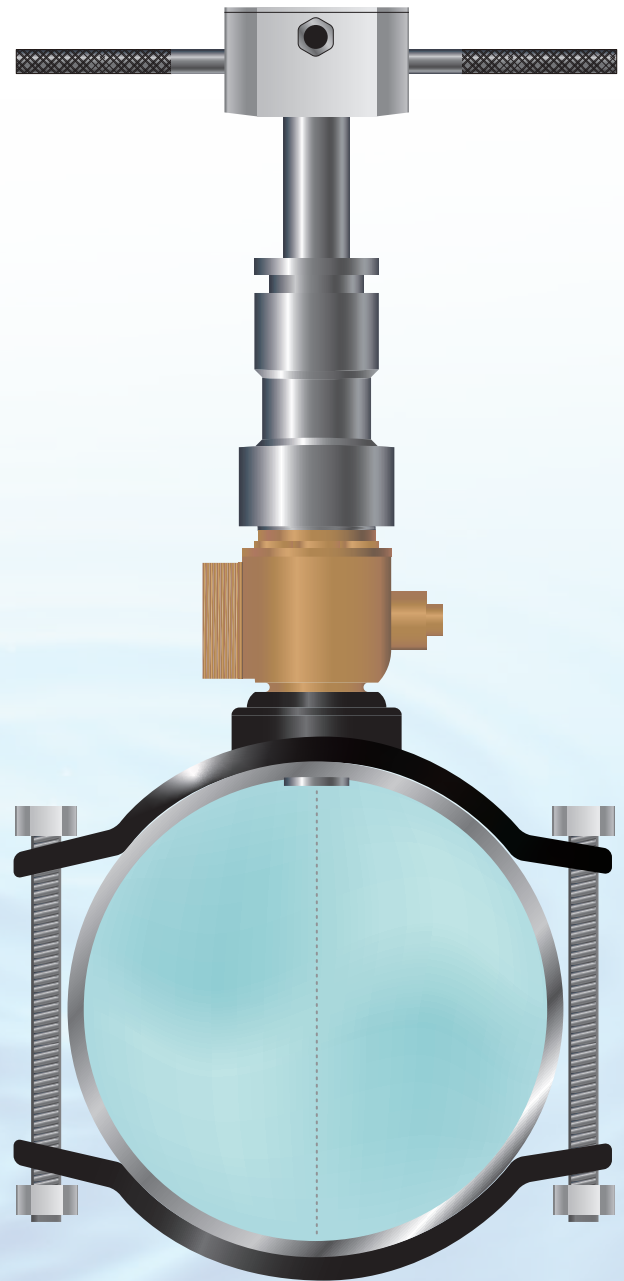*New Insertion Type*
*Ultrahigh Accuracy Ultrasonic Flowmeter*

ULSONA ST

ULSONA Stealth

*With the new ULSONA-ST, the sensor part is **not inserted** into the flow, and the cross section area of flow is **undisturbed**.*

ict co., ltd.

ULSONA ST

The New Ultrasonic Flow Meter

The ULSONA-ST is installed onto a Ball valve. The sensor is inserted just up to the surface of the liquid, which leaves the cross section area of flow undisturbed. The average flow velocity and flow rate can be measured with ulta-high resolution, using transit-time method.

ULSONA-ST

Controller
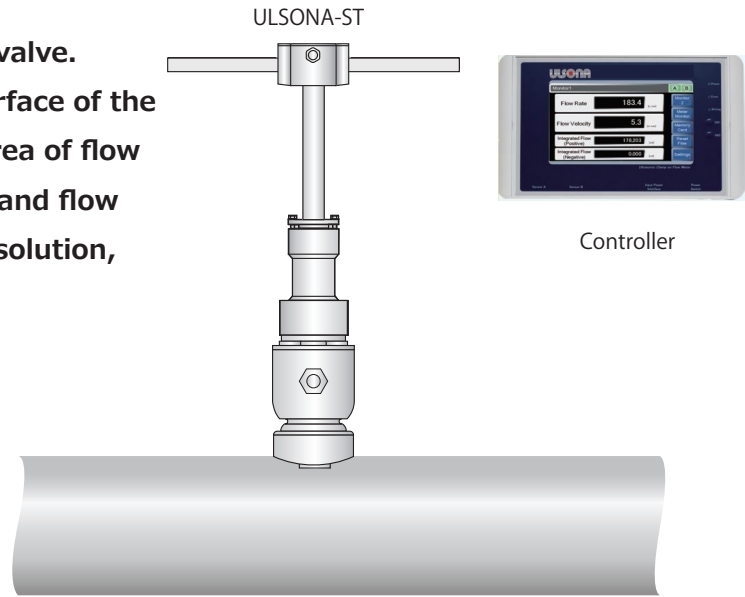
Ultra-high Resolution
0.001m/sec!

Temperature Measurement

Point 1
Installation Cost is Extremely Low
The *ULSONA* can be easily *installed onto a Ball valve* without construction.
There is *no need to stop water flow.*

Point 2
Fast and Easy Calibration
Adjustment and *Calibration* is fully *automated*.
Start measuring, after just one push of the Calibration button.

Point 3
High Accuracy with Latest Ultrasonic Technology
Transit-time measurement accuracy has improved greatly with the newest technology. With a flow *resolution of 0.003m/sec*, the highest in the industry, *accurate* measurement of *micro flow* is also possible.

Point 4
Settings
The Parameter settings necessary for measurement, can easily be set through an *interactive LCD screen*.

Point 5
Temperature Measurement
The **ULSONA** can measure fluid temperature. With accuracy of ± 1 ℃, continuous *monitoring of temperature* is possible. (standard function)

Point 6
Output
Pulse: Positive flowrate pulse, Negative flowrate pulse, Error output
Analog: Flowrate (4-20mA) Liquid Temperature (DC 0-5V)
Data Storage: microSD Card (CSV format)
Computer Communication: Direct link to Modbus RTU
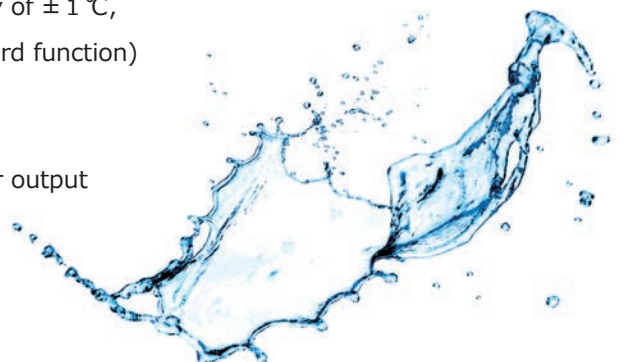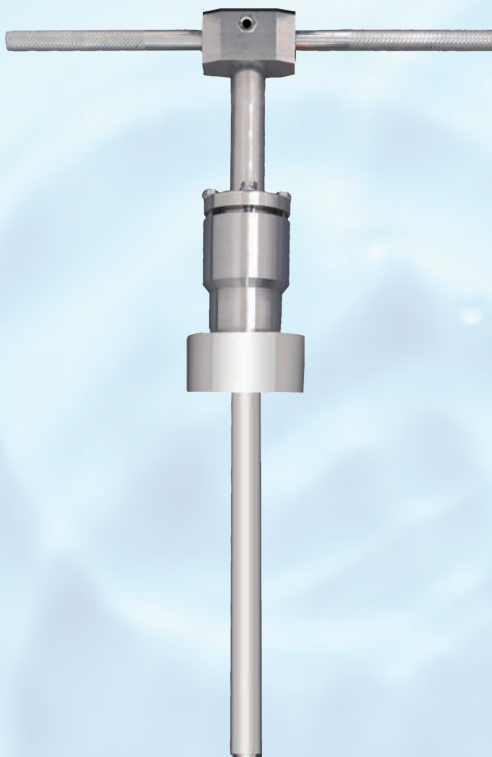
【Specifications】

■Controller / Display and Settings

■Main Unit and Sensor

ULSONA-ST

Connection Box

Sensors

■General Specifications

Measurable Fluids	Water, Pure Water, Industrial Water, etc.
Measurement Method	Transit-time Method
Applicable Pipe Sizes	DN80 ~ DN300
Measurable Velocity	0.030 ~ 20.000 [m/sec]
Accuracy	±0.6% for RD (at a flow rate of 0.5 [m/sec] or more)

■Controller / Display and Settings Specifications

Supply Voltage & Power Consumption	DC24V (DC9V-DC26V), approx. 7W or less (Battery Operational)
Analog Output	[Ch1] Flowrate DC 4-20mA (DC0-24mA) (Resistance ≦500Ω)
	[Ch2] Temperature DC 0-5V
Digital Output	[Ch1] Positive Flowrate (PhotoMOS Relay DC30V 500mA)
	[Ch2] Negative Flowrate (PhotoMOS Relay DC30V 500mA)
	[Ch3] Measurement Error (Non-voltage contact)
Recording Medium	microSD Card （2GB MAX)
Communication*	RS485 (Modbus RTU 9.600~38.400bps)
Calendar Clock	Built in Circuit board
Working Temperature	Controller (-5~50 °C)
Velocity Resolution	0.001 [m/sec] @300A
Man-machine Interface	7" liquid crystal color touch panel
Display Units	Current flow rate [L/sec] [L/min] [L/hour] [m³/sec] [m³/min] [m³/hour] Current flow velocity [m/sec] Positive flow rate pulse 0 to 999999.999 [m³] Negative flow rate pulse 0 to 999999.999 [m³]
Waterproof Performance	Controller IP65

■Sensor / Main Unit Specifications

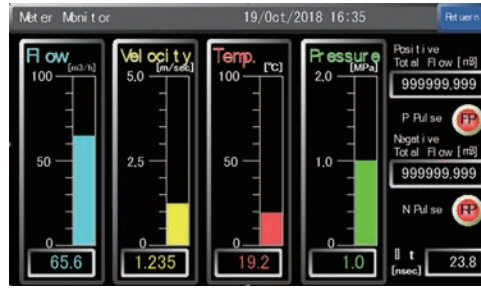|	
Sensor	Ultrasonic Oscillator
Installation Method	Onto Ball Valve (hole diameter >42mm)
Material	AISI 316 (Insertion shaft) AISI 304 (Connection box, handle)
Weight	7Kg or more (depends on shaft length)
Waterproof Performance	Sensors IP68 Connection Box IP67
Working Temperature	0~55 °C （Sensor)

ULSONA ST

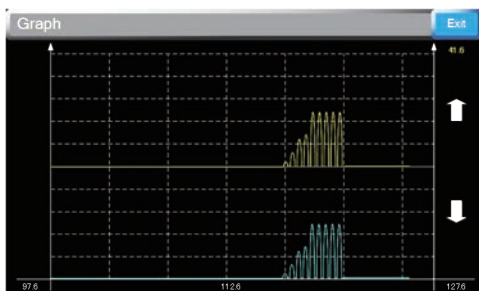*New Insertion Type*
Ultrahigh Accuracy Ultrasonic Flowmeter

■ Screen Examples

Data Display Digital

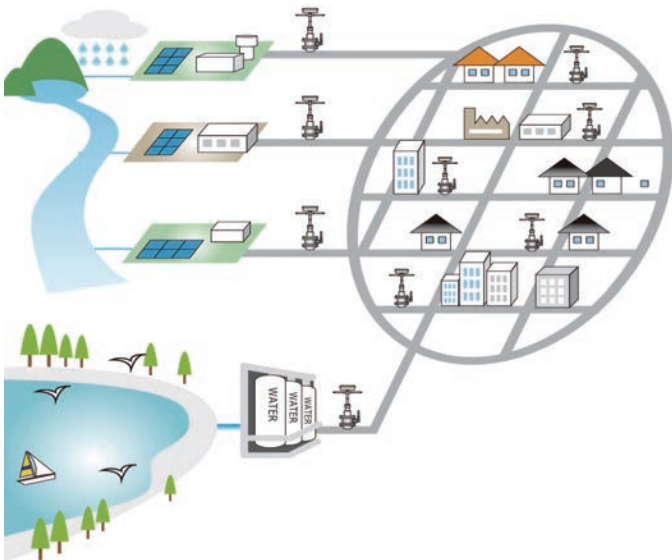**Data Display Meter**

Graph Display of Echo Received

Displays ultrasound signal strength. Useful during setup and checking

Piping Standards
Displays general piping standards.

■ Application Example【Smart Water Grid】

Other similar products

Clamp-on Type
Ultrasonic Flow meter

※Contact:

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