



## Instantaneous Flow-Rate · Integrating Flow Volume Flowmeter



Model NW (Local display type)

Model NW-P (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 vane wheel 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 NW Type		NW05-NTN	NW05-PTN	NW05-TTN	NW10-NTN
Instantaneous flow-rate · Integrating flow volume flowmeter (with pulse output) NW-P Type		NW05-NTP	NW05-PTP	NW05-TTP	NW10-NTP
Flow-rate range (m3/h)		0.3 – 3L/min			1.5 – 20L/min
Accuracy	Flow-rate indication	+/-2%RS+/-0.05L/min			+/-2% RS+/-0.2L/min
	Volume indication	+/-2%RS (with the standard installation position)			



Measurable fluids		Various liquids (Please select with reference to the following major materials of the liquid-touching materials)			
Max. Working Pressure		1MPa (at the time of fluid temperature of 20°C)			
Pressure Drop		Not more than 12kPa (At the time of 3L/min)		Not more than 20kPa (At the time of 20L/min)	
Fluid viscosity range		0.5 – 1.5mPa · s			
Fluid temperature range		0 – +60°C			
Ambient temperature range		0 – +60°C 35 – 85%RH(Dew condensation must be avoided)			
Output signal (for NW-P)		<ul style="list-style-type: none"> <li>· Open drain output (Equivalent to open collector)</li> <li>· Pulse width: Not less than 5ms</li> <li>· Max. rating voltage: 30 VDC</li> <li>· Output capacity: “ON resistance” Not more than 150Ω, “OFF resistance” Not less than 100kΩ (Remained voltage not more than 1.5V in case of input current not more than 10mA)</li> </ul>			
Pulse unit (for NW-P)		10mL/p		1L/p	
LCD	Flow-rate	Smallest Scale	0.05L/min		0.2L/min
		Display digits	00.00L/min		000.0L/min
	Volume	Display digits		000000.00L	
Power supply		Built-in lithium battery (Battery life 4 years. Not replaceable.)			
Structure		IP64 equivalent, Indoor installation			
Connection		R1/2			
Meter Weight		Approx. 280g		Approx. 250g	
Major materials of the liquid touching parts	Casing	Denatured PPO	PP	ETFE	Denatured PPO
	Vane wheel	POM		ETFE	POM
	Pivot	SUS304	PA	ETFE	SUS304
	O-ring	NBR	FKM		NBR
	Magnet	Sa-Co ※1		Ba-Fe	

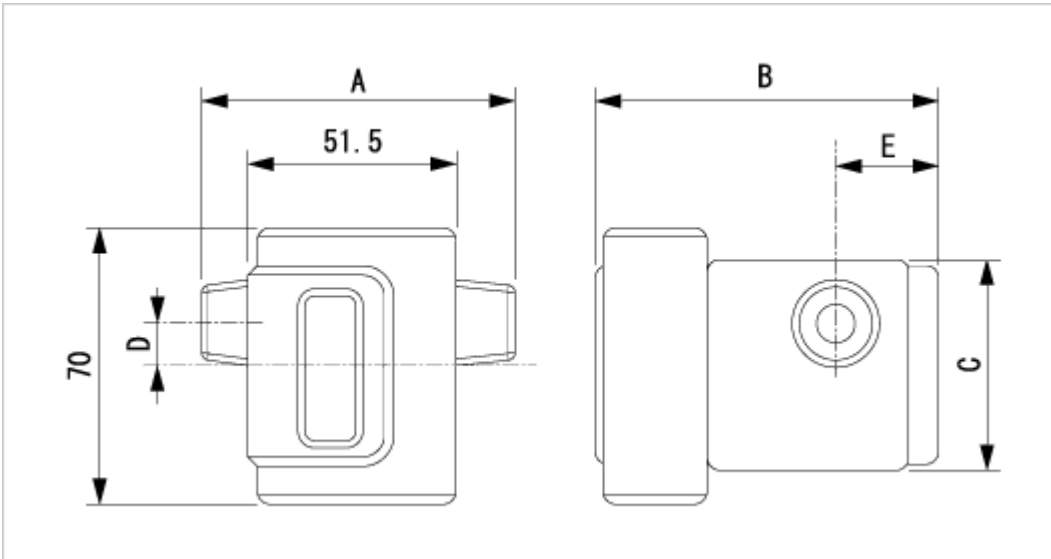
Instantaneous flow-rate · Integrating flow volume flowmeter NW Type		NW10-PTN	NW10-TTN	NW20-NTN	NW20-PTN
Instantaneous flow-rate · Integrating flow volume flowmeter (with pulse output) NW-P Type		NW10-PTP	NW10-TTP	NW20-NTP	NW20-PTP
Flow-rate range (m3/h)		1.5 – 20L/min	1.0 – 10L/min	3.0 – 60L/min	
Accuracy	Flow-rate indication	+/-2%RS+/-0.2L/min		+/-2% RS+/-0.5L/min	
	Volume indication	+/-2%RS (with the standard installation position)			

Measurable fluids		Various liquids (Please select with reference to the following major materials of the liquid-touching materials)			
Max. Working Pressure		1MPa (at the time of fluid temperature of 20°C)			
Pressure Drop		Not more than 20kPa (At the time of 20L/min)	Not more than 15kPa (At the time of 10L/min)	Not more than 60kPa (At the time of 60L/min)	
Fluid viscosity range		0.5 – 1.5mPa · s			
Fluid temperature range		0 – +60°C			
Ambient temperature range		0 – +60°C 35 – 85%RH(Dew condensation must be avoided)			
Output signal (for NW-P)		<ul style="list-style-type: none"> <li>▪ Open drain output (Equivalent to open collector)</li> <li>▪ Pulse width: Not less than 5ms</li> <li>▪ Max. rating voltage: 30 VDC</li> <li>▪ Output capacity: “ON resistance” Not more than 150Ω, “OFF resistance” Not less than 100kΩ (Remained voltage not more than 1.5V in case of input current not more than 10mA)</li> </ul>			
Pulse unit (for NW-P)		1L/p			
LCD	Flow-rate	Smallest Scale	0.2L/min	0.5L/min	
		Display digits	000.0L/min		
	Volume	Display digits	0000000.0L		
Power supply		Built-in lithium battery (Battery life 4 years. Not replaceable.)			
Structure		IP64 equivalent, Indoor installation			
Connection		R1/2		R3/4	
Meter Weight		Approx. 250g			Approx. 500g
Major materials of the liquid touching parts	Casing	PP	ETFE	Denatured PPO	PP
	Vane wheel	POM	ETFE	POM	
	Pivot	SUS304	ETFE	SUS304	
	O-ring	FKM		NBR	FKM
	Magnet	Ba-Fe	Sa-Co ※1	Ba-Fe	

- Any installation position other than the standard installation position is not available for NW05-TTN, NW05-TTP, NW10-TTN, and NW10-TTP.
- ※1: The magnet does not touch liquid.

### External dimensions

Model	NW05	NW10	NW20
A(mm)	80	80	110
B(mm)	87	87	105.5
C(mm)	52	52	74
D(mm)	11	11	16
E(mm)	25	25	35.5



**Standard installation position**



**Materials –Abbreviations**

Denatured PPO	Denatured Polyphenylene oxide
PP	Polypropylene
ETFE	Ethylene-tetrafluoro ethylene
POM	Polyacetal or Polyoxymethylene
SUS304	Stainless steel 304
PA	Polyamide
NBR	Acrylonitrile-Butadiene Rubber
FKM	Fluoro Rubber
Sa-Co	Samarium-Cobalt
Ba-Fe	Barium-ferrite