

Compact Electromagnetic Flow Sensor

VN

No moving parts,
No pressure loss,
Excellent durability

Compact design,
Easy to install

No straight
pipe required



Possible to measure, even though there are foreign materials in fluid, and even though there is no straight pipe section.
Also possible to measure flow of disinfection fluids.
Therefore, it is the most suitable for measurement of installation at various factory production lines and built-in machines.

Specification		In addition, for the special specification, please contact us.		
Model	VNO5R		VN10R	VN20R
Accuracy guaranteed flow range (Minimum flow rate to Maximum flow rate)	0.05~1L/min		0.5~10L/min	3.0~60L/min
Maximum operating flow rate	3L/min		25L/min	100L/min
Low flow cutoff	0.025L/min		0.25L/min	1.5L/min
Accuracy (Liquid temperature at 25°C)	Frequency pulse	±2.5RS% (100% to 20% of maximum flow rate) ±0.5FS% (20% to 5% of maximum flow rate)		
	Unit pulse	±2.0RS% (100% to 20% of maximum flow rate) ±0.4FS% (20% to 5% of maximum flow rate)		
Piping connection (Thread size)	R1/4		R1/2	R1
Fluid temperature range	0 to 60°C (No freezing)			
Fluid conductivity rate	50 μS/cm or more			
Type of liquid	Conductive liquid that does not corrode the material contacting to liquid			
Working pressure	1MPa or less			
Pressure loss	0.02MPa or less			
Ambient temperature/humidity	Temperature: -20°C to 60°C Humidity: 35% to 85%RH (No condensation)			
Responsiveness	63% response Damping time: 2s (Standard)			
Signal cable	Length: 0.5m 4 core Red: Power supply + wire White: Output 1 Blue: GND Yellow: Output 2			
LED display	One LED display in the main body Green: Flow rate display Display in three-step speed Red: NG status is displayed with number of blinks			
Installation position	Free (Vertical piping is recommended)			
Common specification of output	NPN Open collector Current capacity: 20mA or less Voltage: 30VDC or less Residual voltage at turning ON: 1V or less			
Output 1 *2	Frequency pulse *1	Duty ratio:	Standard 200Hz (Settable in steps of 0.1Hz between 20 and 400Hz)	
	Unit pulse	50%	0.001L/P (Standard)	0.01L/P (Standard) 0.1L/P (Standard)
	Alarm *3	Selectable between Normal Open (Standard) and Normal Close Details of alarm (Low source voltage/Meter error/Dry moisture/ Excessive flow rate/Excessive liquid noise/Reverse-flow)		
Output 2 *2	Switch *4	Selectable between Normal Open (Standard) and Normal Close Level judgment value: Settable in steps of 1% from 0 to 100%. (Convert the maximum flow rate 100%)		
	Unit pulse	The same as output 1		
	Alarm *3	The same as output 1		
Protection level	IPX4 (Equivalent to IP64)			
Consumption current	100mA or less			
Power supply	12-24 VDC (±10%) We recommend the power supply is supplied with isolated power supply and 1 unit of power supply is connected to one unit of VN			
Wetted materials	Main body: PPS resin Electrode: SUS316L O-ring: FKM Earth ring: SUS316			

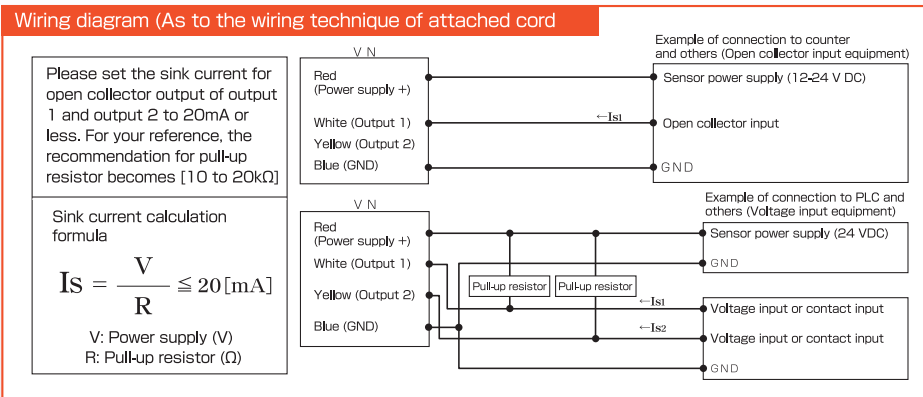
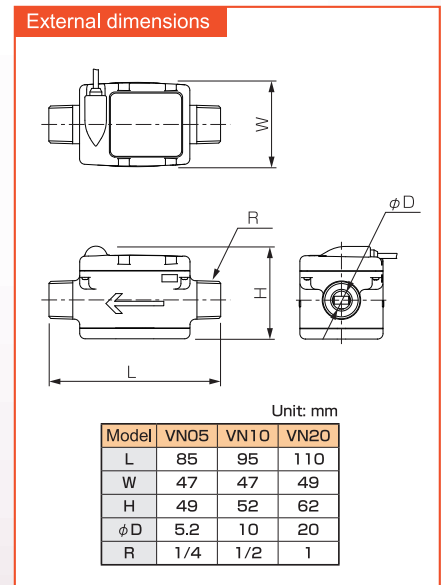
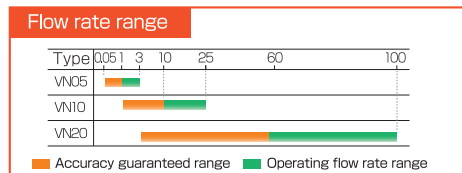
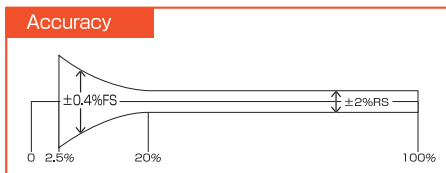
*1: Frequency at maximum flow rate

*2: For the set value and choice of Output 1 and Output 2, all are factory setting, and setting change after installation is not available.

*3: Alarm is selectable only either one of Output 1 or Output 2.

*4: For the window judgment, Output 1 and Output 2 are used.

(Note) CE mark certification for lightning surge has not obtained.



Manufactured and Distributed by

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Technical specifications in this catalog are up-to-date as of June 2020.

To Our Customers

Please understand that product specifications may be changed without notice in order to improve performance. We are always happy to provide the latest catalogs and brochures, and respond to inquiries made to our offices.

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