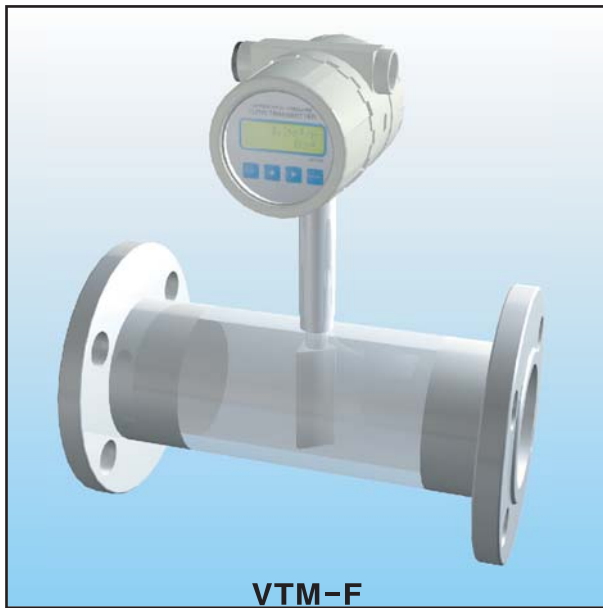




VTM-W



VTM-F

볼텍스 유량계 (Vortex Flow Meters)



FTC[®]



VTM Series

◆ PRINCIPLE

As the flow meter that applied the principle of Karman Vortex, when the fluid is flowing after installing the sensor of delta shape vertically in pipe, the vortex is generated at both sides of delta and vortex wave of apex of delta measures flow rate in proportion to the velocity of the fluid.

◆ FEATURES

1. Simple structure and design.
It is easy to keep and lasts long because there is no rotating part.
2. The temperature, pressure, viscosity and density of fluid don't influence to the accuracy of the sensor.
3. Wide measuring range. Generally, high ratio of 10:1.
4. Since measuring part doesn't contact the fluid directly, the flow meter has strong durability.
5. The output is pulse signal and possible to transmit remotely.
6. Small pressure loss.

◆ SUITABLE FLUID

- ◆ Gas : Saturated steam, Overheated steam, Condensed air, Carbon gas, natural gas and so on.
- ◆ Liquid : Water, oil, chemicals, refined petroleum and so on.

◆ 유량범위 (Flow rate table)

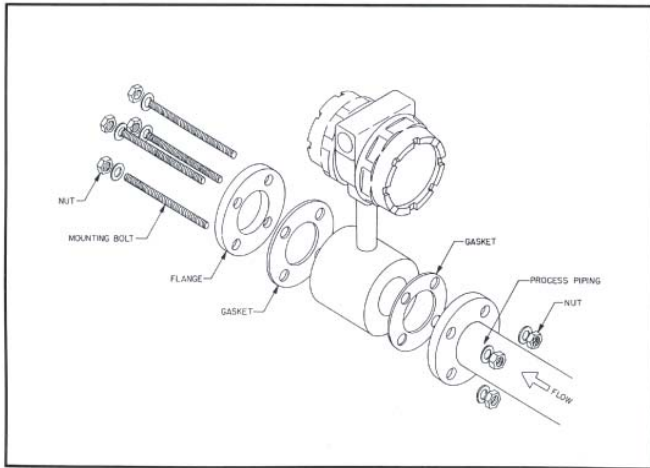
SIZE (mm)	TYPE	FLOW RANGE(m ³ /h) LIQUID	TYPE	FLOW RANGE	
				GAS (Nm ³ /h)	STEAM (kg/h)
25A	VTM-2202	0.9~12	VTM-2302	7~60	9~120
40A	VTM-2204	2~30	VTM-2304	18~15	20~300
50A	VTM-2205	3~50	VTM-2305	30~240	30~500
80A	VTM-2208	10~130	VTM-2308	70~600	100~1300
100A	VTM-2210	20~200	VTM-2310	100~1000	200~2000
125A	VTM-2215	45~400	VTM-2315	200~2000	450~4500



◆ TECHNICAL DATA

1. WORKING TEMPERATURE : -40°C ~ +350°C
2. WORKING PRESSURE : 4.0 Mpa
(possible to supply by mutual consent in case of more than 4.0 Mpa.)
3. POWER : DC24V , BATTERY
4. ACCURACY : ±1.0%
5. REPEATABILITY : 0.2%
6. Output : Three wire system low level for electric pulse is 0.5 V and below, and high level is 10 V and above.
7. SIGNAL TRANSMISSION DISTANCE : 1KM
8. MATERIAL : SUS316
9. EXCLUSION-PROOF ABILITY :
A : NON-EXCLUSION-PROOF TYPE
B : EXPLOSION-PROOF TYPE

◆ ASSEMBLY



◆ INSERTION TYPE VORTEX-STREET FLOW SENSOR

① APPLICATION

Insertion Type Vortex-Street Flow Sensor is used for measuring of water, oil, chemicals, condensed air, steam, natural gas and etc and is suitable for large size of pipe.

This flow meter consists of sensor and indicator.

② FEATURE

1. Simple structure and design without rotating part.
2. Since the ball valve is mounted to the sensor, it doesn't need to stop the supply of the fluid for repair and separation.
3. The minimum velocity range is 4m/s for gas and 0.4m/s for liquid.
4. It is also possible to use in beveled pipe horizontally or vertically.

③ TECHNICAL DATA

1. Please refer to table 1 for type, length of insertion rod, proper pipe size, depth of insertion and proper flow rate.
2. ACCURACY : $\pm 2.5\%$ OF F.S
3. WORKING PRESSURE : 1MPa
4. WORKING TEMPERATURE : $-40^{\circ}\text{C} \sim 350^{\circ}\text{C}$
5. The length of straightener :
For upstream and downstream side are 15DS and 5DS or above respectively.
* DS : This means internal diameter of pipe.

형식 TYPE	표정관도 공칭통경(mm) Nominal bore of suitable	유량범위 m ³ /h Flow range	적용피측관도 실측내경범위(mm) Range of internal diameter of the pipeline of the user	입간장도/입심도 Plug rod Length/ Insertion depth mm
VTM-2021	pipe	45-270	>170-240	895/0.5DS
VTM-2031	200	100-600	>240-340	
VTM-2041	300	180-1100	>340-440	1095/0.5DS
VTM-2051	400	280-1700	>440-540	
VTM-2061	500	400-2400	>540-680	1295/0.5DS
VTM-2081	600	750-4500	>680-880	
VTM-2101	800	1200-7200	>880-1050	1295/0.5DS
VTM-2 ※ ※ ※	1000	협의 Upon agreement	>1050	
VTM-3021	200	450-2700 기체 GAS	>170-240	895/0.5DS
-3020		450-5400 증기 Steam	>240-340	
VTM-3031	300	1000-6000 기체	>340-440	1095/0.5DS
-3030		1000-12000 증기	>440-540	
VTM-3041	400	1800-11800 기체	>540-640	1095/0.5DS
VTM-3051		2800-17800 기체	>680-880	
VTM-3061	500	4000-24000 기체	>880-1050	1295/0.5DS
VTM-3081	600	7500-45000 기체	>1050	
VTM-3101	800	12000-72000 기체	>1050	1300
VTM-3 ※ ※ ※	1000	협의 Upon agreement	>1050	1300