

# **MVF-2400**

### **Marmonix Tri-clamp Vortex Flow Meter**

#### Overview:

Marmonix Tri-clamp Vortex Flow Meter works based on Carmen and Strouhal relevant spiral produce and on the theory of the flow relationship. As shown in picture, In the meter body vertical insert a triangular prism root namely the happening of the body, when eddies of medium flow through the table body, in triangular prism behind the alternate produce in opposite directions regular karman swirl, its spiral

separation and the flow of the medium frequency F speed by sensing head is proportional to the V detected the number of spiral, can measure the flow velocity, again according to the table body mouth.

#### Features:

- Flange& body: integrally forged pieces, it will avoid break down into pieces. 100% SS304 material, we can provide material report.
- Circuit Board: Digital circuit board, anti-most of the supplier use analog circuit board, digital circuit board enjoy the advantages of anti-vibration and antiinterference.
- Flow converter: Distinctive modular design, amateurs can operate, disassemble and assemble easily, it will avoid accident risks.
- Welding: adopt the advanced fish scale technology, which makes the welding seam looks nice and smooth.
- Our medium temperature sensor can measure highest temperature around 350  $^{\circ}$ C, normal it is -40 $^{\circ}$ 250  $^{\circ}$ C

### **Application:**

- Liquid
- Dry gas
- Wet gas
- Wet steam
- Saturated steam
- Superheated steam





## **SPECIFICATION**

Size	DN15-DN300mm (flange and flange card), DN100-DN2000mm (Insertion)
Medium Temperature	Liquid, Gas , Steam
Accuracy	±0.75% of read (liquid), ±1.0% of read (gas and steam)
Nominal pressure	1.6MPa,2.5MPa,4.0MPa
Protection Grade	IP65
EX-proof Class	Exd IIB T6 Gb
Body Material	SS304,SS316
Medium Temperature	-20°C~+100°C, -20°C~+250°C, -20°C~+350°C
Signal Output	4~20 mA (two wire), pulse (three wires)
Power supply	24VDC, 3.6V lithium
Ambient Temperature	-25°C <b>~</b> +55°C
Humidity	5∼90% RH
Pressure loss	Resistance coefficient CD≤ 2.4
Connection	Flange: DN15-DN300 Flange Card: DN15-DN300 Insertion: DN100-DN2000
Communication	RS485







# **MODEL SELECTION**

Table 1: Connection Model										
Mark No	1	2	3	4						
Connection	Flange	Flange card	Inserted type	others						

Table 2: Measured Medium										
Mark No	1	2	3	4	5					
Medium	Liquid	Common Gas	Saturated Steam	Superheated Steam	others					

Table 3: (	Table 3: Caliber Size (mm)													
Flange and flange card connection														
Mark No	150	200	250	320	400	500	650	800	101	125	151	201	251	301
Caliber	15	20	25	32	40	50	65	80	100	125	150	200	250	300

Insertion 1	Гуре																		
Caliber	10 0	12 5	15 0	20 0	25 0	30 0	35 0	40 0	50 0	60 0	70 0	80 0	90 0	100 0	120 0	140 0	160 0	180 0	200 0
Mark no	10	12 5	15 1	20 1	25 1	30 1	35 1	40 1	50 1	60 1	70 1	80 1	90 1	102	122	142	162	182	202

Table 4: Special Mark										
Mark No	Mo mark	М	В	Х	G	W	Υ	Z		
Format	Common	Standard Signal Output	Intrinsically Safe Explosion-proof	Scene Shows	High Temperature	Temperature Compensation	Pressure Compensation	Temperature Pressure Compensation		



Medium	Liqui	d (m³/h)	Gas (r	n³/h)			
Condition	(T=20°C ρc	=1000 Kg/m³)	(T=20°C 101325 Pa Air)				
DN (mm)	Standard	Extend	Standard	Extend			
20	1~8	0.6~12	5~50	5~60			
25	1.5~12	0.8~16	8~80	8~120			
40	2.5~30	1.5~40	20~200	18~300			
50	3~50	2~60	30~300	30~500			
65	5~80	3~90	50~500	50~900			
80	8~120	5~150	80~1000	60~1200			
100	12~200	6~240	100~1000	100~2000			
125	20~300	13~390	150~1600	150~3000			
150	30~400	15~600	250~2500	200~4000			
200	40~800	30~1200	400~4000	350~8000			
250	80~1200	40~1600	600~6000	500~12000			
300	100~1800	1000~10000	1000~10000	600~18000			



