

# Precession Vortex Flow Meter





New High-tech Enterprise



CE

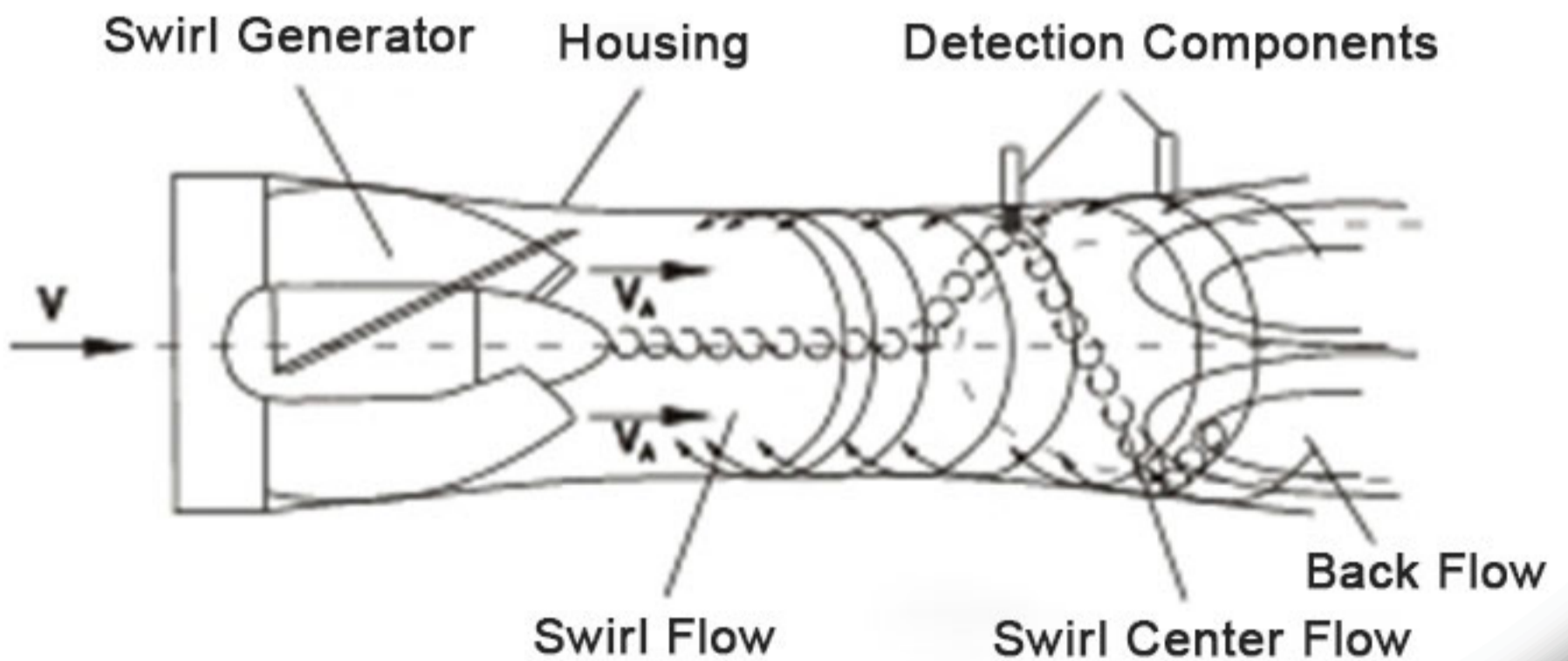


Ex-proof



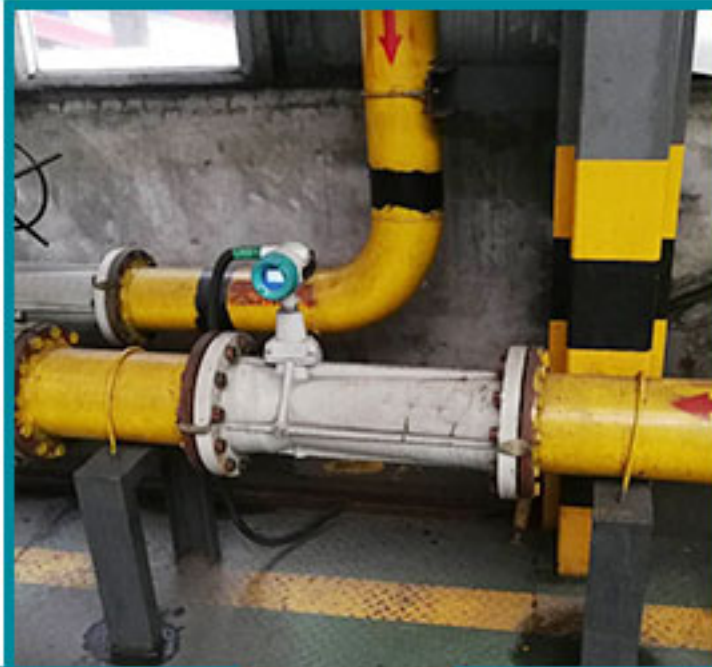
ISO

## Working Principle

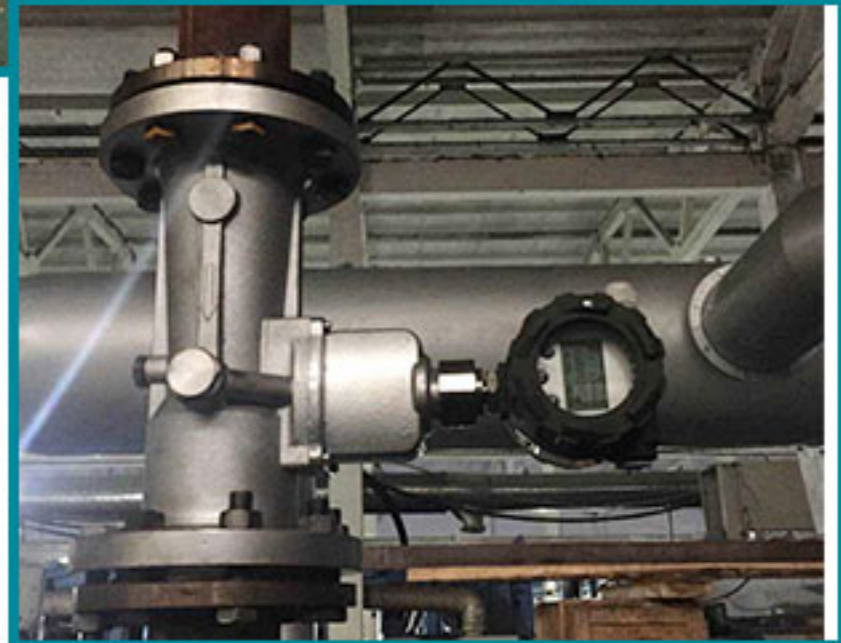


# ••• CASES •••

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



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



Application

Industry



Environment Protection



Textile Industry



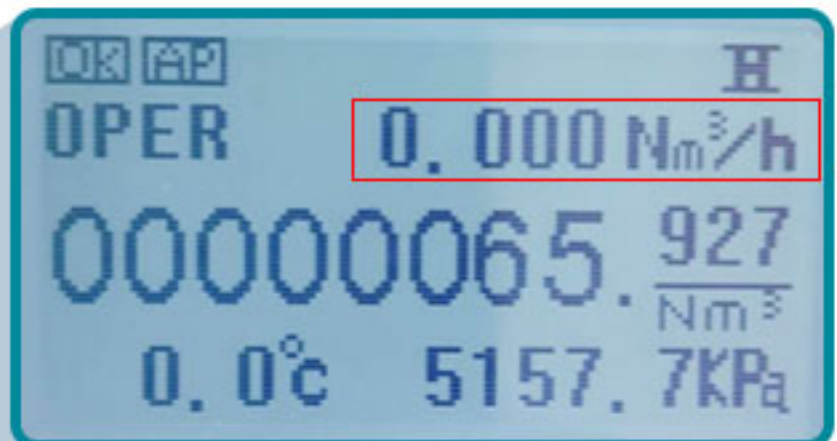
Petrochemical Engineering



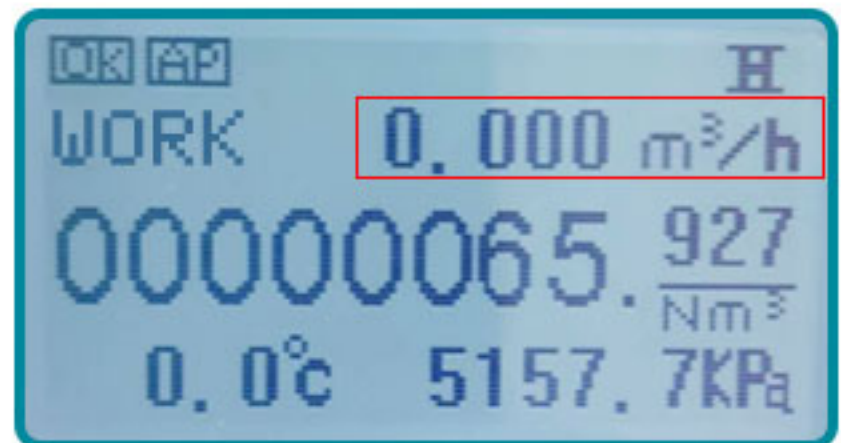
Oil & Gas

# DETAILS

## 1. LCD HD Display



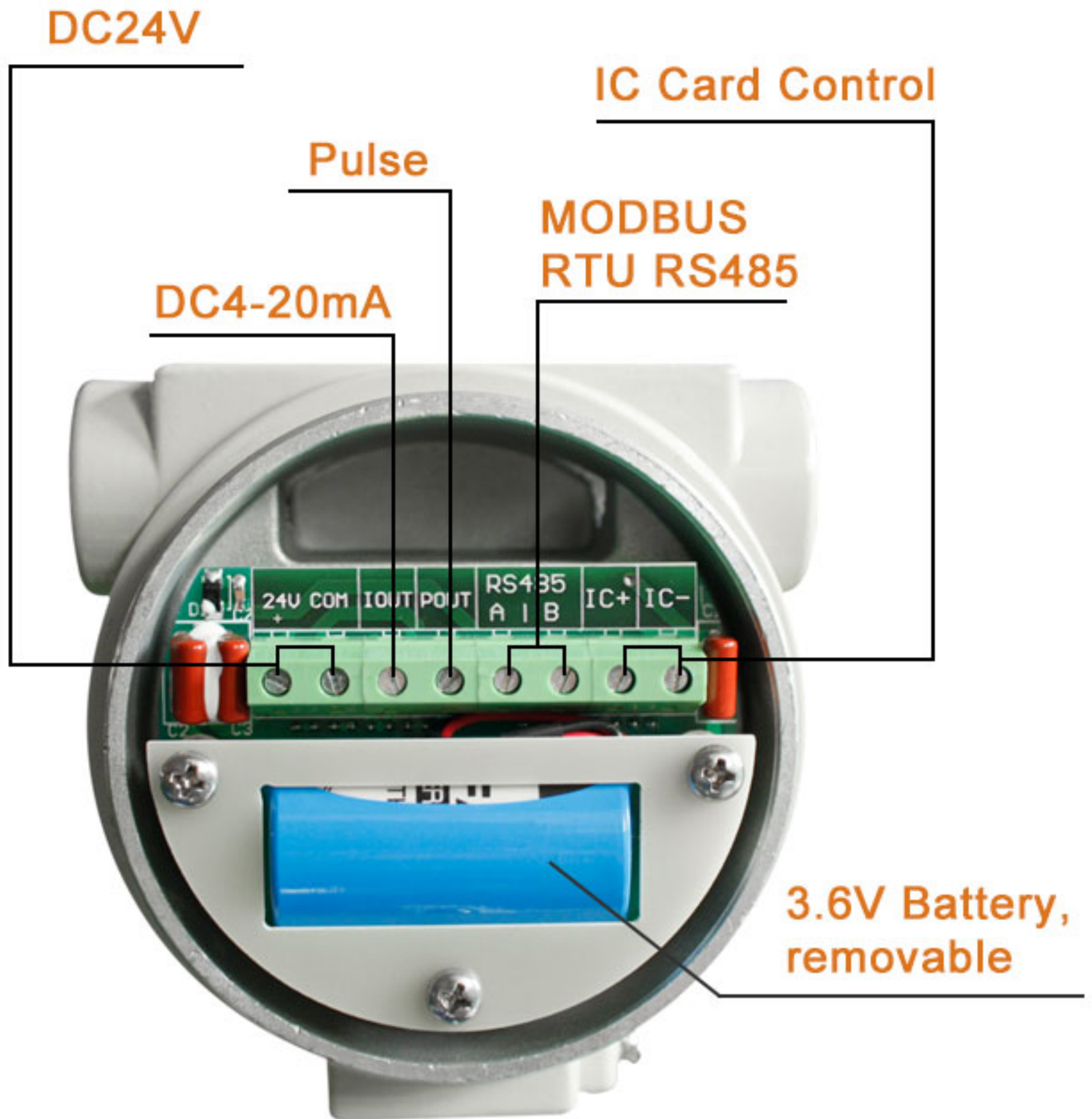
Standard Instantaneous Flow



Operating Instantaneous Flow

Display parameters can switch freely, can display instantaneous flow (Nm<sup>3</sup>/h), total flow (Nm<sup>3</sup>), medium temperature (°C) and pressure (Kpa) at the same screen.

## 2. Dual Power



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

## 3. Sensor

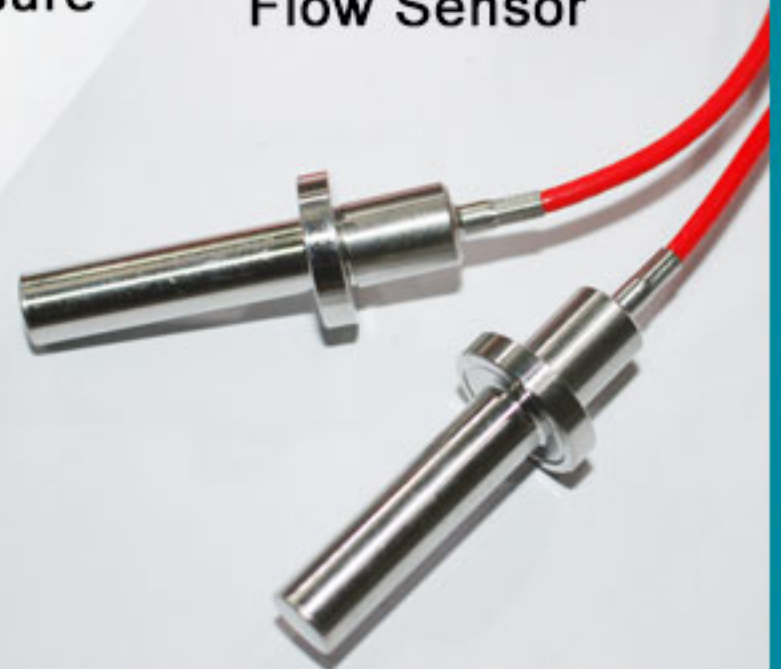
Intelligent flow meter integrates the flow sensor, micro-processor, pressure and temperature sensor together.



Absolute Pressure Sensor



PT1000 Temperature Sensor

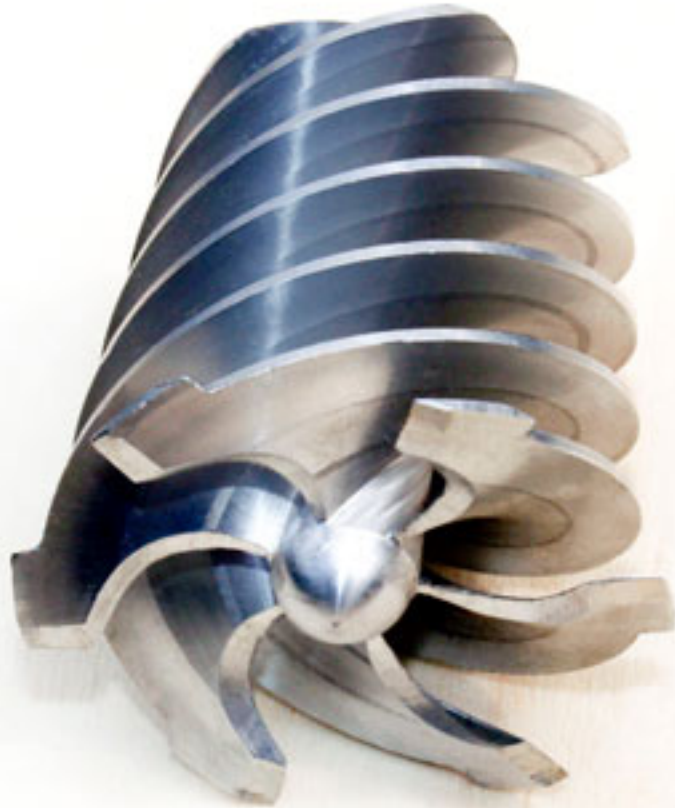


Flow Sensor

### Military Quality

Double flow sensor, enjoy excellent stability, high accuracy and anti-vibration performance

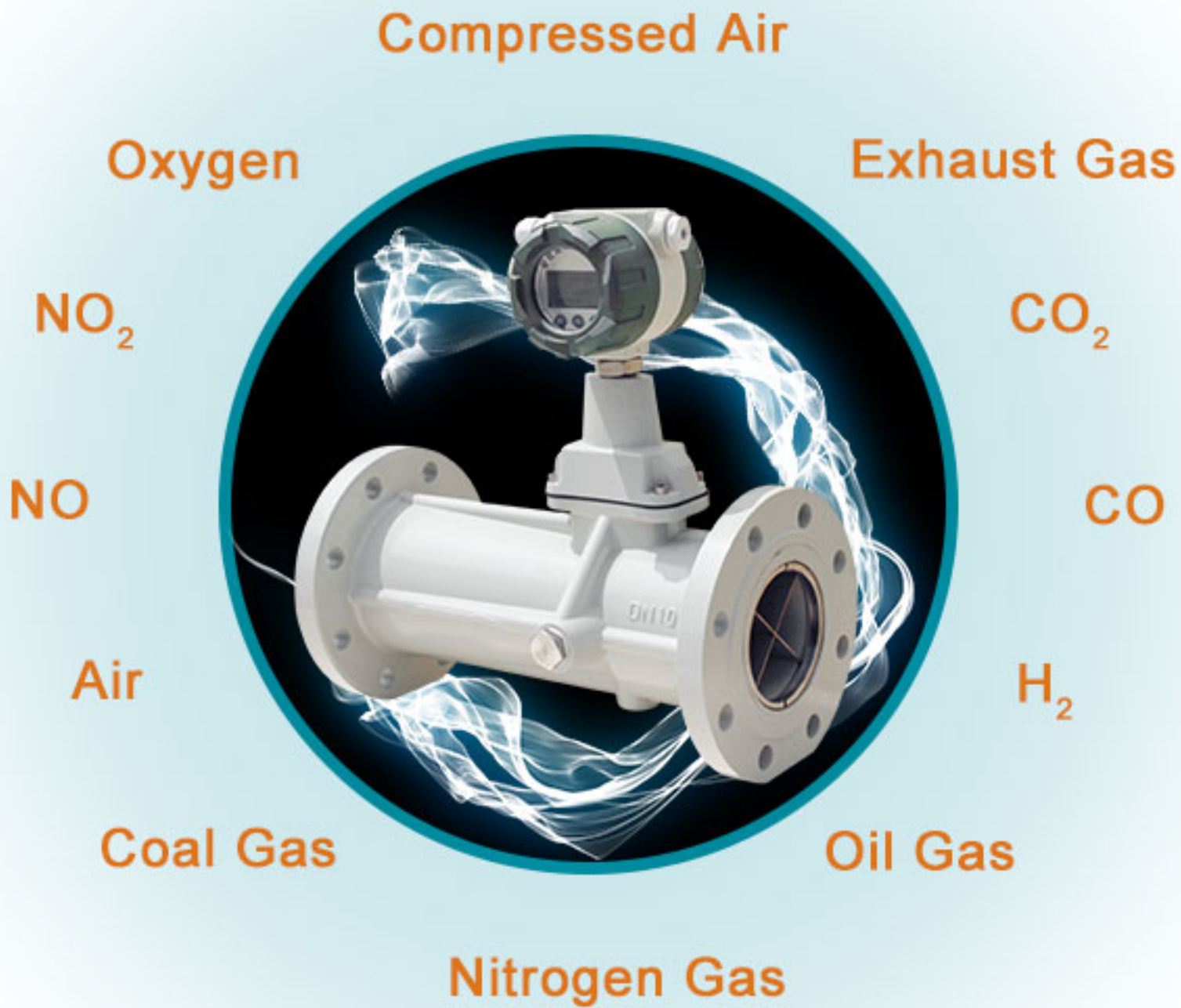
## 4. Swirl Generator



Minimize pressure loss based on fluid functionology design



## 5. Measuring Medium

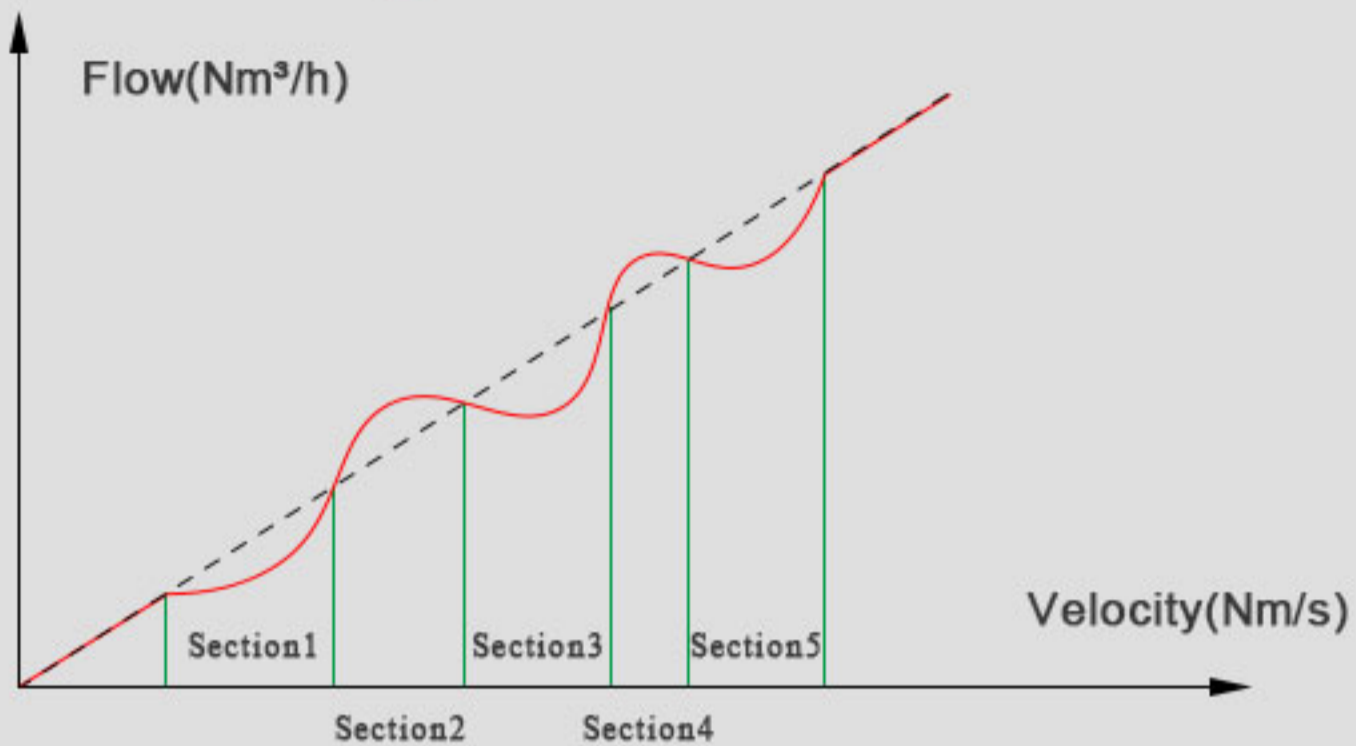


Remarks : Steam is not workable



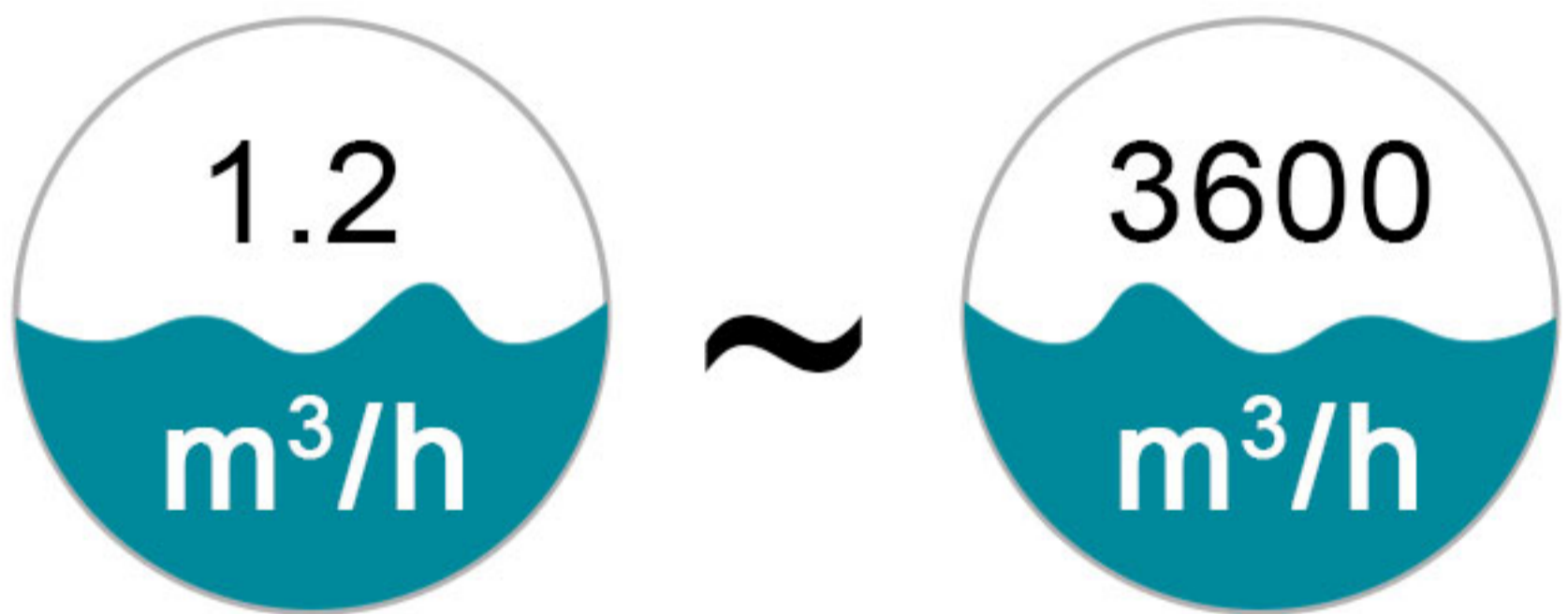
## 6. Segment Correction

### Precession Vortex Flowmeter Segment Correction



Can be divided into five sections for correction, this operation will make measuring more accurate

## 7. Flow Range

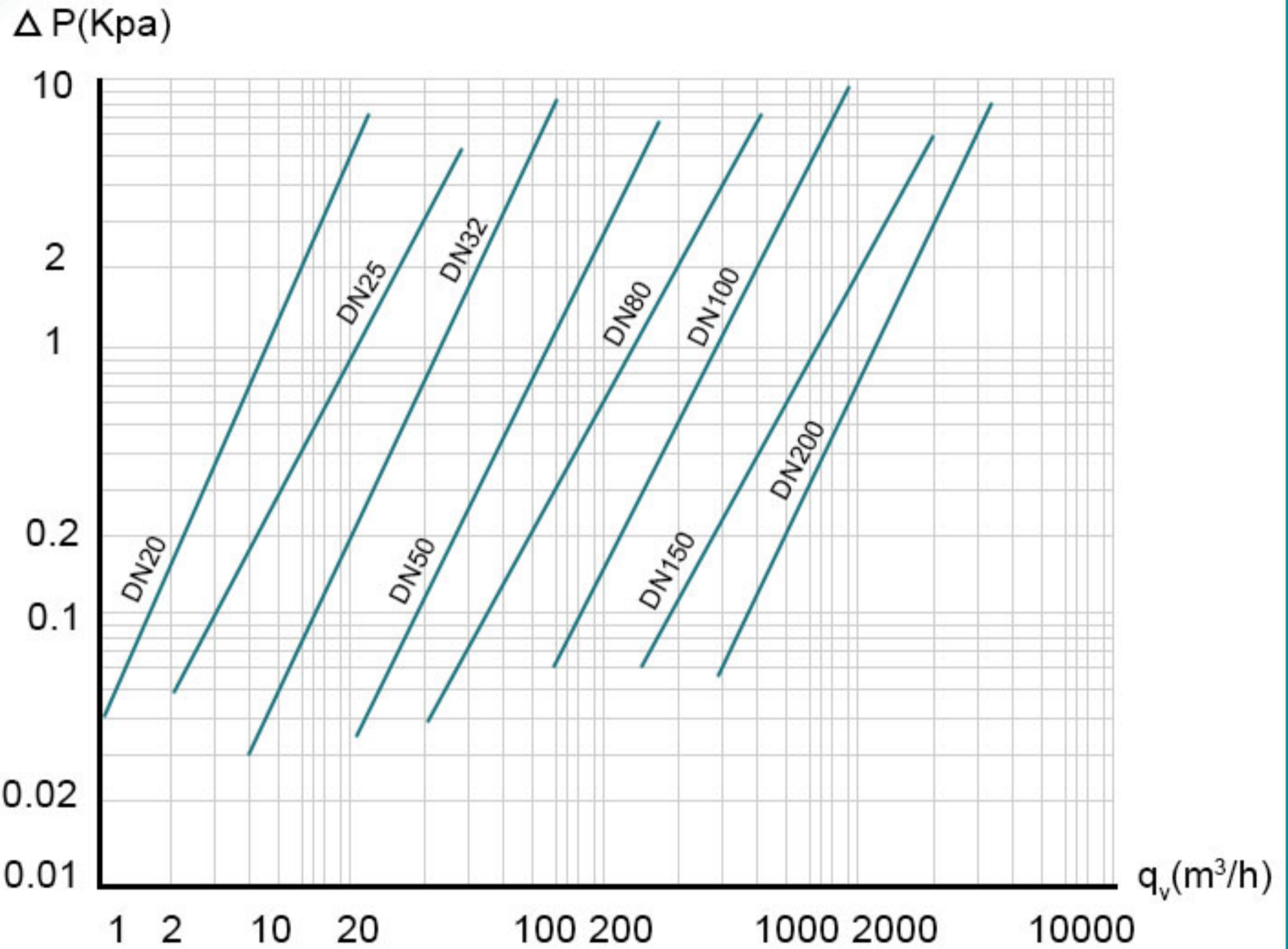


Precession vortex flow meter combines the swirl generator and swirl eliminator in the flow sensor, which can reduce the pressure loss, realize wider flow measuring range, upgrade measurement !

## Precession Vortex Flow Meter Main Technical Parameters

Caliber (mm)	20	25	32	50	80	100	150	200
Flow Range (m <sup>3</sup> /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 of basic error absolute value							
Working Pressure (MPa)	1.6Mpa, 2.5Mpa, 4.0Mpa, 6.3Mpa Special pressure please double check							
Application Condition	Environment temperature: -30°C~+65°C Relative humidity: 5%~95% Medium temperature: -20°C~+80°C Atmospheric pressure: 86KPa~106KPa							
Working Power	24VDC+3.6V battery power, can remove the battery							
Output Signal	4-20mA, pulse, RS485, alarm							
Applicable Medium	All gases (except steam)							
Explosion-proof Mark	Ex ia II C T6 Ga							

## Pressure Loss Curve



Flow meter actual pressure loss calculation formula like below:

$$\Delta P_1 = \frac{\rho}{1.205} \Delta P \dots \dots \dots (1)$$

## Installation Dimension Drawing

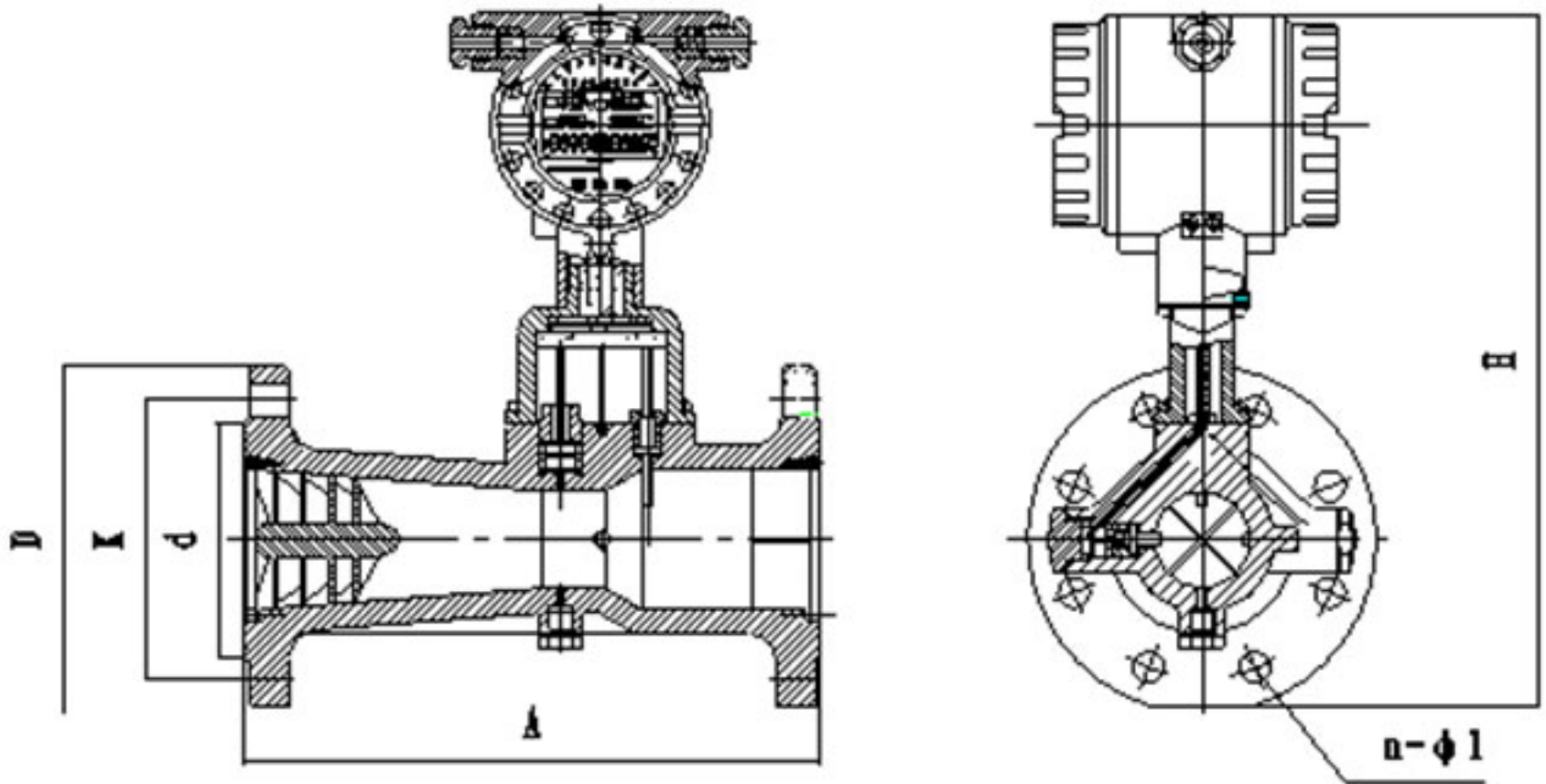


Table:

Unit: mm

Caliber (mm)	Length (mm)	PN1.6~4.0MPa						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													
		PN1.6MPa						※PN2.5~4.0MPa												
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							
		PN1.6MPa						PN2.5MPa						※PN4.0MPa						
200	700	470	340	295	12	22	266	490	360	310	12	26	274	510	375	320	12	30	284	

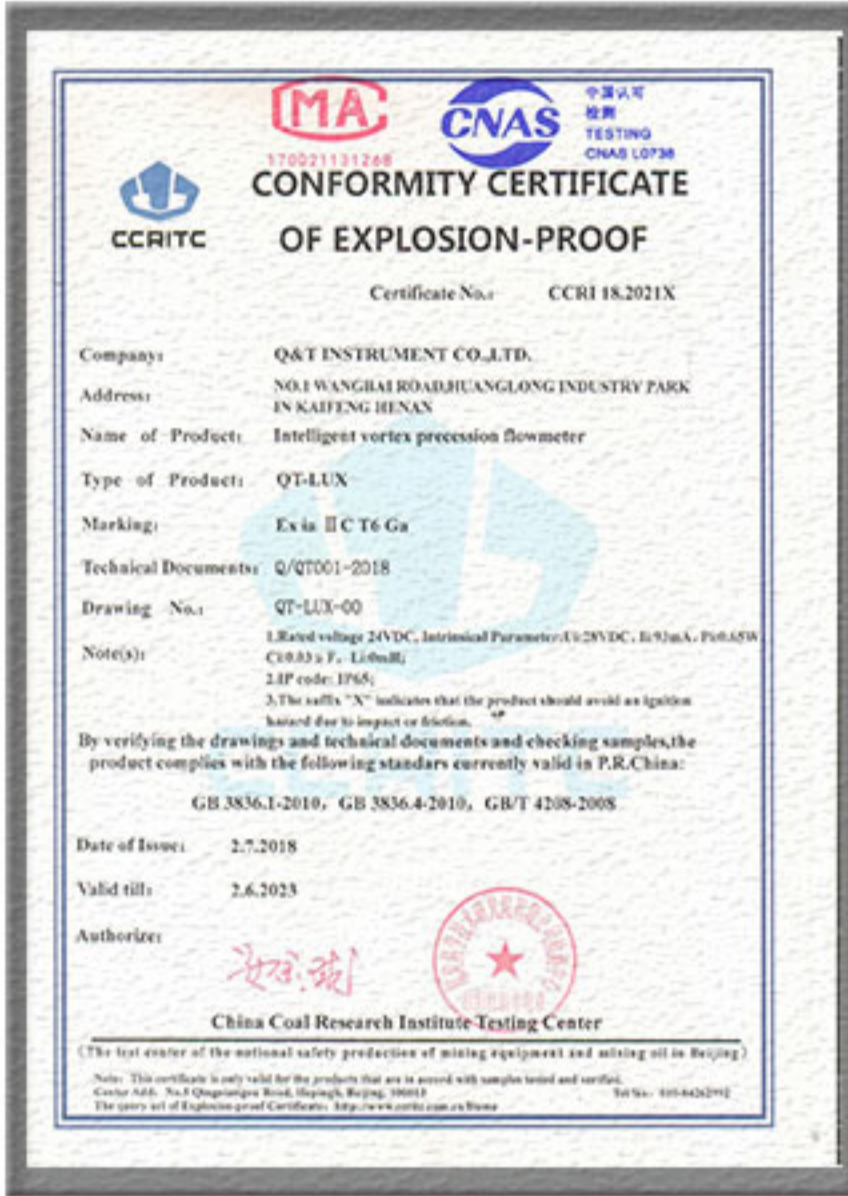
Note: ※ is special requirements.

## Strict Flow Calibration



Adopt the gas venturi sonic nozzle calibration device and submit the equipment for inspection and verification regularly, which could guarantee the accuracy more stable and reliable !

# Certificates



Precession vortex flow meter Ex-proof



Precession vortex flow meter CE



Enterprise Certificates



More than 100 patents

## Packing Of Products



Products ready for packing



ECO Packing

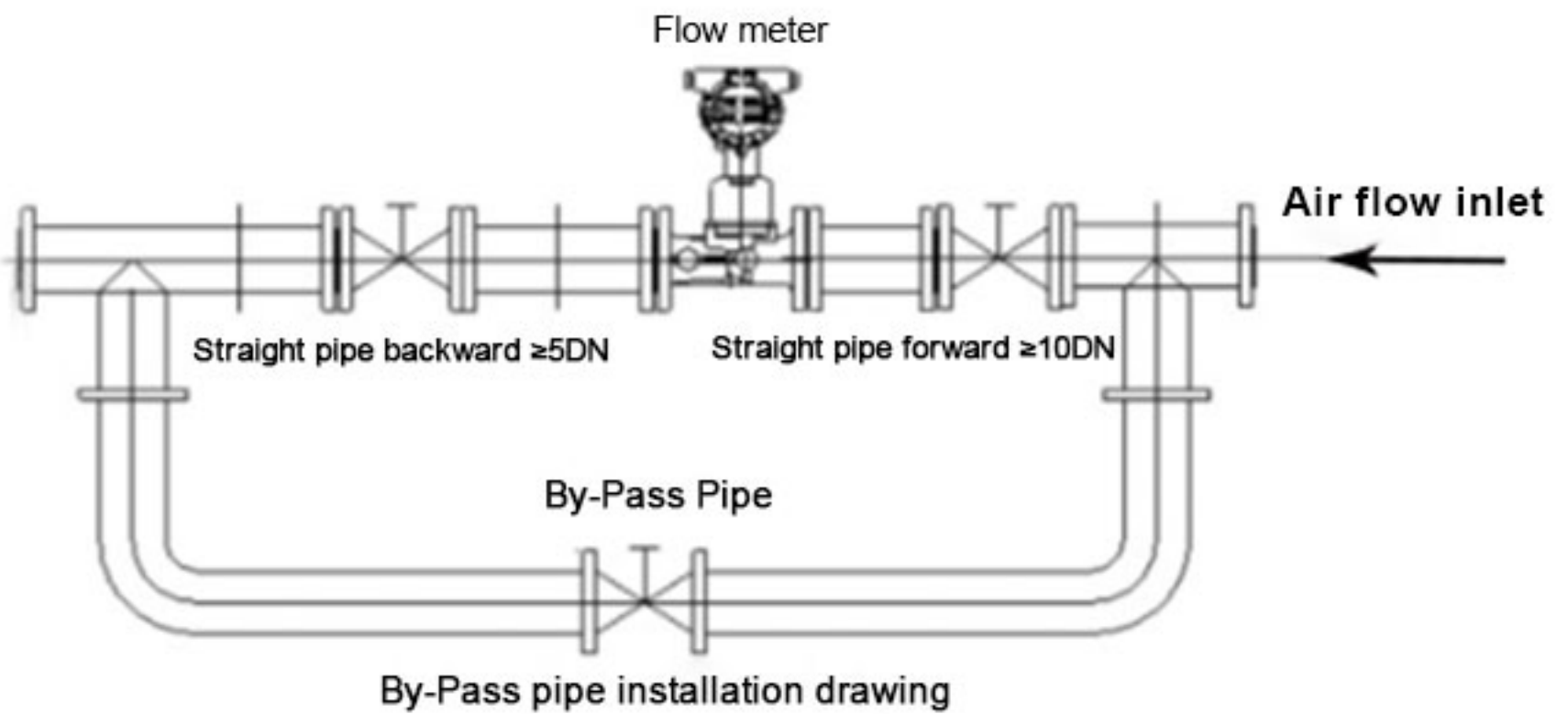


Enter the finished product warehouse and wait for transportation

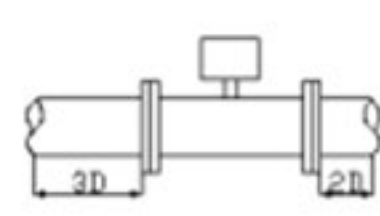
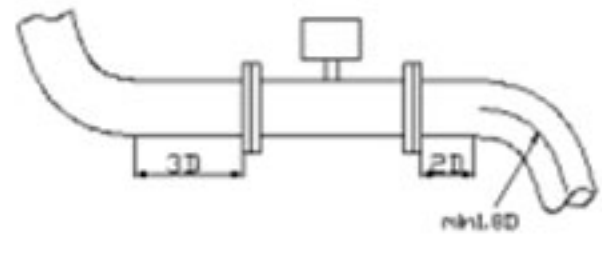
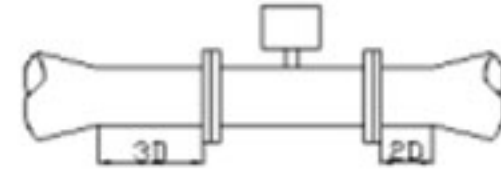
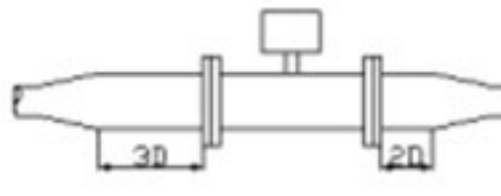
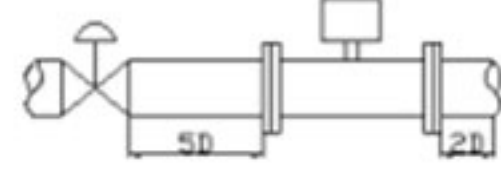
Products are multi-packaging, shockproof and anti-fall, ensure the safe delivery of goods to customers' hand

## Precession Vortex Flow Meter Installation

### Flow Meter Installation :



### Straight pipe line requirements :

Illustration	See below pic
Guarantee the upstream straight pipeline at least 3D, and the downstream straight pipeline at least 2D, see pic I. (D: Nominal Caliber)	I 
Bend Pipe: The required upstream straight pipeline at least 3D, the downstream straight pipeline at least 2D, see pic II.	II 
Reducing Pipe: The required upstream straight pipeline at least 3D, the downstream straight pipeline at least 2D, see pic III.	III 
Expanding Pipe: The required upstream straight pipeline at least 3D, the downstream straight pipeline at least 2D, see pic IV.	IV 
Valve: The required upstream straight pipeline at least 5D, the downstream straight pipeline at least 2D, see pic V.	V 

Straight Pipeline Requirement



# Trade Show

*Rich experiences in exhibition*

