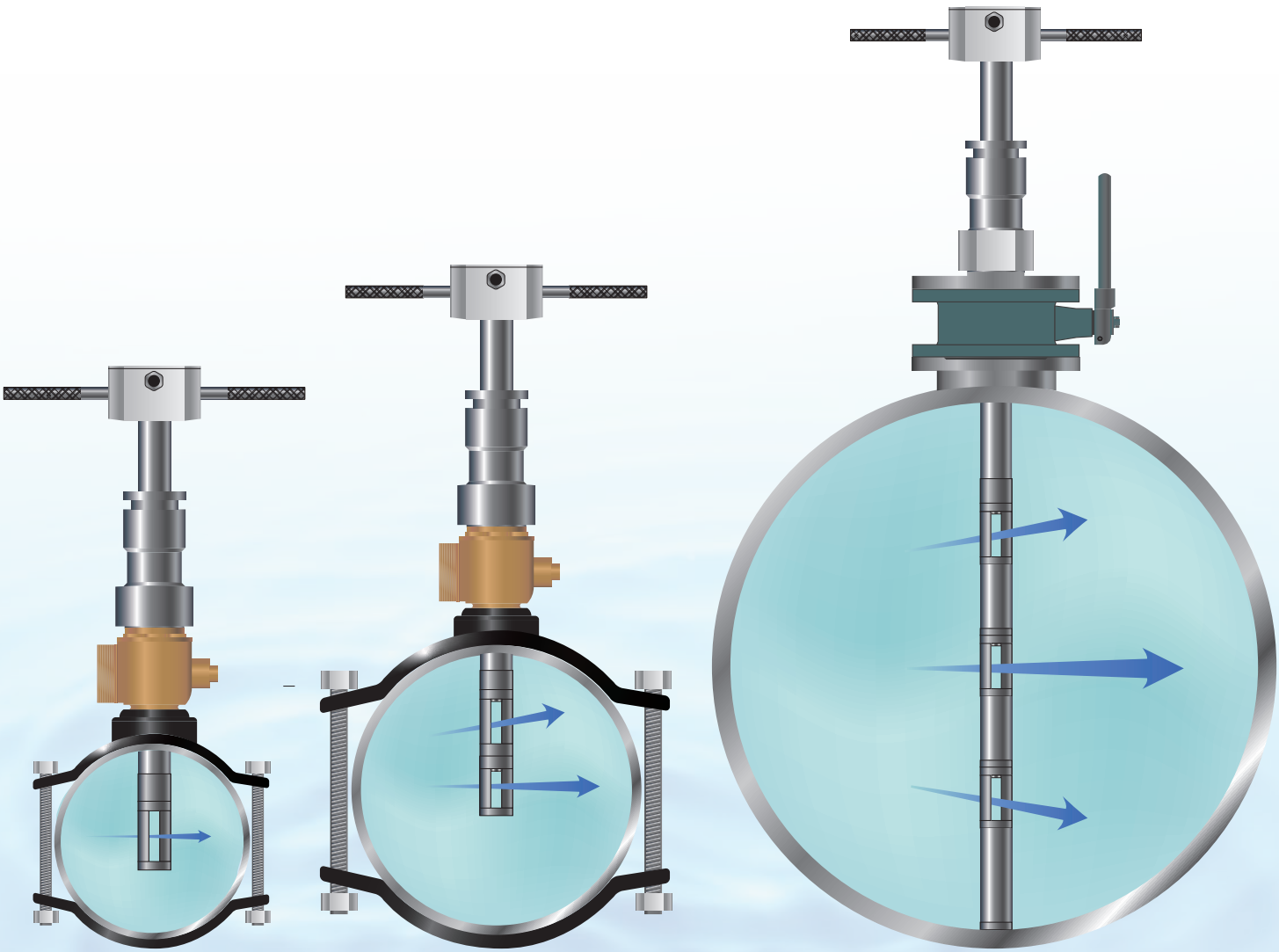
Insertion Type
Ultrahigh Accuracy Ultrasonic Flowmeter

ULSONA DT

ULSONA DT Series

The new Ulsona-DT series offers innovative measurement methods with improved user-friendly functions



1 point measurement
ULSONA-DT 1

2 point measurement
ULSONA-DT 2

3 point measurement
ULSONA-DT 3

ict co.,ltd.

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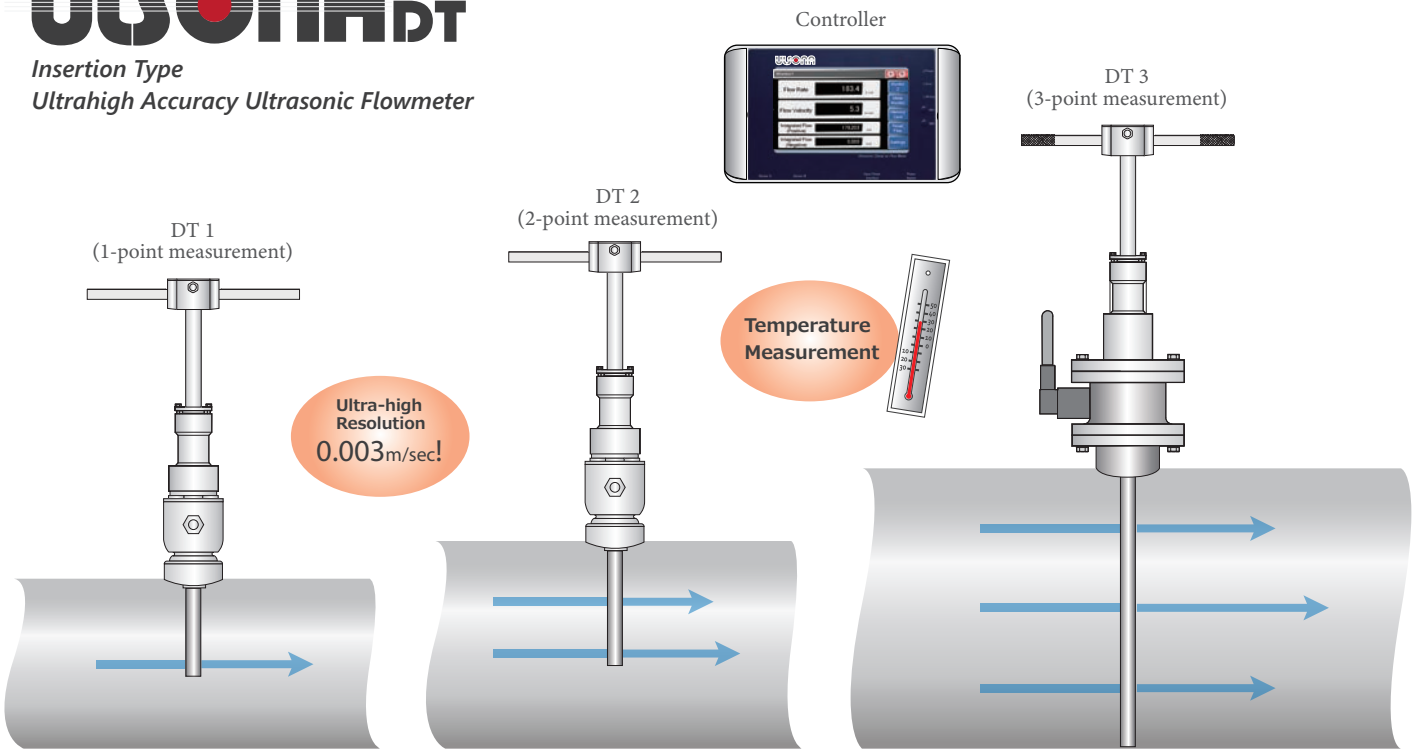


Point 1 Installation Cost is Extremely Low

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

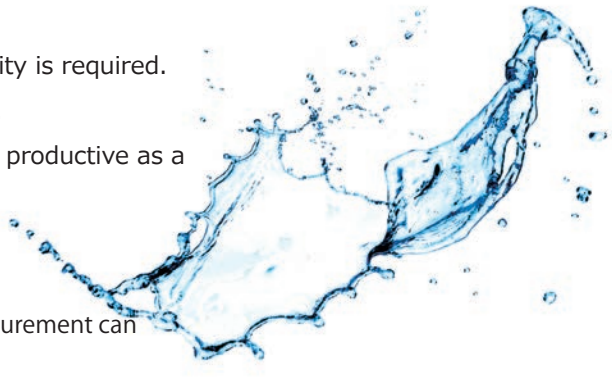
The Parameter settings necessary for measurement, can easily be set through an ***interactive LCD screen***.

Point 5 Temperature Measurement

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

Point 6 Portability

The **ULSONA** may be ***battery operated*** when portability is required.
Any battery that has appropriate voltages can be used.
The easily attachable and detachable **ULSONA**, can be productive as a ***portable type*** ultrasonic flowmeter.



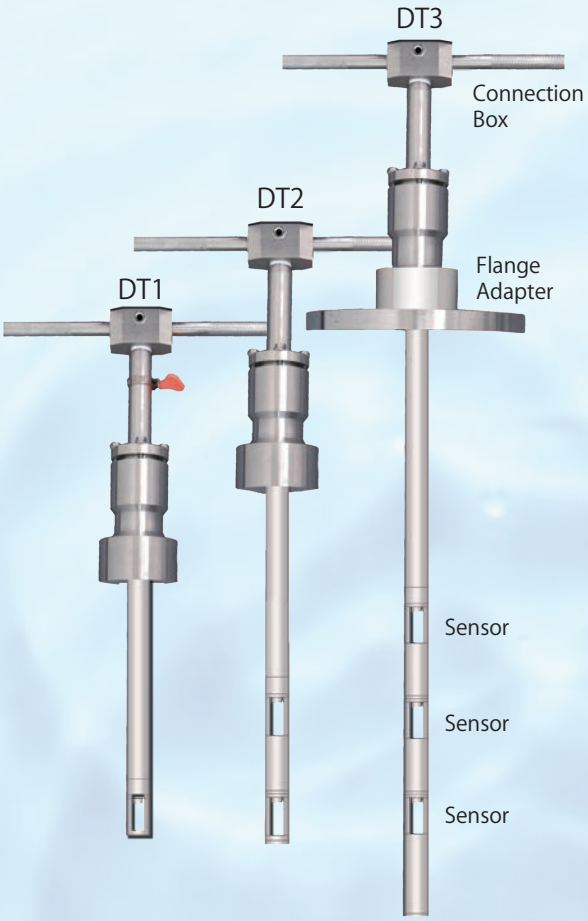
Point 7 DT-2 and DT-3 Backup Function

As long as one of the sensors are functioning properly, measurement can progress without interruption.

【Specifications】

Controller Display and Settings

Main Unit and Sensor



■General Specifications	
Measurable Fluids	Water, Pure Water, Industrial Water, etc.
Measurement Method	Transit-time Method
Applicable Pipe Sizes	DT 1 DN80 ~ DN300 DT 2 DN350 ~ DN450 DT 3 DN500 ~ DN2000
Measurable Velocity	0.000 ~ ±20.000 [m/sec]
Velocity Resolution	0.003 [m/sec]
Measurement Accuracy	±0.5% for RD (at a flow rate > 0.5 [m/sec])

■Controller / Display and Settings Specifications		
Supply Voltage & Power Consumption	DC24V (DC9V-DC26V Battery Operational) < approx. 10W	
Analog Output	Ch 1	Flowrate DC 4-20mA (DC0-24mA) (Resistance 500Ω)
	Ch 2	Temperature, Flow velocity, Negative flowrate (selectable) DC 1-5V
Digital Output	Ch 1	Positive Flowrate PhotoMOS Relay DC30V 500mA
	Ch 2	Negative Flowrate PhotoMOS Relay DC30V 500mA
	Ch 3	Measurement Error Non-voltage contact
Recording Medium	microSD Card (2GB MAX)	
Communication	RS485 (Modbus RTU 9600~38400bps)	
Calendar Clock	Built in Circuit board	
Working Temperature	-5~50 °C (Controller)	
Man-machine Interface	7" LCD Color Touch Panel	
Indication	Current flow rate [L/sec] [L/min] [L/hour] [m³/sec] [m³/min] [m³/hr] Current flow velocity [m/s] Positive flow rate pulse 0 to 999999.999 [m³] Negative flow rate pulse 0 to 999999.999 [m³]	
Waterproof Performance	Equivalent to IP65	

■Sensor / Main Unit Specifications	
Sensor	Ultrasonic Oscillator
Installation Method	Directly onto Ball Valve / Flange mounting
Material	AISI 316 (Insertion shaft) AISI 304 (Connection box, handle)
Weight	10Kg or more (depends on shaft length)
Waterproof Performance	IP68
Working Temperature	0~55 °C (Sensor)

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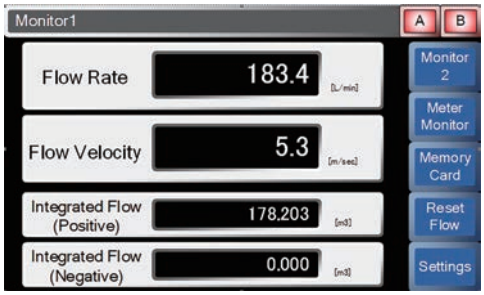
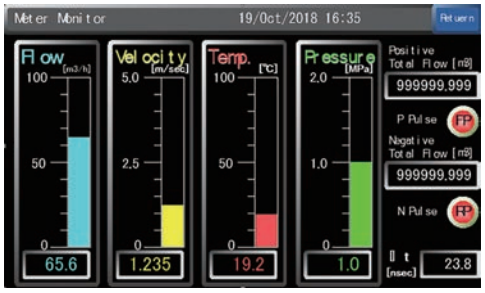
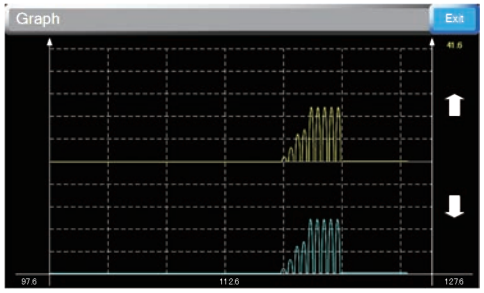
■ Screen Examples



Data Display Digital

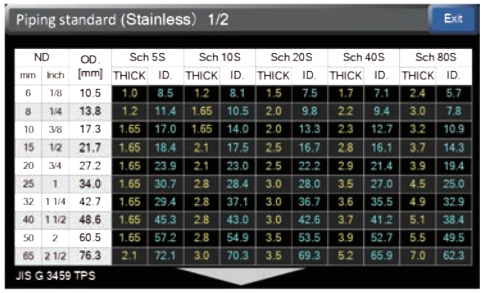


Data Display Meter



Graph Display of Echo Received

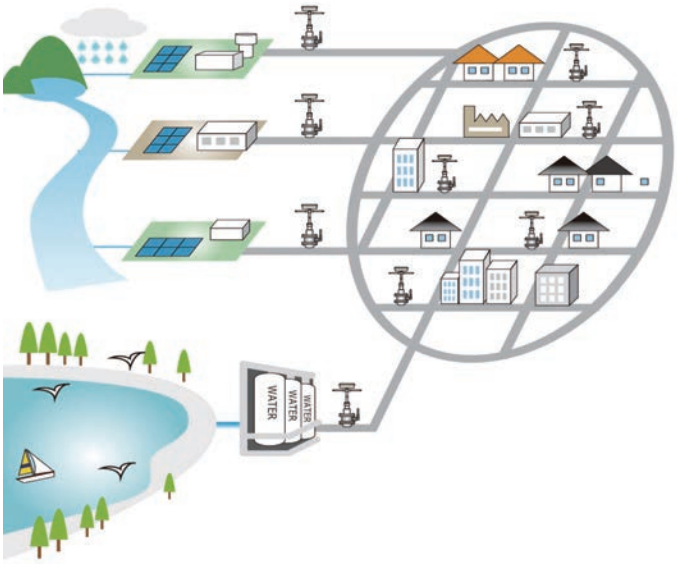
Displays ultrasound signal strength. Useful during setup and checking



ND		OD	Sch 5S		Sch 10S		Sch 20S		Sch 40S		Sch 80S	
mm	Inch	[mm]	THICK	ID.	THICK	ID.	THICK	ID.	THICK	ID.	THICK	ID.
6	1/8	10.5	1.0	8.5	1.2	8.1	1.5	7.5	1.7	7.1	2.4	5.7
8	1/4	13.8	1.2	11.4	1.65	10.5	2.0	9.8	2.2	9.4	3.0	7.8
10	3/8	17.3	1.65	17.0	1.65	14.0	2.0	13.3	2.3	12.7	3.2	10.9
15	1/2	21.7	1.65	18.4	2.1	17.5	2.5	16.7	2.8	16.1	3.7	14.3
20	3/4	27.2	1.65	23.9	2.1	23.0	2.5	22.2	2.9	21.4	3.9	19.4
25	1	34.0	1.65	30.7	2.8	28.4	3.0	28.0	3.5	27.0	4.5	25.0
32	1 1/4	42.7	1.65	29.4	2.8	37.1	3.0	36.7	3.6	35.5	4.9	32.9
40	1 1/2	48.6	1.65	45.3	2.8	43.0	3.0	42.6	3.7	41.2	5.1	38.4
50	2	60.5	1.65	57.2	2.8	54.9	3.5	53.5	3.9	52.7	5.5	49.5
65	2 1/2	76.3	2.1	72.1	3.0	70.3	3.5	69.3	5.2	65.9	7.0	62.3

Piping Standards
Displays general piping standards.

■ Application Example【Smart Water Grid】



Other similar products

Caloriena R2®

Clamp-on Type
Ultrasonic Flow meter

※Contact:

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