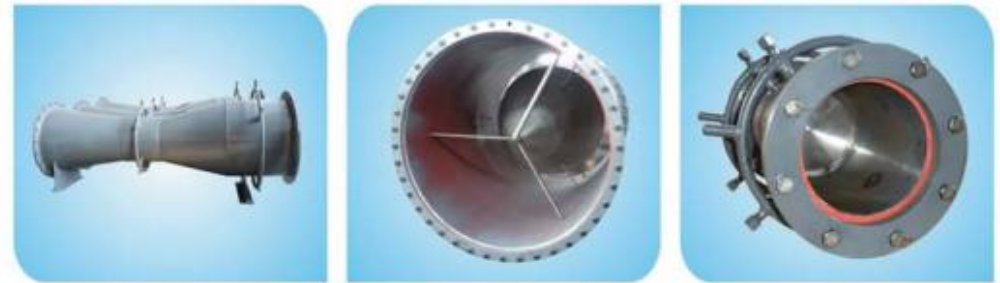
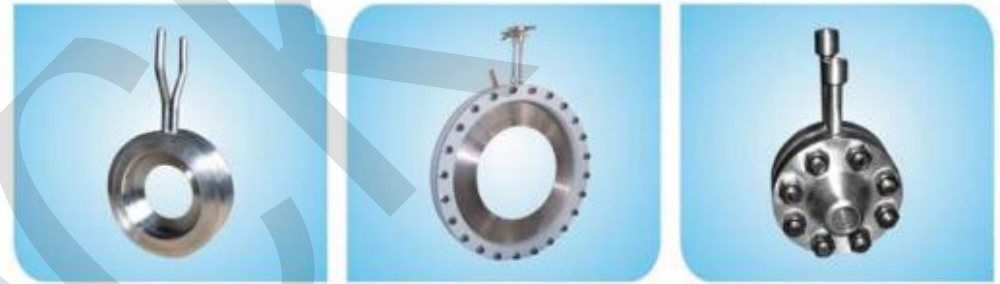
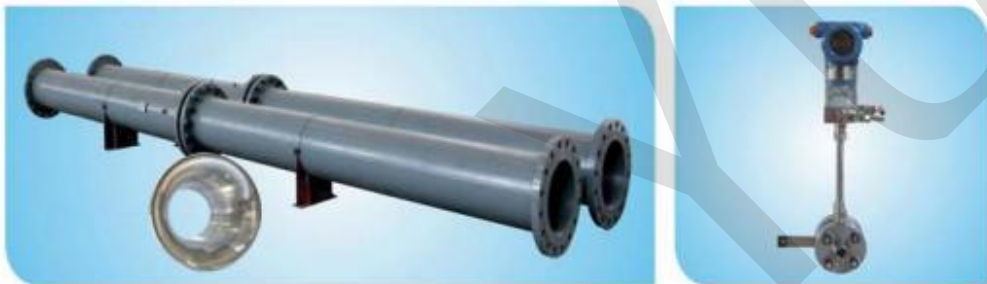
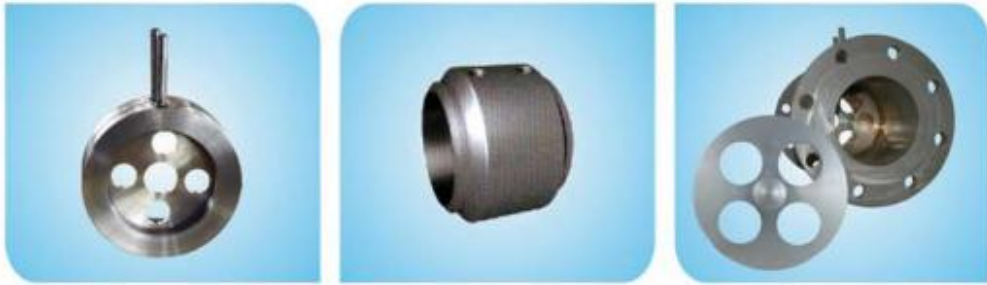




YUNOCK

product book

Flow chapter



SZDPT porous equalization flowmeter

1. High measurement accuracy

Measured calibration sensor accuracy: 0.3%

Geometric dimension calibration sensor accuracy: + 0.5%

2. Good repeatability and long-term stability

β Value: constant for a long time

Repeatability: $\leq + 0.1\%$

3. Straight pipe section

Requirements: the front and rear straight pipe sections are generally front 3D and rear 1D, and the minimum can be as low as front and rear 0.5d

4. Permanent pressure loss

Compared with ordinary orifice plate, the permanent pressure loss is reduced by more than 3 times

5. Substitutability

There is no need for any piping changes and related instrument changes.

6. Measuring range

The minimum Reynolds number can be as low as 200 and the maximum Reynolds number can be greater than 107

β Value: 0.25 ~ 0.85

7. Range specific width

Under normal conditions, the measuring range ratio of szdpt porous average street flowmeter is 10:1. Selecting appropriate parameters can achieve 20:1.

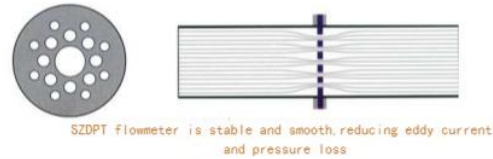
8. Measuring medium

It can measure gas, liquid and steam;

Mixed gas: gas, biogas and gas;

Low temperature gas: liquid nitrogen, liquid oxygen, liquid argon, liquid hydrogen, liquid chlorine, liquefied ethylene and liquefied petroleum gas;

Gas liquid two-phase medium: moisture, slurry, multiphase water flow, vibrating water flow and electromagnetic interference medium



SZAF adjustable symmetrical flowmeter

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1. Straight pipe section

Requirements: the front and rear straight pipe sections are generally 2D in front and 1D in rear, and 0.5d in front and 1D in rear

2. Measurement accuracy and repeatability

Linearity: 5 ~ 10 times higher than orifice plate

Repeatability: increased by 60%, $\leq 0.10\%$

3. Long term stability

β Value: stable

4. Wide measuring range and small permanent pressure loss

When the Reynolds number is greater than 50000, select appropriate aperture parameters. Szaf adjustable symmetrical flowmeter has no upper limit. According to the needs of practical application of industrial measurement, the conventional measurement range ratio is 10:1. Select appropriate parameters to 30:1, and the Reynolds number is between 200 and 107; β The value can be selected between 0.25-0.9, and the pressure loss is $1/2 \sim 1/5$ of the traditional throttling device.

5. Temperature and pressure parameters

Operating temperature $\leq 850\text{ }^{\circ}\text{C}$

Pressure $\leq 42.0\text{mpa}$



SZXT series anti blocking Wedge Flowmeter

1. Manufacturing inspection

At present, the manufacturers of flow meters manufacture and calibrate after calculation (only single point accuracy can be guaranteed), and the error is large in actual use. After the calculation, the company first carries out the test-bed model test, detects and modifies the model Until the experimental measurement accuracy meets the requirements, the flowmeter can be amplified and manufactured according to the wedge ratio of the corrected model and the guide angle of the wedge. In this way, the measurement accuracy of the flowmeter amplified and processed according to the scale can ensure 1%. When the user needs higher accuracy, the actual flow calibration can be carried out. The process parameters involved in the calculation of szxt flowmeter include: maximum / normal / minimum flow, working pressure, working temperature, medium state (gas or liquid, including or without solid particles, corrosive or not), viscosity, density, process pipe diameter, design range, pressure loss, etc.

2. Performance characteristics

Szxt series anti blocking wedge flowmeter has the advantages of simple structure, small maintenance, internal surface hardening treatment, small pressure loss, easy adjustment and wide application range. Szxt series anti blocking wedge flowmeter can be used for flow measurement of high-temperature and high viscosity media, especially suitable for wear and tear caused by solid particles and dust (such as catalyst and pulverized coal) It is easy to block the medium and can be used for two-phase medium Flow measurement.

3. Material selection

| | | | | | | |
|---------------------------|----------------|----------------------------------|-------------------------|-------------------------|--------------------------|----------------------------------|
| Pipe and flange materials | A-105 | A-105 | A-105+PTFE | SS321 | SS316 | SS321 |
| Wedge material | SS304SS321 | SS304 surfacing tungsten carbide | SS304+PTFE | SS316 | SS316 surfacing stellite | SS321 surfacing tungsten carbide |
| Trial media | General medium | Wear medium | Strong corrosive medium | Acidic corrosive medium | Corrosion and wear | Corrosion and wear |

4. Installation requirements

Szxt series anti blocking Wedge Flowmeter is generally installed horizontally, It can also be installed on the vertical pipe or inclined pipe: the pressure tapping interface nozzle of the instrument generally adopts 2 "flange nozzle or medium 14x 3 impulse pipe. During installation, if there are no special circumstances, the pressure tapping pipe (nozzle) is upward to facilitate the flow of solid particles under the wedge; however, for some special applications, the pressure tapping pipe (nozzle) of the instrument can also be used Install horizontally. Installation principle: when measuring liquid flow, solid particles shall not be deposited in front of the wedge; When measuring the gas flow, there is no liquid deposition. When gas can be precipitated in the liquid, there is no gas accumulation in front of the wedge. In order to make the fluid have a better flow state and ensure the measurement accuracy, before and after the pressure tap The length of straight pipe section shall be 3D after the first 5D (D is the inner diameter of the measuring pipe); If it cannot be met due to environmental constraints, at least ensure the front 3D and the rear 1D.

The differential pressure measurement of szxt series anti blocking Wedge Flowmeter generally adopts double flange diaphragm remote transmitter. When the temperature or pressure of the measuring medium is high, install the pressure cut-off valve: for the measuring medium with high temperature, install the condenser Medium temperature at the capsule; Add flushing oil ring for measuring high viscosity medium.

Corner ring chamber pressure tapping standard orifice (ISA 1932 nozzle)

Applicable pressure: \leq pN2 5Mpa

Applicable pipe diameter: DN20 - DN600mm

Usage and features: used for flow measurement, control and regulation of gas, liquid and steam. It has the characteristics of high measurement accuracy, low cost, simple installation and convenient maintenance.

Corner ring chamber pressure tapping standard orifice (ISA 1932 nozzle)

Applicable pressure: \leq pn6 3Mpa

Applicable pipe diameter: DN20 - DN600mm

Usage and features: used for flow measurement, control and regulation of gas, liquid and steam. It has the characteristics of high measurement accuracy, long service life and convenient installation and maintenance.

Corner ring chamber pressure tapping standard orifice (ISA 1932 nozzle)

Applicable pressure: pN2 5 - Pn42. 0Mpa

Applicable pipe diameter: DN20 - DN600mm

Application and features: it is applicable to the flow measurement, control and regulation of liquid, steam and heat supply network pipeline under high temperature and high pressure in power plant. It has the characteristics of impact resistance, difficult deformation of orifice plate or nozzle, high measurement accuracy and long service life.

Standard orifice plate for corner drilling and pressure tapping (ISA 1932 nozzle)

Applicable pressure: \leq pN2 5Mpa

Applicable pipe diameter: DN50 - dn2000mm

Application and features: suitable for flow measurement, control and regulation of gas, liquid and other media in large pipelines. It has the characteristics of high measurement accuracy, convenient installation and use and low cost.

Flange pressure tapping standard orifice

Applicable pressure: PN \leq 42.0mpa

Applicable pipe diameter: dn10 - dn2000mm

Application and features: suitable for flow measurement, control and regulation of various media in petroleum, chemical and other industries. It has the characteristics of high measurement accuracy, simple structure, convenient installation, use and maintenance.

Diameter distance pressure tapping standard orifice (nozzle)

Applicable pressure: PN \leq 6.3MPa

Applicable pipe diameter: dn10 - dn2000mm

Usage and features: it is used for flow measurement, control and regulation of dirty media under low working pressure. It has the characteristics of high measurement accuracy, convenient installation and use, good anti blocking performance and so on.

Radial distance pressure tapping long diameter nozzle

Applicable pressure: PN \leq 42.0mpa

Applicable pipe diameter: DN50 - DN600mm

Purpose and features: it is mainly used for flow measurement, control and regulation of high temperature and high pressure main steam, Main Feedwater or desuperheating water systems in power industry. It has the advantages of high measurement accuracy, impact resistance and small pressure loss. Long service life and other characteristics.

Throat pressure tapping ASME long diameter nozzle

Applicable pressure: PN \leq 42.0mpa

Applicable pipe diameter: DN50 - DN600mm

Application features: it is mainly used for condensate flow measurement of steam turbine performance test, and the integral welding type can also be used for main steam flow measurement of boiler. It has the characteristics of high measurement accuracy and good repeatability.

Machined Venturi

Applicable pressure: PN \leq 42.0mpa

Applicable pipe diameter: DN50 - dn200mm

Application and features: suitable for flow measurement, control and regulation of gas, liquid and other media in various industries under high pressure. It has high precision and small pressure loss. The front and rear straight pipe sections have the characteristics of low requirements and long service life.

Rough welded Venturi

Applicable pressure: PN \leq 6.3MPa

Applicable pipe diameter: DN200 ~ dn3000mm

Application features: suitable for gas flow measurement, control and regulation with large pipe diameter and large flow. With low pressure loss. The front and rear straight pipe sections have the characteristics of low requirements and long service life.

Circular perforated plate

Applicable pressure: PN \leq 6.3MPa

Applicable pipe diameter: DN50 - dn3000mm

Usage and features: it is applicable to the flow measurement of dirty gas media, such as gas, flue gas and other media. It makes it easier for media containing precipitated impurities or coal tar to pass through the orifice plate, so as to achieve the purpose of not affecting the measurement accuracy.

Annular orifice

Applicable pressure: PN \leq 6.3MPa

Applicable pipe diameter: DN50 - dn3000mm

Application and features: it is mainly used for flow measurement of industrial fluids containing dust, suspension and sediment, such as blast furnace gas, coke oven gas, water gas, flue gas and other media. It has the characteristics of stable measurement signal, good anti blocking and sewage discharge performance, small front and rear straight pipe sections, etc.

Concentric sharp orifice plate

Applicable pressure: PN ≤ 42.0mpa

Applicable pipe diameter: DN50 - DN600mm

Application and features: suitable for flow measurement, control and regulation of various media in petroleum, chemical and other industries. It has the characteristics of high concentricity, good sealing, convenient installation, use and maintenance.

Lens pad hole plate

Applicable pressure: PN ≤ 42.0mpa

Applicable pipe diameter: dn10 - dn400mm

Application and features: it is mainly used for flow measurement of gas and mixed gas under high pressure. It is widely used in chemical, petrochemical and other industries. It has high concentricity and good sealing performance Accurate measurement and other characteristics.

Circular orifice plate

Applicable pressure: PN ≤ 42.0mpa

Applicable pipe diameter: DN15 - dn200mm

Application and features: suitable for flow measurement, control and regulation under the requirements of low pressure loss. It has the characteristics of impact resistance, not easy to deform, high measurement accuracy and small pressure loss.

Orifice plate

Applicable pressure: PN ≤ 42.0mpa

Applicable pipe diameter: dn10 - dn2000mm

Usage and features: it is used to limit the flow of medium and reduce the working pressure. It can be divided into single-stage current limiting and multi-stage current limiting according to the pressure reduction. Quantity. It has the characteristics of stable measurement signal, good anti blocking and sewage discharge performance, small front and rear straight pipe sections, etc.

Elbow flowmeter

Applicable pressure: PN ≤ 42.0mpa

Applicable pipe diameter: DN50 - dn3000mm

Usage and features: used for flow measurement, control and regulation of gas, liquid and steam. It has the characteristics of low cost, simple installation and no requirements for the front and rear straight pipe sections. It can be directly used as an elbow in many application sites.

annubar flowmeter

Applicable pressure: PN ≤ 10.0MPa

Applicable pipe diameter: DN50 - dn3000mm

Application and features: it is suitable for flow measurement, control and regulation of large diameter and large flow circular and rectangular pipes. It is widely used in air volume measurement. It has the characteristics of small pressure loss, simple and convenient installation and small welding quantity.

Integrated flowmeter

Applicable pressure: PN ≤ 42.0mpa

Applicable pipe diameter: dn10 - dn2000mm

Application and features: suitable for flow measurement, control and regulation of various media. If it is always used for measurement, it needs to be calibrated separately. It has the characteristics of stable measurement, high measurement accuracy, on-site display and remote signal transmission.

V-Cone flowmeter

Applicable pressure: PN ≤ 6.3MPa

Applicable pipe diameter: DN25 ~ dn2000mm

Usage and features: suitable for flow measurement, control and regulation of any medium, especially dirty medium and high viscosity medium, such as heavy oil. Gas, natural gas, etc. It can reduce the flow and turbulence, and the pressure loss is small. It has the characteristics of large range ratio, low requirements for front and rear straight pipe sections and high precision.



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