

# ND Vane Wheel Flowsensor



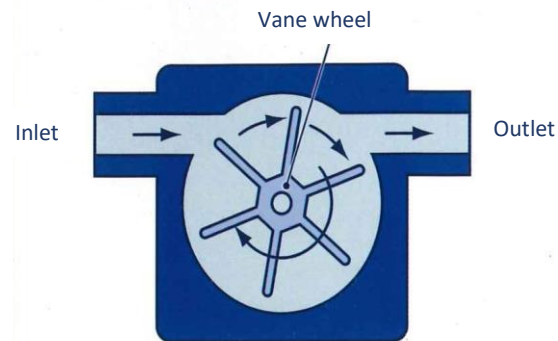
## Features

- Ideal for measuring various liquids
- Best-selling products with high quality at a low price
- Excellent repeatability.
- Suitable for batch control
- Lineup of 3 different wetted materials

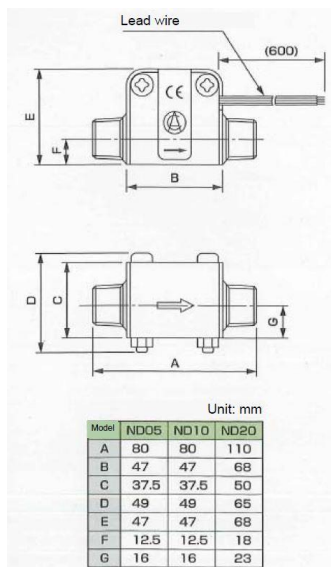
## Measurement Principle

The flow from the inlet is injected into the vane wheel and the vane wheel is rotated in proportion to the flow rate. A magnet is installed on the vane wheel, and the number of rotations is detected and output by the magnetic sensor.

The structure of this flowsensor is simple and indestructible. This flowsensor operates smoothly from low flow rate range. In addition, the performance is excellently reproducible.



## External Dimensions



KOFLOC CORP.

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# ND Vane Wheel Flowsensor

## Specifications

Model	ND05-N ATAAC-RC	ND005-P ATAAC-RC	ND05-T ATAAA-RC	ND10-N ATAAA-RC	ND10-P ATAAA-RC	ND10-P ATAAC-RC	ND10-T ATAAA-RC	ND20-N ATAAA-RC	ND20-P ATAAA-RC	ND20-P ATAAC-RC
Nominal Diameters	5mm			10mm			20mm			
Accuracy-Guaranteed Flow Range	0.3~3L/min			1.5~20L/min			1~10L/min	3~60L/min		
Accuracy	± 2%RS (Standard installation position)									
Type of Fluid	Water · Hot water	Water · Chemical Solution *1		Water · Hot water	Water · Chemical Solution *1		Water · Hot water	Water · Chemical Solution *1		
Fluid Viscosity Range	0.5~1.5mPa · s (Equivalent to water)									
Fluid Temperature Range (No Freezing)	0~+70°C	0~+60°C		0~+70°C	0~+60°C		0~+70°C	0~+60°C		
Ambient Temperature / Humidity	-10~+70°C 35~85%RH (No condensation)									
Working Pressure	1MPa (Liquid temperature at 20°C)									
Pressure Loss	12 kPa or less			20 kPa or less			15 kPa or less	60 kPa or less		
Spec. of Output	NPN open collector pulse Voltage: 24V DC Current: 6mA DC Duty ratio: 3 : 7 < ON : OFF < 7 : 3									
Cable	Lead-wire length: Approx. 600 mm 4 core AWG26 Flat cable									
Pulse Factor	2.5mL/P			7.69mL/P			25mL/P			
Maximum Frequency	20Hz			Approx. 44Hz			Approx. 22Hz	40Hz		
Minimum Pulse Width	15ms			Approx. 6.9ms			Approx. 13.8ms	7.5ms		
Installation Position	The CE mark on the nameplate shall be horizontal to the floor and facing upward. (Air intrusion shall be avoided.)									
Piping Connection	R1/2						R3/4			
Flow Direction	Arrow direction indicated on the product									
Protection Level	Indoor use (Equivalent to IP X4)									
Power Supply	3~24V DC Sensor power supply (Red - Black) and pulse output (Blue/White - Black) shall be the same. *2									
Consumption Current	5 mA DC or less									
Weight	Approx. 150 g			Approx. 120 g			Approx. 360 g			
Wetted Materials	Body Case	Modified PPO	PP	ETFE	Modified PPO	PP	ETFE	Modified PPO	PP	
	Vane Wheel	CF-POM		ETFE	CF-POM		ETFE	CF-POM		
	Pivot	SUS304	PA	ETFE	SUS304	PA	ETFE	SUS304		PA
	O-Ring	NBR	FKM		NBR	FKM		NBR	FKM	
	Magnet	Sa-Co *3			Ba-Fe		Sa-Co *3		Ba-Fe	

\*1 : When using with various liquids, please select the model after checking the corrosion resistance of main wetted materials.

\*2 : In case applied voltage of sensor power supply and pulse output are not the same, performance and output may become unstable.

\*3 : This magnet does not touch the liquid.