CHENXUAN VALVE

MANUFACTURING CO., LTD.

辰轩阀门
CHENXUANFAMEN

PRODUCT CATALOG 2019

Company profile

Shandong Chenxuan Valve Manufacturing CO.,Ltd. Is specialize in design, develop and manufacture new type self operated pressure regulating valve and various process control valves. Yari Valve has a talented team which worked on self operated control valve for decades of years, we always keep the principle that "people-oriented and endless innovation", we adopt advanced mechanical process equipments and perfect examine devices, make sure all product are qualified in every procedure. Our main product includes:self operated pressure/differential pressure/flow/ temperature regulating valve Electric regulating valve pneumatic (electric) high pressure regulating valve and bellow sealed regulating valve series, and so on Pneumatic (electric) fluorine lined regulating valve We insist "Credit first, quality first", we have large experience on petrochemical, city heating supply, heating pipeline network and other various industries, we can provide professional, reliable, quick and flexible engineering service for clients, minimum client's worry and maximum return on investment. Our products are widely used in petroleum, chemical, metallurgy, paper, medical, building air conditioning, water supply, light industry and other industries, these products are well sold in other countries and districts.

We are professional control valve manufacturer .

We offer control valve , regulating valve , pneumatic control valve,Outdoor temperature sensor,temperature sensor and related assemblies .Integrated research and development, design, production, sales and service.

Our biggest advantages :

1. Quality :Highly professional production team, high quality raw materials with 100% guarantee, and excellent consistency!

2. The unique technology is specially based on the development of some laboratories and mass prooduction lines and was regarded as the world's most advanced ,leading domestic level . we surpass competitors for quality, reliablility and design.

3. Competitive Price : Direct manufacture of valves,direct profit to customers.

4. Short Delivery term:Delivery term 2-5 days shorter than the industry average! Excellent, efficient processes and flexible machine process controls!

目录

Non negative pressure water supply

The bidirectional compensator starts to work, the high-pressure water pump outler to the higeh-pressure chamber end to water, when the liquid nitrogen increased gradually ,with pressure being squeezed back to the energy storage device,thus completing the process of the low peak to the tank water,whenthe peak of water drop or municipal pipe network pressure,the release of energy storage device extrusion high pressure chamber water,together with the constant pressure cavity to the user with municipal water replenishment,thus completing the process of peak water to users.

3 energy storage

Ni trogen energy storage builtin preloading are not soluble inwater, when the peak of water, energy re lease l hi g h pressure l chamber water pressure to the extrusion cavity ne twork, make

full useof the principle of the law of conservation of energy, to achieve the peak water users, to ensure the water in the potto the greatest degree l of compensation l to the user in the network, suppression of negative pressure generated, guarantee l wi thout affecting the municipal pipe network.

3 control points edit control techno logy

Non negative pressure water supply system is set to a cons tant pressure value, if the pipe pressure is hi gher than the set pressure value, the pressure transmitter pipel ine pressure feedback to the frequency convers ion contro

*l cabinet, tap waterby direct supply pipeline directly to the user on the user wate*r

supply pipe network. When the water changes the pipe pressurebelow the l set pressure of the pressure of the mu nicipal pipe

network or network users, pressure transmitter pipel ine pressure feedback to the controller PID frequency conv ersion control cabinet, adjust the output frequency of inverter through UPC watchdog control ler, and start the water pump control pump speed to maintain a cons tant pressure water supply ;if the tap water can not fully mee t the (water or all) requi rements, the central contro l center will be ad justed to control multiple frequency pum p start stop and pump speed to the maximum extent to meet users requirement of water supply.

Negative pressure techni que

The non negative pressure water supply system adopts the mi crocomputer frequency conversion techno logy and the effective negative pressure treatment technology to real izethe pressure superposed water supply. Through the vacuumcompensation system and the l fully enclosed struc ture, the

equi pment real izes the direct connection with the water pipe ne twork, and overcomes the adverse influence on the pipe ne twork. The device through the pipe pressure gauge, vacuum and water level signal, and the steady flow compensator in a vacuum suppressor compensator in the test device l for collecting

real-time feedback through the microcomputer control device, special vacuum suppressor and the steady f low compensator, suppression Of negative pressure generated, ensure l that the

equipment does not affect the city network.

The system is directly connected with the municipal water supply network , and the water supplu will not cause negative pressure to the municipal water supply network. When the municipal pipe network pressure drops even without water , the pump unit can still work ,and out of the water until the time variation of the steady flow compensator in the negative (watchdog) or by a simple low level control mode when the water pressure decreases to elctrically contact the set lower limit pressure after the automatic shutdown, automatic starting after the runoff . When the power failure occurs, the water pump unit stops working, and the tap water can enter the use's pipe network through a through pipe , When calling ,the unit will automatically turn on and resume normal water supply .
Automatic pressure compensation technique
According to the system resistance characteristic , when the flow rate is bigger, In order to meet the system in maximum water when there is enough head to overcome the resistance of the system general manufacturers in setting the system pressure only by the maximum flow tate of the pressure required to set up ,when the small flow fo water pressure caused by excessive waste of energy. According to the set pressure automatic regulating system with the change of water , running at low pressure value in the small flow of water ,along with the incresse of water consumption , the system according to the hydraulic characteristics , the use of the system pressure increases gradually .Thus , the electric energy is saved to the maximum extent.
4 scope of application edit
1 , the user original pressurization system energy conservation ,consumption reduction transformation .
2, various types of reclaimed water , sewage and wastewater treatment plants;
3, all types of waterworks ,feed pressure pump station;
Constant pressure oil system
4,oil pipelines, oil depots , oil pump station ,oil etc ;
5,non negative pressure water supply equipment is also applicable to all kinds of industrial and mining enterprises production water (such as circulating cooling water ,industrial boiler water, industrial boiler water supply system and so on ,need constant pressure production water);
6, hige-rese buildings, residential areas ,enterprises and institutions ,such as life ,fire water supply system ,HVAC, centeal air conditioning cycle and separation
5, advantages and disadvantages ,editng advantages
1., make full usd of the city pipe network pressure ,greatly save energy.
2 . avoid the two plllution of water .
3. save floor space.
4. save investment .
5. convenient maintenance
6. save operating costs
7. keep constant pressure
8. blackouts,continuous water.
Shortcoming

Non negative pressure water supply has certain shor tcomings,because no non negative pressure water tank can st ore water , but the amount is very small, when the municipal pipe network water, users will soon wi thout water us e, so in the choice of non negative pressure water supply, can also consider non negative pressure water suppl y equi pment box, stainless steel water tank assembly increase based on non negat1 ve pressurewater supply the unit is available from a few to thousands of the reserves, to meet the di fferent needs of cus tomers.

6 other water supply seven edit 1. pollution: tap water mustfirst into the pool or water tank, poor sealing perform ance,are always contaminated by debris, dirt and even ani ma l
carcasses, wi ll produce scale and bacteria, seriously affects l the health of users.
2. , high inves tment: the need to build pool or water tank, high construction costs.
3., large land: the need to build a pool or water tank, equi pment
covers a l arge space, wil l occupy a large number of commercial land, reduce revenue.
4. , high energy consumption: because the tap water must be put linto the pool or water tank, and then pressur i zed, resulting in municipal pipe ne twork pressure utilization is zero, ser iously wasting energy.
5., waste ser ious : most of the pool use of civil struc ture,
often occur seepage, running, l eakage and other phenomena, due lto serious pol lution, but al so need to use a l arge number of regular water l for cleaning, waste ser ious.
6. installation: to build complex water tank or pool, complex l installation, long cons truction period.
7., hi gh maintenance costs: regular cleaning, disinfection and other maintenance work, late cleaning and maintenance costs.

FCU Room Thermostats

Chenxuan display thermostat, is applied to a two water control systemor wind system. By comparing the results of temperature control ofambient temperature and setting temperature, coil control air conditioning system and electric valve, electric valve or valve workingcondition, in order to regulate the environmental temperature, comfort and energy efficiency.

The digital display thermostat adopts microcomputer control technology,especially the large LCD display, which is elegant and easy to use. It canchoose the heating / cooling mode and set the required indoortemperature through the key.

Picture	Model	**Basic function**
	CX-01	1.indoor temperature setting 2.temperature calibration work 3.indoor set well display 4.low temperature protection functions. 5.cold and warm mode switching 6.manual or automatic fan threespeed conversion 7.key locking 8.EOM

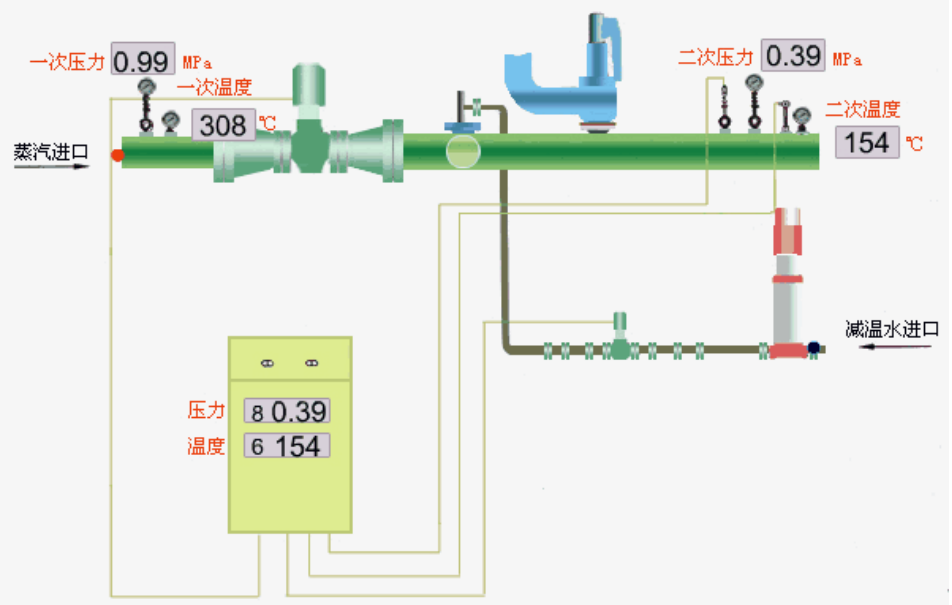
	CX-02	1.indoor temperature setting 2.temperature calibration work 3.indoor set well display 4.low temperature protection functions. 5.cold and warm mode switching 6.manual or automatic fan threespeed conversion 7.key locking 8.EOM
	CX-03	1.indoor temperature setting 2.temperature calibration work 3.indoor set well display 4.low temperature protection functions. 5.cold and warm mode switching 6.manual or automatic fan threespeed conversion 7.key locking 8.EOM
	CX-04	1.indoor temperature setting 2.temperature calibration work 3.indoor set well display 4.low temperature protection functions. 5.cold and warm mode switching 6.manual or automatic fan threespeed conversion 7.key locking 8.EOM
	CX-05	1.indoor temperature setting 2.temperature calibration work 3.indoor set well display 4.low temperature protection functions. 5.cold and warm mode switching 6.manual or automatic fan threespeed conversion 7.key locking 8.EOM

Special function

Sleep function timing switch Blue backlight function

Operation desription

Temperature and pressure reduction device system



I. The principle of temperature reducing device

The temperature and pressure reduction means for reducing the temperature of high-temperature steam to the steam parameters necessary for a user, including a temperature reducing device and a pressure reducing device.

chenxuan TP series temperature reduction and decompression device is designed with advanced foreign technology. Its unique design can meet the needs of the production process site. For example, the production process site generally requires pressure and temperature remain stable when load changes to ensure that the downstream use of steam equipment normal operation and to avoid quality accidents.

The decompression device is a part of decompressing the high-pressure steam to the user's desired pressure. The pressure sensor, pressure controller, multi-function controller, and throttle device are installed on the downstream of the steam pipeline. After monitoring the decompressed steam pressure, the PI (Proportional Integral) mode regulates the opening of the valve. The downstream steam pressure can remain stable when the upstream pressure and the downstream load change.

The desuperheating device is the realization part of the steam temperature reduction, which is composed of a desuperheating body and a desuperheating water system. The desuperheating body directly accesses the steam pipe.

The desuperheated water is pumped into the desuperheating body by the high pressure of the pump. The atomized fine water droplets are sprayed through the nozzles mix with the superheated steam, gasify so that it can absorb the heat energy of the superheated steam and reduce the temperature of the superheated steam.

Imported professionally designed nozzles are made of stainless steel, with rotating blades inside. The water droplets are forced and forcefully supported. The screw movement is uniform, and the particles are fine and uniform. The atomization effect is remarkable.

According to the feedback signal of the downstream temperature sensor, the control system PI mode adjusts the waterway regulating valve and also adjusts the desuperheating water volume to bring the steam temperature closer to the set value.

II. The main features

- The temperature-reducing probe is directly inserted into the steam pipe, which has a compact structure and exquisite workmanship.
- US imports of special nozzles, desuperheated water spray uniform solid cone, atomized particles small, the largest particles 300μ, bearing screw movement, is conducive to steam absorption, effectively avoid cavitation / flashing.
- Fully suitable for steam flow changes in the field, steam flow change ratio up to 20:1.
- The desuperheater probe is made of stainless steel material, which has strong anti-fatigue ability, impact resistance and long service life.
- The desuperheating water control valve and actuator are imported from Germany. The performance is stable and the action is sensitive.

III. Technical requirements

★When the steam temperature is lower than the saturated steam temperature, the desuperheated water will no longer evaporate. We recommend that the desuperheated steam be at a temperature above the minimum 5°C saturated steam to obtain dry steam.

★The desuperheated water is condensed water or demineralized water, and the desuperheating water pressure is higher than the steam pressure by a minimum of 0.4 MPa, so that the desuperheated water achieves the best atomization effect.

The temperature-reducing and pressure-reducing device is equipped with a well-functioning thermal control cabinet, which can control the steam temperature, pressure, and temperature-reducing water pump, and can realize the following functions:

- Downstream steam temperature automatic control
- Downstream steam pressure automatic control
- Steam high temperature alarm
- Steam high pressure alarm
- Automatic power-off protection, closing the pressure reducing valve
- Cooling water pump start/stop button

IV. The alarm function

Multifunctional digital controller with complete alarm function

- temperature limit alarm
- Lower temperature alarm
- Pressure limit alarm
- Lower pressure alarm

V. Features

- Streamlined design, beautiful, standard GGD production
- Original imported Siemens controller, high control accuracy, stable and reliable
- Can add touch screen according to user needs
- According to user needs to increase communication capabilities
- Compact structure, simple operation, and full realization of "unattended" function

➢ Internal electrical components mainly use German Siemens, Merlin Gerin, and strive to reliable electrical operation

VI. Protection class

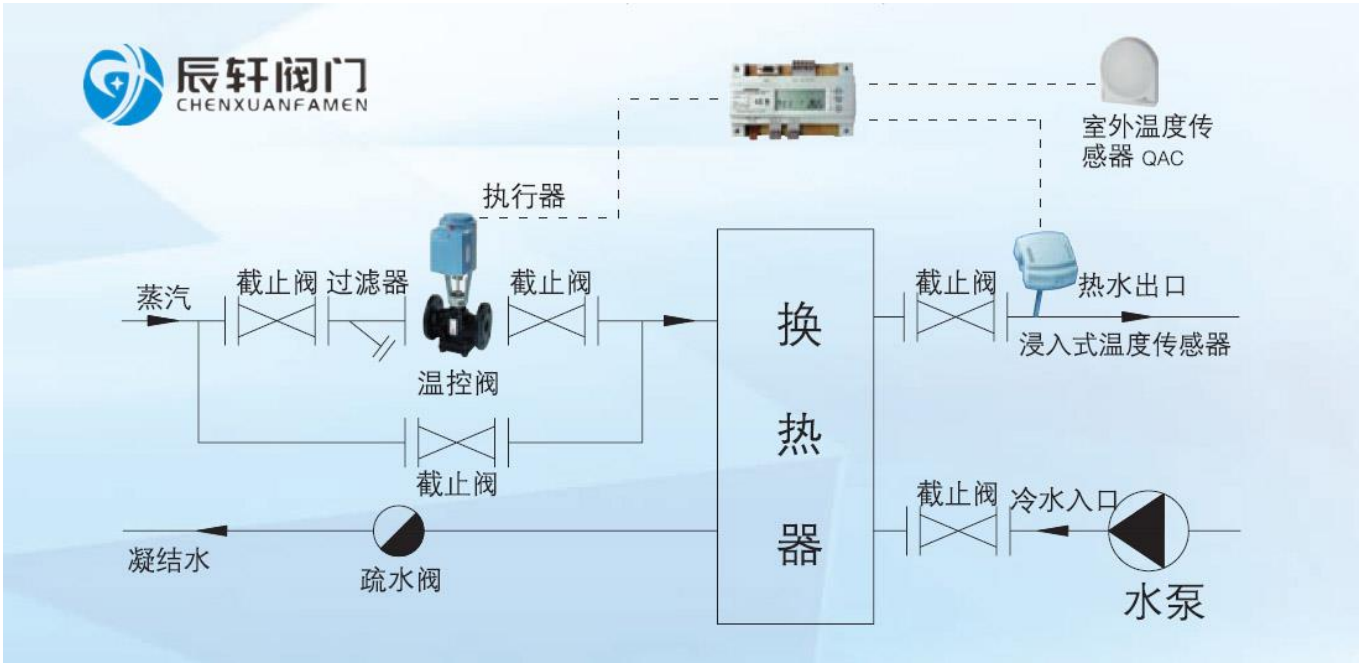
Complies with IP54 standard, the controller can work in harsh environmental conditions

1. Smooth regulation in the range of flow of 10 to 100°C.
2. Export steam pressure P2: adjustment accuracy is not less than 1.0.
3. Export steam temperature T2: adjustment accuracy is not less than 1.5
4. Noise: In the normal operation, one meter downstream of the temperature reducing and pressure reducing valve, and one meter away from the pipeline, the noise is less than 80dBA.

VII. The implementation of standards

1.《Temperature and pressure reduction device technical conditions》JB/T6323-92
2.《Power station valve technical conditions》JB/T3595-93
3.《Pipe flange Technical conditions》JB/T74-94
4.《Pipe flange type》JB/T74-94
5.《Asbestos Rubber Gasket for Pipe Flange》JB/T87-94
6.《Convex panel type flat welded steel flange》JB/T81-94

Working Principle of Electric Temperature Control Valve



Electric temperature control valve is a typical application of electric flow control valve in the field of temperature control. Its basic principle is to control the outlet temperature of equipment by controlling the inlet flow of heat exchanger, air conditioning unit or other heat and cold equipment and primary heat (cold) medium. When the load changes, the flow rate is adjusted by changing the valve opening degree to eliminate the influence caused by load fluctuation and restore the temperature to the set value.

Classification of Siemens Temperature Control Valves

A、 Siemens original - electric temperature control valve

B 、mixed installation (Siemens) - electric temperature control valve (with valve body manufactured by Shandong chenxuan)

Composition of Siemens Temperature Control Valve

Controller:

Accept the temperature signal and output 0...10V control signal through P/PI/PID operation. Common models of Siemens controllers include RWD60 \ RWD 62 \ RWD68 \ RLU36 \ MZ730 - b, etc.

Actuator:

Accept the adjustment signal sent by the controller, accurately adjust the valve opening, stable operation, optional power-off reset, 3P or analog adjustment, 230DCV or 24DCV power supply. The common models of Siemens actuators are SUA21\SQS65\SSC85\ SAX61\SKD62\SKB62\SKC62, etc.

Valve body:

The executor that regulates the flow of medium is matched with the executor to form an electric regulating valve. Siemens valves are divided into: copper valves, cast iron valves, ductile iron valves, cast steel valves; According to the connection mode, it can be divided into: threaded connection and flange connection valves; According to the medium used, it can be divided into water valve and steam valve. Diameter DN10 ... DN150.(chenxuan DN15-DN300)

Sensors:

The temperature of the medium is measured in various types. According to the installation position, it can be divided into immersion temperature sensor, binding temperature sensor, air duct temperature sensor, indoor temperature sensor, outdoor temperature sensor and other types.

Characteristics of Siemens Temperature Control Valve

Advantages:

A．with proportional integral (PI) or proportional integral and differential (PID) adjustment functions, the control is stable and accurate.

B． aiming at different field working conditions, the control parameters can be flexibly adjusted to achieve system optimization.

C．the controller can read the current temperature value and observe the working state of the valve.

D．Extensible functions, such as remote setting, temperature compensation, overtemperature alarm, heat metering, automatic meter reading, remote transmission, etc.

E． most models can be operated manually when power is cut off.

Features:

1. Siemens temperature control valve controller is easy to install and debug and does not require expensive debugging and field programming costs.

2. The controller automatically adjusts the water flow in the primary valve according to the secondary side outlet water temperature to achieve the effects of comfort and energy saving. The outlet water temperature of the heat exchanger is compensated and changed according to the outdoor temperature, so that users feel comfortable in the use process, and the strange circle that the higher the outdoor temperature is, the higher the indoor temperature is, and the lower the outdoor temperature is, the lower the indoor temperature is is is avoided. On the premise of comfortable use, users can save operating costs, reduce operating costs and obtain considerable economic benefits.

3. According to different use sites, especially unattended workstations, the extension function of multi-function controller can be selected to support the control of water pump, flow rate, pressure difference, and alarm for faults in operation.

4. The valve body adopts advanced pressure feedback device, which solves the problem that the use of electric regulating valve has been affected by high pressure drop for a long time. It has a wide range of applications, can be used for production and automatic control in various industries such as chemical industry, petroleum, metallurgy, electric power and light industry, and is suitable for heat exchange occasions such as air conditioning, refrigeration, ventilation, heat supply, etc.

5. Electric valve actuator adopts patented hydraulic control technology of Siemens Building Technology to realize large thrust, long service life, safety and stability, and can effectively save user investment.

6. Add an outdoor temperature sensor to realize outdoor temperature compensation, which can save energy and reduce operating costs.

Common Knowledge of Siemens Temperature Control Valve Selection

1. The valve material, flow capacity and actuator shutoff force shall be comprehensively considered according to the type of heat medium (steam / hot water), temperature, pressure parameters and operating conditions (heat exchanger type, opening / closing system).

2, when used for steam flow control, generally refers to 98 % dryness of saturated steam. If it is superheated steam, due to the change of steam adiabatic index k and the corresponding change of fluid viscosity coefficient, it is generally necessary to recalculate and check.

3. The medium flow rate has a square root relationship with the differential pressure before and after the valve. Excessive pressure difference not only produces noise, but also has cavitation effect on valve body, affecting service life. The light ones are not tightly sealed, and the heavy ones may explode, causing casualties and other major accidents.

4. Excellent temperature regulation curve is the guarantee to realize temperature control effect. Except for the special requirements of the fast thermal system, the valve shall be of equal percentage or parabolic type as far as possible.

Equal percentage: q / qmax = r (l / lmax - 1)

Parabolic: Q/Qmax=1/[1+ (r - 1 under radical) l / lmax] 2

5. Electric temperature control valve shall not be used as stop valve for a long time. Please shut down when stopping the machine.

6. The two-way valve must not be used as a three-way valve by removing the blind plate on the valve base.

7. When using equipment produced by a third party to match Siemens products, attention should be paid to meeting safety requirements.

8. The temperature control valve cannot use a direct water supply system and must be circulated. If it is an instant heat exchanger, a heat storage tank must be added.

9. When working in domestic hot water, please distinguish between 24 - hour hot water supply and regular hot water supply.

Precautions for Use of Siemens Temperature Control Valve

Influence of Environmental Humidity

- the allowable environmental humidity of the actuator shall be ≤ 95 % r h, and there shall be no moisture or dew - beware of leakage and leakage of pipelines and equipment in the machine room

- Pay attention to secondary volatilization of condensed water

- Keep the machine room ventilated or regularly ventilate and exhaust air.

- Pay attention to rainproof doors and windows, building leaks

Influence of ambient temperature

- Allowable ambient temperature of actuator ≤ 55 ℃;

- valve body, heat exchanger and pipeline shall be kept warm;

- Keep the machine room ventilated or take regular ventilation;

- Avoid direct sunlight.

Faults Caused by Outdoor Installation

- Icing: outdoor temperature is low in winter. When the equipment is not in use, water will be stored in the interior and the ice will expand.

- Ultraviolet irradiation: plastic parts and electronic parts are easy to age.

- Rainwater: Causing PCB Burnout and Metal Rust

- Dust: PCB fouling, mechanical parts blocking

Precautions for installation location

- Don't be too high, otherwise it is not convenient for debugging, maintenance and replacement.

- Avoid the upper pipeline of the regulating valve, especially the pipe flange, slipknot and other pipe fittings,

so as not to damage the actuator due to water leakage.

- Actuator shall be installed on the upper part of valve body to prevent water leakage from damaging actuator.

- The valve body shall not be installed at the " U" bottom of the pipeline or at the place where the equipment can flow back condensate, so as to avoid water in the valve body of the temperature control valve, causing steam hammer during secondary steam admission.

The equipment starts up and runs.

- When the equipment is operated for the first time, the temperature control valve will be operated at a sharp full load due to the large temperature increase requirements of the warm pipe and secondary water, resulting in damage;

- It is recommended to pass steam and water from the bypass, and close the bypass when the secondary side temperature rises close to the set value (note that the bypass must be closed to death);

- When the new pipe network and system are put into operation for a period of time, please be sure to clean up the filter so as not to block up steam and water.

- Pay attention to the operation, the steam valve opens slowly and closes quickly, and the water valve opens slowly and closes slowly.

Maintenance

- When the temperature control valve is in operation, it shall be checked regularly to eliminate the faults in time.

- maintenance after equipment shutdown

- Maintenance before starting up the equipment

- When the equipment is out of service for a long time, pay attention to regular inspection to improve the environment of the machine room, and clean and protect the parts prone to dust and rust.

- It must be operated and maintained by trained professional technicians.

SDCHENXUAN VF flange connection control valve

VF40 series Gray iron electric control valve Two way type/ three way type Valve Seat PN16 Flange connection		
	Route	≤VF40.100=20mm; ≥VF40.125=40mm
	Leakage rate	0...0.05% of kvs value
	Medium temperature	2--150℃
	Valve flow characteristic	Equal percentage
	Adjustable valve ratio	>100
	Allowable working pressure	1600kpa
	Body	Gray iron
	Valve inner material	Stainless steel
	Preset pressure	PN16
VF45 eries Cast iron electric control valve Two way type/three way type Valve Seat PN16 Flange connection		
	Route	≤VF45.100=20mm; ≥VF45.125=40mm
	Leakage rate	0...0.05% of kvs value
	Medium temperature	2--220℃
	Valve flow characteristic	Equal percentage
	Adjustable valve ratio	>100
	Allowable working pressure	1600kpa
	Body	Cast iron
	Valve inner material	Stainless steel
	Preset pressure	PN16
VF53 series Precision cast steel electric control valve Two way type Valve Seat PN16/PN25 Flange connection		
	Route	≤VF53.100=20mm; ≥VF53.125=40mm
	Leakage rate	0...0.05% of kvs value
	Medium temperature	2--350℃
	Valve flow characteristics	Equal percentage
	Adjustable valve ratio	>100
	Allowable working pressure	2500kpa
	Body	Precision cast steel
	Valve inner material	Stainless steel
	Preset pressure	PN16/PN25
VF61 series Stainless steel electric control valve Two way type Valve Seat PN16/PN25 Flange connection		
	Route	≤VF61.100=20mm; ≥VF61.125=40mm
	Leakage rate	0...0.05% of kvs value
	Medium temperature	2--250℃
	Valve flow characteristic	Equal percentage
	Adjustable valve ratio	>100
	Allowable working pressure	2500kpa
	Body	Stainless steel
	Valve inner material	Stainless steel
	Preset pressure	PN16/PN25

Mixing valve VF40 High - closing flange - two way type / three way type control valve

Product features：

- Precision Casting HT250
- The valve body adopts the pressure balance type, which guarantees the high clearance ability under the low pressure, and the switching free ability under the high pressure difference
- Maximum allowable differential pressure is 1000kpa
- The stem seal uses special sealing process
- The full metal joint seat increases the value of the life of the valve
- The product meets GB/T17213-2015 flange connection standard
- Order description：

Diameter	Inch	Model	Kv value	Optional actuator			
			（m^3/h）	HC1000	HC1800	HC3000	HC5000
DN40	1½	VF40.40	25	●	●	○	○
DN50	2	VF40.50	40	●	●	○	○
DN65	2½	VF40.65	63	○	●	○	○
DN80	3	VF40.80	100	○	●	○	○
DN100	4	VF40.100	160	○	●	○	○
DN125	5	VF40.125	200	○	○	●	○
DN150	6	VF40.150	315	○	○	●	○
DN200	8	VF40.200	450	○	○	●	○
DN250	10	VF40.250	630	○	○	○	●

It can be installed with Siemens SAX, SKD, SKB, SKC series executor.

Diameter	Inch	Model	Kv value	Optional actuator			
			（m^3/h）	SAX	SKD	SKB	SKC
DN25	1	VF45.25	12	●	●	●	○
DN32	1¼	VF45.32	12	●	●	●	○
DN40	1½	VF45.40	25	●	●	●	○
DN50	2	VF45.50	40	●	●	●	○
DN65	2½	VF45.65	63	●	●	●	○
DN80	3	VF45.80	100	●	●	●	○
DN100	4	VF45.100	160	●	●	●	○
DN125	5	VF45.125	200	○	○	○	●
DN150	6	VF45.150	315	○	○	○	●
DN200	8	VF45.200	450	○	○	○	●
DN250	10	VF45.250	630	○	○	○	●
DN300	12	VF45.300	800	○	○	○	●

Mixed valve VF45 series High closing force flange type two way regulating valve

Product features ：

Precision casting (resin sand) nodular cast iron GGG-50

The valve body adopts the pressure balance type, which guarantees the high clearance ability under the low pressure, and the switching free ability under the high pressure difference

- Maximum allowable differential pressure is 1000kpa
- The stem seal uses special sealing process
- The full metal joint seat increases the value of the life of the valve
- The product meets GB/T17213-2015 flange connection standard

the body uses iron coated sand casting process compared with the traditional technology, there is no swelling phenomenon, body wall thickness, no pores, trachoma material of high density, more exquisite appearance The valve body and stainless steel valve port in the casting process once molding, the valve port will not have deformation phenomenon, long time high temperature use will not exist outside the valve leakage phenomenon, to ensure that the valve port factory pressure test 0 leakage. The sealing ring is made of PTFE+ carbon fiber material, which has better wear resistance The paint paint line and drying equipment make the paint adhesion stronger, the anti-corrosion effect is better, the valve body gloss has been significantly improved.

Order description：

Diameter	Inch	Model	Kv value	Optional actuator			
			（m^3/h）	HC1000	HC1800	HC3000	HC5000
DN25	1	VF45.25	12	●	○	○	○
DN32	1¼	VF45.32	12	●	○	○	○
DN40	1½	VF45.40	25	○	●	○	○
DN50	2	VF45.50	40	○	●	○	○
DN65	2½	VF45.65	63	○	●	○	○
DN80	3	VF45.80	100	○	●	○	○
DN100	4	VF45.100	160	○	●	○	○
DN125	5	VF45.125	200	○	○	●	○
DN150	6	VF45.150	315	○	○	●	○
DN200	8	VF45.200	450	○	○	●	○
DN250	10	VF45.250	630	○	○	○	●
DN300	12	VF45.300	800	○	○	○	●

It can be installed with Siemens SAX, SKD, SKB, SKC series executor.

Diameter	Inch	Model	Kv value (m³/h)	Optional actuator SAX	SKD	SKB	SKC
DN25	1	VF45.25	12	●	●	●	○
DN32	1¼	VF45.32	12	●	●	●	○
DN40	1½	VF45.40	25	●	●	●	○
DN50	2	VF45.50	40	●	●	●	○
DN65	2½	VF45.65	63	●	●	●	○
DN80	3	VF45.80	100	●	●	●	○
DN100	4	VF45.100	160	●	●	●	○
DN125	5	VF45.125	200	○	○	○	●
DN150	6	VF45.150	315	○	○	○	●
DN200	8	VF45.200	450	○	○	○	●
DN250	10	VF45.250	630	○	○	○	●
DN300	12	VF45.300	800	○	○	○	●

Mixed valve VF53 series High closing force flange type two way/three way regulating valve

Application：

It is suitable for continuous control in district heating system and hvac system.

It can be installed with Siemens SAX, SKD, SKB, SKC series executor.

Product features ：

- Precision casting WCB
- The valve body adopts the pressure balance type, which guarantees the high clearance ability under the low pressure, and the switching free ability under the high pressure difference
- Maximum allowable differential pressure is 1000kpa
- The stem seal uses special sealing process
- The full metal joint seat increases the value of the life of the valve
- The product meets GB/T17213-2015 flange connection standard

Order description：

Diameter	Inch	Model	Kv value (m³/h)	Optional actuator HC1000	HC1800	HC3000	HC5000
DN25	1	VF53.25	12	●	○	○	○

DN32	1¼	VF53.32	12	●	○	○	○
DN40	1½	VF53.40	25	○	●	○	○
DN50	2	VF53.50	40	○	●	○	○
DN65	2½	VF53.65	63	○	●	○	○
DN80	3	VF53.80	100	○	●	○	○
DN100	4	VF53.100	160	○	●	○	○
DN125	5	VF53.125	200	○	○	●	○
DN150	6	VF53.150	315	○	○	●	○
DN200	8	VF53.200	450	○	○	●	○
DN250	10	VF53.250	630	○	○	○	●
DN300	12	VF53.300	800	○	○	○	●

It can be installed with Siemens SAX, SKD, SKB, SKC series executor.

Diameter	Inch	Model	Kv value	Optional actuator			
			（m^3/h）	SAX	SKD	SKB	SKC
DN25	1	VF53.25	12	●	●	●	○
DN32	1¼	VF53.32	12	●	●	●	○
DN40	1½	VF53.40	25	●	●	●	○
DN50	2	VF53.50	40	●	●	●	○
DN65	2½	VF53.65	63	●	●	●	○
DN80	3	VF53.80	100	●	●	●	○
DN100	4	VF53.100	160	●	●	●	○
DN125	5	VF53.125	200	○	○	○	●
DN150	6	VF53.150	315	○	○	○	●
DN200	8	VF53.200	450	○	○	○	●
DN250	10	VF53.250	630	○	○	○	●
DN300	12	VF53.300	800	○	○	○	●

Stainless steel mixed valve VF61 series Stainless steel electric temperature control valve

High closing force flange type two way regulating valve

Parameters of 304/316L stainless steel series with VF61 series connection regulator:

1. Nominal pressure: PN40
1. Itinerary: VF61.32 ~ VF61. L00:20mm VF61. L00 ~ VF61.200:40mm
2. Leakage: 0... 0.1% Kvs
3. Medium temperature: -25... + 350 ℃
4. Flow characteristics: equal-ratio
5. 6. Material: body: 304 stainless steel Stem: stainless steel
6. Disc: stainless steel valve core: stainless steel

7. Stem seal: special seal

Application：

It is suitable for continuous control in district heating system and hvac system.

It can be installed with Siemens SAX, SKD, SKB, SKC SBX series executor.

Order description：

Diameter	Inch	Model	Kv value	Optional actuator			
			（m^3/h）	HC1000	HC1800	HC3000	HC5000
DN25	1	VF61.25	12	●	○	○	○
DN32	1¼	VF61.32	12	●	○	○	○
DN40	1½	VF61.40	25	○	●	○	○
DN50	2	VF61.50	40	○	●	○	○
DN65	2½	VF61.65	63	○	●	○	○
DN80	3	VF61.80	100	○	●	○	○
DN100	4	VF61.100	160	○	●	○	○
DN125	5	VF61.125	200	○	○	●	○
DN150	6	VF61.150	315	○	○	●	○
DN200	8	VF61.200	450	○	○	●	○
DN250	10	VF61.250	630	○	○	○	●

It can be installed with Siemens SAX, SKD, SKB, SKC series executor.

Diameter	Inch	Model	Kv value	Optional actuator			
			（m^3/h）	SAX	SKD	SKB	SKC
DN25	1	VF61.25	12	●	●	●	○
DN32	1¼	VF61.32	12	●	●	●	○
DN40	1½	VF61.40	25	●	●	●	○
DN50	2	VF61.50	40	●	●	●	○
DN65	2½	VF61.65	63	●	●	●	○
DN80	3	VF61.80	100	●	●	●	○
DN100	4	VF61.100	160	●	●	●	○
DN125	5	VF61.125	200	○	○	○	●
DN150	6	VF61.150	315	○	○	○	●
DN200	8	VF61.200	450	○	○	○	●
DN250	10	VF61.250	630	○	○	○	●
DN300	12	VF61.300	800	○	○	○	●

MSV static balancing valve

This series is bronze static balancing valve, Mainly used for regulating the hydraulic balance between branch

pipelines, The valve body adopts "Y" shape structure, Increased circulation capacity. Reasonable structure design facilitates installation and debugging, reduces the difficulty of operation and provides the accuracy of debugging.

- Commonly used in air conditioning balance system in parallel pipe flow distribution and shut off, Can effectively avoid the parallel branch due to uneven flow distribution caused by uneven heating and cooling. Avoid unnecessary energy consumption caused by unevenness.
- The test nozzle adopts double "O" ring structure and adopts self-sealing structure to prevent water leakage
- Clear switch scale indication, convenient speed adjustment and setting
- Independent switch lock structure
-

texture

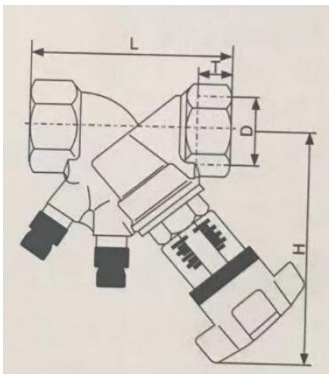
valve body	bronze
valve cover	bronze
handle	Reinforced nylon
Sealing ring	EPDM
seal is free of asbestos	

Technical parameters

Nominal pressure	PN16/PN25
Maximum test pressure	3.2MPA
Maximum working differential pressure	1.6MAP/2.5MPA(Restricted by noise levels)
Medium temperature	-10…120℃
Size range	DN15-DN50(½"-2")
connection	Threaded connections
Applicable medium	Water or ethylene glycol mixed liquid

boundary dimension

size	Kvs(cv)-valve	boundary dimension			
		D	H	L	T
DN15	3.8(4.5)	½	114	80	13
DN20	6.4(7.49)	3/4	116	84	15
DN25	8.9(10.4)	1	119	98	17
DN32	19.5(22.8)	1¼“	136	110	19
DN40	27.5(32.2)	1½“	138	120	19



DN50	38.8	2“	148	150	22.5

Supporting the use of actuators

SIEMENS Valve actuator

SKD60/SKD62　Electrohydraulic actuators 1000 N for valves with 20 mm stroke

Stock no. BPZ:SKD60/SKD62..

Overload-proof through travel-dependent, electronic switching off in end position. With die-cast aluminium housing and yoke for valves with 20 mm stroke. Optional function with one auxiliary switch. With manual control.

Additional info

SKD..U, SKD..UA are UL listed. Control devices MK..5.. are control devices with safety shut-off function per DIN EN 14597.

Attribute	Value
Positioning signal	DC 0...10, DC 4...20, 0...1000 V
Positioning force	1000 N
Stroke	20 mm
Spring return function	SKD62..
Position feedback	DC 0...10, DC 4...20 V
Degree of protection	IP54
Medium temperature	-25···150 °C
Ambient temperature, operation	-15...50 °C
Mounting position	Upright to horizontal

Product Variants

SKD60 - Electrohydraulic actuator, 1000 N, 20 mm, AC 24 V, DC 0...10/V 4...20 mA

SKD62 - Electrohydraulic actuator, 1000 N, 20 mm, AC 24 V, DC 0...10 V/4...20 mA, spring return

SKB60/SKB62　Electrohydraulic actuators 2800 N for valves with 20 mm stroke

Stock no. BPZ:SKB60/62..

Overload-proof through travel-dependent, electronic switching off in end position. With die-cast aluminium housing and yoke for valves with 20 mm stroke. Optional function with one auxiliary switch. With manual control.

Additional info

SKB..U, SKB..UA are UL listed. Control devices MK..5.., MK..6.. or MK..5..G are control devices with safety shut-off function per DIN EN 14597.

Attribute	Value
Positioning signal	DC 0...10, 4...20, 0...1000 V
Positioning force	2800 N
Stroke	20 mm
Spring return function	SKB62..

Attribute	Value
Position feedback	DC 0...10, DC 4...20 V
Degree of protection	IP54
Medium temperature	-25···220 °C (350 °C)
Ambient temperature, operation	-15...55 °C
Mounting position	Upright to horizontal

Product Variants

SKB60 - Electrohydraulic actuator, 2800 N, 20 mm, AC 24 V, DC 0...10 V/4...20 mA

SKB62 - Electrohydraulic actuator, 2800 N, 20 mm, AC 24 V, DC 0...10 V/4...20 mA, spring return

SKC60/SKC62.　Electrohydraulic actuators 2800 N for valves with 40 mm stroke

Stock no. BPZ:SKC60/SKC62..

Overload-proof through travel-dependent, electronic switching off in end position. With die-cast aluminium housing and yoke for valves with 40 mm stroke. Optional function with one auxiliary switch. With manual control.

Additional info

SKC..U, SKC..UA are UL listed. Control devices MK..6.. are control devices with safety shut-off function per DIN EN 14597.

Attribute	Value
Positioning signal	DC 0...10, 4...20, 0...1000 V
Positioning force	2800 N
Stroke	40 mm
Spring return function	SKC62..
Position feedback	DC 0...10, DC 4...20 V
Degree of protection	IP54
Medium temperature	-25···220 °C (350 °C)
Ambient temperature, operation	-15...55 °C
Mounting position	Upright to horizontal

Product Variants

SKC60 - Electrohydraulic actuator, 2800 N, 40 mm, AC 24 V, DC 0...10 V/4...20 mA

SKC62 - Electrohydraulic actuator, 2800 N, 40 mm, AC 24 V, DC 0...10 V/4...20 mA, spring return

SDCHENXUAN Valve actuator

HC1000 Electric mechanical actuator 1000 N for valves with 20 mm stroke

Stock no. BPZ: HC1000

Overload-proof through travel-dependent, electronic switching off in end position. With die-cast aluminium housing and yoke for valves with 20 mm stroke. Optional function with one auxiliary switch. With manual control.

Additional info

listed. Control devices MK..5.. are control devices with safety shut-off function per DIN EN 14597.

Attribute	Value
Positioning signal	DC 0...10, DC 4...20, 0...1000 V
Positioning force	1000 N
Stroke	20 mm
Spring return function	SKD62..
Position feedback	DC 0...10, DC 4...20 V
Degree of protection	IP54
Medium temperature	-25···150 °C
Ambient temperature, operation	-15...50 °C
Mounting position	Upright to horizontal

Product Variants

HC1000 - Electrohydraulic actuator, 1000 N, 20 mm, AC 24 V, DC 0...10 V/4...20 mA,

HC1800 Electric mechanical actuator 1800 N for valves with 20 mm stroke

Stock no. BPZ: HC1800

Overload-proof through travel-dependent, electronic switching off in end position. With die-cast aluminium housing and yoke for valves with 20 mm stroke. Optional function with one auxiliary switch. With manual control.

Additional info

listed. Control devices MK..5.. are control devices with safety shut-off function per DIN EN 14597.

Attribute	Value
Positioning signal	DC 0...10, DC 4...20, 0...1000 V
Positioning force	1800 N
Stroke	20 mm
Spring return function	HC1800
Position feedback	DC 0...10, DC 4...20 V
Degree of protection	IP54
Medium temperature	-25···150 °C
Ambient temperature, operation	-15...50 °C
Mounting position	Upright to horizontal

Product Variants

HC1800 - Electrohydraulic actuator, 1800 N, 20 mm, AC 24 V, DC 0...10 V/4...20 mA,

HC3000 Electric mechanical actuator 3000 N for valves with 40 mm stroke

Stock no. BPZ: HC3000

Overload-proof through travel-dependent, electronic switching off in end position. With die-cast aluminium housing and yoke for valves with 20 mm stroke. Optional function with one auxiliary switch. With manual control.

Additional info

listed. Control devices MK..5.. are control devices with safety shut-off function per DIN EN 14597.

Attribute	Value
Positioning signal	DC 0...10, DC 4...20, 0...1000 V

Attribute	Value
Positioning force	3000 N
Stroke	40 mm
Spring return function	HC3000
Position feedback	DC 0...10, DC 4...20 V
Degree of protection	IP54
Medium temperature	-25···150 °C
Ambient temperature, operation	-15...50 °C
Mounting position	Upright to horizontal

Product Variants

HC3000 - Electrohydraulic actuator, 3000 N, 40 mm, AC 24 V, DC 0...10 V/4...20 mA,

HC5000 Electric mechanical actuator 5000 N for valves with 40 mm stroke

Stock no. BPZ: HC5000

Overload-proof through travel-dependent, electronic switching off in end position. With die-cast aluminium housing and yoke for valves with 20 mm stroke. Optional function with one auxiliary switch. With manual control.

Additional info

listed. Control devices MK..5.. are control devices with safety shut-off function per DIN EN 14597.

Attribute	Value
Positioning signal	DC 0...10, DC 4...20, 0...1000 V
Positioning force	3000 N
Stroke	40 mm
Spring return function	HC5000
Position feedback	DC 0...10, DC 4...20 V
Degree of protection	IP54
Medium temperature	-25···150 °C
Ambient temperature, operation	-15...50 °C
Mounting position	Upright to horizontal

Product Variants

HC5000 - Electrohydraulic actuator, 5000 N, 40 mm, AC 24 V, DC 0...10 V/4...20 mA,