

## VXW

### Vortex Flowmeter

VXW Series vortex flowmeter is manufactured according to Karman vortex principle. It is widely used to measure liquid, gas, steam flow in the closed pipeline. The frequency emitted by the Vortex is proportional to the flow rate. From the VXW series, a trepezoidal object is used for vortex creation. This structure ensures that all liquids and gases, even steam, create highly reliable vortexes. The well-designed sharp corner of the upright and wide object that forms the vortex guarantees excellent linearity.

#### Technical Features

- Compact structure
- No moving parts, long service time
- Long time stability

<b>Display</b>	: Total flow and instant flow
<b>Working Pressure</b>	: 1.6 to 32 Mpa
<b>Ambient Temperature</b>	: - 25 °C to +60 °C
<b>Power</b>	: 24 VDC or 220 VAC
<b>Relative Humidity</b>	: %5 - %95
<b>Atm. Pressure</b>	: 86 - 106 Kpa
<b>Measurable Fluid</b>	: Liquid, Gas, Steam
<b>Accuracy</b>	: %1 (Liquid), 1.5% (Gas and Steam)
<b>Anti Explosion Grade</b>	: Exd Bt4
<b>LCD Digital Display</b>	: L/min, m/h, kg/h, etc.
<b>Output Signal</b>	: 4-20 mA Current (2 Wire System) Standard Pulse Ouput ( 3 Wire System) Digital Communication Modbus RTU
<b>Medium Temp.</b>	: 100 - 300°C (High Temp. Type)
<b>Reynolds No. Range</b>	: $2 \times 10^4$ - $7 \times 10^6$ (DN 25 – DN 100) $4 \times 10^4$ - $7 \times 10^6$ (DN 150 – DN 300)



#### Where to use;

- Liquid, Gas and Steam Flow Measurement
- Boiler Efficiency Monitoring

#### Benefits;

- Calculation of steam costs by measuring the steam consumption of the plant and various units.
- Checking whether steam is supplied to the processes in operation at the correct amount and pressure.
- The efficiency of the plants and processes are monitored with steam flow meters.

## Saturated Steam Flow Range

DN (mm)	Flow Range	Measurable Flow Range							
		1 bar	2 bar	4 bar	6 bar	8 bar	10 bar	15 bar	20 bar
25	Min.	10,2	14,9	24,9	33	41,9	50,8	72,7	94,9
	Maks.	62,2	90,8	146,9	201,9	255,8	310,2	444,4	579,7
40	Min.	24,9	36,3	58,7	80,7	102,3	124,1	177,8	231,9
	Maks.	226	330	534	734	930	1128	1616	2108
50	Min.	40,7	59,4	96,1	132,1	167,4	203	290,9	379,4
	Maks.	361,6	528	854,4	1174,4	1488	1804,8	2585,6	3372,8
80	Min.	84,8	123,8	200,3	275,3	348,8	423	606	790,5
	Maks.	709,6	1036,2	1676,8	2304,8	2920,2	3541,9	5074,2	6619,1
100	Min.	146,9	214,5	347,1	477,1	604,5	733,2	1050,4	1370,2
	Maks.	1243	1815	2937	4037	5115	6204	8888	11594
150	Min.	316,4	462	747,6	1027,6	1302	1579,2	2262,4	2951,2
	Maks.	2531,2	3696	5980,8	8220,8	10416	12633,6	18099,2	23609,6
200	Min.	655,4	957	1548,6	2128,6	2697	3271,2	4686,4	6113,2
	Maks.	4746	6930	11214	15414	19530	23688	33936	44268
250	Min.	1096,1	1600,5	2589,9	3559,9	4510,5	5470,8	7837,6	10223,8
	Maks.	6215	9075	14685	20185	25575	31020	44440	57970
300	Min.	1649,8	2409	3898,2	5358,2	6789	8234,4	11796,8	15388,4
	Maks.	9040	13200	21360	29360	37200	45120	64640	84320

## Standard Pipe Length Requirement

Connection Pipe Form	Least Requirement of Straight Pipe	
	Upper Flow	Down Flow
Concentric Shrink Pipe	15D	5D
Concentric Flare Pipe	35D	5D
One 90° Turning	20D	5D
Two 90° Turning in Same Plane	25D	5D
Two 90° Turning in Different Plane	30D	5D
Full Open Valve	20D	5D
Half Open Valve	40D	5D

**Note :** D means the nominal diameter of flowmeter. If need install temperature sensor and/or pressure sensor in the pipe system, sensor should be installed the down flow of the flowmeter as the below figure shown.

