



Precession Vortex Flowmeter

Intelligent Gas Precession Vortex Flowmeter is a new type of gas flow meter. It has the function of measuring flow, temperature, and pressure; it also can compensate temperature, pressure and compressible factor automatically. It is an ideal instrument of gas measurement, which is used for petroleum, chemical industry, electricity, metallurgy, and so on.

Feature

- Aluminium housing, Compact design, light in weight
- LCD display for flow rate and total volume(M3,NM3 selectable), temperature, pressure etc.
- Integrated temperature/pressure correction (standard)
- Optional for explosion-proof (I.S. or XP)
- Capable for Natural gas, biogas, Compressed air, exhaust gas, oxygen, NO₂, CO₂, CO, NO, H₂, Oil gas, coal gas, coal seam gas, Mixed gases and Artificial gas. (Steam is not workable)



Environment
Protection

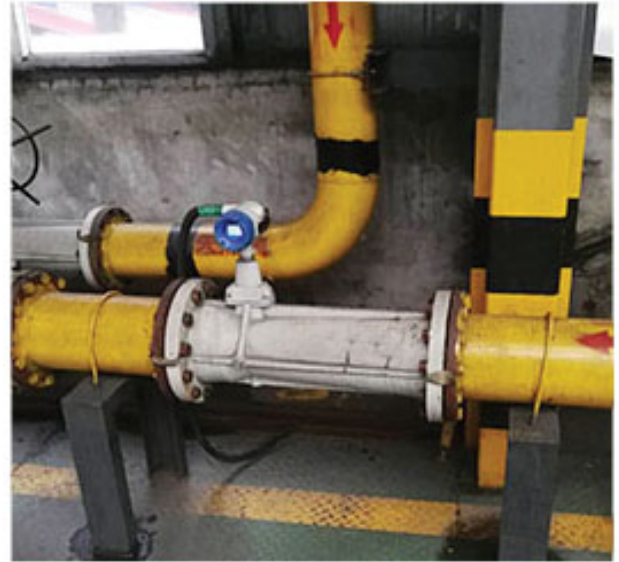
Textile Industry

Petrochemical
Engineering

Oil & Gas



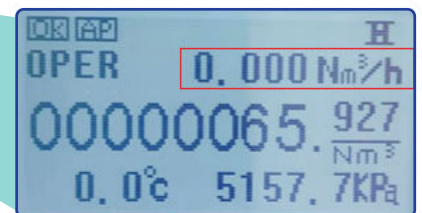
Without movable mechanical parts inside, incorrosolve, reliable & stable.



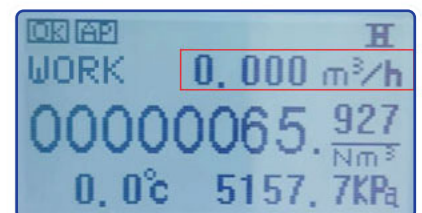
Long service life, long time running, no need special maintenance.

LCD HD Display

Display parameters can switch freely, can display instantaneous flow (Nm³/h), total flow (Nm³), medium temperature (°C) and pressure (Kpa) at the same screen.



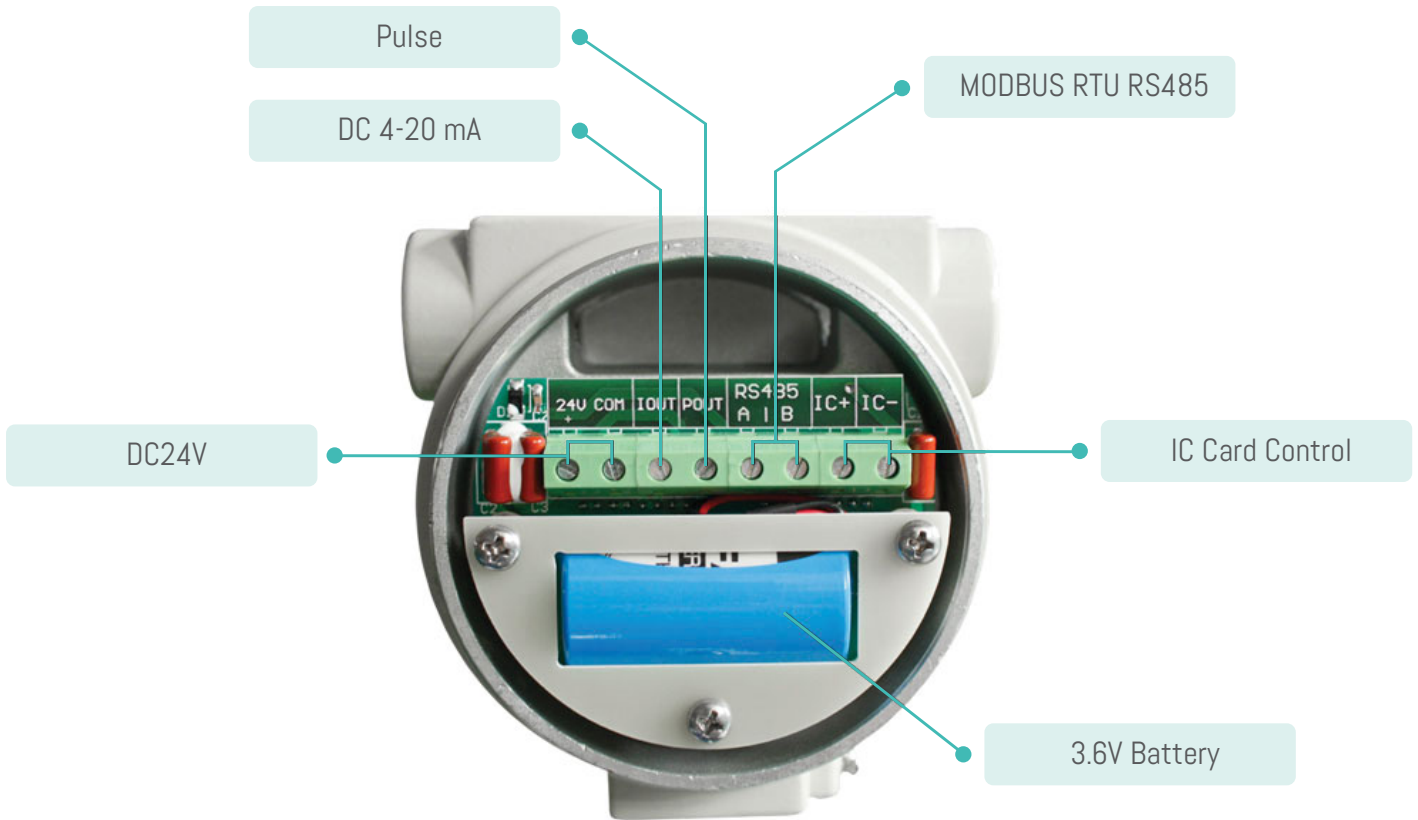
Standard Instantaneous Flow



Operating Instantaneous Flow

Dual Power

Lower power consumption, could use the battery powered and connect the external power too.



Sensor

Military Quality. Double flow sensor, enjoy excellent stability, high accuracy and anti-vibration performance. Intelligent flow meter integrates the flow sensor, micro-processor, pressure and temperature sensor together.



Absolute Pressure Sensor

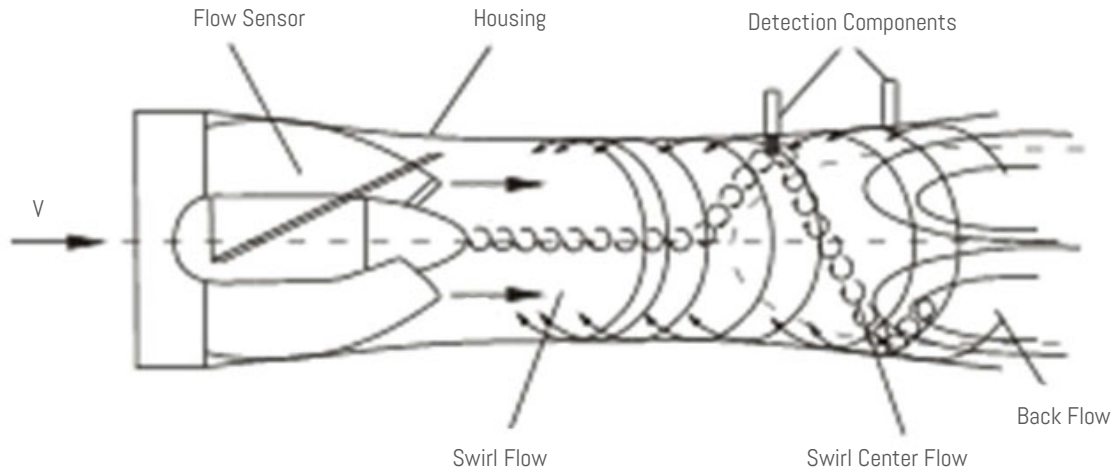


PT1000 Temperature Sensor



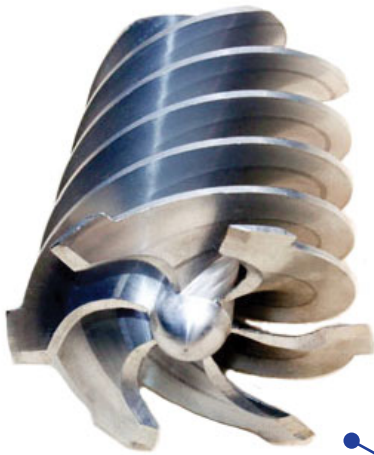
Flow Sensor

Working Principle



Precession vortex flow meter combines the swirl generator and swirl eliminator in the flow sensor, which can reduce the pressure loss, realize wider flow measuring range, upgrade measurement

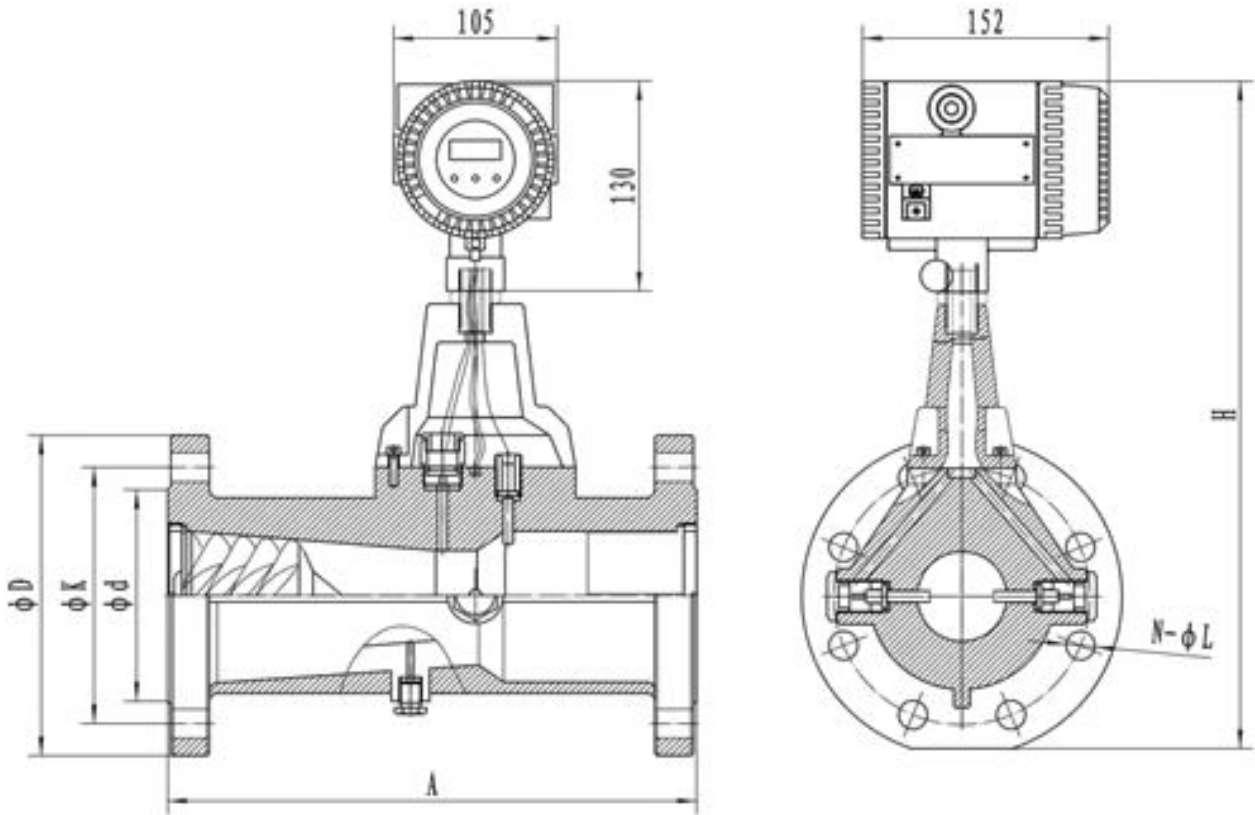
Swirl Generator



Minimize pressure loss based on fluid functionology design



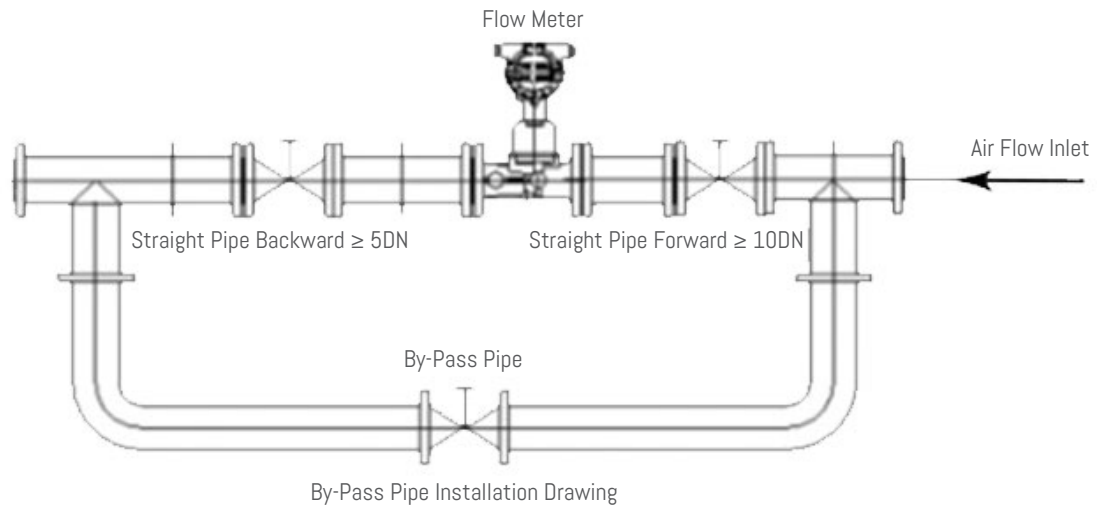
Dimension



Caliber (mm)	Length (mm)	PN 1.6 ~ 4.0 MPa																	
		H	DΦ	KΦ	N	L	dΦ	H	DΦ	KΦ	N	L	dΦ	H	DΦ	KΦ	N	L	dΦ
25	200	305	115	85	4	14	65												
32	200	320	140	100	4	18	76												
50	230	330	165	125	4	18	99												
80	330	360	200	160	8	18	132												
		PN 1.6 MPa						* PN 2.5 ~ 4.0 MPa											
100	410	376	220	180	8	18	156	390	235	190	8	22	156						
150	570	430	285	240	8	22	211	450	300	250	8	26	211						
		PN 1.6 MPa						* PN 2.5 MPa						* PN 4.0 MPa					
200	700	470	340	295	12	22	266	490	360	310	12	26	274	510	375	320	12	30	284

Unit : mm

Installation Method



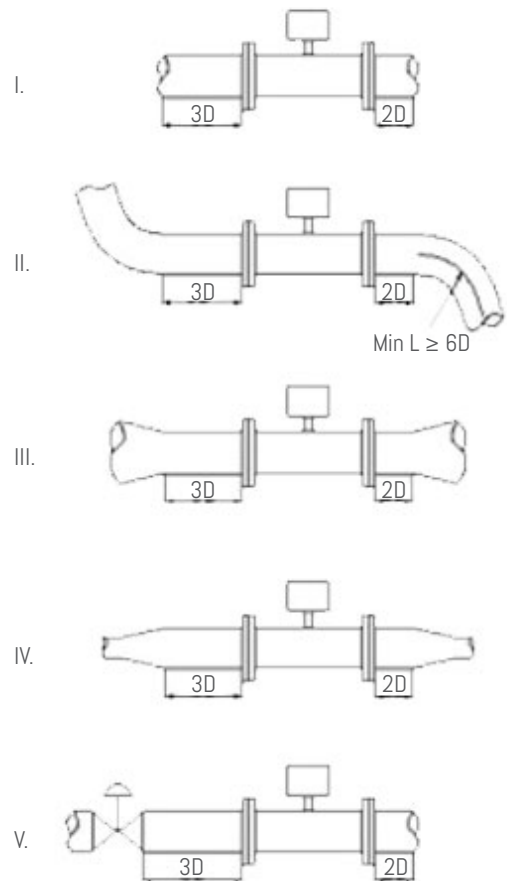
Guarantee the upstream straight pipeline at least 3D, and the downstream straight pipeline at least 2D.
(D : Nominal Caliber)

Bend Pipe.
The required upstream straight pipeline at least 3D, the downstream straight pipeline at least 2D

Reducing Pipe.
The required upstream straight pipeline at least 3D, the downstream straight pipeline at least 2D

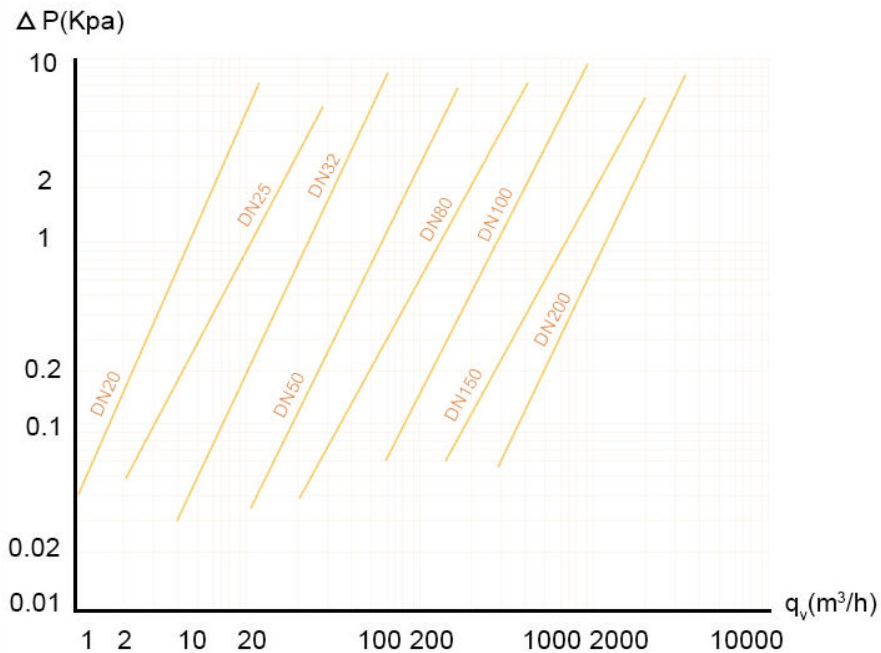
Expanding Pipe.
The required upstream straight pipeline at least 3D, the downstream straight pipeline at least 2D

Valve.
The required upstream straight pipeline at least 5D, the downstream straight pipeline at least 2D



Technical Performance Parameters								
Caliber (mm)	20	25	32	50	80	100	150	200
Flow Range (m ³ /h)	1.2 ~ 15	2.5 ~ 30	4.5 ~ 60	10 ~ 150	28 ~ 400	50 ~ 800	150 ~ 2250	360 ~ 3600
Accuracy	1.0 - 1.5%							
Repeatability	Less than 1/3 or basic error absolute value							
Working Pressure (MPa)	1.6 MPa, 2.5 MPa, 4.0 MPa, 6.3 MPa Special pressure please double check							
	Environment temperature : -30 °C to 65 °C Relative humidity : 5% ~ 95% Medium temperature : -20 °C to 80 °C Atmospheric pressure : 86 KPa-106 KPa							
Working Power	24VDC + 3.6V battery power, can remove the battery							
Output Signal	4-20mA, pulse, RS485, alarm							
Applicable Medium	All gases (except steam)							
Explosionproof Mark	Ex ia II C T6 Ga							

Pressure Loss Curve



Model Select

	VTS	XXX	X	X	X	X	X	X	X	X	X
Caliber (mm)	DN25 - DN200 Reference Code Please check caliber code table 1										
Function	With Temperature & Pressure Compensation	Y									
	Without Temperature & Pressure Compensation	N									
Nominal Pressure	1.6 MPa		1								
	2.5 MPa		2								
	4.0 MPa		3								
	6.3 MPa		4								
	Others		5								
Connection	Flange			1							
	Thread			2							
	Wafer			3							
	Others			4							
Output Signal	4-20 mA, Pulse (Two-Wire System)				1						
	4-20 mA, Pulse (Three-Wire System)				2						
	RS485 Communication				3						
	4-20 mA, Pulse, HART				4						
	Others				5						
Alarm	Low and High Limit Alarm				6						
	Without				7						
Accuracy Level	1.0					1					
	1.5					2					
Cable Entry	M20 x 1.5						M				
	1/2" NPT						N				
Structure Type	Compact/ Integral							1			
	Remote							2			
Power Supply	3.6V Lithium Battery, DC24V								A		
	DC24V								D		
	3.6V Lithium Battery								E		
Ex-proof	With Ex-proof									0	
	Without Ex-proof									1	
Shell Material	Stainless Steel										S
	Aluminium Alloy										L
Process Connection	DIN PN16										1
	DIN PN25										2
	DIN PN40										3
	ANSI 150#										4
	ANSI 300#										A
	ANSI 600#										B
	JIS 10K										C
	JIS 20K										D
	JIS 40K										E
	Others										F

Optional Selection

X	
1	Matched Flange
2	Others

Lorem ipsum

Table 1 : Caliber Code Table

Caliber	Code
25	25
32	32
40	40
50	50
65	65
80	80
100	100
125	125
150	150
200	200

Other Parameters Required

Medium	
Min Working Temperature (°C)	
Normal Working Temperature (°C)	
Max Working Temperature (°C)	
Working Pressure	Gauge Pressure : _____ Absolute Pressure : _____
Environment Humidity	
Min Flow Rate (m3/h)	
Normal Flow Rate (m3/h)	
Max Flow Rate (m3/h)	
Flow Range (m3/h)	
Press Loss Allowable (KPa)	