

Product overview

The FCV V-shaped cone flowmeter is a differential pressure instrument used to measure the fluid flow in the tube pursuant to law of conservation of mass and law of conservation of energy. The V-shaped cone suspended in the center of a pipe is innovatively used for it, and the structure has the unique advantages of self-rectification and self-cleaning. It's a new instrument widely used.



Product features

- Integrated V-shaped cone flowmeter system.
- The special structure is suitable for measuring the flow at low static pressure and low velocity.
- To facilitate the use by the user, our company's V-shaped cone flowmeter is of integrated and split structure.
- Good wear-resisting property, good long-term stability and high measurement repeatability. The battery power supply and external 24VDC power supply can be used with output of 4~20mA pulse signal and Hart protocol.
- The special construction is with small pressure loss and its pressure loss is 1 / 3~1 / 5 of that of pore plate. The range ratio is 10:1 (reaching to 30:1 under the special situation).
- The applicable operating temperature reaches to 850°C and the maximum pressure is 42MPa. The scope will be higher in case of special material chosen.
- As for the self-rectifying function, the V-shaped cone is characterized by slowing down the flow rate in the center of the pipe and speeding up the flow velocity near the pipe wall, effectively improves the distribution of fluid velocity, achieve self-rectification, and greatly shortens the front and rear straight pipe length (0~3DN in the front and 0~1D in the back).
- As for the self-cleaning function, when the fluid passes through the V-shaped cone, the flow rate in the center of the pipe will slow down and the velocity near the wall will increase, making the dirt not easily deposit on the throttling element and facilitating the accuracy and stability of measurement.
- Our company's FCV plug-in V-shaped cone flowmeter system solves the problem of high cost incurred by using V-cone sensor for large caliber with V-shaped cone measurement advantages reserved, greatly expands the use V-shaped cone flowmeter use field, and solves the problem of inconvenient measurement because the large diameter pipeline differential pressure is too small. It is of good economy, timeliness and stability.
- The intelligent V-shaped cone flowmeter is of advanced circuit design with strong function, micro-power consumption, display of flow information on the large LCD screen and internal memory unit ensuring the safety security;

Product model selection

FCV	V-shaped cone flowmeter						
	Nominal caliber *** (100 indicates pipeline nominal diameter: DN100)						
		Structure form Z Intelligent integration L Split type					
		Measuring medium 1 Liquid 2 Gas 3 Steam					
		Body form S pipelined SO (with neck flat welding flange connection) W Inline type WN (neck butt welding flanged connection way) F Flange pressure tapping way B Direct welding type J Heating jacket type A Anti-corrosion type P Square tube cone H Pipe double-clip type					
		Pipe static pressure A 0.6Mpa B 1.0Mpa C 1.6Mpa D 2.50Mpa E 4.0Mpa F 6.3Mpa G 10Mpa H 16Mpa I 25Mpa J 40Mpa					
		Compensation method 0 None P Single pressure compensation T Single temperature compensation O Pressure and temperature full compensation					
		Integrated signal output 0 None 1 4~20mA 2 Pulse 3 Hart					
		Integrated power supply mode 1 Internal battery power supply 2 Battery and 24VDC double selection power supply 3 External 25VDC power supply					
FCV-							