## **MICROSTREAM Flowsensor / Flowmeter**

# OF Series



## **MICROSTREAM Flowmeter**

Instantaneous Flow-Rate-Integrating Flow Volume Flowmeter

Model OF-WN (Local display type) Model OF-WP (With pulse output)

Features

\* Built-in lithium batteries (No external power supply is required).

\* Indications of both instantaneous flow-rate and integrating flow volume by only 1 flowmeter.

- \* Revolving display unit (It can be fixed to a easy-to-read position).
- \* Simplified structure with the oval gears type measuring principle.
- \* Measurement of various liquids.

\* Reset function for indications of Integrating Flow Volume (Total) and Integrating Flow Volume (Trip).

- \* Value holding function for Instantaneous Flow-Rate indication.
- \* Pulse output function (Option).

## Specifications

Instantaneous flow-rate • Integrating flow volume flowmeter OF-WN Type			OF05ZAWN	OF10ZAWN
Instantaneous flow-rate • Integrating flow volume flowmeter (with pulse output) OF-WP Type			OF05ZAWP	OF10ZAWP
	Fluid viscosity 0.3 ~ 0.8mPa·S		0.085 ~ 0.85L/min	0.7 ~ 5L/min
Flow-rate range (m <sup>3</sup> /h)	0.8 ~ 2.0mPa⋅S		0.05 ~ 0.85L/min	0.35 5L/min
	2.0 ~ 5.0mPa⋅S		0.017 ~ 0.85L/min	0.17 5L/min
	5.0 ~ 200mPa·S		0.0085 ~ 0.85L/min	0.085 ~ 5L/min
Accuracy	Flow-rate indication		±2%RS±0.007L/min	±2% RS±0.04L/min
(*1)	Volume indication		±2%RS	
Measurable fluids	Vario	ous liquids	Please select with reference to the following major materials of the liquid-touching materials	
nulus	Major fluids		Water, hot water, kerosene, heavy oil	
Мах	. working pr	essure	0.5MPa (at the time of fluid temperature of 20°C)	
	Pressure dr	ор	Not more than 4kPa	Not more than 10kPa
Fluid	d temperatur	e range	0 ~ +60°C	
Output signal (for OF-WP)			Open drain output (Equivalent to open collector) Pulse width: Not less than 5ms Max. rating voltage: 30 VDC Output capacity: "ON resistance" Not more than 150Ω, "OFFresistance" Not less than 100kΩ (Remained voltage not more than 1.5V in case of input current not more than 10mA)	
Pulse unit (for OF-WP)			10mL/p	
Ambient temperature range		ure range	0 ~ +60°C 35 ~ 85%RH (Dew condensation must be avoided)	
	Flow-rate	Smallest Scale	0.007L/min	0.04L/min
LCD	Flow-fate	Display digits	0.000L/min	00.00L/min
LOD	Volume	Smallest Scale	0.001L	0.01L
		Display digits	00000.000L	000000.00L
Power supply			Built-in lithium battery (Battery life 4 years. Not replaceable.)	
Structure			IP64 equivalent, Indoor installation	
Connection			R1/4	R1/2
Meter Weight			Approx. 240g	Approx. 260g
Major materials of the liquid touching partsCasingO-ringPivot		Casing	PPS	
		Rotor	PPS	
		O-ring	NBR	
		Pivot	SUS304	

Instantaneous flow-rate • Integrating flow volume flowmeter OF-WN Type			OF05ZZWN	OF10ZZWN
Instantaneous flow-rate • Integrating flow volume flowmeter (with pulse output) OF-WP Type			OF05ZZWP	OF10ZZWP
Flow-rate range (m <sup>3</sup> /h)	Fluid viscosity 0.3 ~ 0.8mPa·S		0.085 ~ 0.85L/min	0.7 ~ 5L/min
	0.8 ~ 2.0mPa⋅S		0.05 ~ 0.85L/min	0.35 ~ 5L/min
	2.0 ~ 5.0mPa⋅S		0.017 ~ 0.85L/min	0.17 ~ 5L/min
	5.0 ~ 200mPa⋅S		0.0085 ~ 0.85L/min	0.085 ~ 5L/min
Accuracy (*1)	Flow-rate indication		±2%RS±0.007L/min	±2% RS±0.04L/min
	Volume indication		±2%RS	
Measurable	Var	ious liquids	Please select with reference to the following major materials of the liquid-touching materials	
fluids	Major fluids		Water, hot water, kerosene, heavy oil	
Max. working pressure			0.5MPa (at the time of fluid temperature of 20°C)	
Pressure drop			Not more than 4kPa	Not more than 10kPa
Flui	d temperatu	ure range	0 ~ +60°C	
Output signal (for OF-WP)			Open drain output (Equivalent to open collector) Pulse width: Not less than 5ms Max. rating voltage: 30 VDC Output capacity: "ON resistance" Not more than 150Ω, "OFFresistance" Not less than 100kΩ (Remained voltage not more than 1.5V in case of input current not more than 10mA)	
Pul	se unit (for	OF-WP)	10mL/p	
Ambient temperature range		ture range	0 ~ +60°C 35 ~ 85%RH (Dew condensation must be avoided)	
		Smallest Scale	0.007L/min	0.04L/min
LCD	Flow-rate	Display digits	0.000L/min	00.00L/min
	Malum	Smallest Scale	0.001L	0.01L
	Volume	Display digits	00000.000L	000000.00L
Power supply				ery life 4 years. Not replaceable.)
Structure				t, Indoor installation
Connection			R1/4	R1/2
Meter Weight			Approx. 240g	Approx. 260g
Major materials of the liquid touching parts		Casing	PPS	
		Rotor O-ring	PPS FKM	
		Pivot	SiC	
		FIVU	510	

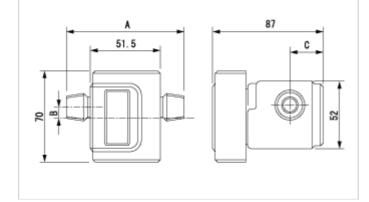
• In case there is possibility that any particle is flown in the liquid to be measured, please install a filter of not less than 80 meshes at the inlet side of the flowmeter.

• Gasoline, Sodium hydroxide (Caustic soda), Hydrogen peroxide solution (Oxydol), and Hydrochloric acid are not applicable.

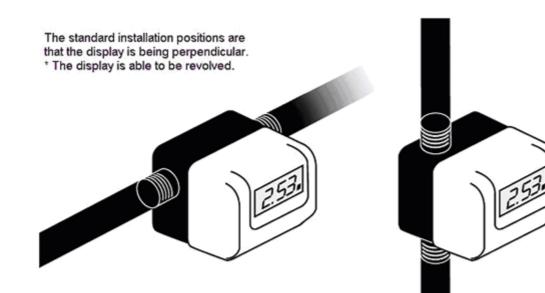
• \*1: With the standard installation position.

### **External dimensions**

Model	OF05	OF10
A(mm)	80	90
B(mm)	8	8.5
C(mm)	25	24



#### Standard installation position



### Materials - Abbreviations

PPS	Polyphenylene Sulfide Resin		
NBR	Acrylonitrile-Butadiene Rubber		
SUS304	Stainless Steel 304		
FKM	Fluoro Rubber		

SiC	Silicon Carbide Ceramic
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Specifications are subject to change without notice.