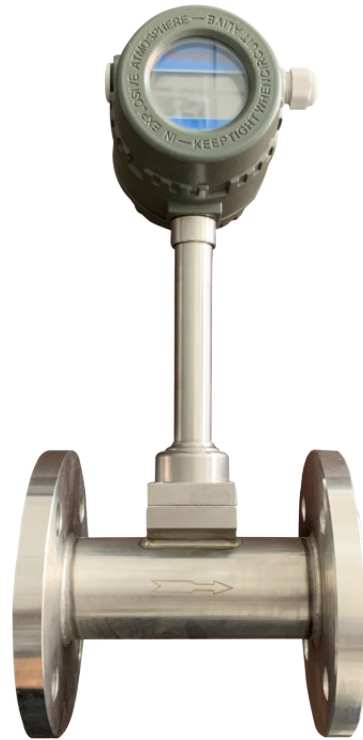


# VORTEX FLOWMETERS

## SMV VORTEX FLOWMETERS



## SPECIFICATIONS

- SMV Vortex Flowmeters with Vortex operation feature are new generation flowmeters with automatic temperature and pressure calculations compared to other vortices.
- In the model with display, instantaneous flow rate / main total, pressure and / or temperature values can also be displayed on the screen. (if selected as an option)
- SMV Vortex flowmeters are in-line (pipeline mounted type) in diameters between DN25 - DN300, and immersed type between DN300 - DN1000.
- Protection class "IP65" in In-Line models, It is "IP68" in immersion types.
- Standard body material is SUS 304, it can be made in SS 316 or different material.
- Standard pressure class of flowmeters is PN40 in, diameters between DN25-DN200, and PN16 in large diameters.

## APPLICATIONS

- Especially in flow measurement applications of high temperature liquid, air and steam.
- In flow measurement applications where there is no material other than stainless in the measurement part,
- In applications where economical measurement is required in high pressure systems,
- In applications where both high temperature liquid and steam are measured and information should be provided to automation systems,
- They are used in applications where flowmeters need to be connected to remote control systems via RS-485 or HART protocol.

# SMV VORTEX FLOWMETERS

SMV flowmeters are economical measuring devices that work with the principle of Vortex (vortex measurement), especially in high temperature pure (without particles) water, chemical fluid, air and steam systems.

SMV model flowmeters can also be connected to automation systems with no display / pulse output or LCD display / 4-20mA outputs.

SMW Vortex flowmeters; 2 different types for liquid fluids and gas & steam applications has the model.

## SMW VORTEX FLOWMETER TYPES



### Models w/o Register

- Models without indicators, which are the most economical model in terms of price, they are preferred in applications that do not require local reading or cannot be read due to the difficulty of mounting the flow meter or only remote reading is required.



### Models with LCD Register

- Instantaneous flow rate and main total values can be read as standard on the LCD display on the Vortex flowmeters with SMV Display.
- Temperature and / or pressure compensator feature can be selected optionally for steam measuring models. When this feature is selected, temperature and pressure values can also be read on the screen.



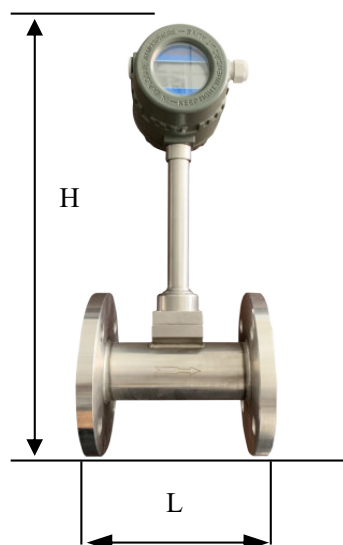
### Immersion Type Models

- In lines with an installation diameter between DN300 - DN1000, immersion type Vortex flowmeter model is used instead of in-line.

This model also has non-display and display options, only the measuring unit (sensor) is different.

# TECHNICAL SPECIFICATIONS

Measuring System	Vortex Prenciple
Fluids Used	Liquid – Air – Steam (pure, free of solid particles)
Sizes	DN25 – DN300 (Flange, Threaded, Tri-Clover, Wafer) DN300 - DN1000 (immersion)
Pressure	DN25-DN200 / PN40, DN250-DN300 / PN16 ( < optional)
Working Temperature	Piezoelektrik : -40/+260, -40 /+320 Kapasitans : -40/ +300, -40 /+400, -40/+450
Body Material	SS 304 (Anothers Optional)
Accuracy	<ul style="list-style-type: none"> <li>• Connection Types : <math>\pm 1</math> (flow rate for Liquids 35 m/s) <math>\pm 1.5</math> (For Gas and Steam 35-80m/s )</li> <li>• Immersion Type : <math>\pm 2,5</math></li> </ul>
Flow Rate	$\leq 10$ m/s (Liquids) $\leq 80$ m/s (Gas and Vapor)
Max. Working Viskosity	10 cp
Outputs	1- Model w/o indicator ; Pulse Output (14-30 VDC) 2- LCD display model ; 4-20mA output (18-45 VDC) 3- RS-485 Output 4- HART Communication
Option (*) (Only applies to LCD models)	<ul style="list-style-type: none"> <li>• With Temperature Compensator</li> <li>• Pressure Compensator</li> <li>• Temperature &amp; Pressure Compensator</li> </ul>
Supply Power	12 VCD - 24 VDC
Protection Class	Connection Types - IP65 Immersion Types - IP68



## Dimensions

DN (mm)	L	H
15~32	160	455
40	180	440
50		450
65		470
80		480
100	200	500
125		530
150		560
200		610
250	250	660
300		710

# FLOW RATE TABLE

## SMV VORTEX FLOWMETER FLOW RATES

DN [mm]	Liquid		Gas - Steam	
	Flow Rate (m <sup>3</sup> /h)	Frequency Output (Hz)	Flow Rate (m <sup>3</sup> /h)	Frequency Output (Hz)
25	1.2 ~ 16	25 ~ 336	8.8 ~ 55	190 ~ 1140
32	1.5 ~ 15	15 ~ 150	15 ~ 140	150 ~ 1395
40	2 ~ 40	10 ~ 200	27 ~ 205	140 ~ 1040
50	3 ~ 60	8 ~ 160	35 ~ 380	94 ~ 1020
65	5.5 ~ 75	6.7 ~ 91	60 ~ 600	73 ~ 730
80	6.5 ~ 130	4.1 ~ 82	86 ~ 1100	55 ~ 690
100	15 ~ 220	4.7 ~ 69	133 ~ 1700	42 ~ 536
125	25 ~ 270	4.3 ~ 49	220 ~ 2200	38 ~ 380
150	30 ~ 450	2.8 ~ 43	347 ~ 4000	33 ~ 380
200	45 ~ 800	2 ~ 31	560 ~ 8000	22 ~ 315
250	65 ~ 1250	1.5 ~ 25	890 ~ 11000	18 ~ 221
300	95 ~ 2000	1.2 ~ 24	1360 ~ 18000	16 ~ 213
(300)	100 ~ 1500	5.5 ~ 87	1560 ~ 15600	85 ~ 880
(400)	180 ~ 3000	5.6 ~ 87	2750 ~ 27000	85 ~ 880
(500)	300 ~ 4500	5.6 ~ 88	4300 ~ 43000	85 ~ 880
(600)	450 ~ 6500	5.7 ~ 89	6100 ~ 61000	85 ~ 880
(800)	750 ~ 10000	5.7 ~ 88	11000 ~ 110000	85 ~ 880
(1000)	1200 ~ 17000	5.8 ~ 88	17000 ~ 170000	85 ~ 880



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